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**Phase II Environmental Site  
Assessment, 23 Brock Street West,  
Uxbridge, Ontario**

Final Report

February 28, 2025

Prepared for:  
Township of Uxbridge  
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This report provides an evaluation of selected environmental conditions associated with the identified portion of the property that was assessed at the time the work was conducted and is based on information obtained by and/or provided to Stantec at that time. There are no assurances regarding the accuracy and completeness of this information. All information received from the client or third parties in the preparation of this report has been assumed by Stantec to be correct. Stantec assumes no responsibility for any deficiency or inaccuracy in information received from others.

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Conclusions made within this report consist of Stantec's professional opinion as of the time of the writing of this report and are based solely on the scope of work described in the report, the limited data available and the results of the work. They are not a certification of the property's environmental or geotechnical condition. This report should not be construed as legal advice.

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This report is limited by the following:

- Conditions observed on-site at the time of the 2024 field work.
- Regulatory criteria in effect at the time the assessment was completed.
- Results pertain only to the locations as shown on **Figure Nos. 4 and 5 in Appendix A** and parameters listed in **Tables III and IV in Appendix E**.

The locations of any utilities, buildings and structures, and property boundaries illustrated in or described within this report, if any, including pole lines, conduits, water mains, sewers and other surface or sub-surface utilities and structures are not guaranteed. Before starting work, the exact location of all such utilities and structures should be confirmed and Stantec assumes no liability for damage to them.

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The conclusions are based on the site conditions encountered by Stantec at the time the work was performed at the specific testing and/or sampling locations, and conditions may vary among sampling locations. Factors such as areas of potential concern identified in previous studies, site conditions (e.g., utilities) and cost may have constrained the sampling locations used in this assessment.

In addition, analysis has been carried out for only a limited number of chemical parameters, and it should not be inferred that other chemical species are not present. Due to the nature of the investigation and the limited data available, Stantec does not warrant against undiscovered environmental liabilities nor that the sampling results are indicative of the condition of the entire site. As the purpose of this report is to identify site conditions which may pose an environmental risk; the identification of non-environmental risks to structures or people on the site is beyond the scope of this assessment.

Should additional information become available which differs significantly from our understanding of conditions presented in this report, Stantec specifically disclaims any responsibility to update the conclusions in this report.

This document was prepared by Marissa Lusito, M.Env.Sc., B.Sc.H., and reviewed by Randy Sinukoff, M.A.Sc., P.Eng., QPESA.

Respectfully submitted,

**STANTEC CONSULTING LTD.**



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## **Executive Summary**

Stantec Consulting Ltd. (Stantec) was retained by the Township of Uxbridge to conduct a Phase II Environmental Site Assessment (ESA) of the property located at 23 Brock Street West in Uxbridge, Ontario, hereinafter referred to as the "Site". The objective of this program was to assess soil and groundwater quality at the Site with respect to potential environmental concerns that were identified in the Phase I ESA conducted by Stantec (*DRAFT Phase I Environmental Site Assessment, 23 Brock Street West, Uxbridge, Ontario*, dated November 26, 2024).

The Site is in a predominantly residential and commercial neighbourhood of Uxbridge, Ontario and occupies approximately 0.63 hectares (ha) of land. The Site is located on the north side of Brock Street West, approximately 80 metres (m) west of the intersection of Brock Street West and Concession Road 7. At the time of the Phase II ESA, the Site was occupied by a vacant building that was formerly used for commercial purposes, including a commercial autobody shop and gasoline service station. The site building was located on the southern portion of the Site. The Site is bounded by residential and commercial properties to the north and east. The Site is bounded by Toronto Street North to the west and Brock Street West to the south.

The scope of work for the Phase II ESA included the advancement of 13 boreholes (identified as MW1 to MW7, BH8, MW9 to MW10, BH11, MW12, and BH13) to a maximum depth of approximately 12.2 metres below ground surface (m BGS), with ten of the boreholes completed as monitoring wells (identified as MW1 to MW7, MW9 to MW10, and MW12). Soil samples collected as part of the Phase II ESA were submitted for laboratory analysis of volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, xylenes (BTEX), polycyclic aromatic hydrocarbons (PAHs), metals and other regulated parameters (ORPs) and petroleum hydrocarbon (PHC) fractions 1 to 4 (F1 to F4). Soil samples were also submitted for the analysis of pH and grain size. Groundwater samples were collected from the ten newly installed monitoring wells and submitted for laboratory analysis of VOCs, PAHs, metals and ORPs, and PHC F1 to F4.

The Ontario Regulation (O.Reg.) 153/04 Table 8 Generic site condition standards (SCS) for Use within 30 m of a Water Body in a Potable Groundwater Condition for a residential/parkland/institutional/industrial/commercial/community property use were considered applicable for the Site (Table 8 SCS).

Based on the elevation survey and depth to groundwater measured on November 5, 2024, the shallow groundwater flow was inferred to be towards the centre of the Site (towards the Uxbridge Brook), likely due to the presence of the culvert beneath the Site. Evidence of light non-aqueous phase liquid (LNAPL) was not measured in the newly installed monitoring wells during the November 5, 2024, monitoring event.

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Electrical conductivity (EC) and/or sodium adsorption ratio (SAR) concentrations in soil and sodium and chloride concentrations in groundwater exceeded the Table 8 SCS at various sampling locations across the Site. The EC, SAR, sodium and chloride exceedances are likely attributed to the application of road salt for deicing purposes across the Site and nearby roadways. As per paragraph 1 of section 49.1 of Ontario Regulation 153/04, these parameters are not considered to be contaminants of concern in soil and groundwater if they are present due to the application of salt/de-icing compounds at the Site for the safety of vehicular and pedestrian traffic.

Exceedances of the Table 8 SCS were identified in the soil samples analyzed from across the Site for one or more of VOCs, PHC F1 to F4, metals and ORPs, and PAHs. The soil pH exceeded the applicable range for applying the SCS at one soil sample location. Furthermore, exceedances of the Table 8 SCS were identified in the groundwater samples analyzed from the southern portion of the Site for one or more of metals and ORPs, and PAHs. Fill was identified across the Site up to a maximum depth of 6.8 m BGS (MW2). The presence of fill is a likely contributor to the exceedances of the SCS and elevated pH in the soil and groundwater at the Site.

The source of the PHC exceedances identified in soil from MW6 and MW7 may be associated with the former gasoline service station located on the southern portion of the Site, including gasoline underground storage tanks and a pump island.

The monitoring wells installed on the Site by Stantec can be left in place in the event they may be required for future groundwater monitoring. If the monitoring wells are no longer required, they should be decommissioned according to provincial regulatory requirements.

It is Stantec's understanding that legal proceedings are ongoing regarding geotechnical, hydrogeological, and environmental issues, including the discovery of contaminated soil on the Site, encountered during the Brock Street culvert replacement project undertaken by the Township of Uxbridge in 2018 at the Site to mitigate flooding risk in downtown Uxbridge. Documentation associated with the legal proceedings was not made available to Stantec for review and, as such, the related information is not included in this report.

It is recommended that documentation related to contamination encountered during the Brock Street culvert replacement project be made available for review and interpretation to supplement the information presented in this report subject to Township of Uxbridge legal approval.

The statements made in this Executive Summary text are subject to the limitations included in **Section 5.0** and are to be read in conjunction with the remainder of this report.

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# **1 Introduction**

## **1.1 General**

Stantec Consulting Ltd. (Stantec) was retained by the Township of Uxbridge to conduct a Phase II Environmental Site Assessment (ESA) of the property located at 23 Brock Street West in Uxbridge, Ontario, hereinafter referred to as the "Site". The general location of the Site is presented on **Figure No. 1** in **Appendix A** and the boundaries of the Site and features are presented on **Figure No. 2** in **Appendix A**.

## **1.2 Background**

This Phase II ESA was completed for due diligence purposes. It was completed in accordance with Canadian Standards Association (CSA) standard Z769-00 (R2023) for Phase II ESAs and does not follow the report format consistent with Ontario Regulation (O.Reg.153/04) for a Record of Site Condition (RSC). Should an RSC be required, additional investigation and/or data evaluation/reporting will be needed to meet the requirements of O.Reg.153/04.

The Phase I ESA conducted by Stantec (*DRAFT Phase I Environmental Site Assessment, 23 Brock Street West, Uxbridge, Ontario*, dated November 26, 2024), identified the following environmental concerns at the Site:

- Former underground storage tanks (USTs) and fuel pumps on the southern portion of the Site.
- Former use of the Site as a commercial autobody on the southern portion of the Site.
- Hazardous waste generation at the Site, including the generation of light fuels, petroleum distillates, and oil skimmings and sludges.
- Impacted soil (petroleum hydrocarbons [PHCs], volatile organic compounds [VOCs], and zinc) previously identified across the Site.
- Impacted groundwater (PHCs and ethylbenzene) previously identified on the southern portion of the Site.
- Previous subsurface investigations conducted on the Site indicate that silty clay and silty sand fill was identified across the Site to a maximum depth of 6.6 m below ground surface (BGS).
- A former landfill was located approximately 65 m south of the Site.
- Fuel storage formerly present at 21 Brock Street West (immediately east of the Site).
- A historical dry cleaners present at 16 Brock Street West (30 m southeast of the Site).

Stantec recommended completing a Phase II ESA to assess the above-noted potential environmental concerns.



It is Stantec's understanding that legal proceedings are ongoing regarding geotechnical, hydrogeological, and environmental issues, including the discovery of contaminated soil on the Site, encountered during the Brock Street culvert replacement project undertaken by the Township of Uxbridge in 2018 at the Site to mitigate flooding risk in downtown Uxbridge. Documentation associated with the legal proceedings was not made available to Stantec for review and, as such, the related information is not included in this report.

### **1.2.1 Site and Surrounding Land Use**

The Site is in a predominantly residential and commercial neighbourhood of Uxbridge, Ontario and occupies approximately 0.63 hectares (ha) of land. The Site is located on the north side of Brock Street West, approximately 80 metres (m) west of the intersection of Brock Street West and Concession Road 7. At the time of the Phase II ESA, the Site was occupied by a vacant building that was formerly used for commercial purposes, including a commercial autobody shop and gasoline service station. The site building was located on the southern portion of the Site. The Site is bounded by residential and commercial properties to the north and east. The Site is bounded by Toronto Street North to the west and Brock Street West to the south. The Site details are presented on **Figure No. 2 in Appendix A**.

### **1.2.2 Topography and Drainage**

The exterior surfaces surrounding the on-site building consist of asphalt parking and driveway areas with some grassed and landscaped areas on the western and northern portions of the Site. Stormwater at the Site flows to on-site catch basins, while excess stormwater likely drains by overland flow to adjacent catch basins located along Toronto Street North or Brock Street West.

Based on an available topographic map (MNRF 2019) reviewed during Stantec's 2024 Phase I ESA and the observed site topography, the inferred regional shallow groundwater flow direction is northerly towards Lake Simcoe, approximately 27 km north of the Site. The Uxbridge Brook is present immediately north and 90 m south of the Site and runs through the central portion of the Site underground in a culvert, running south-north. The local shallow groundwater flow pattern may be influenced by the culvert and other subsurface structures, such as building foundations, weeping tiles, underground utility corridors and trenches and are not always a reflection of regional or local groundwater flow or a replica of the Site or area topography.

Regional topography is indicated on **Figure No. 1 in Appendix A**. The Site grade generally slopes towards the centre of the Site and to the north.



## **1.3 Geologic Setting**

Based on an available surficial geology map, native surficial soils of the Site consist of sand, gravelly sand and gravel, nearshore and beach deposits. One well record that was available in the ERIS report for the Phase I ESA described wells at the Site. These wells were installed in 2019 and were listed as monitoring/test holes.

Based on an available bedrock geology map, bedrock around the Site consists of shale, limestone, dolostone and/or siltstone belonging to the Georgian Bay Formation, Blue Mountain Formation, Billings Formation, Collingwood Member and/or Eastview Member.

## **1.4 Regulatory Framework**

The roles and powers of the Ministry of the Environment, Conservation and Parks (MECP) when dealing with contaminated sites are outlined primarily in the Environmental Protection Act (R.S.O. 1990). The MECP has a mandate to deal with situations where there is an adverse effect, or the likelihood of an adverse effect, associated with the presence or discharge of a contaminant. O.Reg.153/04 provides guidance and information to property owners and consultants to use when assessing the environmental condition of a property, when determining whether restoration is required and in determining the kind of restoration needed to allow continued use or reuse of a property. *The Soil, Groundwater, and Sediment Standards for Use Under Part XV.I of the Environmental Protection Act* (MOE, 2011b) provide generic numerical Site Condition Standards (SCS) for soil, groundwater, and sediment quality as a function of land use, soil texture (medium and fine or coarse), groundwater usage (potable or non-potable), and remediation approach (full depth or stratified).

The assessment completed for this Site was undertaken following the requirements of the MECP's 2011 *Protocol for Analytical Methods Used in the Assessment of Properties Under Part XV.1 of the Environmental Protection Act* document and generally followed the requirements of O.Reg.153/04, including the use of the SCS to assess soil and groundwater (if encountered) quality. The Phase II ESA program was not completed with the intent of filing a Record of Site Condition; therefore, some requirements of O.Reg.153/04, such as the prescribed report format, were not strictly adhered to.



### **1.4.1 Generic Soil Quality Standards**

This section summarizes the selection process Stantec used to identify the appropriate standards for the Site based on a review of site-specific characteristics consistent with the requirements of O.Reg.153/04. The selection of the applicable SCS considered the following characteristics specific to the Site:

- Groundwater use
- Current/intended property use
- Depth to bedrock
- Proximity to water bodies
- Soil characteristics (e.g., grain size)
- Environmental sensitivity, including:
  - Soil pH
  - Proximity to areas of natural significance

These characteristics were used to determine the applicable soil and groundwater quality standards for use at the Site.

A detailed summary of the selection process for the Site is included in **Appendix B**. Considering the site characteristics described in **Appendix B**, the generic SCS considered applicable for the Site are the Table 8 Generic SCS for Use within 30 m of a Water Body in a Potable Groundwater Condition for a residential/parkland/institutional/industrial/commercial/community property use (Table 8 SCS).



## **2 Field Program**

### **2.1 Objective**

The objective of this program was to assess the soil and groundwater quality at the Site with respect to potential environmental concerns that were identified in Stantec's Phase I ESA report.

### **2.2 Scope of Work**

A summary of the completed scope of work is presented below. A detailed methodology is presented in **Appendix C**.

The Phase II ESA was completed in conjunction with a geotechnical investigation, which will be reported under separate cover. The following activities were completed for this Phase II ESA:

#### **2.2.1 Pre-Field Activities**

Pre-field activities completed included the following tasks:

- Prepared a health and safety plan (HASP).
- Retained subcontractors for private underground utility location, borehole drilling and laboratory analytical services.
- Established data quality objectives (DQOs).

#### **2.2.2 Field Activities**

Field activities completed at the Site included the following tasks:

- Retained private utility locators (OnSite Locates Inc.) to locate private services in the work areas and requested utility clearances for public utilities (Ontario One Call).
- Retained a drilling contractor (Strata Drilling Group [Strata]) and observed the advancement of 13 boreholes (identified as MW1 to MW7, BH8, MW9 to MW10, BH11, MW12, and BH13) with 10 of the boreholes completed as monitoring wells (identified as MW1 to MW7, MW9 to MW10, and MW12).
- Collected and submitted select soil samples from the boreholes to Bureau Veritas Canada (2019) Inc. (BV) Laboratories for analysis of VOCs (including benzene, toluene, ethylbenzene, and xylenes [BTEX]), polycyclic aromatic hydrocarbons (PAHs), PHC fraction 1 to 4 (F1 to F4), metals, hydride metals, other regulated parameters (ORPs) and grain size.
- Conducted a groundwater monitoring and sampling program at newly installed groundwater monitoring wells.
- Submitted groundwater samples to BV for analysis of VOCs (including BTEX), PHC F1 to F4, PAHs, metals, hydride metals, ORPs.
- Completed an elevation survey at newly installed monitoring well and borehole locations.
- Submitted a composite soil sample to BV for waste characterization analysis.



### **2.2.3 Data Interpretation and Reporting**

Data interpretation and reporting activities completed included the following tasks:

- Interpreted the observations and findings of the field work and the analytical results.
- Evaluated quality assurance/quality control (QA/QC).
- Prepared this report to document the investigation findings.



## 3 Results

### 3.1 Stratigraphy

Detailed descriptions of stratigraphy observed during borehole advancement are provided on the borehole records in **Appendix D**. The subsurface profile encountered in the boreholes generally consisted of fill (sand and gravel, silty sand, and/or silty clay with sand) up to 6.8 m BGS (MW2) overlying silt/sandy silt or clay/silty clay to the termination depth of the boreholes (12.0 m BGS [MW2 and MW9]). A layer of peat overlain by fill was observed in BH13 and MW1.

### 3.2 Soil Headspace Vapour Concentrations

Headspace soil vapour concentrations are a field screening tool to provide a qualitative indication of the presence of volatile Contaminants of Concern (COCs) (i.e., BTEX and PHC F1). There are no regulatory criteria for headspace soil vapour concentrations.

The combustible vapour concentrations (CVC) and total organic vapour (TOV) concentrations measured in the headspace of the soil samples recovered from the boreholes are provided on the borehole logs in **Appendix D**. A hydrocarbon odour was noted in soil sample MW7-4 (2.3 – 2.9 m BGS). No other visual or olfactory indications of subsurface impacts were observed.

The CVC measured in the soil samples collected from the boreholes ranged from less than (<) the detection limits of the instrument (5 parts per million by volume (ppm<sub>v</sub>)) at multiple locations to 980 ppm<sub>v</sub> at MW7-4 at depths ranging from 2.3 – 2.9 m BGS. Similarly, the TOV measured in the soil samples collected from the boreholes were less than the detection limits of the instrument (0.02 ppm<sub>v</sub>) at several soil sample locations to 729 ppm<sub>v</sub> at the soil samples identified as at MW7-4 at depths ranging from 2.3 – 2.9 m BGS.

### 3.3 Groundwater Monitoring

This section presents the results of the groundwater monitoring program, including vapour concentrations measured in the monitoring well headspace, water levels, and interpreted groundwater flow direction. Groundwater monitoring data are presented in **Table I** in **Appendix E**.

Depth to groundwater and headspace CVC and TOV were measured in the newly installed monitoring wells (identified as MW1 to MW7, MW9 to MW10, and MW12) on November 5, 2024.

As shown in **Table I** in **Appendix E**, headspace CVC measured in the monitoring wells ranged from less than the detection limit of the instrument (5 ppm<sub>v</sub>) at various locations to 430 ppm<sub>v</sub> at MW4. The headspace TOV measured in the monitoring wells ranged from less than the detection limits of the instrument (0.02 ppm<sub>v</sub>) at various locations to 25 ppm<sub>v</sub> at MW7.



The depth to groundwater ranged from 1.4 m BGS (at MW2) to 3.0 m BGS (at MW1), as shown in **Table I** in **Appendix E**.

Groundwater elevations and the inferred direction of groundwater flow measured on November 5, 2024, are illustrated on **Figure No. 3** in **Appendix A**. Based on the elevation survey and depth to groundwater measured on November 5, 2024, the shallow groundwater flow was inferred to be towards the centre of the Site (towards the Uxbridge Brook).

## 3.4 Analytical Results

### 3.4.1 Waste Classification

The results of the waste classification analysis are shown in **Table II** in **Appendix E**. The results indicated that the soil would be classified as a non-hazardous material for waste disposal purposes. Laboratory certificates of analysis are provided in **Appendix F**.

### 3.4.2 Soil Chemistry

Soil analytical results for samples collected from the boreholes are summarized in **Table III** in **Appendix E** and on **Figures No. 4a** and **4b** in **Appendix A**. Laboratory certificates of analysis are presented in **Appendix F**.

The concentrations/values of parameters analyzed in soil samples during this Phase II ESA were less than the Table 8 SCS except for the following:

- The SAR in the soil samples collected from boreholes MW1-2 (0.8 – 1.4 m BGS), MW2-1 (0 – 0.6 m BGS), MW4-9 (6.1 – 6.9 m BGS), MW6-5 (3.0 – 3.8 m BGS), MW6-8 (5.3 – 6.1 m BGS), MW7-4 and QC-2 (2.3 – 2.9 m BGS), BH8-3 and QC-1 (1.5 – 2.3 m BGS), MW9-6 (3.8 – 4.4 m BGS), BH11-2 (0.8 – 1.5 m BGS), MW12-2 (0.8 – 1.5 m BGS), and BH13-1 and BH13-2 (0 – 1.4 m BGS).
- Electrical conductivity in the soil samples collected from boreholes MW2-1 (0 – 0.6 m BGS), MW3-4 (2.3 – 3.0 m BGS), MW4-8 and MW4-9 (5.3 – 6.9 m BGS), MW6-5 (3.0 – 3.8 m BGS), MW6-8 (5.3 – 6.1 m BGS), MW7-4 and QC-2 (2.3 – 2.9 m BGS), MW9-6 (3.8 – 4.4 m BGS), MW10-5 (3.0 – 3.7 m BGS), BH11-2 (0.8 – 1.5 m BGS), MW12-2 (0.8 – 1.5 m BGS), BH13-1 and BH13-2 (0 – 1.4 m BGS), BH13-4 (2.3 – 2.9 m BGS), and BH13-6 (3.8 – 4.4 m BGS).
- Various metals (including one or more of the following of antimony, cadmium, chromium, copper, lead, mercury, silver, and/or zinc) in the soil samples collected from boreholes MW4-8 (5.3 – 6.1 m BGS), MW6-5 (3.0 – 3.8 m BGS), MW6-8 (5.3 – 6.1 m BGS), and BH13-4 to BH13-6 (2.3 – 4.4 m BGS).
- Xylenes in the soil samples collected from boreholes MW1-2 (0.8 – 1.4 m BGS), MW2-1 (0 – 0.6 m BGS), MW4-9 (6.1 – 6.9 m BGS), MW6-5 (3.0 – 3.8 m BGS), and MW9-5 (3.0 – 3.8 m BGS).
- PHC F1 in the soil samples collected from boreholes MW6-5 (3.0 – 3.8 m BGS), and MW7-4 and QC-2 (2.3 – 2.9 m BGS).



- PHC F2 in the soil samples collected from boreholes MW6-5 (3.0 – 3.8 m BGS), MW7-4 and QC-2 (2.3 – 2.9 m BGS), MW9-5 (3.0 – 3.8 m BGS), and MW9-13 (10.7 – 11.3 m BGS).
- PHC F3 in the soil samples collected from boreholes MW7-4 and QC-2 (2.3 – 2.9 m BGS), MW9-5 (3.0 – 3.8 m BGS), BH11-6 (3.8 – 4.6 m BGS), BH11-8 (5.3 – 6.1 m BGS), BH13-3 (1.5 – 2.1 m BGS), BH13-4 (2.3 – 2.9 m BGS), and BH13-7 (4.6 – 5.2 m BGS).
- PHC F4 in the soil samples collected from boreholes MW7-4 and QC-2 (2.3 – 2.9 m BGS), BH11-6 (3.8 – 4.6 m BGS), BH13-3 to BH13-5 (1.5 – 3.8 m BGS), and BH13-7 (4.6 – 5.2 m BGS).
- PHC F4 Gravimetric in the soil samples collected from boreholes MW7-4 and QC-2 (2.3 – 2.9 m BGS), BH13-3 (1.5 – 2.1 m BGS), BH13-4 (2.3 – 2.9 m BGS), and BH13-7 (4.6 – 5.2 m BGS).
- Mercury in the soil sample collected from MW9-6 (3.8 – 4.4 m BGS).
- Antimony in the soil sample collected from MW8-3 and QC-1 (1.5 – 2.3 m BGS).
- Ethylbenzene in soil sample collected from MW6-5 (3.0 – 3.8 m BGS).
- Various PAHs (acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b/j)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, fluoranthene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene) in the soil sample collected from MW8-3 and QC-1 (1.5 – 2.3 m BGS).
- Benzo(a)pyrene in the soil sample collected from MW7-4 and QC-2 (2.3 – 2.9 m BGS).
- Indeno(1,2,3-cd)pyrene in the soil sample collected from QC-2 (2.3 – 2.9 m BGS).
- Acetone in the soil sample collected from borehole MW4-8 (5.3 – 6.1 m BGS).
- Hexane in the soil sample collected from borehole MW6-5 (3.0 – 3.8 m BGS).

The analysis for pH was conducted on 28 soil samples, including seven soil samples recovered from the surface (<1.5 m depth) and 21 soil samples recovered from the subsurface (> 1.5 m depth). The results are presented on **Table III** in **Appendix E**. The corresponding certificates of analysis from BV Labs are presented in **Appendix F**. The pH values of soil samples analyzed were within the acceptable range for surface and/or subsurface soil as outlined in O.Reg. 153/04, with the exception of one soil sample from MW3-4 (2.3 – 3.0 m BGS).

Grain size analysis was conducted on two soil samples (identified as MW2-2 [0.8 – 1.4 m BGS], and BH13-2 [0.8 – 1.4 m BGS]) recovered from the fill at the Site. For these samples, 19% and 48% of the particles were less than 75 micrometers ( $\mu\text{m}$ ) in diameter. Based on the results, the SCS for a coarse-textured soil were applicable, as outlined in O.Reg. 153/04 and as presented on **Table III** in **Appendix E**. The corresponding certificates of analysis from BV Labs are presented in **Appendix F**.



### **3.4.3 Groundwater Chemistry**

Groundwater analytical results are summarized in **Table IV** in **Appendix E** and on **Figure No. 5** in **Appendix A**. Laboratory certificates of analysis are provided in **Appendix F**.

The concentrations of parameters analyzed in groundwater samples during this Phase II ESA were less than the Table 8 SCS except for the following:

- Chloride in the groundwater samples collected from monitoring wells MW1, MW2, MW4, MW6, MW7, and MW10.
- Sodium in the groundwater samples collected from monitoring wells MW2, MW4, MW6, MW7, and MW10.
- Benzo(a)pyrene in the groundwater samples collected from monitoring wells MW4, MW5, and MW6.
- Cobalt in the groundwater samples collected from monitoring wells MW5 and MW7.
- Barium in the groundwater sample collected from monitoring well MW7.

## **3.5 Quality Assurance / Quality Control**

Stantec implemented the following quality assurance/quality control (QA/QC) program to promote the acquisition of soil data that were accurate and representative of conditions at the Site. This program consisted of, but was not limited to, the elements listed below:

- Proper containment, preservation, handling, and transport of soil samples.
- Use of an accredited laboratory.
- Use of reporting limits appropriate for the required soil analyses for comparison to the applicable SCS for the Site.

For sampling efforts, Stantec implemented the following elements for QA/QC:

- Project staff were properly trained and equipped to undertake the tasks involved in the project.
- Field equipment was in good working order and properly calibrated.
- Performance of sampling procedures and field activities was properly documented.
- Field and analytical data were evaluated and interpreted by the project scientific and management teams.
- Independent checks of scientific calculations, figures, and tables were conducted.
- Field duplicate soil samples were analyzed.
- The relative percent difference (RPD) for the sample duplicate pairs was calculated to assess the precision of the sampling and analytical procedures.
- Laboratory QA/QC results, including laboratory replicate analyses and surrogate standard recoveries, were reviewed.

The data quality objective (DQO) for the soil analytical program was to provide data that were reproducible and of a suitable quality for comparison with the applicable regulatory SCS.



As a check on the laboratory analytical methods and on sample precision, the following QC samples were submitted:

- One blind field duplicate soil sample (identified as QC-1 [parent sample BH8-3]) submitted for analysis of PAHs, metals, and ORPs.
- One blind field duplicate soil sample (identified as QC-2 [parent sample MW7-4]) submitted for analysis of VOCs, PHCs, PAHs, metals, and ORPs.
- One blind field duplicate soil sample (identified as QC-3 [parent sample MW5-5]) submitted for analysis of VOCs and PHCs.
- One blind field duplicate groundwater sample (identified as QC-01 [MW4]) submitted for analysis of VOCs, PHCs, PAHs, metals, and ORPs.
- One field blank groundwater sample (identified as QC-02) was submitted for analysis of VOCs, and PHCs.
- One trip blank groundwater sample (identified as TRIP BLANK) was submitted for analysis of VOCs, and PHCs.

The blind field duplicate samples were used to assess the precision of the sampling and analytical procedures. Typically, the RPD is calculated for the concentrations in the original sample and its duplicate. The RPD was calculated using the following formula:

$$RPD = \left| \frac{C_1 - C_2}{(C_1 + C_2)/2} \right| \times 100$$

Where:  
C1 is the concentration in the original sample; and  
C2 is the concentration in the sample duplicate.

If the results for either or both the original sample and the duplicate were less than the laboratory RLs, the RPD was not calculated. RPDs were only calculated if the analytical result was greater than five times the RL.

### **3.5.1 Blind Duplicate Samples**

The analytical results for the field duplicate soil samples and the calculated RPDs are presented on **Table III in Appendix E**.

#### Soil

The RPDs, where calculated, ranged between 0% and 34%. RPDs exceeding the quality objective of 30% were calculated for the following samples:

- BH8-3 and QC-1 – Acenaphthylene; RPD of 34%
- BH8-3 and QC-1 – Benzo(a)pyrene; RPD of 33%
- BH8-3 and QC-1 – Benzo(b/j)fluoranthene; RPD of 34%
- BH8-3 and QC-1 – Dibenz(a,h)anthracene; RPD of 31%
- BH8-3 and QC-1 – Indeno(1,2,3-cd)pyrene; RPD of 33%



- BH7-4 and QC-2 – PHC F4; RPD of 34%

The exceedance of the quality objective of 30% at BH8-3 and its duplicate sample QC-1 and at BH7-4 and its duplicate sample QC-2 is likely due to soil heterogeneities. Since both the parent and duplicate samples at both locations were above the applicable SCS for one or more parameter, the exceedance of the quality objective of 30% has no material impact on the interpretation of the results.

#### Groundwater

The RPDs, where calculated, were between 0% and 7% and within the acceptable quality objective of 30%.

### **3.5.2 Laboratory QA/QC**

In addition to Stantec's assessment of blind field duplicate samples, BV Labs followed internal QA/QC protocols, which included laboratory replicates, process blanks, process recovery and matrix spike analyses.

BV Labs reported that the results of their QA/QC procedures were within their applicable limits and met their overall QA/QC acceptability criteria, with the following exceptions:

#### BV Job #C4Y8641

- The recovery for the extraction surrogate compound was above the upper control limit for soil sample MW4-8 (5.3 – 6.1 m BGS) and MW4-9 (6.1 – 6.9 m BGS).
- The detection limit was raised due to matrix interference for ethyibenzene in soil sample QC-2.
- The detection limit was raised due to matrix interference for chromium VI in soil sample BH13-7 (4.6 – 5.2 m BGS).

#### BV Job #C4Z1246

- Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly for chromium VI in groundwater samples MW2, MW6, MW7, and MW10. Detection limits were adjusted accordingly for phenanthrene in groundwater sample MW9 and chloroform in MW2.

These QA/QC items are not anticipated to affect the interpretation of the analytical results.

### **3.5.3 QA/QC Conclusions**

Based on the QA/QC evaluation, it was concluded that the DQO for this assessment was satisfied, and the data were considered acceptable for use in this report.



## **4      Summary and Discussion**

Stantec Consulting Ltd. (Stantec) was retained by the Township of Uxbridge to conduct a Phase II Environmental Site Assessment (ESA) for the property municipally described as 23 Brock Street West in Uxbridge, Ontario. The objective of this program was to assess the soil and groundwater quality at the Site with respect to the potential environmental concerns that were identified in Stantec's Phase I ESA report.

Thirteen boreholes (identified as MW1 to MW7, BH8, MW9 to MW10, BH11, MW12, and BH13) were advanced to depths ranging from 6.1 m BGS (various) to 12.2 m BGS (MW2). Ten of the 13 boreholes were completed as monitoring wells (identified as MW1 to MW7, MW9 to MW10, and MW12).

The Table 8 SCS for Use within 30 m of a Water Body in a Potable Groundwater Condition for a residential/parkland/institutional/industrial/commercial/community property use were determined to apply for the comparison of soil and groundwater data from the Site.

Based on the elevation survey and depth to groundwater measured on November 5, 2024, the shallow groundwater flow was inferred to be towards the centre of the Site (towards the Uxbridge Brook), likely due to the presence of the culvert beneath the Site. Evidence of light non-aqueous phase liquid (LNAPL) was not identified in the newly installed monitoring wells during the November 5, 2024, monitoring event.

Electrical conductivity (EC) and/or sodium adsorption ratio (SAR) concentrations in soil and sodium and chloride concentrations in groundwater exceeded the Table 8 SCS at various sampling locations across the Site. The EC, SAR, sodium and chloride exceedances are likely attributed to the application of road salt for deicing purposes across the Site and nearby roadways. As per paragraph 1 of section 49.1 of Ontario Regulation 153/04, these parameters are not considered to be contaminants of concern in soil and groundwater if they are present due to the application of salt/de-icing compounds at the Site for the safety of vehicular and pedestrian traffic.

Exceedances of the Table 8 SCS were identified in the soil samples analyzed from across the Site for one or more of VOCs, PHC F1 to F4, metals and ORPs, and PAHs. One location also exceeded the applicable pH range for applying the SCS. Furthermore, exceedances of the Table 8 SCS were identified in the groundwater samples analyzed from the southern portion of the Site for one or more of metals and ORPs, and PAHs. Fill was identified across the Site up to a maximum depth of 6.8 m BGS (MW2). The presence of fill is a likely contributor to exceedances of the SCS and elevated pH in the soil and groundwater at the Site.

The source of the PHC exceedances identified in soil from MW6 and MW7 may be associated with the former gasoline service station located on the southern portion of the Site, including gasoline underground storage tanks and a pump island.



**Phase II Environmental Site Assessment, 23 Brock Street West, Uxbridge, Ontario**

**4 Summary and Discussion**

February 28, 2025

It is Stantec's understanding that legal proceedings are ongoing regarding geotechnical, hydrogeological, and environmental issues, including the discovery of contaminated soil on the Site, encountered during the Brock Street culvert replacement project undertaken by the Township of Uxbridge in 2018 at the Site to mitigate flooding risk in downtown Uxbridge. Documentation associated with the legal proceedings was not made available to Stantec for review and, as such, the related information is not included in this report.



## **5      Recommendations**

Based on the conclusions of the current investigation of the Site, Stantec provides the following recommendations:

- The monitoring wells installed on the Site by Stantec can be left in place in the event they may be required for future groundwater monitoring. If the monitoring wells are no longer required, they should be decommissioned according to provincial regulatory requirements.
- It is recommended that documentation related to contamination encountered during the Brock Street culvert replacement project be made available for review and interpretation to supplement the information presented in this report subject to Township of Uxbridge legal approval.



## **6      References**

- CSA. (2000). CAN/CSA-Z769-00 (R2023) – Phase II Environmental Site Assessment. Canadian Standards Association (CSA).
- MNRF. (2019). *Topographic Mapping available from the Ontario Ministry of Natural Resources and Forestry (MNRF) online mapping*. Ministry of Natural Resources (MNR), Queen's Printer for Ontario.
- MOE. (2011). *Soil, Groundwater, and Sediment Standards for Use Under Part XV.I of the Environmental Protection Act*. Ontario Ministry of the Environment (MOE).
- MOE. (2011a). *Protocol for Analytical Methods Used in the Assessment of Properties Under Part XV.1 of the Environmental Protection Act*. Ontario Ministry of the Environment.
- MOEE. (1996). *Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario*. Ministry of Environment and Energy. December 1996.
- OGS. (2003). *Quaternary geology of Ontario, southern sheet, M2556, Scale 1:1,000,000*. Ontario Geological Survey (OGS).
- OGS. (2011). *Bedrock Geology of Ontario, Scale 1:250,000*. Ontario Geological Survey (OGS), Miscellaneous Release—Data 126-Revision 1.
- Stantec. (2024). *DRAFT - Phase I Environmental Site Assessment, 23 Brock Street West, Uxbridge, ON, dated November 26, 2024*.
- USEPA. (1996). *EPA/540/S095-504 Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures*. United States Environmental Protection Agency (USEPA).



**Phase II Environmental Site Assessment, 23 Brock Street West, Uxbridge, Ontario**

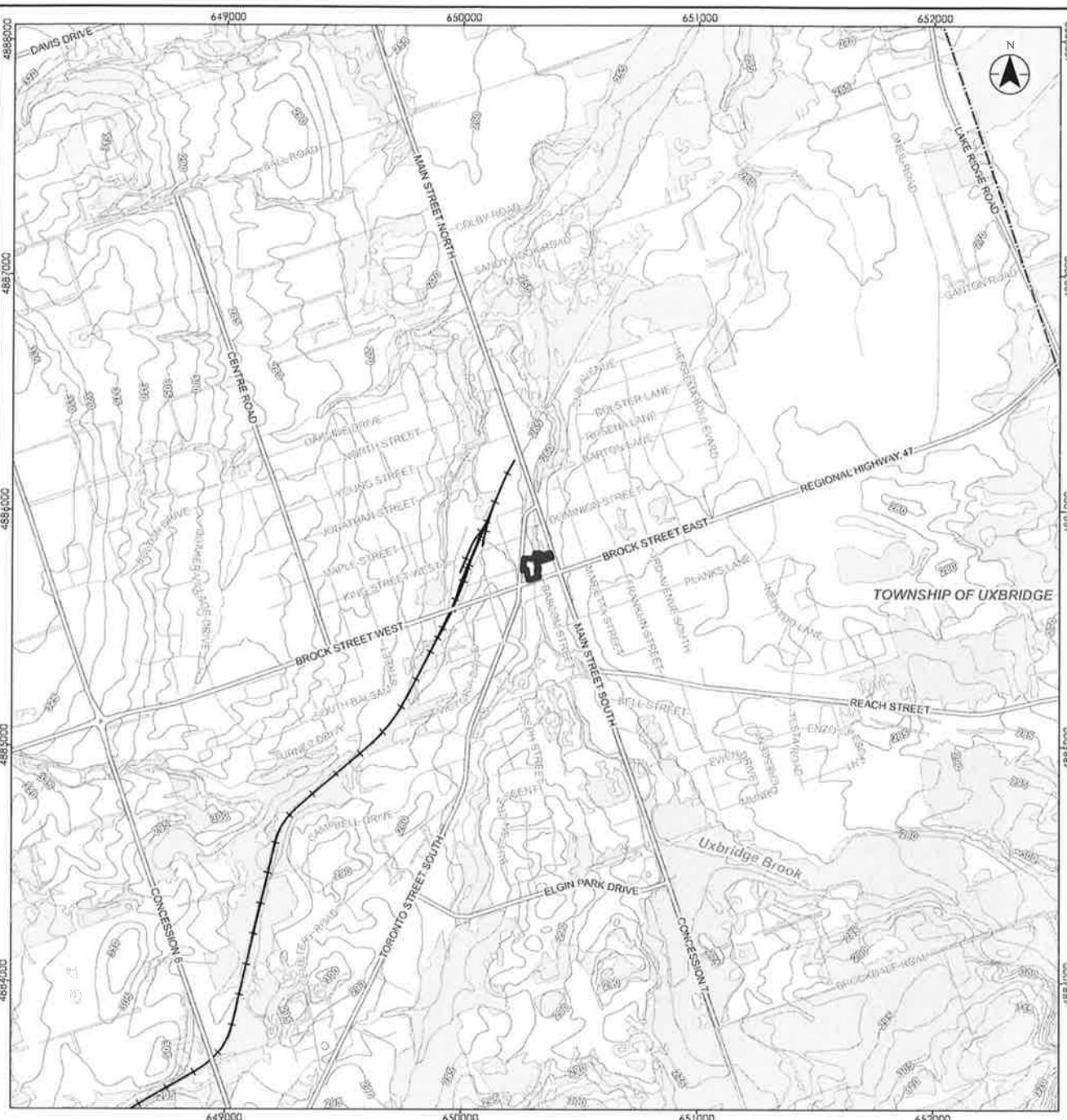
February 28, 2025

## **Appendices**



## **Appendix A      Figures**





- Legend**
- Approximate Site Boundary
  - Major Road
  - - Minor Road
  - + Railway - Operational

- Topographic Contour (m AMSL)
- Watercourse
- Waterbody
- Wooded Area
- Municipal Boundary - Lower Tier

0 500 1,000 metres  
1:25,000 (at original document size of 8.5x11)

 **Stantec**

Project Location  
23 Brock Street West,  
Uxbridge, Ontario  
Prepared by svandamme on 2024-12-06

Client/Project  
**TOWNSHIP OF UXBRIDGE**  
**PHASE II ENVIRONMENTAL SITE ASSESSMENT**  
**23 BROCK STREET WEST, UXBRIDGE, ONTARIO**

Figure No.:  
**1**

### Site Location

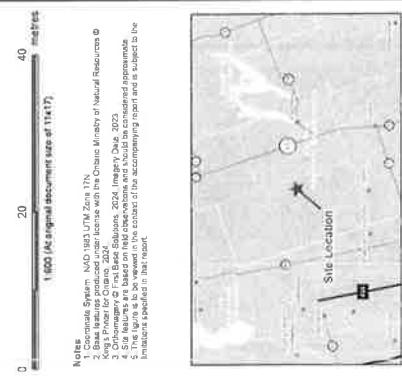
**Notes**

1. Coordinate System: NAD 1983 UTM Zone 17N
2. This figure was produced under license with the Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry © King's Printer for Ontario, 2024
3. This figure is to be viewed in the context of the accompanying report and is subject to the limitations specified in that report.
4. m AMSL - metres above mean sea level.

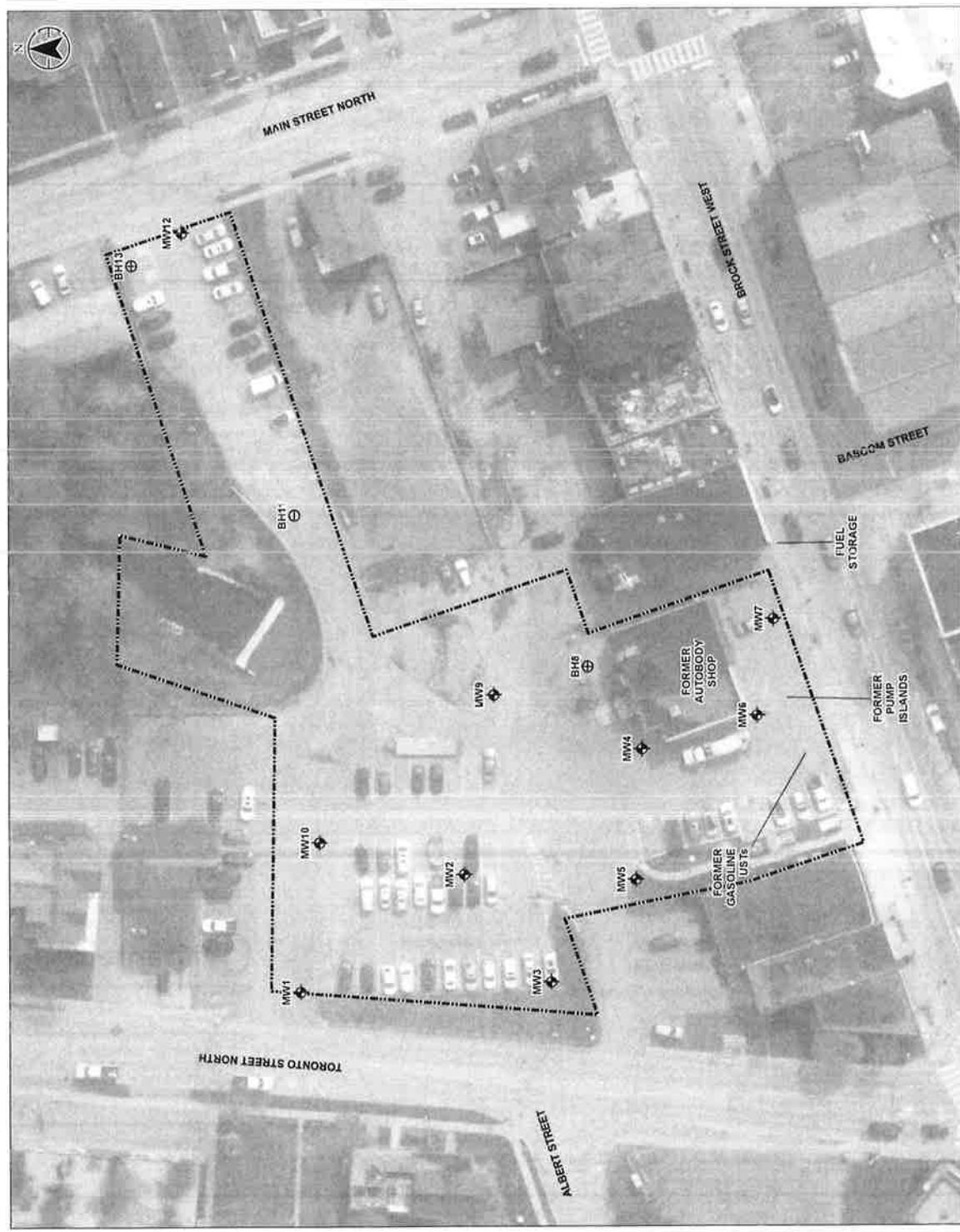
**Disclaimer:** This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic format, and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.



Legend  
⊕ Approximate Borehole Location (Stantec, 2024)  
◆ Approximate Monitoring Well Location (Stantec, 2024)  
■ Approximate Site Boundary



Project Location  
23 Brook Street West  
Uxbridge, Ontario  
Prepared by Stantec Inc.  
122140392  
Prepared on 2024-02-20  
Client Project  
TOWNSHIP OF UXBRIDGE  
PHASE I ENVIRONMENTAL SITE ASSESSMENT  
23 BROOK STREET WEST, UXBRIDGE, ONTARIO  
Figure No.: 2  
Title: Site Plan





Legend

⊕ Approximate Borehole Location (Stantec, 2024)

◆ Approximate Monitoring Well Location (Stantec, 2024)

□ Approximate Site Boundary

■ Whitecourse

Groundwater Elevation (m AMSL)

— Groundwater Contour

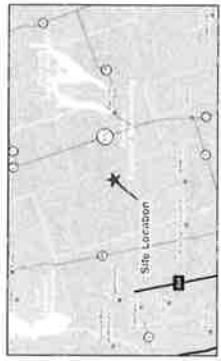
→ Inferred Direction of Groundwater Flow

0 20 40 metres

1500 (A original document size of 1x17)

**Notes:**

1. Land Sale System NAO 1183 UTM Zone 17N
2. Site status as produced under knowledge of the Ontario Ministry of Natural Resources
3. 1990 Master Survey by Ontario, 2024 Survey by Stantec, 2024 Report by Stantec, 2023
4. Site boundaries are based on the 1990 Master Survey
5. Site location is the location of the accompanying report and is subject to the 1990 Master Survey
6. m AMSL = metres above sea level



Project Location: 23 Brock Street West, Storage, Ontario

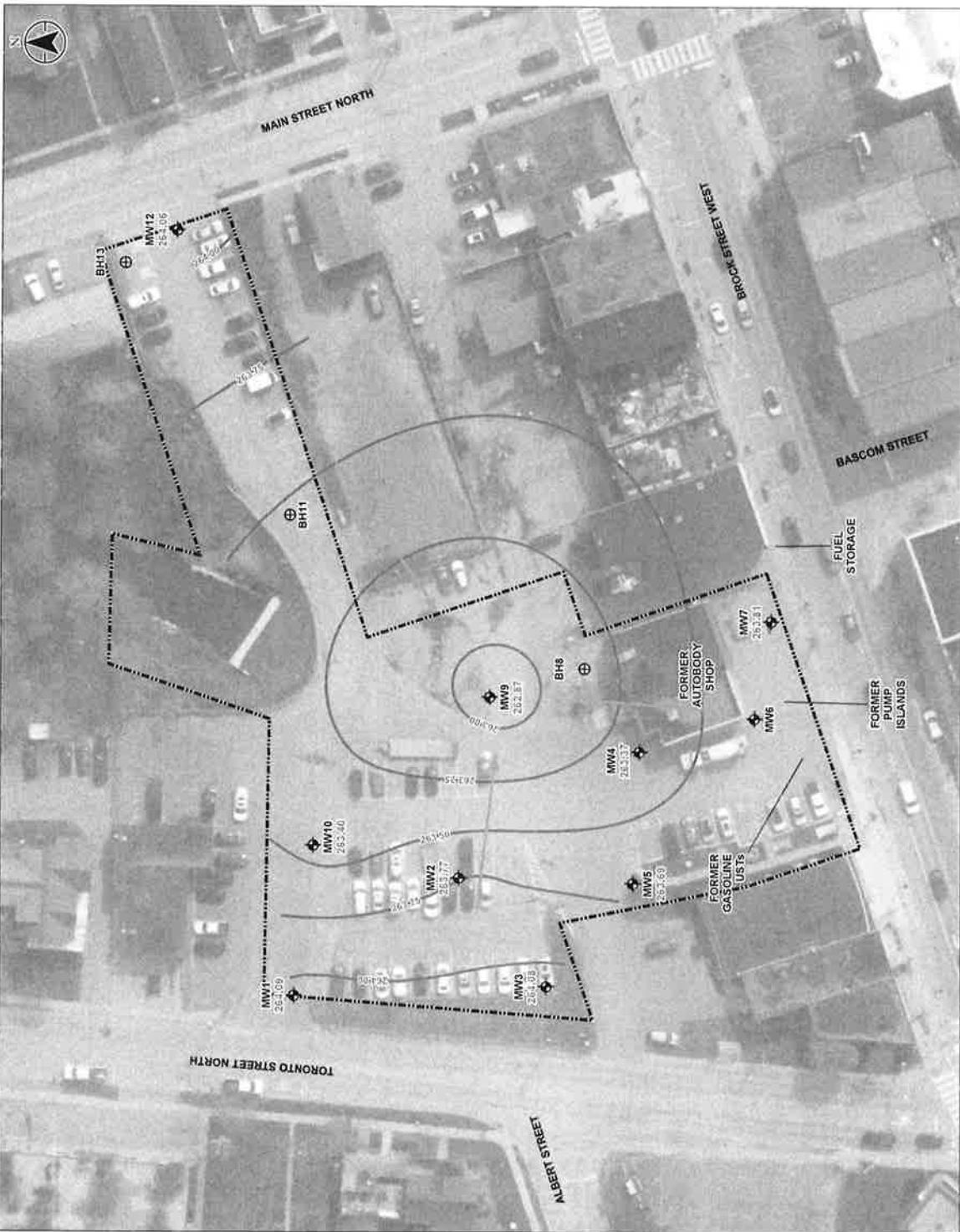
Prepared by: Stantec Inc. on 2024-12-30

122162932  
TOWNSHIP OF UXBRIDGE  
PHASE II ENVIRONMENTAL SITE ASSESSMENT  
23 BROCK STREET WEST, UXBRIDGE, ONTARIO

Figure No.

