



**PATERSON  
GROUP**

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August 1, 2025  
File: PE7096-LET.02

**W.O. Stinson & Son Ltd.**

4728 Bank Street  
Ottawa, Ontario  
K1T 0K5

Attention: **Mr. Scott Stinson**

Subject: **Phase II-Environmental Site Assessment Update  
301 Somme Street  
Ottawa, Ontario**

Geotechnical Engineering  
Environmental Engineering  
Hydrogeology  
Materials Testing  
Building Science  
Rural Development Design  
Temporary Shoring Design  
Retaining Wall Design  
Noise and Vibration Studies  
Energy and Sustainability  
Temporary Shoring Design  
Pile Dynamic Analysis and Testing

[patersongroup.ca](http://patersongroup.ca)

Dear Sir,

Further to your request, Paterson Group (Paterson) has completed a Phase II Environmental Site Assessment (ESA) Update for the aforementioned property. This report updates a Phase II ESA Update entitled "Phase II Environmental Site Assessment Update, 301 Somme Street, Ottawa, Ontario" prepared by Paterson Group, dated September 26, 2022.

This update is intended to meet the requirements for an updated Phase II ESA, as per the MECP O.Reg. 153/04, as amended. This update report is to be read in conjunction with the 2022 report.

## **Background Information**

The Phase I Property is located on the north side of Somme Street, at the intersection of Somme Street and Sappers Ridge, in the City of Ottawa. The subject site is vacant with a large gravel pad on the western portion of the property. While the site is referred to as 301 Somme Street, the property also includes part of 331 Somme Street and part of 3748 Rideau Road. Please refer to the Site Plan for the property limits.

The Phase I Property is an irregular shaped lot with an area of approximately 61,000 m<sup>2</sup>. The Phase I Property is situated in a rural heavy industrial area that relies on private wells and septic systems. Refer to Figure 1 – Key Plan, following the text of this letter report, for site contextual information.





Drainage on the Phase II Property consists primarily of surface infiltration throughout the property. The site topography is relatively flat and at grade with neighbouring properties, while the regional topography gently slopes downward to the southeast.

## Past Assessments

- ❑ *“Phase I Environmental Site Assessment, Part Lot 26 & 27 Concession 6, Ottawa, Ontario, prepared by CRA, dated July 2008.*

The 2008 Phase I ESA was carried out for a larger tract of land than the current Phase I Property. The 2008 Phase I ESA indicated that a former waste disposal site (x.9013) was documented on the northern portion of the lands that they were assessing, however, they found no evidence of the waste disposal site through a review of the aerial photographs or through on-site observations including test pits. CRA concluded that the designation of part of the lands as a waste disposal site was an error.

The Ontario Ministry of Environment (MOE) approved the placement of non-recyclable asphalt and waste road building materials more than 30 years ago (MOE letter, 1990). The placement of waste road building materials (granular materials, non-recyclable asphalt and presumably concrete) on site in the past was considered by CRA to represent a potential environmental concern on the subject site. CRA recommended a Phase II ESA to assess the site conditions due to the former handling of waste road building materials on site.

- ❑ *“Phase I Environmental Site Assessment, Northern Part of 5123 Hawthorne Road (formerly) and now readdressed 301 Somme Street, Ottawa, Ontario,” prepared by Paterson Group Inc. (Paterson), dated November 20, 2020.*

A Phase I ESA was carried out by Paterson Group in November of 2020 in general accordance with the Ontario Regulation (O.Reg.) 153/04, as amended. The Phase I ESA identified the following on site PCA that generated an APEC on the Phase I Property:

- PCA 30 – *“Importation of Fill Material of Unknown Quality”* associated with handling and placement of fill material across the majority of the Phase I Property (APEC 1).

A Phase II ESA was recommended to address the aforementioned APEC on the Phase I Property.

- ❑ *“Phase II Environmental Site Assessment, Northern Part of 5123 Hawthorne Road (formerly) and now readdressed 301 Somme Street, Ottawa, Ontario,” prepared by Paterson Group Inc. (Paterson), dated November 30, 2020.*

The Phase II ESA was carried out to assess the quality of the fill material that had been placed on site by the owner of the property, R.W. Tomlinson. The field program consisted of placing three (3) boreholes on the subject site. It should be noted that a previously drilled well from 2008 (MW7-08) was sampled as part of the program. The boreholes were



placed to obtain a general coverage of the area to address the unknown quality of the fill material on site. The soil profile generally consisted of a layer of fill, overlying native clayey silt/silty clay and/or a silty fine sand with traces of gravel. Practical refusal was reached at depths ranging from 5.28 to 10.67m below the existing grade on inferred bedrock. The fill material consisted of a mix of clay, silt, sand and gravel with varying amounts of asphaltic concrete and concrete. The fill varied in thickness from 2.3 to 5.8m.

Six (6) soil samples were submitted for metals, PHCs (fraction 2 to 4), PAHs, electrical conductivity (EC), sodium adsorption ratio (SAR) and pH analysis. All soil samples complied with the MECP Table 2 Commercial standards. A comparison of the soil data to the MECP Table 1 Industrial standards, indicated that the petroleum hydrocarbon fraction 4 concentrations in several soil samples exceed the Table 1 standards, as well as molybdenum and chromium concentrations.

Groundwater samples were recovered from the monitoring wells BH1, BH2 and MW7-08 on May 28 and June 7, 2019 and November 10, 2020. No visual olfactory signs of contamination were noted in the groundwater. The groundwater samples were submitted for PHC (F1-F4), PAH, VOC and sodium and chloride analysis. Concentrations of PHCs and VOCs in the groundwater samples analyzed were not detected above the laboratory detection limits. VOC and PHC test results complied with the MECP Table 2 standards.

Detectable PAH parameters were identified in all of the groundwater samples analyzed for the May 28, 2019 sampling event. All PAH parameters in the groundwater location MW7-08 were in compliance with the MECP Table 2 standards. Benzo[a]pyrene concentrations in BH1 and BH2 were in excess of the applicable standards. Benzo[b]fluoranthene and chrysene concentrations in BH2 were also in excess of the applicable MECP standards.

It was speculated that some sediment was present in the groundwater samples, and as such, BH1 and BH2 were resampled on June 7, 2019 and November 10, 2020.

Based on the last two (2) sampling events, the analytical test results showed that the groundwater complied with the MECP Table 2 standards.

The apparent discrepancies between these analytical results, are considered to be a result of sediment present in the first groundwater samples analyzed.

☐ *“Phase I Environmental Site Assessment Update, 301 Somme Street, Ottawa, Ontario,”* prepared by Paterson Group Inc. (Paterson), dated July 26, 2022.

Based on the findings of the Phase I ESA Update, no new on or off-site PCAs were identified and as such, no new APECs were present on the subject property.



- “Phase II Environmental Site Assessment Update, 301 Somme Street, Ottawa, Ontario,”* prepared by Paterson Group Inc. (Paterson), dated September 26, 2022.

A water supply well (A342117) and observation well (MW22-1) was installed on the Phase II Property on July 29, 2022. The previous samples were unable to be resampled as they were subsequently decommissioned prior to recent grading and compaction that took place on site; thus, a groundwater sample was collected from MW22-1 on August 12, 2022. No visual olfactory signs of contamination were noted in the groundwater. The groundwater sample was submitted for PAH and VOC analysis. Concentrations of PAH and VOC in the groundwater sample analyzed were not detected above the laboratory detection limits.

Based on the findings of the Phase II ESA Update, no further investigative work is required on the Phase II Property.

- “Phase I Environmental Site Assessment Update, 301 Somme Street, Ottawa, Ontario,”* prepared by Paterson Group Inc. (Paterson), dated July 31, 2025.

Based on a review of more recent historical information records, in conjunction with a visual inspection of the property, the information and findings were generally confirmed from the previous Phase I ESA reports completed by Paterson. Since that time, no potential environmental concerns were identified with respect to the use of the subject site or its neighbouring properties, however, the current Phase I Property includes some additional lands. Based on the addition of new lands, a Phase II ESA Update was recommended.

## **Applicable Site Condition Standard**

The site condition standards for the property were obtained from Table 2 of the document entitled “Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act”, prepared by the Ontario Ministry of the Environment, Conservation and Parks (MECP), April 2011. The intended use of the Phase II Property is commercial/industrial, and therefore, the commercial/industrial standards have been selected for the purpose of this Phase II ESA. The MECP Table 2 Industrial Standards are based on the following considerations:

- Coarse-grained soil conditions
- Full depth generic site condition
- Potable groundwater conditions
- Industrial land use

Section 35 of O.Reg. 153/04 does not apply to the Phase II Property in that the property and properties within the Phase I Study Area rely upon potable groundwater.



Section 41 of O.Reg. 153/04 does not apply to the Phase II Property, as the property is not within 30m of an environmentally sensitive area.

Section 43.1 of O.Reg. 153/04 does not apply to the Phase II Property in that the property is not situated where Shallow Soils are present.

## Impediments

No physical impediments were encountered during the Phase II ESA Update program.

## Investigation Method

As part of the Phase II ESA Update, Paterson advanced six (6) boreholes on the Phase II Property, three (3) of which were instrumented with groundwater monitoring wells. The boreholes were completed by Downing Drilling under the full-time supervision of Paterson personnel on June 2, 2025 (BH1-25 to BH3A-25) and on June 3, 2025 (BH3B-2025 to BH4-25). Borehole locations are illustrated on Drawing PE7096-1 – Test Hole Location Plan appended to this report.

All boreholes were terminated at depths ranging from approximately 7.52 to 12.20m below ground surface. One borehole (BH4-25) was advanced to 15.42m by means of DCPT. Three of the boreholes were instrumented with groundwater monitoring wells (BH1-25, BH3B-25 and BH4-25). A total of fifty-nine (59) soil samples were obtained from the boreholes by means of auger sampling and split sampling. The depths at which auger and split spoon samples were obtained from the boreholes are shown as “**AU**” and “**SS**” respectively on the Soil Profile and Test Data Sheets appended to this report.

Upon recovery, all samples were immediately sealed in appropriate containers to facilitate the preliminary screening procedure, which included a visual screening for colour and evidence of deleterious fill. No unusual visual or olfactory observations were made with regard to the soil samples obtained from any of the boreholes.

Paterson submitted soil samples to further characterize the subsurface conditions at the Phase II ESA Property, refer to Table 2: Soil Testing Summary appended to this report.

Paterson completed one groundwater monitoring sampling event on the newly installed groundwater monitoring wells in order to update the groundwater quality at the Phase II ESA Property, refer to Table 3: Groundwater Testing Summary appended to this report. The groundwater levels and parameters are summarized in Tables 8 and 9, appended to this report.



## **Review and Evaluation**

### **Groundwater Elevations, Flow Direction and Hydraulic Gradient**

Groundwater levels were measured during the groundwater sampling event on June 11, 2025 using an electronic water level meter. Groundwater levels were recorded from the monitoring wells installed in BH1-25, BH3B-25 and BH4-25.

The groundwater at the Phase II ESA Property was encountered within the overburden at depths ranging from approximately 2.50 to 5.73m below the existing ground surface.

Using the groundwater elevations recorded during the June 11, 2025 sampling event, groundwater contour mapping was completed as part of this assessment. According to the mapped contour data, groundwater flow is northeasterly in direction, with a hydraulic gradient of 0.012m/m. Groundwater contours are shown on Drawing PE7096-3 – Test Hole Location Plan, appended to this report.

It should be noted that groundwater levels are expected to fluctuate throughout the year with seasonal variations.

### **Soil Quality**

As part of the 2019 Phase II ESA, a total of eight soil samples (plus one duplicate) were submitted for laboratory analysis of petroleum hydrocarbons (PHCs, Fractions F1-F4), Benzene, Toluene, Ethylbenzene and Xylenes (BTEX), polycyclic aromatic hydrocarbons (PAHs), metals and/or electrical conductivity (EC) and sodium adsorption ratio (SAR). All soil sample parameter concentrations complied with the MECP Table 2 ICC Standards.

As part of the current environmental investigation on the Phase II Property, an additional three soil samples (plus one duplicate) were submitted for laboratory analysis of PHCs, BTEX, PAHs, metals, EC and SAR. The results of the analytical testing are presented in Table 4 – Soil Analytical Test Results, as well as on the laboratory certificates of analysis, appended to this report.

#### **PHCs (F1-F4)**

All PHC parameters comply with the MECP Table 2 ICC Standards.

The analytical results for PHCs in the tested soil are shown on Drawing PE7096-4 – Analytical Testing Plan – Soil, appended to this report.

#### **BTEX**

All BTEX parameters were non-detect and comply with the MECP Table 2 ICC Standards.



The analytical results for BTEX in the tested soil are shown on Drawing PE7096-4 – Analytical Testing Plan – Soil, appended to this report.

### **PAHs**

The concentrations of several PAH parameters in soil sample BH2-25-SS2 were in excess of the MECP Table 2 ICC Standards. All remaining PAH parameters detected in the soil samples comply with the MECP Table 2 ICC Standards.

The analytical results for PAHs in the tested soil are shown on Drawing PE7096-4 – Analytical Testing Plan – Soil, appended to this report.

### **Metals**

All metal concentration were found to comply with the MECP Table 2 ICC Standards.

The analytical results for metals in the tested soil are shown on Drawing PE7096-4 – Analytical Testing Plan – Soil, appended to this report.

### **EC/SAR**

The concentrations of EC and SAR were found to comply with the MECP Table 2 ICC Standards.

The analytical results for EC and SAR in the tested soil are shown on Drawing PE7096-4 -Analytical Testing Plan – Soil, appended to this report.

### **Groundwater Quality**

As part of the previous investigations, a total of seven groundwater samples were submitted for laboratory testing for a combination of volatile organic compounds (VOCs), petroleum hydrocarbons (PHCs, F1-F4), polycyclic aromatic hydrocarbons (PAHs), Sodium and Chloride. The groundwater on the Phase II ESA Property is in compliance with the MECP Table 2 Non-Potable Standards.

As part of the current environmental investigation, one groundwater sample (plus duplicate), obtained from the monitoring well installed in BH3B-25 was submitted for laboratory analysis of VOCs, PHCs and PAHs as part of the current Phase II ESA Update. The results of the analytical testing are presented in Table 5 – Groundwater Analytical Test Results, as well as on the laboratory certificates of analysis, appended to this report.

No detectable VOC, PHC and PAH parameter concentrations were detected in the groundwater sample analyzed as part of this Phase II ESA Update.

The analytical results for the tested groundwater are shown on Drawing PE7096-5 – Analytical Testing Plan – Groundwater, appended to this report.



## Phase II Conceptual Site Model

### Potentially Contaminating Activity (PCA) and Area of Potential Environmental Concern (APEC)

As per the recent Phase I ESA Update, the PCAs considered to result in APECs on the Phase II Property have been summarized in the table below.

Areas of Potential Environmental Concern					
Area of Potential Environmental Concern	Location of Area of Potential Environmental Concern	Potentially Contaminating Activity	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil, and/or Sediment)
APEC 1: Resulting from fill material of unknown quality	Across the Phase I Property	PCA 30 – <i>“Importation of Fill Material of Unknown Quality”</i>	On-site	VOCs PHCs PAHs Metals EC and SAR	Soil Groundwater

### Contaminants of Potential Concern (CPCs)

The contaminants of potential concern (CPCs) in soil and/or groundwater include:

- Volatile Organic Compounds (VOCs)
- Petroleum Hydrocarbons (PHCs, Fractions F1-F4);
- Polycyclic Aromatic Hydrocarbons (PAHs);
- Metals
- Electrical Conductivity (EC) and Sodium Adsorption Ratio (SAR);

These CPCs have the potential to be present within the underlying soil matrix and/or the groundwater system situated beneath the Phase II ESA Property.

### Subsurface Structures and Utilities

No subsurface structures or utilities are expected to be present on the Phase II ESA Property.



## Physical Setting

### Site Stratigraphy

The stratigraphy of the Phase II ESA Property generally consists of:

- ❑ Fill material generally comprised of silty sand and/or silty clay, crushed stone, gravel, organics with trace fragments of concrete, wood and asphalt extended to depths ranging from approximately 6.78 to 8.69m below the existing grade. Groundwater was encountered in this unit in all boreholes.
- ❑ Silty clay was identified beneath the fill material in Borehole BH3B-25 from 7.54 to 10.21m below the existing grade.
- ❑ Topsoil was identified beneath the fill material in Borehole BH4-25 from 8.69 to 8.99m below the existing grade.
- ❑ Silty sand was identified beneath the layer of topsoil in Borehole BH4-25 from 8.99 to 9.45m below the existing grade.
- ❑ Glacial till comprised of silty clay with gravel, cobbles and boulders with some sand was identified at depths starting at 6.78 to 10.21m and extended to depths ranging from 10.26 to 15.42m below ground surface.

The site stratigraphy, from ground surface to the deepest aquifer or aquitard investigated, is provided in the Soil Profile and Test Data Sheets, appended to this report.

### Hydrogeological Characteristics

Groundwater at the Phase II Property was encountered within the fill material. During the most recent groundwater monitoring event, groundwater flow was measured in a northeasterly direction, with a hydraulic gradient of 0.012m/m. Groundwater contours are shown on Drawing PE7096-3 – Test Hole Location Plan.

### Approximate Depth to Bedrock

Bedrock was not confirmed during the subsurface investigation, however, a DCPT was conducted and reached refusal at approximately 15.42m below ground surface, where bedrock beneath the Phase II Property was inferred.

### Approximate Depth to Water Table

Depth to the water table at the Phase II Property varies between approximately 2.50 to 5.73m below ground surface and is expected to fluctuate seasonally.



### **Sections 35, 41 and 43.1 of the Regulation**

Section 35 of O.Reg. 153/04 does not apply to the Phase II Property in that the property and properties within the Phase I Study Area rely upon potable groundwater.

Section 41 of O.Reg. 153/04 does not apply to the Phase II Property, as the property is not within 30m of an environmentally sensitive area.

Section 43.1 of O.Reg. 153/04 does not apply to the Phase II Property in that the property is not situated where Shallow Soils are present.

### **Fill Placement**

Fill material was identified across the Phase II Property at depths ranging from 6.78 to 8.69m below ground surface. The fill material consisted of silty sand and/or silty clay, crushed stone, gravel, organics with trace fragments of concrete, wood and asphalt.

### **Existing Buildings and Structures**

No buildings or structures are currently present on the Phase II Property.

### **Proposed Buildings and Other Structures**

It is our understanding that the proposed development will be comprised of a tank and equipment storage building, a vehicle bay and lubricant storage building, a bulk propane filling plant, a propane tank and equipment storage yard, and a cardlock (pre-authorized commercial gas bar). The proposed buildings will be of slab-on-grade construction, surrounded by paved access lanes, loading areas, and parking areas.

### **Drinking Water Wells**

One potable water well is present on the Phase II Property.

### **Water Bodies and Areas of Natural Significance**

No areas of natural and scientific interest are present within the Phase I Study Area. The nearest named water body with respect to the Phase I Property is a tributary of the North Castor River, located approximately 330m to the southeast.





## **Environmental Condition**

### **Areas Where Contaminants are Present**

PAH concentrations in the soil/fill are in excess of the selected MECP Table 2 ICC Standards in Borehole BH2-25. The remaining soil was observed to comply with the selected site standards.

### **Types of Contaminants**

The contaminants present in the soil/fill material in excess of the selected standards include: PAHs (acenaphthylene, benzo[a]pyrene and dibenzo[a,h]anthracene).

### **Contaminated Media**

Some of the fill material on the Phase II Property is impacted with PAHs.

### **What Is Known About Areas Where Contaminants Are Present**

Contaminants are present in the fill material beneath the Phase II Property, and are considered likely to be a result of asphalt in the fill material.

### **Distribution and Migration of Contaminants**

The impacts are confined to the fill material, resultant from the importation of waste road building materials, with no indication of migration of contaminants into the groundwater. Therefore, concerns regarding the distribution or migration of contaminants via the groundwater are not considered to be an issue on the Phase II Property.

### **Discharge of Contaminants**

The impacted fill material containing PAHs is a result of the importation of fill material containing waste road building materials (specifically asphalt) onto the Phase II Property.

### **Climatic and Meteorological Conditions**

In general, climatic and meteorological conditions have the potential to affect contaminant distribution. Two (2) ways by which climatic and meteorological conditions may affect contaminant distribution include the downward leaching of contaminants by means of the infiltration of precipitation, and the migration of contaminants via groundwater levels and/or flow, which may fluctuate seasonally. Neither of these mechanisms are considered to be occurring on the subject site.

### **Potential for Vapour Intrusion**

There is no potential for vapour intrusion on the Phase II Property.



## Recommendations

### Soil

Based on the findings of this assessment, as well as the findings of previous environmental investigations conducted for the Phase II Property, there is some impacted fill present on the Phase II Property.

It is our understanding that the Phase II Property will be developed with a commercial/industrial facility in the near future. Based on the nature of the proposed development, the presence of this fill material does not pose any risk to the operation. As a result, it is our opinion that the impacted fill does not need to be remediated.

However, the presence of road waste building materials, asphaltic concrete and concrete may restrict the reuse of this material, if it requires removal off-site for construction purposes. Any excess soil requiring off-site disposal during construction must be managed in accordance with Ontario Regulation 406/19 – On-site and Excess Soil Management.

Given the very low volatile readings obtained on the fill samples and the age of the asphalt, it is considered unlikely that the asphalt would pose any risk to interior air quality of a building, although the design of the building could have bearing on this. As a precautionary measure, any significant deposits of asphalt encountered at the subgrade level below buildings should be removed. It has been assumed that any future building structure would be a commercial/industrial use building, constructed with a slab-on-grade foundation.

### Monitoring Wells

If the monitoring wells installed on the subject site are not going to be used in the future or will be destroyed during site redevelopment, they should be abandoned according to Ontario Regulation 903. In the meantime, the wells will be registered with the MECP under this regulation.



## **Statement of Limitations**

This Phase II - Environmental Site Assessment Update report has been prepared under the supervision of a qualified person, in general accordance with Ontario Regulation 153/04, as amended. The conclusions presented herein are based on information gathered from a limited historical review and field inspection program.

The findings of the Phase II - ESA Update are based on the review of the previous subsurface program completed on the Phase II Property in conjunction with the most recent analytical test results. Should any conditions be encountered at the Phase II Property that differ from our findings, we request that we be notified immediately.

This report was prepared for the sole use of W.O. Stinson & Son Ltd. Permission and notification from the above noted party and Paterson will be required to release this report to any other party.

We trust that this submission satisfies your current requirements. Should you have any questions please contact the undersigned.





Regards,

**Paterson Group Inc.**

Joshua Dempsey, B.Sc.

Mark D'Arcy, P.Eng., QP<sub>ESA</sub>



**Report Distribution:**

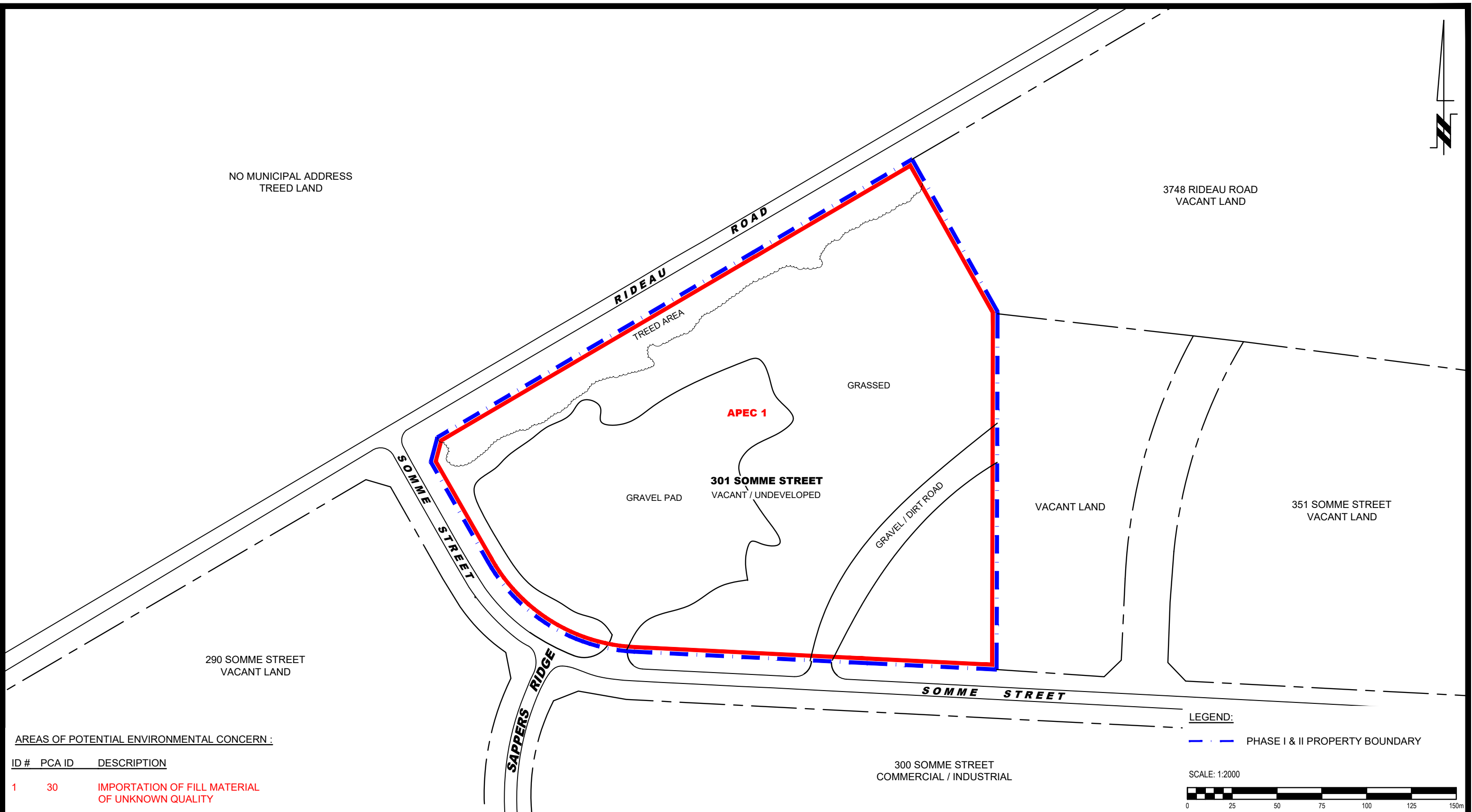
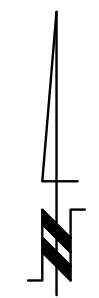
- W.O. Stinson & Son Ltd.
- Paterson Group

**Appendix**

- Figure 1 – Key Plan
- Drawing PE7096-1 – Site Plan
- Drawing PE7096-2 – Surrounding Land Use Plan
- Drawing PE7096-3 – Test Hole Location Plan
- Drawing PE7096-4 – Analytical Testing Plan – Soil
- Drawing PE7096-5 – Analytical Testing Plan – Groundwater
- Soil Profile and Test Data Sheets
- Symbols and Terms
- Laboratory Certificates of Analysis
- Table 1 – Test Hole Summary Details
- Table 2 – Soil Testing Summary
- Table 3 – Groundwater Testing Summary
- Table 4 – Soil Analytical Test Results
- Table 4A – Maximum Concentrations – Soil
- Table 5 – Groundwater Analytical Test Results
- Table 5A – Maximum Concentrations – Groundwater
- Table 6 – QA/QC Calculations – Relative Percent Difference
- Table 7 – Groundwater Levels
- Table 8 – Stabilized Water Quality Parameters



FIGURE 1  
KEY PLAN



NO MUNICIPAL ADDRESS  
TREED LAND

3748 RIDEAU ROAD  
VACANT LAND

290 SOMME STREET  
VACANT LAND

351 SOMME STREET  
VACANT LAND

301 SOMME STREET  
VACANT / UNDEVELOPED

300 SOMME STREET  
COMMERCIAL / INDUSTRIAL

AREAS OF POTENTIAL ENVIRONMENTAL CONCERN :

ID #	PCA ID	DESCRIPTION
1	30	IMPORTATION OF FILL MATERIAL OF UNKNOWN QUALITY

LEGEND:

--- PHASE I & II PROPERTY BOUNDARY

SCALE: 1:2000



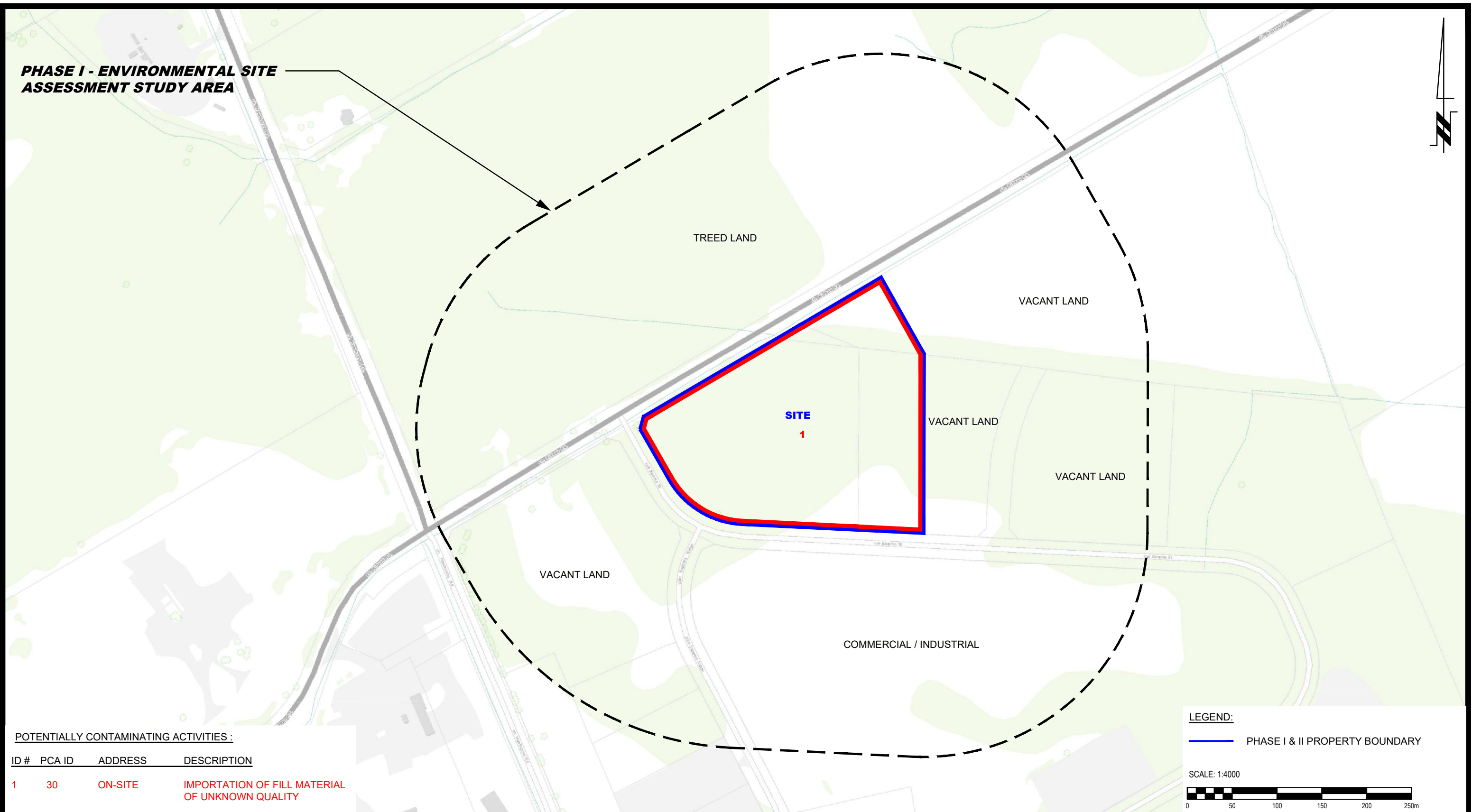
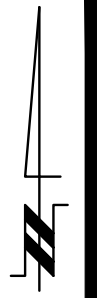
9 AURIGA DRIVE  
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K2E 7T9  
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

W.O. STINSON & SONS LTD.  
**PHASE I - ENVIRONMENTAL SITE ASSESSMENT**  
 301 SOMME STREET  
 OTTAWA, ONTARIO  
**SITE PLAN**

Scale:	1:2000	Date:	08/2025
Drawn by:	YA	Report No.:	PE7096-LET.01
Checked by:	JD	Dwg. No.:	<b>PE7096-1</b>
Approved by:	MSD	Revision No.:	

**PHASE I - ENVIRONMENTAL SITE ASSESSMENT STUDY AREA**



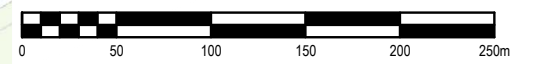
**POTENTIALLY CONTAMINATING ACTIVITIES :**

ID #	PCA ID	ADDRESS	DESCRIPTION
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**LEGEND:**

— PHASE I & II PROPERTY BOUNDARY

SCALE: 1:4000

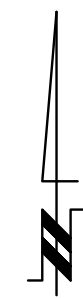


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NO.	REVISIONS	DATE	INITIAL

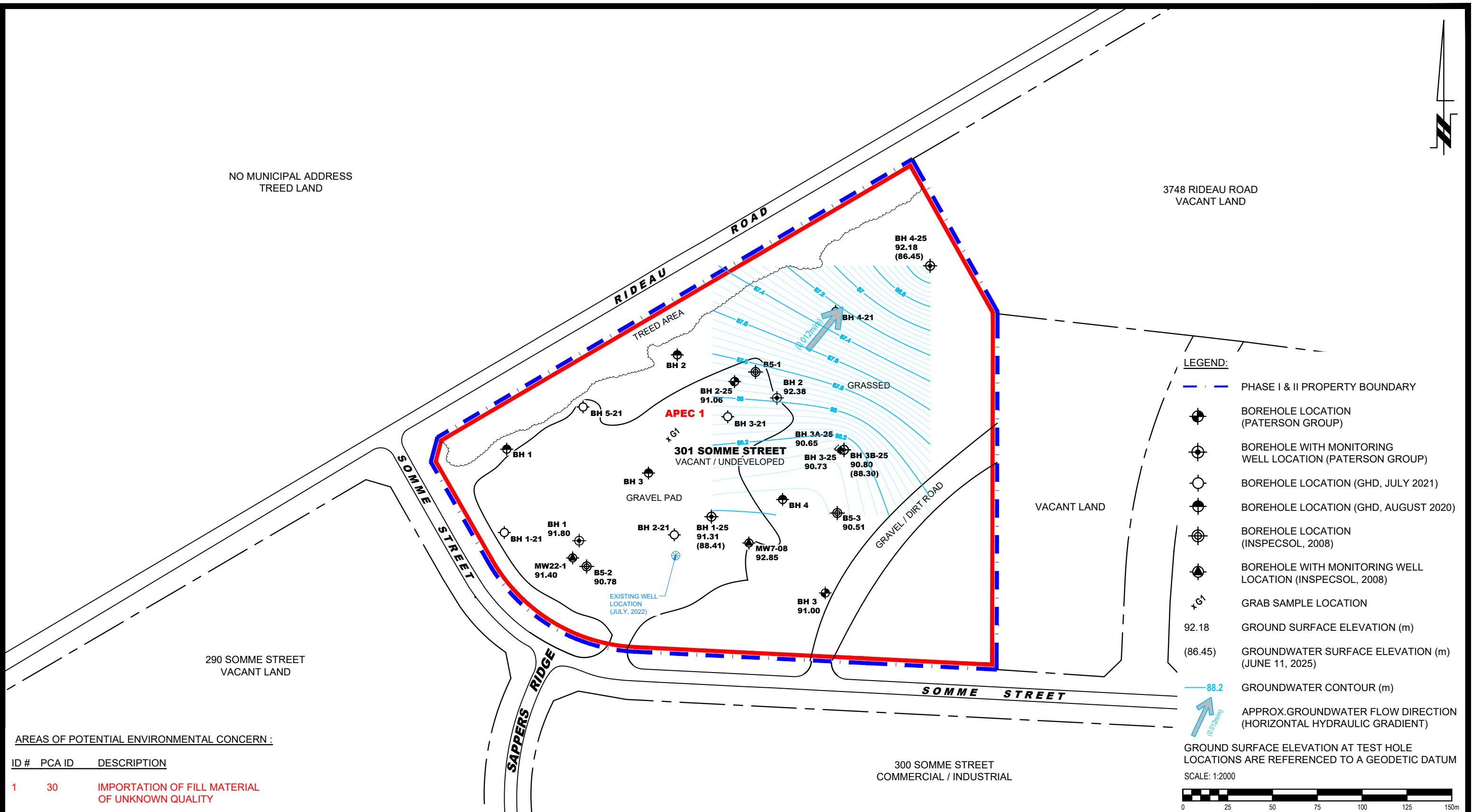
**W.O. STINSON & SONS LTD.**  
**PHASE I - ENVIRONMENTAL SITE ASSESSMENT**  
**301 SOMME STREET**  
**OTTAWA, ONTARIO**  
**SURROUNDING LAND USE PLAN**

Scale:	1:4000	Date:	08/2025
Drawn by:	YA	Report No.:	PE7096-LET.01
Checked by:	JD	Dwg. No.:	<b>PE7096-2</b>
Approved by:	MSD	Revision No.:	



NO MUNICIPAL ADDRESS  
TREED LAND

3748 RIDEAU ROAD  
VACANT LAND



- LEGEND:**
- PHASE I & II PROPERTY BOUNDARY
  - BOREHOLE LOCATION (PATERSON GROUP)
  - BOREHOLE WITH MONITORING WELL LOCATION (PATERSON GROUP)
  - BOREHOLE LOCATION (GHD, JULY 2021)
  - BOREHOLE LOCATION (GHD, AUGUST 2020)
  - BOREHOLE LOCATION (INSPECSOL, 2008)
  - BOREHOLE WITH MONITORING WELL LOCATION (INSPECSOL, 2008)
  - GRAB SAMPLE LOCATION
  - 92.18 GROUND SURFACE ELEVATION (m)
  - (86.45) GROUNDWATER SURFACE ELEVATION (m) (JUNE 11, 2025)
  - 88.2 GROUNDWATER CONTOUR (m)
  - APPROX. GROUNDWATER FLOW DIRECTION (HORIZONTAL HYDRAULIC GRADIENT)
- GROUND SURFACE ELEVATION AT TEST HOLE LOCATIONS ARE REFERENCED TO A GEODETIC DATUM  
SCALE: 1:2000
- 

**AREAS OF POTENTIAL ENVIRONMENTAL CONCERN :**

ID #	PCA ID	DESCRIPTION
1	30	IMPORTATION OF FILL MATERIAL OF UNKNOWN QUALITY

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K2E 7T9  
TEL: (613) 226-7381

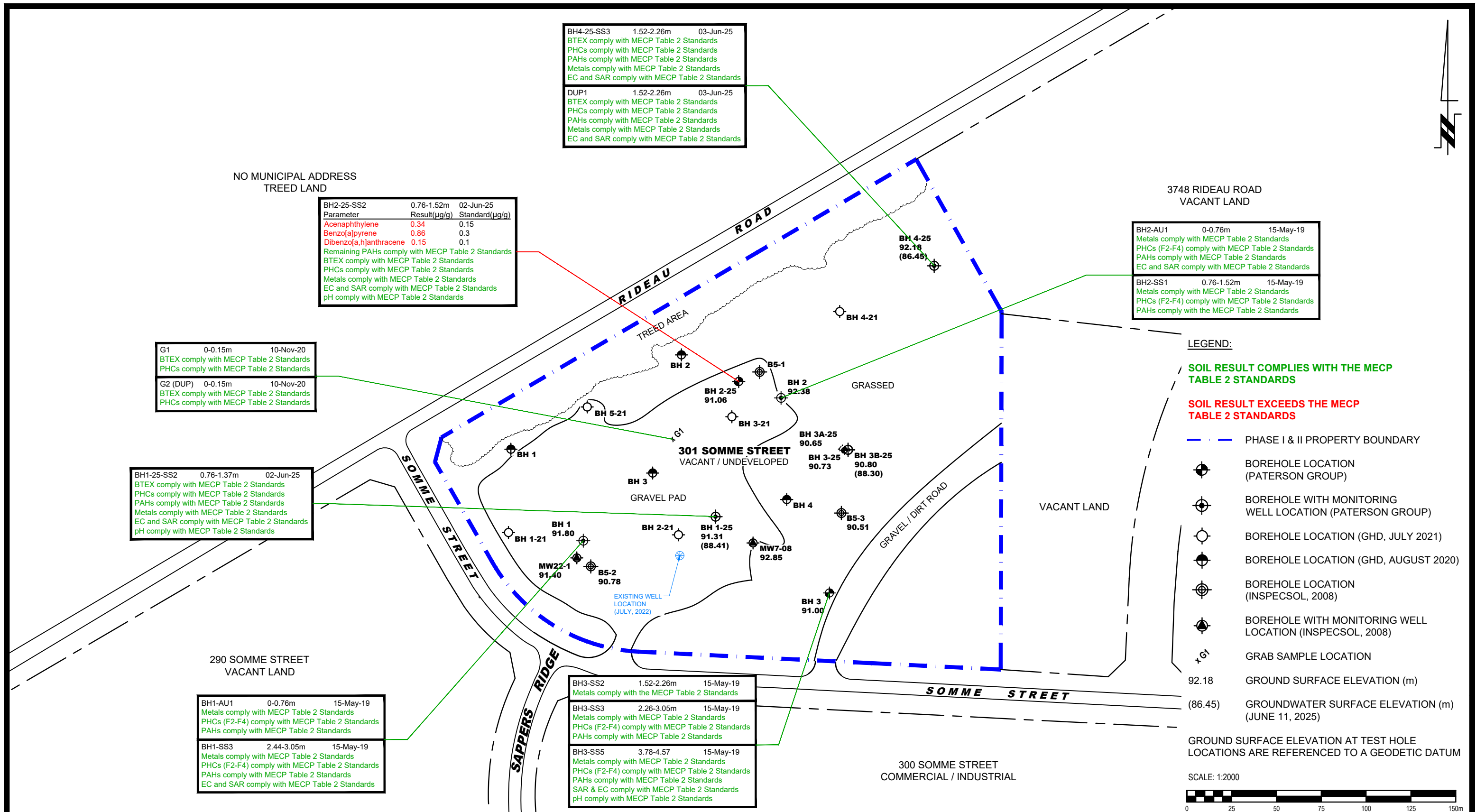
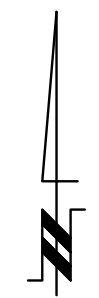
NO.	REVISIONS	DATE	INITIAL