3

**Inferred Direction of Groundwater Flow - November 5, 2024**



**Disclaimer:** This document has been prepared based on information provided to us by the Project Owner. Stantec Inc. has not had the opportunity to independently verify any areas or information which may be indicated herein and such areas or information which may be indicated herein shall not be relied upon for anything other than the information and analysis contained herein. Stantec Inc. makes no representations or warranties with respect to the accuracy or completeness of the information and analysis and accepts no responsibility for any errors or omissions which may be contained herein.



**Legend**

- ⊕ Approximate Borehole Location (Stantec, 2024)
- ♦ Approximate Monitoring Well Location (Stanley, 2024)
- Soil Parameters Tested Less Than Regulatory Standards (2011 MECP O'Reg. 153/04 Table 1 SCS)
- One or More Soil Parameters Tested Greater Than Regulatory Standards (2011 MECP O'Reg. 153/04 Table 8 SCS)
- Approximate Site Boundary

Table 8 SCS

Table 1 SCS

Soil Parameters Tested Less Than SCS

Soil Parameters Tested Greater Than SCS

		Sample Depth (m SCD) Sample Date (MM/DD/YYYY)	
		Location ID	Distance From Borehole BH11
PHC F3 (>C15-C50 range)	0.0 - 0.6 m	1021/2024	3.0 - 3.8 m
PHC F4 (>C30-C50 range)	0.0 - 0.6 m	1021/2024	3.0 - 3.8 m
PHC F4 (>C30-C50 range)	0.6 - 1.0 m	1021/2024	3.0 - 3.8 m
Chromium	< 0.10	1021/2024	< 0.10
Manganese	< 2.0	1021/2024	< 2.0
Magnesium	< 0.050	1021/2024	< 0.050
Sodium	< 0.050	1021/2024	< 0.050
Zinc	< 0.10	1021/2024	< 0.10

		Sample Depth (m SCD) Sample Date (MM/DD/YYYY)	
		Location ID	Distance From Borehole BH11
PHC F3 (>C15-C50 range)	0.0 - 0.6 m	1021/2024	3.0 - 3.8 m
PHC F4 (>C15-C50 range)	0.0 - 0.6 m	1021/2024	3.0 - 3.8 m
PHC F4 (>C15-C50 range)	0.6 - 1.0 m	1021/2024	3.0 - 3.8 m
Chromium	< 0.10	1021/2024	< 0.10
Manganese	< 2.0	1021/2024	< 2.0
Magnesium	< 0.050	1021/2024	< 0.050
Sodium	< 0.050	1021/2024	< 0.050
Zinc	< 0.10	1021/2024	< 0.10

BH11



## Soil Analytical Results (Excluding EC/SAR)

Project Name: CleanProject

TOWNSHIP OF UXBRIDGE

PHASE 1 ENVIRONMENTAL SITE ASSESSMENT

22 BROCK STREET WEST, UXBRIDGE, ONTARIO

Figure No.: 4a

Page: 1 of 1

Date: 12/14/2024

Prepared by: srodriguez@12/14/2024

Reviewed by: jbrown@12/14/2024

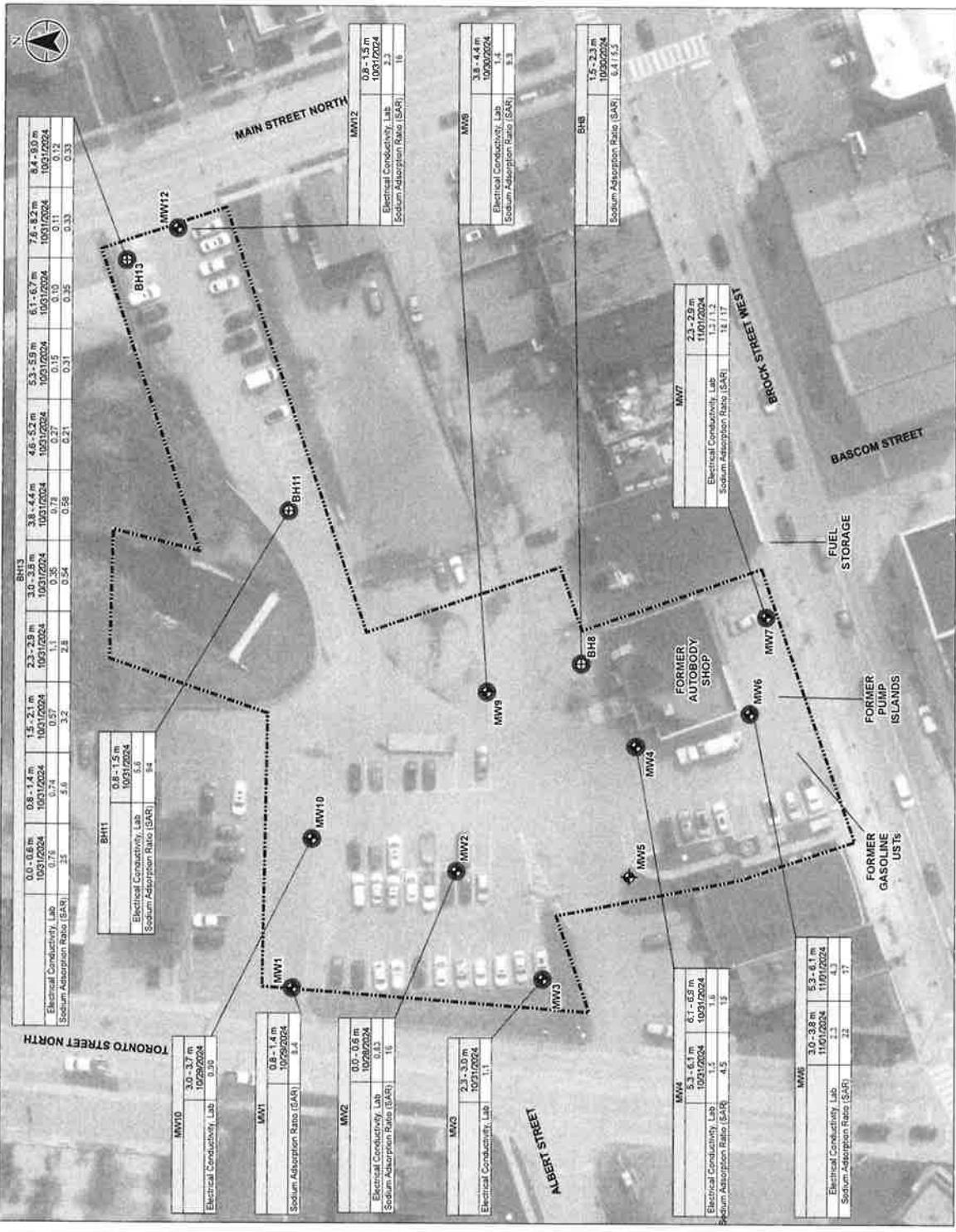
Approved by: jbrown@12/14/2024

Comments: This document is the final report prepared for the Township of Uxbridge, Ontario, regarding the environmental site assessment of the property located at 22 Brock Street West, Uxbridge, Ontario. The report includes the results of soil sampling and analysis, as well as recommendations for future actions. The data presented in this report is intended for use in decision-making processes related to the property's environmental status and potential risks.



**Legend**

- ⊕ Approximate Borehole Location (Stantec, 2024)
- ◆ Approximate Monitoring Well Location (Stantec, 2024)
- Soil Parameters Tested Less Than Regulatory Standards (2011 MECP O Reg. 153/04 Table 8 & SCS)
- One or More Soil Parameters Tested Greater Than Regulatory Standards (2011 MECP O Reg. 153/04 Table 8 & SCS)
- Approximate Site Boundary



### Soil Analytical Results - EC and SAR

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Approximate Borehole location (Stantec, 2024)

Approximate Monitoring Well Location (Stantec, 2024)  
Groundwater Parameters Tested Less Than  
Regulatory Standards (2011 MECP O.Reg. 153/04  
Table 8 SCS)

One or More Groundwater Parameters Tested Greater  
Than Regulatory Standards (2011 MECP O.Reg.  
153/04 Table 8 SCS)

Approximate Site Boundary

Location ID	Location Name
MW1	11/06/2024

Boron/Barium/Cobalt/Benzylbenzene

Concentration Greater Than SCS

Value/Fault Duplicate

2011 MECP Table 8 SCS			
Parameter	Barium, Cobalt, Benzylbenzene	Unit	Value
Boron	mg/L	1	0.0038
Cobalt	mg/L	0.0038	0.01
Benzylbenzene	ug/L	0.01	0.01

Approximate Site Boundary



Notes

1 Coordinate System: NAD 1983 UTM Zone 17N  
2 Coordinates are relative to the Ontario Ministry of Natural Resources ©  
3 Soil sample for Chloro 1034 was taken with the Ontario Ministry of Natural Resources ©

4 Site manager © File Base 2024. Image Date: 2022  
5 A. S. is to be viewed in the context of the accompanying report and is subject to the limitations specified in that report.

6 SCS = Site Condition Summary Report

7 SCS © Stantec Consulting Engineers Inc.

Project Location: 1221/4532

Prepared by: Stantec Inc.: 12/2024-12/2025

Client/Project:

TOWNSHIP OF UXBRIDGE

PHASE II ENVIRONMENTAL SITE ASSESSMENT

23 BROCK STREET WEST, UXBRIDGE, ONTARIO

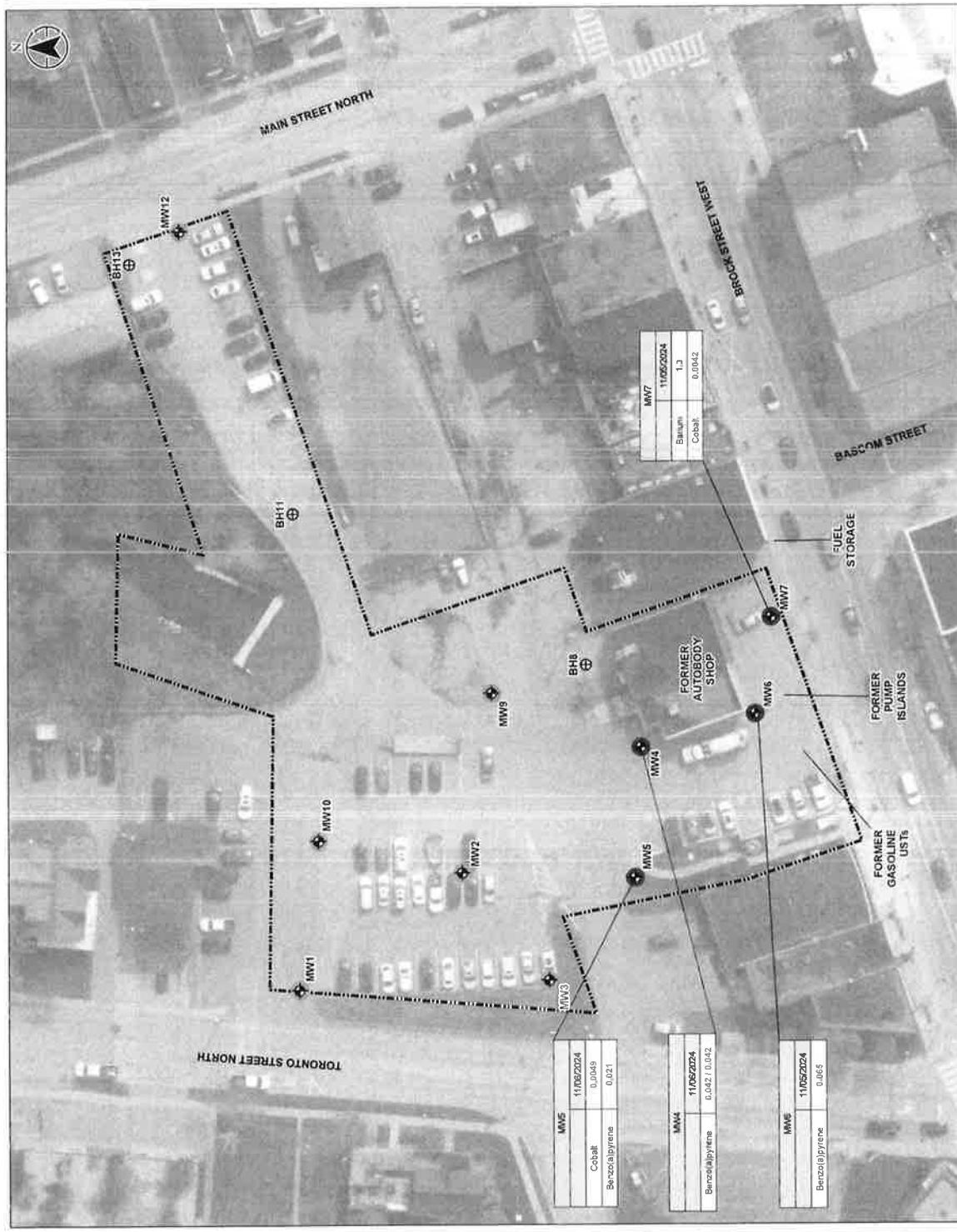
Figure No.:

5a

Title:

Groundwater Analytical Results  
(Excluding Sodium and Chloride)

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**Legend**

- ⊕ Approximate Borehole Location (Stantec, 2024)
- ◆ Approximate Monitoring Well Location (Stantec, 2024)
- Groundwater Parameters Tested Less Than Regulatory Standards (2011 MECP O.Reg. 153/04 Table 8 SCS)
- One or More Groundwater Parameters Tested Greater Than Regulatory Standards (2011 MECP O.Reg. 153/04 Table 8 SCS)
- Approximate Site Boundary

Location ID	Sample Date (MM/DD/YYYY)
MW1	11/06/2024
Chloride	2,350
Sodium	720

Parameter	Concentration	WATERFIELD Qualification
Chloride	Greater Than SCS Qualification	

2011 MECP Table 8 SCS		
Parameter	Unit	Value
Chloride	mg/L	700
Sodium	mg/L	450



Location ID	Sample Date (MM/DD/YYYY)
MW7	11/06/2024
Chloride	6,400
Sodium	3,600

Parameter	Unit	Value
Chloride	mg/L	11,517

**Notes:**

1. Combustion System - ADD 1983 U/N Zone 1N
2. Base values produced under license with the Ontario Ministry of Natural Resources ©
3. Data gathered by Project Team, Stantec, 2024.
4. Site boundaries are based on the observations and should be considered approximate.
5. Site boundaries are based on the observations and should be considered approximate.
6. MECP - Ministry of the Environment, Conservation and Parks.
7. SCS - Site Condition Standard.

Project Location  
23 Brock Street West,  
Uxbridge, Ontario  
N9L 1B2  
Figure No.  
**5b**

Prepared by Stantec on 2024-11-20  
122140292

Client Project:  
**TOWNSHIP OF UXBRIDGE**  
**PHASE II ENVIRONMENTAL SITE ASSESSMENT**  
**23 BROCK STREET WEST, UXBRIDGE, ONTARIO**

## Groundwater Analytical Results - Sodium and Chloride

Location ID	Sample Date (MM/DD/YYYY)	Chloride	Sodium
MW10	11/06/2024	2,350	720
MW1	11/06/2024	920	
MW2	11/06/2024	2,200	710
MW3	11/06/2024	1,520	1,950
MW4	11/06/2024	1,700	1,700
MW5	11/06/2024	1,700	1,700
MW6	11/06/2024	1,700	1,700
MW7	11/06/2024	6,400	3,600
MW8	11/06/2024	5,200	2,200

**Appendix B      Generic Soil and Groundwater  
                              Quality Standard Selection Process**



This section summarizes the selection process Stantec used to identify the appropriate SCS for the Site. The selection was based on a review of site-specific characteristics consistent with the requirements of O.Reg.153/04 and considered the following characteristics specific to the Site.

## **B.1      Groundwater Use**

The Site obtains its drinking water from the Region of Durham's municipal distribution system, however, it was reported on the Region of Durham's website that the sources of potable water in the Township of Uxbridge included Lake Simcoe and a groundwater well. Therefore, SCS for potable groundwater conditions were considered applicable at the Site.

## **B.2      Current/Intended Property Use**

Stantec understands that the Site is currently vacant and has been used for commercial purposes. Therefore, the applicable land use category was residential/parkland/institutional/industrial/commercial/community.

## **B.3      Depth to Bedrock**

The subsurface investigation completed as part of this Phase II ESA did not identify bedrock within 2 m of the existing ground surface. Therefore, the full depth generic SCS were considered applicable for use at the Site.

## **B.4      Proximity to Water Bodies**

The Uxbridge Brook is present immediately north and 90 m south of the Site and runs through the central portion of the Site underground in a culvert, running south-north. Therefore, the generic SCS suitable for properties within 30 m of a water body were considered applicable for the Site.

## **B.5      Soil Characteristics**

Stratigraphy observed in the boreholes advanced as part of this Phase II ESA consisted of fill (sand and gravel, silty sand, and/or silty clay with sand) overlying silt/sandy silt or clay/silty clay. Three soil samples were submitted for grain size analysis as part of the Phase II ESA. The results of the grain size analyses indicated the majority of the material at the Site to be coarse-grained material, therefore, the coarse-grained standards were applied.



## **B.6 Environmentally Sensitive Areas**

The O.Reg.153/04 generic SCS cannot be used at properties that are within, include, or are proximate to (i.e., within 30 m of) Environmentally Sensitive Areas, such as areas of natural significance, or when soil pH is not within the allowable ranges for surface and/or subsurface soils. If either condition applies, the Table 1 (background) SCS are used to evaluate soil and groundwater quality.

Stantec searched the Ontario Ministry of Natural Resources and Forestry's (MNRF's) Natural Heritage online database. No areas of natural or scientific interest (ANSIs) or natural heritage areas were identified within 1 km of the Site.

The generic SCS cannot be applied to a property if the soil pH has a value outside a range of 5 to 9 for surface soil (less than 1.5 m BGS) or outside a range of 5 to 11 for subsurface soil (greater than 1.5 m BGS).

The soil sampling completed as part of this Phase II ESA confirmed that the pH in soil at the Site was within the acceptable range (between 5 and 9 for surface soil, and 5 and 11 for soil at depths greater than 1.5 m from the ground surface) for 27 of the 28 pH samples analyzed, and therefore, the Site would not be considered environmentally sensitive as per the definitions provided in Section 41 of O.Reg.153/04.

Based on the above results, the Site was therefore not considered to be environmentally sensitive.

## **B.7 Applicable Standards**

Based on the Site's characteristics, the Table 8 Generic SCS for Use within 30 m of a Water Body in a Potable Groundwater Condition for a residential/parkland/institutional/industrial/commercial/community property use were considered applicable for the Site (Table 8 SCS).



## **Appendix C      Methodology**



## **C.1 Health and Safety**

Stantec developed a Health and Safety Plan (HASP) for this project consistent with the requirements of the Ontario *Occupational Health and Safety Act* (OHSA) to address the fieldwork components, including sampling and handling of soil and groundwater samples potentially containing the contaminants of potential concern (COPC) previously identified. The specific objectives of the health and safety checklist were to:

- Identify potential health and safety concerns or exposure risks associated with activities to be conducted on the Site.
- Identify and describe the control methods designed to reduce on-site worker exposure to potential risks.
- Reduce the potential for on-site workers and the public to be exposed to unnecessary or unacceptable risk as part of the work program.
- Undertake the proposed Phase II ESA program field activities in a manner consistent with the applicable legislation and guidelines respecting worker health and safety, and regulations concerning contaminant and waste handling.

A copy of the health and safety documentation was kept on the Site by Stantec field personnel for the duration of the field activities.

## **C.2 Underground Utilities**

### **C.2.1 Public and Private Underground Service Locates**

Prior to the borehole drilling activities, Stantec contacted Ontario One Call to have publicly owned utilities located in the vicinity of the proposed borehole locations. In addition, Stantec retained OnSite Locates Inc. of Markham, Ontario to locate public and private underground services near the boreholes including, but not limited to, buried former private Site services, telephone, natural gas, cable, water, and power.

## **C.3 Methodology**

### **C.3.1 Borehole Advancement and Monitoring Well Installation**

Between October 28 and November 4, 2024, Strata advanced 13 boreholes (identified as MW1 to MW7, BH8, MW9 to MW10, BH11, MW12, and BH13) at various locations across the Site to depths ranging from 6.1 m BGS (various locations) to 12.2 m BGS (MW2). The locations of the boreholes are presented on **Figure No. 2 in Appendix A**. To facilitate future groundwater monitoring and sampling activities at the Site, ten of the 13 boreholes (identified as MW1 to MW7, MW9 to MW10, and MW12) were completed as monitoring wells.

Stantec personnel logged the subsurface conditions encountered within each of the boreholes at the time of the field work. Samples from the soils within the boreholes were recovered at regular depth intervals (i.e., every 1.2 m) in disposable polyethylene liners.



Groundwater monitoring wells were constructed of 50 mm inside diameter (ID) polyvinyl chloride (PVC) well materials. Monitoring wells were constructed with a 3.0 m long slotted PVC well screen connected to an appropriate length of PVC riser pipe. The PVC screen and riser pipe were flush-threaded and equipped with O-rings to provide watertight joints. A flush-threaded PVC cap was installed at the bottom of the well screen. Silica sand was placed in the borehole annulus around each well screen and extended to approximately 0.3 m above the top of the well screen. A bentonite seal was installed from the top of the silica sand to approximate depths of 0.15 m BGS in each of the monitoring wells. A j-plug was installed at the top of each monitoring well. The monitoring wells were finished with flush mounted well casings that were concreted in-place.

Borehole logs in **Appendix D** present the monitoring well construction details.

## **C.4 Elevation Survey**

The ground surface elevations of the boreholes and the top of monitoring well casings were surveyed using a Sokkia GCX3 Global Network Satellite System (GNSS) Receiver to provide an accurate elevation in meters above sea level (m ASL). This permitted an assessment of relative ground water elevations between monitoring wells across the Site.

## **C.5 Sampling Methods**

### **C.5.1 Soil Sampling Methodology**

Soil samples were collected from the boreholes at regular intervals. Stantec's field technician visually assessed and logged the recovered soil samples in the field and recorded observations of colour, odour, texture, soil type, and moisture. Borehole logs are provided in **Appendix D**. Each soil sample was split into two portions. One portion was placed into a sealable plastic bag for use in screening headspace soil vapour concentrations. The second portion of each sample was placed into laboratory-supplied jars and temporarily stored in a cooler on ice prior to transport to Bureau Veritas Canada (2019) Inc. (BV) Laboratories. Samples to be analyzed for volatile organic compounds (VOC) or petroleum hydrocarbons (PHC) including benzene, toluene, ethylbenzene and xylenes (BTEX) and PHC F1 were recovered at each sampling interval using a hermetic sampling device. This involved collecting approximately 5 gram aliquots of soil and extruding the aliquots directly into laboratory supplied vials containing methanol preservative.

Stantec screened soil samples for headspace soil vapour concentrations in the field using an RKI Eagle 2 gas detector. The Eagle 2 is equipped with a combustible gas detector to measure combustible vapour concentrations (CVC) and a photoionization detector (PID) to measure total organic vapours (TOV). The combustible gas detector was calibrated to hexane and operated in methane elimination mode for CVC measurements, and the PID was calibrated to isobutylene and equipped with a 10.6 eV lamp for TOV measurements. For CVC, the Eagle 2 can display measurement in parts per million by volume (ppmv), percent by volume (% volume), and percent of the lower explosive limit (% LEL). TOV measurements are reported in units of ppmv.



The Eagle 2 is equipped with a Teflon® lined hose and a 0.4 m (10 in.) long hydrophobic probe. The probe includes a replaceable hydrophobic filter disk that reduces the potential for particulates and water to enter the instrument. The Eagle 2 was calibrated in the field at the beginning of work each day. Field screening methods measure the total concentration of a range of combustible and volatile contaminants such as PHC and VOC in soil vapour. Borehole logs in **Appendix D** include CVC/TOV measurements.

Stantec selected soil samples for laboratory analysis based on a variety of lines of evidence, including samples with elevated CVC/TOV concentrations, staining, odour, and the expected behaviour of contaminants of potential concern (COPCs) in the environment. Samples submitted for laboratory analysis were packed in coolers on ice and shipped to BV under chain-of-custody documentation.

### **C.5.2 Geoprobe Decontamination Methodology**

Potential cross-contamination of samples was reduced by using cleaned drilling and sampling equipment. Loose soil was brushed from the stainless-steel drive casings between sampling locations and the non-dedicated sampling equipment from the drill rig was washed using a solution of Alconox and water and rinsed with water between sample locations. Stantec's field technicians wore a new pair of disposable nitrile gloves for each soil sample.

### **C.5.3 Groundwater Monitoring and Sampling**

Headspace CVC and TOV in the monitoring wells were measured using an RKI Eagle 2, which was calibrated in accordance with the methodology described above.

Stantec measured the depth to ground water and assessed the presence/absence of light and dense non-aqueous phase liquids (LNAPL and DNAPL) with a Heron Model H.Oil oil/water interface probe (or equivalent). The sensor accuracy is 1 mm (1/200 ft).

Prior to sampling, Stantec developed and purged the newly installed monitoring wells using dedicated Waterra® tubing and foot valves. The monitoring wells were allowed to recover to approximately 90% of static elevation prior to sample collection.

Groundwater samples were recovered from the newly installed monitoring wells and existing monitoring wells in accordance with the United States Environmental Protection Agency's (USEPA's) recommended "low-flow" sampling methodology, as outlined in the USEPA publication EPA/540/S095-504 Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures, April 1996.

Low flow refers to the velocity at which water enters the pump intake, which directly affects the flow of formation pore water in the immediate vicinity of the well screen. Water level drawdown provides the best indication of the stress imparted by a given flowrate for a given hydrological situation. The objective is to pump in a manner that reduces stress (drawdown) to the system to the extent practicable, taking into account established data quality objectives.



A peristaltic pump was placed gently into the water column of each monitoring well and the pump intake was positioned in the middle of, or slightly above the middle of the screened interval. The pump was set at a flow rate on the order of 0.2 L to 0.4 L/minute.

Water quality indicator parameters were measured using the YSI-556 MPS. In addition, the water level in the monitoring well was checked periodically to monitor the drawdown in the well as a guide to flow rate adjustment. The goal was minimal drawdown (<0.1 m) during purging. Stabilization was considered to be achieved after all parameters had stabilized for three successive readings. Once the water quality parameters had stabilized and it was confirmed that the drawdown was less than 0.1 m, ground water sampling was initiated. The ground water samples were collected by direct transfer, without agitation, from the dedicated polyethylene tubing on the pump into a clean sampling container.

The VOC sample vials were filled so that the water formed a convex meniscus at the top of the vial, resulting in little to no air space in the vial. The vial was turned over and tapped to check for bubbles in the vial, which would indicate air space is present. If gas bubbles were observed in the sample vial, the procedure was repeated until no gas bubbles appeared. All other sample bottles were filled so that minimal head space was left in the bottle. Sufficient water volumes were available to fill the recommended bottles, as required by the laboratory. The J plug on each well was replaced at the end of the sampling event.

Stantec's field technicians wore a new pair of disposable nitrile gloves at each monitoring well location. Non dedicated monitoring equipment (e.g., interface probe, water quality instruments) was decontaminated using a solution of Alconox detergent and tap water and rinsed with distilled water between each well. Dedicated sampling equipment (waterra tubing, foot valves, bailers, string, etc.) was used for each monitoring well.

## **C.6      Laboratory Analyses**

### **C.6.1      Soil Analytical Program**

Soil samples were recovered from each of the completed boreholes and submitted to BV Labs for analysis of VOCs, PHCs F1 to F4, PAHs, metals and other regulated parameters, pH, and grain size.

### **C.6.2      Groundwater Analytical Program**

Groundwater samples were recovered from each of the ten completed monitoring wells and submitted to BV Labs for analysis of VOCs, PHCs F1 to F4, PAHs, and metals and other regulated parameters.



**Phase II Environmental Site Assessment, 23 Brock Street West, Uxbridge, Ontario**

**Appendix D Borehole Logs**

February 28, 2025

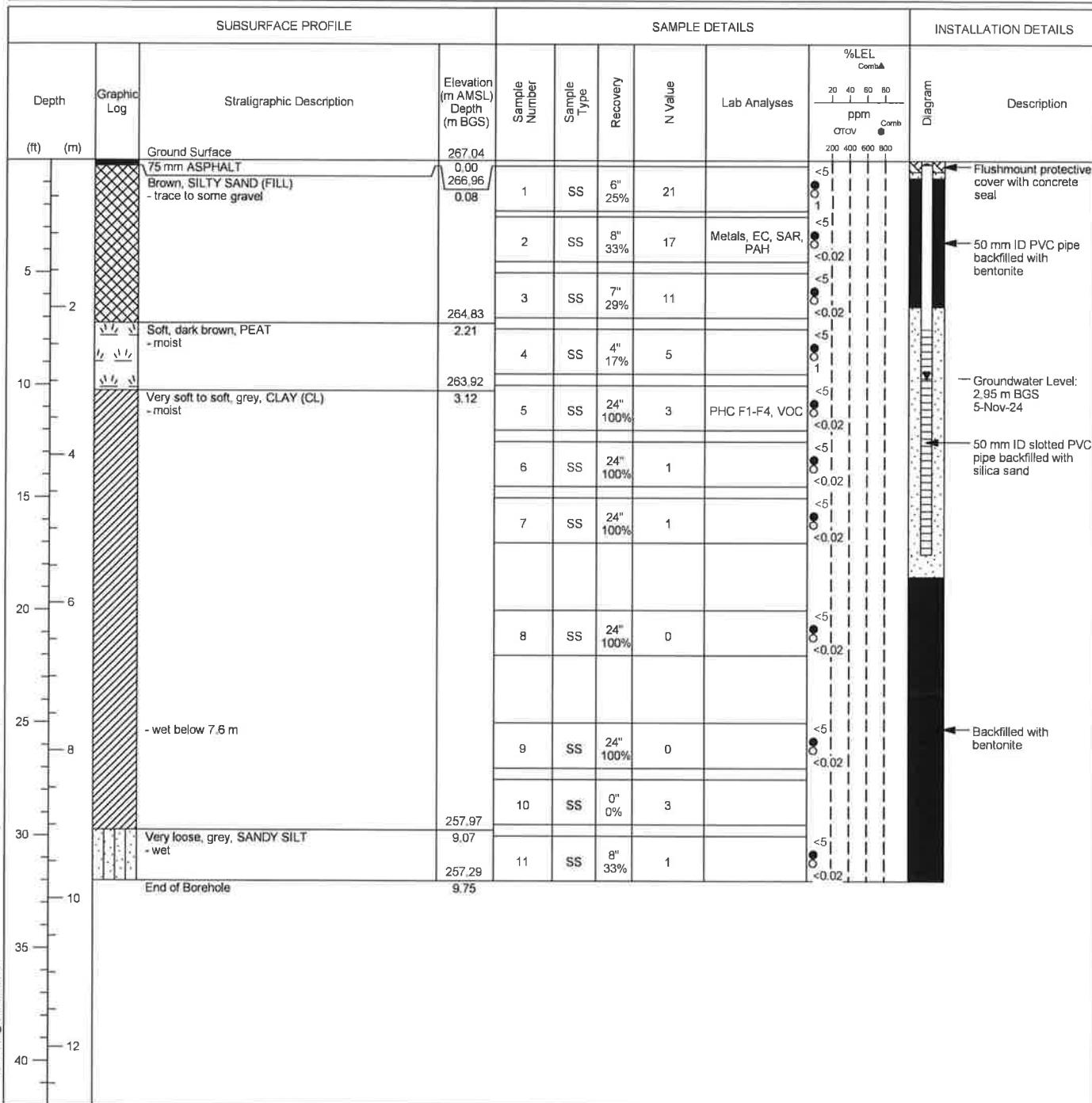
## **Appendix D      Borehole Logs**



## Monitoring Well: MW1

**Project:** Phase II ESA  
**Client:** Township of Uxbridge  
**Location:** 23 Brock Street, Uxbridge, ON  
**Number:** 122140392  
**Field investigator:** H. Masoud  
**Contractor:** Strata Drilling Group

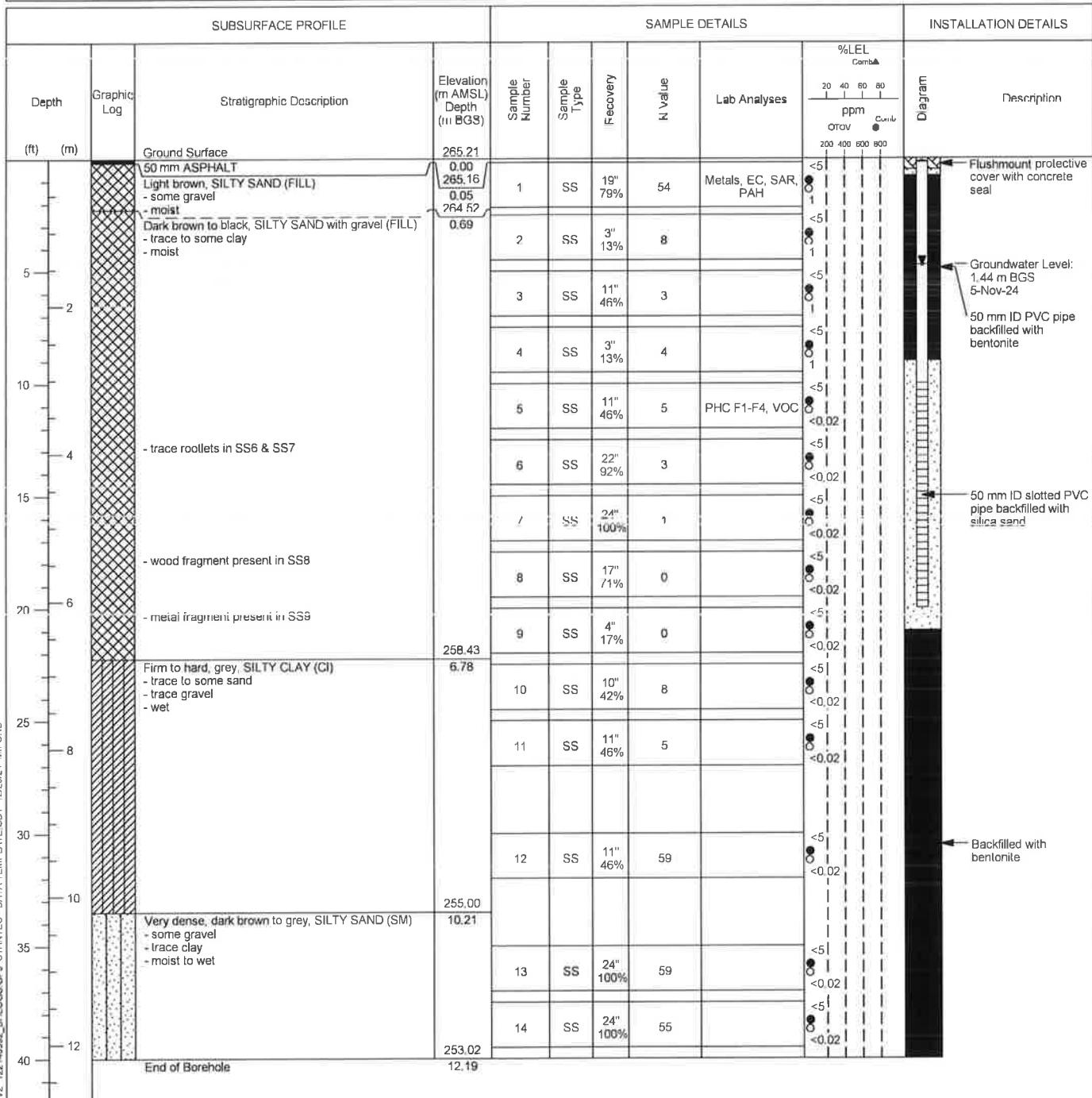
**Method:** Geoprobe 3230GT (Direct Push)  
**Date started/completed:** 29-Oct-2024  
**Ground surface elevation:** 267.04 m AMSL  
**Top of casing elevation:** 266.99 m AMSL  
**Easting:** 650263.747  
**Northing:** 4885790.933



## Monitoring Well: MW2

**Project:** Phase II ESA  
**Client:** Township of Uxbridge  
**Location:** 23 Brock Street, Uxbridge, ON  
**Number:** 122140392  
**Field investigator:** H. Masoud  
**Contractor:** Strata Drilling Group

**Method:** Geoprobe 3230GT (Direct Push)  
**Date started/completed:** 28-Oct-2024  
**Ground surface elevation:** 265.21 m AMSL  
**Top of casing elevation:** 265.15 m AMSL  
**Easting:** 650281.583  
**Northing:** 4885765.987



Screen Interval: 3.05 - 6.10 m BGS  
 Sand Pack Interval: 2.74 - 6.40 m BGS  
 Well Seal Interval: 0.23 - 2.74 m BGS

Notes:  
 m AMSL - metres above mean sea level  
 m BGS - metres below ground surface  
 SS - split-spoon sample  
 ppm - parts per million by volume  
 %LEL - percent lower explosive limit  
 n/a - not available

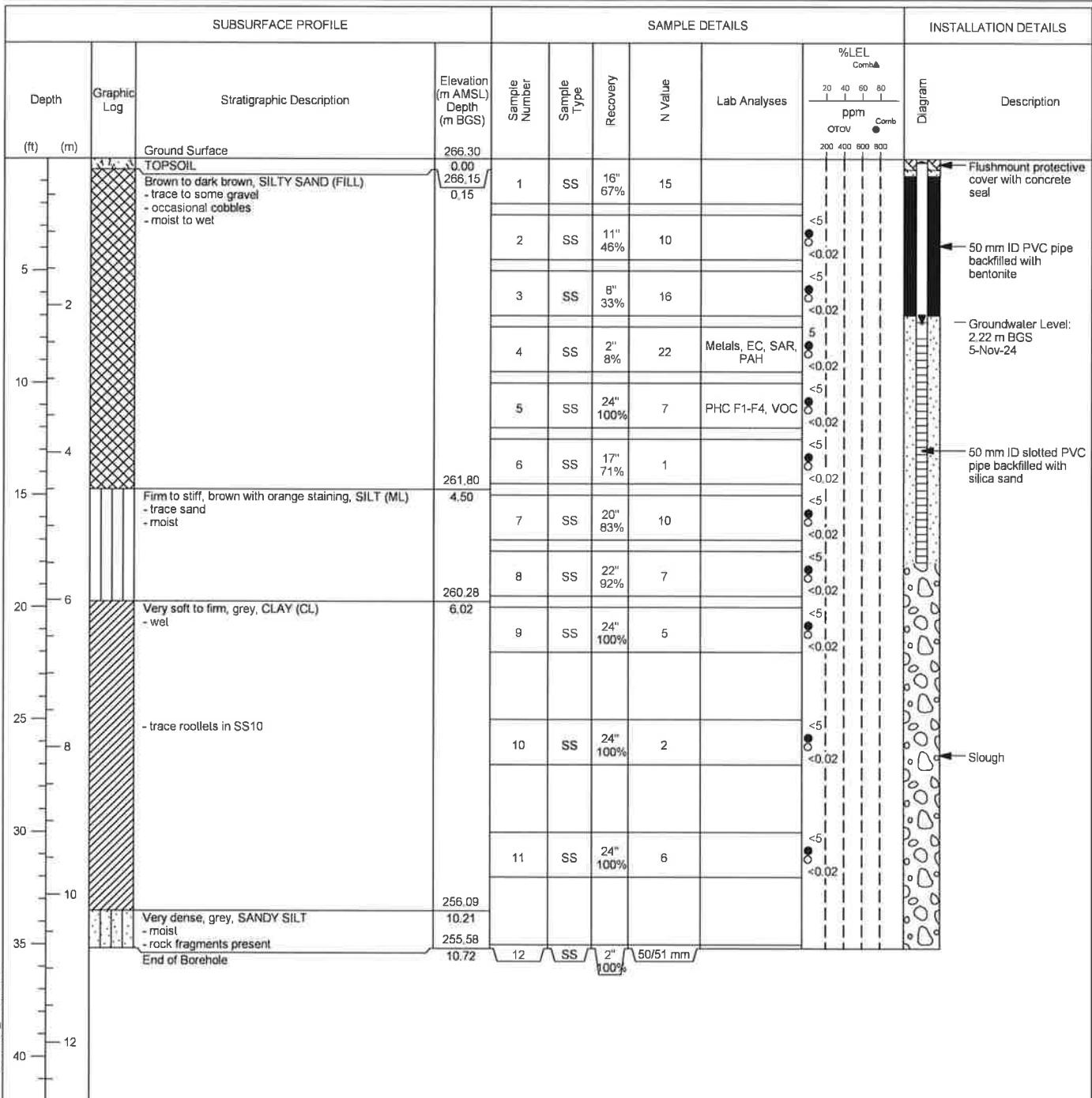
BTEX - benzene, toluene, ethylbenzene, xylenes  
 PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4  
 VOC - volatile organic compounds  
 EC - electrical conductivity  
 SAR - sodium adsorption ratio  
 PAH - polycyclic aromatic hydrocarbons



## Monitoring Well: MW3

**Project:** Phase II ESA  
**Client:** Township of Uxbridge  
**Location:** 23 Brock Street, Uxbridge, ON  
**Number:** 122140392  
**Field investigator:** Harpreet  
**Contractor:** Strata Drilling Group

**Method:** Geoprobe 3126GT (Direct Push)  
**Date started/completed:** 31-Oct-2024  
**Ground surface elevation:** 266.30 m AMSL  
**Top of casing elevation:** 266.22 m AMSL  
**Easting:** 650265,169  
**Northing:** 4885752,648



Screen Interval: 2.44 - 5.49 m BGS  
 Sand Pack Interval: 2.13 - 5.49 m BGS  
 Well Seal Interval: 0.23 - 2.13 m BGS

Notes:  
 m AMSL - metres above mean sea level  
 m BGS - metres below ground surface  
 SS - split-spoon sample  
 ppm - parts per million by volume  
 %LEL - percent lower explosive limit  
 n/a - not available

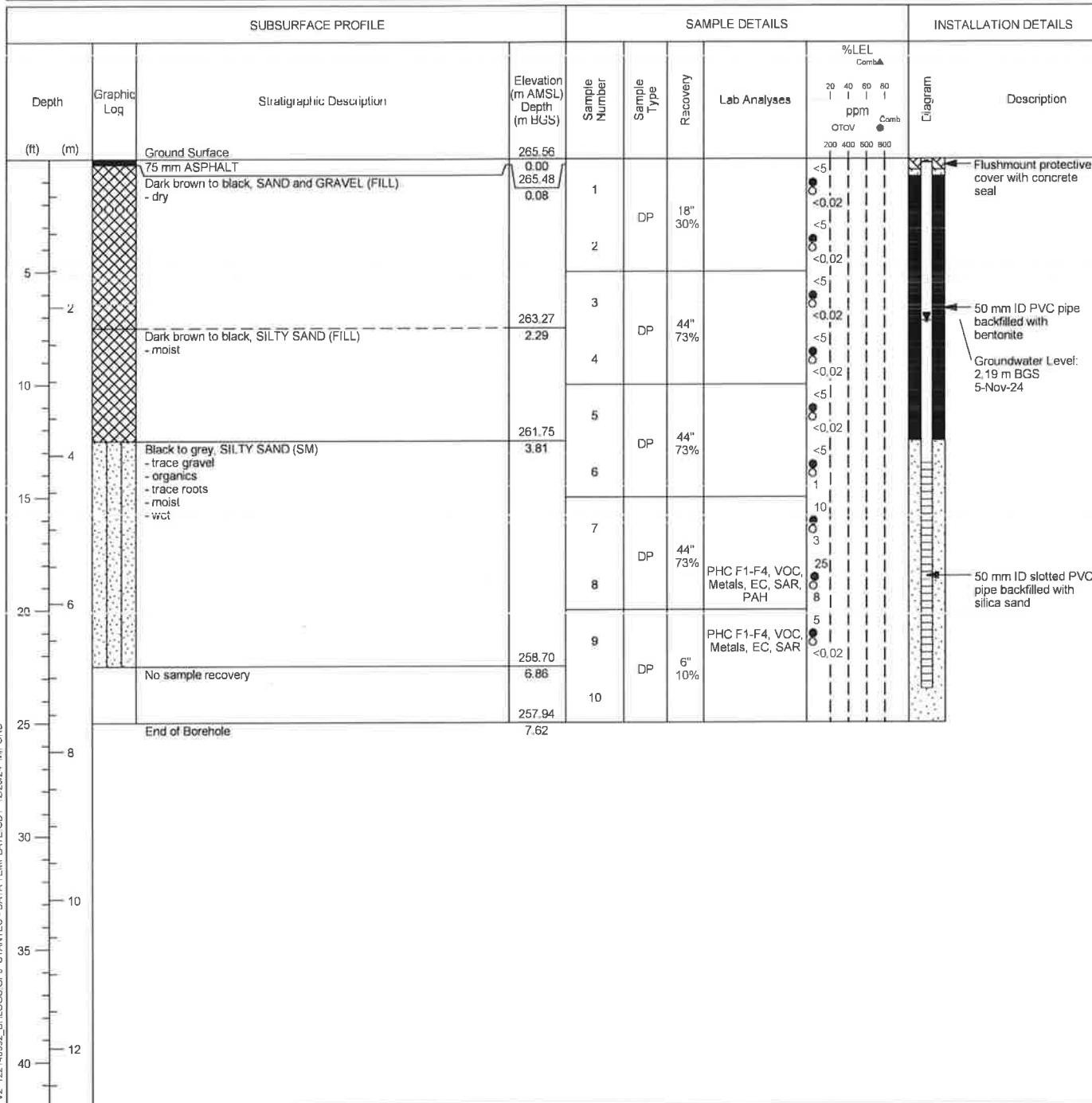
BTEX - benzene, toluene, ethylbenzene, xylenes  
 PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4  
 VOC - volatile organic compounds  
 EC - electrical conductivity  
 SAR - sodium adsorption ratio  
 PAH - polycyclic aromatic hydrocarbons



## Monitoring Well: MW4

**Project:** Phase II ESA  
**Client:** Township of Uxbridge  
**Location:** 23 Brock Street, Uxbridge, ON  
**Number:** 122140392  
**Field investigator:** Harpreet  
**Contractor:** Strata Drilling Group