**W.O. STINSON & SONS LTD.**  
**PHASE II - ENVIRONMENTAL SITE ASSESSMENT**  
**301 SOMME STREET**

OTTAWA, ONTARIO

**TEST HOLE LOCATION PLAN**

Scale:	1:2000	Date:	08/2025
Drawn by:	YA	Report No.:	PE7096-LET.02
Checked by:	JD	Dwg. No.:	<b>PE7096-3</b>
Approved by:	MSD	Revision No.:	



BH4-25-SS3	1.52-2.26m	03-Jun-25
BTEX comply with MECP Table 2 Standards		
PHCs comply with MECP Table 2 Standards		
PAHs comply with MECP Table 2 Standards		
Metals comply with MECP Table 2 Standards		
EC and SAR comply with MECP Table 2 Standards		
DUP1	1.52-2.26m	03-Jun-25
BTEX comply with MECP Table 2 Standards		
PHCs comply with MECP Table 2 Standards		
PAHs comply with MECP Table 2 Standards		
Metals comply with MECP Table 2 Standards		
EC and SAR comply with MECP Table 2 Standards		

BH2-25-SS2	0.76-1.52m	02-Jun-25
Parameter	Result(µg/g)	Standard(µg/g)
Acenaphthylene	0.34	0.15
Benzo[a]pyrene	0.86	0.3
Dibenzo[a,h]anthracene	0.15	0.1
Remaining PAHs comply with MECP Table 2 Standards		
BTEX comply with MECP Table 2 Standards		
PHCs comply with MECP Table 2 Standards		
Metals comply with MECP Table 2 Standards		
EC and SAR comply with MECP Table 2 Standards		
pH comply with MECP Table 2 Standards		

BH2-AU1	0-0.76m	15-May-19
Metals comply with MECP Table 2 Standards		
PHCs (F2-F4) comply with MECP Table 2 Standards		
PAHs comply with MECP Table 2 Standards		
EC and SAR comply with MECP Table 2 Standards		
BH2-SS1	0.76-1.52m	15-May-19
Metals comply with MECP Table 2 Standards		
PHCs (F2-F4) comply with MECP Table 2 Standards		
PAHs comply with the MECP Table 2 Standards		

G1	0-0.15m	10-Nov-20
BTEX comply with MECP Table 2 Standards		
PHCs comply with MECP Table 2 Standards		
G2 (DUP)	0-0.15m	10-Nov-20
BTEX comply with MECP Table 2 Standards		
PHCs comply with MECP Table 2 Standards		

BH1-25-SS2	0.76-1.37m	02-Jun-25
BTEX comply with MECP Table 2 Standards		
PHCs comply with MECP Table 2 Standards		
PAHs comply with MECP Table 2 Standards		
Metals comply with MECP Table 2 Standards		
EC and SAR comply with MECP Table 2 Standards		
pH comply with MECP Table 2 Standards		

BH1-AU1	0-0.76m	15-May-19
Metals comply with MECP Table 2 Standards		
PHCs (F2-F4) comply with MECP Table 2 Standards		
PAHs comply with MECP Table 2 Standards		
BH1-SS3	2.44-3.05m	15-May-19
Metals comply with MECP Table 2 Standards		
PHCs (F2-F4) comply with MECP Table 2 Standards		
PAHs comply with MECP Table 2 Standards		
EC and SAR comply with MECP Table 2 Standards		

BH3-SS2	1.52-2.26m	15-May-19
Metals comply with the MECP Table 2 Standards		
BH3-SS3	2.26-3.05m	15-May-19
Metals comply with MECP Table 2 Standards		
PHCs (F2-F4) comply with MECP Table 2 Standards		
PAHs comply with MECP Table 2 Standards		
BH3-SS5	3.78-4.57	15-May-19
Metals comply with MECP Table 2 Standards		
PHCs (F2-F4) comply with MECP Table 2 Standards		
PAHs comply with MECP Table 2 Standards		
SAR & EC comply with MECP Table 2 Standards		
pH comply with MECP Table 2 Standards		

**LEGEND:**

- SOIL RESULT COMPLIES WITH THE MECP TABLE 2 STANDARDS
- SOIL RESULT EXCEEDS THE MECP TABLE 2 STANDARDS
- PHASE I & II PROPERTY BOUNDARY
- BOREHOLE LOCATION (PATERSON GROUP)
- BOREHOLE WITH MONITORING WELL LOCATION (PATERSON GROUP)
- BOREHOLE LOCATION (GHD, JULY 2021)
- BOREHOLE LOCATION (GHD, AUGUST 2020)
- BOREHOLE LOCATION (INSPECSOL, 2008)
- BOREHOLE WITH MONITORING WELL LOCATION (INSPECSOL, 2008)
- GRAB SAMPLE LOCATION
- 92.18 GROUND SURFACE ELEVATION (m)
- (86.45) GROUNDWATER SURFACE ELEVATION (m) (JUNE 11, 2025)

GROUND SURFACE ELEVATION AT TEST HOLE LOCATIONS ARE REFERENCED TO A GEODETIC DATUM

SCALE: 1:2000

9 AURIGA DRIVE  
OTTAWA, ON  
K2E 7T9  
TEL: (613) 226-7381

NO.	REVISIONS	DATE	INITIAL

**W.O. STINSON & SONS LTD.**

**PHASE II - ENVIRONMENTAL SITE ASSESSMENT**  
**301 SOMME STREET**

**OTTAWA, ONTARIO**

**ANALYTICAL TESTING PLAN - SOIL**

Scale:	1:2000	Date:	08/2025
Drawn by:	YA	Report No.:	PE7096-LET.02
Checked by:	JD	Dwg. No.:	<b>PE7096-4</b>
Approved by:	MSD	Revision No.:	



BH2-GW1	2.30-5.30m	28-May-19
Parameter	Results(µg/L)	Standard(µg/L)
Benzo(a)pyrene	0.12	0.01
Benzo(b)fluoranthene	0.15	0.1
Chrysene	0.15	0.1
Remaining PAHs comply with MECP Table 2 Standards		
PHCs comply with MECP Table 2 Standards		
VOCs comply with MECP Table 2 Standards		
BH2-GW2	2.30-5.30m	07-Jun-19
PAHs comply with MECP Table 2 Standards		

BH3B-25-GW1	4.57-6.20m	11-Jun-25
VOCs comply with MECP Table 2 Standards		
PHCs comply with MECP Table 2 Standards		
PAHs comply with MECP Table 2 Standards		
DUP	4.57-6.20m	11-Jun-25
VOCs comply with MECP Table 2 Standards		
PHCs comply with MECP Table 2 Standards		
PAHs comply with MECP Table 2 Standards		

BH1-GW1	5.35-8.35m	28-May-19
Parameter	Results(µg/L)	Standard(µg/L)
Benzo(a)pyrene	0.05	0.01
Remaining PAHs comply with MECP Table 2 Standards		
PHCs comply with MECP Table 2 Standards		
VOCs comply with MECP Table 2 Standards		
BH1-GW2	5.35-8.35m	07-Jun-19
Parameter	Results(µg/L)	Standard(µg/L)
Benzo(a)anthracene	1.02	1.0
Benzo(a)pyrene	0.75	0.01
Benzo(b)fluoranthene	1.41	0.1
Benzo(g,h,i)perylene	0.41	0.2
Benzo(k)fluoranthene	0.81	0.1
Chrysene	0.88	0.1
Fluoranthene	2.28	0.41
Indenol(1,2,3-cd)pyrene	0.4	0.05
Phenanthrene	1.12	1.0
Remaining PAHs comply with MECP Table 2 Standards		
Sodium and Chloride comply with MECP Table 2 Standards		
MW1-GW3	5.35-8.35m	10-Nov-20
PAHs comply with MECP Table 2 Standards		
DUP(MW1-GW3)	5.35-8.35m	10-Nov-20
PAHs comply with MECP Table 2 Standards		

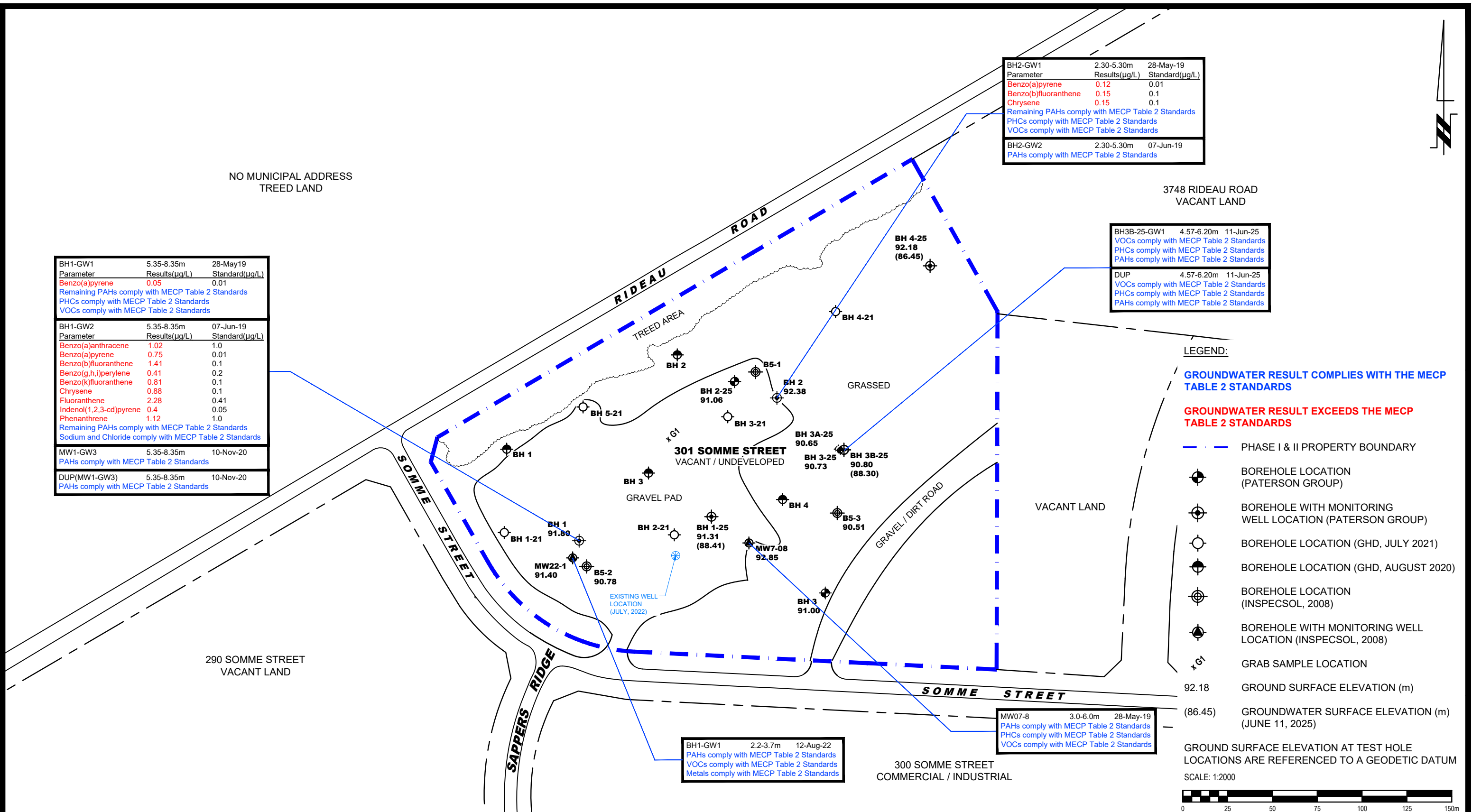
**LEGEND:**

**GROUNDWATER RESULT COMPLIES WITH THE MECP TABLE 2 STANDARDS**

**GROUNDWATER RESULT EXCEEDS THE MECP TABLE 2 STANDARDS**

- PHASE I & II PROPERTY BOUNDARY
- BOREHOLE LOCATION (PATERSON GROUP)
- BOREHOLE WITH MONITORING WELL LOCATION (PATERSON GROUP)
- BOREHOLE LOCATION (GHD, JULY 2021)
- BOREHOLE LOCATION (GHD, AUGUST 2020)
- BOREHOLE LOCATION (INSPECSOL, 2008)
- BOREHOLE WITH MONITORING WELL LOCATION (INSPECSOL, 2008)
- GRAB SAMPLE LOCATION
- 92.18 GROUND SURFACE ELEVATION (m)
- (86.45) GROUNDWATER SURFACE ELEVATION (m) (JUNE 11, 2025)

GROUND SURFACE ELEVATION AT TEST HOLE LOCATIONS ARE REFERENCED TO A GEODETIC DATUM  
SCALE: 1:2000



BH1-GW1	2.2-3.7m	12-Aug-22
PAHs comply with MECP Table 2 Standards		
VOCs comply with MECP Table 2 Standards		
Metals comply with MECP Table 2 Standards		

MW07-8	3.0-6.0m	28-May-19
PAHs comply with MECP Table 2 Standards		
PHCs comply with MECP Table 2 Standards		
VOCs comply with MECP Table 2 Standards		



NO.	REVISIONS	DATE	INITIAL

**W.O. STINSON & SONS LTD.**

**PHASE II - ENVIRONMENTAL SITE ASSESSMENT**

**301 SOMME STREET**

OTTAWA, ONTARIO

**ANALYTICAL TESTING PLAN - GROUNDWATER**

Scale:	1:2000	Date:	08/2025
Drawn by:	YA	Report No.:	PE7096-LET.02
Checked by:	JD	Dwg. No.:	<b>PE7096-5</b>
Approved by:	MSD	Revision No.:	

**COORD. SYS.:** MTM ZONE 9      **EASTING:** 379013.78      **NORTHING:** 5019022.56      **ELEVATION:** 91.31

**PROJECT:** Proposed Commercial Development      **FILE NO.:** PE7096

**ADVANCED BY:** CME-55 Low Clearance Drill

**REMARKS:**      **DATE:** June 2, 2025      **HOLE NO.:** BH 1-25

SAMPLE DESCRIPTION	STRATA PLOT	DEPTH (m)	SAMPLE			ANALYTICAL TESTS	GASTECH (ppm)				MONITORING WELL CONSTRUCTION	ELEVATION (m)
			TYPE AND NO.	RECOVERY (%)	N OR RQD		GASTECH (% LEL)					
							50	100	150	200		
GROUND SURFACE												
FILL: Gravel and crushed stone, trace sand 0.15m [91.16m]			AU 1									91
FILL: Compact to very dense, brown silty sand, with gravel, crushed stone, concrete and ash		1	SS 2	50	10-10-15-21							90
		2	SS 3	27	5-50-/-/50/0.13							89
		3	SS 4	50	12-9-8-9							88
		4	SS 5	42	4-6-6-11							87
		5	SS 6	46	4-20-52-21							86
5.26m [86.05m]		6	SS 7	37	2-20-10-5							85
FILL: Brown silty sand to sandy silt, some gravel, cobbles and boulders		7	SS 8	42	2-3-5-13							84
		8	SS 9	71	11-23-15-25							83
6.78m [84.53m]		9	SS 10	46	9-12-12-23							82
GLACIAL TILL: Loose to dense, silty sand to sandy silt, some gravel, cobbles and boulders		10	SS 11	33	6-15-12-16							81
		11	SS 12	37	11-12-15-12							80
		12	SS 13	43	7-18-22-50							79
		13	SS 14	51	10-51-50-101/0.2							78
10.26m [81.05m]		14										
End of Borehole												
Practical refusal to augering at 10.26 m depth (GWL at 2.90 m depth - June 11, 2025)												

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**COORD. SYS.:** MTM ZONE 9      **EASTING:** 379026.72      **NORTHING:** 5019097.92      **ELEVATION:** 91.06

**PROJECT:** Proposed Commercial Development      **FILE NO.:** PE7096

**ADVANCED BY:** CME-55 Low Clearance Drill

**REMARKS:**      **DATE:** June 2, 2025      **HOLE NO.:** BH 2-25

SAMPLE DESCRIPTION	STRATA PLOT	DEPTH (m)	SAMPLE				ANALYTICAL TESTS				PIEZOMETER CONSTRUCTION	ELEVATION (m)
			TYPE AND NO.	RECOVERY (%)	N OR RQD	ANALYTICAL TESTS	GASTECH (ppm)		GASTECH (% LEL)			
							50	100	150	200		
GROUND SURFACE												
<b>FILL:</b> Gravel and crushed stone, some sand 0.10m [90.96m]			AU 1									91
<b>FILL:</b> Compact, brown silty sand to sandy silt, with gravel and crushed stone 1.45m [89.61m]		1	SS 2	58	6-9-4-6 13							90
<b>FILL:</b> Stiff, brown to grey silty clay 2.21m [88.85m]		2	SS 3	71	4-4-3-3 7							89
<b>FILL:</b> Stiff to firm, grey silty clay 5.79m [85.27m]		3	SS 4	75	P							88
		4	SS 5	83	P							87
		5	SS 6	25	P							86
<b>FILL:</b> Compact, grey silty clay, with gravel, cobbles and boulders 6.78m [84.28m]		6	SS 7	50	P							85
		7	G 8	0								84
<b>FILL:</b> Very dense, brown silty sand, with gravel, cobbles and boulders 7.52m [83.54m]		8	SS 9	67	2-3-9-20 12							83
		9	SS 10	44	26-50-/-/ 50/0.08							82
End of Borehole		10										81
Practical refusal to augering at 7.52 m depth		11										80
		12										79
		13										78
		14										78

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**COORD. SYS.:** MTM ZONE 9      **EASTING:** 379085.67      **NORTHING:** 5019059.58      **ELEVATION:** 90.73

**PROJECT:** Proposed Commercial Development      **FILE NO.:** PE7096

**ADVANCED BY:** CME-55 Low Clearance Drill

**REMARKS:**      **DATE:** June 2, 2025      **HOLE NO.:** BH 3-25

SAMPLE DESCRIPTION	STRATA PLOT	DEPTH (m)	SAMPLE				ANALYTICAL TESTS				PIEZOMETER CONSTRUCTION	ELEVATION (m)
			TYPE AND NO.	RECOVERY (%)	N OR RQD	ANALYTICAL TESTS	GASTECH (ppm)		GASTECH (% LEL)			
							50	100	150	200		
GROUND SURFACE												
TOPSOIL and organics 0.08m [90.65m]			AU 1									
FILL: Compact to very dense, brown silty sand, some clay, trace gravel, crushed stone and asphalt 1.68m [89.05m]		1	SS 2	43	3-10-50-/ 60/0.25							90
End of Borehole		2	SS 3	48	50-/-/-/ 50/0.15							89
Practical refusal to augering at 1.63 m depth		2										89
		3										88
		4										87
		5										86
		6										85
		7										84
		8										83
		9										82
		10										81
		11										80
		12										79
		13										78
		14										77

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**COORD. SYS.:** MTM ZONE 9      **EASTING:** 379084.55      **NORTHING:** 5019060.27      **ELEVATION:** 90.64

**PROJECT:** Proposed Commercial Development      **FILE NO. :** PE7096

**ADVANCED BY:** CME-55 Low Clearance Drill

**REMARKS:**      **DATE:** June 2, 2025      **HOLE NO. :** BH 3A-25

SAMPLE DESCRIPTION	STRATA PLOT	DEPTH (m)	SAMPLE				<input type="checkbox"/> GASTECH (ppm) <input type="checkbox"/> GASTECH (% LEL)				PIEZOMETER CONSTRUCTION	ELEVATION (m)
			TYPE AND NO.	RECOVERY (%)	N OR RQD	ANALYTICAL TESTS	50	100	150	200		
							<input type="checkbox"/> PID (ppm) <input type="checkbox"/> PID (% LEL)					
GROUND SURFACE												
0.94m [ 89.70m ]		1										90
End of Borehole		2										89
Practical refusal to augering at 0.94 m depth		3										88
		4										87
		5										86
		6										85
		7										84
		8										83
		9										82
		10										81
		11										80
		12										79
		13										78
		14										77

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COORD. SYS.: MTM ZONE 9      EASTING: 379087.71      NORTHING: 5019059.84      ELEVATION: 90.80

PROJECT: Proposed Commercial Development      FILE NO. : PE7096

ADVANCED BY: CME-55 Low Clearance Drill

REMARKS:      DATE: June 2, 2025      HOLE NO. : BH 3B-25

SAMPLE DESCRIPTION	STRATA PLOT	DEPTH (m)	SAMPLE			ANALYTICAL TESTS	GASTECH (ppm)				MONITORING WELL CONSTRUCTION	ELEVATION (m)
			TYPE AND NO.	RECOVERY (%)	N OR RQD		GASTECH (% LEL)					
							50	100	150	200		
GROUND SURFACE												
Overburden		1										90
1.52m [ 89.28m ]												
FILL: Crushed stone, with concrete		2	SS 1	17	24-25-7-12							89
1.83m [ 88.97m ]												
FILL: Stiff, brown silty clay, some sand and gravel, trace asphalt		3	SS 2	29	9-2-2-2							88
2.97m [ 87.83m ]												
FILL: Loose, brown silty sand, with rock fragments, trace clay		4	SS 3	17	1-2-4-12							87
3.73m [ 87.07m ]												
FILL: Stiff, brown silty clay, some sand, trace gravel and crushed stone		5	SS 4	12	1-7-2-3							86
4.50m [ 86.30m ]												
FILL: Loose, brown silty sand, with gravel		6	SS 5	25	9-3-3-3							85
5.26m [ 85.54m ]												
FILL: Compact to dense, grey silty sand, with gravel, cobbles and boulders, trace clay		7	SS 6	8	1-9-22-25							84
6.78m [ 84.02m ]												
FILL: Stiff, grey silty clay, some topsoil and organics, trace sand		8	SS 7	33	3-6-4-4							83
7.54m [ 83.26m ]												
FILL: Very stiff, brown, silty clay		9	SS 8	33	27-9-3-4							82
8.53m [ 82.27m ]												
FILL: Stiff, brown clayey silt, trace sand		10	SS 9	50	5-4-4-6							81
- Trace gravel by 9.6 m depth		11	SS 10	62	3-2-2-2							80
10.21m [ 80.59m ]												
FILL: Stiff, brown clayey silt, trace sand		12	SS 11	62	2-4-4-5							79
11.40m [ 79.40m ]												
GLACIAL TILL: Stiff, grey silty clay, with gravel, cobbles and boulders, some sand		13	SS 12	50	7-4-1-1							78
End of Borehole		14	SS 13	42	P							77
Practical refusal to augering at 11.40 m depth												
(GWL at 2.50 m depth - June 11, 2025)												

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**COORD. SYS.:** MTM ZONE 9      **EASTING:** 379135.75      **NORTHING:** 5019162.49      **ELEVATION:** 92.18

**PROJECT:** Proposed Commercial Development      **FILE NO.:** PE7096

**ADVANCED BY:** CME-55 Low Clearance Drill

**REMARKS:**      **DATE:** June 3, 2025      **HOLE NO.:** BH 4-25

SAMPLE DESCRIPTION	STRATA PLOT	DEPTH (m)	SAMPLE			GASTECH (ppm)				MONITORING WELL CONSTRUCTION	ELEVATION (m)	
			TYPE AND NO.	RECOVERY (%)	N OR RQD	ANALYTICAL TESTS	GASTECH (% LEL)					
							50	100	150			200
GROUND SURFACE												
FILL: Stiff brown silty clay, some gravel, trace sand - trace organics to 0.08 m depth		1	AU 1								92	
		1.22m [90.96m]	SS 2	33	3-5-5-25						91	
FILL: Compact, brown silty sand, with gravel, trace topsoil and organics		2	SS 3	75	11-13-11-11						90	
		2.21m [89.97m]	SS 4	25	2-5-2-3						89	
FILL: Stiff, brown silty clay, with gravel, some crushed stone and sand		3	SS 5	42	1-4-4-4						89	
		2.97m [89.21m]	SS 6	12	1-2-2-4						88	
FILL: Loose, brown silty sand, some clay, trace wood and topsoil		4	SS 7	31	2-2-50-/52/0.25						87	
		3.73m [88.45m]	SS 8	25	1-2-2-2						87	
FILL: Firm, brown silty clay, with gravel, some sand and crushed stone		5	SS 9	29	1-2-4-4						86	
		6.02m [86.16m]	SS 10	46	1-2-1-1						85	
FILL: Firm, grey silty clay, with gravel, cobbles and boulders, trace crushed stone and asphalt		6	SS 11	58	1-3-2-2						84	
		8.69m [83.49m]	SS 12	71	1-2-2-6						83	
TOPSOIL and organics		8.99m [83.19m]	SS 13	62	5-11-8-/19						83	
Compact, grey SILTY SAND to SANDY SILT		9.45m [82.73m]	SS 14	83	1-1-1-1						82	
GLACIAL TILL: Firm to stiff, brown clayey silt, trace gravel and sand		10	SS 15	100	1-1-1-2						81	
			SS 16	83	0-0-0-0						80	
			SS 17	100	P						80	
- Clay content increasing by 12.2 m depth		12	SS 18	100	1-2-3-1						79	
			SS 19	100	5						79	

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**COORD. SYS.:** MTM ZONE 9      **EASTING:** 379135.75      **NORTHING:** 5019162.49      **ELEVATION:** 92.18

**PROJECT:** Proposed Commercial Development      **FILE NO. :** PE7096

**ADVANCED BY:** CME-55 Low Clearance Drill

**REMARKS:**      **DATE:** June 3, 2025      **HOLE NO. :** BH 4-25

SAMPLE DESCRIPTION	STRATA PLOT	DEPTH (m)	SAMPLE				ANALYTICAL TESTS				MONITORING WELL CONSTRUCTION	ELEVATION (m)
			TYPE AND NO.	RECOVERY (%)	N OR RQD	ANALYTICAL TESTS	GASTECH (ppm)		GASTECH (% LEL)			
							50	100	150	200		
Dynamic cone penetration test commenced at 14.33 m depth		14	SS 19	83	1-2-4-4 6							78
End of Borehole		15										77
Practical refusal to DCPT at 15.42 m depth		16										76
DCPT Pushed from 14.33 m to 15.01 m depth		17										75
(GWL at 5.73 m depth - June 11, 2025)		18										74
		19										73
		20										72
		21										71
		22										70
		23										69
		24										68
		25										67
		26										66
		27										65
		28										65

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# SYMBOLS AND TERMS

## SOIL DESCRIPTION

Behavioural properties, such as structure and strength, take precedence over particle gradation in describing soils. Terminology describing soil structure are as follows:

Desiccated	-	having visible signs of weathering by oxidation of clay minerals, shrinkage cracks, etc.
Fissured	-	having cracks, and hence a blocky structure.
Varved	-	composed of regular alternating layers of silt and clay.
Stratified	-	composed of alternating layers of different soil types, e.g. silt and sand or silt and clay.
Well-Graded	-	Having wide range in grain sizes and substantial amounts of all intermediate particle sizes (see Grain Size Distribution).
Uniformly-Graded	-	Predominantly of one grain size (see Grain Size Distribution).

The standard terminology to describe the relative strength of cohesionless soils is the compactness condition, usually inferred from the results of the Standard Penetration Test (SPT) 'N' value. The SPT N value is the number of blows of a 63.5 kg hammer, falling 760 mm, required to drive a 51 mm O.D. split spoon sampler 300 mm into the soil after an initial penetration of 150 mm. An SPT N value of "P" denotes that the split-spoon sampler was pushed 300 mm into the soil without the use of a falling hammer.

Compactness Condition	'N' Value	Relative Density %
Very Loose	<4	<15
Loose	4-10	15-35
Compact	10-30	35-65
Dense	30-50	65-85
Very Dense	>50	>85

The standard terminology to describe the strength of cohesive soils is the consistency, which is based on the undisturbed undrained shear strength as measured by the in situ or laboratory shear vane tests, unconfined compression tests, or occasionally by the Standard Penetration Test (SPT). Note that the typical correlations of undrained shear strength to SPT N value (tabulated below) tend to underestimate the consistency for sensitive silty clays, so Paterson reviews the applicable split spoon samples in the laboratory to provide a more representative consistency value based on tactile examination.

Consistency	Undrained Shear Strength (kPa)	'N' Value
Very Soft	<12	<2
Soft	12-25	2-4
Firm	25-50	4-8
Stiff	50-100	8-15
Very Stiff	100-200	15-30
Hard	>200	>30

## SYMBOLS AND TERMS (continued)

### SOIL DESCRIPTION (continued)

Cohesive soils can also be classified according to their “sensitivity”. The sensitivity,  $S_t$ , is the ratio between the undisturbed undrained shear strength and the remoulded undrained shear strength of the soil. The classes of sensitivity may be defined as follows:

Low Sensitivity:	$S_t < 2$
Medium Sensitivity:	$2 < S_t < 4$
Sensitive:	$4 < S_t < 8$
Extra Sensitive:	$8 < S_t < 16$
Quick Clay:	$S_t > 16$

### ROCK DESCRIPTION

The structural description of the bedrock mass is based on the Rock Quality Designation (RQD).

The RQD classification is based on a modified core recovery percentage in which all pieces of sound core over 100 mm long are counted as recovery. The smaller pieces are considered to be a result of closely-spaced discontinuities (resulting from shearing, jointing, faulting, or weathering) in the rock mass and are not counted. RQD is ideally determined from NQ or larger size core. However, it can be used on smaller core sizes, such as BQ, if the bulk of the fractures caused by drilling stresses (called “mechanical breaks”) are easily distinguishable from the normal in situ fractures.

RQD %	ROCK QUALITY
90-100	Excellent, intact, very sound
75-90	Good, massive, moderately jointed or sound
50-75	Fair, blocky and seamy, fractured
25-50	Poor, shattered and very seamy or blocky, severely fractured
0-25	Very poor, crushed, very severely fractured

### SAMPLE TYPES

SS	-	Split spoon sample (obtained in conjunction with the performing of the Standard Penetration Test (SPT))
TW	-	Thin wall tube or Shelby tube, generally recovered using a piston sampler
G	-	"Grab" sample from test pit or surface materials
AU	-	Auger sample or bulk sample
WS	-	Wash sample
RC	-	Rock core sample (Core bit size BQ, NQ, HQ, etc.). Rock core samples are obtained with the use of standard diamond drilling bits.

## SYMBOLS AND TERMS (continued)

### PLASTICITY LIMITS AND GRAIN SIZE DISTRIBUTION

WC%	-	Natural water content or water content of sample, %
LL	-	Liquid Limit, % (water content above which soil behaves as a liquid)
PL	-	Plastic Limit, % (water content above which soil behaves plastically)
PI	-	Plasticity Index, % (difference between LL and PL)
D <sub>xx</sub>	-	Grain size at which xx% of the soil, by weight, is of finer grain sizes These grain size descriptions are not used below 0.075 mm grain size
D <sub>10</sub>	-	Grain size at which 10% of the soil is finer (effective grain size)
D <sub>60</sub>	-	Grain size at which 60% of the soil is finer
C <sub>c</sub>	-	Concavity coefficient = $(D_{30})^2 / (D_{10} \times D_{60})$
C <sub>u</sub>	-	Uniformity coefficient = $D_{60} / D_{10}$

C<sub>c</sub> and C<sub>u</sub> are used to assess the grading of sands and gravels:

Well-graded gravels have:  $1 < C_c < 3$  and  $C_u > 4$

Well-graded sands have:  $1 < C_c < 3$  and  $C_u > 6$

Sands and gravels not meeting the above requirements are poorly-graded or uniformly-graded.

C<sub>c</sub> and C<sub>u</sub> are not applicable for the description of soils with more than 10% silt and clay (more than 10% finer than 0.075 mm or the #200 sieve)

### CONSOLIDATION TEST

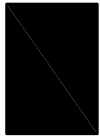
p' <sub>o</sub>	-	Present effective overburden pressure at sample depth
p' <sub>c</sub>	-	Preconsolidation pressure of (maximum past pressure on) sample
C <sub>cr</sub>	-	Recompression index (in effect at pressures below p' <sub>c</sub> )
C <sub>c</sub>	-	Compression index (in effect at pressures above p' <sub>c</sub> )
OC Ratio		Overconsolidation ratio = $p'_c / p'_o$
Void Ratio		Initial sample void ratio = volume of voids / volume of solids
W <sub>o</sub>	-	Initial water content (at start of consolidation test)

### PERMEABILITY TEST

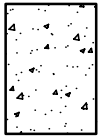
k	-	Coefficient of permeability or hydraulic conductivity is a measure of the ability of water to flow through the sample. The value of k is measured at a specified unit weight for (remoulded) cohesionless soil samples, because its value will vary with the unit weight or density of the sample during the test.
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## SYMBOLS AND TERMS (continued)

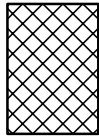
### STRATA PLOT



Topsoil



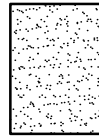
Asphalt



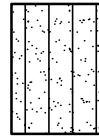
Fill



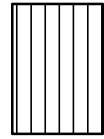
Peat



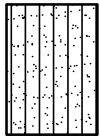
Sand



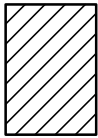
Silty Sand



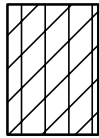
Silt



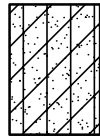
Sandy Silt



Clay



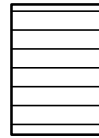
Silty Clay



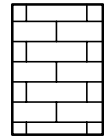
Clayey Silty Sand



Glacial Till



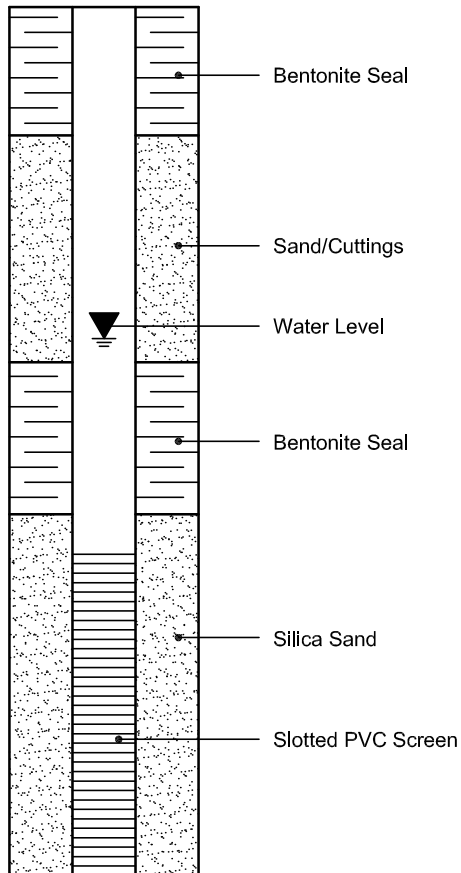
Shale



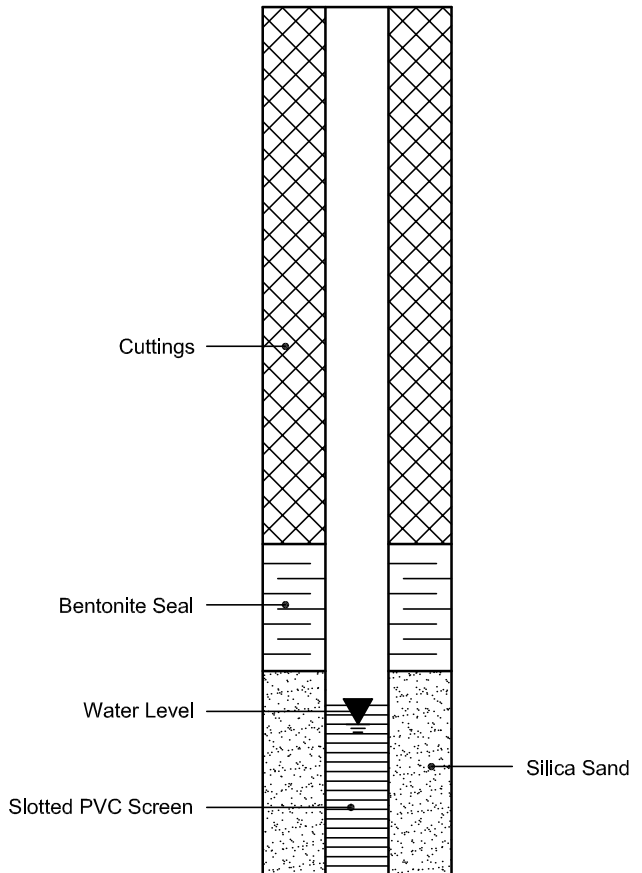
Bedrock

### MONITORING WELL AND PIEZOMETER CONSTRUCTION

#### MONITORING WELL CONSTRUCTION



#### PIEZOMETER CONSTRUCTION



## Certificate of Analysis

**Paterson Group Consulting Engineers (Ottawa)**

9 Auriga Drive  
Ottawa, ON K2E 7T9  
Attn: Joshua Dempsey

Client PO: 63277  
Project: PE7096  
Custody:

Report Date: 12-Jun-2025  
Order Date: 5-Jun-2025

**Order #: 2523398**

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Parcel ID	Client ID
2523398-01	BH1-25-SS2
2523398-02	BH2-25-SS2
2523398-03	BH4-25-SS3
2523398-04	DUP1

Approved By:



Mark Foto, M.Sc.

Laboratory Director

Certificate of Analysis

Report Date: 12-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 5-Jun-2025

Client PO: 63277

Project Description: PE7096

**Analysis Summary Table**

Analysis	Method Reference/Description	Extraction Date	Analysis Date
BTEX by P&T GC-MS	EPA 8260 - P&T GC-MS	6-Jun-25	7-Jun-25
Conductivity	MOE E3138 - probe @25 °C, water ext	9-Jun-25	9-Jun-25
pH, soil	MOE E3137 - probe @25 °C, CaCl2 ext	9-Jun-25	9-Jun-25
PHC F1	CWS Tier 1 - P&T GC-FID	6-Jun-25	7-Jun-25
PHC F4G (gravimetric)	CWS Tier 1 - Extraction Gravimetric	12-Jun-25	12-Jun-25
PHCs F2 to F4	CWS Tier 1 - GC-FID, extraction	6-Jun-25	6-Jun-25
REG 153: Metals by ICP/MS, soil	EPA 6020 - Digestion - ICP-MS	9-Jun-25	10-Jun-25
REG 153: PAHs by GC-MS	EPA 8270 - GC-MS, extraction	9-Jun-25	11-Jun-25
SAR	Calculated	9-Jun-25	9-Jun-25
Solids, %	CWS Tier 1 - Gravimetric	6-Jun-25	9-Jun-25

Certificate of Analysis

Report Date: 12-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 5-Jun-2025

Client PO: 63277

Project Description: PE7096

<b>Client ID:</b>	BH1-25-SS2	BH2-25-SS2	BH4-25-SS3	DUP1		
<b>Sample Date:</b>	02-Jun-25 00:00	02-Jun-25 00:00	02-Jun-25 00:00	02-Jun-25 00:00	-	-
<b>Sample ID:</b>	2523398-01	2523398-02	2523398-03	2523398-04		
<b>Matrix:</b>	Soil	Soil	Soil	Soil		
<b>MDL/Units</b>						

**Physical Characteristics**

% Solids	0.1 % by Wt.	90.2	78.9	87.6	86.5	-	-
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**General Inorganics**

SAR	0.01 N/A	0.64	0.29	0.80	0.84	-	-
Conductivity	5 uS/cm	418	495	875	629	-	-
pH	0.05 pH Units	9.10	7.86	-	-	-	-

**Metals**

Antimony	1.0 ug/g	<1.0	<1.0	1.7	1.3	-	-
Arsenic	1.0 ug/g	4.8	4.2	5.5	5.2	-	-
Barium	1.0 ug/g	121	110	114	116	-	-
Beryllium	0.5 ug/g	0.6	0.6	<0.5	<0.5	-	-
Boron	5.0 ug/g	13.8	9.3	9.1	8.9	-	-
Cadmium	0.5 ug/g	<0.5	<0.5	<0.5	<0.5	-	-
Chromium	5.0 ug/g	29.3	35.4	25.3	25.8	-	-
Cobalt	1.0 ug/g	9.6	9.0	7.6	7.7	-	-
Copper	5.0 ug/g	25.5	21.9	33.0	33.3	-	-
Lead	1.0 ug/g	33.0	16.3	63.4	53.9	-	-
Molybdenum	1.0 ug/g	1.9	2.3	1.8	2.0	-	-
Nickel	5.0 ug/g	27.5	22.4	21.4	20.8	-	-
Selenium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	-	-
Silver	0.3 ug/g	<0.3	<0.3	<0.3	2.4	-	-
Thallium	1.0 ug/g	<1.0	<1.0	<1.0	<1.0	-	-
Uranium	1.0 ug/g	<1.0	1.1	1.0	1.1	-	-
Vanadium	10.0 ug/g	36.9	44.4	32.4	34.5	-	-
Zinc	20.0 ug/g	76.3	51.8	83.5	86.5	-	-

**Volatiles**

Certificate of Analysis

Report Date: 12-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 5-Jun-2025

Client PO: 63277

Project Description: PE7096

Client ID:	BH1-25-SS2	BH2-25-SS2	BH4-25-SS3	DUP1	-	-
Sample Date:	02-Jun-25 00:00	02-Jun-25 00:00	02-Jun-25 00:00	02-Jun-25 00:00	-	-
Sample ID:	2523398-01	2523398-02	2523398-03	2523398-04	-	-
Matrix:	Soil	Soil	Soil	Soil	-	-
MDL/Units						

**Volatiles**

Benzene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	-	-
Ethylbenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
Toluene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
m,p-Xylenes	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
o-Xylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
Xylenes, total	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
Toluene-d8	Surrogate	109%	117%	114%	114%	-	-

**Hydrocarbons**

F1 PHCs (C6-C10)	7 ug/g	<7	<7	<7	<7	-	-
F2 PHCs (C10-C16)	4 ug/g	<4	<4	<4	<4	-	-
F3 PHCs (C16-C34)	8 ug/g	81	<8	56	58	-	-
F4 PHCs (C34-C50)	6 ug/g	166 [1]	<6	37	42	-	-
F4G PHCs (gravimetric)	50 ug/g	621	-	-	-	-	-