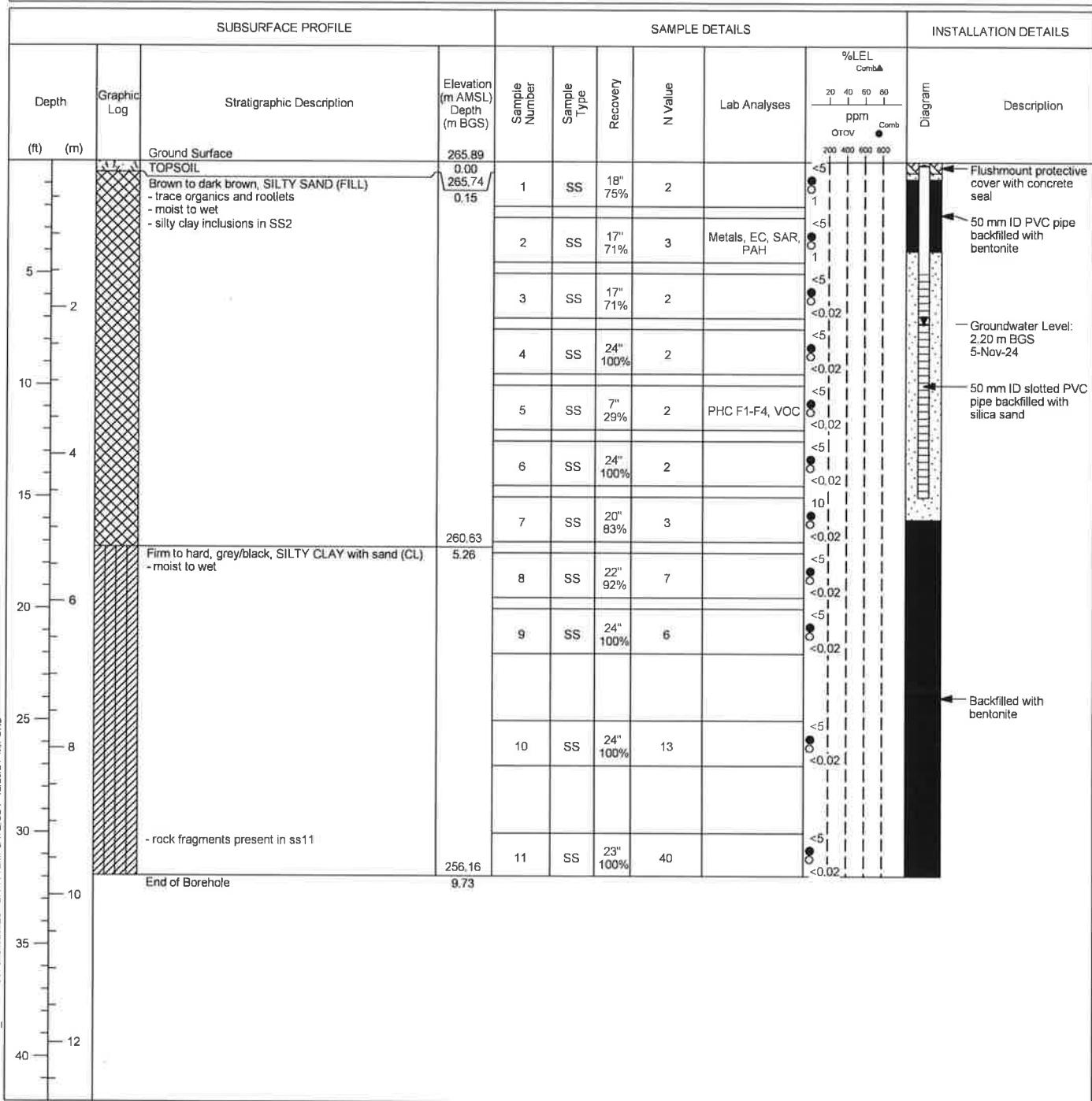
**Method:** Geoprobe 3126GT (Direct Push)  
**Date started/completed:** 31-Oct-2024  
**Ground surface elevation:** 265.56 m AMSL  
**Top of casing elevation:** 265.49 m AMSL  
**Easting:** 650300.695  
**Northing:** 4885738.659



## Monitoring Well: MW5

**Project:** Phase II ESA  
**Client:** Township of Uxbridge  
**Location:** 23 Brock Street, Uxbridge, ON  
**Number:** 122140392  
**Field Investigator:** Harpreet  
**Contractor:** Strata Drilling Group

**Method:** Geoprobe 7822DT (Direct Push)  
**Date started/completed:** 04-Nov-2024  
**Ground surface elevation:** 265.89 m AMSL  
**Top of casing elevation:** 265.77 m AMSL  
**Easting:** 650280.776  
**Northing:** 4885739.598



Screen Interval: 1.52 - 4.57 m BGS  
 Sand Pack Interval: 1.22 - 4.88 m BGS  
 Well Seal Interval: 0.23 - 1.22 m BGS

Notes:  
 m AMSL - metres above mean sea level  
 m BGS - metres below ground surface  
 SS - split-spoon sample  
 ppm - parts per million by volume  
 %LEL - percent lower explosive limit  
 n/a - not available

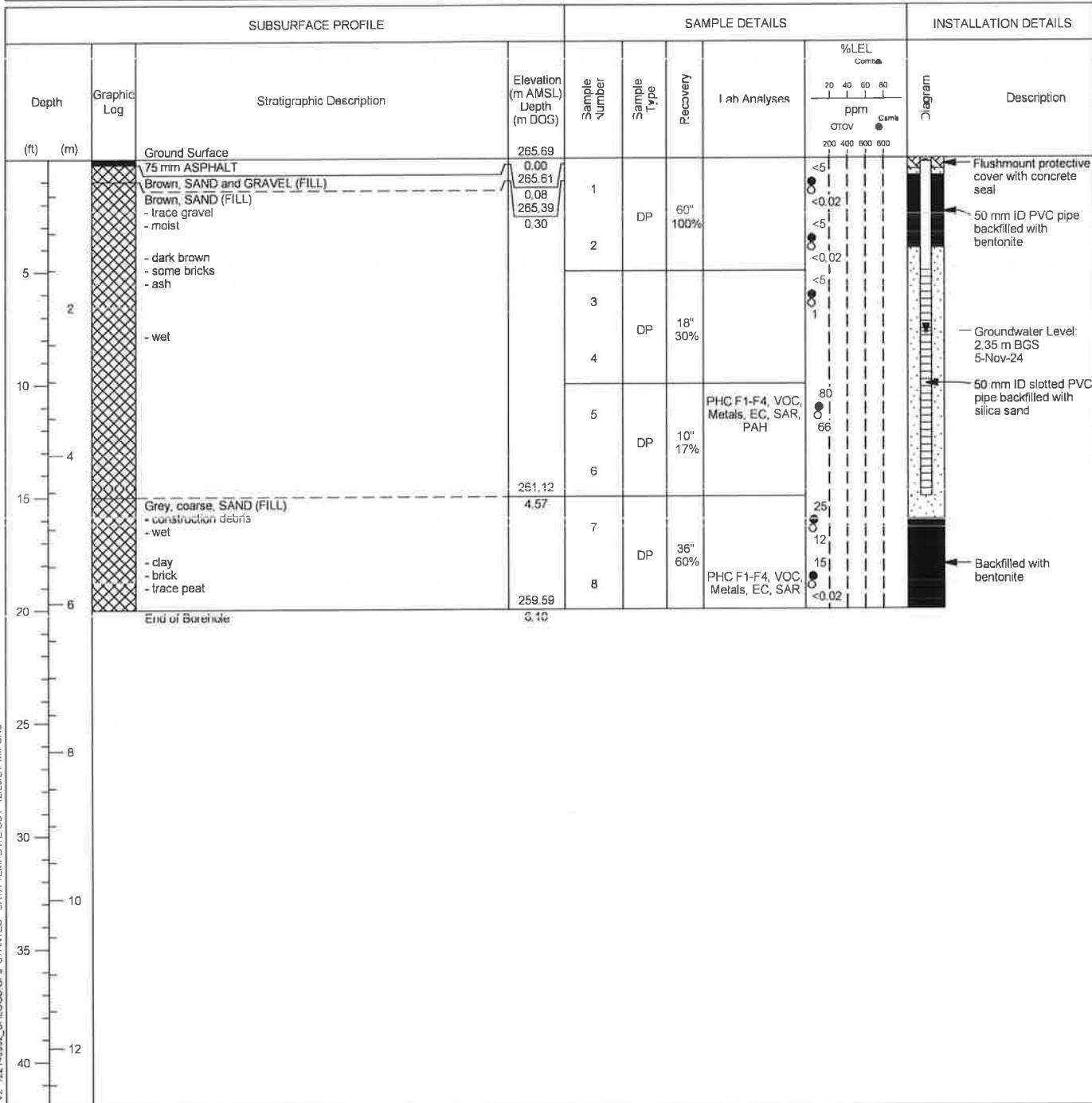
BTEX - benzene, toluene, ethylbenzene, xylenes  
 PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4  
 VOC - volatile organic compounds  
 EC - electrical conductivity  
 SAR - sodium adsorption ratio  
 PAH - polycyclic aromatic hydrocarbons



## Monitoring Well: MW6

**Project:** Phase II ESA  
**Client:** Township of Uxbridge  
**Location:** 23 Brock Street, Uxbridge, ON  
**Number:** 122140392  
**Field investigator:** H. Masoud  
**Contractor:** Strata Drilling Group

**Method:** Geoprobe 3230GT (Direct Push)  
**Date started/completed:** 01-Nov-2024  
**Ground surface elevation:** 265.69 m AMSL  
**Top of casing elevation:** n/a  
**Easting:** 650305.743  
**Northing:** 4885721.181



Screen Interval: 1.52 - 4.57 m BGS  
Sand Pack Interval: 1.22 - 4.88 m BGS  
Well Seal Interval: 0.23 - 1.22 m BGS

Notes:  
m AMSL - metres above mean sea level  
m BGS - metres below ground surface  
DP - direct push sample  
ppm - parts per million by volume  
%LEL - percent lower explosive limit  
n/a - not available

BTEX - benzene, toluene, ethylbenzene, xylenes  
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4  
VOC - volatile organic compounds  
EC - electrical conductivity  
SAR - sodium adsorption ratio  
PAH - polycyclic aromatic hydrocarbons



**Stantec**

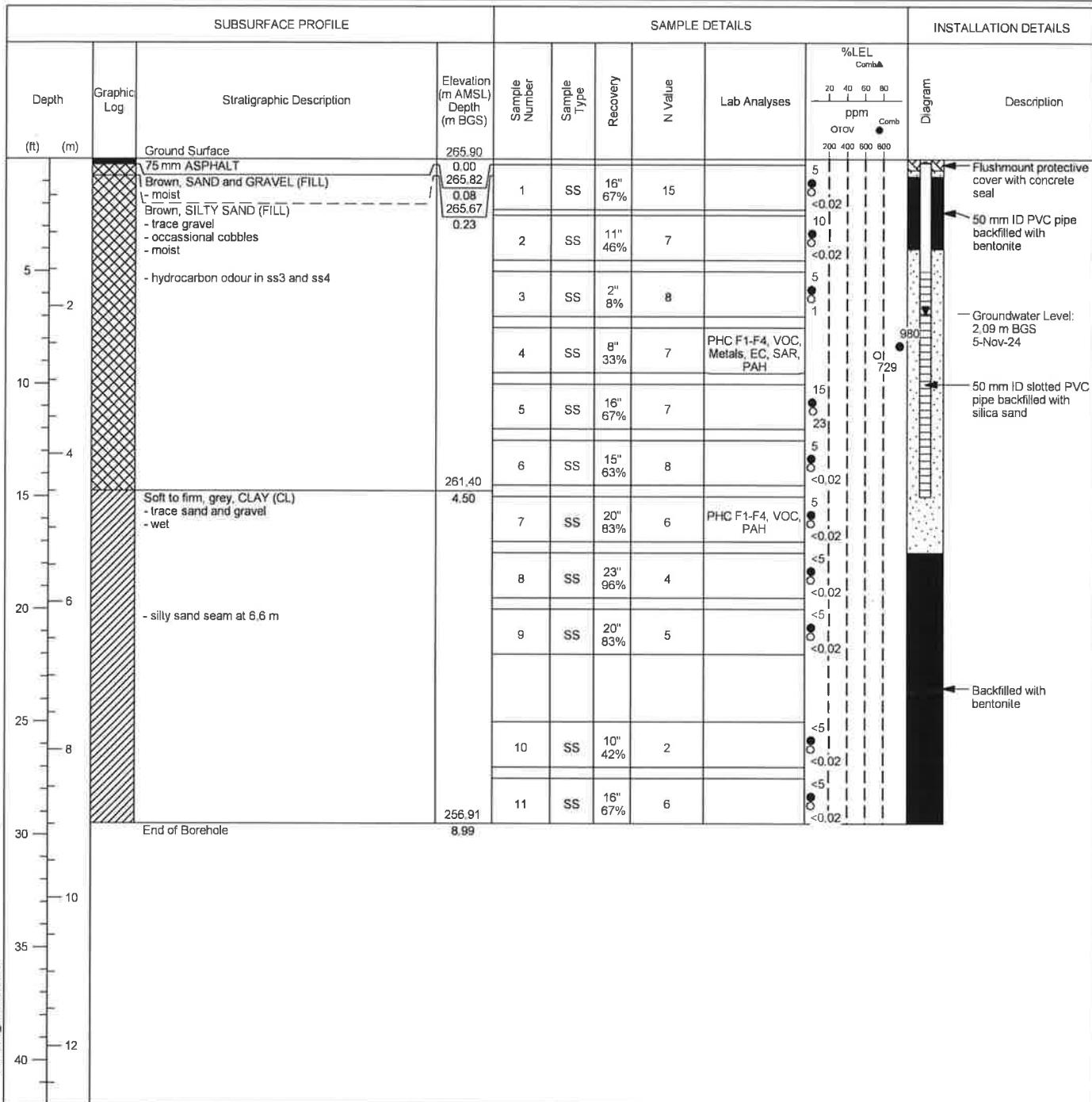
Drawn By/Checked By: M. Ford

Sheet 1 of 1

## Monitoring Well: MW7

**Project:** Phase II ESA  
**Client:** Township of Uxbridge  
**Location:** 23 Brock Street, Uxbridge, ON  
**Number:** 122140392  
**Field investigator:** H. Masoud  
**Contractor:** Strata Drilling Group

**Method:** Geoprobe 3230GT (Direct Push)  
**Date started/completed:** 01-Nov-2024  
**Ground surface elevation:** 265.90 m AMSL  
**Top of casing elevation:** 265.84 m AMSL  
**Easting:** 650320.491  
**Northing:** 4885718.68



Screen Interval: 1.52 - 4.57 m BGS  
 Sand Pack Interval: 1.22 - 5.33 m BGS  
 Well Seal Interval: 0.23 - 1.22 m BGS

Notes:  
 m AMSL - metres above mean sea level  
 m BGS - metres below ground surface  
 SS - split-spoon sample  
 ppm - parts per million by volume  
 %LEL - percent lower explosive limit  
 n/a - not available

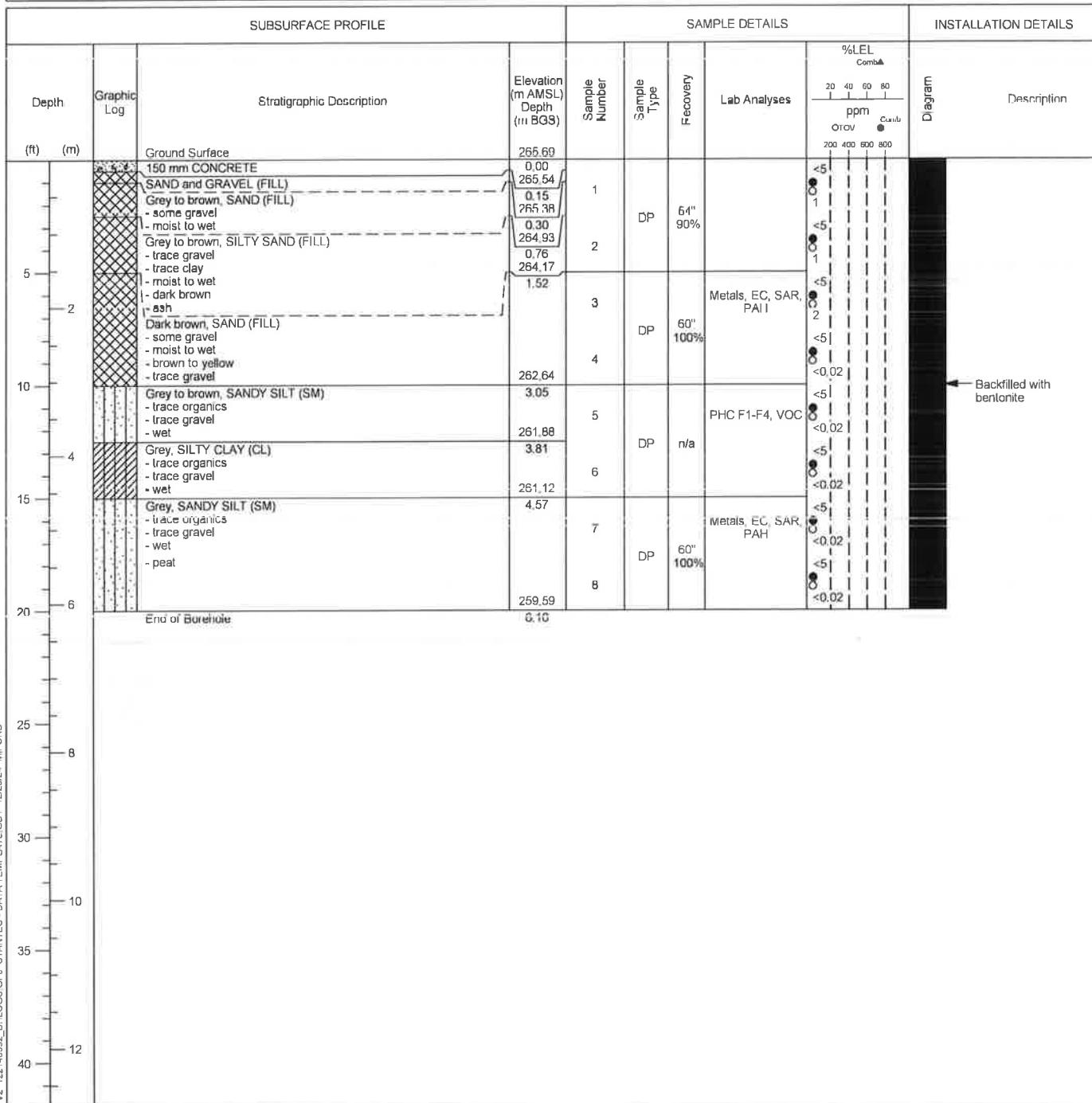
BTEX - benzene, toluene, ethylbenzene, xylenes  
 PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4  
 VOC - volatile organic compounds  
 EC - electrical conductivity  
 SAR - sodium adsorption ratio  
 PAH - polycyclic aromatic hydrocarbons



## Borehole: BH8

**Project:** Phase II ESA  
**Client:** Township of Uxbridge  
**Location:** 23 Brock Street, Uxbridge, ON  
**Number:** 122140392  
**Field investigator:** H. Masoud  
**Contractor:** Strata Drilling Group

**Method:** Geoprobe 3230GT (Direct Push)  
**Date started/completed:** 30-Oct-2024  
**Ground surface elevation:** 265.69 m AMSL  
**Top of casing elevation:** n/a  
**Easting:** 650313.291  
**Northing:** 4885746.939



Stantec

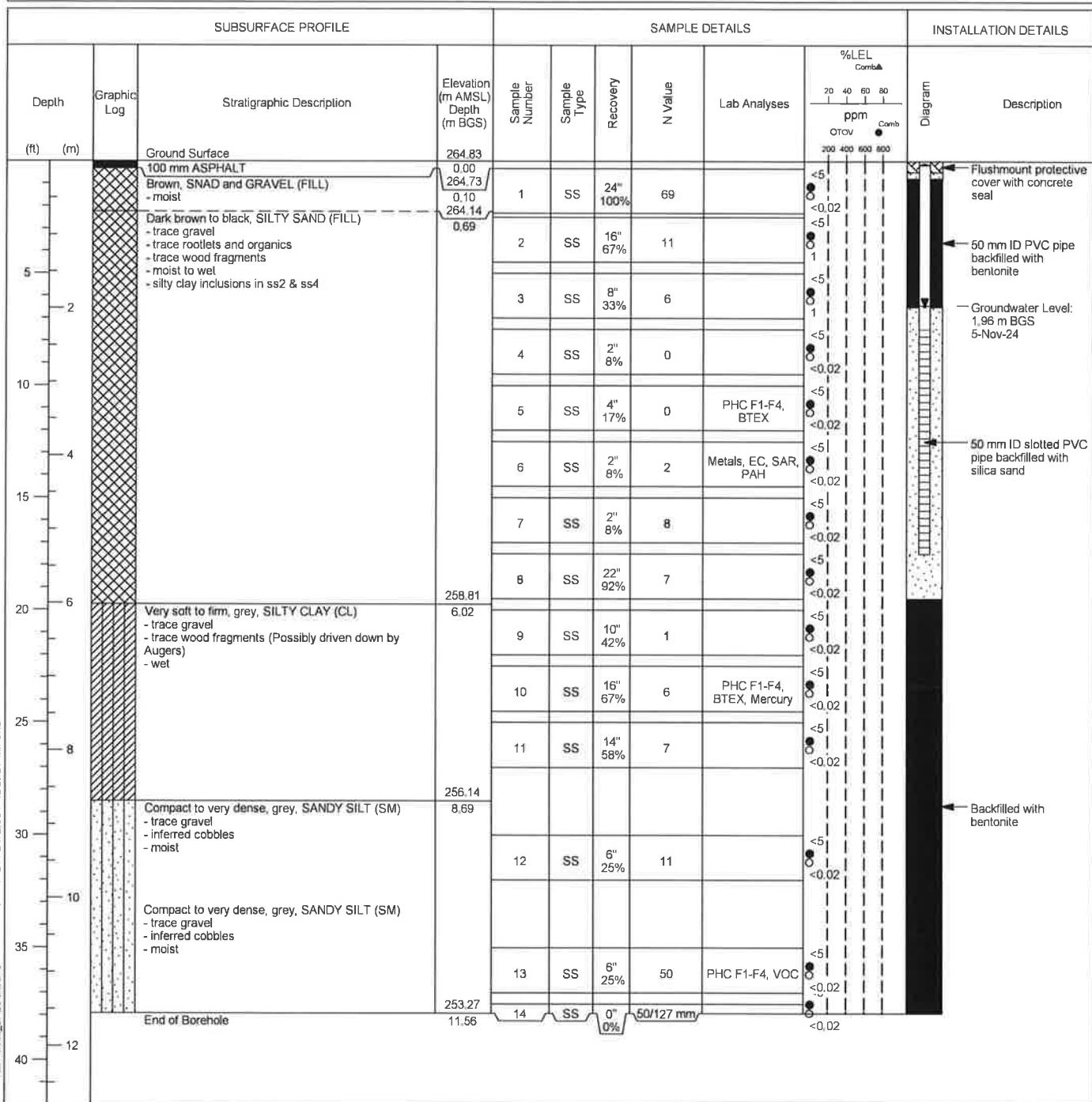
Notes:  
 m AMSL - metres above mean sea level  
 m BGS - metres below ground surface  
 DP - direct push sample  
 ppm - parts per million by volume  
 %LEL - percent lower explosive limit  
 n/a - not available

BTEX - benzene, toluene, ethylbenzene, xylenes  
 PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4  
 VOC - volatile organic compounds  
 EC - electrical conductivity  
 SAR - sodium adsorption ratio  
 PAH - polycyclic aromatic hydrocarbons

## Monitoring Well: MW9

**Project:** Phase II ESA  
**Client:** Township of Uxbridge  
**Location:** 23 Brock Street, Uxbridge, ON  
**Number:** 122140392  
**Field investigator:** H. Masoud  
**Contractor:** Strata Drilling Group

**Method:** Geoprobe 3230GT (Direct Push)  
**Date started/completed:** 30-Oct-2024  
**Ground surface elevation:** 264.83 m AMSL  
**Top of casing elevation:** 264.79 m AMSL  
**Easting:** 650308.976  
**Northing:** 4885761.374



Screen Interval: 2.29 - 5.33 m BGS  
Sand Pack Interval: 1.98 - 5.94 m BGS  
Well Seal Interval: 0.23 - 1.98 m BGS

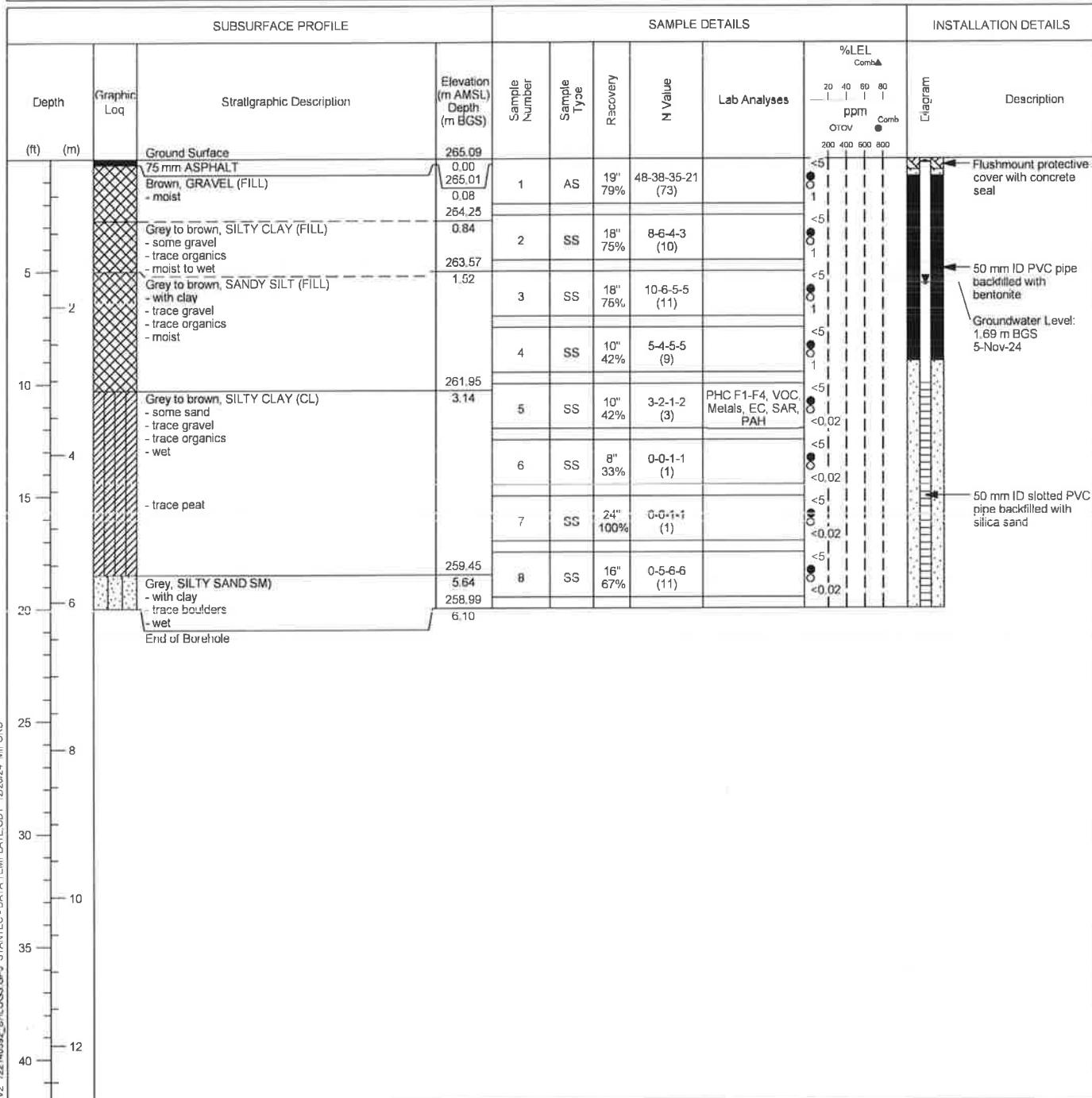
Notes:  
m AMSL - metres above mean sea level  
m BGS - metres below ground surface  
SS - split-spoon sample  
ppm - parts per million by volume  
%LEL - percent lower explosive limit  
n/a - not available

BTEX - benzene, toluene, ethylbenzene, xylenes  
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4  
VOC - volatile organic compounds  
EC - electrical conductivity  
SAR - sodium adsorption ratio  
PAH - polycyclic aromatic hydrocarbons

## **Monitoring Well: MW10**

**Project:** Phase II ESA  
**Client:** Township of Uxbridge  
**Location:** 23 Brock Street, Uxbridge, ON  
**Number:** 122140392  
**Field investigator:** H. Masoud  
**Contractor:** Strata Drilling Group

**Method:** Geoprobe 3126GT (Hollow Stem Auger)  
**Date started/completed:** 29-Oct-2024  
**Ground surface elevation:** 265.09 m AMSL  
**Top of casing elevation:** 265.02 m AMSL  
**Easting:** 650286.485  
**Northing:** 4885788.012



Screen Interval: 3.05 - 6.10 m BGS  
Sand Pack Interval: 2.74 - 6.10 m BGS  
Well Seal Interval: 0.23 - 2.74 m BGS

Notes:  
 m AMSL - metres above mean sea level  
 m BGS - metres below ground surface  
 SS - split-spoon sample  
 AS - auger sample  
 ppm - parts per million by volume  
 %LEL - percent lower explosive limit  
 n/a - not available

BTEX - benzene, toluene, ethylbenzene, xylenes  
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4  
VOC - volatile organic compounds  
EC - electrical conductivity  
SAR - sodium adsorption ratio  
PAH - polycyclic aromatic hydrocarbons

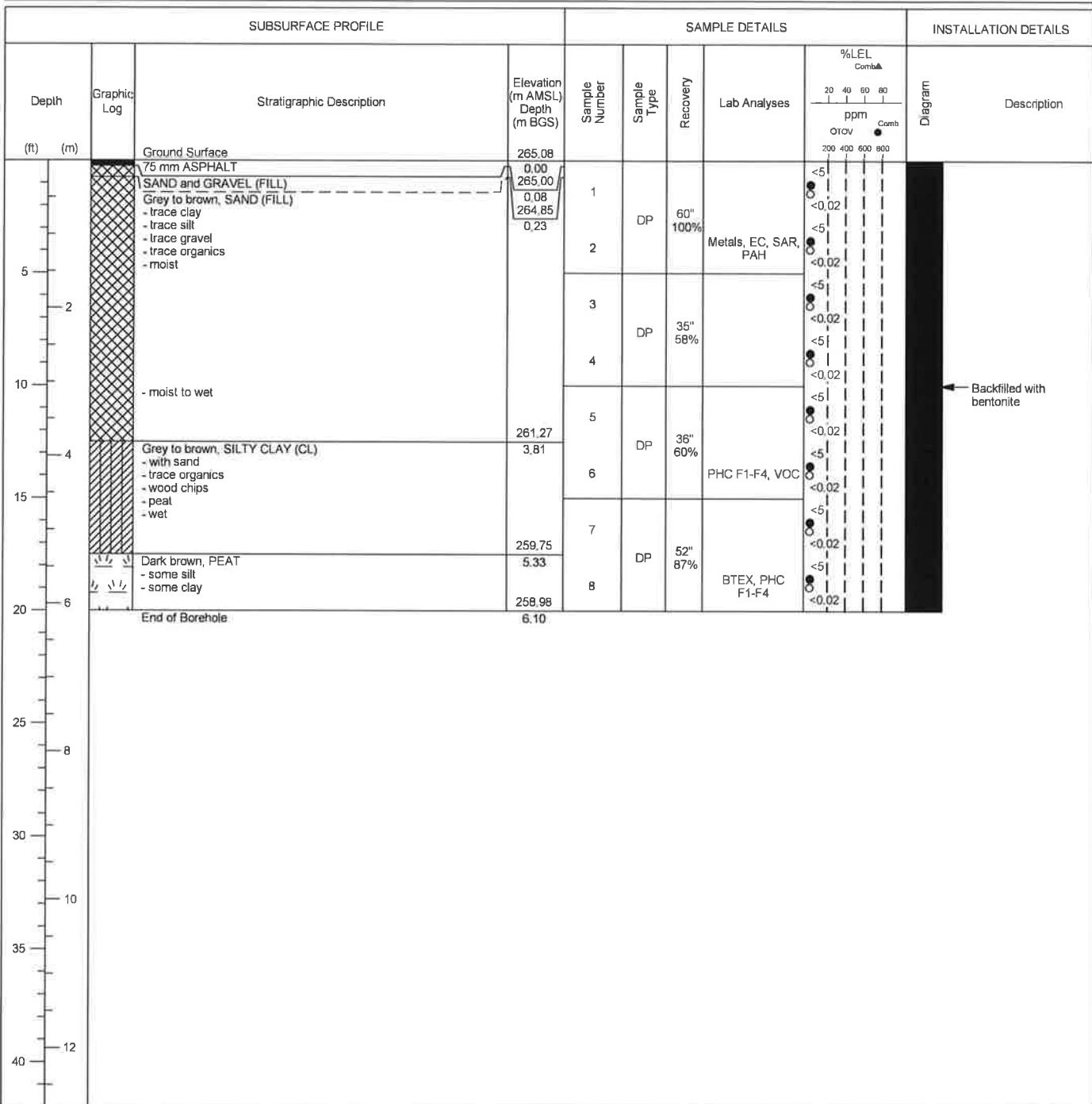


Stantec

# Borehole: BH11

**Project:** Phase II ESA  
**Client:** Township of Uxbridge  
**Location:** 23 Brock Street, Uxbridge, ON  
**Number:** 122140392  
**Field investigator:** H. Masoud  
**Contractor:** Strata Drilling Group

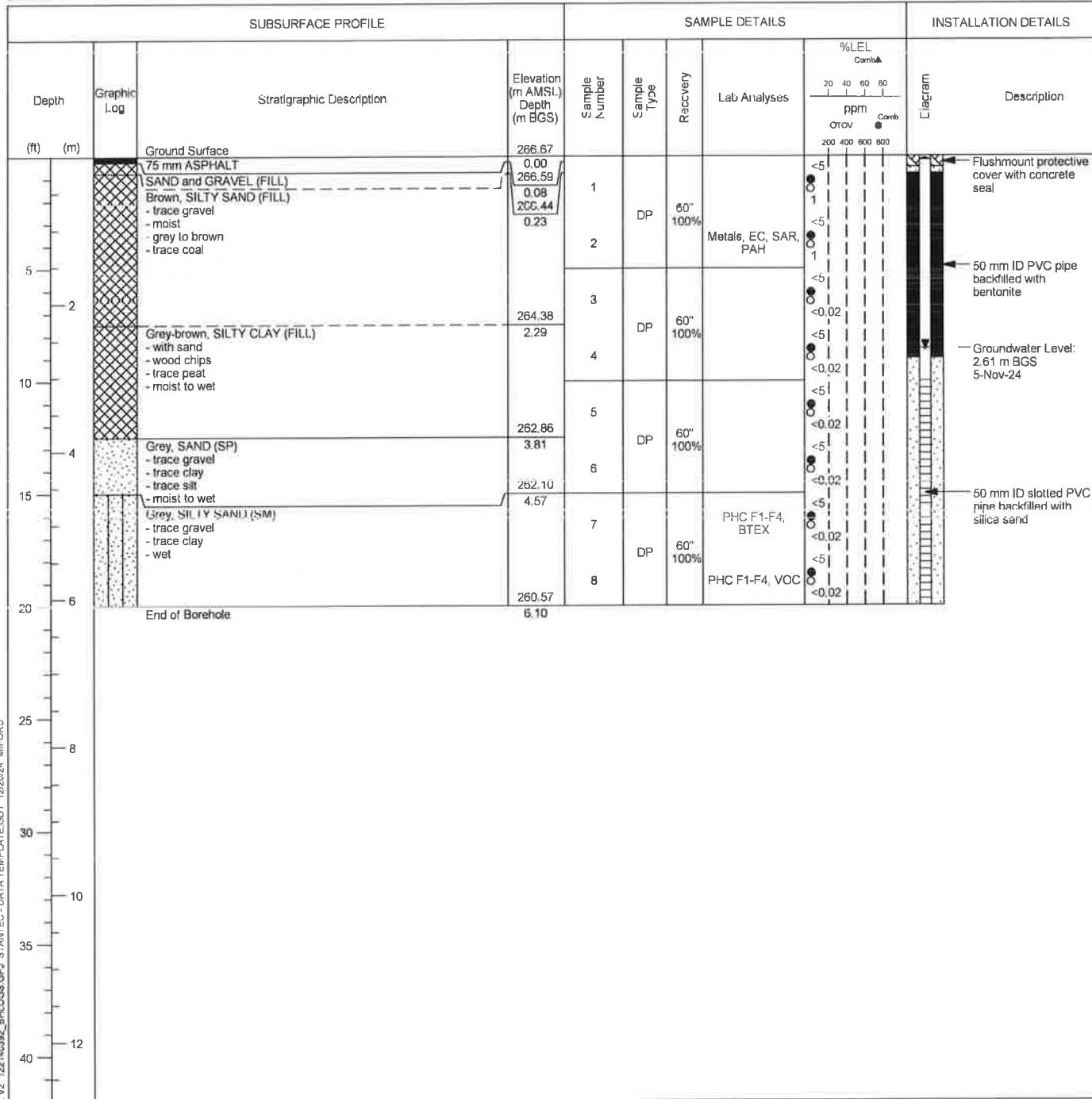
**Method:** Geoprobe 3126GT (Direct Push)  
**Date started/completed:** 31-Oct-2024  
**Ground surface elevation:** 265.08 m AMSL  
**Top of casing elevation:** n/a  
**Easting:** 650336, 518  
**Northing:** 4885791.751



## Monitoring Well: MW12

**Project:** Phase II ESA  
**Client:** Township of Uxbridge  
**Location:** 23 Brock Street, Uxbridge, ON  
**Number:** 122140392  
**Field investigator:** H. Masoud  
**Contractor:** Strata Drilling Group

**Method:** Geoprobe 3126GT (Direct Push)  
**Date started/completed:** 31-Oct-2024  
**Ground surface elevation:** 266.67 m AMSL  
**Top of casing elevation:** 266.58 m AMSL  
**Easting:** 650379.723  
**Northing:** 4885809.025



STANTEC BOREHOLE AND WELL V2\_122140392\_BHLOGS.GPJ STANTEC - DATA TEMPLATE.GOT 12/20/2024 MIFORD

Screen Interval: 3.05 - 6.10 m BGS  
Sand Pack Interval: 2.74 - 6.10 m BGS  
Well Seal Interval: 0.23 - 2.74 m BGS

Notes:  
m AMSL - metres above mean sea level  
m BGS - metres below ground surface  
DP - direct push sample  
ppm - parts per million by volume  
%LEL - percent lower explosive limit  
n/a - not available

BTEX - benzene, toluene, ethylbenzene, xylenes  
PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4  
VOC - volatile organic compounds  
EC - electrical conductivity  
SAR - sodium adsorption ratio  
PAH - polycyclic aromatic hydrocarbons



**Stantec**

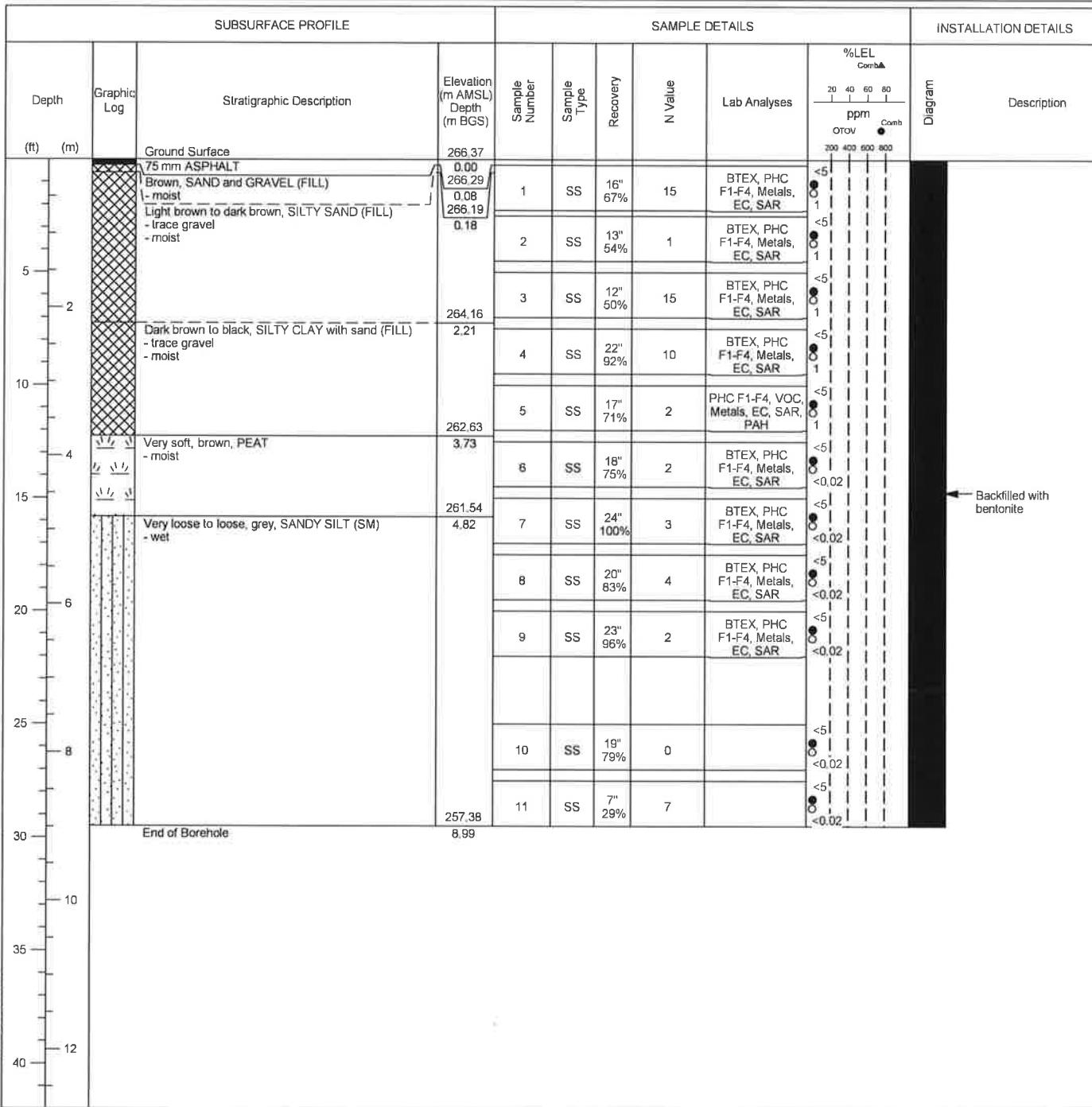
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Sheet 1 of 1

## Borehole: BH13

**Project:** Phase II ESA  
**Client:** Township of Uxbridge  
**Location:** 23 Brock Street, Uxbridge, ON  
**Number:** 122140392  
**Field investigator:** H. Masoud  
**Contractor:** Strata Drilling Group

**Method:** Geoprobe 3230GT (Direct Push)  
**Date started/completed:** 31-Oct-2024  
**Ground surface elevation:** 266.37 m AMSL  
**Top of casing elevation:** n/a  
**Easting:** 650374.779  
**Northing:** 4885816.703



Notes:  
 m AMSL - metres above mean sea level  
 m BGS - metres below ground surface  
 SS - split-spoon sample  
 ppm - parts per million by volume  
 %LEL - percent lower explosive limit  
 n/a - not available

BTEX - benzene, toluene, ethylbenzene, xylenes  
 PHC F1-F4 - petroleum hydrocarbon fractions 1 to 4  
 VOC - volatile organic compounds  
 EC - electrical conductivity  
 SAR - sodium adsorption ratio  
 PAH - polycyclic aromatic hydrocarbons

**Phase II Environmental Site Assessment, 23 Brock Street West, Uxbridge, Ontario**

**Appendix E Tables**

**February 28, 2025**

## **Appendix E      Tables**



**Table I**  
**Summary of Groundwater Monitoring Data**  
**Phase II Environmental Site Assessment**  
**23 Brock Street West, Uxbridge, Ontario**  
**Township of Uxbridge**

Monitoring Location	Monitoring Date (dd-mm-yy)	Ground Surface Elevation (m AMSL)	Top of Pipe Elevation (m AMSL)	Water Level Elevation (m AMSL)	Water Level Depth (m BTOP)	Water Level Depth (m BGS)	Liquid-Phase Petroleum Hydrocarbon Apparent Thickness (mm)	Well Headspace Combustible Vapour Concentration (ppm <sub>v</sub> )	Well Headspace Total Organic Vapour Concentrations (ppm <sub>v</sub> )
MW1	5-Nov-24	267.04	266.99	264.09	2.90	2.95	0	<5	3
MW2	5-Nov-24	265.21	265.15	263.77	1.38	1.44	0	60	5
MW3	5-Nov-24	266.30	266.22	264.08	2.14	2.22	0	<5	<0.02
MW4	5-Nov-24	265.56	265.49	263.37	2.12	2.19	0	430	<0.02
MW5	5-Nov-24	265.89	265.77	263.69	2.08	2.20	0	5	<0.02
MW6	5-Nov-24	265.69	NS	263.34*	2.20	2.35*	0	<5	2
MW7	5-Nov-24	265.90	265.84	263.81	2.03	2.09	0	<5	25
MW8	5-Nov-24	264.83	264.79	262.87	1.92	1.96	0	20	5
MW10	5-Nov-24	265.09	265.02	263.40	1.62	1.69	0	140	<0.02
MW12	5-Nov-24	266.67	266.56	264.06	2.52	2.61	0	20	7

**Notes:**

m AMSL Metres above mean sea level

m BTOP Metres below top of pipe

m BGS Metres below ground surface

mm Millimetres

ppm<sub>v</sub> Parts per million by volume

NS Not Surveyed

\* Field Measurement

**Table II**  
**Summary of TCLP Results**  
**Phase II Environmental Site Assessment**  
**23 Brock Street West, Uxbridge, Ontario**  
**Township of Uxbridge**

Sample Location	Units	O.Reg. 347 Sch 4	TCLP	
Sample Date			31-Oct-24 TCLP STANTEC BV C4Y8641	31-Oct-24 TCLP Lab-Dup STANTEC BV C4Y8641 AHZR67
Sample ID				
Sampling Company			Lab Replicate	
Laboratory				
Laboratory Work Order				
Laboratory Sample ID				
Sample Type				
<b>General Chemistry-TCLP</b>				
Cyanide (Free)	mg/L	20 <sup>A</sup>	<0.010	-
Fluoride	mg/L	150 <sup>A</sup>	0.21	-
Nitrate (as N)	mg/L	n/v	<1.0	-
Nitrate + Nitrite (as N)	mg/L	1,000 <sup>A</sup>	<1.0	-
Nitrite (as N)	mg/L	n/v	<0.10	-
<b>Ignitability</b>				
Ignitability	none	n/v	NF/NI	-
<b>Leachate Preparation</b>				
Amount Extracted (Wet Weight)	none	n/v	25	-
Extraction Fluid	none	n/v	FLUID II	-
pH Final	S.U.	n/v	5.77	-
pH Initial	E.U.	n/v	9.62	-
Total Solids	%	n/v	100	-
<b>Metals - TCLP</b>				
Arsenic	mg/L	2.5 <sup>A</sup>	<0.2	-
Barium	mg/L	100 <sup>A</sup>	0.2	-
Boron	mg/L	500 <sup>A</sup>	<0.1	-
Cadmium	mg/L	0.5 <sup>A</sup>	<0.05	-
Chromium	mg/L	5 <sup>A</sup>	<0.1	-
Lead	mg/L	5 <sup>A</sup>	<0.1	-
Mercury	mg/L	0.1 <sup>A</sup>	<0.001	-
Selenium	mg/L	1 <sup>A</sup>	<0.1	-
Silver	mg/L	5 <sup>A</sup>	<0.01	-
Uranium	mg/L	10 <sup>A</sup>	<0.01	-
<b>Semi - Volatile Organic Compounds - TCLP</b>				
Benzo(a)pyrene	µg/L	1 <sup>A</sup>	<0.10	<0.10
Cresol, m & p- (Methylphenol, 3&4-)	µg/L	200,000 <sup>A</sup>	<2.5	<2.5
Cresol, o- (Methylphenol, 2-)	µg/L	200,000 <sup>A</sup>	<2.5	<2.5
Cresol, Total Leachable	µg/L	200,000 <sup>A</sup>	<2.5	<2.5
Dichlorophenol, 2,4-	µg/L	90,000 <sup>A</sup>	<2.5	<2.5
Dinitrotoluene, 2,4-	µg/L	130 <sup>A</sup>	<10	<10
Hexachlorobenzene	µg/L	130 <sup>A</sup>	<10	<10
Hexachlorobutadiene (Hexachloro-1,3-butadiene)	µg/L	500 <sup>A</sup>	<10	<10
Hexachloroethane	µg/L	3,000 <sup>A</sup>	<10	<10
Nitrobenzene	µg/L	2,000 <sup>A</sup>	<10	<10
Penachlorophenol	µg/L	6,000 <sup>A</sup>	<2.5	<2.5
Pyridine	µg/L	5,000 <sup>A</sup>	<10	<10
Tetrachlorophenol, 2,3,4,6-	µg/L	10,000 <sup>A</sup>	<2.5	<2.5
Trichlorophenol, 2,4,5-	µg/L	400,000 <sup>A</sup>	<0.50	<0.50
Trichlorophenol, 2,4,6-	µg/L	500 <sup>A</sup>	<2.5	<2.5
<b>Volatile Organic Compounds - TCLP</b>				
Benzene	mg/L	0.5 <sup>A</sup>	<0.020	-
Carbon Tetrachloride (Tetrachloromethane)	mg/L	0.5 <sup>A</sup>	<0.020	-
Chlorobenzene (Monochlorobenzene)	mg/L	8 <sup>A</sup>	<0.020	-
Chloroform (Trichloromethane)	mg/L	10 <sup>A</sup>	<0.020	-
Dichlorobenzene, 1,2-	mg/L	20 <sup>A</sup>	<0.050	-
Dichlorobenzene, 1,4-	mg/L	0.5 <sup>A</sup>	<0.050	-
Dichloroethane, 1,2-	mg/L	0.5 <sup>A</sup>	<0.050	-
Dichloroethylene, 1,1-	mg/L	1.4 <sup>A</sup>	<0.020	-
Methyl Ethyl Ketone (MEK) (2-Butanone)	mg/L	200 <sup>A</sup>	<1.0	-
Methylene Chloride (Dichloromethane)	mg/L	5 <sup>A</sup>	<0.20	-
Tetrachloroethene (PCE)	mg/L	3 <sup>A</sup>	<0.020	-
Trichloroethylene (TCE)	mg/L	5 <sup>A</sup>	<0.020	-
Vinyl Chloride	mg/L	0.2 <sup>A</sup>	<0.020	-

Notes:

O.Reg. 347 Sch 4 Ontario Ministry of the Environment

<sup>A</sup> MOE O.Reg. 347 of R.R.O. 1990 - Schedule 4 – Leachate Quality Criteria

**6.5<sup>A</sup>** Concentration exceeds the indicated standard.

15.2 Measured concentration did not exceed the indicated standard.

<0.03 Analyte was not detected at a concentration greater than the laboratory reporting limit.

n/v No standard/guideline value.

- Parameter not analyzed / not available.

NF/NI Non-flammable and non-ignitable

**Table III**  
**Summary of Soil Analytical Results**  
**Phase II Environmental Site Assessment**  
**23 Brock Street West, Uxbridge, Ontario**  
**Township of Uxbridge**

Sample Location	MW1	MW2	MW3	MW4	MW5	MW6	MW7	MW8	MW9	MW10	MW11	MW12	MW13	MW14	MW15	MW16	MW17
Sample Date	29-Oct-15	28-Oct-15	28-Oct-15	28-Oct-15	MW1-2	MW1-5	MW1-8	MW1-12	MW1-14	MW1-15	MW1-16	MW1-17	MW1-18	MW1-19	MW1-20	MW1-24	MW1-24
Sample ID																	
Sample Depth	0-0.6 m	0-1.4 m	0-1.7 m	0-1.7 m	0-1.7 m	0-1.7 m	0-1.7 m	0-1.7 m	0-1.7 m	0-1.7 m	0-1.7 m	0-1.7 m	0-1.7 m	0-1.7 m	0-1.7 m	0-1.7 m	0-1.7 m
Sampling Company	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC	STANTEC
Laboratory	CAN/AM	CAN/AM	CAN/AM	CAN/AM	CAN/AM	CAN/AM	CAN/AM	CAN/AM	CAN/AM	CAN/AM	CAN/AM	CAN/AM	CAN/AM	CAN/AM	CAN/AM	CAN/AM	CAN/AM
Rock Order	ANHPI1	ANHPI2	ANHPI3	ANHPI4	ANHPI5	ANHPI6	ANHPI7	ANHPI8	ANHPI9	ANHPI10	ANHPI11	ANHPI12	ANHPI13	ANHPI14	ANHPI15	ANHPI16	ANHPI17
Sample ID																	
Sample Type																	
General Chemistry																	
Available (CaCO <sub>3</sub> ) pH	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Electrical Conductivity, mS/cm	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Specific Gravity, SG	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Bitrex and Petroleum Hydrocarbons																	
Benzene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethylbenzene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Xylene, o-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Xylene, m-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Xylene, p-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PhC-E1 (C <sub>10</sub> -C <sub>12</sub> range)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PhC-F1 (C <sub>12</sub> -C <sub>15</sub> range)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PhC-F2 (C <sub>15</sub> -C <sub>16</sub> range)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PhC-F3 (C <sub>16</sub> -C <sub>17</sub> range)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PhC-F4 (C <sub>17</sub> -C <sub>20</sub> range)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Organic Compounds (ppm)																	
Metals																	
Antimony	0.00	1.37	0.13	0.20	1.1	1.1	1.2	0.24	0.24	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Arsenic	0.00	1.07	1.0	1.0	2.3	2.3	36.0	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Barium	0.00	2.57	<2.0	0.20	5.1	0.11	0.12	0.23	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Boron	0.00	36.84	<5.0	0.072	0.11	0.11	0.12	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Boron (Assayed)	0.00	1.5144	<5.0	0.072	0.10	0.10	0.12	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Calcium	0.00	1.24	<0.10	0.10	0.10	0.10	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Chromium	0.00	7.07	6.8	7.1	7.1	7.1	11	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Chromium (hexavalent)	0.00	0.3847	<0.16	<0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Cobalt	0.00	2.27	2.7	0.20	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Copper	0.00	9.27	6.0	8.6	4.2	4.2	4.2	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Lead	0.00	12.07	<0.60	0.60	<0.50	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mercury	0.00	0.1747	<0.50	<0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Molybdenum	0.00	2.07	<0.50	<0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Nickel	0.00	8.92	5.7	8.9	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Selenium	0.00	1.67	<0.50	<0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Silver	0.00	0.97	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Tellurium	0.00	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066
Uranium	0.00	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Zinc	0.00	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05	2.05

See notes on back page.



**Table III**  
**Summary of Soil Analytical Results**  
**Phase II Environmental Site Assessment**  
**23 Brock Street West, Uxbridge, Ontario**  
**Township of Uxbridge**

**Table III**  
**Summary of Soil Analytical Results**  
**Phase II Environmental Site Assessment**  
**23 Brock Street West, Uxbridge, Ontario**  
**Township of Uxbridge**

Sample Location	Sample Date	BH#-1	30-Oct-24	BH#-2	30-Oct-24	BH#-3	30-Oct-24	BH#-4	30-Oct-24	BH#-5	30-Oct-24	BH#-6	30-Oct-24	BH#-7	30-Oct-24	BH#-8	30-Oct-24	BH#-9	30-Oct-24	BH#-10	30-Oct-24	BH#-11
Sample ID																						
Sample Depth																						
Sampling Company																						
Laboratory																						
Laboratory Name/Order																						
Sample Type																						
General Chemistry																						
Available (C=221 ppm)																						
Cyanide Free																						
Electrical Conductivity																						
Nitrate Concentration																						
Sulfur Adhesive Resin (SAR)																						
Units	Ontario SCS																					
Bitrex and Petroleum Hydrocarbons																						
Bitrex																						
Toluene																						
Ethylbenzene																						
Xylenes m & p																						
Xylenes o, m & p																						
Xylenes, Total																						
PHC P1 (C6-C10 range)																						
PHC F1 (C6-C10 range, min/max 0.1E-06)																						
PHC F2 (C11-C15 range)																						
PHC F3 (C11-C15 range)																						
PHC F4 (C15-C20 range)																						
PHC F5 (C15-C20 range)																						
Constituents to Balance at C20																						
Metals																						
Antimony																						
Arsenic																						
Boron																						
Boron (Available)																						
Cadmium																						
Chromium (Hexavalent)																						
Cobalt																						
Copper																						
Lead																						
Mercury																						
Mercury																						
Nickel																						
Phosphorus																						
Seaborgium																						
Silver																						
Tellurium																						
Uranium																						
Vanadium																						
Zinc																						

**Table III**  
**Summary of Soil Analytical Results**  
**Phase II Environmental Site Assessment**  
**23 Brock Street West, Uxbridge, Ontario**  
**Township of Uxbridge**

**Table III**  
**Summary of Soil Analytical Results**  
**Phase II Environmental Site Assessment**  
**223 Brock Street West, Uxbridge, Ontario**  
**Township of Uxbridge**

**Table III**  
**Summary of Soil Analytical Results**  
**Phase II Environmental Site Assessment**  
**23 Brock Street West, Uxbridge, Ontario**  
**Township of Uxbridge**

Sample Location	Sample Date	Sample ID	Description	Sample Depth	Soil Condition	Site Status	Laboratory	Laboratory Order	Laboratory Sample ID	Sample Date	Sample ID	Depth	Sample ID	Sample ID	Depth																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Sample One	21-Oct-24	MW12-2	MW12-2	0.8-1.5 m	4.6-8.9 m	5.3-5.5 m	SWANTEC	SWANTEC	GAT78641	21-Oct-24	MW12-24	0.8-1.6 m	BH11-2	BH11-2	0.8-1.4 m	BH11-24	BH11-24	1.5-2.1 m	BH11-27	BH11-27	2.3-2.8 m	BH11-34	BH11-34	3.1-3.8 m	BH11-37	BH11-37	4.5-5.2 m	BH11-40	BH11-40	5.1-5.8 m	BH11-43	BH11-43	6.1-6.7 m	BH11-46	BH11-46	7.6-8.2 m	BH11-49	BH11-49	8.4-9.0 m	BH11-52	BH11-52	9.1-9.8 m	BH11-55	BH11-55	10.1-10.8 m	BH11-58	BH11-58	Dup	BH11-61	BH11-61	10.4-10.9 m	BH11-64	BH11-64	11.1-11.6 m	BH11-67	BH11-67	11.8-12.3 m	BH11-70	BH11-70	12.4-12.9 m	BH11-73	BH11-73	13.1-13.6 m	BH11-76	BH11-76	14.3-14.8 m	BH11-79	BH11-79	15.0-15.5 m	BH11-82	BH11-82	15.7-16.2 m	BH11-85	BH11-85	16.4-16.9 m	BH11-88	BH11-88	17.1-17.6 m	BH11-91	BH11-91	17.8-18.3 m	BH11-94	BH11-94	18.5-19.0 m	BH11-97	BH11-97	19.2-19.7 m	BH11-100	BH11-100	19.4-19.9 m	BH11-103	BH11-103	20.1-20.6 m	BH11-106	BH11-106	20.3-20.8 m	BH11-109	BH11-109	20.6-21.1 m	BH11-112	BH11-112	21.3-21.8 m	BH11-115	BH11-115	22.0-22.5 m	BH11-118	BH11-118	22.7-23.2 m	BH11-121	BH11-121	23.4-23.9 m	BH11-124	BH11-124	24.1-24.6 m	BH11-127	BH11-127	24.8-25.3 m	BH11-130	BH11-130	25.5-26.0 m	BH11-133	BH11-133	26.2-26.7 m	BH11-136	BH11-136	26.9-27.4 m	BH11-139	BH11-139	27.6-28.1 m	BH11-142	BH11-142	27.8-28.3 m	BH11-145	BH11-145	28.0-28.5 m	BH11-148	BH11-148	28.2-28.7 m	BH11-151	BH11-151	28.4-28.9 m	BH11-154	BH11-154	28.6-29.1 m	BH11-157	BH11-157	28.8-29.3 m	BH11-160	BH11-160	29.0-29.5 m	BH11-163	BH11-163	29.2-29.7 m	BH11-166	BH11-166	29.4-29.9 m	BH11-169	BH11-169	29.6-30.1 m	BH11-172	BH11-172	29.8-30.3 m	BH11-175	BH11-175	30.0-30.5 m	BH11-178	BH11-178	30.2-30.7 m	BH11-181	BH11-181	30.4-30.9 m	BH11-184	BH11-184	30.6-31.1 m	BH11-187	BH11-187	30.8-31.3 m	BH11-190	BH11-190	31.0-31.5 m	BH11-193	BH11-193	31.2-31.7 m	BH11-196	BH11-196	31.4-31.9 m	BH11-199	BH11-199	31.6-32.1 m	BH11-202	BH11-202	31.8-32.3 m	BH11-205	BH11-205	32.0-32.5 m	BH11-208	BH11-208	32.2-32.7 m	BH11-211	BH11-211	32.4-32.9 m	BH11-214	BH11-214	32.6-33.1 m	BH11-217	BH11-217	32.8-33.3 m	BH11-220	BH11-220	33.0-33.5 m	BH11-223	BH11-223	33.2-33.7 m	BH11-226	BH11-226	33.4-33.9 m	BH11-229	BH11-229	33.6-34.1 m	BH11-232	BH11-232	33.8-34.3 m	BH11-235	BH11-235	34.0-34.5 m	BH11-238	BH11-238	34.2-34.7 m	BH11-241	BH11-241	34.4-34.9 m	BH11-244	BH11-244	34.6-35.1 m	BH11-247	BH11-247	34.8-35.3 m	BH11-250	BH11-250	35.0-35.5 m	BH11-253	BH11-253	35.2-35.7 m	BH11-256	BH11-256	35.4-35.9 m	BH11-259	BH11-259	35.6-36.1 m	BH11-262	BH11-262	35.8-36.3 m	BH11-265	BH11-265	36.0-36.5 m	BH11-268	BH11-268	36.2-36.7 m	BH11-271	BH11-271	36.4-36.9 m	BH11-274	BH11-274	36.6-37.1 m	BH11-277	BH11-277	36.8-37.3 m	BH11-280	BH11-280	37.0-37.5 m	BH11-283	BH11-283	37.2-37.7 m	BH11-286	BH11-286	37.4-37.9 m	BH11-289	BH11-289	37.6-38.1 m	BH11-292	BH11-292	37.8-38.3 m	BH11-295	BH11-295	38.0-38.5 m	BH11-298	BH11-298	38.2-38.7 m	BH11-301	BH11-301	38.4-38.9 m	BH11-304	BH11-304	38.6-39.1 m	BH11-307	BH11-307	38.8-39.3 m	BH11-310	BH11-310	39.0-39.5 m	BH11-313	BH11-313	39.2-39.7 m	BH11-316	BH11-316	39.4-39.9 m	BH11-319	BH11-319	39.6-40.1 m	BH11-322	BH11-322	39.8-40.3 m	BH11-325	BH11-325	40.0-40.5 m	BH11-328	BH11-328	40.2-40.7 m	BH11-331	BH11-331	40.4-40.9 m	BH11-334	BH11-334	40.6-41.1 m	BH11-337	BH11-337	40.8-41.3 m	BH11-340	BH11-340	41.0-41.5 m	BH11-343	BH11-343	41.2-41.7 m	BH11-346	BH11-346	41.4-41.9 m	BH11-349	BH11-349	41.6-42.1 m	BH11-352	BH11-352	41.8-42.3 m	BH11-355	BH11-355	42.0-42.5 m	BH11-358	BH11-358	42.2-42.7 m	BH11-361	BH11-361	42.4-42.9 m	BH11-364	BH11-364	42.6-43.1 m	BH11-367	BH11-367	42.8-43.3 m	BH11-370	BH11-370	43.0-43.5 m	BH11-373	BH11-373	43.2-43.7 m	BH11-376	BH11-376	43.4-43.9 m	BH11-379	BH11-379	43.6-44.1 m	BH11-382	BH11-382	43.8-44.3 m	BH11-385	BH11-385	44.0-44.5 m	BH11-388	BH11-388	44.2-44.7 m	BH11-391	BH11-391	44.4-44.9 m	BH11-394	BH11-394	44.6-45.1 m	BH11-397	BH11-397	44.8-45.3 m	BH11-400	BH11-400	45.0-45.5 m	BH11-403	BH11-403	45.2-45.7 m	BH11-406	BH11-406	45.4-45.9 m	BH11-409	BH11-409	45.6-46.1 m	BH11-412	BH11-412	45.8-46.3 m	BH11-415	BH11-415	46.0-46.5 m	BH11-418	BH11-418	46.2-46.7 m	BH11-421	BH11-421	46.4-46.9 m	BH11-424	BH11-424	46.6-47.1 m	BH11-427	BH11-427	46.8-47.3 m	BH11-430	BH11-430	47.0-47.5 m	BH11-433	BH11-433	47.2-47.7 m	BH11-436	BH11-436	47.4-47.9 m	BH11-439	BH11-439	47.6-48.1 m	BH11-442	BH11-442	47.8-48.3 m	BH11-445	BH11-445	48.0-48.5 m	BH11-448	BH11-448	48.2-48.7 m	BH11-451	BH11-451	48.4-48.9 m	BH11-454	BH11-454	48.6-49.1 m	BH11-457	BH11-457	48.8-49.3 m	BH11-460	BH11-460	49.0-49.5 m	BH11-463	BH11-463	49.2-49.7 m	BH11-466	BH11-466	49.4-49.9 m	BH11-469	BH11-469	49.6-50.1 m	BH11-472	BH11-472	49.8-50.3 m	BH11-475	BH11-475	50.0-50.5 m	BH11-478	BH11-478	50.2-50.7 m	BH11-481	BH11-481	50.4-50.9 m	BH11-484	BH11-484	50.6-51.1 m	BH11-487	BH11-487	50.8-51.3 m	BH11-490	BH11-490	51.0-51.5 m	BH11-493	BH11-493	51.2-51.7 m	BH11-496	BH11-496	51.4-51.9 m	BH11-499	BH11-499	51.6-52.1 m	BH11-502	BH11-502	51.8-52.3 m	BH11-505	BH11-505	52.0-52.5 m	BH11-508	BH11-508	52.2-52.7 m	BH11-511	BH11-511	52.4-52.9 m	BH11-514	BH11-514	52.6-53.1 m	BH11-517	BH11-517	52.8-53.3 m	BH11-520	BH11-520	53.0-53.5 m	BH11-523	BH11-523	53.2-53.7 m	BH11-526	BH11-526	53.4-53.9 m	BH11-529	BH11-529	53.6-54.1 m	BH11-532	BH11-532	53.8-54.3 m	BH11-535	BH11-535	54.0-54.5 m	BH11-538	BH11-538	54.2-54.7 m	BH11-541	BH11-541	54.4-54.9 m	BH11-544	BH11-544	54.6-55.1 m	BH11-547	BH11-547	54.8-55.3 m	BH11-550	BH11-550	55.0-55.5 m	BH11-553	BH11-553	55.2-55.7 m	BH11-556	BH11-556	55.4-55.9 m	BH11-559	BH11-559	55.6-56.1 m	BH11-562	BH11-562	55.8-56.3 m	BH11-565	BH11-565	56.0-56.5 m	BH11-568	BH11-568	56.2-56.7 m	BH11-571	BH11-571	56.4-56.9 m	BH11-574	BH11-574	56.6-57.1 m	BH11-577	BH11-577	56.8-57.3 m	BH11-580	BH11-580	57.0-57.5 m	BH11-583	BH11-583	57.2-57.7 m	BH11-586	BH11-586	57.4-57.9 m	BH11-589	BH11-589	57.6-58.1 m	BH11-592	BH11-592	57.8-58.3 m	BH11-595	BH11-595	58.0-58.5 m	BH11-598	BH11-598	58.2-58.7 m	BH11-601	BH11-601	58.4-58.9 m	BH11-604	BH11-604	58.6-59.1 m	BH11-607	BH11-607	58.8-59.3 m	BH11-610	BH11-610	59.0-59.5 m	BH11-613	BH11-613	59.2-59.7 m	BH11-616	BH11-616	59.4-59.9 m	BH11-619	BH11-619	59.6-60.1 m	BH11-622	BH11-622	59.8-60.3 m	BH11-625	BH11-625	60.0-60.5 m	BH11-628	BH11-628	60.2-60.7 m	BH11-631	BH11-631	60.4-60.9 m	BH11-634	BH11-634	60.6-61.1 m	BH11-637	BH11-637	60.8-61.3 m	BH11-640	BH11-640	61.0-61.5 m	BH11-643	BH11-643	61.2-61.7 m	BH11-646	BH11-646	61.4-61.9 m	BH11-649	BH11-649	61.6-62.1 m	BH11-652	BH11-652	61.8-62.3 m	BH11-655	BH11-655	62.0-62.5 m	BH11-658	BH11-658	62.2-62.7 m	BH11-661	BH11-661	62.4-62.9 m	BH11-664	BH11-664	62.6-63.1 m	BH11-667	BH11-667	62.8-63.3 m	BH11-670	BH11-670	63.0-63.5 m	BH11-673	BH11-673	63.2-63.7 m	BH11-676	BH11-676	63.4-63.9 m	BH11-679	BH11-679	63.6-64.1 m	BH11-682	BH11-682	63.8-64.3 m	BH11-685	BH11-685	64.0-64.5 m	BH11-688	BH11-688	64.2-64.7 m	BH11-691	BH11-691	64.4-64.9 m	BH11-694	BH11-694	64.6-65.1 m	BH11-697	BH11-697	64.8-65.3 m	BH11-700	BH11-700	65.0-65.5 m	BH11-703	BH11-703	65.2-65.7 m	BH11-706	BH11-706	65.4-65.9 m	BH11-709	BH11-709	65.6-66.1 m	BH11-712	BH11-712	65.8-66.3 m	BH11-715	BH11-715	66.0-66.5 m	BH11-718	BH11-718	66.2-66.7 m	BH11-721	BH11-721	66.4-66.9 m	BH11-724	BH11-724	66.6-67.1 m	BH11-727	BH11-727	66.8-67.3 m	BH11-730	BH11-730	67.0-67.5 m	BH11-733	BH11-733	67.2-67.7 m	BH11-736	BH11-736	67.4-67.9 m	BH11-739	BH11-739	67.6-68.1 m	BH11-742	BH11-742	67.8-68.3 m	BH11-745	BH11-745	68.0-68.5 m	BH11-748	BH11-748	68.2-68.7 m	BH11-751	BH11-751	68.4-68.9 m	BH11-754	BH11-754	68.6-69.1 m	BH11-757	BH11-757	68.8-69.3 m	BH11-760	BH11-760	69.0-69.5 m	BH11-763	BH11-763	69.2-69.7 m	BH11-766	BH11-766	69.4-69.9 m	BH11-769	BH11-769	69.6-70.1 m	BH11-772	BH11-772	69.8-70.3 m	BH11-775	BH11-775	70.0-70.5 m	BH11-778	BH11-778	70.2-70.7 m	BH11-781	BH11-781	70.4-70.9 m	BH11-784	BH11-784	70.6-71.1 m	BH11-787	BH11-787	70.8-71.3 m	BH11-790	BH11-790	71.0-71.5 m	BH11-793	BH11-793	71.2-71.7 m	BH11-796	BH11-796	71.4-71.9 m	BH11-799	BH11-799	71.6-72.1 m	BH11-802	BH11-802	71.8-72.3 m	BH11-805	BH11-805	72.0-72.5 m	BH11-808	BH11-808	72.2-72.7 m	BH11-811	BH11-811	72.4-72.9 m	BH11-814	BH11-814	72.6

**Table III**  
**Summary of Soil Analytical Results**  
**Phase II Environmental Site Assessment**  
**23 Brock Street West, Uxbridge, Ontario**  
**Township of Uxbridge**

Notes:	
Ontario SOIL Ground Water and Sediment Standards for Use under Part XV of the Environmental Protection Act (MOE, 2011) Site Condition Standards (SCS)	
A	Table I - Residential / Parkland / Industrial / Commercial / Community Property Use
15.2	Concentration exceeds the indicated standard
<0.50	Measured concentration did not exceed the indicated standard
<0.03	Laboratory reporting limit (lower than the applicable standard)
n/a	No standard/policy value
-	Pump filter not analyzed / Not available
y/n	Standard applicable to total lysimetric and d & p-permeate samples should be summed for comparison
y/n	Standard applicable to both 1-methylpyrrolidine and 2-methylpyrrolidine, with the proviso that if both are detected the sum of the two must not exceed the standard
y/n	Standard applicable to both 1-methylpyrrolidine and 2-methylpyrrolidine, with the proviso that if both are detected the sum of the two must not exceed the sum of the two standards
y/n	Standard applicable to F1 in the F3 circle, minus PAs (other than naphthalene). If PA's were not analysed, the standard is applied to the higher of the two results
y/n	Standard applicable to F1 in the F3 circle, plus PA's (other than naphthalene), their gravimetric analysis is to be performed and the balance is applied to the higher of the two results
y/n	If there is a solubility limit for F4 analyses, their individual values (less 1 mmol) should be added for comparison
y/n	The criteria for pH in surface soils (0 to 1.5 m) is 5.5, whereas the criteria for g/m <sup>2</sup> in sub-surface soils (> 1.5 m depth) is 5.5 - 1.1
y/n	Standard applicable to pH in the F2 range (not naphthalene). If naphthalene was measured, the standard is 5.5 - 1.7
HM	For surfaces soils, the boron standard is for red water soluble extract. For subsurface soil, the standard is for total boron (mixed strong acid digest), as ecological criteria are not considered.
M	Detection limit due to matrix interference
RPD	Relative Percent Difference
83.3%	RPD acceptable data quality objective at 30%
nc	RPD is not calculated if one or more values is non detect or one or more values is less than five times the acceptable detection limit.

**Table IV**  
Summary of Groundwater Analytical Results  
Phase II Environmental Site Assessment  
21 Brock Street West, Uxbridge, Ontario  
Township of Uxbridge

General Chemistry	Chloride, mg/L	Turbidity, NTU	Water Quality Data								Dissolved Oxygen, mg/L	Specific Conductance, mS/cm	Electrolyte Index	Temperature, °C	
			Total Coliform, CFU/100mL	5-E.Coli, CFU/100mL	Escherichia coli, CFU/100mL	fecal coliform, CFU/100mL	Total coliform, CFU/100mL	fecal coliform, CFU/100mL	Coliform, CFU/100mL	fecal coliform, CFU/100mL					
<b>Chemicals present in concentrations greater than or equal to 1 mg/L</b>															
<b>BTEX and Petroleum Hydrocarbons</b>															
Toluene	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Ethylbenzene	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Xylenes, m+p	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
XYLENE, G	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Aromatic hydrocarbons (C8-C10 range)	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
PhC1+PhC2 (>C8-C10 range)	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
PhC3-F2 (>C6-C8 range)	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
PhC4-F4 (>C8-C10 range)	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
<b>Metals</b>															
Manganese	µg/L	µg/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Barium	µg/L	µg/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Boron	µg/L	µg/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Chromium	µg/L	µg/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Chromium (hexavalent)	µg/L	µg/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Cobalt	µg/L	µg/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Copper	µg/L	µg/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Iridium	µg/L	µg/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Nickel	µg/L	µg/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Lead	µg/L	µg/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Silver	µg/L	µg/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Scandium	µg/L	µg/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Vanadium	µg/L	µg/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
<b>Polyaromatic Hydrocarbons</b>															
Aromatic hydrocarbons	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Anthracene	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Benzoanthracene	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Benzo(b)fluoranthene	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Benzo(a)anthracene	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Benzo(a)pyrene	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Benzo(a,anthracene-1,2,3-triol)	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Chrysene	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Dibenz(a,h)anthracene	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Fluorene	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Indeno(1,2,3-j,k)perylene	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Markenaphthalene-1	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Markenaphthalene-2	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Naphthalene	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24
Phenanthrene	ng/L	ng/L	6-Nov-24	10-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24	6-Nov-24

**Table IV**  
**Summary of Groundwater Analytical Results**  
**Phase II Environmental Site Assessment**  
**23 Brock Street West, Uxbridge, Ontario**  
**Township of Uxbridge**

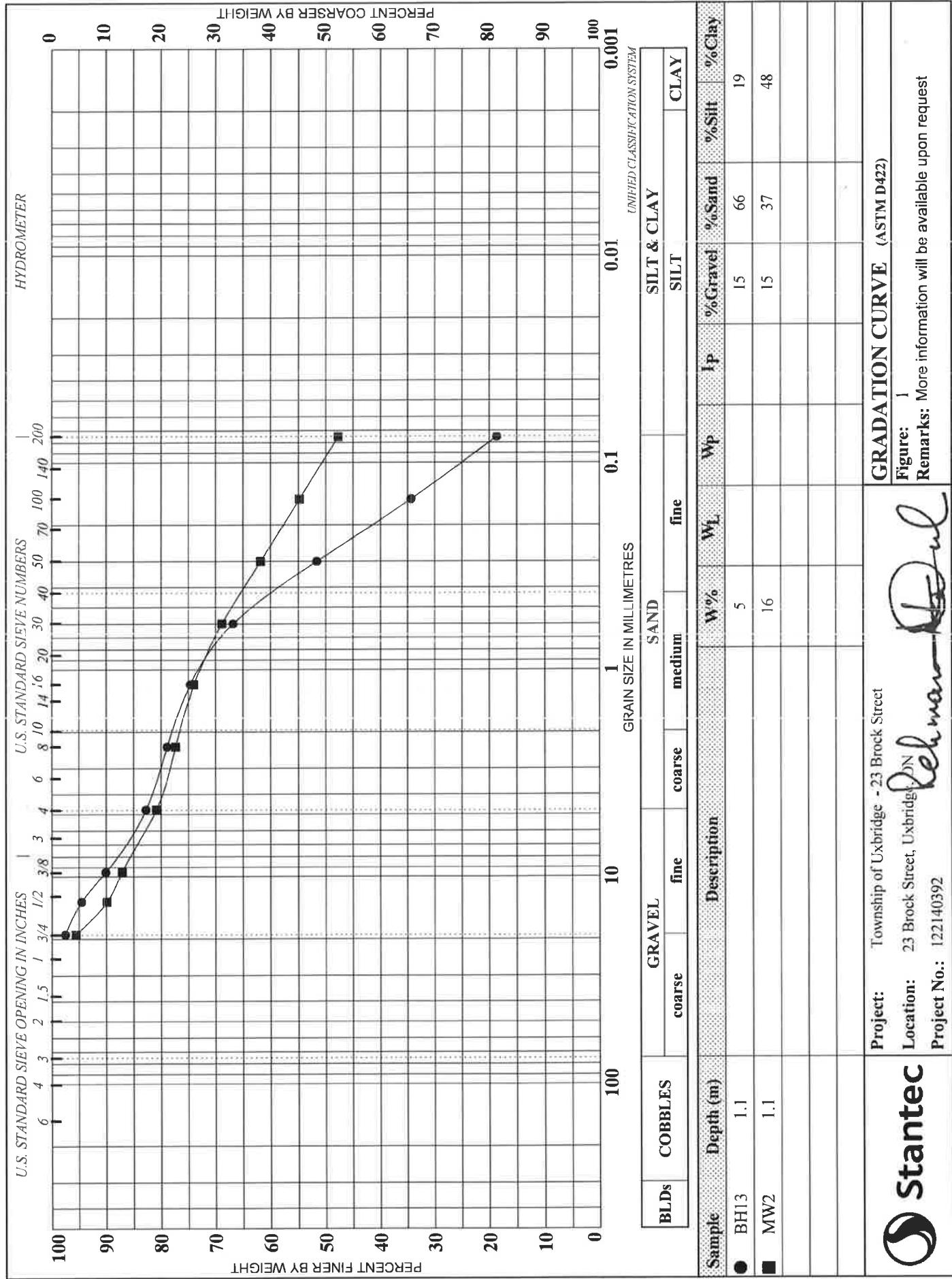
Sample Location	WW1	WW2	WW3	NW4	NW5	NW6	NW7	NW8	NW9	NW10	NW11	NW12	FIELD BLANK
Sample Date	5-Nov-14	5-Nov-14	5-Nov-14	5-Nov-14	5-Nov-14	5-Nov-14	5-Nov-14	5-Nov-14	5-Nov-14	5-Nov-14	5-Nov-14	5-Nov-14	5-Nov-14
Submitting Company	Stantec Inc.	Stantec Inc.	Stantec Inc.	Stantec Inc.	Stantec Inc.	Stantec Inc.	Stantec Inc.	Stantec Inc.	Stantec Inc.	Stantec Inc.	Stantec Inc.	Stantec Inc.	Stantec Inc.
Laboratory Name	C&Z Water Order	C&Z Water Order	C&Z Water Order	C&Z Water Order	C&Z Water Order	C&Z Water Order	C&Z Water Order	C&Z Water Order	C&Z Water Order	C&Z Water Order	C&Z Water Order	C&Z Water Order	C&Z Water Order
Laboratory Sample ID	AIF222	AIF222	AIF218	AIF217	AIF224	AIF224	AIF225						
Sample Type	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate
Volatiles/Organic Compounds													
Benzene (benzene)	<0.2	2.700 <sup>a</sup>	<0.0	<0.0	<0.0	<0.0	<0.0	<0.0	<0.0	<0.0	<0.0	<0.0	<0.0
Bromodichloromethane	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Carbon Tetrachloride (tetrachloroethane)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Chlorobromo Methane (chlorobromoethane)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Chlorobromo Ethane (chlorobromoethane)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Dibromochloromethane	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Dichloroethane (1,2)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Dichloroethane (1,4)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Dichlorofluoromethane (Freon-12)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Dichloroethane (1,1)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Dichloroethane (2,2)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Dichloroethane (1,1,1)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Dichloroethane (1,1,2)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Dichloroethane (1,1,1,2)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Dimethyl Ether (dimethyl ether)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Methyl Methacrylate (MMA)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Methylene Chloride (Methylene)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Shore	5.0 <sup>a</sup>	5.4 <sup>a</sup>	1.1 <sup>a</sup>	1.1 <sup>a</sup>	1.1 <sup>a</sup>	1.1 <sup>a</sup>	1.1 <sup>a</sup>	1.1 <sup>a</sup>	1.1 <sup>a</sup>	1.1 <sup>a</sup>	1.1 <sup>a</sup>	1.1 <sup>a</sup>	1.1 <sup>a</sup>
Tetrahydrofuran (THF)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Tetrahydrofuran (TCE)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Toluene (Toluene)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>
Water (Water)	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>	100 <sup>a</sup>

**Table IV**  
**Summary of Groundwater Analytical Results**  
**Phase II Environmental Site Assessment**  
**23 Brock Street West, Uxbridge, Ontario**  
**Township of Uxbridge**

Sample	Ontario SCS Soil Criteria Value and Sampled Parameters for Phase-II (Environmental Protection Act (MOE, 2011) Site Condition Standards (SCS))
A	Phase II - At - Times of Sampling
B	Characterization samples taken at indicated locations
C	Sampling parameters are all derived from the applicable standard
c>50	Monitoring sampling is not required if the applicable standard is c>50
D	Monitoring sampling is not required if the applicable standard is c>10
E	Monitoring sampling is not required if the applicable standard is E or lower than the secondary reporting limit
F	No detectable value
G	Below detection limit / one-half detection limit
H	Standard is applicable to this location, and it is believed that standards should be summited for consideration of a "best available" outcome, and therefore the result is a maximum value of the two results, regardless of which the location which the location which has been sampled
I	Standard is or exceeds standard. However, no additional laboratory analysis were performed between laboratory and field sample, and therefore the result is a minimum of the two, and not a qualitative measure. (Note: the applicable standard is I)
J	Monitoring sampling is not required if the applicable standard is J or higher than the applicable standard
K	Standard is applicable to H or in the F range (not BTEX)
L	Standard is applicable to H or in the F range (not Public (other than residential))
M	Standard is applicable to H or in the F range (not Public (other than residential))
N	Standard is applicable to H or in the F range (not Residential)
O	Standard is applicable to H or in the F range (not Residential)
P	Standard is applicable to H or in the F range (not Residential)
Q	Standard is applicable to H or in the F range (not Residential)
R	Standard is applicable to H or in the F range (not Residential)
S	Standard is applicable to H or in the F range (not Residential)
T	Standard is applicable to H or in the F range (not Residential)
U	Standard is applicable to H or in the F range (not Residential)
V	Standard is applicable to H or in the F range (not Residential)
W	Standard is applicable to H or in the F range (not Residential)
X	Standard is applicable to H or in the F range (not Residential)
Y	Standard is applicable to H or in the F range (not Residential)
Z	Standard is applicable to H or in the F range (not Residential)
aa	Due to the sample matrix, sample required dilution (dilution factors indicated according to:
bb	Character - Primary (not BTEX or non-Hazardous)
cc	RPD - Relative Precision Officiency
dd	RPD indicates data quality objective of 30%
ee	(RPD < 1.00 calculated if one or more results is not detect or if one or more values less than five times the reporting detection limit.

## **Appendix F      Laboratory Certificates of Analysis**







Your Project #: 122140392  
Your C.O.C. #: 1019663-01-01

**Attention: Marissa Lusito**

Stantec Consulting Ltd  
675 Cochrane Dr W.  
West Tower Suite 300  
Markham, ON  
CANADA L3R 0B8

**Report Date: 2024/11/26**

Report #: R8420109

Version: 2 - Revision

**CERTIFICATE OF ANALYSIS – REVISED REPORT**

**BUREAU VERITAS JOB #: C4Y6747**

Received: 2024/11/04, 15:40

Sample Matrix: Soil  
# Samples Received: 18

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum	1	N/A	2024/11/25	CAM SOP-00301	EPA 8270D m
Methylnaphthalene Sum	6	N/A	2024/11/08	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron	1	2024/11/22	2024/11/22	CAM SOP-00408	R153 Ana. Prot. 2011
Hot Water Extractable Boron	2	2024/11/07	2024/11/07	CAM SOP-00408	R153 Ana. Prot. 2011
Hot Water Extractable Boron	4	2024/11/07	2024/11/08	CAM SOP-00408	R153 Ana. Prot. 2011
1,3-Dichloropropene Sum	5	N/A	2024/11/08		EPA 8260C m
Free (WAD) Cyanide	1	2024/11/21	2024/11/23	CAM SOP-00457	OMOE E3015 m
Free (WAD) Cyanide	6	2024/11/08	2024/11/08	CAM SOP-00457	OMOE E3015 m
Conductivity	1	2024/11/22	2024/11/22	CAM SOP-00414	OMOE E3530 v1 m
Conductivity	3	2024/11/07	2024/11/08	CAM SOP-00414	OMOE E3530 v1 m
Conductivity	3	2024/11/08	2024/11/08	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1)	1	2024/11/21	2024/11/22	CAM SOP-00436	EPA 3060A/7199 m
Hexavalent Chromium in Soil by IC (1)	6	2024/11/07	2024/11/07	CAM SOP-00436	EPA 3060A/7199 m
Petroleum Hydro. CCME F1 & BTEX in Soil (2)	1	N/A	2024/11/22	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydro. CCME F1 & BTEX in Soil (2)	1	N/A	2024/11/08	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Soil (3)	1	2024/11/22	2024/11/22	CAM SOP-00316	CCME CWS m
Petroleum Hydrocarbons F2-F4 in Soil (3)	6	2024/11/08	2024/11/11	CAM SOP-00316	CCME CWS m
Acid Extractable Metals by ICPMS	1	2024/11/22	2024/11/22	CAM SOP-00447	EPA 6020B m
Acid Extractable Metals by ICPMS	1	2024/11/22	2024/11/23	CAM SOP-00447	EPA 6020B m
Acid Extractable Metals by ICPMS	6	2024/11/07	2024/11/07	CAM SOP-00447	EPA 6020B m
Moisture	6	N/A	2024/11/19	CAM SOP-00445	Carter 2nd ed 70.2 m
Moisture	1	N/A	2024/11/21	CAM SOP-00445	Carter 2nd ed 70.2 m
Moisture	11	N/A	2024/11/05	CAM SOP-00445	Carter 2nd ed 70.2 m
PAH Compounds in Soil by GC/MS (SIM)	1	2024/11/22	2024/11/22	CAM SOP-00318	EPA 8270E
PAH Compounds in Soil by GC/MS (SIM)	6	2024/11/07	2024/11/07	CAM SOP-00318	EPA 8270E
pH CaCl <sub>2</sub> EXTRACT	1	2024/11/21	2024/11/21	CAM SOP-00413	EPA 9045 D m
pH CaCl <sub>2</sub> EXTRACT	6	2024/11/08	2024/11/08	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR)	3	N/A	2024/11/11	CAM SOP-00102	EPA 6010C
Sodium Adsorption Ratio (SAR)	1	N/A	2024/11/25	CAM SOP-00102	EPA 6010C
Sodium Adsorption Ratio (SAR)	3	N/A	2024/11/08	CAM SOP-00102	EPA 6010C



Your Project #: 122140392  
Your C.O.C. #: 1019663-01-01

**Attention: Marissa Lusito**

Stantec Consulting Ltd  
675 Cochrane Dr W.  
West Tower Suite 300  
Markham, ON  
CANADA L3R 0B8

**Report Date:** 2024/11/26  
**Report #:** R8420109  
**Version:** 2 - Revision

**CERTIFICATE OF ANALYSIS – REVISED REPORT**

**BUREAU VERITAS JOB #: C4Y6747**

Received: 2024/11/04, 15:40

Sample Matrix: Soil  
# Samples Received: 18

Analyses	Date Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Volatile Organic Compounds and F1 PHCs	5	N/A	2024/11/08	CAM SOP-00230	EPA 8260C m

**Remarks:**

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

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

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

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

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

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

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

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

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

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



Your Project #: 122140392  
Your C.O.C. #: 1019663-01-01

**Attention: Marissa Lusito**

Stantec Consulting Ltd  
675 Cochrane Dr W.  
West Tower Suite 300  
Markham, ON  
CANADA L3R 0B8

**Report Date:** 2024/11/26  
**Report #:** R8420109  
**Version:** 2 - Revision

**CERTIFICATE OF ANALYSIS – REVISED REPORT**

**BUREAU VERITAS JOB #: C4Y6747**  
Received: 2024/11/04, 15:40

**Encryption Key**

Please direct all questions regarding this Certificate of Analysis to:

Julie Clement, Technical Account Manager  
Email: Julie.CLEMENT@bureauveritas.com  
Phone# (613)868-6079

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

Total Cover Pages : 3  
Page 3 of 47

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

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

BUREAU  
VERITAS

Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		AHVP81		AHVP83		AHVP85		
Sampling Date		2024/10/29 11:50		2024/10/28 09:50		2024/10/30 15:20		
COC Number		1019663-01-01		1019663-01-01		1019663-01-01		
	UNITS	MW1-2	QC Batch	MW2-1	QC Batch	BH8-3	RDL	QC Batch

#### Calculated Parameters

Sodium Adsorption Ratio	N/A	8.4	9745976	16	9745976	6.4		9745976
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#### Inorganics

Conductivity	mS/cm	0.47	9752456	0.83	9751543	0.28	0.002	9753978
Available (CaCl <sub>2</sub> ) pH	pH	7.93	9754639	8.03	9754639	7.59		9754639
WAD Cyanide (Free)	ug/g	<0.01	9753786	<0.01	9753786	<0.01	0.01	9753786
Chromium (VI)	ug/g	<0.18	9752069	<0.18	9752069	<0.18	0.18	9752069

#### Metals

Hot Water Ext. Boron (B)	ug/g	0.072	9751996	0.11	9751233	0.44	0.050	9751996
Acid Extractable Antimony (Sb)	ug/g	<0.20	9751740	<0.20	9751740	2.6	0.20	9751740
Acid Extractable Arsenic (As)	ug/g	1.0	9751740	1.1	9751740	1.5	1.0	9751740
Acid Extractable Barium (Ba)	ug/g	23	9751740	28	9751740	42	0.50	9751740
Acid Extractable Beryllium (Be)	ug/g	<0.20	9751740	<0.20	9751740	0.25	0.20	9751740
Acid Extractable Boron (B)	ug/g	<5.0	9751740	5.1	9751740	<5.0	5.0	9751740
Acid Extractable Cadmium (Cd)	ug/g	<0.10	9751740	<0.10	9751740	0.10	0.10	9751740
Acid Extractable Chromium (Cr)	ug/g	6.9	9751740	7.1	9751740	9.1	1.0	9751740
Acid Extractable Cobalt (Co)	ug/g	2.7	9751740	3.2	9751740	2.8	0.10	9751740
Acid Extractable Copper (Cu)	ug/g	6.0	9751740	8.6	9751740	8.6	0.50	9751740
Acid Extractable Lead (Pb)	ug/g	12	9751740	4.2	9751740	56	1.0	9751740
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	9751740	<0.50	9751740	<0.50	0.50	9751740
Acid Extractable Nickel (Ni)	ug/g	5.7	9751740	6.3	9751740	6.5	0.50	9751740
Acid Extractable Selenium (Se)	ug/g	<0.50	9751740	<0.50	9751740	<0.50	0.50	9751740
Acid Extractable Silver (Ag)	ug/g	<0.20	9751740	<0.20	9751740	<0.20	0.20	9751740
Acid Extractable Thallium (Tl)	ug/g	0.066	9751740	0.065	9751740	0.068	0.050	9751740
Acid Extractable Uranium (U)	ug/g	0.35	9751740	0.39	9751740	0.36	0.050	9751740
Acid Extractable Vanadium (V)	ug/g	15	9751740	15	9751740	20	5.0	9751740
Acid Extractable Zinc (Zn)	ug/g	26	9751740	28	9751740	86	5.0	9751740
Acid Extractable Mercury (Hg)	ug/g	<0.050	9751740	<0.050	9751740	0.13	0.050	9751740

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		AHVP85			AHVP86			AHVP86	
Sampling Date		2024/10/30 15:20			2024/10/30			2024/10/30	
COC Number		1019663-01-01			1019663-01-01			1019663-01-01	
	UNITS	BH8-3 Lab-Dup	RDL	QC Batch	QC-1	RDL	QC Batch	QC-1 Lab-Dup	RDL
<b>Calculated Parameters</b>									
Sodium Adsorption Ratio	N/A				5.5		9745976		
<b>Inorganics</b>									
Conductivity	mS/cm	0.28	0.002	9753978	0.30	0.002	9751543		
Available (CaCl <sub>2</sub> ) pH	pH				7.66		9754639	7.62	9754639
WAD Cyanide (Free)	ug/g				<0.01	0.01	9753786	<0.01	0.01
Chromium (VI)	ug/g				<0.18	0.18	9752069	<0.18	0.18
<b>Metals</b>									
Hot Water Ext. Boron (B)	ug/g				0.45	0.050	9751233		
Acid Extractable Antimony (Sb)	ug/g				1.9	0.20	9751740		
Acid Extractable Arsenic (As)	ug/g				1.4	1.0	9751740		
Acid Extractable Barium (Ba)	ug/g				42	0.50	9751740		
Acid Extractable Beryllium (Be)	ug/g				0.25	0.20	9751740		
Acid Extractable Boron (B)	ug/g				<5.0	5.0	9751740		
Acid Extractable Cadmium (Cd)	ug/g				<0.10	0.10	9751740		
Acid Extractable Chromium (Cr)	ug/g				9.6	1.0	9751740		
Acid Extractable Cobalt (Co)	ug/g				2.9	0.10	9751740		
Acid Extractable Copper (Cu)	ug/g				8.1	0.50	9751740		
Acid Extractable Lead (Pb)	ug/g				52	1.0	9751740		
Acid Extractable Molybdenum (Mo)	ug/g				<0.50	0.50	9751740		
Acid Extractable Nickel (Ni)	ug/g				6.4	0.50	9751740		
Acid Extractable Selenium (Se)	ug/g				<0.50	0.50	9751740		
Acid Extractable Silver (Ag)	ug/g				<0.20	0.20	9751740		
Acid Extractable Thallium (Tl)	ug/g				0.067	0.050	9751740		
Acid Extractable Uranium (U)	ug/g				0.37	0.050	9751740		
Acid Extractable Vanadium (V)	ug/g				22	5.0	9751740		
Acid Extractable Zinc (Zn)	ug/g				67	5.0	9751740		
Acid Extractable Mercury (Hg)	ug/g				0.14	0.050	9751740		
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
Lab-Dup = Laboratory Initiated Duplicate									

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Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		AHVP89		AHVP91		AHVQ17		
Sampling Date		2024/10/30 09:25		2024/10/29 09:20		2024/10/30 15:30		
COC Number		1019663-01-01		1019663-01-01		1019663-01-01		
	UNITS	MW9-6	QC Batch	MW10-5	QC Batch	BH8-7	RDL	QC Batch
<b>Calculated Parameters</b>								
Sodium Adsorption Ratio	N/A	9.9	9745976	3.0	9745976	1.7		9771384
<b>Inorganics</b>								
Conductivity	mS/cm	1.4	9753978	0.90	9753978	0.40	0.002	9782786
Available (CaCl <sub>2</sub> ) pH	pH	7.33	9754639	7.57	9754639	7.08		9780505
WAD Cyanide (Free)	ug/g	<0.01	9753786	<0.01	9753786	<0.01	0.01	9781284
Chromium (VI)	ug/g	<0.18	9752069	<0.18	9752069	<0.18	0.18	9780503
<b>Metals</b>								
Hot Water Ext. Boron (B)	ug/g	0.89	9752688	0.43	9751996	0.66	0.050	9782284
Acid Extractable Antimony (Sb)	ug/g	0.96	9751740	<0.20	9751740	<0.20	0.20	9782729
Acid Extractable Arsenic (As)	ug/g	2.6	9751740	1.5	9751740	<1.0	1.0	9782729
Acid Extractable Barium (Ba)	ug/g	48	9751740	68	9751740	34	0.50	9782729
Acid Extractable Beryllium (Be)	ug/g	0.29	9751740	0.38	9751740	0.27	0.20	9782729
Acid Extractable Boron (B)	ug/g	5.1	9751740	6.8	9751740	<5.0	5.0	9782729
Acid Extractable Cadmium (Cd)	ug/g	0.14	9751740	0.12	9751740	0.10	0.10	9782729
Acid Extractable Chromium (Cr)	ug/g	12	9751740	15	9751740	8.5	1.0	9782729
Acid Extractable Cobalt (Co)	ug/g	3.1	9751740	4.9	9751740	2.1	0.10	9782729
Acid Extractable Copper (Cu)	ug/g	11	9751740	12	9751740	4.9	0.50	9782729
Acid Extractable Lead (Pb)	ug/g	71	9751740	14	9751740	26	1.0	9782729
Acid Extractable Molybdenum (Mo)	ug/g	0.72	9751740	<0.50	9751740	<0.50	0.50	9782729
Acid Extractable Nickel (Ni)	ug/g	7.0	9751740	11	9751740	5.0	0.50	9782729
Acid Extractable Selenium (Se)	ug/g	0.72	9751740	<0.50	9751740	<0.50	0.50	9782729
Acid Extractable Silver (Ag)	ug/g	<0.20	9751740	<0.20	9751740	<0.20	0.20	9782729
Acid Extractable Thallium (Tl)	ug/g	0.12	9751740	0.10	9751740	<0.050	0.050	9782729
Acid Extractable Uranium (U)	ug/g	0.36	9751740	0.45	9751740	0.38	0.050	9782729
Acid Extractable Vanadium (V)	ug/g	22	9751740	25	9751740	21	5.0	9782729
Acid Extractable Zinc (Zn)	ug/g	54	9751740	36	9751740	76	5.0	9782729
Acid Extractable Mercury (Hg)	ug/g	0.29	9751740	<0.050	9751740	0.060	0.050	9782729
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								



Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 PAHS (SOIL)