**Semi-Volatiles**

Acenaphthene	0.02 ug/g	<0.02	<0.02	0.02	<0.02	-	-
Acenaphthylene	0.02 ug/g	<0.02	0.34	0.06	0.03	-	-
Anthracene	0.02 ug/g	0.05	0.28	0.11	0.07	-	-
Benzo [a] anthracene	0.02 ug/g	0.21	0.83	0.30	0.18	-	-
Benzo [a] pyrene	0.02 ug/g	0.22	0.86	0.26	0.14	-	-
Benzo [b] fluoranthene	0.02 ug/g	0.22	0.75	0.26	0.16	-	-
Benzo [g,h,i] perylene	0.02 ug/g	0.15	0.53	0.18	0.11	-	-
Benzo [k] fluoranthene	0.02 ug/g	0.13	0.45	0.15	0.09	-	-
Chrysene	0.02 ug/g	0.20	0.82	0.30	0.19	-	-
Dibenzo [a,h] anthracene	0.02 ug/g	0.04	0.15	0.05	0.03	-	-
Fluoranthene	0.02 ug/g	0.46	1.65	0.65	0.41	-	-

Certificate of Analysis

Report Date: 12-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 5-Jun-2025

Client PO: 63277

Project Description: PE7096

<b>Client ID:</b>	BH1-25-SS2	BH2-25-SS2	BH4-25-SS3	DUP1	-	-
<b>Sample Date:</b>	02-Jun-25 00:00	02-Jun-25 00:00	02-Jun-25 00:00	02-Jun-25 00:00	-	-
<b>Sample ID:</b>	2523398-01	2523398-02	2523398-03	2523398-04	-	-
<b>Matrix:</b>	Soil	Soil	Soil	Soil	-	-
<b>MDL/Units</b>						

**Semi-Volatiles**

Fluorene	0.02 ug/g	<0.02	0.05	0.03	0.02	-	-
Indeno [1,2,3-cd] pyrene	0.02 ug/g	0.14	0.51	0.17	0.10	-	-
1-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	0.05	0.04	-	-
2-Methylnaphthalene	0.02 ug/g	<0.02	0.03	0.06	0.05	-	-
Methylnaphthalene (1&2)	0.04 ug/g	<0.04	<0.04	0.11	0.10	-	-
Naphthalene	0.01 ug/g	<0.01	0.01	0.05	0.04	-	-
Phenanthrene	0.02 ug/g	0.22	0.64	0.38	0.23	-	-
Pyrene	0.02 ug/g	0.37	1.37	0.62	0.39	-	-
2-Fluorobiphenyl	Surrogate	71.3%	80.3%	84.0%	72.2%	-	-
Terphenyl-d14	Surrogate	69.6%	80.3%	96.5%	78.5%	-	-

Certificate of Analysis

Report Date: 12-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 5-Jun-2025

Client PO: 63277

Project Description: PE7096

**Method Quality Control: Blank**

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
<b>General Inorganics</b>								
Conductivity	ND	5	uS/cm					
<b>Hydrocarbons</b>								
F1 PHCs (C6-C10)	ND	7	ug/g					
F2 PHCs (C10-C16)	ND	4	ug/g					
F3 PHCs (C16-C34)	ND	8	ug/g					
F4 PHCs (C34-C50)	ND	6	ug/g					
F4G PHCs (gravimetric)	ND	50	ug/g					
<b>Metals</b>								
Antimony	ND	1.0	ug/g					
Arsenic	ND	1.0	ug/g					
Barium	ND	1.0	ug/g					
Beryllium	ND	0.5	ug/g					
Boron	ND	5.0	ug/g					
Cadmium	ND	0.5	ug/g					
Chromium	ND	5.0	ug/g					
Cobalt	ND	1.0	ug/g					
Copper	ND	5.0	ug/g					
Lead	ND	1.0	ug/g					
Molybdenum	ND	1.0	ug/g					
Nickel	ND	5.0	ug/g					
Selenium	ND	1.0	ug/g					
Silver	ND	0.3	ug/g					
Thallium	ND	1.0	ug/g					
Uranium	ND	1.0	ug/g					
Vanadium	ND	10.0	ug/g					
Zinc	ND	20.0	ug/g					
<b>Semi-Volatiles</b>								
Acenaphthene	ND	0.02	ug/g					
Acenaphthylene	ND	0.02	ug/g					
Anthracene	ND	0.02	ug/g					
Benzo [a] anthracene	ND	0.02	ug/g					
Benzo [a] pyrene	ND	0.02	ug/g					

Certificate of Analysis

Report Date: 12-Jun-2025

Client: **Paterson Group Consulting Engineers (Ottawa)**

Order Date: 5-Jun-2025

Client PO: 63277

Project Description: PE7096

**Method Quality Control: Blank**

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Benzo [b] fluoranthene	ND	0.02	ug/g					
Benzo [g,h,i] perylene	ND	0.02	ug/g					
Benzo [k] fluoranthene	ND	0.02	ug/g					
Chrysene	ND	0.02	ug/g					
Dibenzo [a,h] anthracene	ND	0.02	ug/g					
Fluoranthene	ND	0.02	ug/g					
Fluorene	ND	0.02	ug/g					
Indeno [1,2,3-cd] pyrene	ND	0.02	ug/g					
1-Methylnaphthalene	ND	0.02	ug/g					
2-Methylnaphthalene	ND	0.02	ug/g					
Methylnaphthalene (1&2)	ND	0.04	ug/g					
Naphthalene	ND	0.01	ug/g					
Phenanthrene	ND	0.02	ug/g					
Pyrene	ND	0.02	ug/g					
Surrogate: 2-Fluorobiphenyl	0.856		%	64.2	50-140			
Surrogate: Terphenyl-d14	1.00		%	75.2	50-140			
<b>Volatiles</b>								
Benzene	ND	0.02	ug/g					
Ethylbenzene	ND	0.05	ug/g					
Toluene	ND	0.05	ug/g					
m,p-Xylenes	ND	0.05	ug/g					
o-Xylene	ND	0.05	ug/g					
Xylenes, total	ND	0.05	ug/g					
Surrogate: Toluene-d8	8.30		%	104	50-140			

Certificate of Analysis

Report Date: 12-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 5-Jun-2025

Client PO: 63277

Project Description: PE7096

**Method Quality Control: Duplicate**

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
<b>General Inorganics</b>									
SAR	13.7	0.01	N/A	13.8			0.4	30	
Conductivity	1820	5	uS/cm	1830			0.3	5	
pH	7.46	0.05	pH Units	7.45			0.1	2.3	
<b>Hydrocarbons</b>									
F1 PHCs (C6-C10)	ND	7	ug/g	ND			NC	40	
F2 PHCs (C10-C16)	ND	4	ug/g	ND			NC	30	
F3 PHCs (C16-C34)	22	8	ug/g	20			10.3	30	
F4 PHCs (C34-C50)	22	6	ug/g	25			13.8	30	
<b>Metals</b>									
Antimony	30.3	1.0	ug/g	38.2			23.0	30	
Arsenic	5.4	1.0	ug/g	5.4			0.0	30	
Barium	200	1.0	ug/g	203			1.9	30	
Beryllium	ND	0.5	ug/g	ND			NC	30	
Boron	621	5.0	ug/g	675			8.4	30	
Cadmium	6.0	0.5	ug/g	4.5			28.9	30	
Chromium	34.8	5.0	ug/g	38.1			8.9	30	
Cobalt	6.3	1.0	ug/g	6.1			3.0	30	
Copper	1150	5.0	ug/g	1250			7.9	30	
Lead	165	1.0	ug/g	175			6.1	30	
Molybdenum	2.4	1.0	ug/g	2.6			9.8	30	
Nickel	32.6	5.0	ug/g	27.6			16.8	30	
Selenium	1.1	1.0	ug/g	1.3			12.2	30	
Silver	1.3	0.3	ug/g	2.1			NC	30	
Thallium	ND	1.0	ug/g	ND			NC	30	
Uranium	ND	1.0	ug/g	ND			NC	30	
Vanadium	55.4	10.0	ug/g	57.4			3.4	30	
Zinc	3520	50.2	ug/g	3370			4.3	30	
<b>Physical Characteristics</b>									
% Solids	86.7	0.1	% by Wt.	87.4			0.8	25	
<b>Semi-Volatiles</b>									

Certificate of Analysis

Report Date: 12-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 5-Jun-2025

Client PO: 63277

Project Description: PE7096

**Method Quality Control: Duplicate**

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Acenaphthene	ND	0.02	ug/g	ND			NC	40	
Acenaphthylene	ND	0.02	ug/g	ND			NC	40	
Anthracene	0.068	0.02	ug/g	0.048			34.7	40	
Benzo [a] anthracene	0.235	0.02	ug/g	0.213			10.0	40	
Benzo [a] pyrene	0.221	0.02	ug/g	0.221			0.0	40	
Benzo [b] fluoranthene	0.242	0.02	ug/g	0.223			8.0	40	
Benzo [g,h,i] perylene	0.243	0.02	ug/g	0.154			44.6	40	QR-04
Benzo [k] fluoranthene	0.155	0.02	ug/g	0.134			14.8	40	
Chrysene	0.234	0.02	ug/g	0.202			14.6	40	
Dibenzo [a,h] anthracene	0.038	0.02	ug/g	0.042			10.9	40	
Fluoranthene	0.527	0.02	ug/g	0.456			14.5	40	
Fluorene	ND	0.02	ug/g	ND			NC	40	
Indeno [1,2,3-cd] pyrene	0.149	0.02	ug/g	0.144			3.8	40	
1-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
2-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
Naphthalene	ND	0.01	ug/g	ND			NC	40	
Phenanthrene	0.265	0.02	ug/g	0.224			16.4	40	
Pyrene	0.435	0.02	ug/g	0.368			16.7	40	
Surrogate: 2-Fluorobiphenyl	0.907		%		61.3	50-140			
Surrogate: Terphenyl-d14	1.08		%		72.9	50-140			
<b>Volatiles</b>									
Benzene	ND	0.02	ug/g	ND			NC	50	
Ethylbenzene	ND	0.05	ug/g	ND			NC	50	
Toluene	ND	0.05	ug/g	ND			NC	50	
m,p-Xylenes	ND	0.05	ug/g	ND			NC	50	
o-Xylene	ND	0.05	ug/g	ND			NC	50	
Surrogate: Toluene-d8	10.0		%		110	50-140			

Certificate of Analysis

Report Date: 12-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 5-Jun-2025

Client PO: 63277

Project Description: PE7096

**Method Quality Control: Spike**

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
<b>Hydrocarbons</b>									
F1 PHCs (C6-C10)	173	7	ug/g	ND	100	85-115			
F2 PHCs (C10-C16)	102	4	ug/g	ND	100	60-140			
F3 PHCs (C16-C34)	256	8	ug/g	20	94.5	60-140			
F4 PHCs (C34-C50)	189	6	ug/g	25	104	60-140			
F4G PHCs (gravimetric)	880	50	ug/g	ND	88.0	80-120			
<b>Metals</b>									
Antimony	57.0	1.0	ug/g	15.3	83.4	70-130			
Arsenic	53.8	1.0	ug/g	2.2	103	70-130			
Barium	122	1.0	ug/g	81.3	81.3	70-130			
Beryllium	55.4	0.5	ug/g	ND	110	70-130			
Boron	60.0	5.0	ug/g	ND	114	70-130			
Cadmium	51.0	0.5	ug/g	1.8	98.4	70-130			
Chromium	70.5	5.0	ug/g	15.2	111	70-130			
Cobalt	59.3	1.0	ug/g	13.1	92.5	70-130			
Copper	64.6	5.0	ug/g	5.5	118	70-130			
Lead	105	1.0	ug/g	70.1	70.2	70-130			
Molybdenum	57.8	1.0	ug/g	1.0	114	70-130			
Nickel	64.6	5.0	ug/g	11.0	107	70-130			
Selenium	55.2	1.0	ug/g	ND	109	70-130			
Silver	45.1	0.3	ug/g	0.9	88.5	70-130			
Thallium	50.4	1.0	ug/g	ND	101	70-130			
Uranium	55.6	1.0	ug/g	ND	111	70-130			
Vanadium	77.3	10.0	ug/g	22.9	109	70-130			
Zinc	72.0	20.0	ug/g	ND	120	70-130			
<b>Semi-Volatiles</b>									
Acenaphthene	0.156	0.02	ug/g	ND	84.3	50-140			
Acenaphthylene	0.161	0.02	ug/g	ND	87.0	50-140			
Anthracene	0.187	0.02	ug/g	0.048	75.1	50-140			
Benzo [a] anthracene	0.347	0.02	ug/g	0.213	72.6	50-140			
Benzo [a] pyrene	0.341	0.02	ug/g	0.221	64.8	50-140			

Certificate of Analysis

Report Date: 12-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 5-Jun-2025

Client PO: 63277

Project Description: PE7096

**Method Quality Control: Spike**

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Benzo [b] fluoranthene	0.360	0.02	ug/g	0.223	73.9	50-140			
Benzo [g,h,i] perylene	0.284	0.02	ug/g	0.154	70.0	50-140			
Benzo [k] fluoranthene	0.290	0.02	ug/g	0.134	84.5	50-140			
Chrysene	0.399	0.02	ug/g	0.202	106	50-140			
Dibenzo [a,h] anthracene	0.194	0.02	ug/g	0.042	82.5	50-140			
Fluoranthene	0.576	0.02	ug/g	0.456	64.8	50-140			
Fluorene	0.165	0.02	ug/g	ND	89.0	50-140			
Indeno [1,2,3-cd] pyrene	0.281	0.02	ug/g	0.144	74.3	50-140			
1-Methylnaphthalene	0.148	0.02	ug/g	ND	79.9	50-140			
2-Methylnaphthalene	0.162	0.02	ug/g	ND	87.5	50-140			
Naphthalene	0.144	0.01	ug/g	ND	77.8	50-140			
Phenanthrene	0.350	0.02	ug/g	0.224	68.0	50-140			
Pyrene	0.514	0.02	ug/g	0.368	78.8	50-140			
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>0.967</i>		%		<i>65.4</i>	<i>50-140</i>			
<i>Surrogate: Terphenyl-d14</i>	<i>1.09</i>		%		<i>73.7</i>	<i>50-140</i>			
<b>Volatiles</b>									
Benzene	3.01	0.02	ug/g	ND	75.2	60-130			
Ethylbenzene	4.82	0.05	ug/g	ND	120	60-130			
Toluene	4.98	0.05	ug/g	ND	125	60-130			
m,p-Xylenes	10.0	0.05	ug/g	ND	125	60-130			
o-Xylene	5.12	0.05	ug/g	ND	128	60-130			
<i>Surrogate: Toluene-d8</i>	<i>8.27</i>		%		<i>103</i>	<i>50-140</i>			

Certificate of Analysis

Report Date: 12-Jun-2025

Client: **Paterson Group Consulting Engineers (Ottawa)**

Order Date: 5-Jun-2025

Client PO: 63277

**Project Description: PE7096**

Qualifier Notes:

**Sample Qualifiers :**

- 1: GC-FID signal did not return to baseline by C50  
Applies to Samples: BH1-25-SS2

**QC Qualifiers:**

- QR-04 Duplicate results exceeds RPD limits due to non-homogeneous matrix.

Sample Data Revisions:

None

Certificate of Analysis

Report Date: 12-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 5-Jun-2025

Client PO: 63277

Project Description: PE7096

**Work Order Revisions / Comments:**

None

**Other Report Notes:**

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

NC: Not Calculated

Soil results are reported on a dry weight basis unless otherwise noted.

Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

**CCME PHC additional information:**

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.
- When reported, data for F4G has been processed using a silica gel cleanup.

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.



20  
St. Laurent Blvd,  
Toronto, K1G 4J8  
416-1947  
paracellabs.com  
cellabs.com

Paracel Order Number (Lab Use Only) <b>2523398</b>	Chain Of Custody (Lab Use Only)
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Client Name: Paterson Group	Project Ref: PE7096	Page <u>1</u> of <u>1</u>
Contact Name: Joshua Dempsey	Quote #:	<b>Turnaround Time</b> <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular
Address: 9 Auriga Drive Ottawa, Ontario	PO #: 63277	
Telephone: 613-226-7381	E-mail: jdempsey@patersongroup.ca	
		Date Required: _____

<input checked="" type="checkbox"/> REG 153/04	<input type="checkbox"/> REG 406/19	<b>Other Regulation</b>	<b>Matrix Type:</b> S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)				<b>Required Analysis</b>												
<input type="checkbox"/> Table 1	<input type="checkbox"/> Agri/Other	<input type="checkbox"/> Med/Fine	<input type="checkbox"/> REG 558	<input type="checkbox"/> PWQO	Matrix	Air Volume	# of Containers	Field Filtered	Sample Taken Date   Time		PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	EC/SAR	pH
<input type="checkbox"/> Table 2	<input type="checkbox"/> Res/Park	<input type="checkbox"/> Coarse	<input type="checkbox"/> CCME	<input type="checkbox"/> MISA															
<input type="checkbox"/> Table 3	<input type="checkbox"/> Ind/Comm		<input type="checkbox"/> SU - Sani	<input type="checkbox"/> SU - Storm															
<input type="checkbox"/> Table _____			Mun: _____																
For RSC: <input type="checkbox"/> Yes <input type="checkbox"/> No			<input type="checkbox"/> Other: _____																
<b>Sample ID/Location Name</b>																			
1	BH1-25-SS2				S		2		June 2, 2025		X		X	X				X	X
2	BH2-25-SS2				S		2		June 2, 2025		X		X	X				X	X
3	BH4-25-SS3				S		2		June 2, 2025		X		X	X				X	
4	DUP1				S		2		June 2, 2025		X		X	X				X	
5																			
6																			
7																			
8																			
9																			
10																			

Comments:		Method of Delivery: <i>Paracel Courier</i>	
Relinquished By (Sign): <i>[Signature]</i>	Received at Depot:	Received at Lab: <i>Jm</i>	Verified By: <i>LTJ</i>
Relinquished By (Print): Joshua Dempsey	Date/Time:	Date/Time: <i>05/06/25 16:13</i>	Date/Time: <i>05/06/25 16:42</i>
Date/Time: June 5, 2025	Temperature: °C	Temperature: <i>16.9°C</i>	pH Verified: <input type="checkbox"/> By:

## Certificate of Analysis

**Paterson Group Consulting Engineers (Ottawa)**

9 Auriga Drive  
Ottawa, ON K2E 7T9  
Attn: Joshua Dempsey

Client PO: 63337  
Project: PE7096  
Custody:

Report Date: 19-Jun-2025  
Order Date: 13-Jun-2025

**Order #: 2524489**

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Parcel ID	Client ID
2524489-01	BH3B-25-GW1
2524489-02	DUP

Approved By:



Mark Foto, M.Sc.