Bureau Veritas ID		AHVP81		AHVP83	AHVP85	AHVP86	AHVP89		
Sampling Date		2024/10/29 11:50		2024/10/28 09:50	2024/10/30 15:20	2024/10/30	2024/10/30 09:25		
COC Number		1019663-01-01		1019663-01-01	1019663-01-01	1019663-01-01	1019663-01-01		
	UNITS	MW1-2	RDL	MW2-1	BH8-3	QC-1	MW9-6	RDL	QC Batch
<b>Calculated Parameters</b>									
Methylnaphthalene, 2-(1-)	ug/g	<0.071	0.071	<0.0071	0.12	0.14	<0.0071	0.0071	9745593
<b>Polyaromatic Hydrocarbons</b>									
Acenaphthene	ug/g	<0.050	0.050	<0.0050	0.27	0.32	0.0089	0.0050	9751063
Acenaphthylene	ug/g	<0.050	0.050	<0.0050	0.12	0.17	0.019	0.0050	9751063
Anthracene	ug/g	<0.050	0.050	<0.0050	0.51	0.65	0.025	0.0050	9751063
Benzo(a)anthracene	ug/g	<0.050	0.050	<0.0050	1.5	2.0	0.090	0.0050	9751063
Benzo(a)pyrene	ug/g	<0.050	0.050	<0.0050	1.5	2.1	0.12	0.0050	9751063
Benzo(b/j)fluoranthene	ug/g	<0.050	0.050	<0.0050	1.7	2.4	0.15	0.0050	9751063
Benzo(g,h,i)perylene	ug/g	0.099	0.050	<0.0050	0.97	1.3	0.10	0.0050	9751063
Benzo(k)fluoranthene	ug/g	<0.050	0.050	<0.0050	0.65	0.78	0.054	0.0050	9751063
Chrysene	ug/g	<0.050	0.050	<0.0050	1.3	1.7	0.091	0.0050	9751063
Dibeno(a,h)anthracene	ug/g	<0.050	0.050	<0.0050	0.25	0.34	0.020	0.0050	9751063
Fluoranthene	ug/g	<0.050	0.050	<0.0050	3.5	4.5	0.22	0.0050	9751063
Fluorene	ug/g	<0.050	0.050	<0.0050	0.21	0.25	0.011	0.0050	9751063
Indeno(1,2,3-cd)pyrene	ug/g	<0.050	0.050	<0.0050	1.0	1.4	0.097	0.0050	9751063
1-Methylnaphthalene	ug/g	<0.050	0.050	<0.0050	0.058	0.070	<0.0050	0.0050	9751063
2-Methylnaphthalene	ug/g	<0.050	0.050	<0.0050	0.062	0.068	<0.0050	0.0050	9751063
Naphthalene	ug/g	<0.050	0.050	<0.0050	0.064	0.057	0.0055	0.0050	9751063
Phenanthrene	ug/g	<0.050	0.050	<0.0050	2.2	2.8	0.12	0.0050	9751063
Pyrene	ug/g	<0.050	0.050	<0.0050	3.1	4.1	0.21	0.0050	9751063
<b>Surrogate Recovery (%)</b>									
D10-Anthracene	%	90		95	82	85	88		9751063
D14-Terphenyl (FS)	%	89		89	87	91	84		9751063
D8-Acenaphthylene	%	87		89	88	92	86		9751063
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									



Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 PAHS (SOIL)

Bureau Veritas ID		AHVP91		AHVQ17		
Sampling Date		2024/10/29 09:20		2024/10/30 15:30		
COC Number		1019663 01-01		1019663-01-01		
	UNITS	MW10-5	QC Batch	BH8-7	RDL	QC Batch
<b>Calculated Parameters</b>						
Methylnaphthalene, 2-(1-)	ug/g	<0.0071	9745593	<0.0071	0.0071	9771783
<b>Polyaromatic Hydrocarbons</b>						
Acenaphthene	ug/g	<0.0050	9751063	<0.0050	0.0050	9781986
Acenaphthylene	ug/g	0.0083	9751063	<0.0050	0.0050	9781986
Anthracene	ug/g	0.0070	9751063	<0.0050	0.0050	9781986
Benzo(a)anthracene	ug/g	0.014	9751063	<0.0050	0.0050	9781986
Benzo(a)pyrene	ug/g	0.018	9751063	<0.0050	0.0050	9781986
Benzo(b/j)fluoranthene	ug/g	0.023	9751063	<0.0050	0.0050	9781986
Benzo(g,h,i)perylene	ug/g	0.016	9751063	<0.0050	0.0050	9781986
Benzo(k)fluoranthene	ug/g	0.0087	9751063	<0.0050	0.0050	9781986
Chrysene	ug/g	0.013	9751063	<0.0050	0.0050	9781986
Dibenz(a,h)anthracene	ug/g	<0.0050	9751063	<0.0050	0.0050	9781986
Fluoranthene	ug/g	0.045	9751063	<0.0050	0.0050	9781986
Fluorene	ug/g	0.0054	9751063	<0.0050	0.0050	9781986
Indeno(1,2,3-cd)pyrene	ug/g	0.015	9751063	<0.0050	0.0050	9781986
1-Methylnaphthalene	ug/g	<0.0050	9751063	<0.0050	0.0050	9781986
2-Methylnaphthalene	ug/g	<0.0050	9751063	<0.0050	0.0050	9781986
Naphthalene	ug/g	<0.0050	9751063	<0.0050	0.0050	9781986
Phenanthrene	ug/g	0.028	9751063	<0.0050	0.0050	9781986
Pyrene	ug/g	0.038	9751063	<0.0050	0.0050	9781986
<b>Surrogate Recovery (%)</b>						
D10-Anthracene	%	94	9751063	88		9781986
D14-Terphenyl (FS)	%	89	9751063	104		9781986
D8-Acenaphthylene	%	86	9751063	80		9781986
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						



Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 PHCS, BTEX/F1-F4 (SOIL)

Bureau Veritas ID		AHVP88		AHVQ26		
Sampling Date		2024/10/30 09:15		2024/10/30 10:10		
COC Number		1019663-01-01		1019663-01-01		
	UNITS	MW9-5	QC Batch	MW9-10	RDL	QC Batch
<b>BTEX &amp; F1 Hydrocarbons</b>						
Benzene	ug/g	<0.020	9754484	<0.020	0.020	9782078
Toluene	ug/g	<0.020	9754484	<0.020	0.020	9782078
Ethylbenzene	ug/g	0.021	9754484	<0.020	0.020	9782078
o-Xylene	ug/g	0.022	9754484	<0.020	0.020	9782078
p+m-Xylene	ug/g	0.14	9754484	<0.040	0.040	9782078
Total Xylenes	ug/g	0.16	9754484	<0.040	0.040	9782078
F1 (C6-C10)	ug/g	<10	9754484	<10	10	9782078
F1 (C6-C10) - BTEX	ug/g	<10	9754484	<10	10	9782078
<b>F2-F4 Hydrocarbons</b>						
F2 (C10-C16 Hydrocarbons)	ug/g	15	9755082	<7.0	7.0	9781962
F3 (C16-C34 Hydrocarbons)	ug/g	270	9755082	<50	50	9781962
F4 (C34-C50 Hydrocarbons)	ug/g	110	9755082	<50	50	9781962
Reached Baseline at C50	ug/g	Yes	9755082	Yes		9781962
<b>Surrogate Recovery (%)</b>						
1,4-Difluorobenzene	%	104	9754484	112		9782078
4-Bromofluorobenzene	%	98	9754484	97		9782078
D10-o-Xylene	%	110	9754484	109		9782078
D4-1,2-Dichloroethane	%	96	9754484	100		9782078
o-Terphenyl	%	105	9755082	96		9781962
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						



Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 VOCs BY HS & F1-F4 (SOIL)

Bureau Veritas ID		AHVP82	AHVP84	AHVP87	AHVP90	AHVP91		
Sampling Date		2024/10/29 13:25	2024/10/28 10:25	2024/10/30 15:25	2024/10/30 11:20	2024/10/29 09:20		
COC Number		1019663-01-01	1019663-01-01	1019663-01-01	1019663-01-01	1019663-01-01		
	UNITS	MW1-5	MW2-5	BH8-5	MW9-13	MW10-5	RDL	QC Batch

#### Calculated Parameters

1,3-Dichloropropene (cis+trans)	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9745595
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#### Volatile Organics

Acetone (2-Propanone)	ug/g	<0.49	<0.49	<0.49	<0.49	<0.49	0.49	9748482
Benzene	ug/g	<0.0060	<0.0060	0.011	<0.0060	<0.0060	0.0060	9748482
Bromodichloromethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
Bromoform	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
Bromomethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
Carbon Tetrachloride	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
Chlorobenzene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
Chloroform	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
Dibromochloromethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
1,2-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
1,3-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
1,4-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
1,1-Dichloroethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
1,2-Dichloroethane	ug/g	<0.049	<0.049	<0.049	<0.049	<0.049	0.049	9748482
1,1-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
cis-1,2-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
trans-1,2-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
1,2-Dichloropropane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
cis-1,3-Dichloropropene	ug/g	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	9748482
trans-1,3-Dichloropropene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
Ethylbenzene	ug/g	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	9748482
Ethylene Dibromide	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
Hexane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
Methylene Chloride(Dichloromethane)	ug/g	<0.049	<0.049	<0.049	<0.049	<0.049	0.049	9748482
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	9748482
Methyl Isobutyl Ketone	ug/g	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	9748482
Methyl t-butyl ether (MTBE)	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
Styrene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



Bureau Veritas Job #: C4Y6747

Report Date: 2024/11/26

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: HM

**O.REG 153 VOCs BY HS & F1-F4 (SOIL)**

Bureau Veritas ID		AHVP82	AHVP84	AHVP87	AHVP90	AHVP91		
Sampling Date		2024/10/29 13:25	2024/10/28 10:25	2024/10/30 15:25	2024/10/30 11:20	2024/10/29 09:20		
COC Number		1019663-01-01	1019663-01-01	1019663-01-01	1019663-01-01	1019663-01-01		
	UNITS	MW1-5	MW2-5	BH8-5	MW9-13	MW10-5	RDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
1,1,2,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
Tetrachloroethylene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
Toluene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9748482
1,1,1-Trichloroethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
1,1,2-Trichloroethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
Trichloroethylene	ug/g	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	9748482
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9748482
Vinyl Chloride	ug/g	<0.019	<0.019	<0.019	<0.019	<0.019	0.019	9748482
p+m-Xylene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9748482
o-Xylene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9748482
Total Xylenes	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9748482
F1 (C6-C10)	ug/g	<10	<10	<10	<10	<10	10	9748482
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	<10	<10	10	9748482
<b>F2-F4 Hydrocarbons</b>								
F2 (C10-C16 Hydrocarbons)	ug/g	<7.0	<7.0	<7.0	15	<7.0	7.0	9755082
F3 (C16-C34 Hydrocarbons)	ug/g	<50	<50	<50	73	<50	50	9755082
F4 (C34-C50 Hydrocarbons)	ug/g	<50	<50	<50	<50	<50	50	9755082
Reached Baseline at C50	ug/g	Yes	Yes	Yes	Yes	Yes		9755082
<b>Surrogate Recovery (%)</b>								
o-Terphenyl	%	114	101	103	100	105		9755082
4-Bromofluorobenzene	%	108	108	108	106	107		9748482
D10-o-Xylene	%	106	104	102	100	107		9748482
D4-1,2-Dichloroethane	%	89	94	94	93	95		9748482
D8-Toluene	%	96	94	95	96	94		9748482

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

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VERITAS

Bureau Veritas Job #: C4Y6747

Report Date: 2024/11/26

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: HM

### RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		AHVP81		AHVP82		AHVP83		AHVP84		
Sampling Date		2024/10/29 11:50		2024/10/29 13:25		2024/10/28 09:50		2024/10/28 10:25		
COC Number		1019663-01-01		1019663-01-01		1019663-01-01		1019663-01-01		
	UNITS	MW1-2	QC Batch	MW1-5	QC Batch	MW2-1	QC Batch	MW2-5	RDL	QC Batch

**Inorganics**

Moisture	%	5.3	9747354	24	9747247	4.6	9747354	17	1.0	9747247
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RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Bureau Veritas ID		AHVP84		AHVP85		AHVP86		AHVP87		
Sampling Date		2024/10/28 10:25		2024/10/30 15:20		2024/10/30		2024/10/30 15:25		
COC Number		1019663-01-01		1019663-01-01		1019663-01-01		1019663-01-01		
	UNITS	MW2-5 Lab-Dup	QC Batch	BH8-3		QC-1	QC Batch	BH8-5	RDL	QC Batch

**Inorganics**

Moisture	%	17	9747247	13		12	9747354	22	1.0	9747247
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RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas ID		AHVP88	AHVP89	AHVP90	AHVP91		AHVQ13			
Sampling Date		2024/10/30 09:15	2024/10/30 09:25	2024/10/30 11:20	2024/10/29 09:20		2024/10/30 15:10			
COC Number		1019663-01-01	1019663-01-01	1019663-01-01	1019663-01-01		1019663-01-01			
	UNITS	MW9-5	MW9-6	MW9-13	MW10-5	QC Batch	BH8-1	RDL	QC Batch	

**Inorganics**

Moisture	%	34	28	9.7	21	9747247	11	1.0	9774757
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RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Bureau Veritas ID		AHVQ14	AHVQ15	AHVQ16	AHVQ17	AHVQ18				
Sampling Date		2024/10/30 15:10	2024/10/30 15:20	2024/10/30 15:25	2024/10/30 15:30	2024/10/30 15:30				
COC Number		1019663-01-01	1019663-01-01	1019663-01-01	1019663-01-01	1019663-01-01	1019663-01-01			
	UNITS	BH8-2	BH8-4	BH8-6	BH8-7	BH8-8	RDL	QC Batch		

**Inorganics**

Moisture	%	12	12	20	23	73	1.0	9774757
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RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		AHVQ26		
Sampling Date		2024/10/30 10:10		
COC Number		1019663-01-01		
	UNITS	MW9-10	RDL	QC Batch
<b>Inorganics</b>				
Moisture	%	16	1.0	9781742
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				



Bureau Veritas Job #: C4Y6747

Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID	AHVQ26		
Sampling Date	2024/10/30 10:10		
COC Number	1019663-01-01		
	UNITS	MW9-10	RDL

#### Metals

Acid Extractable Mercury (Hg)	ug/g	<0.050	0.050	9782978
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RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

## TEST SUMMARY

**Bureau Veritas ID:** AHVP81  
**Sample ID:** MW1-2  
**Matrix:** Soil

**Collected:** 2024/10/29  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9745593	N/A	2024/11/08	Automated Statchk
Hot Water Extractable Boron	ICP	9751996	2024/11/07	2024/11/08	Thuy Linh Nguyen
Free (WAD) Cyanide	TECH	9753786	2024/11/08	2024/11/08	Prgya Panchal
Conductivity	AT	9752456	2024/11/07	2024/11/08	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	9752069	2024/11/07	2024/11/07	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	9751740	2024/11/07	2024/11/07	Jaswinder Kaur
Moisture	BAL	9747354	N/A	2024/11/05	Raj Patel
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9751063	2024/11/07	2024/11/07	Lingyun Feng
pH CaCl <sub>2</sub> EXTRACT	AT	9754639	2024/11/08	2024/11/08	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9745976	N/A	2024/11/08	Automated Statchk

**Bureau Veritas ID:** AHVP82  
**Sample ID:** MW1-5  
**Matrix:** Soil

**Collected:** 2024/10/29  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	9745595	N/A	2024/11/08	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755082	2024/11/08	2024/11/11	Mohammed Abdul Nafay Shoeb
Moisture	BAL	9747247	N/A	2024/11/05	Raj Patel
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9748482	N/A	2024/11/08	Cheng-Yu Sha

**Bureau Veritas ID:** AHVP83  
**Sample ID:** MW2-1  
**Matrix:** Soil

**Collected:** 2024/10/28  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9745593	N/A	2024/11/08	Automated Statchk
Hot Water Extractable Boron	ICP	9751233	2024/11/07	2024/11/07	Aswathy Neduveli Suresh
Free (WAD) Cyanide	TECH	9753786	2024/11/08	2024/11/08	Prgya Panchal
Conductivity	AT	9751543	2024/11/07	2024/11/08	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9752069	2024/11/07	2024/11/07	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	9751740	2024/11/07	2024/11/07	Jaswinder Kaur
Moisture	BAL	9747354	N/A	2024/11/05	Raj Patel
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9751063	2024/11/07	2024/11/07	Lingyun Feng
pH CaCl <sub>2</sub> EXTRACT	AT	9754639	2024/11/08	2024/11/08	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9745976	N/A	2024/11/08	Automated Statchk

**Bureau Veritas ID:** AHVP84  
**Sample ID:** MW2-5  
**Matrix:** Soil

**Collected:** 2024/10/28  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	9745595	N/A	2024/11/08	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755082	2024/11/08	2024/11/11	Mohammed Abdul Nafay Shoeb
Moisture	BAL	9747247	N/A	2024/11/05	Raj Patel



Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

## TEST SUMMARY

**Bureau Veritas ID:** AHVP84  
**Sample ID:** MW2-5  
**Matrix:** Soil

**Collected:** 2024/10/28  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9748482	N/A	2024/11/08	Cheng-Yu Sha

**Bureau Veritas ID:** AHVP84 Dup  
**Sample ID:** MW2-5  
**Matrix:** Soil

**Collected:** 2024/10/28  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	9747247	N/A	2024/11/05	Raj Patel

**Bureau Veritas ID:** AHVP85  
**Sample ID:** BH8-3  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9745593	N/A	2024/11/08	Automated Statchk
Hot Water Extractable Boron	ICP	9751996	2024/11/07	2024/11/08	Thuy Linh Nguyen
Free (WAD) Cyanide	TECH	9753786	2024/11/08	2024/11/08	Prgya Panchal
Conductivity	AT	9753978	2024/11/08	2024/11/08	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9752069	2024/11/07	2024/11/07	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	9751740	2024/11/07	2024/11/07	Jaswinder Kaur
Moisture	BAL	9747354	N/A	2024/11/05	Raj Patel
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9751063	2024/11/07	2024/11/07	Lingyun Feng
pH CaCl <sub>2</sub> EXTRACT	AT	9754639	2024/11/08	2024/11/08	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9745976	N/A	2024/11/11	Automated Statchk

**Bureau Veritas ID:** AHVP85 Dup  
**Sample ID:** BH8-3  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	9753978	2024/11/08	2024/11/08	Kien Tran

**Bureau Veritas ID:** AHVP86  
**Sample ID:** QC-1  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9745593	N/A	2024/11/08	Automated Statchk
Hot Water Extractable Boron	ICP	9751233	2024/11/07	2024/11/07	Aswathy Neduvelli Suresh
Free (WAD) Cyanide	TECH	9753786	2024/11/08	2024/11/08	Prgya Panchal
Conductivity	AT	9751543	2024/11/07	2024/11/08	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9752069	2024/11/07	2024/11/07	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	9751740	2024/11/07	2024/11/07	Jaswinder Kaur
Moisture	BAL	9747354	N/A	2024/11/05	Raj Patel
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9751063	2024/11/07	2024/11/07	Lingyun Feng
pH CaCl <sub>2</sub> EXTRACT	AT	9754639	2024/11/08	2024/11/08	Kien Tran

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Bureau Veritas Job #: C4Y6747

Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM**TEST SUMMARY**

**Bureau Veritas ID:** AHVP86  
**Sample ID:** QC-1  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Sodium Adsorption Ratio (SAR)	CALC/MET	9745976	N/A	2024/11/08	Automated Statchk

**Bureau Veritas ID:** AHVP86 Dup  
**Sample ID:** QC-1  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	TECH	9753786	2024/11/08	2024/11/08	Prgya Panchal
Hexavalent Chromium in Soil by IC	IC/SPEC	9752069	2024/11/07	2024/11/07	Sousan Besharatlou
pH CaCl <sub>2</sub> EXTRACT	AT	9754639	2024/11/08	2024/11/08	Kien Tran

**Bureau Veritas ID:** AHVP87  
**Sample ID:** BH8-5  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	9745595	N/A	2024/11/08	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755082	2024/11/08	2024/11/11	Mohammed Abdul Nafay Shoeb
Moisture	BAL	9747247	N/A	2024/11/05	Raj Patel
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9748482	N/A	2024/11/08	Cheng-Yu Sha

**Bureau Veritas ID:** AHVP88  
**Sample ID:** MW9-5  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9754484	N/A	2024/11/08	Abdikarim Ali
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755082	2024/11/08	2024/11/11	Mohammed Abdul Nafay Shoeb
Moisture	BAL	9747247	N/A	2024/11/05	Raj Patel

**Bureau Veritas ID:** AHVP89  
**Sample ID:** MW9-6  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9745593	N/A	2024/11/08	Automated Statchk
Hot Water Extractable Boron	ICP	9752688	2024/11/07	2024/11/08	Aswathy Neduvelli Suresh
Free (WAD) Cyanide	TECH	9753786	2024/11/08	2024/11/08	Prgya Panchal
Conductivity	AT	9753978	2024/11/08	2024/11/08	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9752069	2024/11/07	2024/11/07	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	9751740	2024/11/07	2024/11/07	Jaswinder Kaur
Moisture	BAL	9747247	N/A	2024/11/05	Raj Patel
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9751063	2024/11/07	2024/11/07	Lingyun Feng
pH CaCl <sub>2</sub> EXTRACT	AT	9754639	2024/11/08	2024/11/08	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9745976	N/A	2024/11/11	Automated Statchk



Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

## TEST SUMMARY

**Bureau Veritas ID:** AHVP90  
**Sample ID:** MW9-13  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	9745595	N/A	2024/11/08	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755082	2024/11/08	2024/11/11	Mohammed Abdul Nafay Shoeb
Moisture	BAL	9747247	N/A	2024/11/05	Raj Patel
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9748482	N/A	2024/11/08	Cheng-Yu Sha

**Bureau Veritas ID:** AHVP91  
**Sample ID:** MW10-5  
**Matrix:** Soil

**Collected:** 2024/10/29  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9745593	N/A	2024/11/08	Automated Statchk
Hot Water Extractable Boron	ICP	9751996	2024/11/07	2024/11/08	Thuy Linh Nguyen
1,3-Dichloropropene Sum	CALC	9745595	N/A	2024/11/08	Automated Statchk
Free (WAD) Cyanide	TECH	9753786	2024/11/08	2024/11/08	Prgya Panchal
Conductivity	AT	9753978	2024/11/08	2024/11/08	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9752069	2024/11/07	2024/11/07	Sousan Besharatlou
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755082	2024/11/08	2024/11/11	Mohammed Abdul Nafay Shoeb
Acid Extractable Metals by ICPMS	ICP/MS	9751740	2024/11/07	2024/11/07	Jaswinder Kaur
Moisture	BAL	9747247	N/A	2024/11/05	Raj Patel
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9751063	2024/11/07	2024/11/07	Lingyun Feng
pH CaCl <sub>2</sub> EXTRACT	AT	9754639	2024/11/08	2024/11/08	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9745976	N/A	2024/11/11	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9748482	N/A	2024/11/08	Cheng-Yu Sha

**Bureau Veritas ID:** AHVQ13  
**Sample ID:** BH8-1  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	9774757	N/A	2024/11/19	Joe Thomas

**Bureau Veritas ID:** AHVQ14  
**Sample ID:** BH8-2  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	9774757	N/A	2024/11/19	Joe Thomas

**Bureau Veritas ID:** AHVQ15  
**Sample ID:** BH8-4  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	9774757	N/A	2024/11/19	Joe Thomas

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Bureau Veritas Job #: C4Y6747

Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM**TEST SUMMARY**

**Bureau Veritas ID:** AHVQ16  
**Sample ID:** BH8-6  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	9774757	N/A	2024/11/19	Joe Thomas

**Bureau Veritas ID:** AHVQ17  
**Sample ID:** BH8-7  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9771783	N/A	2024/11/25	Automated Statchk
Hot Water Extractable Boron	ICP	9782284	2024/11/22	2024/11/22	Thuy Linh Nguyen
Free (WAD) Cyanide	TECH	9781284	2024/11/21	2024/11/23	Prgya Panchal
Conductivity	AT	9782786	2024/11/22	2024/11/22	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9780503	2024/11/21	2024/11/22	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	9782729	2024/11/22	2024/11/23	Jaswinder Kaur
Moisture	BAL	9774757	N/A	2024/11/19	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9781986	2024/11/22	2024/11/22	Margaret Kulczyk-Stanko
pH CaCl <sub>2</sub> EXTRACT	AT	9780505	2024/11/21	2024/11/21	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9771384	N/A	2024/11/25	Automated Statchk

**Bureau Veritas ID:** AHVQ18  
**Sample ID:** BH8-8  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	9774757	N/A	2024/11/19	Joe Thomas

**Bureau Veritas ID:** AHVQ26  
**Sample ID:** MW9-10  
**Matrix:** Soil

**Collected:** 2024/10/30  
**Shipped:**  
**Received:** 2024/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9782078	N/A	2024/11/22	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9781962	2024/11/22	2024/11/22	Jeevaraj Jeevaratnam
Acid Extractable Metals by ICPMS	ICP/MS	9782978	2024/11/22	2024/11/22	Jaswinder Kaur
Moisture	BAL	9781742	N/A	2024/11/21	Muhammad Chhaidan



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## GENERAL COMMENTS

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

Package 1	5.7°C
Package 2	6.7°C
Package 3	5.0°C

Revised Report [2024/11/25]: Additional analysis requested

Sample AHVP81 [MW1-2] : PAH Analysis: Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Sample AHVP87 [BH8-5] : VOC/F1 Analysis: Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency.

Sample AIIVP88 [MW9-5] : F1/BTEX Analysis: Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency.

Sample AHVP90 [MW9-13] : VOC/F1 Analysis: Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency.

Sample AHVQ14 [BH8-2] : PAH Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample AHVQ18 [BH8-8] : PAH Analysis: Detection limits were adjusted for high moisture content.

Sample AHVQ26 [MW9-10] : F1/BTEX Analysis: Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency.

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



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## QUALITY ASSURANCE REPORT

QA/QC		Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits		
9747247	R1P	RPD [AHVP84-02]	Moisture	2024/11/05	0		%	20		
9747354	R1P	RPD	Moisture	2024/11/05	2.4		%	20		
9748482	CYS	Matrix Spike	4-Bromofluorobenzene	2024/11/08		106	%	60 - 140		
			D10-o-Xylene	2024/11/08		102	%	60 - 130		
			D4-1,2-Dichloroethane	2024/11/08		92	%	60 - 140		
			D8-Toluene	2024/11/08		96	%	60 - 140		
			Acetone (2-Propanone)	2024/11/08		81	%	60 - 140		
			Benzene	2024/11/08		94	%	60 - 140		
			Bromodichloromethane	2024/11/08		91	%	60 - 140		
			Bromoform	2024/11/08		102	%	60 - 140		
			Bromomethane	2024/11/08		82	%	60 - 140		
			Carbon Tetrachloride	2024/11/08		110	%	60 - 140		
			Chlorobenzene	2024/11/08		90	%	60 - 140		
			Chloroform	2024/11/08		95	%	60 - 140		
			Dibromochloromethane	2024/11/08		98	%	60 - 140		
			1,2-Dichlorobenzene	2024/11/08		96	%	60 - 140		
			1,3-Dichlorobenzene	2024/11/08		94	%	60 - 140		
			1,4-Dichlorobenzene	2024/11/08		95	%	60 - 140		
			Dichlorodifluoromethane (FREON 12)	2024/11/08		94	%	60 - 140		
			1,1-Dichloroethane	2024/11/08		86	%	60 - 140		
			1,2-Dichloroethane	2024/11/08		92	%	60 - 140		
			1,1-Dichloroethylene	2024/11/08		93	%	60 - 140		
			cis-1,2-Dichloroethylene	2024/11/08		102	%	60 - 140		
			trans-1,2-Dichloroethylene	2024/11/08		101	%	60 - 140		
			1,2-Dichloropropane	2024/11/08		88	%	60 - 140		
			cis-1,3-Dichloropropene	2024/11/08		80	%	60 - 140		
			trans-1,3-Dichloropropene	2024/11/08		83	%	60 - 140		
			Ethylbenzene	2024/11/08		88	%	60 - 140		
			Ethylene Dibromide	2024/11/08		95	%	60 - 140		
			Hexane	2024/11/08		96	%	60 - 140		
			Methylene Chloride(Dichloromethane)	2024/11/08		95	%	60 - 140		
			Methyl Ethyl Ketone (2-Butanone)	2024/11/08		75	%	60 - 140		
			Methyl Isobutyl Ketone	2024/11/08		75	%	60 - 140		
			Methyl t-butyl ether (MTBE)	2024/11/08		91	%	60 - 140		
			Styrene	2024/11/08		85	%	60 - 140		
			1,1,1,2-Tetrachloroethane	2024/11/08		107	%	60 - 140		
			1,1,2,2-Tetrachloroethane	2024/11/08		84	%	60 - 140		
			Tetrachloroethylene	2024/11/08		98	%	60 - 140		
			Toluene	2024/11/08		93	%	60 - 140		
			1,1,1-Trichloroethane	2024/11/08		100	%	60 - 140		
			1,1,2-Trichloroethane	2024/11/08		86	%	60 - 140		
			Trichloroethylene	2024/11/08		103	%	60 - 140		
			Trichlorofluoromethane (FREON 11)	2024/11/08		107	%	60 - 140		
			Vinyl Chloride	2024/11/08		92	%	60 - 140		
			p+m-Xylene	2024/11/08		85	%	60 - 140		
			o-Xylene	2024/11/08		97	%	60 - 140		
			F1 (C6-C10)	2024/11/08		94	%	60 - 140		
9748482	CYS	Spiked Blank	4-Bromofluorobenzene	2024/11/07		107	%	60 - 140		
			D10-o-Xylene	2024/11/07		99	%	60 - 130		
			D4-1,2-Dichloroethane	2024/11/07		93	%	60 - 140		
			D8-Toluene	2024/11/07		96	%	60 - 140		
			Acetone (2-Propanone)	2024/11/07		92	%	60 - 140		



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9748482	CYS	Method Blank	Benzene	2024/11/07	95	%	60 - 130		
			Bromodichloromethane	2024/11/07	93	%	60 - 130		
			Bromoform	2024/11/07	105	%	60 - 130		
			Bromomethane	2024/11/07	84	%	60 - 140		
			Carbon Tetrachloride	2024/11/07	109	%	60 - 130		
			Chlorobenzene	2024/11/07	95	%	60 - 130		
			Chloroform	2024/11/07	97	%	60 - 130		
			Dibromochloromethane	2024/11/07	101	%	60 - 130		
			1,2-Dichlorobenzene	2024/11/07	102	%	60 - 130		
			1,3-Dichlorobenzene	2024/11/07	104	%	60 - 130		
			1,4-Dichlorobenzene	2024/11/07	105	%	60 - 130		
			Dichlorodifluoromethane (FREON 12)	2024/11/07	92	%	60 - 140		
			1,1-Dichloroethane	2024/11/07	87	%	60 - 130		
			1,2-Dichloroethane	2024/11/07	95	%	60 - 130		
			1,1-Dichloroethylene	2024/11/07	93	%	60 - 130		
			cis-1,2-Dichloroethylene	2024/11/07	105	%	60 - 130		
			trans-1,2-Dichloroethylene	2024/11/07	106	%	60 - 130		
			1,2-Dichloropropane	2024/11/07	90	%	60 - 130		
			cis-1,3-Dichloropropene	2024/11/07	83	%	60 - 130		
			trans-1,3-Dichloropropene	2024/11/07	87	%	60 - 130		
			Ethylbenzene	2024/11/07	92	%	60 - 130		
			Ethylene Dibromide	2024/11/07	100	%	60 - 130		
			Hexane	2024/11/07	94	%	60 - 130		
			Methylene Chloride(Dichloromethane)	2024/11/07	98	%	60 - 130		
			Methyl Ethyl Ketone (2-Butanone)	2024/11/07	83	%	60 - 140		
			Methyl Isobutyl Ketone	2024/11/07	80	%	60 - 130		
			Methyl t-butyl ether (MTBE)	2024/11/07	94	%	60 - 130		
			Styrene	2024/11/07	90	%	60 - 130		
			1,1,1,2-Tetrachloroethane	2024/11/07	109	%	60 - 130		
			1,1,2,2-Tetrachloroethane	2024/11/07	88	%	60 - 130		
			Tetrachloroethylene	2024/11/07	101	%	60 - 130		
			Toluene	2024/11/07	96	%	60 - 130		
			1,1,1-Trichloroethane	2024/11/07	100	%	60 - 130		
			1,1,2-Trichloroethane	2024/11/07	89	%	60 - 130		
			Trichloroethylene	2024/11/07	108	%	60 - 130		
			Trichlorofluoromethane (FREON 11)	2024/11/07	106	%	60 - 130		
			Vinyl Chloride	2024/11/07	145 (1)	%	60 - 130		
			p+m-Xylene	2024/11/07	90	%	60 - 130		
			o-Xylene	2024/11/07	99	%	60 - 130		
			F1 (C6-C10)	2024/11/07	94	%	80 - 120		
			4-Bromofluorobenzene	2024/11/07	108	%	60 - 140		
			D10-o-Xylene	2024/11/07	101	%	60 - 130		
			D4-1,2-Dichloroethane	2024/11/07	91	%	60 - 140		
			D8-Toluene	2024/11/07	96	%	60 - 140		
			Acetone (2-Propanone)	2024/11/07	<0.49		ug/g		
			Benzene	2024/11/07	<0.0060		ug/g		
			Bromodichloromethane	2024/11/07	<0.040		ug/g		
			Bromoform	2024/11/07	<0.040		ug/g		
			Bromomethane	2024/11/07	<0.040		ug/g		
			Carbon Tetrachloride	2024/11/07	<0.040		ug/g		
			Chlorobenzene	2024/11/07	<0.040		ug/g		
			Chloroform	2024/11/07	<0.040		ug/g		



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9748482	CYS	RPD	Dibromochloromethane	2024/11/07	<0.040		ug/g	
			1,2-Dichlorobenzene	2024/11/07	<0.040		ug/g	
			1,3-Dichlorobenzene	2024/11/07	<0.040		ug/g	
			1,4-Dichlorobenzene	2024/11/07	<0.040		ug/g	
			Dichlorodifluoromethane (FREON 12)	2024/11/07	<0.040		ug/g	
			1,1-Dichloroethane	2024/11/07	<0.040		ug/g	
			1,2-Dichloroethane	2024/11/07	<0.049		ug/g	
			1,1-Dichloroethylene	2024/11/07	<0.040		ug/g	
			cis-1,2-Dichloroethylene	2024/11/07	<0.040		ug/g	
			trans-1,2-Dichloroethylene	2024/11/07	<0.040		ug/g	
			1,2-Dichloropropane	2024/11/07	<0.040		ug/g	
			cis-1,3-Dichloropropene	2024/11/07	<0.030		ug/g	
			trans-1,3-Dichloropropene	2024/11/07	<0.040		ug/g	
			Ethylbenzene	2024/11/07	<0.010		ug/g	
			Ethylene Dibromide	2024/11/07	<0.040		ug/g	
			Hexane	2024/11/07	<0.040		ug/g	
			Methylene Chloride(Dichloromethane)	2024/11/07	<0.049		ug/g	
			Methyl Ethyl Ketone (2-Butanone)	2024/11/07	<0.40		ug/g	
			Methyl Isobutyl Ketone	2024/11/07	<0.40		ug/g	
			Methyl t-butyl ether (MTBE)	2024/11/07	<0.040		ug/g	
			Styrene	2024/11/07	<0.040		ug/g	
			1,1,1,2-Tetrachloroethane	2024/11/07	<0.040		ug/g	
			1,1,2,2-Tetrachloroethane	2024/11/07	<0.040		ug/g	
			Tetrachloroethylene	2024/11/07	<0.040		ug/g	
			Toluene	2024/11/07	<0.020		ug/g	
			1,1,1-Trichloroethane	2024/11/07	<0.040		ug/g	
			1,1,2-Trichloroethane	2024/11/07	<0.040		ug/g	
			Trichloroethylene	2024/11/07	<0.010		ug/g	
			Trichlorofluoromethane (FREON 11)	2024/11/07	<0.040		ug/g	
			Vinyl Chloride	2024/11/07	<0.019		ug/g	
			p+m-Xylene	2024/11/07	<0.020		ug/g	
			o-Xylene	2024/11/07	<0.020		ug/g	
			Total Xylenes	2024/11/07	<0.020		ug/g	
			F1 (C6-C10)	2024/11/07	<10		ug/g	
			F1 (C6-C10) - BTEX	2024/11/07	<10		ug/g	
			Acetone (2-Propanone)	2024/11/08	NC		%	50
			Benzene	2024/11/08	NC		%	50
			Bromodichloromethane	2024/11/08	NC		%	50
			Bromoform	2024/11/08	NC		%	50
			Bromomethane	2024/11/08	NC		%	50
			Carbon Tetrachloride	2024/11/08	NC		%	50
			Chlorobenzene	2024/11/08	NC		%	50
			Chloroform	2024/11/08	NC		%	50
			Dibromochloromethane	2024/11/08	NC		%	50
			1,2-Dichlorobenzene	2024/11/08	NC		%	50
			1,3-Dichlorobenzene	2024/11/08	NC		%	50
			1,4-Dichlorobenzene	2024/11/08	NC		%	50
			Dichlorodifluoromethane (FREON 12)	2024/11/08	NC		%	50
			1,1-Dichloroethane	2024/11/08	NC		%	50
			1,2-Dichloroethane	2024/11/08	NC		%	50
			1,1-Dichloroethylene	2024/11/08	NC		%	50
			cis-1,2-Dichloroethylene	2024/11/08	NC		%	50



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## QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9751063	LFE	Matrix Spike	trans-1,2-Dichloroethylene	2024/11/08	NC		%	50
			1,2-Dichloropropane	2024/11/08	NC		%	50
			cis-1,3-Dichloropropene	2024/11/08	NC		%	50
			trans-1,3-Dichloropropene	2024/11/08	NC		%	50
			Ethylbenzene	2024/11/08	NC		%	50
			Ethylene Dibromide	2024/11/08	NC		%	50
			Hoxane	2024/11/08	NC		%	50
			Methylene Chloride(Dichloromethane)	2024/11/08	NC		%	50
			Methyl Ethyl Ketone (2-Butanone)	2024/11/08	NC		%	50
			Methyl Isobutyl Ketone	2024/11/08	NC		%	50
			Methyl t-butyl ether (MTBE)	2024/11/08	NC		%	50
			Styrene	2024/11/08	NC		%	50
			1,1,1,2-Tetrachloroethane	2024/11/08	NC		%	50
			1,1,2,2-Tetrachloroethane	2024/11/08	NC		%	50
			Tetrachloroethylene	2024/11/08	NC		%	50
			Toluene	2024/11/08	NC		%	50
			1,1,1-Trichloroethane	2024/11/08	NC		%	50
			1,1,2-Trichloroethane	2024/11/08	NC		%	50
			Trichloroethylene	2024/11/08	NC		%	50
			Trichlorofluoromethane (FREON 11)	2024/11/08	NC		%	50
			Vinyl Chloride	2024/11/08	NC		%	50
			p+ri-Xylene	2024/11/08	NC		%	50
			n-Xylene	2024/11/08	NC		%	50
			Total Xylenes	2024/11/08	NC		%	50
			F1 (C6-C10)	2024/11/08	NC		%	30
			F1 (C6-C10) - BTEX	2024/11/08	NC		%	30
9751063	LFE	Spiked Blank	D10-Anthracene	2024/11/07	90		%	50 - 130
			D14-Terphenyl (FS)	2024/11/07	84		%	50 - 130
			D8-Acenaphthylene	2024/11/07	85		%	50 - 130
			Acenaphthene	2024/11/07	90		%	50 - 130
			Acenaphthylene	2024/11/07	97		%	50 - 130
			Anthracene	2024/11/07	93		%	50 - 130
			Benzo(a)anthracene	2024/11/07	84		%	50 - 130
			Benzo(a)pyrene	2024/11/07	82		%	50 - 130
			Benzo(b/j)fluoranthene	2024/11/07	82		%	50 - 130
			Benzo(g,h,i)perylene	2024/11/07	89		%	50 - 130
			Benzo(k)fluoranthene	2024/11/07	83		%	50 - 130
			Chrysene	2024/11/07	78		%	50 - 130
			Dibenz(a,h)anthracene	2024/11/07	88		%	50 - 130
			Fluoranthene	2024/11/07	93		%	50 - 130
			Fluorene	2024/11/07	93		%	50 - 130
			Indeno(1,2,3-cd)pyrene	2024/11/07	97		%	50 - 130
			1-Methylnaphthalene	2024/11/07	76		%	50 - 130
			2-Methylnaphthalene	2024/11/07	78		%	50 - 130
			Naphthalene	2024/11/07	73		%	50 - 130
			Phenanthrene	2024/11/07	86		%	50 - 130
			Pyrene	2024/11/07	94		%	50 - 130
			D10-Anthracene	2024/11/07	91		%	50 - 130
			D14-Terphenyl (FS)	2024/11/07	90		%	50 - 130
			D8-Acenaphthylene	2024/11/07	91		%	50 - 130
			Acenaphthene	2024/11/07	94		%	50 - 130
			Acenaphthylene	2024/11/07	101		%	50 - 130

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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9751063	LFE	Method Blank		Anthracene	2024/11/07	94	%	50 - 130	
				Benzo(a)anthracene	2024/11/07	86	%	50 - 130	
				Benzo(a)pyrene	2024/11/07	84	%	50 - 130	
				Benzo(b,j)fluoranthene	2024/11/07	84	%	50 - 130	
				Benzo(g,h,i)perylene	2024/11/07	93	%	50 - 130	
				Benzo(k)fluoranthene	2024/11/07	86	%	50 - 130	
				Chrysene	2024/11/07	80	%	50 - 130	
				Dibenzo(a,h)anthracene	2024/11/07	90	%	50 - 130	
				Fluoranthene	2024/11/07	98	%	50 - 130	
				Fluorene	2024/11/07	96	%	50 - 130	
				Indeno(1,2,3-cd)pyrene	2024/11/07	98	%	50 - 130	
				1-Methylnaphthalene	2024/11/07	83	%	50 - 130	
				2-Methylnaphthalene	2024/11/07	85	%	50 - 130	
				Naphthalene	2024/11/07	85	%	50 - 130	
				Phenanthrene	2024/11/07	90	%	50 - 130	
				Pyrene	2024/11/07	99	%	50 - 130	
				D10-Anthracene	2024/11/07	95	%	50 - 130	
				D14-Terphenyl (FS)	2024/11/07	88	%	50 - 130	
				D8-Acenaphthylene	2024/11/07	90	%	50 - 130	
				Acenaphthene	2024/11/07	<0.0050	ug/g		
				Acenaphthylene	2024/11/07	<0.0050	ug/g		
				Anthracene	2024/11/07	<0.0050	ug/g		
				Benzo(a)anthracene	2024/11/07	<0.0050	ug/g		
				Benzo(a)pyrene	2024/11/07	<0.0050	ug/g		
				Benzo(b,j)fluoranthene	2024/11/07	<0.0050	ug/g		
				Benzo(g,h,i)perylene	2024/11/07	<0.0050	ug/g		
				Benzo(k)fluoranthene	2024/11/07	<0.0050	ug/g		
				Chrysene	2024/11/07	<0.0050	ug/g		
				Dibenzo(a,h)anthracene	2024/11/07	<0.0050	ug/g		
				Fluoranthene	2024/11/07	<0.0050	ug/g		
				Fluorene	2024/11/07	<0.0050	ug/g		
				Indeno(1,2,3-cd)pyrene	2024/11/07	<0.0050	ug/g		
				1-Methylnaphthalene	2024/11/07	<0.0050	ug/g		
				2-Methylnaphthalene	2024/11/07	<0.0050	ug/g		
				Naphthalene	2024/11/07	<0.0050	ug/g		
				Phenanthrene	2024/11/07	<0.0050	ug/g		
				Pyrene	2024/11/07	<0.0050	ug/g		
9751063	LFE	RPD		Acenaphthene	2024/11/07	NC	%	40	
				Acenaphthylene	2024/11/07	NC	%	40	
				Anthracene	2024/11/07	NC	%	40	
				Benzo(a)anthracene	2024/11/07	NC	%	40	
				Benzo(a)pyrene	2024/11/07	NC	%	40	
				Benzo(b,j)fluoranthene	2024/11/07	NC	%	40	
				Benzo(g,h,i)perylene	2024/11/07	NC	%	40	
				Benzo(k)fluoranthene	2024/11/07	NC	%	40	
				Chrysene	2024/11/07	NC	%	40	
				Dibenzo(a,h)anthracene	2024/11/07	NC	%	40	
				Fluoranthene	2024/11/07	NC	%	40	
				Fluorene	2024/11/07	NC	%	40	
				Indeno(1,2,3-cd)pyrene	2024/11/07	NC	%	40	
				1-Methylnaphthalene	2024/11/07	NC	%	40	
				2-Methylnaphthalene	2024/11/07	NC	%	40	



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9751233	ANF	Matrix Spike	Naphthalene	2024/11/07	NC		%	40
			Phenanthrene	2024/11/07	NC		%	40
			Pyrene	2024/11/07	NC		%	40
			Hot Water Ext. Boron (B)	2024/11/07		100	%	75 - 125
			Hot Water Ext. Boron (B)	2024/11/07		93	%	75 - 125
			Hot Water Ext. Boron (B)	2024/11/07	<0.050		ug/g	
			Hot Water Ext. Boron (B)	2024/11/07	4.0		%	40
			Conductivity	2024/11/08		104	%	90 - 110
			Conductivity	2024/11/08	<0.002		mS/cm	
			Conductivity	2024/11/08	4.1		%	10
			Acid Extractable Antimony (Sb)	2024/11/07		98	%	75 - 125
			Acid Extractable Arsenic (As)	2024/11/07		98	%	75 - 125
			Acid Extractable Barium (Ba)	2024/11/07		95	%	75 - 125
			Acid Extractable Beryllium (Be)	2024/11/07		99	%	75 - 125
			Acid Extractable Boron (B)	2024/11/07		94	%	75 - 125
			Acid Extractable Cadmium (Cd)	2024/11/07		96	%	75 - 125
			Acid Extractable Chromium (Cr)	2024/11/07		98	%	75 - 125
			Acid Extractable Cobalt (Co)	2024/11/07		94	%	75 - 125
			Acid Extractable Copper (Cu)	2024/11/07		94	%	75 - 125
			Acid Extractable Lead (Pb)	2024/11/07		91	%	75 - 125
			Acid Extractable Molybdenum (Mo)	2024/11/07		92	%	75 - 125
			Acid Extractable Nickel (Ni)	2024/11/07		95	%	75 - 125
			Acid Extractable Selenium (Se)	2024/11/07		97	%	75 - 125
			Acid Extractable Silver (Ag)	2024/11/07		91	%	75 - 125
			Acid Extractable Thallium (Tl)	2024/11/07		94	%	75 - 125
			Acid Extractable Uranium (U)	2024/11/07		96	%	75 - 125
			Acid Extractable Vanadium (V)	2024/11/07		97	%	75 - 125
			Acid Extractable Zinc (Zn)	2024/11/07		97	%	75 - 125
			Acid Extractable Mercury (Hg)	2024/11/07		91	%	75 - 125
9751740	JWK	Spiked Blank	Acid Extractable Antimony (Sb)	2024/11/07		100	%	80 - 120
			Acid Extractable Arsenic (As)	2024/11/07		96	%	80 - 120
			Acid Extractable Barium (Ba)	2024/11/07		99	%	80 - 120
			Acid Extractable Beryllium (Be)	2024/11/07		95	%	80 - 120
			Acid Extractable Boron (B)	2024/11/07		97	%	80 - 120
			Acid Extractable Cadmium (Cd)	2024/11/07		95	%	80 - 120
			Acid Extractable Chromium (Cr)	2024/11/07		94	%	80 - 120
			Acid Extractable Cobalt (Co)	2024/11/07		93	%	80 - 120
			Acid Extractable Copper (Cu)	2024/11/07		96	%	80 - 120
			Acid Extractable Lead (Pb)	2024/11/07		93	%	80 - 120
			Acid Extractable Molybdenum (Mo)	2024/11/07		90	%	80 - 120
			Acid Extractable Nickel (Ni)	2024/11/07		97	%	80 - 120
			Acid Extractable Selenium (Se)	2024/11/07		99	%	80 - 120
			Acid Extractable Silver (Ag)	2024/11/07		91	%	80 - 120
			Acid Extractable Thallium (Tl)	2024/11/07		96	%	80 - 120
			Acid Extractable Uranium (U)	2024/11/07		97	%	80 - 120
			Acid Extractable Vanadium (V)	2024/11/07		96	%	80 - 120
			Acid Extractable Zinc (Zn)	2024/11/07		100	%	80 - 120
			Acid Extractable Mercury (Hg)	2024/11/07		92	%	80 - 120
9751740	JWK	Method Blank	Acid Extractable Antimony (Sb)	2024/11/07	<0.20		ug/g	
			Acid Extractable Arsenic (As)	2024/11/07	<1.0		ug/g	
			Acid Extractable Barium (Ba)	2024/11/07	<0.50		ug/g	
			Acid Extractable Beryllium (Be)	2024/11/07	<0.20		ug/g	



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9751740	JWK	RPD	Acid Extractable Boron (B)	2024/11/07	<5.0			ug/g	
			Acid Extractable Cadmium (Cd)	2024/11/07	<0.10			ug/g	
			Acid Extractable Chromium (Cr)	2024/11/07	<1.0			ug/g	
			Acid Extractable Cobalt (Co)	2024/11/07	<0.10			ug/g	
			Acid Extractable Copper (Cu)	2024/11/07	<0.50			ug/g	
			Acid Extractable Lead (Pb)	2024/11/07	<1.0			ug/g	
			Acid Extractable Molybdenum (Mo)	2024/11/07	<0.50			ug/g	
			Acid Extractable Nickel (Ni)	2024/11/07	<0.50			ug/g	
			Acid Extractable Selenium (Se)	2024/11/07	<0.50			ug/g	
			Acid Extractable Silver (Ag)	2024/11/07	<0.20			ug/g	
			Acid Extractable Thallium (Tl)	2024/11/07	<0.050			ug/g	
			Acid Extractable Uranium (U)	2024/11/07	<0.050			ug/g	
			Acid Extractable Vanadium (V)	2024/11/07	<5.0			ug/g	
			Acid Extractable Zinc (Zn)	2024/11/07	<5.0			ug/g	
			Acid Extractable Mercury (Hg)	2024/11/07	<0.050			ug/g	
			Acid Extractable Antimony (Sb)	2024/11/07	NC		%	30	
			Acid Extractable Arsenic (As)	2024/11/07	NC		%	30	
			Acid Extractable Barium (Ba)	2024/11/07	1.4		%	30	
			Acid Extractable Beryllium (Be)	2024/11/07	NC		%	30	
			Acid Extractable Boron (B)	2024/11/07	NC		%	30	
			Acid Extractable Cadmium (Cd)	2024/11/07	NC		%	30	
			Acid Extractable Chromium (Cr)	2024/11/07	4.0		%	30	
			Acid Extractable Cobalt (Co)	2024/11/07	0.86		%	30	
			Acid Extractable Copper (Cu)	2024/11/07	0.87		%	30	
			Acid Extractable Lead (Pb)	2024/11/07	3.2		%	30	
			Acid Extractable Molybdenum (Mo)	2024/11/07	NC		%	30	
			Acid Extractable Nickel (Ni)	2024/11/07	0.61		%	30	
			Acid Extractable Selenium (Se)	2024/11/07	NC		%	30	
			Acid Extractable Silver (Ag)	2024/11/07	NC		%	30	
			Acid Extractable Thallium (Tl)	2024/11/07	NC		%	30	
			Acid Extractable Uranium (U)	2024/11/07	5.5		%	30	
			Acid Extractable Vanadium (V)	2024/11/07	0.015		%	30	
			Acid Extractable Zinc (Zn)	2024/11/07	6.2		%	30	
			Acid Extractable Mercury (Hg)	2024/11/07	NC		%	30	
9751996	TLG	Matrix Spike	Hot Water Ext. Boron (B)	2024/11/08		102	%	75 - 125	
9751996	TLG	Spiked Blank	Hot Water Ext. Boron (B)	2024/11/08		93	%	75 - 125	
9751996	TLG	Method Blank	Hot Water Ext. Boron (B)	2024/11/08	<0.050		ug/g		
9751996	TLG	RPD	Hot Water Ext. Boron (B)	2024/11/08	8.9		%	40	
9752069	SBS	Matrix Spike [AHVP86-01]	Chromium (VI)	2024/11/07		53 (2)	%	70 - 130	
9752069	SBS	Spiked Blank	Chromium (VI)	2024/11/07		94	%	80 - 120	
9752069	SBS	Method Blank	Chromium (VI)	2024/11/07	<0.18		ug/g		
9752069	SBS	RPD [AHVP86-01]	Chromium (VI)	2024/11/07	NC		%	35	
9752456	GTK	Spiked Blank	Conductivity	2024/11/08		102	%	90 - 110	
9752456	GTK	Method Blank	Conductivity	2024/11/08	<0.002		mS/cm		
9752456	GTK	RPD	Conductivity	2024/11/08	1.5		%	10	
9752688	ANF	Matrix Spike	Hot Water Ext. Boron (B)	2024/11/08		103	%	75 - 125	
9752688	ANF	Spiked Blank	Hot Water Ext. Boron (B)	2024/11/08		99	%	75 - 125	
9752688	ANF	Method Blank	Hot Water Ext. Boron (B)	2024/11/08	<0.050		ug/g		
9752688	ANF	RPD	Hot Water Ext. Boron (B)	2024/11/08	NC		%	40	
9753786	GYA	Matrix Spike [AHVP86-01]	WAD Cyanide (Free)	2024/11/08		94	%	75 - 125	
9753786	GYA	Spiked Blank	WAD Cyanide (Free)	2024/11/08		105	%	80 - 120	
9753786	GYA	Method Blank	WAD Cyanide (Free)	2024/11/08	<0.01		ug/g		



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9753786	GYA	RPD [AHVP86-01]	WAD Cyanide (Free)	2024/11/08	NC		%	35
9753978	KIT	Spiked Blank	Conductivity	2024/11/08		104	%	90 - 110
9753978	KIT	Method Blank	Conductivity	2024/11/08	<0.002		mS/cm	
9753978	KIT	RPD [AHVP85-01]	Conductivity	2024/11/08	1.7		%	10
9754484	AAI	Spiked Blank	1,1-Difluorobenzene	2024/11/08		102	%	60 - 140
			4-Bromofluorobenzene	2024/11/08		100	%	60 - 140
			D10-o-Xylene	2024/11/08		102	%	60 - 140
			D4-1,2-Dichloroethane	2024/11/08		97	%	60 - 140
			Benzene	2024/11/08		93	%	50 - 140
			Toluene	2024/11/08		89	%	50 - 140
			Ethylbenzene	2024/11/08		102	%	50 - 140
			o-Xylene	2024/11/08		98	%	50 - 140
			p+m-Xylene	2024/11/08		95	%	50 - 140
			F1 (C6-C10)	2024/11/08		102	%	80 - 120
9754484	AAI	RPD	Benzene	2024/11/08	2.5		%	50
			Toluene	2024/11/08	1.8		%	50
			Ethylbenzene	2024/11/08	2.1		%	50
			o-Xylene	2024/11/08	3.0		%	50
			p+m-Xylene	2024/11/08	2.2		%	50
			F1 (C6-C10)	2024/11/08	2.8		%	30
			Benzene	2024/11/08	NC		%	50
			Toluene	2024/11/08	NC		%	50
			Ethylbenzene	2024/11/08	NC		%	50
			o-Xylene	2024/11/08	NC		%	50
			p+m-Xylene	2024/11/08	NC		%	50
			Total Xylenes	2024/11/08	NC		%	50
			F1 (C6-C10)	2024/11/08	NC		%	30
			F1 (C6-C10) - BTEX	2024/11/08	NC		%	30
9754484	AAI	Method Blank	1,4 Difluorobenzene	2024/11/08		104	%	60 - 140
			4-Bromofluorobenzene	2024/11/08		97	%	60 - 140
			D10-o-Xylene	2024/11/08		100	%	60 - 140
			D4-1,2-Dichloroethane	2024/11/08		97	%	60 - 140
			Benzene	2024/11/08	<0.020		ug/g	
			Toluene	2024/11/08	<0.020		ug/g	
			Ethylbenzene	2024/11/08	<0.020		ug/g	
			o-Xylene	2024/11/08	<0.020		ug/g	
			p+m-Xylene	2024/11/08	<0.040		ug/g	
			Total Xylenes	2024/11/08	<0.040		ug/g	
			F1 (C6-C10)	2024/11/08	<10		ug/g	
			F1 (C6-C10) - BTEX	2024/11/08	<10		ug/g	
9754639	KIT	Spiked Blank	Available (CaCl2) pH	2024/11/08		100	%	97 - 103
9754639	KIT	RPD [AHVP86-01]	Available (CaCl2) pH	2024/11/08	0.45		%	N/A
9755082	MSZ	Matrix Spike	o-Terphenyl	2024/11/10		106	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/11/10		106	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2024/11/10		107	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2024/11/10		101	%	60 - 140
9755082	MSZ	Spiked Blank	o-Terphenyl	2024/11/10		102	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/11/10		102	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2024/11/10		103	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2024/11/10		97	%	80 - 120
9755082	MSZ	Method Blank	o-Terphenyl	2024/11/10		101	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/11/10	<7.0		ug/g	



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9755082	MSZ	RPD			F3 (C16-C34 Hydrocarbons)	2024/11/10	<50		ug/g	
					F4 (C34-C50 Hydrocarbons)	2024/11/10	<50		ug/g	
					F2 (C10-C16 Hydrocarbons)	2024/11/10	NC	%	30	
					F3 (C16-C34 Hydrocarbons)	2024/11/10	NC	%	30	
					F4 (C34-C50 Hydrocarbons)	2024/11/10	NC	%	30	
9774757	JTS	RPD			Moisture	2024/11/19	2.5		%	20
9780503	SBS	Matrix Spike			Chromium (VI)	2024/11/21		86	%	70 - 130
9780503	SBS	Spiked Blank			Chromium (VI)	2024/11/21		93	%	80 - 120
9780503	SBS	Method Blank			Chromium (VI)	2024/11/21	<0.18		ug/g	
9780503	SBS	RPD			Chromium (VI)	2024/11/21	NC	%	35	
9780505	KIT	Spiked Blank			Available (CaCl2) pH	2024/11/21		100	%	97 - 103
9780505	KIT	RPD			Available (CaCl2) pH	2024/11/21	0.16		%	N/A
9781284	GYA	Matrix Spike			WAD Cyanide (Free)	2024/11/22		91	%	75 - 125
9781284	GYA	Spiked Blank			WAD Cyanide (Free)	2024/11/22		108	%	80 - 120
9781284	GYA	Method Blank			WAD Cyanide (Free)	2024/11/22	<0.01		ug/g	
9781284	GYA	RPD			WAD Cyanide (Free)	2024/11/22	NC	%	35	
9781742	MUC	RPD			Moisture	2024/11/21	2.5		%	20
9781962	JJE	Matrix Spike			o-Terphenyl	2024/11/22		91	%	60 - 140
					F2 (C10-C16 Hydrocarbons)	2024/11/22		97	%	60 - 140
					F3 (C16-C34 Hydrocarbons)	2024/11/22		100	%	60 - 140
					F4 (C34-C50 Hydrocarbons)	2024/11/22		94	%	60 - 140
					o-Terphenyl	2024/11/22		94	%	60 - 140
9781962	JJE	Spiked Blank			F2 (C10-C16 Hydrocarbons)	2024/11/22		98	%	80 - 120
					F3 (C16-C34 Hydrocarbons)	2024/11/22		101	%	80 - 120
					F4 (C34-C50 Hydrocarbons)	2024/11/22		94	%	80 - 120
					o-Terphenyl	2024/11/22		94	%	60 - 140
					F2 (C10-C16 Hydrocarbons)	2024/11/22	<7.0		ug/g	
9781962	JJE	Method Blank			F3 (C16-C34 Hydrocarbons)	2024/11/22	<50		ug/g	
					F4 (C34-C50 Hydrocarbons)	2024/11/22	<50		ug/g	
					F2 (C10-C16 Hydrocarbons)	2024/11/22	NC	%	30	
					F3 (C16-C34 Hydrocarbons)	2024/11/22	NC	%	30	
					F4 (C34-C50 Hydrocarbons)	2024/11/22	NC	%	30	
9781986	MKS	Matrix Spike			D10-Anthracene	2024/11/22		88	%	50 - 130
					D14-Terphenyl (FS)	2024/11/22		105	%	50 - 130
					D8-Acenaphthylene	2024/11/22		82	%	50 - 130
					Acenaphthene	2024/11/22		85	%	50 - 130
					Acenaphthylene	2024/11/22		83	%	50 - 130
					Anthracene	2024/11/22		89	%	50 - 130
					Benzo(a)anthracene	2024/11/22		96	%	50 - 130
					Benzo(a)pyrene	2024/11/22		93	%	50 - 130
					Benzo(b/j)fluoranthene	2024/11/22		92	%	50 - 130
					Benzo(g,h,i)perylene	2024/11/22		94	%	50 - 130
					Benzo(k)fluoranthene	2024/11/22		96	%	50 - 130
					Chrysene	2024/11/22		94	%	50 - 130
					Dibenzo(a,h)anthracene	2024/11/22		105	%	50 - 130
					Fluoranthene	2024/11/22		96	%	50 - 130
					Fluorene	2024/11/22		94	%	50 - 130
					Indeno(1,2,3-cd)pyrene	2024/11/22		93	%	50 - 130
					1-Methylnaphthalene	2024/11/22		77	%	50 - 130
					2-Methylnaphthalene	2024/11/22		75	%	50 - 130
					Naphthalene	2024/11/22		64	%	50 - 130
					Phenanthrene	2024/11/22		90	%	50 - 130



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9781986	MKS	Spiked Blank	Pyrene	2024/11/22	96	%	50 - 130	
			D10-Anthracene	2024/11/22	88	%	50 - 130	
			D14-Terphenyl (FS)	2024/11/22	103	%	50 - 130	
			D8-Acenaphthylene	2024/11/22	85	%	50 - 130	
			Acenaphthene	2024/11/22	89	%	50 - 130	
			Acenaphthylene	2024/11/22	89	%	50 - 130	
			Anthracene	2024/11/22	90	%	50 - 130	
			Benzo(a)anthracene	2024/11/22	95	%	50 - 130	
			Benzo(a)pyrene	2024/11/22	93	%	50 - 130	
			Benzo(b/j)fluoranthene	2024/11/22	93	%	50 - 130	
			Benzo(g,h,i)perylene	2024/11/22	95	%	50 - 130	
			Benzo(k)fluoranthene	2024/11/22	94	%	50 - 130	
			Chrysene	2024/11/22	95	%	50 - 130	
			Dibenzo(a,h)anthracene	2024/11/22	103	%	50 - 130	
			Fluoranthene	2024/11/22	97	%	50 - 130	
			Fluorene	2024/11/22	96	%	50 - 130	
			Indeno(1,2,3-cd)pyrene	2024/11/22	93	%	50 - 130	
			1-Methylnaphthalene	2024/11/22	91	%	50 - 130	
			2-Methylnaphthalene	2024/11/22	90	%	50 - 130	
			Naphthalene	2024/11/22	86	%	50 - 130	
			Phenanthrene	2024/11/22	92	%	50 - 130	
			Pyrene	2024/11/22	97	%	50 - 130	
9781986	MKS	Method Blank	D10-Anthracene	2024/11/22	93	%	50 - 130	
			D14-Terphenyl (FS)	2024/11/22	107	%	50 - 130	
			D8-Acenaphthylene	2024/11/22	86	%	50 - 130	
			Acenaphthene	2024/11/22	<0.0050	ug/g		
			Acenaphthylene	2024/11/22	<0.0050	ug/g		
			Anthracene	2024/11/22	<0.0050	ug/g		
			Benzo(a)anthracene	2024/11/22	<0.0050	ug/g		
			Benzo(a)pyrene	2024/11/22	<0.0050	ug/g		
			Benzo(b/j)fluoranthene	2024/11/22	<0.0050	ug/g		
			Benzo(g,h,i)perylene	2024/11/22	<0.0050	ug/g		
			Benzo(k)fluoranthene	2024/11/22	<0.0050	ug/g		
			Chrysene	2024/11/22	<0.0050	ug/g		
			Dibenzo(a,h)anthracene	2024/11/22	<0.0050	ug/g		
			Fluoranthene	2024/11/22	<0.0050	ug/g		
			Fluorene	2024/11/22	<0.0050	ug/g		
			Indeno(1,2,3-cd)pyrene	2024/11/22	<0.0050	ug/g		
			1-Methylnaphthalene	2024/11/22	<0.0050	ug/g		
			2-Methylnaphthalene	2024/11/22	<0.0050	ug/g		
			Naphthalene	2024/11/22	<0.0050	ug/g		
			Phenanthrene	2024/11/22	<0.0050	ug/g		
			Pyrene	2024/11/22	<0.0050	ug/g		
9781986	MKS	RPD	Acenaphthene	2024/11/22	NC	%	40	
			Acenaphthylene	2024/11/22	NC	%	40	
			Anthracene	2024/11/22	NC	%	40	
			Benzo(a)anthracene	2024/11/22	NC	%	40	
			Benzo(a)pyrene	2024/11/22	NC	%	40	
			Benzo(b/j)fluoranthene	2024/11/22	NC	%	40	
			Benzo(g,h,i)perylene	2024/11/22	NC	%	40	
			Benzo(k)fluoranthene	2024/11/22	NC	%	40	
			Chrysene	2024/11/22	NC	%	40	



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Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
				Dibenzo(a,h)anthracene	2024/11/22	NC		%	40
				Fluoranthene	2024/11/22	NC		%	40
				Fluorene	2024/11/22	NC		%	40
				Indeno(1,2,3-cd)pyrene	2024/11/22	NC		%	40
				1-Methylnaphthalene	2024/11/22	NC		%	40
				2-Methylnaphthalene	2024/11/22	NC		%	40
				Naphthalene	2024/11/22	NC		%	40
				Phenanthrene	2024/11/22	NC		%	40
				Pyrene	2024/11/22	NC		%	40
9782078	DAN	Matrix Spike		1,4-Difluorobenzene	2024/11/22	103	%	60 - 140	
				4-Bromofluorobenzene	2024/11/22	110	%	60 - 140	
				D10-o-Xylene	2024/11/22	90	%	60 - 140	
				D4-1,2-Dichloroethane	2024/11/22	98	%	60 - 140	
				Benzene	2024/11/22	NC	%	50 - 140	
				Toluene	2024/11/22	NC	%	50 - 140	
				Ethylbenzene	2024/11/22	NC	%	50 - 140	
				o-Xylene	2024/11/22	NC	%	50 - 140	
				p+m-Xylene	2024/11/22	NC	%	50 - 140	
				F1 (C6-C10)	2024/11/22	NC	%	60 - 140	
9782078	DAN	Spiked Blank		1,4-Difluorobenzene	2024/11/22	110	%	60 - 140	
				4-Bromofluorobenzene	2024/11/22	101	%	60 - 140	
				D10-o-Xylene	2024/11/22	100	%	60 - 140	
				D4-1,2-Dichloroethane	2024/11/22	97	%	60 - 140	
				Benzene	2024/11/22	95	%	50 - 140	
				Toluene	2024/11/22	92	%	50 - 140	
				Ethylbenzene	2024/11/22	98	%	50 - 140	
				o-Xylene	2024/11/22	93	%	50 - 140	
				p+m-Xylene	2024/11/22	92	%	50 - 140	
				F1 (C6-C10)	2024/11/22	97	%	80 - 120	
9782078	DAN	Method Blank		1,4-Difluorobenzene	2024/11/22	108	%	60 - 140	
				4-Bromofluorobenzene	2024/11/22	94	%	60 - 140	
				D10-o-Xylene	2024/11/22	98	%	60 - 140	
				D4-1,2-Dichloroethane	2024/11/22	96	%	60 - 140	
				Benzene	2024/11/22	<0.020		ug/g	
				Toluene	2024/11/22	<0.020		ug/g	
				Ethylbenzene	2024/11/22	<0.020		ug/g	
				o-Xylene	2024/11/22	<0.020		ug/g	
				p+m-Xylene	2024/11/22	<0.040		ug/g	
				Total Xylenes	2024/11/22	<0.040		ug/g	
				F1 (C6-C10)	2024/11/22	<10		ug/g	
				F1 (C6-C10) - BTEX	2024/11/22	<10		ug/g	
9782078	DAN	RPD		Benzene	2024/11/22	NC	%	50	
				Toluene	2024/11/22	NC	%	50	
				Ethylbenzene	2024/11/22	NC	%	50	
				o-Xylene	2024/11/22	NC	%	50	
				p+m-Xylene	2024/11/22	NC	%	50	
				Total Xylenes	2024/11/22	NC	%	50	
				F1 (C6-C10)	2024/11/22	24	%	30	
				F1 (C6-C10) - BTEX	2024/11/22	24	%	30	
9782284	TLG	Matrix Spike		Hot Water Ext. Boron (B)	2024/11/22	108	%	75 - 125	
9782284	TLG	Spiked Blank		Hot Water Ext. Boron (B)	2024/11/22	103	%	75 - 125	
9782284	TLG	Method Blank		Hot Water Ext. Boron (B)	2024/11/22	<0.050		ug/g	



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9782284		TLG	RPD	Hot Water Ext. Boron (B)	2024/11/22	NC		%	40
9782729		JWK	Matrix Spike	Acid Extractable Antimony (Sb)	2024/11/22	109		%	75 - 125
				Acid Extractable Arsenic (As)	2024/11/22	101		%	75 - 125
				Acid Extractable Barium (Ba)	2024/11/22	NC		%	75 - 125
				Acid Extractable Beryllium (Be)	2024/11/22	106		%	75 - 125
				Acid Extractable Boron (B)	2024/11/22	90		%	75 - 125
				Acid Extractable Cadmium (Cd)	2024/11/22	106		%	75 - 125
				Acid Extractable Chromium (Cr)	2024/11/22	99		%	75 - 125
				Acid Extractable Cobalt (Co)	2024/11/22	101		%	75 - 125
				Acid Extractable Copper (Cu)	2024/11/22	99		%	75 - 125
				Acid Extractable Lead (Pb)	2024/11/22	NC		%	75 - 125
				Acid Extractable Molybdenum (Mo)	2024/11/22	96		%	75 - 125
				Acid Extractable Nickel (Ni)	2024/11/22	104		%	75 - 125
				Acid Extractable Selenium (Se)	2024/11/22	102		%	75 - 125
				Acid Extractable Silver (Ag)	2024/11/22	100		%	75 - 125
				Acid Extractable Thallium (Tl)	2024/11/22	104		%	75 - 125
				Acid Extractable Uranium (U)	2024/11/22	108		%	75 - 125
				Acid Extractable Vanadium (V)	2024/11/22	NC		%	75 - 125
				Acid Extractable Zinc (Zn)	2024/11/22	NC		%	75 - 125
				Acid Extractable Mercury (Hg)	2024/11/22	101		%	75 - 125
9782729		IWK	Spiked Blank	Acid Extractable Antimony (Sb)	2024/11/22	104		%	80 - 120
				Acid Extractable Arsenic (As)	2024/11/22	102		%	80 - 120
				Acid Extractable Barium (Ba)	2024/11/22	97		%	80 - 120
				Acid Extractable Beryllium (Be)	2024/11/22	99		%	80 - 120
				Acid Extractable Boron (B)	2024/11/22	94		%	80 - 120
				Acid Extractable Cadmium (Cd)	2024/11/22	98		%	80 - 120
				Acid Extractable Chromium (Cr)	2024/11/22	94		%	80 - 120
				Acid Extractable Cobalt (Co)	2024/11/22	97		%	80 - 120
				Acid Extractable Copper (Cu)	2024/11/22	95		%	80 - 120
				Acid Extractable Lead (Pb)	2024/11/22	99		%	80 - 120
				Acid Extractable Molybdenum (Mo)	2024/11/22	92		%	80 - 120
				Acid Extractable Nickel (Ni)	2024/11/22	99		%	80 - 120
				Acid Extractable Selenium (Se)	2024/11/22	101		%	80 - 120
				Acid Extractable Silver (Ag)	2024/11/22	96		%	80 - 120
				Acid Extractable Thallium (Tl)	2024/11/22	100		%	80 - 120
				Acid Extractable Uranium (U)	2024/11/22	103		%	80 - 120
				Acid Extractable Vanadium (V)	2024/11/22	97		%	80 - 120
				Acid Extractable Zinc (Zn)	2024/11/22	100		%	80 - 120
				Acid Extractable Mercury (Hg)	2024/11/22	97		%	80 - 120
9782729		JWK	Method Blank	Acid Extractable Antimony (Sb)	2024/11/22	<0.20		ug/g	
				Acid Extractable Arsenic (As)	2024/11/22	<1.0		ug/g	
				Acid Extractable Barium (Ba)	2024/11/22	<0.50		ug/g	
				Acid Extractable Beryllium (Be)	2024/11/22	<0.20		ug/g	
				Acid Extractable Boron (B)	2024/11/22	<5.0		ug/g	
				Acid Extractable Cadmium (Cd)	2024/11/22	<0.10		ug/g	
				Acid Extractable Chromium (Cr)	2024/11/22	<1.0		ug/g	
				Acid Extractable Cobalt (Co)	2024/11/22	<0.10		ug/g	
				Acid Extractable Copper (Cu)	2024/11/22	<0.50		ug/g	
				Acid Extractable Lead (Pb)	2024/11/22	<1.0		ug/g	
				Acid Extractable Molybdenum (Mo)	2024/11/22	<0.50		ug/g	
				Acid Extractable Nickel (Ni)	2024/11/22	<0.50		ug/g	
				Acid Extractable Selenium (Se)	2024/11/22	<0.50		ug/g	



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9782729	JWK	RPD	Acid Extractable Silver (Ag)	2024/11/22	<0.20		ug/g	
			Acid Extractable Thallium (Tl)	2024/11/22	<0.050		ug/g	
			Acid Extractable Uranium (U)	2024/11/22	<0.050		ug/g	
			Acid Extractable Vanadium (V)	2024/11/22	<5.0		ug/g	
			Acid Extractable Zinc (Zn)	2024/11/22	<5.0		ug/g	
			Acid Extractable Mercury (Hg)	2024/11/22	<0.050		ug/g	
			Acid Extractable Antimony (Sb)	2024/11/22	21	%	30	
			Acid Extractable Arsenic (As)	2024/11/22	5.3	%	30	
			Acid Extractable Barium (Ba)	2024/11/22	3.0	%	30	
			Acid Extractable Beryllium (Be)	2024/11/22	8.3	%	30	
			Acid Extractable Boron (B)	2024/11/22	NC	%	30	
			Acid Extractable Cadmium (Cd)	2024/11/22	4.9	%	30	
			Acid Extractable Chromium (Cr)	2024/11/22	2.1	%	30	
			Acid Extractable Cobalt (Co)	2024/11/22	0.79	%	30	
			Acid Extractable Copper (Cu)	2024/11/22	2.0	%	30	
			Acid Extractable Lead (Pb)	2024/11/22	12	%	30	
			Acid Extractable Molybdenum (Mo)	2024/11/22	11	%	30	
			Acid Extractable Nickel (Ni)	2024/11/22	1.9	%	30	
			Acid Extractable Selenium (Se)	2024/11/22	4.1	%	30	
			Acid Extractable Silver (Ag)	2024/11/22	NC	%	30	
			Acid Extractable Thallium (Tl)	2024/11/22	2.0	%	30	
			Acid Extractable Uranium (U)	2024/11/22	1.8	%	30	
			Acid Extractable Vanadium (V)	2024/11/22	1.6	%	30	
			Acid Extractable Zinc (Zn)	2024/11/22	1.8	%	30	
			Acid Extractable Mercury (Hg)	2024/11/22	2.8	%	30	
9782786	KIT	Spiked Blank	Conductivity	2024/11/22		103	%	90 - 110
9782786	KIT	Method Blank	Conductivity	2024/11/22	<0.002		mS/cm	
9782786	KIT	RPD	Conductivity	2024/11/22	8.6	%	10	
9782978	JWK	Matrix Spike	Acid Extractable Mercury (Hg)	2024/11/22		93	%	75 - 125
9782978	JWK	Spiked Blank	Acid Extractable Mercury (Hg)	2024/11/22		100	%	80 - 120
9782978	JWK	Method Blank	Acid Extractable Mercury (Hg)	2024/11/22	<0.050		ug/g	
9782978	JWK	RPD	Acid Extractable Mercury (Hg)	2024/11/22	NC	%	30	

N/A = Not Applicable

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

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

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

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

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

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

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

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

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



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### VALIDATION SIGNATURE PAGE

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

*Cristina Carriere*

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Cristina Carriere, Senior Scientific Specialist

*Louise A. Harding*

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Louise Harding, Scientific Specialist

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

Bureau Veritas  
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INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:	
Company Name: <b>#3072 Stantec Consulting Ltd</b>	Contact Name: <b>Marissa Lusito</b>	Occupation #: <b>C41673</b>	Task #: <b></b>	COC #: <b></b>	Time Spent in Soil: <b>0</b>
Address: <b>675 Cochrane Dr. W, West Tower Suite 300 Markham ON L3R 0B3</b>	Phone: <b>(905) 944-7777</b>	Project #: <b></b>	Profile/Centre: <b></b>	Project Manager: <b>Juve Clement</b>	Comments: <b></b>
Email: <b>SAPM@bnac.ca@stantec.com</b>	Fax: <b>1905) 479-9326</b>	Site #: <b></b>	Site Address: <b></b>	Comments: <b></b>	Comments: <b></b>
<b>MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY</b>					
Regulation 151(2011)					
Special Instructions					
<input checked="" type="checkbox"/> Fresh/Freshwater <input type="checkbox"/> Medium/Fine Grained <input type="checkbox"/> Coarse <input type="checkbox"/> Storm Sewer Byflow <input type="checkbox"/> Ring 556 <input type="checkbox"/> M.S.A. <input type="checkbox"/> Macroporous <input type="checkbox"/> P.W.D.O. <input type="checkbox"/> Reg. 405 Table <input type="checkbox"/> Other _____					
Inclusion Criteria on Certificate of Analysis (WMO)? <b>N</b>					
Sample (Barcode Label)	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Comments
1	MW1 - 2	24/10/29	1150	Soil	<input checked="" type="checkbox"/> <b>4</b>
2	MW1 - 5	24/10/29	1325	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <b>4</b>
3	MW2 - 1	24/10/28	0950	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <b>4</b>
4	MW2 - 5	24/10/28	1025	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <b>4</b>
5	BH8 - 3	24/10/28	1510	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <b>3</b>
6	QC - 1	—	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <b>3</b>
7	BH8 - 5	1525	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <b>3</b>
8	MW9 - 5	0915	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <b>3</b>
9	MW9 - 6	0925	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <b>3</b>
10	MW9 - 13	1120	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <b>3</b>
* RELINQUISHED BY (Signature/Print)					
Date (MM/DD/YY) <b>24/10/28</b>		Time <b>1115</b>	RECEIVED BY: (Signature/Print) <b>S. Lusito</b>	Date: (MM/DD/YY) <b>25/10/28</b>	Time <b>1140</b>
* DATA USED AND NOT SUBMITTED					
Time Spent in Soil <b>0</b>		Temperature (°C) on Return <b>21.7/15</b>	Laboratory Use Only <b>0</b>	Comments: <b></b>	Comments: <b></b>
<input checked="" type="checkbox"/> White Bureau Veritas <input type="checkbox"/> Yellow Bureau Veritas <b>15/10/28</b> <b>OL</b> <b>16</b>					

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

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

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

Bureau Veritas Canada (2018) Inc.

CAY6747  
2024/11/04 15:40

 Signature block

Bureau Veritas Inc.  
677 Kipling Ave, Etobicoke, Ontario Canada L5N 2L8 Tel:(647) 617-5770 Toll-free 800-553-0266 Fax:(647) 817-5777 www.bver.ca

### STANTEC CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	Stantec Consulting Ltd	Location #:	C41673	Business Veritas Inv. #:	
Accounts Payable	Contact Name: Marissa Luisito	Project #:		Project Name:	Boleto Outfall
Address:	875 Conchranne Dr W, West Tower Suite 300	Site #:		Date:	20230925
Markham ON L3R 0B8	Phone:	Fax:	(905) 473-9326	Comments:	
Phone:	<a href="mailto:SAPinvb@Veritas.com">SAPinvb@Veritas.com</a>	Email:	<a href="mailto:marissa.luisito@stantec.com">marissa.luisito@stantec.com</a>		
<b>NOE REGULATED DRINKING WATER (OR WATER INTENDED FOR HUMAN CONSUMPTION) MUST BE SUBMITTED ON THE SURFACE VENTED DRINKING WATER CHAIN OF CUSTODY</b>					
Regulation 161 (2011)		Special Instructions:			
Table 1	<input type="checkbox"/> Residential	<input type="checkbox"/> Non-Residential	<input type="checkbox"/> Surface Supply / Inflow	<input type="checkbox"/> Sewer Supply / Outflow	<input type="checkbox"/> No Reg.
Table 2	<input type="checkbox"/> Industrial	<input type="checkbox"/> Commercial	<input checked="" type="checkbox"/> For RBC	<input type="checkbox"/> Not Applicable	<input type="checkbox"/> Not Applicable
Table 3	<input type="checkbox"/> Approval	<input type="checkbox"/> None	<input type="checkbox"/> None		
Indicate Criteria on Certificate of Analysis (COA)?					
Sample Barcode Label	Sample Description / Concentration	Date Sampled	Matrix	Comments:	
1	MW1 10-5	24/10/29	09:20	5011	
2	MW1 1-1		14:01		4 HOLD
3	MW1 -3		11:55		4 HOLD
4	MW1 1-4		12:05		4 HOLD
5	MW1 -6		13:35		4 HOLD
6	MW1 1-7		13:40		4 HOLD
7	MW1 1-9		14:25		4 HOLD
8	MW1 1-10		14:40		4 HOLD
9	MW1 1-11		15:00		4 HOLD
10	MW1 1-12		15:15		4 HOLD
*RELIQUIDIFIED BY: Signature/Fing.				Date (YY/MM/DD)	Time
RECEIVED BY: Signature/Print				20230925 09:51	20230925 09:51
*RELIQUIDISHED BY: Signature/Fing		Date (YY/MM/DD)	Time	Laboratory Use Only	
				Customer Seal	Customer Seal Present
				Yes	No
				White	Yellow
UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY DOCUMENT IS SUBJECT TO BUREAU VERITAS' STANDARD TERMS AND CONDITIONS, WHICH CAN BE FOUND ON OUR WEBSITE AT WWW.BVER.COM OR BY REQUESTING A COPY FROM OUR CUSTOMER SERVICE TEAM AT <a href="mailto:APINVB@BVER.COM">APINVB@BVER.COM</a> .					
IT IS THE RESPONSIBILITY OF THE RELIQUIDIFIER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL FAIR DELAYS.					
** SAMPLE CONTAINER, PRESERVATION, HOLD TIME, AND PACKAGE INFORMATION LABORATORY/RESOURCES/CHART-CUSTODY-PIRS-COCS.					
Bureau Veritas Canada (2018) Inc.					

C4Y6747  
2024/11/04 15:40

Bureau Veritas  
8740 Guelph Line, Waterloo, Ontario N2L 2B2 Tel: (519) 885-0268 Fax: (519) 885-0269 Tel: 1-877-5777 www.bv.ca

**STANTEC CHAIN OF CUSTODY RECORD**

Page 3 of 6

INVOICE INFORMATION:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: <b>#3072 Stantec Consulting Ltd</b>	Contact Name: <b>Marissa Lusito</b>	Quotation #: <b>C41673</b>	Bureau Veritas Job #: <b>1011663</b>	Bottle Order #: <b>1011663</b>	Bottle Order #: <b>1011663</b>
Address: <b>675 Cochran Dr W West Tower Suite 300 Markham ON L3R 0B8</b>	Phone: <b>(905) 941-7777</b>	Task #: <b>Frac</b>	Project #: <b>CDC #</b>	Project Manager: <b>Jude Gartner</b>	Project Manager: <b>Jude Gartner</b>
Email: <b>SAPInvoices@Stantec.com</b>	Fac:	Site #: <b>H4</b>	Sampled By: <b>Marissa Lusito@stantec.com</b>	ANALYSIS REQUESTED (PLEASE BE SPECIFIC):	Turnaround Time (TAT) Requirements: <b>Please provide a turn-around time for full details</b>
MORE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRAINKING WATER CHAIN OF CUSTODY		Special Instructions:		Regular (Standard) TAT: <b>72H (if no sample / if Rush TAT is not specified)</b>	
Regulation 163 (2011)		Field Features (please describe): <b>Methyls / HG / CR / V</b>		Detailed TAT: <b>2 Working days or less</b>	
Client Requirements: <b>Reg 569, System Server By-law Municipality Req 405.1(a)(c) PMV2X3 Other</b>		Q-Rings 15A Laboratory & Analytical Services Inc. Q-Rings 15A VOCs by-HS & F-15A (50)		Please note: Standard TAT for certain tests such as 600 and 6000mg/L tests are > 5 days - contact your Project Manager for details.	
Include Criteria on Certificate of Analysis (Y/N)? <b>N</b>		Q-Rings 15A VOCs by-HS F-15A (50) Q-Rings 15A PAHs (50g)		Add Special Rush TAT (if applicable to entire submission): <b>Date Required: _____ Rush Consultant Number: _____ Rush Fee: _____ Rush Add'l Fee: _____</b>	
Sample Barcode Label		Date Sampled:	Time Sampled:	Comments:	
1	MW 2-2	24/10/18	1000	<b>4 HOLD</b>	
2	MW 2-3	1005		<b>4 HOLD</b>	
3	MW 2-4	1020		<b>4 HOLD</b>	
4	MW 2-6	1035		<b>4 HOLD</b>	
5	MW 2-7	1045		<b>4 HOLD</b>	
6	MW 2-8	1055		<b>4 HOLD</b>	
7	MW 2-9	1110		<b>4 HOLD</b>	
8	MW 2-10	1120		<b>4 HOLD</b>	
9	MW 2-11	1135		<b>4 HOLD</b>	
10	MW 2-12	11205		<b>4 HOLD</b>	
REINSTATEMENT BY SIGNATURE/PRINT		Date (YYMMDD)	Time	# Items tested and not submitted	Laboratory Use Only
<b>Jude Lusito</b>		24/11/01	1115	0	Temperature (°C) or Room
					Overhead Seal
					Present:
					Initial:
					White Bureau Veritas Yellow Client
* UNLESS OTHERWISE AGREED TO IN WRITING, WORKS SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGEMENT AND ACCEPTANCE OF OUR TERMS WHERE THERE IS NO WRITING OR OUT-TERMS FOR REVIEW AT ANY TIME. A COPY OF THE BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS IS AVAILABLE UPON REQUEST.					
** IT IS THE RESPONSIBILITY OF THE FELLOWSHIPER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.					
*** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORY-RESOURCES-CHAIN-CUSTODY-FORMS-COCDS.					
Bureau Veritas Canada (2011) Inc.					

CAV6747  
2024/11/04 15:40

Bureau Veritas  
6740 Campionne Road, Mississauga, Ontario Canada L5N 2L8 Tel: 905.877.5700 Fax: 905.877.5777 www.bureauveritas.com

STANTEC CHAIN OF CUSTODY RECORD									
INVOICE INFORMATION:		REPORT INFORMATION (info from invoice):		PROJECT INFORMATION:		Laboratory Use Only:			
Company Name: #2072 Stantec Consulting Ltd Contact Name: Marissa Lusito Address: 6755 Cochrane Dr-W, West Tower Suite 300 Markham ON L3R 0B8 Phone: (905) 464-7777 Fax: (905) 475-9326 Email: SAPInvoices@stantec.com		Customer Name: Marissa Lusito Contact Name: Address: Phone: Email: Fax:		Location #: 141673 Trk #: Proj #: Proj Devt: Site #: Submtd Br: 141673		Bureau Veritas Job #: 1019863 QOC #: 141673-00-00 Julie Clercq:			
ANALYSIS REQUESTED (OR SAME, SEE SPECIFIC)  <b>Regular (Standard) TA:</b> <input type="checkbox"/> I will be available if Bureau Veritas needs to re-call me. Standard TA fee: \$750.00 per hour (not including travel time or time spent on site for sample analysis). Please note Standard TA fee is not applicable for samples where costs are > \$1000 and Bureau Veritas fees are > 5% above standard TA fee. If analytical results are not available within 10 days, Bureau Veritas will charge an additional 10% of the original fee.  <b>Job Specific Bureau VAT (if applicable to entire submission):</b> Rush Confirmation Number: _____ Rush Confirmation Date: _____  <b>Comments:</b>									
ANALYSIS REQUESTED (OR SAME, SEE SPECIFIC)  <b>Special Instructions:</b> <input type="checkbox"/> Sample by law <input type="checkbox"/> Sample by law <input type="checkbox"/> Storm Sewer System <input type="checkbox"/> Municipal <input type="checkbox"/> Reg 403 Table <input type="checkbox"/> Other _____ N									
<b>Field Filtered (Please circle):</b> <input type="checkbox"/> Metabo/Hg/Ci Si  <b>Sample (Location) Identification:</b> Date Sampled: Time Sampled: Matrix: 1. MUN 2 - 13 20/10/26 1245: Soil 2. MUN 2 - 14 1235: 1510 3. BH 8 - 1 24/10/30 1510 4. BH 8 - 2 1510 5. BH 8 - 4 1510 6. BH 8 - 6 1510 7. BH 8 - 7 1510 8. BH 8 - 8 1510 9. MUN - 1 0830 10. MUN - 2 0845									
Received by: (Signature/Print) Date: (Y/M/D) Time: (Y/M/D) Received by: (Signature/Print) Date: (Y/M/D) Time: 24/11/01 1115 24/11/01 14:45									
* RELINQUISHED BY: (Signature/Print) Lab. (Y/N) and Bureau Veritas Seal Yes No Bureau Relinquit									
* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY DOCUMENT IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR REVIEW AT WWW.BVNA.COM/W/TERMS-OF-CUSTODY-TELEGRAMS-10985. * IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TARDY DELAYS. ** SAMPLE CONTAINER, PRESERVATION, HOLD TIME, AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/STANDARDCUSTODY-FORMS-DOCS.									
Bureau Veritas Canada Inc.									

CAY6747  
2024/11/04 15:40

Bureau Veritas  
8740 Finch Avenue, Room 300, Mississauga, Ontario L4V 2L8 Tel: (905) 871-5700 Toll free: 800-569-4520 Fax: (905) 871-5777 www.bv.ca

**STANTEC  
SERVICES**

INVOICE INFORMATION:		REPORT INFORMATION (different from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #3072 Stantec Consulting Ltd	Contact Name: Marissa Luisito	Customer Name: Marissa Luisito	Customer Address:	Job #: C41673	Bureau Veritas Job #: <input type="text"/>	Bureau Order #: <input type="text"/>	Barcode:
Address: 975 Cochran Cr W, West Tower Suite 300	Phone: (905) 844-2777	Phone: (905) 479-9326	Fax: <input type="text"/>	Project #: COC #:	Site #: <input type="text"/>	Project Manager: <input type="text"/>	Project Status: <input type="text"/>
Email: SAPInvoices@Stantec.com	Email: <input type="text"/>	Email: Marissa.Luisito@Stantec.com	Fax: <input type="text"/>	Sampled By: <input type="text"/>	Carried by: <input type="text"/>	Delivery Date: <input type="text"/>	Delivery Method: <input type="text"/>
<b>NOTES REGULATED DRINKING WATER OR WATER INTRUSION CONSUMPTION TEST REQUEST</b> <b>SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY</b>							
Regulation 143 (2011)	Other Regulations		Sample Instructions				
Table 1 <input type="checkbox"/> Waterpark <input type="checkbox"/> Household <input type="checkbox"/> Sanitary Sewer System	<input type="checkbox"/> Domestic <input type="checkbox"/> Storm Sewer System		<input type="checkbox"/> Rainwater <input type="checkbox"/> Municipal <input type="checkbox"/> Industrial <input type="checkbox"/> Other				
Table 2 <input type="checkbox"/> Institutional <input type="checkbox"/> Commercial <input type="checkbox"/> For RSC	<input type="checkbox"/> Domestic <input type="checkbox"/> Agricultural <input type="checkbox"/> Industrial <input type="checkbox"/> Other		<input type="checkbox"/> Rainwater <input type="checkbox"/> Municipal <input type="checkbox"/> Industrial <input type="checkbox"/> Other				
Table 3 <input type="checkbox"/> Residential <input type="checkbox"/> Agricultural <input type="checkbox"/> Industrial <input type="checkbox"/> Other	<input type="checkbox"/> Domestic <input type="checkbox"/> Agricultural <input type="checkbox"/> Industrial <input type="checkbox"/> Other		<input type="checkbox"/> Rainwater <input type="checkbox"/> Municipal <input type="checkbox"/> Industrial <input type="checkbox"/> Other				
<b>Inclusion Criteria on Certificate of Analysis (COA)?</b> <input checked="" type="checkbox"/>							
Sample Barcode/Label	Sample (Location) Identifier	Date Sampled	Time Sampled	Matrix	Comments		
1	MW9-3	24/10/30	08:55	Soil	3 Hold		
2	MW9-4		09:05		3 Hold		
3	MW9-7		09:35		3 Hold		
4	MW9-8		09:45		3 Hold		
5	MW9-9		10:00		3 Hold		
6	MW9-10		10:10		3 Hold		
7	MW9-11		10:25		3 Hold		
8	MW9-12		11:00		3 Hold		
9	MW9-1	24/10/29	08:45		4 Hold		
10	MW9-2		08:55		4 Hold		
RECEIVED BY: (Signature/Print)		Date: (YY/MM/DD)	Time: (MM:SS)	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time: (MM:SS)	Laboratory Use Only
		24/11/01	11:30		14/11/01	11:30	A sample was not submitted <input checked="" type="radio"/> Time Entered/Type: <input type="text"/> Signature: <input type="text"/>
*RECOGNIZED BY: (Signature/Print) Date: (YY/MM/DD) Time: (MM:SS) <input type="text"/> *UNLESS OTHERWISE NOTED TO IN WRITING, WORK SUBMITTED ON THE CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SEEING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR REVIEW AT WWW.BV.CA/TERMSANDCONDITIONS. SOURCE(S)/TERMS AND CONDITIONS * IT IS THE RESPONSIBILITY OF THE PUBLISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS. ** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BV.CA/ENVIRONMENTALLABORATORIES/RESOURCES/CHAINOFCUSTODY-FORMS-CODES							

STANTEC CHAIN OF CUSTODY RECORD  
Page 5 of 6  
Bureau Veritas Canada | 2019 Inc.

STANTEC CHAIN OF CUSTODY RECORD  
Bureau Veritas Canada | 2019 Inc.

White: Bureau Veritas Yellow: Client  
Yellow: Bureau Veritas Yellow: Client

CAY6747  
2024/11/04 15:40

Bureau Veritas  
8740 Campobello Road, Mississauga, Ontario L5N 2L0 Tel:(905) 517-5700 Fax:(905) 517-5777 www.bvna.ca

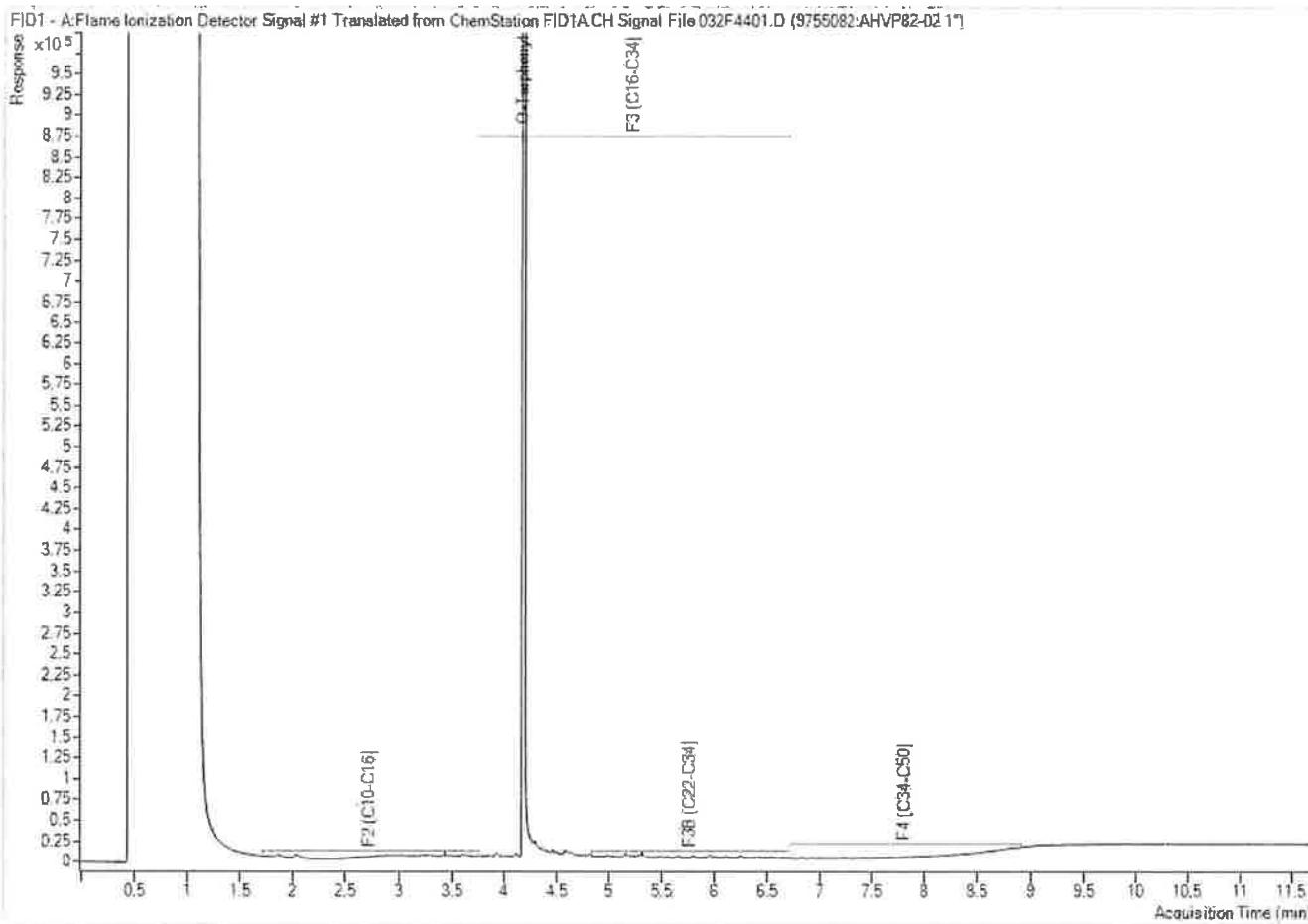
STANTEC CHAIN OF CUSTODY RECORD					
REPORT INFORMATION (differ from invoice)			PROJECT INFORMATION:		
INVOICE INFORMATION:					
Company Name: <b>#3072 Stantec Consulting Ltd</b>	Customer Name: <b>Marissa Lustro</b>	Quotation #: C41673	Bureau Veritas Job #: 109653	Laboratory Use Only:	
Contact Name: <b>Accounts Payable</b>	Address: <b>575 Cochran Dr W West Tower, Suite 300</b>	Task #: Project #: Profit Centre: Site #:	COC #: Barcode:		
Phone: <b>(905) 479-9326</b>	Fax: <b>(905) 844-7777</b>	Billed By: <b>MARISSE.LUSTRO@stantec.com</b>	Billed By: <b>MARISSE.LUSTRO@stantec.com</b>		
NOTE REQUIRED FOR WATER PREPARED FOR HUMAN CONSUMPTION TRUSTEES SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY					
Other Regulations					
<input type="checkbox"/> Rule 1: <input checked="" type="checkbox"/> Drinking Water <input checked="" type="checkbox"/> Non-Drinking Water <input type="checkbox"/> Rule 2: <input checked="" type="checkbox"/> Surface Water <input type="checkbox"/> Rule 3: <input checked="" type="checkbox"/> Groundwater <input type="checkbox"/> Rule 4: <input checked="" type="checkbox"/> Municipal <input type="checkbox"/> Rule 5: <input checked="" type="checkbox"/> Reg 426 - Table <input type="checkbox"/> Other _____	<input type="checkbox"/> Banning Sewer Sludge <input type="checkbox"/> Surface Sewer Sludge <input type="checkbox"/> Municipal <input type="checkbox"/> Reg 426 - Table				
Included Criteria on Certificate of Analysis (M/N/I)					
Sample Number / Job Identifier:	Sample Location / Job Identifier:	Date Sampled:	Date Sampled:	Comments:	
1 MUN10-3	7/10/29	0905	Soi	4 Hold	
2 MUN10-4		0915		4 Hold	
3 MUN10-6		0930		4 Hold	
4 MUN10-7		0940		4 Hold	
5 MUN10-8	V	0950	V	4 Hold	
6					
7					
8					
9					
10					
RELIQUIDATED BY: (Signature/Print)			Date: (MM/DD/YY)	Time: (HH:MM)	RECEIVED BY: (Signature/Print)
<i>Julie Cherniak</i>			24/11/01	11:30	SE 18:55
LABORATORY USE ONLY					
\$ JARS SAVED AND NOT SUBMITTED		TIME	\$ JARS SAVED AND NOT SUBMITTED	TIME	Laboratory Use Only
					Temperature (°C) or Room
UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. PRINTING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF SUCH TERMS WHICH ARE AVAILABLE FOR REVIEW AT WWW.BVNA.COM/TERMS-AND-CONDITIONS.					
IT IS THE RESPONSIBILITY OF THE RELIQUIDATOR TO ENSURE THIS ACCURACY OF THE CHAIN OF CUSTODY AND RESULT IN ANALYTICAL TAT DELAYS.					
* SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/PACKAGES&CHAIN-OF-CUSTODY-FORMS-COCs.					
Bureau Veritas Canada (2015) Inc.					