Laboratory Director

Certificate of Analysis

Report Date: 19-Jun-2025

Client: **Paterson Group Consulting Engineers (Ottawa)**

Order Date: 13-Jun-2025

Client PO: 63337

**Project Description: PE7096**

**Analysis Summary Table**

Analysis	Method Reference/Description	Extraction Date	Analysis Date
PHC F1	CWS Tier 1 - P&T GC-FID	13-Jun-25	14-Jun-25
PHCs F2 to F4	CWS Tier 1 - GC-FID, extraction	14-Jun-25	17-Jun-25
REG 153: PAHs by GC-MS	EPA 625 - GC-MS, extraction	16-Jun-25	17-Jun-25
REG 153: VOCs by P&T GC/MS	EPA 624 - P&T GC-MS	13-Jun-25	14-Jun-25

Certificate of Analysis

Report Date: 19-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 13-Jun-2025

Client PO: 63337

Project Description: PE7096

<b>Client ID:</b>	BH3B-25-GW1	DUP	-	-	-	-
<b>Sample Date:</b>	11-Jun-25 09:00	11-Jun-25 09:00	-	-	-	-
<b>Sample ID:</b>	2524489-01	2524489-02	-	-	-	-
<b>Matrix:</b>	Ground Water	Ground Water	-	-	-	-
<b>MDL/Units</b>						

**Volatiles**

Acetone	5.0 ug/L	<5.0	<5.0	-	-	-	-
Benzene	0.5 ug/L	<0.5	<0.5	-	-	-	-
Bromodichloromethane	0.5 ug/L	<0.5	<0.5	-	-	-	-
Bromoform	0.5 ug/L	<0.5	<0.5	-	-	-	-
Bromomethane	0.5 ug/L	<0.5	<0.5	-	-	-	-
Carbon Tetrachloride	0.2 ug/L	<0.2	<0.2	-	-	-	-
Chlorobenzene	0.5 ug/L	<0.5	<0.5	-	-	-	-
Chloroform	0.5 ug/L	<0.5	<0.5	-	-	-	-
Dibromochloromethane	0.5 ug/L	<0.5	<0.5	-	-	-	-
Dichlorodifluoromethane	1.0 ug/L	<1.0	<1.0	-	-	-	-
1,2-Dichlorobenzene	0.5 ug/L	<0.5	<0.5	-	-	-	-
1,3-Dichlorobenzene	0.5 ug/L	<0.5	<0.5	-	-	-	-
1,4-Dichlorobenzene	0.5 ug/L	<0.5	<0.5	-	-	-	-
1,1-Dichloroethane	0.5 ug/L	<0.5	<0.5	-	-	-	-
1,2-Dichloroethane	0.5 ug/L	<0.5	<0.5	-	-	-	-
1,1-Dichloroethylene	0.5 ug/L	<0.5	<0.5	-	-	-	-
cis-1,2-Dichloroethylene	0.5 ug/L	<0.5	<0.5	-	-	-	-
trans-1,2-Dichloroethylene	0.5 ug/L	<0.5	<0.5	-	-	-	-
1,2-Dichloropropane	0.5 ug/L	<0.5	<0.5	-	-	-	-
cis-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	-	-	-	-
trans-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	-	-	-	-
1,3-Dichloropropene, total	0.5 ug/L	<0.5	<0.5	-	-	-	-
Ethylene dibromide (dibromoethane,	0.2 ug/L	<0.2	<0.2	-	-	-	-
Ethylbenzene	0.5 ug/L	<0.5	<0.5	-	-	-	-
Hexane	1.0 ug/L	<1.0	<1.0	-	-	-	-

Certificate of Analysis

Report Date: 19-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 13-Jun-2025

Client PO: 63337

Project Description: PE7096

<b>Client ID:</b>	BH3B-25-GW1	DUP	-	-	-	-
<b>Sample Date:</b>	11-Jun-25 09:00	11-Jun-25 09:00	-	-	-	-
<b>Sample ID:</b>	2524489-01	2524489-02	-	-	-	-
<b>Matrix:</b>	Ground Water	Ground Water	-	-	-	-
<b>MDL/Units</b>						

**Volatiles**

Methyl Ethyl Ketone (2-Butanone)	5.0 ug/L	<5.0	<5.0	-	-	-	-
Methyl Isobutyl Ketone	5.0 ug/L	<5.0	<5.0	-	-	-	-
Methyl tert-butyl ether	2.0 ug/L	<2.0	<2.0	-	-	-	-
Methylene Chloride	5.0 ug/L	<5.0	<5.0	-	-	-	-
Styrene	0.5 ug/L	<0.5	<0.5	-	-	-	-
1,1,1,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	-	-	-	-
1,1,2,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	-	-	-	-
Tetrachloroethylene	0.5 ug/L	<0.5	<0.5	-	-	-	-
Toluene	0.5 ug/L	<0.5	<0.5	-	-	-	-
1,1,1-Trichloroethane	0.5 ug/L	<0.5	<0.5	-	-	-	-
1,1,2-Trichloroethane	0.5 ug/L	<0.5	<0.5	-	-	-	-
Trichloroethylene	0.5 ug/L	<0.5	<0.5	-	-	-	-
Trichlorofluoromethane	1.0 ug/L	<1.0	<1.0	-	-	-	-
Vinyl chloride	0.5 ug/L	<0.5	<0.5	-	-	-	-
m,p-Xylenes	0.5 ug/L	<0.5	<0.5	-	-	-	-
o-Xylene	0.5 ug/L	<0.5	<0.5	-	-	-	-
Xylenes, total	0.5 ug/L	<0.5	<0.5	-	-	-	-
Dibromofluoromethane	Surrogate	107%	105%	-	-	-	-
Toluene-d8	Surrogate	105%	104%	-	-	-	-
4-Bromofluorobenzene	Surrogate	106%	104%	-	-	-	-

**Hydrocarbons**

F1 PHCs (C6-C10)	25 ug/L	<25	<25	-	-	-	-
F2 PHCs (C10-C16)	100 ug/L	<100	<100	-	-	-	-
F3 PHCs (C16-C34)	100 ug/L	<100	<100	-	-	-	-
F4 PHCs (C34-C50)	100 ug/L	<100	<100	-	-	-	-

Certificate of Analysis

Report Date: 19-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 13-Jun-2025

Client PO: 63337

Project Description: PE7096

<b>Client ID:</b>	BH3B-25-GW1	DUP	-	-	-	-
<b>Sample Date:</b>	11-Jun-25 09:00	11-Jun-25 09:00	-	-	-	-
<b>Sample ID:</b>	2524489-01	2524489-02	-	-	-	-
<b>Matrix:</b>	Ground Water	Ground Water	-	-	-	-
<b>MDL/Units</b>						

**Semi-Volatiles**

Acenaphthene	0.05 ug/L	<0.05	<0.05	-	-	-	-
Acenaphthylene	0.05 ug/L	<0.05	<0.05	-	-	-	-
Anthracene	0.01 ug/L	<0.01	<0.01	-	-	-	-
Benzo [a] anthracene	0.01 ug/L	<0.01	<0.01	-	-	-	-
Benzo [a] pyrene	0.01 ug/L	<0.01	<0.01	-	-	-	-
Benzo [b] fluoranthene	0.05 ug/L	<0.05	<0.05	-	-	-	-
Benzo [g,h,i] perylene	0.05 ug/L	<0.05	<0.05	-	-	-	-
Benzo [k] fluoranthene	0.05 ug/L	<0.05	<0.05	-	-	-	-
Chrysene	0.05 ug/L	<0.05	<0.05	-	-	-	-
Dibenzo [a,h] anthracene	0.05 ug/L	<0.05	<0.05	-	-	-	-
Fluoranthene	0.01 ug/L	<0.01	<0.01	-	-	-	-
Fluorene	0.05 ug/L	<0.05	<0.05	-	-	-	-
Indeno [1,2,3-cd] pyrene	0.05 ug/L	<0.05	<0.05	-	-	-	-
1-Methylnaphthalene	0.05 ug/L	<0.05	<0.05	-	-	-	-
2-Methylnaphthalene	0.05 ug/L	<0.05	<0.05	-	-	-	-
Methylnaphthalene (1&2)	0.10 ug/L	<0.10	<0.10	-	-	-	-
Naphthalene	0.05 ug/L	<0.05	<0.05	-	-	-	-
Phenanthrene	0.05 ug/L	<0.05	<0.05	-	-	-	-
Pyrene	0.01 ug/L	<0.01	<0.01	-	-	-	-
2-Fluorobiphenyl	Surrogate	78.5%	79.3%	-	-	-	-
Terphenyl-d14	Surrogate	85.2%	84.4%	-	-	-	-

Certificate of Analysis

Report Date: 19-Jun-2025

Client: **Paterson Group Consulting Engineers (Ottawa)**

Order Date: 13-Jun-2025

Client PO: 63337

Project Description: PE7096

**Method Quality Control: Blank**

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
<b>Hydrocarbons</b>								
F1 PHCs (C6-C10)	ND	25	ug/L					
F2 PHCs (C10-C16)	ND	100	ug/L					
F3 PHCs (C16-C34)	ND	100	ug/L					
F4 PHCs (C34-C50)	ND	100	ug/L					
<b>Semi-Volatiles</b>								
Acenaphthene	ND	0.05	ug/L					
Acenaphthylene	ND	0.05	ug/L					
Anthracene	ND	0.01	ug/L					
Benzo [a] anthracene	ND	0.01	ug/L					
Benzo [a] pyrene	ND	0.01	ug/L					
Benzo [b] fluoranthene	ND	0.05	ug/L					
Benzo [g,h,i] perylene	ND	0.05	ug/L					
Benzo [k] fluoranthene	ND	0.05	ug/L					
Chrysene	ND	0.05	ug/L					
Dibenzo [a,h] anthracene	ND	0.05	ug/L					
Fluoranthene	ND	0.01	ug/L					
Fluorene	ND	0.05	ug/L					
Indeno [1,2,3-cd] pyrene	ND	0.05	ug/L					
1-Methylnaphthalene	ND	0.05	ug/L					
2-Methylnaphthalene	ND	0.05	ug/L					
Methylnaphthalene (1&2)	ND	0.10	ug/L					
Naphthalene	ND	0.05	ug/L					
Phenanthrene	ND	0.05	ug/L					
Pyrene	ND	0.01	ug/L					
Surrogate: 2-Fluorobiphenyl	15.9		%	79.3	50-140			
Surrogate: Terphenyl-d14	17.0		%	84.9	50-140			
<b>Volatiles</b>								
Acetone	ND	5.0	ug/L					
Benzene	ND	0.5	ug/L					
Bromodichloromethane	ND	0.5	ug/L					
Bromoform	ND	0.5	ug/L					

Certificate of Analysis

Report Date: 19-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 13-Jun-2025

Client PO: 63337

Project Description: PE7096

**Method Quality Control: Blank**

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromomethane	ND	0.5	ug/L					
Carbon Tetrachloride	ND	0.2	ug/L					
Chlorobenzene	ND	0.5	ug/L					
Chloroform	ND	0.5	ug/L					
Dibromochloromethane	ND	0.5	ug/L					
Dichlorodifluoromethane	ND	1.0	ug/L					
1,2-Dichlorobenzene	ND	0.5	ug/L					
1,3-Dichlorobenzene	ND	0.5	ug/L					
1,4-Dichlorobenzene	ND	0.5	ug/L					
1,1-Dichloroethane	ND	0.5	ug/L					
1,2-Dichloroethane	ND	0.5	ug/L					
1,1-Dichloroethylene	ND	0.5	ug/L					
cis-1,2-Dichloroethylene	ND	0.5	ug/L					
trans-1,2-Dichloroethylene	ND	0.5	ug/L					
1,2-Dichloropropane	ND	0.5	ug/L					
cis-1,3-Dichloropropylene	ND	0.5	ug/L					
trans-1,3-Dichloropropylene	ND	0.5	ug/L					
1,3-Dichloropropene, total	ND	0.5	ug/L					
Ethylbenzene	ND	0.5	ug/L					
Ethylene dibromide (dibromoethane, 1,2-)	ND	0.2	ug/L					
Hexane	ND	1.0	ug/L					
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L					
Methyl Isobutyl Ketone	ND	5.0	ug/L					
Methyl tert-butyl ether	ND	2.0	ug/L					
Methylene Chloride	ND	5.0	ug/L					
Styrene	ND	0.5	ug/L					
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L					
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L					
Tetrachloroethylene	ND	0.5	ug/L					
Toluene	ND	0.5	ug/L					
1,1,1-Trichloroethane	ND	0.5	ug/L					
1,1,2-Trichloroethane	ND	0.5	ug/L					
Trichloroethylene	ND	0.5	ug/L					

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Report Date: 19-Jun-2025

Client: **Paterson Group Consulting Engineers (Ottawa)**

Order Date: 13-Jun-2025

Client PO: 63337

Project Description: PE7096

**Method Quality Control: Blank**

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Trichlorofluoromethane	ND	1.0	ug/L					
Vinyl chloride	ND	0.5	ug/L					
m,p-Xylenes	ND	0.5	ug/L					
o-Xylene	ND	0.5	ug/L					
Xylenes, total	ND	0.5	ug/L					
Surrogate: 4-Bromofluorobenzene	81.5		%	102	50-140			
Surrogate: Dibromofluoromethane	52.2		%	65.2	50-140			
Surrogate: Toluene-d8	83.6		%	104	50-140			

Certificate of Analysis

Report Date: 19-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 13-Jun-2025

Client PO: 63337

Project Description: PE7096

**Method Quality Control: Duplicate**

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
<b>Hydrocarbons</b>									
F1 PHCs (C6-C10)	125	25	ug/L	128			2.3	30	
<b>Volatiles</b>									
Acetone	ND	5.0	ug/L	ND			NC	30	
Benzene	ND	0.5	ug/L	ND			NC	30	
Bromodichloromethane	ND	0.5	ug/L	ND			NC	30	
Bromoform	ND	0.5	ug/L	ND			NC	30	
Bromomethane	ND	0.5	ug/L	ND			NC	30	
Carbon Tetrachloride	ND	0.2	ug/L	ND			NC	30	
Chlorobenzene	ND	0.5	ug/L	ND			NC	30	
Chloroform	ND	0.5	ug/L	ND			NC	30	
Dibromochloromethane	ND	0.5	ug/L	ND			NC	30	
Dichlorodifluoromethane	ND	1.0	ug/L	ND			NC	30	
1,2-Dichlorobenzene	ND	0.5	ug/L	ND			NC	30	
1,3-Dichlorobenzene	ND	0.5	ug/L	ND			NC	30	
1,4-Dichlorobenzene	ND	0.5	ug/L	ND			NC	30	
1,1-Dichloroethane	ND	0.5	ug/L	ND			NC	30	
1,2-Dichloroethane	ND	0.5	ug/L	ND			NC	30	
1,1-Dichloroethylene	ND	0.5	ug/L	ND			NC	30	
cis-1,2-Dichloroethylene	ND	0.5	ug/L	ND			NC	30	
trans-1,2-Dichloroethylene	ND	0.5	ug/L	ND			NC	30	
1,2-Dichloropropane	ND	0.5	ug/L	ND			NC	30	
cis-1,3-Dichloropropylene	ND	0.5	ug/L	ND			NC	30	
trans-1,3-Dichloropropylene	ND	0.5	ug/L	ND			NC	30	
Ethylbenzene	ND	0.5	ug/L	ND			NC	30	
Ethylene dibromide (dibromoethane, 1,2-)	ND	0.2	ug/L	ND			NC	30	
Hexane	ND	1.0	ug/L	ND			NC	30	
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L	ND			NC	30	
Methyl Isobutyl Ketone	ND	5.0	ug/L	ND			NC	30	
Methyl tert-butyl ether	ND	2.0	ug/L	ND			NC	30	
Methylene Chloride	ND	5.0	ug/L	ND			NC	30	

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Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 13-Jun-2025

Client PO: 63337

Project Description: PE7096

**Method Quality Control: Duplicate**

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Styrene	ND	0.5	ug/L	ND			NC	30	
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L	ND			NC	30	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	ND			NC	30	
Tetrachloroethylene	ND	0.5	ug/L	ND			NC	30	
Toluene	ND	0.5	ug/L	ND			NC	30	
1,1,1-Trichloroethane	ND	0.5	ug/L	ND			NC	30	
1,1,2-Trichloroethane	ND	0.5	ug/L	ND			NC	30	
Trichloroethylene	ND	0.5	ug/L	ND			NC	30	
Trichlorofluoromethane	ND	1.0	ug/L	ND			NC	30	
Vinyl chloride	ND	0.5	ug/L	ND			NC	30	
m,p-Xylenes	ND	0.5	ug/L	ND			NC	30	
o-Xylene	ND	0.5	ug/L	ND			NC	30	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>80.5</i>		<i>%</i>		<i>101</i>	<i>50-140</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>71.3</i>		<i>%</i>		<i>89.2</i>	<i>50-140</i>			
<i>Surrogate: Toluene-d8</i>	<i>84.1</i>		<i>%</i>		<i>105</i>	<i>50-140</i>			

Certificate of Analysis

Report Date: 19-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 13-Jun-2025

Client PO: 63337

Project Description: PE7096

**Method Quality Control: Spike**

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
<b>Hydrocarbons</b>									
F1 PHCs (C6-C10)	2080	25	ug/L	ND	104	85-115			
F2 PHCs (C10-C16)	1770	100	ug/L	ND	111	60-140			
F3 PHCs (C16-C34)	4440	100	ug/L	ND	113	60-140			
F4 PHCs (C34-C50)	2330	100	ug/L	ND	93.9	60-140			
<b>Semi-Volatiles</b>									
Acenaphthene	4.40	0.05	ug/L	ND	88.0	50-140			
Acenaphthylene	4.20	0.05	ug/L	ND	84.1	50-140			
Anthracene	4.31	0.01	ug/L	ND	86.1	50-140			
Benzo [a] anthracene	4.62	0.01	ug/L	ND	92.5	50-140			
Benzo [a] pyrene	4.61	0.01	ug/L	ND	92.3	50-140			
Benzo [b] fluoranthene	5.00	0.05	ug/L	ND	100	50-140			
Benzo [g,h,i] perylene	3.53	0.05	ug/L	ND	70.5	50-140			
Benzo [k] fluoranthene	4.16	0.05	ug/L	ND	83.2	50-140			
Chrysene	4.85	0.05	ug/L	ND	97.0	50-140			
Dibenzo [a,h] anthracene	5.02	0.05	ug/L	ND	100	50-140			
Fluoranthene	5.01	0.01	ug/L	ND	100	50-140			
Fluorene	4.32	0.05	ug/L	ND	86.4	50-140			
Indeno [1,2,3-cd] pyrene	5.00	0.05	ug/L	ND	100	50-140			
1-Methylnaphthalene	4.30	0.05	ug/L	ND	86.0	50-140			
2-Methylnaphthalene	4.73	0.05	ug/L	ND	94.7	50-140			
Naphthalene	4.29	0.05	ug/L	ND	85.8	50-140			
Phenanthrene	4.53	0.05	ug/L	ND	90.6	50-140			
Pyrene	4.82	0.01	ug/L	ND	96.4	50-140			
Surrogate: 2-Fluorobiphenyl	15.9		%		79.6	50-140			
Surrogate: Terphenyl-d14	16.8		%		84.2	50-140			
<b>Volatiles</b>									
Acetone	85.0	5.0	ug/L	ND	85.0	50-140			
Benzene	44.5	0.5	ug/L	ND	111	60-130			
Bromodichloromethane	40.0	0.5	ug/L	ND	99.9	60-130			
Bromoform	40.0	0.5	ug/L	ND	100	60-130			

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Report Date: 19-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 13-Jun-2025

Client PO: 63337

Project Description: PE7096

**Method Quality Control: Spike**

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromomethane	42.8	0.5	ug/L	ND	107	50-140			
Carbon Tetrachloride	39.9	0.2	ug/L	ND	99.6	60-130			
Chlorobenzene	48.3	0.5	ug/L	ND	121	60-130			
Chloroform	43.2	0.5	ug/L	ND	108	60-130			
Dibromochloromethane	41.0	0.5	ug/L	ND	102	60-130			
Dichlorodifluoromethane	33.8	1.0	ug/L	ND	84.6	50-140			
1,2-Dichlorobenzene	47.2	0.5	ug/L	ND	118	60-130			
1,3-Dichlorobenzene	47.2	0.5	ug/L	ND	118	60-130			
1,4-Dichlorobenzene	47.5	0.5	ug/L	ND	119	60-130			
1,1-Dichloroethane	44.0	0.5	ug/L	ND	110	60-130			
1,2-Dichloroethane	42.8	0.5	ug/L	ND	107	60-130			
1,1-Dichloroethylene	48.0	0.5	ug/L	ND	120	60-130			
cis-1,2-Dichloroethylene	42.4	0.5	ug/L	ND	106	60-130			
trans-1,2-Dichloroethylene	46.4	0.5	ug/L	ND	116	60-130			
1,2-Dichloropropane	44.8	0.5	ug/L	ND	112	60-130			
cis-1,3-Dichloropropylene	40.8	0.5	ug/L	ND	102	60-130			
trans-1,3-Dichloropropylene	37.4	0.5	ug/L	ND	93.4	60-130			
Ethylbenzene	46.9	0.5	ug/L	ND	117	60-130			
Ethylene dibromide (dibromoethane, 1,2-)	37.3	0.2	ug/L	ND	93.2	60-130			
Hexane	44.0	1.0	ug/L	ND	110	60-130			
Methyl Ethyl Ketone (2-Butanone)	102	5.0	ug/L	ND	102	50-140			
Methyl Isobutyl Ketone	104	5.0	ug/L	ND	104	50-140			
Methyl tert-butyl ether	105	2.0	ug/L	ND	105	50-140			
Methylene Chloride	47.7	5.0	ug/L	ND	119	60-130			
Styrene	41.5	0.5	ug/L	ND	104	60-130			
1,1,1,2-Tetrachloroethane	38.8	0.5	ug/L	ND	96.9	60-130			
1,1,2,2-Tetrachloroethane	38.1	0.5	ug/L	ND	95.2	60-130			
Tetrachloroethylene	48.3	0.5	ug/L	ND	121	60-130			
Toluene	49.3	0.5	ug/L	ND	123	60-130			
1,1,1-Trichloroethane	39.8	0.5	ug/L	ND	99.4	60-130			
1,1,2-Trichloroethane	41.7	0.5	ug/L	ND	104	60-130			

Certificate of Analysis

Report Date: 19-Jun-2025

Client: **Paterson Group Consulting Engineers (Ottawa)**

Order Date: 13-Jun-2025

Client PO: 63337

Project Description: PE7096

**Method Quality Control: Spike**

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Trichloroethylene	44.5	0.5	ug/L	ND	111	60-130			
Trichlorofluoromethane	49.4	1.0	ug/L	ND	123	60-130			
Vinyl chloride	42.4	0.5	ug/L	ND	106	50-140			
m,p-Xylenes	88.8	0.5	ug/L	ND	111	60-130			
o-Xylene	46.7	0.5	ug/L	ND	117	60-130			
Surrogate: 4-Bromofluorobenzene	76.7		%		95.8	50-140			
Surrogate: Dibromofluoromethane	78.2		%		97.8	50-140			
Surrogate: Toluene-d8	85.3		%		107	50-140			

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Report Date: 19-Jun-2025

Client: Paterson Group Consulting Engineers (Ottawa)

Order Date: 13-Jun-2025

Client PO: 63337

Project Description: PE7096

**Qualifier Notes:**

**Sample Data Revisions:**

None

**Work Order Revisions / Comments:**

None

**Other Report Notes:**

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

NC: Not Calculated

*CCME PHC additional information:*

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.
- When reported, data for F4G has been processed using a silica gel cleanup.

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.