Page 6 of 6

Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHVP82

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW1-5

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

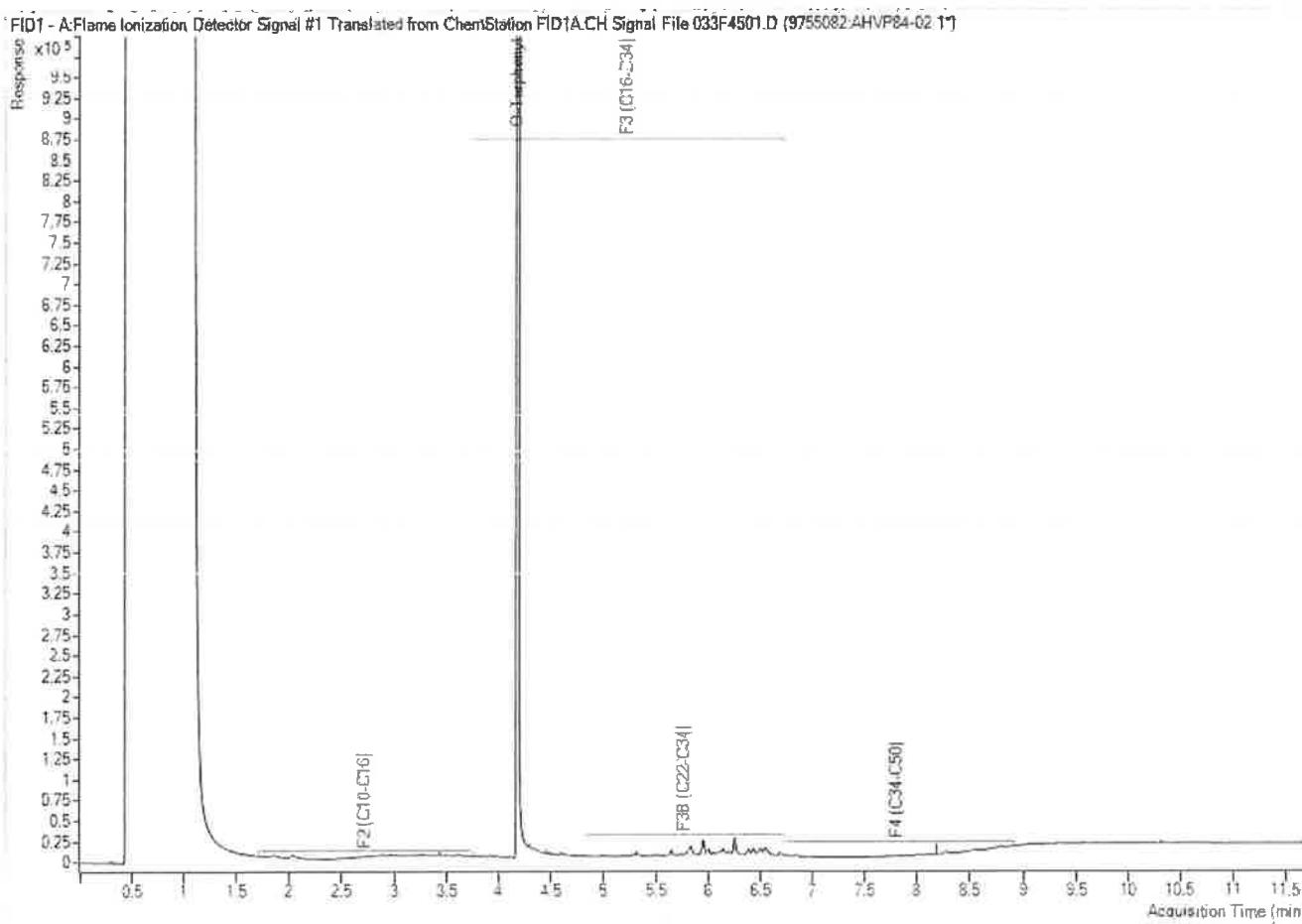


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHVP84

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW2-5

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

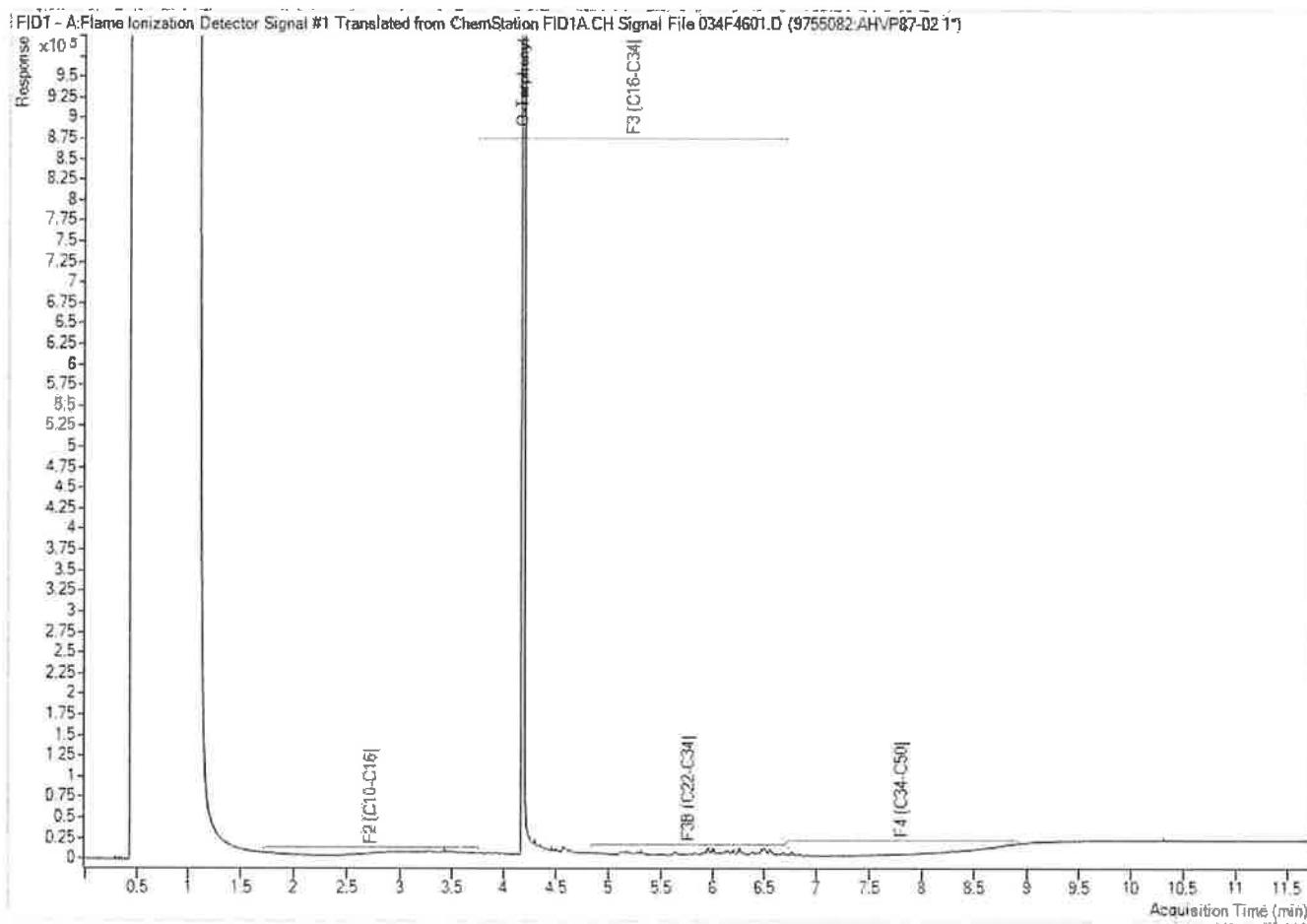


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHVP87

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: BH8-5

**Petroleum Hydrocarbons F2-F4 in Soil Chromatogram**

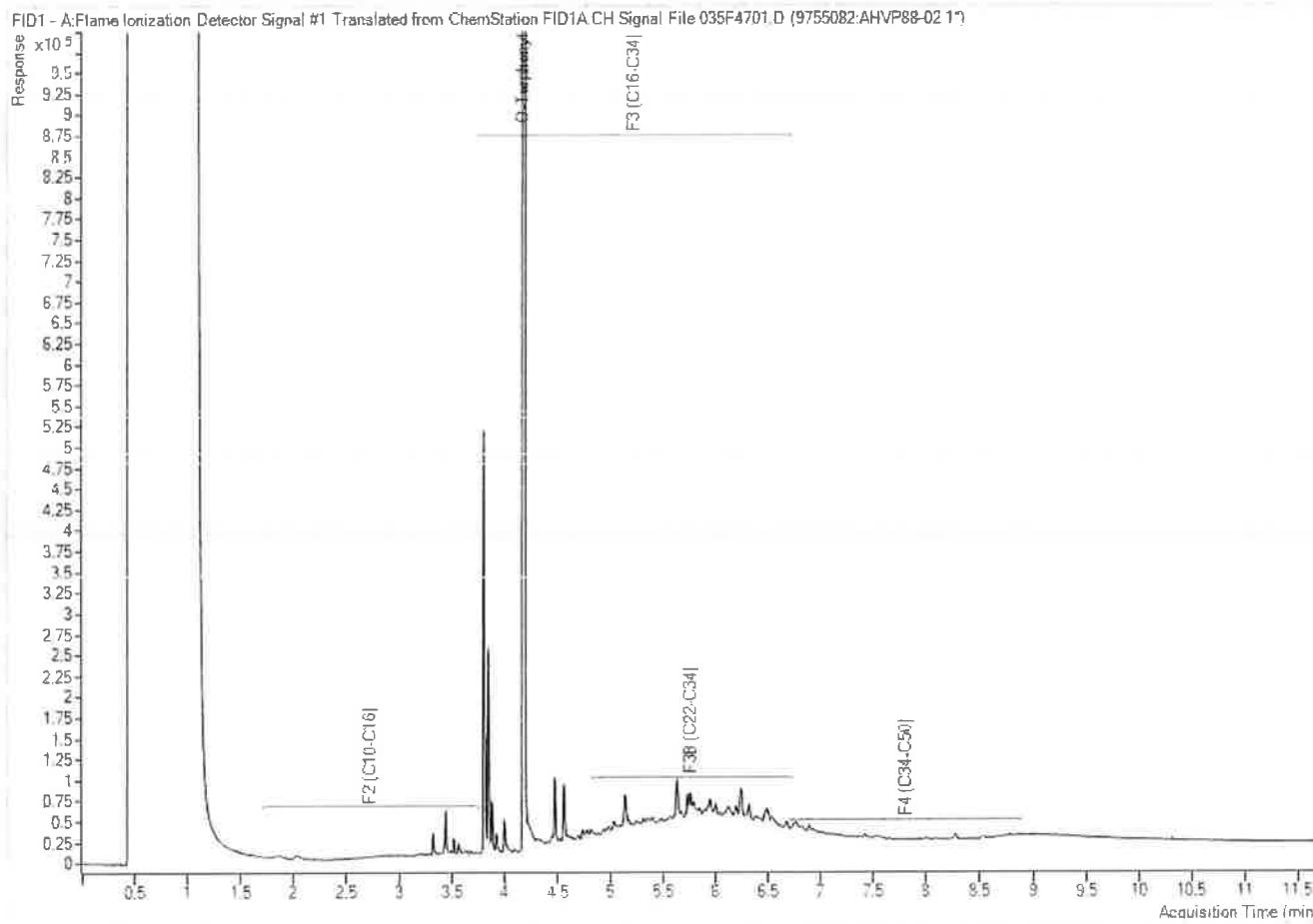


**Note:** This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHVP88

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW9-5

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

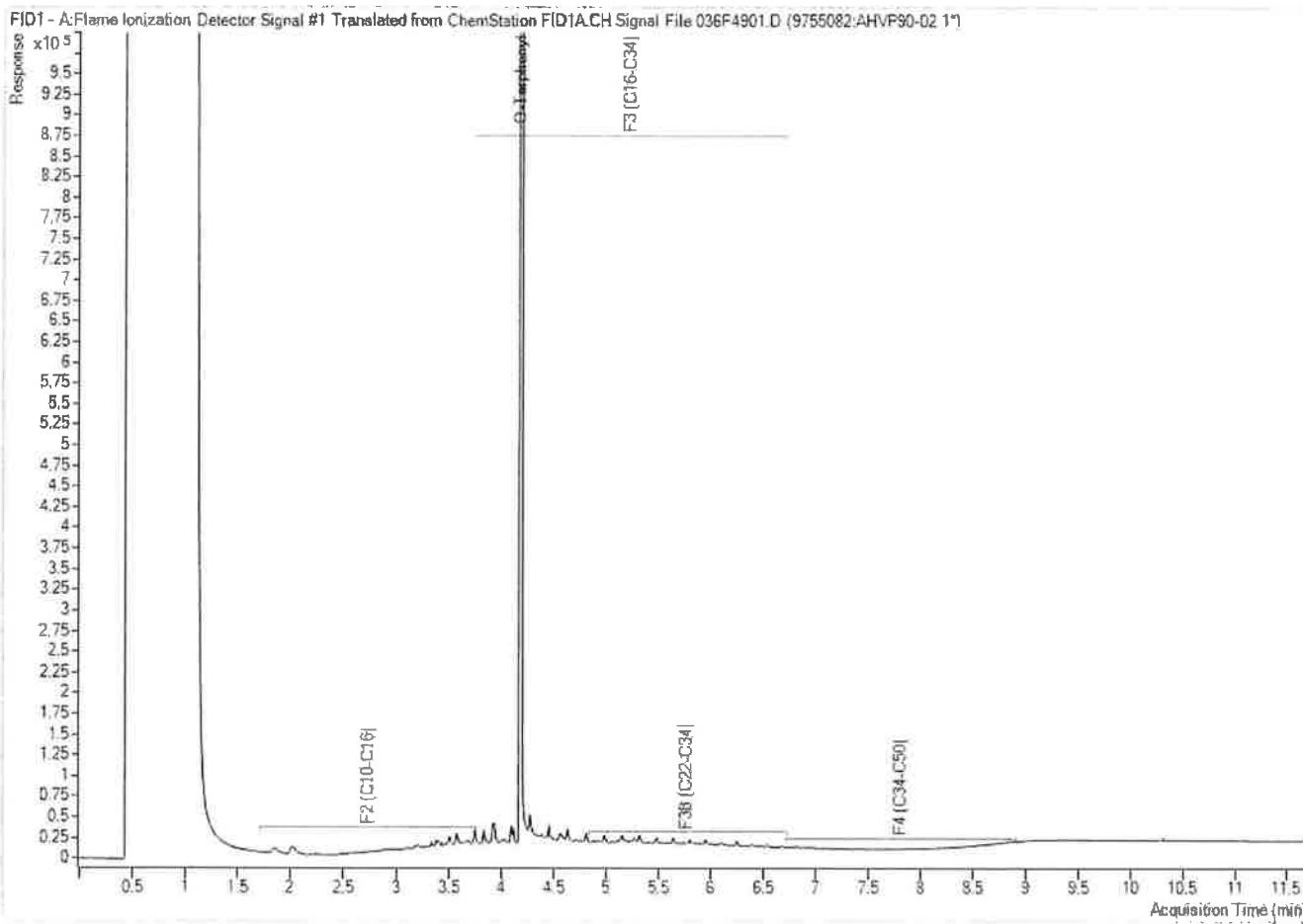


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHVP90

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW9-13

**Petroleum Hydrocarbons F2-F4 in Soil Chromatogram**

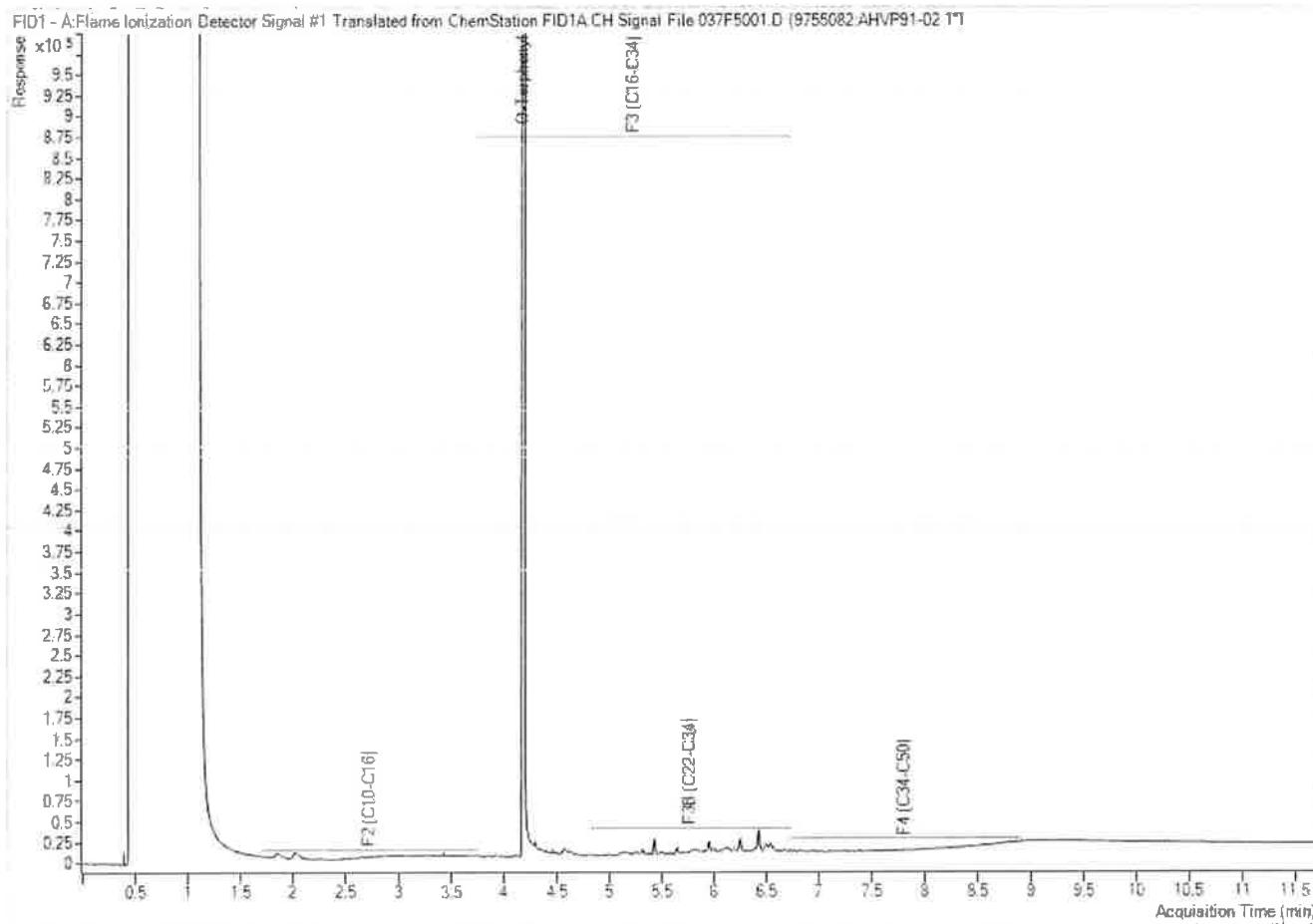


**Note:** This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHVP91

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW10-5

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

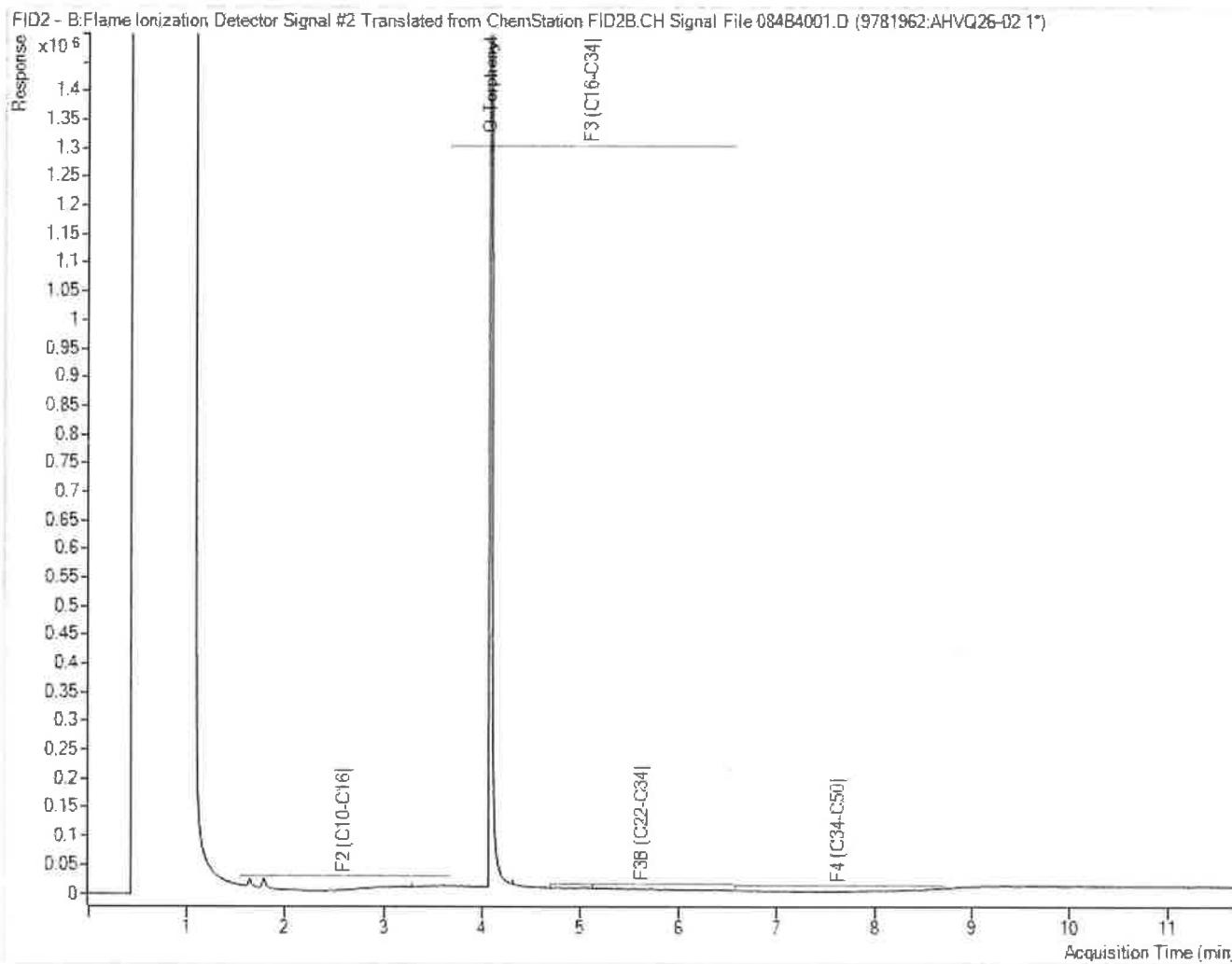


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y6747  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHVQ26

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW9-10

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



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



Your Project #: 122140392  
Your C.O.C. #: 1019663-10-01

Attention: Marissa Lusito

Stantec Consulting Ltd  
675 Cochrane Dr W.  
West Tower Suite 300  
Markham, ON  
CANADA L3R 0B8

Report Date: 2024/11/26

Report #: R8420115

Version: 2 - Revision

**CERTIFICATE OF ANALYSIS – REVISED REPORT**

**BUREAU VERITAS JOB #: C4Y8641**

Received: 2024/11/05, 15:20

Sample Matrix: Soil  
# Samples Received: 27

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum	8	N/A	2024/11/10	CAM SOP-00301	EPA 8270D m
Methylnaphthalene Sum	1	N/A	2024/11/25	CAM SOP-00301	EPA 8270D m
Semivolatile Organic Compounds (TCLP)	1	2024/11/11	2024/11/12	CAM SOP-00301	FPA 8270D m
Hot Water Extractable Boron	8	2024/11/22	2024/11/22	CAM SOP-00408	R153 Ana. Prot. 2011
Hot Water Extractable Boron	4	2024/11/22	2024/11/23	CAM SOP-00408	R153 Ana. Prot. 2011
Hot Water Extractable Boron	8	2024/11/08	2024/11/08	CAM SOP-00408	R153 Ana. Prot. 2011
1,3-Dichloropropene Sum	2	N/A	2024/11/11		EPA 8260C m
1,3-Dichloropropene Sum	3	N/A	2024/11/25		EPA 8260C m
1,3-Dichloropropene Sum	6	N/A	2024/11/08		EPA 8260C m
Free (WAD) Cyanide	10	2024/11/21	2024/11/22	CAM SOP-00457	OMOE E3015 m
Free (WAD) Cyanide	2	2024/11/22	2024/11/22	CAM SOP-00457	OMOE E3015 m
Free (WAD) Cyanide	8	2024/11/08	2024/11/12	CAM SOP-00457	OMOE E3015 m
Cyanide (WAD) in Leachates	1	N/A	2024/11/08	CAM SOP-00457	OMOE 3015 m
Conductivity	8	2024/11/11	2024/11/11	CAM SOP-00414	OMOE E3530 v1 m
Conductivity	10	2024/11/21	2024/11/21	CAM SOP-00414	OMOE E3530 v1 m
Conductivity	2	2024/11/22	2024/11/22	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1)	10	2024/11/21	2024/11/22	CAM SOP-00436	EPA 3060A/7199 m
Hexavalent Chromium in Soil by IC (1)	2	2024/11/22	2024/11/22	CAM SOP-00436	EPA 3060A/7199 m
Hexavalent Chromium in Soil by IC (1)	8	2024/11/08	2024/11/08	CAM SOP-00436	EPA 3060A/7199 m
Petroleum Hydro. CCME F1 & BTEX in Soil (2)	5	N/A	2024/11/18	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydro. CCME F1 & BTEX in Soil (2)	6	N/A	2024/11/19	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydro. CCME F1 & BTEX in Soil (2)	1	N/A	2024/11/07	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Soil (3)	11	2024/11/18	2024/11/19	CAM SOP-00316	CCME CWS m
Petroleum Hydrocarbons F2-F4 in Soil (3)	3	2024/11/22	2024/11/22	CAM SOP-00316	CCME CWS m
Petroleum Hydrocarbons F2-F4 in Soil (3)	4	2024/11/08	2024/11/10	CAM SOP-00316	CCME CWS m
Petroleum Hydrocarbons F2-F4 in Soil (3)	5	2024/11/08	2024/11/11	CAM SOP-00316	CCME CWS m
F4G (CCME Hydrocarbons Gravimetric)	2	2024/11/13	2024/11/13	CAM SOP-00316	CCME PHC-CWS m
F4G (CCME Hydrocarbons Gravimetric)	3	2024/11/20	2024/11/20	CAM SOP-00316	CCME PHC-CWS m
Fluoride by ISE in Leachates	1	2024/11/08	2024/11/09	CAM SOP-00449	SM 24 4500-F- C m
Acid Extractable Metals by ICPMS	10	2024/11/21	2024/11/23	CAM SOP-00447	EPA 6020B m



Your Project #: 122140392  
Your C.O.C. #: 1019663-10-01

**Attention: Marissa Lusito**

Stantec Consulting Ltd  
675 Cochrane Dr W.  
West Tower Suite 300  
Markham, ON  
CANADA L3R 0B8

**Report Date: 2024/11/26**

Report #: R8420115

Version: 2 - Revision

**CERTIFICATE OF ANALYSIS – REVISED REPORT**

**BUREAU VERITAS JOB #: C4Y8641**

**Received: 2024/11/05, 15:20**

Sample Matrix: Soil  
# Samples Received: 27

<b>Analyses</b>	<b>Quantity</b>	<b>Date Extracted</b>	<b>Date Analyzed</b>	<b>Laboratory Method</b>	<b>Analytical Method</b>
Acid Extractable Metals by ICPMS	2	2024/11/22	2024/11/22	CAM SOP-00447	EPA 6020B m
Acid Extractable Metals by ICPMS	8	2024/11/08	2024/11/08	CAM SOP-00447	EPA 6020B m
Total Metals in TCLP Leachate by ICPMS	1	2024/11/08	2024/11/08	CAM SOP-00447	EPA 6020B m
Ignitability of a Sample	1	2024/11/11	2024/11/11	CAM SOP-00432	EPA 1030 Rev. 1 m
Moisture	11	N/A	2024/11/18	CAM SOP-00445	Carter 2nd ed 70.2 m
Moisture	3	N/A	2024/11/21	CAM SOP-00445	Carter 2nd ed 70.2 m
Moisture	12	N/A	2024/11/06	CAM SOP-00445	Carter 2nd ed 70.2 m
Nitrate & Nitrite as Nitrogen in Leachate	1	N/A	2024/11/12	CAM SOP-00440	SM 24 4500-NO3/NO2B
PAH Compounds in Soil by GC/MS (SIM)	1	2024/11/22	2024/11/22	CAM SOP-00318	EPA 8270E
PAH Compounds in Soil by GC/MS (SIM)	8	2024/11/08	2024/11/08	CAM SOP-00318	EPA 8270E
pH CaCl <sub>2</sub> EXTRACT	9	2024/11/21	2024/11/21	CAM SOP-00413	EPA 9045 D m
pH CaCl <sub>2</sub> EXTRACT	3	2024/11/22	2024/11/22	CAM SOP-00413	EPA 9045 D m
pH CaCl <sub>2</sub> EXTRACT	8	2024/11/09	2024/11/09	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR)	8	N/A	2024/11/12	CAM SOP-00102	EPA 6010C
Sodium Adsorption Ratio (SAR)	10	N/A	2024/11/22	CAM SOP-00102	EPA 6010C
Sodium Adsorption Ratio (SAR)	2	N/A	2024/11/25	CAM SOP-00102	EPA 6010C
TCLP - % Solids	1	2024/11/07	2024/11/08	CAM SOP-00401	EPA 1311 Update I m
TCLP - Extraction Fluid	1	N/A	2024/11/08	CAM SOP-00401	EPA 1311 Update I m
TCLP - Initial and final pH	1	N/A	2024/11/08	CAM SOP-00401	EPA 1311 Update I m
TCLP Zero Headspace Extraction	1	2024/11/07	2024/11/08	CAM SOP-00430	EPA 1311 m
Volatile Organic Compounds and F1 PHCs	3	N/A	2024/11/22	CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds and F1 PHCs	8	N/A	2024/11/07	CAM SOP-00230	EPA 8260C m
VOCs in ZHE Leachates	1	2024/11/08	2024/11/08	CAM SOP-00228	EPA 8260D

**Remarks:**

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

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are



Your Project #: 122140392  
Your C.O.C. #: 1019663-10-01

**Attention: Marissa Lusito**

Stantec Consulting Ltd  
675 Cochrane Dr W.  
West Tower Suite 300  
Markham, ON  
CANADA L3R 0B8

**Report Date: 2024/11/26**  
Report #: R8420115  
Version: 2 - Revision

**CERTIFICATE OF ANALYSIS – REVISED REPORT**

**BUREAU VERITAS JOB #: C4Y8641**

**Received: 2024/11/05, 15:20**

reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

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

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

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

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

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

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

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

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

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

**Encryption Key**

Please direct all questions regarding this Certificate of Analysis to:

Julie Clement, Technical Account Manager  
Email: Julie.CLEMENT@bureauveritas.com  
Phone# (613)868-6079

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

Total Cover Pages : 3  
Page 3 of 102

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

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		AHZR54		AHZR56		AHZR57		
Sampling Date		2024/10/31 09:50		2024/10/31 15:25		2024/11/01 14:30		
COC Number		1019663-10-01		1019663-10-01		1019663-10-01		
	UNITS	MW3-4	RDL	MW4-8	RDL	MW6-5	RDL	QC Batch
<b>Calculated Parameters</b>								
Sodium Adsorption Ratio	N/A	1.6		4.5		22		9748632
<b>Inorganics</b>								
Conductivity	mS/cm	1.1	0.002	1.5	0.002	2.3	0.002	9757581
Available (CaCl <sub>2</sub> ) pH	pH	12.1		7.13		7.39		9756537
WAD Cyanide (Free)	ug/g	<0.01	0.01	<0.01	0.01	<0.01	0.01	9755572
Chromium (VI)	ug/g	<0.18	0.18	<0.36	0.36	<0.18	0.18	9754630
<b>Metals</b>								
Hot Water Ext. Boron (B)	ug/g	0.22	0.050	0.67	0.050	1.5	0.050	9753952
Acid Extractable Antimony (Sb)	ug/g	0.24	0.20	2.4	0.20	3.6	0.20	9754367
Acid Extractable Arsenic (As)	ug/g	1.2	1.0	5.0	1.0	5.8	1.0	9754367
Acid Extractable Barium (Ba)	ug/g	36	0.50	59	0.50	71	0.50	9754367
Acid Extractable Beryllium (Be)	ug/g	0.23	0.20	0.21	0.20	0.27	0.20	9754367
Acid Extractable Boron (B)	ug/g	<5.0	5.0	<5.0	5.0	7.1	5.0	9754367
Acid Extractable Cadmium (Cd)	ug/g	0.14	0.10	1.1	0.10	0.41	0.10	9754367
Acid Extractable Chromium (Cr)	ug/g	11	1.0	13	1.0	160	1.0	9754367
Acid Extractable Cobalt (Co)	ug/g	2.6	0.10	4.0	0.10	3.5	0.10	9754367
Acid Extractable Copper (Cu)	ug/g	5.2	0.50	28	0.50	12	0.50	9754367
Acid Extractable Lead (Pb)	ug/g	13	1.0	200	1.0	130	1.0	9754367
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	0.50	1.4	0.50	1.4	0.50	9754367
Acid Extractable Nickel (Ni)	ug/g	5.4	0.50	12	0.50	7.9	0.50	9754367
Acid Extractable Selenium (Se)	ug/g	<0.50	0.50	<0.50	0.50	0.89	0.50	9754367
Acid Extractable Silver (Ag)	ug/g	<0.20	0.20	<0.20	0.20	<0.20	0.20	9754367
Acid Extractable Thallium (Tl)	ug/g	<0.050	0.050	0.090	0.050	0.13	0.050	9754367
Acid Extractable Uranium (U)	ug/g	0.38	0.050	0.43	0.050	0.47	0.050	9754367
Acid Extractable Vanadium (V)	ug/g	22	5.0	20	5.0	23	5.0	9754367
Acid Extractable Zinc (Zn)	ug/g	44	5.0	520	5.0	150	5.0	9754367
Acid Extractable Mercury (Hg)	ug/g	0.13	0.050	0.63	0.050	0.13	0.050	9754367
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								

BUREAU  
VERITAS

Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

## O.REG 153 METALS &amp; INORGANICS PKG (SOIL)

Bureau Veritas ID		AHZR58			AHZR58			AHZR59		
Sampling Date		2024/11/01 09:17			2024/11/01 09:17			2024/10/31 15:00		
COC Number		1019663-10-01			1019663-10-01			1019663-10-01		
	UNITS	MW7-4	RDL	QC Batch	MW7-4 Lab-Dup	RDL	QC Batch	BH11-2	RDL	QC Batch

## Calculated Parameters

Sodium Adsorption Ratio	N/A	18		9748632				94		9748632
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## Inorganics

Conductivity	mS/cm	1.3	0.002	9757581				5.6	0.002	9757581
Available (CaCl <sub>2</sub> ) pH	pH	7.78		9756537	7.78		9756537	7.95		9756537
WAD Cyanide (Free)	ug/g	<0.01	0.01	9755572	<0.01	0.01	9755572	<0.01	0.01	9755572
Chromium (VI)	ug/g	<0.18	0.18	9754630	<0.18	0.18	9754630	<0.18	0.18	9754630

## Metals

Hot Water Ext. Boron (B)	ug/g	0.15	0.050	9754031				0.11	0.050	9753952
Acid Extractable Antimony (Sb)	ug/g	<0.20	0.20	9754367				<0.20	0.20	9754367
Acid Extractable Arsenic (As)	ug/g	1.1	1.0	9754367				2.4	1.0	9754367
Acid Extractable Barium (Ba)	ug/g	9.6	0.50	9754367				28	0.50	9754367
Acid Extractable Beryllium (Be)	ug/g	<0.20	0.20	9754367				<0.20	0.20	9754367
Acid Extractable Boron (B)	ug/g	<5.0	5.0	9754367				<5.0	5.0	9754367
Acid Extractable Cadmium (Cd)	ug/g	<0.10	0.10	9754367				<0.10	0.10	9754367
Acid Extractable Chromium (Cr)	ug/g	8.9	1.0	9754367				6.0	1.0	9754367
Acid Extractable Cobalt (Co)	ug/g	2.4	0.10	9754367				2.0	0.10	9754367
Acid Extractable Copper (Cu)	ug/g	4.4	0.50	9754367				3.3	0.50	9754367
Acid Extractable Lead (Pb)	ug/g	6.4	1.0	9754367				1.6	1.0	9754367
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	0.50	9754367				<0.50	0.50	9754367
Acid Extractable Nickel (Ni)	ug/g	5.2	0.50	9754367				3.6	0.50	9754367
Acid Extractable Selenium (Se)	ug/g	<0.50	0.50	9754367				<0.50	0.50	9754367
Acid Extractable Silver (Ag)	ug/g	<0.20	0.20	9754367				<0.20	0.20	9754367
Acid Extractable Thallium (Tl)	ug/g	<0.050	0.050	9754367				<0.050	0.050	9754367
Acid Extractable Uranium (U)	ug/g	0.50	0.050	9754367				0.28	0.050	9754367
Acid Extractable Vanadium (V)	ug/g	28	5.0	9754367				14	5.0	9754367
Acid Extractable Zinc (Zn)	ug/g	17	5.0	9754367				14	5.0	9754367
Acid Extractable Mercury (Hg)	ug/g	0.060	0.050	9754367				<0.050	0.050	9754367

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		AHZR62		AHZR63		AHZR66		
Sampling Date		2024/11/01		2024/10/31 13:15		2024/10/31 09:31		
COC Number		1019663-10-01		1019663-10-01		1019663-10-01		
	UNITS	QC-2	QC Batch	MW12-2	RDL	QC Batch	BH13-5	RDL

#### Calculated Parameters

Sodium Adsorption Ratio	N/A	17	9748632	16		9748632	0.54		9748632
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#### Inorganics

Conductivity	mS/cm	1.2	9757581	2.3	0.002	9757581	0.35	0.002	9757581
Available (CaCl <sub>2</sub> ) pH	pH	7.80	9756537	7.78		9756537	7.37		9756537
WAD Cyanide (Free)	ug/g	<0.01	9755572	<0.01	0.01	9755572	<0.01	0.01	9755572
Chromium (VI)	ug/g	<0.18	9754630	<0.18	0.18	9754630	<0.18	0.18	9754630

#### Metals

Hot Water Ext. Boron (B)	ug/g	0.19	9754031	0.36	0.050	9753952	0.66	0.050	9754031
Acid Extractable Antimony (Sb)	ug/g	<0.20	9754367	0.22	0.20	9754367	0.39	0.20	9754367
Acid Extractable Arsenic (As)	ug/g	1.1	9754367	2.1	1.0	9754367	7.1	1.0	9754367
Acid Extractable Barium (Ba)	ug/g	8.1	9754367	44	0.50	9754367	130	0.50	9754367
Acid Extractable Beryllium (Be)	ug/g	<0.20	9754367	0.26	0.20	9754367	0.20	0.20	9754367
Acid Extractable Boron (B)	ug/g	<5.0	9754367	<5.0	5.0	9754367	11	5.0	9754367
Acid Extractable Cadmium (Cd)	ug/g	<0.10	9754367	0.24	0.10	9754367	3.0	0.10	9754367
Acid Extractable Chromium (Cr)	ug/g	7.9	9754367	12	1.0	9754367	15	1.0	9754367
Acid Extractable Cobalt (Co)	ug/g	1.9	9754367	3.7	0.10	9754367	2.5	0.10	9754367
Acid Extractable Copper (Cu)	ug/g	4.0	9754367	8.9	0.50	9754367	18	0.50	9754367
Acid Extractable Lead (Pb)	ug/g	4.4	9754367	70	1.0	9754367	360	1.0	9754367
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	9754367	<0.50	0.50	9754367	<0.50	0.50	9754367
Acid Extractable Nickel (Ni)	ug/g	4.5	9754367	7.8	0.50	9754367	5.0	0.50	9754367
Acid Extractable Selenium (Se)	ug/g	<0.50	9754367	<0.50	0.50	9754367	<0.50	0.50	9754367
Acid Extractable Silver (Ag)	ug/g	<0.20	9754367	<0.20	0.20	9754367	0.59	0.20	9754367
Acid Extractable Thallium (Tl)	ug/g	<0.050	9754367	0.056	0.050	9754367	0.094	0.050	9754367
Acid Extractable Uranium (U)	ug/g	0.39	9754367	0.44	0.050	9754367	0.37	0.050	9754367
Acid Extractable Vanadium (V)	ug/g	22	9754367	26	5.0	9754367	19	5.0	9754367
Acid Extractable Zinc (Zn)	ug/g	14	9754367	45	5.0	9754367	1700	5.0	9754367
Acid Extractable Mercury (Hg)	ug/g	<0.050	9754367	0.068	0.050	9754367	52	0.50	9754367

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		AHZR66		AHZR86	AHZR91		
Sampling Date		2024/10/31 09:31		2024/10/31 15:55	2024/11/01 14:40		
COC Number		1019663-10-01		1019663-10-01	1019663-10-01		
	UNITS	BH13-5 Lab-Dup	RDL	QC Batch	MW4-9	MW6-8	RDL

#### Calculated Parameters

Sodium Adsorption Ratio	N/A			15	17		9780245
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#### Inorganics

Conductivity	mS/cm	0.35	0.002	9757581	1.6	4.3	0.002	9782811
Available (CaCl <sub>2</sub> ) pH	pH				9.56	7.46		9782879
WAD Cyanide (Free)	ug/g				<0.01	<0.01	0.01	9781975
Chromium (VI)	ug/g				<0.18	<0.18	0.18	9782200

#### Metals

Hot Water Ext. Boron (B)	ug/g			0.17	0.58	0.050	9782283
Acid Extractable Antimony (Sb)	ug/g			<0.20	5.2	0.20	9782920
Acid Extractable Arsenic (As)	ug/g			1.1	9.2	1.0	9782920
Acid Extractable Barium (Ba)	ug/g			18	200	0.50	9782920
Acid Extractable Beryllium (Be)	ug/g			<0.20	0.36	0.20	9782920
Acid Extractable Boron (B)	ug/g			<5.0	7.7	5.0	9782920
Acid Extractable Cadmium (Cd)	ug/g			<0.10	0.19	0.10	9782920
Acid Extractable Chromium (Cr)	ug/g			5.8	35	1.0	9782920
Acid Extractable Cobalt (Co)	ug/g			1.7	4.4	0.10	9782920
Acid Extractable Copper (Cu)	ug/g			3.8	880	0.50	9782920
Acid Extractable Lead (Pb)	ug/g			2.3	560	1.0	9782920
Acid Extractable Molybdenum (Mo)	ug/g			<0.50	0.74	0.50	9782920
Acid Extractable Nickel (Ni)	ug/g			3.1	12	0.50	9782920
Acid Extractable Selenium (Se)	ug/g			<0.50	<0.50	0.50	9782920
Acid Extractable Silver (Ag)	ug/g			<0.20	0.75	0.20	9782920
Acid Extractable Thallium (Tl)	ug/g			<0.050	0.083	0.050	9782920
Acid Extractable Uranium (U)	ug/g			0.46	0.53	0.050	9782920
Acid Extractable Vanadium (V)	ug/g			14	28	5.0	9782920
Acid Extractable Zinc (Zn)	ug/g			13	540	5.0	9782920
Acid Extractable Mercury (Hg)	ug/g			<0.050	0.38	0.050	9782920

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		AHZS16		AHZS17		AHZS18		
Sampling Date		2024/10/31 08:50		2024/10/31 09:00		2024/10/31 09:10		
COC Number		1019663-10-01		1019663-10-01		1019663-10-01		
	UNITS	BH13-1	QC Batch	BH13-2	QC Batch	BH13-3	RDL	QC Batch
<b>Calculated Parameters</b>								
Sodium Adsorption Ratio	N/A	25	9771384	5.6	9771384	3.2		9771384
<b>Inorganics</b>								
Conductivity	mS/cm	0.76	9780464	0.74	9780464	0.57	0.002	9780464
Available (CaCl <sub>2</sub> ) pH	pH	7.97	9780505	7.70	9780505	7.59		9781125
WAD Cyanide (Free)	ug/g	<0.01	9781287	<0.01	9781287	<0.01	0.01	9781307
Chromium (VI)	ug/g	<0.18	9780512	<0.18	9780512	<0.18	0.18	9781254
<b>Metals</b>								
Hot Water Ext. Boron (B)	ug/g	<0.050	9782634	0.18	9782456	0.10	0.050	9782634
Acid Extractable Antimony (Sb)	ug/g	<0.20	9780686	<0.20	9780686	<0.20	0.20	9780686
Acid Extractable Arsenic (As)	ug/g	<1.0	9780686	1.3	9780686	1.7	1.0	9780686
Acid Extractable Barium (Ba)	ug/g	15	9780686	38	9780686	27	0.50	9780686
Acid Extractable Beryllium (Be)	ug/g	<0.20	9780686	0.28	9780686	0.26	0.20	9780686
Acid Extractable Boron (B)	ug/g	<5.0	9780686	<5.0	9780686	<5.0	5.0	9780686
Acid Extractable Cadmium (Cd)	ug/g	<0.10	9780686	0.11	9780686	<0.10	0.10	9780686
Acid Extractable Chromium (Cr)	ug/g	6.8	9780686	9.4	9780686	9.3	1.0	9780686
Acid Extractable Cobalt (Co)	ug/g	2.2	9780686	3.1	9780686	2.9	0.10	9780686
Acid Extractable Copper (Cu)	ug/g	4.7	9780686	5.6	9780686	4.5	0.50	9780686
Acid Extractable Lead (Pb)	ug/g	2.2	9780686	8.6	9780686	8.4	1.0	9780686
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	9780686	<0.50	9780686	<0.50	0.50	9780686
Acid Extractable Nickel (Ni)	ug/g	3.9	9780686	6.0	9780686	5.3	0.50	9780686
Acid Extractable Selenium (Se)	ug/g	<0.50	9780686	<0.50	9780686	<0.50	0.50	9780686
Acid Extractable Silver (Ag)	ug/g	<0.20	9780686	<0.20	9780686	<0.20	0.20	9780686
Acid Extractable Thallium (Tl)	ug/g	<0.050	9780686	0.058	9780686	0.050	0.050	9780686
Acid Extractable Uranium (U)	ug/g	0.40	9780686	0.33	9780686	0.39	0.050	9780686
Acid Extractable Vanadium (V)	ug/g	16	9780686	24	9780686	24	5.0	9780686
Acid Extractable Zinc (Zn)	ug/g	13	9780686	28	9780686	23	5.0	9780686
Acid Extractable Mercury (Hg)	ug/g	<0.050	9780686	<0.050	9780686	<0.050	0.050	9780686

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

BUREAU  
VERITAS

Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: HM

**O.REG 153 METALS & INORGANICS PKG (SOIL)**

Bureau Veritas ID		AHZS19		AHZS20		AHZS21				
Sampling Date		2024/10/31 09:20		2024/10/31 09:40		2024/10/31 10:00				
COC Number		1019663-10-01		1019663-10-01		1019663-10-01				
	UNITS	BH13-4	RDL	QC Batch	BH13-6	RDL	QC Batch	BH13-7	RDL	QC Batch

**Calculated Parameters**

Sodium Adsorption Ratio	N/A	2.8		9771384	0.58		9771384	0.21		9771384
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**Inorganics**

Conductivity	mS/cm	1.1	0.002	9780464	0.78	0.002	9780464	0.27	0.002	9780464
Available (CaCl <sub>2</sub> ) pH	pH	7.41		9781125	7.32		9780505	7.63		9783050
WAD Cyanide (Free)	ug/g	<0.01	0.01	9781307	<0.01	0.01	9781287	<0.01	0.01	9781287
Chromium (VI)	ug/g	<0.18	0.18	9781254	<0.18	0.18	9780512	<0.36 (1)	0.36	9780512

**Metals**

Hot Water Ext. Boron (B)	ug/g	0.80	0.050	9782456	0.68	0.050	9782634	0.29	0.050	9782456
Acid Extractable Antimony (Sb)	ug/g	0.86	0.20	9780686	0.23	0.20	9780686	<0.20	0.20	9780686
Acid Extractable Arsenic (As)	ug/g	8.6	1.0	9780686	3.1	1.0	9780686	1.7	1.0	9780686
Acid Extractable Barium (Ba)	ug/g	160	0.50	9780686	100	0.50	9780686	38	0.50	9780686
Acid Extractable Beryllium (Be)	ug/g	0.38	0.20	9780686	<0.20	0.20	9780686	<0.20	0.20	9780686
Acid Extractable Boron (B)	ug/g	9.3	5.0	9780686	8.9	5.0	9780686	<5.0	5.0	9780686
Acid Extractable Cadmium (Cd)	ug/g	0.33	0.10	9780686	0.34	0.10	9780686	<0.10	0.10	9780686
Acid Extractable Chromium (Cr)	ug/g	14	1.0	9780686	11	1.0	9780686	7.7	1.0	9780686
Acid Extractable Cobalt (Co)	ug/g	4.5	0.10	9780686	2.2	0.10	9780686	2.3	0.10	9780686
Acid Extractable Copper (Cu)	ug/g	29	0.50	9780686	14	0.50	9780686	6.3	0.50	9780686
Acid Extractable Lead (Pb)	ug/g	260	1.0	9780686	180	1.0	9780686	12	1.0	9780686
Acid Extractable Molybdenum (Mo)	ug/g	0.70	0.50	9780686	<0.50	0.50	9780686	<0.50	0.50	9780686
Acid Extractable Nickel (Ni)	ug/g	11	0.50	9780686	4.8	0.50	9780686	4.8	0.50	9780686
Acid Extractable Selenium (Se)	ug/g	0.84	0.50	9780686	<0.50	0.50	9780686	<0.50	0.50	9780686
Acid Extractable Silver (Ag)	ug/g	0.30	0.20	9780686	0.57	0.20	9780686	<0.20	0.20	9780686
Acid Extractable Thallium (Tl)	ug/g	0.17	0.050	9780686	0.076	0.050	9780686	<0.050	0.050	9780686
Acid Extractable Uranium (U)	ug/g	0.42	0.050	9780686	0.38	0.050	9780686	0.41	0.050	9780686
Acid Extractable Vanadium (V)	ug/g	25	5.0	9780686	16	5.0	9780686	15	5.0	9780686
Acid Extractable Zinc (Zn)	ug/g	240	5.0	9780686	680	5.0	9780686	58	5.0	9780686
Acid Extractable Mercury (Hg)	ug/g	0.77	0.050	9780686	18	0.25	9780686	0.20	0.050	9780686

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

(1) Detection Limits were raised due to high moisture content.