Parcel ID: 2524489



20 St. Laurent Blvd.  
Toronto, ON M4J 4J8  
416-184-7381  
aparacellabs.com  
collabs.com

Parcel Order Number (Lab Use Only) <i>2524489</i>	Chain Of Custody (Lab Use Only)
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Client Name: <i>Paterson</i>	Project Ref: <i>PE 7090</i>	Page <u>  </u> of <u>  </u>
Contact Name: <i>Josh Dempsey</i>	Quote #:	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular
Address: <i>9 Auriga</i>	PO #: <i>0337</i>	
Telephone: <i>63 226 7381</i>	E-mail: <i>J.Dempsey } @patersongroup.ca G.Paterson }</i>	
Date Required: _____		

<input checked="" type="checkbox"/> REG 153/04 <input type="checkbox"/> REG 406/19    Other Regulation <input type="checkbox"/> Table 1 <input type="checkbox"/> Res/Park <input type="checkbox"/> Med/Fine <input type="checkbox"/> REG 558 <input type="checkbox"/> PWQO <input type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> CCME <input type="checkbox"/> MISA <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm <input type="checkbox"/> Table _____ For RSC: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other: _____		Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)	Required Analysis																
Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken		PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	Cr/Vi	B (HWS)							
				Date	Time														
1 <i>BH3B-25-GW1</i>	<i>GW</i>		<i>4</i>	<i>JUNE 9 11</i>		<i>↓</i>	<i>↓</i>	<i>↓</i>											
2 <i>DUP</i>	<i>↓</i>		<i>↓</i>	<i>↓</i>		<i>↓</i>	<i>↓</i>	<i>↓</i>											
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Comments:			Method of Delivery: <i>Paracel Courier</i>		
Relinquished By (Sign): <i>G.Pat</i>	Received By Driver/Depot:	Received at Lab: <i>WTJ</i>	Verified By: <i>SO</i>		
Relinquished By (Print): <i>Grant Paterson</i>	Date/Time:	Date/Time: <i>13/06/25; 15:40</i>	Date/Time: <i>June 13, 2025 4:25pm</i>		
Date/Time: <i>June 13 2025</i>	Temperature: _____ °C	Temperature: <i>11.1°C</i>	pH Verified: <input type="checkbox"/> By: _____		

Test Hole ID	Date of Construction	Well Diameter (mm)	Ground Surface Elevation (masl)	Test Hole Depth (m)	Test Hole Bottom Elevation (masl)	Well Screen Length (m)	Well Screen Interval (mbgs)	Well Screen Interval (masl)	Geologic Media Intercepted by Well Screen
BH1	15-May-2019	50	91.80	8.35	83.45	3.00	5.35 - 8.35	86.45 - 83.45	Silty sand
BH2	15-May-2019	50	92.38	5.30	87.08	3.00	2.3 - 5.3	90.08 - 87.08	Silty Clay
BH3	14-May-2019		91.00	5.79	85.21		-	-	
BH1-25	2-Jun-2025	50	91.31	10.26	81.05	1.50	4.09 - 5.61	87.22 - 85.70	Fill
BH2-25	2-Jun-2025		91.06	7.52	83.54		-	-	
BH3-25	2-Jun-2025		90.73	1.63	89.1		-	-	
BH3A-25	2-Jun-2025		90.65	0.94	89.71		-	-	
BH3B-25	2-Jun-2025	50	90.80	11.40	79.4	1.50	4.57 - 6.10	86.23 - 84.70	Fill
BH4-25	3-Jun-2025	50	92.18	15.72	76.46	1.50	6.15 - 7.67	86.03 - 84.51	Fill

Sample ID and Laboratory ID	Sample Depth (mbgs)	Sampling Date	Rationale	PID Vapour Reading (ppm)	Parameter Groups Analyzed									
					PHCs	BTEX	PAHs	Metals	Hg	Cr <sup>VI</sup>	EC	SAR	pH	
BH1-AU1 1921134-01	0 - 0.76	15-May-2019	Assess potential impacts in the soil resulting from the presence of unknown fill material.		✓		✓	✓	✓	✓				
BH1-SS3 1921134-02	2.44 - 3.05	15-May-2019	Assess potential impacts in the soil resulting from the presence of unknown fill material.		✓		✓	✓	✓	✓	✓	✓	✓	✓
BH2-AU1 1921134-03	0 - 0.76	15-May-2019	Assess potential impacts in the soil resulting from the presence of unknown fill material.		✓		✓	✓	✓	✓				
BH2-SS1 1921134-04	0.76 - 1.52	15-May-2019	Assess potential impacts in the soil resulting from the presence of unknown fill material.		✓		✓	✓	✓	✓				
BH3-SS2 1921134-05	1.52 - 2.26	15-May-2019	Assess potential impacts in the soil resulting from the presence of unknown fill material.		✓		✓	✓	✓	✓				
BH3-SS3 1921134-06	2.26 - 3.05	15-May-2019	Assess potential impacts in the soil resulting from the presence of unknown fill material.		✓		✓	✓	✓	✓				
BH3-SS5 1921134-07	3.78 - 4.57	15-May-2019	Assess potential impacts in the soil resulting from the presence of unknown fill material.		✓		✓	✓	✓	✓	✓	✓	✓	✓
G1 2046230-01	0 - 0.15	10-Nov-2020	Assess potential impacts in the soil resulting from the presence of unknown fill material.		✓	✓								
G2 2046230-02	0 - 0.15	10-Nov-2020	Duplicate sample of G1 for QA/QC purposes.		✓	✓								
BH1-25-SS2 2523398-01	0.76 - 1.52	2-Jun-2025	Assess potential impacts in the soil resulting from the presence of unknown fill material.		✓	✓	✓	✓			✓	✓	✓	
BH2-25-SS2 2523398-02	0.76 - 1.52	2-Jun-2025	Assess potential impacts in the soil resulting from the presence of unknown fill material.		✓	✓	✓	✓			✓	✓	✓	
BH4-25-SS3 2523398-03	1.52 - 2.26	3-Jun-2025	Assess potential impacts in the soil resulting from the presence of unknown fill material.		✓	✓	✓	✓			✓	✓		
DUP1 2523398-04	1.52 - 2.26	3-Jun-2025	Duplicate sample of BH4-25-SS3 for QA/QC purposes.		✓	✓	✓	✓			✓	✓		

Sample ID and Laboratory ID	Sample Depth (mbgs)	Sampling Date	Rationale	Parameter Groups Analyzed				
				PHCs	VOCs	PAHs	Sodium	Chloride
BH1 1922388-01	5.35 - 8.35	28-May-2019	To assess the groundwater quality beneath the Phase II Property.	✓	✓	✓		
BH2 1922388-02	2.30 - 5.30	28-May-2019	To assess the groundwater quality beneath the Phase II Property.	✓	✓	✓		
MW07-8 1922388-03	3.05 - 6.10	28-May-2019	To assess the groundwater quality beneath the Phase II Property.	✓	✓	✓		
BH1-GW2 1924244-01	5.35 - 8.35	7-Jun-2019	To assess the groundwater quality beneath the Phase II Property.			✓	✓	✓
BH2-GW2 1924244-02	2.30 - 5.30	7-Jun-2019	To assess the groundwater quality beneath the Phase II Property.			✓	✓	✓
MW1-GW3 2046207-01	5.35 - 8.35	10-Nov-2020	To assess the groundwater quality beneath the Phase II Property.			✓		
MW11-GW1 2046207-02	5.35 - 8.35	10-Nov-2020	Duplicate sample of MW1-GW3 for QA/QC purposes.			✓		
BH1-GW1 2234098-01	2.20 - 3.70	12-Aug-2022	To assess the groundwater quality beneath the Phase II Property.		✓	✓		
BH3B-25-GW1 2524489-01	4.57 - 6.10	11-Jun-2025	To assess the groundwater quality beneath the Phase II Property.	✓	✓	✓		
DUP 2524489-02	4.57 - 6.10	11-Jun-2025	Duplicate sample of BH3B-25-GW1 for QA/QC purposes.	✓	✓	✓		

Parameter	Units	Regulation	BH1-AU1 1921134-01	BH1-SS3 1921134-02	BH2-AU1 1921134-03	BH2-SS1 1921134-04	BH3-SS2 1921134-05	BH3-SS3 1921134-06	BH3-SS5 1921134-07	G1 2046230-01	G2 2046230-02	BH1-25-SS2 2523398-01	BH2-25-SS2 2523398-02	BH4-25-SS3 2523398-03	DUP1 2523398-04
Sample Depth (m)		Reg 153/04 - Table 2 Industrial, coarse	0 - 0.76	2.44 - 3.05	0 - 0.76	0.76 - 1.52	1.52 - 2.26	2.26 - 3.05	3.78 - 4.57	0 - 0.15	0 - 0.15	0.76 - 1.52	0.76 - 1.52	1.52 - 2.26	1.52 - 2.26
Sample Date			15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019	15-May-2019	10-Nov-2020	10-Nov-2020	2-Jun-2025	2-Jun-2025	3-Jun-2025	3-Jun-2025
<b>Physical Characteristics</b>															
% Solids	% by Wt.		89	92.4	88.4	92.6	81	90.1	89.2	89.1	89.1	90.2	78.9	87.6	86.5
<b>General Inorganics</b>															
SAR	N/A	12	N/A	0.26	0.25	N/A	N/A	N/A	0.69	N/A	N/A	0.64	0.29	0.8	0.84
Conductivity	uS/cm	1400	N/A	272	282	N/A	N/A	N/A	472	N/A	N/A	418	495	875	629
pH	N/A	5-9 (surf); 5-11 (subsurf)	N/A	7.65	N/A	N/A	N/A	N/A	7.86	N/A	N/A	9.1	7.86	N/A	N/A
<b>Metals</b>															
Chromium (VI)	ug/g dry	8.0	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	N/A	ND (0.2)	N/A	N/A	N/A	N/A	N/A	N/A
Mercury	ug/g dry	3.9	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	ND (0.1)	N/A	ND (0.1)	N/A	N/A	N/A	N/A	N/A	N/A
Antimony	ug/g dry	40	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	N/A	ND (1.0)	N/A	N/A	ND (1.0)	ND (1.0)	1.7	1.3
Arsenic	ug/g dry	18	5.7	4.9	4.4	7.3	5.9	N/A	6.2	N/A	N/A	4.8	4.2	5.5	5.2
Barium	ug/g dry	670	163	65.7	71.5	188	191	N/A	137	N/A	N/A	121	110	114	116
Beryllium	ug/g dry	8.0	0.6	ND (0.5)	0.5	1	1	N/A	0.5	N/A	N/A	0.6	0.6	ND (0.5)	ND (0.5)
Boron	ug/g dry	120	8.3	8.5	9.8	17	15.9	N/A	9.7	N/A	N/A	13.8	9.3	9.1	8.9
Cadmium	ug/g dry	1.9	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	N/A	ND (0.5)	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Chromium	ug/g dry	160	53.5	19.4	23.4	44.3	73.4	N/A	33	N/A	N/A	29.3	35.4	25.3	25.8
Cobalt	ug/g dry	80	11.5	7	8.1	15.7	14.7	N/A	9	N/A	N/A	9.6	9	7.6	7.7
Copper	ug/g dry	230	27.8	14.3	21	41.6	37.4	N/A	19.6	N/A	N/A	25.5	21.9	33	33.3
Lead	ug/g dry	120	25.9	19.6	14.5	35.2	29.3	N/A	65.1	N/A	N/A	33	16.3	63.4	53.9
Molybdenum	ug/g dry	40	1.1	2.3	ND (1.0)	1.9	2	N/A	2.8	N/A	N/A	1.9	2.3	1.8	2
Nickel	ug/g dry	270	31.1	16.1	18	39.2	44.7	N/A	22.2	N/A	N/A	27.5	22.4	21.4	20.8
Selenium	ug/g dry	5.5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	N/A	ND (1.0)	N/A	N/A	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Silver	ug/g dry	40	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	N/A	ND (0.3)	N/A	N/A	ND (0.3)	ND (0.3)	ND (0.3)	2.4
Thallium	ug/g dry	3.3	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	N/A	ND (1.0)	N/A	N/A	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Uranium	ug/g dry	33	ND (1.0)	ND (1.0)	ND (1.0)	1.1	1.2	N/A	ND (1.0)	N/A	N/A	ND (1.0)	1.1	1	1.1
Vanadium	ug/g dry	86	64.9	29.6	35.2	53.2	69.1	N/A	37.7	N/A	N/A	36.9	44.4	32.4	34.5
Zinc	ug/g dry	340	97.3	36.4	37	93	98.4	N/A	55.7	N/A	N/A	76.3	51.8	83.5	86.5
<b>BTEX</b>															
Benzene	ug/g dry	0.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)
Ethylbenzene	ug/g dry	1.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Toluene	ug/g dry	6.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
m/p-Xylene	ug/g dry	26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
o-Xylene	ug/g dry	26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Xylenes, total	ug/g dry	26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
<b>Hydrocarbons</b>															
F1 PHCs (C6-C10)	ug/g dry	55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)
F2 PHCs (C10-C16)	ug/g dry	230	4	6	7	ND (4)	N/A	ND (4)	6	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)
F3 PHCs (C16-C34)	ug/g dry	1700	160	189	39	19	N/A	174	239	27	20	81	ND (8)	56	58
F4 PHCs (C34-C50)	ug/g dry	3300	852	983	228	114	N/A	413	1410	28	24	166	ND (6)	37	42
F4G PHCs (gravimetric)	ug/g dry	3300	696	628	441	270	N/A	N/A	247	N/A	N/A	621	N/A	N/A	N/A
<b>Semi-Volatiles</b>															
Acenaphthene	ug/g dry	21	ND (0.02)	0.04	ND (0.02)	ND (0.02)	N/A	ND (0.02)	ND (0.02)	N/A	N/A	ND (0.02)	ND (0.02)	0.02	ND (0.02)
Acenaphthylene	ug/g dry	0.15	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	N/A	ND (0.02)	ND (0.02)	N/A	N/A	ND (0.02)	0.34	0.06	0.03
Anthracene	ug/g dry	0.67	ND (0.02)	0.11	ND (0.02)	ND (0.02)	N/A	ND (0.02)	0.03	N/A	N/A	0.05	0.28	0.11	0.07
Benzo[a]anthracene	ug/g dry	0.96	0.03	0.18	ND (0.02)	ND (0.02)	N/A	0.05	0.07	N/A	N/A	0.21	0.83	0.3	0.18
Benzo[a]pyrene	ug/g dry	0.3	0.05	0.16	ND (0.02)	ND (0.02)	N/A	0.08	0.06	N/A	N/A	0.22	0.86	0.26	0.14
Benzo[b]fluoranthene	ug/g dry	0.96	0.05	0.16	ND (0.02)	ND (0.02)	N/A	0.09	0.09	N/A	N/A	0.22	0.75	0.26	0.16
Benzo[g,h,i]perylene	ug/g dry	9.6	0.05	0.08	ND (0.02)	ND (0.02)	N/A	0.07	0.05	N/A	N/A	0.15	0.53	0.18	0.11
Benzo[k]fluoranthene	ug/g dry	0.96	0.04	0.14	ND (0.02)	ND (0.02)	N/A	0.1	0.07	N/A	N/A	0.13	0.45	0.15	0.09
Chrysene	ug/g dry	9.6	0.06	0.21	ND (0.02)	ND (0.02)	N/A	0.1	0.09	N/A	N/A	0.2	0.82	0.3	0.19
Dibenzo[a,h]anthracene	ug/g dry	0.1	ND (0.02)	0.02	ND (0.02)	ND (0.02)	N/A	ND (0.02)	ND (0.02)	N/A	N/A	0.04	0.15	0.05	0.03
Fluoranthene	ug/g dry	9.6	0.05	0.46	ND (0.02)	0.03	N/A	0.15	0.18	N/A	N/A	0.46	1.65	0.65	0.41
Fluorene	ug/g dry	62	ND (0.02)	0.04	ND (0.02)	ND (0.02)	N/A	ND (0.02)	ND (0.02)	N/A	N/A	ND (0.02)	0.05	0.03	0.02
Indeno [1,2,3-cd] pyrene	ug/g dry	0.76	0.02	0.04	ND (0.02)	ND (0.02)	N/A	0.03	0.03	N/A	N/A	0.14	0.51	0.17	0.1
1-Methylnaphthalene	ug/g dry	30	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	N/A	ND (0.02)	ND (0.02)	N/A	N/A	ND (0.02)	ND (0.02)	0.05	0.04
2-Methylnaphthalene	ug/g dry	30	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	N/A	ND (0.02)	ND (0.02)	N/A	N/A	ND (0.02)	0.03	0.06	0.05
Methylnaphthalene (1&2)	ug/g dry	30	ND (0.04)	ND (0.04)	ND (0.04)	ND (0.04)	N/A	ND (0.04)	ND (0.04)	N/A	N/A	ND (0.04)	ND (0.04)	0.11	0.1
Naphthalene	ug/g dry	9.6	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	N/A	ND (0.01)	ND (0.01)	N/A	N/A	ND (0.01)	0.01	0.05	0.04
Phenanthrene	ug/g dry	12	0.03	0.3	ND (0.02)	ND (0.02)	N/A	0.06	0.12	N/A	N/A	0.22	0.64	0.38	0.23
Pyrene	ug/g dry	96	0.05	0.36	ND (0.02)	0.03	N/A	0.13	0.14	N/A	N/A	0.37	1.37	0.62	0.39

2.00 Result exceeds Reg 153/04 - Table 2 Industrial, coarse Standards  
 ND (0.2) MDL exceeds Reg 153/04 - Table 2 Industrial, coarse Standards  
 ND (0.2) No concentrations identified above the MDL  
 N/A Parameter not analysed  
 NV No value given for indicated parameter

Parameter	Sample ID / Depth (m)	Units	Reg 153/04 - Table 2 Industrial, coarse Standards	Concentration
SAR	DUP1 2523398-04 - 1.52 - 2.26	N/A	12	0.84
Conductivity	BH4-25-SS3 2523398-03 - 1.52 - 2.26	uS/cm	1400	875
pH	BH1-25-SS2 2523398-01 - 0.76 - 1.52	N/A	5-9 (surf); 5-11 (subsurf)	9.1
Antimony	BH4-25-SS3 2523398-03 - 1.52 - 2.26	ug/g dry	40	1.7
Arsenic	BH4-25-SS3 2523398-03 - 1.52 - 2.26	ug/g dry	18	5.5
Barium	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	670	121
Beryllium	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	8.0	0.6
Boron	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	120	13.8
Cadmium	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	1.9	ND (0.5)
Chromium	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	160	35.4
Cobalt	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	80	9.6
Copper	DUP1 2523398-04 - 1.52 - 2.26	ug/g dry	230	33.3
Lead	BH4-25-SS3 2523398-03 - 1.52 - 2.26	ug/g dry	120	63.4
Molybdenum	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	40	2.3
Nickel	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	270	27.5
Selenium	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	5.5	ND (1.0)
Silver	DUP1 2523398-04 - 1.52 - 2.26	ug/g dry	40	2.4
Thallium	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	3.3	ND (1.0)
Uranium	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	33	1.1
Vanadium	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	86	44.4
Zinc	DUP1 2523398-04 - 1.52 - 2.26	ug/g dry	340	86.5
Benzene	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	0.32	ND (0.02)
Ethylbenzene	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	1.1	ND (0.05)
Toluene	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	6.4	ND (0.05)
m/p-Xylene	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	26	ND (0.05)
o-Xylene	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	26	ND (0.05)
Xylenes, total	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	26	ND (0.05)
F1 PHCs (C6-C10)	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	55	ND (7)
F2 PHCs (C10-C16)	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	230	ND (4)
F3 PHCs (C16-C34)	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	1700	81
F4 PHCs (C34-C50)	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	3300	166
F4G PHCs (gravimetric)	BH1-25-SS2 2523398-01 - 0.76 - 1.52	ug/g dry	3300	621
Acenaphthene	BH4-25-SS3 2523398-03 - 1.52 - 2.26	ug/g dry	21	ND (0.02)
Acenaphthylene	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	0.15	0.34
Anthracene	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	0.67	0.28
Benzo[a]anthracene	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	0.96	0.83
Benzo[a]pyrene	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	0.3	0.86
Benzo[b]fluoranthene	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	0.96	0.75
Benzo[g,h,i]perylene	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	9.6	0.53
Benzo[k]fluoranthene	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	0.96	0.45
Chrysene	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	9.6	0.82
Dibenzo[a,h]anthracene	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	0.1	0.15
Fluoranthene	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	9.6	1.65
Fluorene	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	62	0.05
Indeno [1,2,3-cd] pyrene	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	0.76	0.51
1-Methylnaphthalene	BH4-25-SS3 2523398-03 - 1.52 - 2.26	ug/g dry	30	0.05
2-Methylnaphthalene	BH4-25-SS3 2523398-03 - 1.52 - 2.26	ug/g dry	30	0.06
Methylnaphthalene (1&2)	BH4-25-SS3 2523398-03 - 1.52 - 2.26	ug/g dry	30	0.11
Naphthalene	BH4-25-SS3 2523398-03 - 1.52 - 2.26	ug/g dry	9.6	0.05
Phenanthrene	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	12	0.64
Pyrene	BH2-25-SS2 2523398-02 - 0.76 - 1.52	ug/g dry	96	1.37

Note: ND (x) = parameter analysed was reported non-detect

Parameter	Units	Regulation	BH1 1922388-01	BH2 1922388-02	MW07-8 1922388-03	BH1-GW2 1924244-01	BH2-GW2 1924244-02	MW1-GW3 2046207-01	MW11-GW1 2046207-02	BH1-GW1 2234098-01	BH3B-25-GW1 2524489-01	DUP 2524489-02
Sample Depth (m)		Reg 153/04 - Table 2 Potable	5.35 - 8.35	2.30 - 5.30	3.05 - 6.10	5.35 - 8.35	2.30 - 5.30	5.35 - 8.35	5.35 - 8.35	2.20 - 3.70	4.57 - 6.10	4.57 - 6.10
Sample Date		Groundwater, coarse	28-May-2019	28-May-2019	28-May-2019	7-Jun-2019	7-Jun-2019	10-Nov-2020	10-Nov-2020	12-Aug-2022	11-Jun-2025	11-Jun-2025
<b>Anions</b>												
Chloride	mg/L	790	N/A	N/A	N/A	113	65	N/A	N/A	N/A	N/A	N/A
<b>Metals</b>												
Sodium	ug/L	490000	N/A	N/A	N/A	109000	94200	N/A	N/A	N/A	N/A	N/A
<b>Volatiles</b>												
Acetone	ug/L	2700	ND (5.0)	ND (5.0)	ND (5.0)	N/A	N/A	N/A	N/A	ND (5.0)	ND (5.0)	ND (5.0)
Benzene	ug/L	5.0	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
Bromodichloromethane	ug/L	16	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
Bromoform	ug/L	25	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
Bromomethane	ug/L	0.89	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
Carbon Tetrachloride	ug/L	0.79	ND (0.2)	ND (0.2)	ND (0.2)	N/A	N/A	N/A	N/A	ND (0.2)	ND (0.2)	ND (0.2)
Chlorobenzene	ug/L	30	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
Chloroform	ug/L	2.4	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
Dibromochloromethane	ug/L	25	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
Dichlorodifluoromethane	ug/L	590	ND (1.0)	ND (1.0)	ND (1.0)	N/A	N/A	N/A	N/A	ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dichlorobenzene	ug/L	3.0	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
1,3-Dichlorobenzene	ug/L	59	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
1,4-Dichlorobenzene	ug/L	1.0	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
1,1-Dichloroethane	ug/L	5.0	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
1,2-Dichloroethane	ug/L	1.6	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
1,1-Dichloroethylene	ug/L	1.6	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
cis-1,2-Dichloroethylene	ug/L	1.6	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
trans-1,2-Dichloroethylene	ug/L	1.6	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
1,2-Dichloropropane	ug/L	5.0	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
cis-1,3-Dichloropropylene	ug/L	0.5	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
trans-1,3-Dichloropropylene	ug/L	0.5	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
1,3-Dichloropropene, total	ug/L	0.5	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
Ethylbenzene	ug/L	2.4	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
Ethylene dibromide (dibromoethane, 1,2)	ug/L	0.2	ND (0.2)	ND (0.2)	ND (0.2)	N/A	N/A	N/A	N/A	ND (0.2)	ND (0.2)	ND (0.2)
Hexane	ug/L	51	ND (1.0)	ND (1.0)	ND (1.0)	N/A	N/A	N/A	N/A	ND (1.0)	ND (1.0)	ND (1.0)
Methyl Ethyl Ketone (2-Butanone)	ug/L	1800	ND (5.0)	ND (5.0)	ND (5.0)	N/A	N/A	N/A	N/A	ND (5.0)	ND (5.0)	ND (5.0)
Methyl Isobutyl Ketone	ug/L	640	ND (5.0)	ND (5.0)	ND (5.0)	N/A	N/A	N/A	N/A	ND (5.0)	ND (5.0)	ND (5.0)
Methyl tert-butyl ether	ug/L	15	ND (2.0)	ND (2.0)	ND (2.0)	N/A	N/A	N/A	N/A	ND (2.0)	ND (2.0)	ND (2.0)
Methylene Chloride	ug/L	50	ND (5.0)	ND (5.0)	ND (5.0)	N/A	N/A	N/A	N/A	ND (5.0)	ND (5.0)	ND (5.0)
Styrene	ug/L	5.4	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
1,1,1,2-Tetrachloroethane	ug/L	1.1	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
1,1,2,2-Tetrachloroethane	ug/L	1.0	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
Tetrachloroethylene	ug/L	1.6	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
Toluene	ug/L	24	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
1,1,1-Trichloroethane	ug/L	200	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
1,1,2-Trichloroethane	ug/L	4.7	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
Trichloroethylene	ug/L	1.6	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
Trichlorofluoromethane	ug/L	150	ND (1.0)	ND (1.0)	ND (1.0)	N/A	N/A	N/A	N/A	ND (1.0)	ND (1.0)	ND (1.0)
Vinyl Chloride	ug/L	0.5	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
m/p-Xylene	ug/L	300	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
o-Xylene	ug/L	300	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
Xylenes, total	ug/L	300	ND (0.5)	ND (0.5)	ND (0.5)	N/A	N/A	N/A	N/A	ND (0.5)	ND (0.5)	ND (0.5)
<b>Hydrocarbons</b>												
F1 PHCs (C6-C10)	ug/L	750	ND (25)	ND (25)	ND (25)	N/A	N/A	N/A	N/A	N/A	ND (25)	ND (25)
F2 PHCs (C10-C16)	ug/L	150	ND (100)	ND (100)	ND (100)	N/A	N/A	N/A	N/A	N/A	ND (100)	ND (100)
F3 PHCs (C16-C34)	ug/L	500	ND (100)	ND (100)	ND (100)	N/A	N/A	N/A	N/A	N/A	ND (100)	ND (100)
F4 PHCs (C34-C50)	ug/L	500	ND (100)	ND (100)	ND (100)	N/A	N/A	N/A	N/A	N/A	ND (100)	ND (100)
<b>Semi-Volatiles</b>												
Acenaphthene	ug/L	4.1	0.75	ND (0.05)	0.11	0.69	ND (0.05)	0.79	0.73	ND (0.05)	ND (0.05)	ND (0.05)
Acenaphthylene	ug/L	1.0	ND (0.05)	ND (0.05)	0.08	0.06	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Anthracene	ug/L	2.4	0.06	0.07	ND (0.01)	0.42	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)
Benzo[a]anthracene	ug/L	1.0	0.07	0.16	ND (0.01)	1.02	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)
Benzo[a]pyrene	ug/L	0.01	0.05	0.12	ND (0.01)	0.75	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)
Benzo[b]fluoranthene	ug/L	0.1	ND (0.05)	0.15	ND (0.05)	1.41	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Benzo[g,h,i]perylene	ug/L	0.2	ND (0.05)	0.09	ND (0.05)	0.41	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Benzo[k]fluoranthene	ug/L	0.1	ND (0.05)	0.07	ND (0.05)	0.81	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Chrysene	ug/L	0.1	0.06	0.15	ND (0.05)	0.88	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Dibenzo[a,h]anthracene	ug/L	0.2	ND (0.05)	ND (0.05)	ND (0.05)	0.15	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Fluoranthene	ug/L	0.41	0.29	0.35	0.03	2.28	ND (0.01)	0.27	0.26	ND (0.01)	ND (0.01)	ND (0.01)
Fluorene	ug/L	120	0.58	0.05	0.11	0.49	ND (0.05)	0.47	0.44	ND (0.05)	ND (0.05)	ND (0.05)
Indeno [1,2,3-cd] pyrene	ug/L	0.2	0.06	0.08	ND (0.05)	0.4	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
1-Methylnaphthalene	ug/L	3.2	ND (0.05)	ND (0.05)	0.05	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
2-Methylnaphthalene	ug/L	3.2	ND (0.05)	0.05	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Methylnaphthalene (1&2)	ug/L	3.2	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Naphthalene	ug/L	11	ND (0.05)	ND (0.05)	0.22	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Phenanthrene	ug/L	1.0	0.12	0.26	ND (0.05)	1.12	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Pyrene	ug/L	4.1	0.21	0.29	0.03	1.82	ND (0.01)	0.15	0.15	ND (0.01)	ND (0.01)	ND (0.01)

2.00 Result exceeds Reg 153/04 - Table 2 Potable Groundwater, coarse Standards  
 ND (0.2) MDL exceeds Reg 153/04 - Table 2 Potable Groundwater, coarse Standards  
 ND (0.2) No concentrations identified above the MDL  
 N/A Parameter not analysed  
 NV No value given for indicated parameter

Parameter	Sample ID / Screen Interval (m)	Units	Reg 153/04 - Table 2 Potable Groundwater, coarse Standards	Concentration
Acetone	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	2700	ND (5.0)
Benzene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	5.0	ND (0.5)
Bromodichloromethane	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	16	ND (0.5)
Bromoform	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	25	ND (0.5)
Bromomethane	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	0.89	ND (0.5)
Carbon Tetrachloride	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	0.79	ND (0.2)
Chlorobenzene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	30	ND (0.5)
Chloroform	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	2.4	ND (0.5)
Dibromochloromethane	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	25	ND (0.5)
Dichlorodifluoromethane	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	590	ND (1.0)
1,2-Dichlorobenzene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	3.0	ND (0.5)
1,3-Dichlorobenzene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	59	ND (0.5)
1,4-Dichlorobenzene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	1.0	ND (0.5)
1,1-Dichloroethane	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	5.0	ND (0.5)
1,2-Dichloroethane	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	1.6	ND (0.5)
1,1-Dichloroethylene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	1.6	ND (0.5)
cis-1,2-Dichloroethylene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	1.6	ND (0.5)
trans-1,2-Dichloroethylene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	1.6	ND (0.5)
1,2-Dichloropropane	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	5.0	ND (0.5)
cis-1,3-Dichloropropylene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	0.5	ND (0.5)
trans-1,3-Dichloropropylene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	0.5	ND (0.5)
1,3-Dichloropropene, total	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	0.5	ND (0.5)
Ethylbenzene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	2.4	ND (0.5)
Ethylene dibromide (dibromide)	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	0.2	ND (0.2)
Hexane	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	51	ND (1.0)
Methyl Ethyl Ketone (2-Butanone)	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	1800	ND (5.0)
Methyl Isobutyl Ketone	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	640	ND (5.0)
Methyl tert-butyl ether	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	15	ND (2.0)
Methylene Chloride	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	50	ND (5.0)
Styrene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	5.4	ND (0.5)
1,1,1,2-Tetrachloroethane	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	1.1	ND (0.5)
1,1,2,2-Tetrachloroethane	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	1.0	ND (0.5)
Tetrachloroethylene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	1.6	ND (0.5)
Toluene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	24	ND (0.5)
1,1,1-Trichloroethane	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	200	ND (0.5)
1,1,2-Trichloroethane	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	4.7	ND (0.5)
Trichloroethylene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	1.6	ND (0.5)
Trichlorofluoromethane	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	150	ND (1.0)
Vinyl Chloride	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	0.5	ND (0.5)
m/p-Xylene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	300	ND (0.5)
o-Xylene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	300	ND (0.5)
Xylenes, total	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	300	ND (0.5)
F1 PHCs (C6-C10)	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	750	ND (25)
F2 PHCs (C10-C16)	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	150	ND (100)
F3 PHCs (C16-C34)	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	500	ND (100)
F4 PHCs (C34-C50)	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	500	ND (100)
Acenaphthene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	4.1	ND (0.05)
Acenaphthylene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	1.0	ND (0.05)
Anthracene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	2.4	ND (0.01)
Benzo[a]anthracene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	1.0	ND (0.01)
Benzo[a]pyrene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	0.01	ND (0.01)
Benzo[b]fluoranthene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	0.1	ND (0.05)
Benzo[g,h,i]perylene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	0.2	ND (0.05)
Benzo[k]fluoranthene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	0.1	ND (0.05)
Chrysene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	0.1	ND (0.05)
Dibenzo[a,h]anthracene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	0.2	ND (0.05)
Fluoranthene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	0.41	ND (0.01)
Fluorene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	120	ND (0.05)
Indeno [1,2,3-cd] pyrene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	0.2	ND (0.05)
1-Methylnaphthalene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	3.2	ND (0.05)
2-Methylnaphthalene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	3.2	ND (0.05)
Methylnaphthalene (1&2)	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	3.2	ND (0.10)
Naphthalene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	11	ND (0.05)
Phenanthrene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	1.0	ND (0.05)
Pyrene	BH3B-25-GW1 2524489-01 - 4.57 - 6.10	ug/L	4.1	ND (0.01)

Note: ND (x) = parameter analysed was reported non-detect.

Parameter	MDL	G1 2046230-01	G2 (Duplicate of G1) 2046230-02	RPD (%)	QA/QC Result
<b>BTEX</b>					
Benzene	0.02	ND (0.02)	ND (0.02)	0.0%	Within the acceptable range
Ethylbenzene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
Toluene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
m/p-Xylene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
o-Xylene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
Xylenes, total	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
<b>Hydrocarbons</b>					
F1 PHCs (C6-C10)	7	ND (7)	ND (7)	0.0%	Within the acceptable range
F2 PHCs (C10-C16)	4	ND (4)	ND (4)	0.0%	Within the acceptable range
F3 PHCs (C16-C34)	8	27.0	20.0	29.8%	Outside the acceptable range
F4 PHCs (C34-C50)	6	28	24	15.4%	Within the acceptable range

Parameter	MDL	BH4-25-SS3 2523398-03	DUP1 2523398-04	RPD (%)	QA/QC Result
<b>General Inorganics</b>					
SAR	0.01	0.8	0.84	4.9%	Within the acceptable range
Conductivity	5	875	629	32.7%	Outside the acceptable range
<b>Metals</b>					
Antimony	1	1.7	1.3	26.7%	Outside the acceptable range
Arsenic	1	5.5	5.2	5.6%	Within the acceptable range
Barium	1	114	116	1.7%	Within the acceptable range
Beryllium	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Boron	5	9.1	8.9	2.2%	Within the acceptable range
Cadmium	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Chromium	5	25.3	25.8	2.0%	Within the acceptable range
Cobalt	1	7.6	7.7	1.3%	Within the acceptable range
Copper	5	33	33.3	0.9%	Within the acceptable range
Lead	1	63.4	53.9	16.2%	Within the acceptable range
Molybdenum	1	1.8	2	10.5%	Within the acceptable range
Nickel	5	21.4	20.8	2.8%	Within the acceptable range
Selenium	1	ND (1.0)	ND (1.0)	0.0%	Within the acceptable range
Silver	0.3	ND (0.3)	2.4	155.6%	Outside the acceptable range
Thallium	1	ND (1.0)	ND (1.0)	0.0%	Within the acceptable range
Uranium	1	1	1.1	9.5%	Within the acceptable range
Vanadium	10	32.4	34.5	6.3%	Within the acceptable range
Zinc	20	83.5	86.5	3.5%	Within the acceptable range
<b>BTEX</b>					
Benzene	0.02	ND (0.02)	ND (0.02)	0.0%	Within the acceptable range
Ethylbenzene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
Toluene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
m/p-Xylene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
o-Xylene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
Xylenes, total	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
<b>Hydrocarbons</b>					
F1 PHCs (C6-C10)	7	ND (7)	ND (7)	0.0%	Within the acceptable range
F2 PHCs (C10-C16)	4	ND (4)	ND (4)	0.0%	Within the acceptable range
F3 PHCs (C16-C34)	8	56	58	3.5%	Within the acceptable range
F4 PHCs (C34-C50)	6	37	42	12.7%	Within the acceptable range
<b>Semi-Volatiles</b>					
Acenaphthene	0.02	0.02	ND (0.02)	0.0%	Within the acceptable range
Acenaphthylene	0.02	0.06	0.03	66.7%	Outside the acceptable range
Anthracene	0.02	0.11	0.07	44.4%	Outside the acceptable range
Benzo[a]anthracene	0.02	0.3	0.18	50.0%	Outside the acceptable range
Benzo[a]pyrene	0.02	0.26	0.14	60.0%	Outside the acceptable range
Benzo[b]fluoranthene	0.02	0.26	0.16	47.6%	Outside the acceptable range
Benzo[g,h,i]perylene	0.02	0.18	0.11	48.3%	Outside the acceptable range
Benzo[k]fluoranthene	0.02	0.15	0.09	50.0%	Outside the acceptable range
Chrysene	0.02	0.3	0.19	44.9%	Outside the acceptable range
Dibenzo[a,h]anthracene	0.02	0.05	0.03	50.0%	Outside the acceptable range
Fluoranthene	0.02	0.65	0.41	45.3%	Outside the acceptable range
Fluorene	0.02	0.03	0.02	40.0%	Outside the acceptable range
Indeno [1,2,3-cd] pyrene	0.02	0.17	0.1	51.9%	Outside the acceptable range
1-Methylnaphthalene	0.02	0.05	0.04	22.2%	Outside the acceptable range
2-Methylnaphthalene	0.02	0.06	0.05	18.2%	Within the acceptable range
Methylnaphthalene (1&2)	0.04	0.11	0.1	9.5%	Within the acceptable range
Naphthalene	0.01	0.05	0.04	22.2%	Outside the acceptable range
Phenanthrene	0.02	0.38	0.23	49.2%	Outside the acceptable range
Pyrene	0.02	0.62	0.39	45.5%	Outside the acceptable range

Parameter	MDL	BH3B-25-GW1 2524489-01	DUP 2524489-02	RPD (%)	QA/QC Result
<b>Volatiles</b>					
Acetone	5	ND (5.0)	ND (5.0)	0.0%	Within the acceptable range
Benzene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Bromodichloromethane	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Bromoform	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Bromomethane	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Carbon Tetrachloride	0.2	ND (0.2)	ND (0.2)	0.0%	Within the acceptable range
Chlorobenzene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Chloroform	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Dibromochloromethane	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Dichlorodifluoromethane	1	ND (1.0)	ND (1.0)	0.0%	Within the acceptable range
1,2-Dichlorobenzene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
1,3-Dichlorobenzene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
1,4-Dichlorobenzene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
1,1-Dichloroethane	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
1,2-Dichloroethane	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
1,1-Dichloroethylene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
cis-1,2-Dichloroethylene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
trans-1,2-Dichloroethylene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
1,2-Dichloropropane	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
cis-1,3-Dichloropropylene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
trans-1,3-Dichloropropylene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
1,3-Dichloropropene, total	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Ethylbenzene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Ethylene dibromide (dibromoethane, 1,2-)	0.2	ND (0.2)	ND (0.2)	0.0%	Within the acceptable range
Hexane	1	ND (1.0)	ND (1.0)	0.0%	Within the acceptable range
Methyl Ethyl Ketone (2- Butanone)	5	ND (5.0)	ND (5.0)	0.0%	Within the acceptable range
Methyl Isobutyl Ketone	5	ND (5.0)	ND (5.0)	0.0%	Within the acceptable range
Methyl tert-butyl ether	2	ND (2.0)	ND (2.0)	0.0%	Within the acceptable range
Methylene Chloride	5	ND (5.0)	ND (5.0)	0.0%	Within the acceptable range
Styrene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
1,1,1,2-Tetrachloroethane	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
1,1,2,2-Tetrachloroethane	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Tetrachloroethylene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Toluene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
1,1,1-Trichloroethane	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
1,1,2-Trichloroethane	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Trichloroethylene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Trichlorofluoromethane	1	ND (1.0)	ND (1.0)	0.0%	Within the acceptable range
Vinyl Chloride	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
m/p-Xylene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
o-Xylene	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
Xylenes, total	0.5	ND (0.5)	ND (0.5)	0.0%	Within the acceptable range
<b>Hydrocarbons</b>					
F1 PHCs (C6-C10)	25	ND (25)	ND (25)	0.0%	Within the acceptable range
F2 PHCs (C10-C16)	100	ND (100)	ND (100)	0.0%	Within the acceptable range
F3 PHCs (C16-C34)	100	ND (100)	ND (100)	0.0%	Within the acceptable range
F4 PHCs (C34-C50)	100	ND (100)	ND (100)	0.0%	Within the acceptable range
<b>Semi-Volatiles</b>					
Acenaphthene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
Acenaphthylene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
Anthracene	0.01	ND (0.01)	ND (0.01)	0.0%	Within the acceptable range
Benzo[a]anthracene	0.01	ND (0.01)	ND (0.01)	0.0%	Within the acceptable range
Benzo[a]pyrene	0.01	ND (0.01)	ND (0.01)	0.0%	Within the acceptable range
Benzo[b]fluoranthene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
Benzo[g,h,i]perylene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
Benzo[k]fluoranthene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
Chrysene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
Dibenzo[a,h]anthracene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
Fluoranthene	0.01	ND (0.01)	ND (0.01)	0.0%	Within the acceptable range
Fluorene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
Indeno [1,2,3-cd] pyrene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
1-Methylnaphthalene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
2-Methylnaphthalene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
Methylnaphthalene (1&2)	0.1	ND (0.10)	ND (0.10)	0.0%	Within the acceptable range
Naphthalene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
Phenanthrene	0.05	ND (0.05)	ND (0.05)	0.0%	Within the acceptable range
Pyrene	0.01	ND (0.01)	ND (0.01)	0.0%	Within the acceptable range

Test Hole ID	Ground Surface Elevation (masl)	Water Level Depth (mbgs)	Water Level Elevation (masl)	Date of Measurement
BH1-25	91.31	2.90	88.41	11-Jun-2025
BH3B-25	90.80	2.50	88.30	11-Jun-2025
BH4-25	92.18	5.73	86.45	11-Jun-2025

Test Hole ID	Temperature (°C)	Conductivity (µS)	pH	Date of Measurement
BH3B-25	12.1	1390	7.1	11-Jun-2025
BH4-25	18.6	4380	7.3	11-Jun-2025