BUREAU  
VERITAS

Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: HM

### O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		AHZS22	AHZS23	AHZS24			AHZS24		
Sampling Date		2024/10/31 10:10	2024/10/31 10:15	2024/10/31 10:25			2024/10/31 10:25		
COC Number		1019663-10-01	1019663-10-01	1019663-10-01			1019663-10-01		
	UNITS	BH13-8	BH13-9	BH13-10	RDL	QC Batch	BH13-10 Lab-Dup	RDL	QC Batch

#### Calculated Parameters

Sodium Adsorption Ratio	N/A	0.31 (1)	0.35 (1)	0.33 (1)		9771384			
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#### Inorganics

Conductivity	mS/cm	0.15	0.10	0.11	0.002	9780464	0.11	0.002	9780464
Available (CaCl <sub>2</sub> ) pH	pH	7.81	7.89	7.87		9780505			
WAD Cyanide (Free)	ug/g	<0.01	<0.01	<0.01	0.01	9781287			
Chromium (VI)	ug/g	<0.18	<0.18	<0.18	0.18	9780512			

#### Metals

Hot Water Ext. Boron (B)	ug/g	<0.050	<0.050	<0.050	0.050	9782634			
Acid Extractable Antimony (Sb)	ug/g	<0.20	<0.20	<0.20	0.20	9780686			
Acid Extractable Arsenic (As)	ug/g	1.4	<1.0	<1.0	1.0	9780686			
Acid Extractable Barium (Ba)	ug/g	21	18	19	0.50	9780686			
Acid Extractable Beryllium (Be)	ug/g	<0.20	<0.20	<0.20	0.20	9780686			
Acid Extractable Boron (B)	ug/g	<5.0	<5.0	<5.0	5.0	9780686			
Acid Extractable Cadmium (Cd)	ug/g	<0.10	<0.10	<0.10	0.10	9780686			
Acid Extractable Chromium (Cr)	ug/g	5.7	5.3	5.6	1.0	9780686			
Acid Extractable Cobalt (Co)	ug/g	2.1	1.8	1.8	0.10	9780686			
Acid Extractable Copper (Cu)	ug/g	4.3	3.6	4.7	0.50	9780686			
Acid Extractable Lead (Pb)	ug/g	2.4	1.6	1.7	1.0	9780686			
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	<0.50	<0.50	0.50	9780686			
Acid Extractable Nickel (Ni)	ug/g	3.7	3.3	3.4	0.50	9780686			
Acid Extractable Selenium (Se)	ug/g	<0.50	<0.50	<0.50	0.50	9780686			
Acid Extractable Silver (Ag)	ug/g	<0.20	<0.20	<0.20	0.20	9780686			
Acid Extractable Thallium (Tl)	ug/g	<0.050	<0.050	<0.050	0.050	9780686			
Acid Extractable Uranium (U)	ug/g	0.65	0.52	0.42	0.050	9780686			
Acid Extractable Vanadium (V)	ug/g	13	12	13	5.0	9780686			
Acid Extractable Zinc (Zn)	ug/g	12	9.9	10	5.0	9780686			
Acid Extractable Mercury (Hg)	ug/g	<0.050	<0.050	<0.050	0.050	9780686			

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

(1) Sodium was not detected. To report SAR the sodium detection limit was used in the calculation. This value represents a maximum ratio.



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		AHZS26		
Sampling Date		2024/10/31 10:50		
COC Number		1019663-10-01		
	UNITS	BH13-11	RDL	QC Batch
<b>Calculated Parameters</b>				
Sodium Adsorption Ratio	N/A	0.33 (1)		9771384
<b>Inorganics</b>				
Conductivity	mS/cm	0.12	0.002	9780464
Available (CaCl <sub>2</sub> ) pH	pH	7.78		9780505
WAD Cyanide (Free)	ug/g	<0.01	0.01	9781287
Chromium (VI)	ug/g	<0.18	0.18	9780512
<b>Metals</b>				
Hot Water Ext. Boron (B)	ug/g	<0.050	0.050	9782456
Acid Extractable Antimony (Sb)	ug/g	<0.20	0.20	9780686
Acid Extractable Arsenic (As)	ug/g	<1.0	1.0	9780686
Acid Extractable Barium (Ba)	ug/g	20	0.50	9780686
Acid Extractable Beryllium (Be)	ug/g	<0.20	0.20	9780686
Acid Extractable Boron (B)	ug/g	<5.0	5.0	9780686
Acid Extractable Cadmium (Cd)	ug/g	<0.10	0.10	9780686
Acid Extractable Chromium (Cr)	ug/g	5.0	1.0	9780686
Acid Extractable Cobalt (Co)	ug/g	1.9	0.10	9780686
Acid Extractable Copper (Cu)	ug/g	4.4	0.50	9780686
Acid Extractable Lead (Pb)	ug/g	1.9	1.0	9780686
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	0.50	9780686
Acid Extractable Nickel (Ni)	ug/g	3.6	0.50	9780686
Acid Extractable Selenium (Se)	ug/g	<0.50	0.50	9780686
Acid Extractable Silver (Ag)	ug/g	<0.20	0.20	9780686
Acid Extractable Thallium (Tl)	ug/g	<0.050	0.050	9780686
Acid Extractable Uranium (U)	ug/g	0.48	0.050	9780686
Acid Extractable Vanadium (V)	ug/g	14	5.0	9780686
Acid Extractable Zinc (Zn)	ug/g	12	5.0	9780686
Acid Extractable Mercury (Hg)	ug/g	<0.050	0.050	9780686
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				
(1) Sodium was not detected. To report SAR the sodium detection limit was used in the calculation. This value represents a maximum ratio.				

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Bureau Veritas Job #: C4Y8641  
 Report Date: 2024/11/26

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: HM

### O.REG 153 PAHS (SOIL)

Bureau Veritas ID		AHZR54		AHZR56		AHZR57		AHZR58		
Sampling Date		2024/10/31 09:50		2024/10/31 15:25		2024/11/01 14:30		2024/11/01 09:17		
COC Number		1019663-10-01		1019663-10-01		1019663-10-01		1019663-10-01		
	UNITS	MW3-4	RDL	MW4-8	RDL	MW6-5	RDL	MW7-4	RDL	QC Batch

#### Calculated Parameters

Methylnaphthalene, 2-(1-)	ug/g	<0.0071	0.0071	0.030	0.014	0.037	0.0071	<0.071	0.071	9748849
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#### Polyaromatic Hydrocarbons

Acenaphthene	ug/g	<0.0050	0.0050	0.040	0.010	0.020	0.0050	<0.050	0.050	9753795
Acenaphthylene	ug/g	<0.0050	0.0050	0.014	0.010	0.018	0.0050	<0.050	0.050	9753795
Anthracene	ug/g	<0.0050	0.0050	0.066	0.010	0.059	0.0050	0.051	0.050	9753795
Benzo(a)anthracene	ug/g	0.0093	0.0050	0.15	0.010	0.072	0.0050	0.21	0.050	9753795
Benzo(a)pyrene	ug/g	0.011	0.0050	0.16	0.010	0.077	0.0050	0.34	0.050	9753795
Benzo(b/j)fluoranthene	ug/g	0.014	0.0050	0.20	0.010	0.098	0.0050	0.35	0.050	9753795
Benzo(g,h,i)perylene	ug/g	0.0091	0.0050	0.085	0.010	0.075	0.0050	0.24	0.050	9753795
Benzo(k)fluoranthene	ug/g	<0.0050	0.0050	0.061	0.010	0.035	0.0050	0.12	0.050	9753795
Chrysene	ug/g	0.0095	0.0050	0.15	0.010	0.067	0.0050	0.18	0.050	9753795
Dibenzo(a,h)anthracene	ug/g	<0.0050	0.0050	0.019	0.010	0.013	0.0050	<0.050	0.050	9753795
Fluoranthene	ug/g	0.024	0.0050	0.40	0.010	0.23	0.0050	0.39	0.050	9753795
Fluorene	ug/g	<0.0050	0.0050	0.044	0.010	0.033	0.0050	<0.050	0.050	9753795
Indeno(1,2,3-cd)pyrene	ug/g	0.0080	0.0050	0.090	0.010	0.073	0.0050	0.23	0.050	9753795
1-Methylnaphthalene	ug/g	<0.0050	0.0050	0.015	0.010	0.024	0.0050	<0.050	0.050	9753795
2-Methylnaphthalene	ug/g	<0.0050	0.0050	0.014	0.010	0.013	0.0050	<0.050	0.050	9753795
Naphthalene	ug/g	<0.0050	0.0050	0.029	0.010	0.016	0.0050	<0.050	0.050	9753795
Phenanthrene	ug/g	0.016	0.0050	0.39	0.010	0.31	0.0050	0.21	0.050	9753795
Pyrene	ug/g	0.021	0.0050	0.33	0.010	0.19	0.0050	0.39	0.050	9753795

#### Surrogate Recovery (%)

D10-Anthracene	%	86		82		90		102		9753795
D14-Terphenyl (FS)	%	80		80		85		84		9753795
D8-Acenaphthylene	%	78		88		89		93		9753795

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 PAHS (SOIL)

Bureau Veritas ID		AHZR59		AHZR62	AHZR63	AHZR66		
Sampling Date		2024/10/31 15:00		2024/11/01	2024/10/31 13:15	2024/10/31 09:31		
COC Number		1019663-10-01		1019663-10-01	1019663-10-01	1019663-10-01		
	UNITS	BH11-2	RDL	QC-2	MW12-2	BH13-5	RDL	QC Batch
<b>Calculated Parameters</b>								
Methylnaphthalene, 2-(1-)	ug/g	<0.0071	0.0071	<0.071	<0.071	<0.071	0.071	9748849
<b>Polyaromatic Hydrocarbons</b>								
Acenaphthene	ug/g	<0.0050	0.0050	<0.050	<0.050	<0.050	0.050	9753795
Acenaphthylene	ug/g	<0.0050	0.0050	<0.050	<0.050	<0.050	0.050	9753795
Anthracene	ug/g	<0.0050	0.0050	<0.050	<0.050	<0.050	0.050	9753795
Benzo(a)anthracene	ug/g	<0.0050	0.0050	0.17	<0.050	0.16	0.050	9753795
Benzo(a)pyrene	ug/g	<0.0050	0.0050	0.42	<0.050	0.18	0.050	9753795
Benzo(b/j)fluoranthene	ug/g	<0.0050	0.0050	0.41	0.058	0.24	0.050	9753795
Benzo(g,h,i)perylene	ug/g	<0.0050	0.0050	0.34	<0.050	0.12	0.050	9753795
Benzo(k)fluoranthene	ug/g	<0.0050	0.0050	0.12	<0.050	0.075	0.050	9753795
Chrysene	ug/g	<0.0050	0.0050	0.17	<0.050	0.16	0.050	9753795
Dibeno(a,h)anthracene	ug/g	<0.0050	0.0050	0.059	<0.050	<0.050	0.050	9753795
Fluoranthene	ug/g	<0.0050	0.0050	0.33	0.072	0.36	0.050	9753795
Fluorene	ug/g	<0.0050	0.0050	<0.050	<0.050	<0.050	0.050	9753795
Indeno(1,2,3-cd)pyrene	ug/g	<0.0050	0.0050	0.30	<0.050	0.11	0.050	9753795
1-Methylnaphthalene	ug/g	<0.0050	0.0050	<0.050	<0.050	<0.050	0.050	9753795
2-Methylnaphthalene	ug/g	<0.0050	0.0050	0.061	<0.050	<0.050	0.050	9753795
Naphthalene	ug/g	<0.0050	0.0050	<0.050	<0.050	<0.050	0.050	9753795
Phenanthrene	ug/g	<0.0050	0.0050	0.17	<0.050	0.24	0.050	9753795
Pyrene	ug/g	<0.0050	0.0050	0.38	0.074	0.32	0.050	9753795
<b>Surrogate Recovery (%)</b>								
D10-Anthracene	%	91		89	87	99		9753795
D14-Terphenyl (FS)	%	86		88	81	85		9753795
D8-Acenaphthylene	%	85		99	87	92		9753795
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 PAHS (SOIL)

Bureau Veritas ID		AHZR97		
Sampling Date		2024/11/01 09:55		
COC Number		1019663-10-01		
	UNITS	MW7-7	RDL	QC Batch
<b>Calculated Parameters</b>				
Methylnaphthalene, 2-(1-)	ug/g	<0.0071	0.0071	9779565
<b>Polyaromatic Hydrocarbons</b>				
Acenaphthene	ug/g	<0.0050	0.0050	9781986
Acenaphthylene	ug/g	<0.0050	0.0050	9781986
Anthracene	ug/g	<0.0050	0.0050	9781986
Benzo(a)anthracene	ug/g	<0.0050	0.0050	9781986
Benzo(a)pyrene	ug/g	<0.0050	0.0050	9781986
Benzo(b/j)fluoranthene	ug/g	<0.0050	0.0050	9781986
Benzo(g,h,i)perylene	ug/g	<0.0050	0.0050	9781986
Benzo(k)fluoranthene	ug/g	<0.0050	0.0050	9781986
Chrysene	ug/g	<0.0050	0.0050	9781986
Dibeno(a,h)anthracene	ug/g	<0.0050	0.0050	9781986
Fluoranthene	ug/g	<0.0050	0.0050	9781986
Fluorene	ug/g	<0.0050	0.0050	9781986
Indeno(1,2,3-cd)pyrene	ug/g	<0.0050	0.0050	9781986
1-Methylnaphthalene	ug/g	<0.0050	0.0050	9781986
2-Methylnaphthalene	ug/g	<0.0050	0.0050	9781986
Naphthalene	ug/g	<0.0050	0.0050	9781986
Phenanthrene	ug/g	<0.0050	0.0050	9781986
Pyrene	ug/g	<0.0050	0.0050	9781986
<b>Surrogate Recovery (%)</b>				
D10-Anthracene	%	94		9781986
D14-Terphenyl (FS)	%	105		9781986
D8-Acenaphthylene	%	84		9781986
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 PHCS, BTEX/F1-F4 (SOIL)

Bureau Veritas ID		AHZR64		AHZS09		AHZS16	AHZS17		
Sampling Date		2024/10/31 15:30		2024/10/31 15:25		2024/10/31 08:50	2024/10/31 09:00		
COC Number		1019663-10-01		1019663-10-01		1019663-10-01	1019663-10-01		
	UNITS	MW12-7	RDL	QC Batch	BH11-8	RDL	BH13-1	BH13-2	RDL
<b>BTEX &amp; F1 Hydrocarbons</b>									
Benzene	ug/g	<0.020	0.020	9750293	<0.020	0.020	<0.020	<0.020	0.020
Toluene	ug/g	<0.020	0.020	9750293	<0.020	0.020	<0.020	<0.020	0.020
Ethylbenzene	ug/g	<0.020	0.020	9750293	<0.020	0.020	<0.020	<0.020	0.020
o-Xylene	ug/g	<0.020	0.020	9750293	<0.020	0.020	<0.020	<0.020	0.020
p+m-Xylene	ug/g	<0.040	0.040	9750293	<0.040	0.040	<0.040	<0.040	0.040
Total Xylenes	ug/g	<0.040	0.040	9750293	<0.040	0.040	<0.040	<0.040	0.040
F1 (C6-C10)	ug/g	<10	10	9750293	<10	10	<10	<10	10
F1 (C6-C10) - BTEX	ug/g	<10	10	9750293	<10	10	<10	<10	10
<b>F2-F4 Hydrocarbons</b>									
F2 (C10-C16 Hydrocarbons)	ug/g	<7.0	7.0	9755061	<14	14	<7.0	<7.0	7.0
F3 (C16-C34 Hydrocarbons)	ug/g	51	50	9755061	330	100	99	57	50
F4 (C34-C50 Hydrocarbons)	ug/g	<50	50	9755061	110	100	170	53	50
Reached Baseline at C50	ug/g	Yes		9755061	Yes		Yes	Yes	
<b>Surrogate Recovery (%)</b>									
1,4-Difluorobenzene	%	104		9750293	102		102	103	
4-Bromofluorobenzene	%	99		9750293	92		92	91	
D10-o-Xylene	%	91		9750293	111		100	96	
D4-1,2-Dichloroethane	%	97		9750293	78		78	79	
o-Terphenyl	%	94		9755061	91		79	70	

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



VERITAS

Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: HM

### O.REG 153 PHCS, BTEX/F1-F4 (SOIL)

Bureau Veritas ID		AHZS18	AHZS19	AHZS20	AHZS21	AHZS22		
Sampling Date		2024/10/31 09:10	2024/10/31 09:20	2024/10/31 09:40	2024/10/31 10:00	2024/10/31 10:10		
COC Number		1019663-10-01	1019663-10-01	1019663-10-01	1019663-10-01	1019663-10-01		
	UNITS	BH13-3	BH13-4	BH13-6	BH13-7	BH13-8	RDL	QC Batch

#### BTEX & F1 Hydrocarbons

Benzene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9771947
Toluene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9771947
Ethylbenzene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9771947
o-Xylene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	9771947
p+m-Xylene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9771947
Total Xylenes	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9771947
F1 (C6-C10)	ug/g	<10	<10	<10	<10	<10	10	9771947
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	<10	<10	10	9771947

#### F2-F4 Hydrocarbons

F2 (C10-C16 Hydrocarbons)	ug/g	<7.0	<7.0	<7.0	<7.0	<7.0	7.0	9773009
F3 (C16-C34 Hydrocarbons)	ug/g	860	560	120	250	<50	50	9773009
F4 (C34-C50 Hydrocarbons)	ug/g	320	450	120	280	<50	50	9773009
Reached Baseline at C50	ug/g	No	No	Yes	No	Yes		9773009

#### Surrogate Recovery (%)

1,4-Difluorobenzene	%	104	103	103	103	101		9771947
4-Bromofluorobenzene	%	92	93	91	91	92		9771947
D10-o-Xylene	%	96	99	105	110	100		9771947
D4-1,2-Dichloroethane	%	77	78	77	78	79		9771947
o-Terphenyl	%	78	84	80	89	86		9773009

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 PHCS, BTEX/F1-F4 (SOIL)

Bureau Veritas ID		AHZS23	AHZS24	AHZS26		
Sampling Date		2024/10/31 10:15	2024/10/31 10:25	2024/10/31 10:50		
COC Number		1019663-10-01	1019663-10-01	1019663 10 01		
	UNITS	BH13-9	BH13-10	BH13-11	RDL	QC Batch
<b>BTEX &amp; F1 Hydrocarbons</b>						
Benzene	ug/g	<0.020	<0.020	<0.020	0.020	9771947
Toluene	ug/g	<0.020	<0.020	<0.020	0.020	9771947
Ethylbenzene	ug/g	<0.020	<0.020	<0.020	0.020	9771947
o-Xylene	ug/g	<0.020	<0.020	<0.020	0.020	9771947
p+m-Xylene	ug/g	<0.040	<0.040	<0.040	0.040	9771947
Total Xylenes	ug/g	<0.040	<0.040	<0.040	0.040	9771947
F1 (C6-C10)	ug/g	<10	<10	<10	10	9771947
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	10	9771947
<b>F2-F4 Hydrocarbons</b>						
F2 (C10-C16 Hydrocarbons)	ug/g	<7.0	<7.0	<7.0	7.0	9773009
F3 (C16-C34 Hydrocarbons)	ug/g	<50	<50	<50	50	9773009
F4 (C34-C50 Hydrocarbons)	ug/g	<50	<50	<50	50	9773009
Reached Baseline at C50	ug/g	Yes	Yes	Yes		9773009
<b>Surrogate Recovery (%)</b>						
1,4-Difluorobenzene	%	102	103	103		9771947
4-Bromofluorobenzene	%	92	91	92		9771947
D10-o-Xylene	%	99	97	105		9771947
D4-1,2-Dichloroethane	%	79	79	77		9771947
o-Terphenyl	%	90	91	92		9773009
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 VOCs BY HS & F1-F4 (SOIL)

Bureau Veritas ID		AHZR55		AHZR56		AHZR57		
Sampling Date		2024/10/31 10:15		2024/10/31 15:25		2024/11/01 14:30		
COC Number		1019663-10-01		1019663-10-01		1019663-10-01		
	UNITS	MW3-5	RDL	MW4-8	RDL	MW6-5	RDL	QC Batch

#### Calculated Parameters

1,3-Dichloropropene (cis+trans)	ug/g	<0.050	0.050	<0.10	0.10	<0.050	0.050	9748691
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#### Volatile Organics

Acetone (2-Propanone)	ug/g	<0.49	0.49	1.3	0.98	<0.49	0.49	9751403
Benzene	ug/g	<0.0060	0.0060	0.014	0.012	0.012	0.0060	9751403
Bromodichloromethane	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
Bromoform	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
Bromomethane	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
Carbon Tetrachloride	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
Chlorobenzene	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
Chloroform	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
Dibromochloromethane	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
1,2-Dichlorobenzene	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
1,3-Dichlorobenzene	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
1,4-Dichlorobenzene	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
1,1-Dichloroethane	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
1,2-Dichloroethane	ug/g	<0.049	0.049	<0.098	0.098	<0.049	0.049	9751403
1,1-Dichloroethylene	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
cis-1,2-Dichloroethylene	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
trans-1,2-Dichloroethylene	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
1,2-Dichloropropane	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
cis-1,3-Dichloropropene	ug/g	<0.030	0.030	<0.060	0.060	<0.030	0.030	9751403
trans-1,3-Dichloropropene	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
Ethylbenzene	ug/g	<0.010	0.010	<0.020	0.020	0.082	0.010	9751403
Ethylene Dibromide	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
Hexane	ug/g	<0.040	0.040	<0.080	0.080	0.14	0.040	9751403
Methylene Chloride(Dichloromethane)	ug/g	<0.049	0.049	<0.098	0.098	<0.049	0.049	9751403
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	0.40	<0.80	0.80	<0.40	0.40	9751403
Methyl Isobutyl Ketone	ug/g	<0.40	0.40	<0.80	0.80	<0.40	0.40	9751403
Methyl t-butyl ether (MTBE)	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
Styrene	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

BUREAU  
VERITAS

Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: HM

### O.REG 153 VOCs BY HS & F1-F4 (SOIL)

Bureau Veritas ID		AHZR55		AHZR56		AHZR57		
Sampling Date		2024/10/31 10:15		2024/10/31 15:25		2024/11/01 14:30		
COC Number		1019663-10-01		1019663-10-01		1019663-10-01		
	UNITS	MW3-5	RDL	MW4-8	RDL	MW6-5	RDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
1,1,2,2-Tetrachloroethane	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
Tetrachloroethylene	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
Toluene	ug/g	<0.020	0.020	<0.040	0.040	0.034	0.020	9751403
1,1,1-Trichloroethane	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
1,1,2-Trichloroethane	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
Trichloroethylene	ug/g	<0.010	0.010	<0.020	0.020	<0.010	0.010	9751403
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	0.040	<0.080	0.080	<0.040	0.040	9751403
Vinyl Chloride	ug/g	<0.019	0.019	<0.038	0.038	<0.019	0.019	9751403
p+m-Xylene	ug/g	<0.020	0.020	0.053	0.040	0.23	0.020	9751403
o-Xylene	ug/g	<0.020	0.020	<0.040	0.040	0.024	0.020	9751403
Total Xylenes	ug/g	<0.020	0.020	0.053	0.040	0.26	0.020	9751403
F1 (C6-C10)	ug/g	<10	10	<20	20	60	10	9751403
F1 (C6-C10) - BTEX	ug/g	<10	10	<20	20	59	10	9751403
<b>F2-F4 Hydrocarbons</b>								
F2 (C10-C16 Hydrocarbons)	ug/g	<7.0	7.0	<7.0	7.0	28	7.0	9755061
F3 (C16-C34 Hydrocarbons)	ug/g	<50	50	90	50	94	50	9755061
F4 (C34-C50 Hydrocarbons)	ug/g	<50	50	52	50	61	50	9755061
Reached Baseline at C50	ug/g	Yes		Yes		Yes		9755061
<b>Surrogate Recovery (%)</b>								
o-Terphenyl	%	92		74		91		9755061
4-Bromofluorobenzene	%	107		105		107		9751403
D10-o-Xylene	%	117		132 (1)		106		9751403
D4-1,2-Dichloroethane	%	93		95		94		9751403
D8-Toluene	%	96		94		95		9751403

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

(1) The recovery for the extraction surrogate compound was above the upper control limit for the analysis of the soil sample. Visible loss of methanol was observed in this sample, with abnormally low soil weight calculated. As a result, there is an increased level of uncertainty associated with the values reported for this sample.



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 VOCs BY HS & F1-F4 (SOIL)

Bureau Veritas ID		AHZR58		AHZR61		AHZR62		
Sampling Date		2024/11/01 09:17		2024/10/31 15:20		2024/11/01		
COC Number		1019663-10-01		1019663-10-01		1019663-10-01		
	UNITS	MW7-4	RDL	BH11-6	RDL	QC-2	RDL	QC Batch
<b>Calculated Parameters</b>								
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	0.050	<0.050	0.050	<0.050	0.050	9748691
<b>Volatile Organics</b>								
Acetone (2-Propanone)	ug/g	<0.49	0.49	<0.49	0.49	<0.49	0.49	9751403
Benzene	ug/g	<0.0060	0.0060	<0.0060	0.0060	<0.0060	0.0060	9751403
Bromodichloromethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
Bromoform	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
Bromomethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
Carbon Tetrachloride	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
Chlorobenzene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
Chloroform	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
Dibromochloromethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
1,2-Dichlorobenzene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
1,3-Dichlorobenzene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
1,4-Dichlorobenzene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
1,1-Dichloroethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
1,2-Dichloroethane	ug/g	<0.049	0.049	<0.049	0.049	<0.049	0.049	9751403
1,1-Dichloroethylene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
cis-1,2-Dichloroethylene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
trans-1,2-Dichloroethylene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
1,2-Dichloropropane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
cis-1,3-Dichloropropene	ug/g	<0.030	0.030	<0.030	0.030	<0.030	0.030	9751403
trans-1,3-Dichloropropene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
Ethylbenzene	ug/g	<0.010	0.010	<0.010	0.010	<0.020 (1)	0.020	9751403
Ethylene Dibromide	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
Hexane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
Methylene Chloride(Dichloromethane)	ug/g	<0.049	0.049	<0.049	0.049	<0.049	0.049	9751403
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	0.40	<0.40	0.40	<0.40	0.40	9751403
Methyl Isobutyl Ketone	ug/g	<0.40	0.40	<0.40	0.40	<0.40	0.40	9751403
Methyl t-butyl ether (MTBE)	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
Styrene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

(1) Detection limit was raised due to matrix interference.

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VERITAS

Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: HM

### O.REG 153 VOCs BY HS & F1-F4 (SOIL)

Bureau Veritas ID		AHZR58		AHZR61		AHZR62		
Sampling Date		2024/11/01 09:17		2024/10/31 15:20		2024/11/01		
COC Number		1019663-10-01		1019663-10-01		1019663-10-01		
	UNITS	MW7-4	RDL	BH11-6	RDL	QC-2	RDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
1,1,2,2-Tetrachloroethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
Tetrachloroethylene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
Toluene	ug/g	<0.020	0.020	<0.020	0.020	<0.020	0.020	9751403
1,1,1-Trichloroethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
1,1,2-Trichloroethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
Trichloroethylene	ug/g	<0.010	0.010	<0.010	0.010	<0.010	0.010	9751403
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	9751403
Vinyl Chloride	ug/g	<0.019	0.019	<0.019	0.019	<0.019	0.019	9751403
p+m-Xylene	ug/g	<0.020	0.020	<0.020	0.020	<0.020	0.020	9751403
o-Xylene	ug/g	<0.020	0.020	<0.020	0.020	<0.020	0.020	9751403
Total Xylenes	ug/g	<0.020	0.020	<0.020	0.020	<0.020	0.020	9751403
F1 (C6-C10)	ug/g	360	20	<10	10	320	20	9751403
F1 (C6-C10) - BTEX	ug/g	360	20	<10	10	320	20	9751403
<b>F2-F4 Hydrocarbons</b>								
F2 (C10-C16 Hydrocarbons)	ug/g	99	7.0	7.7	7.0	110	7.0	9755061
F3 (C16-C34 Hydrocarbons)	ug/g	340	50	820	50	450	50	9755061
F4 (C34-C50 Hydrocarbons)	ug/g	650	50	320	50	920	50	9755061
Reached Baseline at C50	ug/g	No		Yes		No		9755061
<b>Surrogate Recovery (%)</b>								
o-Terphenyl	%	86		93		91		9755061
4-Bromofluorobenzene	%	105		106		105		9751403
D10-o-Xylene	%	102		98		101		9751403
D4-1,2-Dichloroethane	%	93		96		95		9751403
D8-Toluene	%	97		95		97		9751403

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

BUREAU  
VERITAS

Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM**O.REG 153 VOCs BY HS & F1-F4 (SOIL)**

Bureau Veritas ID		AHZR65			AHZR65			AHZR66		
Sampling Date		2024/10/31 13:50			2024/10/31 13:50			2024/10/31 09:31		
COC Number		1019663-10-01			1019663-10-01			1019663-10-01		
	UNITS	MW12-8	RDL	QC Batch	MW12-8 Lab-Dup	RDL	QC Batch	BH13-5	RDL	QC Batch

**Calculated Parameters**

1,3-Dichloropropene (cis+trans)	ug/g	<0.050	0.050	9748691				<0.050	0.050	9748691
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**Volatile Organics**

Acetone (2-Propanone)	ug/g	<0.49	0.49	9751403				<0.49	0.49	9751403
Benzene	ug/g	<0.0060	0.0060	9751403				<0.0060	0.0060	9751403
Bromodichloromethane	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
Bromoform	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
Bromomethane	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
Carbon Tetrachloride	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
Chlorobenzene	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
Chloroform	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
Dibromochloromethane	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
1,2-Dichlorobenzene	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
1,3-Dichlorobenzene	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
1,4-Dichlorobenzene	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
1,1-Dichloroethane	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
1,2-Dichloroethane	ug/g	<0.049	0.049	9751403				<0.049	0.049	9751403
1,1-Dichloroethylene	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
cis-1,2-Dichloroethylene	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
trans-1,2-Dichloroethylene	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
1,2-Dichloropropane	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
cis-1,3-Dichloropropene	ug/g	<0.030	0.030	9751403				<0.030	0.030	9751403
trans-1,3-Dichloropropene	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
Ethylbenzene	ug/g	<0.010	0.010	9751403				<0.010	0.010	9751403
Ethylene Dibromide	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
Hexane	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
Methylene Chloride(Dichloromethane)	ug/g	<0.049	0.049	9751403				<0.049	0.049	9751403
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	0.40	9751403				<0.40	0.40	9751403
Methyl Isobutyl Ketone	ug/g	<0.40	0.40	9751403				<0.40	0.40	9751403
Methyl t-butyl ether (MTBE)	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403
Styrene	ug/g	<0.040	0.040	9751403				<0.040	0.040	9751403

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 VOCs BY HS & F1-F4 (SOIL)

Bureau Veritas ID		AHZR65		AHZR65		AHZR66				
Sampling Date		2024/10/31 13:50		2024/10/31 13:50		2024/10/31 09:31				
COC Number		1019663-10-01		1019663-10-01		1019663-10-01				
	UNITS	MW12-8	RDL	QC Batch	MW12-8 Lab-Dup	RDL	QC Batch	BH13-5		
								RDL		
								QC Batch		
1,1,1,2-Tetrachloroethane	ug/g	<0.040	0.040	9751403			<0.040	0.040	9751403	
1,1,2,2-Tetrachloroethane	ug/g	<0.040	0.040	9751403			<0.040	0.040	9751403	
Tetrachloroethylene	ug/g	<0.040	0.040	9751403			<0.040	0.040	9751403	
Toluene	ug/g	<0.020	0.020	9751403			0.024	0.020	9751403	
1,1,1-Trichloroethane	ug/g	<0.040	0.040	9751403			<0.040	0.040	9751403	
1,1,2-Trichloroethane	ug/g	<0.040	0.040	9751403			<0.040	0.040	9751403	
Trichloroethylene	ug/g	<0.010	0.010	9751403			<0.010	0.010	9751403	
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	0.040	9751403			<0.040	0.040	9751403	
Vinyl Chloride	ug/g	<0.019	0.019	9751403			<0.019	0.019	9751403	
p+m-Xylene	ug/g	<0.020	0.020	9751403			<0.020	0.020	9751403	
o-Xylene	ug/g	<0.020	0.020	9751403			<0.020	0.020	9751403	
Total Xylenes	ug/g	<0.020	0.020	9751403			<0.020	0.020	9751403	
F1 (C6-C10)	ug/g	<10	10	9751403			<10	10	9751403	
F1 (C6-C10) - BTEX	ug/g	<10	10	9751403			<10	10	9751403	
<b>F2 F4 Hydrocarbons</b>										
F2 (C10-C16 Hydrocarbons)	ug/g	<7.0	7.0	9755061	<7.0	7.0	9755061	<7.0	7.0	9755061
F3 (C16-C34 Hydrocarbons)	ug/g	<50	50	9755061	<50	50	9755061	220	50	9755061
F4 (C34-C50 Hydrocarbons)	ug/g	<50	50	9755061	<50	50	9755061	210	50	9755061
Reached Baseline at C50	ug/g	Yes		9755061	Yes		9755061	Yes		9755061
<b>Surrogate Recovery (%)</b>										
o-Terphenyl	%	96		9755061	96		9755061	91		9755061
4-Bromofluorobenzene	%	107		9751403				106		9751403
D10-o-Xylene	%	106		9751403				102		9751403
D4-1,2-Dichloroethane	%	93		9751403				97		9751403
D8-Toluene	%	96		9751403				94		9751403

RDL = Reportable Detection Limit  
QC Batch = Quality Control Batch  
Lab-Dup = Laboratory Initiated Duplicate



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 VOCs BY HS & F1-F4 (SOIL)

Bureau Veritas ID		AHZR86	AHZR91	AHZR97		
Sampling Date		2024/10/31 15:55	2024/11/01 14:40	2024/11/01 09:55		
COC Number		1019663-10-01	1019663-10-01	1019663-10-01		
	UNITS	MW4-9	MW6-8	MW7-7	RDL	QC Batch
<b>Calculated Parameters</b>						
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	<0.050	<0.050	0.050	9779775
<b>Volatile Organics</b>						
Acetone (2-Propanone)	ug/g	<0.49	<0.49	<0.49	0.49	9782343
Benzene	ug/g	<0.0060	<0.0060	<0.0060	0.0060	9782343
Bromodichloromethane	ug/g	<0.040	<0.040	<0.040	0.040	9782343
Bromoform	ug/g	<0.040	<0.040	<0.040	0.040	9782343
Bromomethane	ug/g	<0.040	<0.040	<0.040	0.040	9782343
Carbon Tetrachloride	ug/g	<0.040	<0.040	<0.040	0.040	9782343
Chlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9782343
Chloroform	ug/g	<0.040	<0.040	<0.040	0.040	9782343
Dibromochloromethane	ug/g	<0.040	<0.040	<0.040	0.040	9782343
1,2-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9782343
1,3-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9782343
1,4-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	0.040	9782343
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	<0.040	<0.040	0.040	9782343
1,1-Dichloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9782343
1,2-Dichloroethane	ug/g	<0.049	<0.049	<0.049	0.049	9782343
1,1-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9782343
cis-1,2-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9782343
trans-1,2-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9782343
1,2-Dichloropropane	ug/g	<0.040	<0.040	<0.040	0.040	9782343
cis-1,3-Dichloropropene	ug/g	<0.030	<0.030	<0.030	0.030	9782343
trans-1,3-Dichloropropene	ug/g	<0.040	<0.040	<0.040	0.040	9782343
Ethylbenzene	ug/g	<0.010	<0.010	<0.010	0.010	9782343
Ethylene Dibromide	ug/g	<0.040	<0.040	<0.040	0.040	9782343
Hexane	ug/g	<0.040	<0.040	<0.040	0.040	9782343
Methylene Chloride(Dichloromethane)	ug/g	<0.049	<0.049	<0.049	0.049	9782343
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	<0.40	<0.40	0.40	9782343
Methyl Isobutyl Ketone	ug/g	<0.40	<0.40	<0.40	0.40	9782343
Methyl t-butyl ether (MTBE)	ug/g	<0.040	<0.040	<0.040	0.040	9782343
Styrene	ug/g	<0.040	<0.040	<0.040	0.040	9782343
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 153 VOCs BY HS & F1-F4 (SOIL)

Bureau Veritas ID		AHZR86	AHZR91	AHZR97		
Sampling Date		2024/10/31 15:55	2024/11/01 14:40	2024/11/01 09:55		
COC Number		1019663-10-01	1019663-10-01	1019663-10-01		
	UNITS	MW4-9	MW6-8	MW7-7	RDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9782343
1,1,2,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9782343
Tetrachloroethylene	ug/g	<0.040	<0.040	<0.040	0.040	9782343
Toluene	ug/g	<0.020	<0.020	<0.020	0.020	9782343
1,1,1-Trichloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9782343
1,1,2-Trichloroethane	ug/g	<0.040	<0.040	<0.040	0.040	9782343
Trichloroethylene	ug/g	<0.010	<0.010	<0.010	0.010	9782343
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	<0.040	<0.040	0.040	9782343
Vinyl Chloride	ug/g	<0.019	<0.019	<0.019	0.019	9782343
p+m-Xylene	ug/g	<0.020	<0.020	<0.020	0.020	9782343
o-Xylene	ug/g	<0.020	<0.020	<0.020	0.020	9782343
Total Xylenes	ug/g	<0.020	<0.020	<0.020	0.020	9782343
F1 (C6-C10)	ug/g	<10	<10	<10	10	9782343
F1 (C6-C10) - DTCX	ug/g	<10	<10	<10	10	9782343
<b>F2-F4 Hydrocarbons</b>						
F2 (C10-C16 Hydrocarbons)	ug/g	<7.0	<7.0	<7.0	7.0	9781962
F3 (C16-C34 Hydrocarbons)	ug/g	<50	88	73	50	9781962
F4 (C34-C50 Hydrocarbons)	ug/g	<50	69	<50	50	9781962
Reached Baseline at C50	ug/g	Yes	Yes	Yes		9781962
<b>Surrogate Recovery (%)</b>						
o-Terphenyl	%	96	94	92		9781962
4-Bromofluorobenzene	%	103	103	102		9782343
D10-o-Xylene	%	141 (1)	89	91		9782343
D4-1,2-Dichloroethane	%	110	113	111		9782343
D8-Toluene	%	93	92	93		9782343

RDL = Reportable Detection Limit  
QC Batch = Quality Control Batch  
(1) The recovery for the extraction surrogate compound was above the upper control limit for duplicate analyses of the soil sample. Visible loss of methanol was observed in this sample. As a result, there is an increased level of uncertainty associated with the values reported for this sample.



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 558 TCLP INORGANICS PACKAGE (SOIL)

Bureau Veritas ID		AHZR67		
Sampling Date		2024/10/31		
COC Number		1019663-10-01		
	UNITS	TCLP	RDL	QC Batch
<b>Inorganics</b>				
Leachable Fluoride (F-)	mg/L	0.21	0.10	9754357
Leachable WAD Cyanide (Free)	mg/L	<0.010	0.010	9754368
Leachable Nitrite (N)	mg/L	<0.10	0.10	9754364
Leachable Nitrate (N)	mg/L	<1.0	1.0	9754364
Leachable Nitrate + Nitrite (N)	mg/L	<1.0	1.0	9754364
<b>Metals</b>				
Leachable Arsenic (As)	mg/L	<0.2	0.2	9754504
Leachable Barium (Ba)	mg/L	0.2	0.2	9754504
Leachable Boron (B)	mg/L	<0.1	0.1	9754504
Leachable Cadmium (Cd)	mg/L	<0.05	0.05	9754504
Leachable Chromium (Cr)	mg/L	<0.1	0.1	9754504
Leachable Lead (Pb)	mg/L	<0.1	0.1	9754504
Leachable Mercury (Hg)	mg/L	<0.001	0.001	9754504
Leachable Selenium (Se)	mg/L	<0.1	0.1	9754504
Leachable Silver (Ag)	mg/L	<0.01	0.01	9754504
Leachable Uranium (U)	mg/L	<0.01	0.01	9754504
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

#### TCLP LEACHATE PREPARATION (SOIL)

Dureau Veritas ID		AHZR67	
Sampling Date		2024/10/31	
COC Number		1019663-10-01	
	UNITS	TCLP	RDL QC Batch
<b>Inorganics</b>			
Final pH	pH	5.77	9755028
Initial pH	pH	9.62	9755028
TCLP - % Solids	%	100	0.2 9751747
TCLP Extraction Fluid	N/A	FLUID II	9755020

RDL = Reportable Detection Limit  
QC Batch = Quality Control Batch



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### O.REG 558 TCLP SEMI-VOLATILE ORGANICS (SOIL)

Bureau Veritas ID		AHZR67	AHZR67		
Sampling Date		2024/10/31	2024/10/31		
COC Number		1019663-10-01	1019663-10-01		
	UNITS	TCLP	TCLP Lab-Dup	RDL	QC Batch
<b>Semivolatile Organics</b>					
Leachable Benzo(a)pyrene	ug/L	<0.10	<0.10	0.10	9758575
Leachable m/p-Cresol	ug/L	<2.5	<2.5	2.5	9758575
Leachable o-Cresol	ug/L	<2.5	<2.5	2.5	9758575
Leachable Cresol Total	ug/L	<2.5	<2.5	2.5	9758575
Leachable 2,4-Dichlorophenol	ug/L	<2.5	<2.5	2.5	9758575
Leachable 2,4-Dinitrotoluene	ug/L	<10	<10	10	9758575
Leachable Hexachlorobenzene	ug/L	<10	<10	10	9758575
Leachable Hexachlorobutadiene	ug/L	<10	<10	10	9758575
Leachable Hexachloroethane	ug/L	<10	<10	10	9758575
Leachable Nitrobenzene	ug/L	<10	<10	10	9758575
Leachable Pentachlorophenol	ug/L	<2.5	<2.5	2.5	9758575
Leachable Pyridine	ug/L	<10	<10	10	9758575
Leachable 2,3,4,6-Tetrachlorophenol	ug/L	<2.5	<2.5	2.5	9758575
Leachable 2,4,5-Trichlorophenol	ug/L	<0.50	<0.50	0.50	9758575
Leachable 2,4,6-Trichlorophenol	ug/L	<2.5	<2.5	2.5	9758575
<b>Surrogate Recovery (%)</b>					
Leachable 2,4,6-Tribromophenol	%	92	90		9758575
Leachable 2-Fluorobiphenyl	%	74	76		9758575
Leachable 2-Fluorophenol	%	70	74		9758575
Leachable D14-Terphenyl (FS)	%	100	99		9758575
Leachable D5-Nitrobenzene	%	95	94		9758575
Leachable D5-Phenol	%	40	39		9758575
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate					



Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM**O.REG 558 TCLP VOCs BY HS (SOIL)**

Bureau Veritas ID	AHZR67		
Sampling Date	2024/10/31		
COC Number	1019663-10-01		
	UNITS	TCLP	RDL QC Batch
<b>Charge/Prep Analysis</b>			
Amount Extracted (Wet Weight) (g)	N/A	25	N/A 9752117
<b>Volatile Organics</b>			
Leachable Benzene	mg/L	<0.020	0.020 9753977
Leachable Carbon Tetrachloride	mg/L	<0.020	0.020 9753977
Leachable Chlorobenzene	mg/L	<0.020	0.020 9753977
Leachable Chloroform	mg/L	<0.020	0.020 9753977
Leachable 1,2-Dichlorobenzene	mg/L	<0.050	0.050 9753977
Leachable 1,4-Dichlorobenzene	mg/L	<0.050	0.050 9753977
Leachable 1,2-Dichloroethane	mg/L	<0.050	0.050 9753977
Leachable 1,1-Dichloroethylene	mg/L	<0.020	0.020 9753977
Leachable Methylene Chloride(Dichloromethane)	mg/L	<0.20	0.20 9753977
Leachable Methyl Ethyl Ketone (2-Butanone)	mg/L	<1.0	1.0 9753977
Leachable Tetrachloroethylene	mg/L	<0.020	0.020 9753977
Leachable Trichloroethylene	mg/L	<0.020	0.020 9753977
Leachable Vinyl Chloride	mg/L	<0.020	0.020 9753977
<b>Surrogate Recovery (%)</b>			
Leachable 4-Bromofluorobenzene	%	105	9753977
Leachable D4-1,2-Dichloroethane	%	101	9753977
Leachable D8-Toluene	%	93	9753977
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable			



Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM**RESULTS OF ANALYSES OF SOIL**

Bureau Veritas ID		AHZR54	AHZR55	AHZR56	AHZR57	AHZR58	AHZR59	
Sampling Date		2024/10/31 09:50	2024/10/31 10:15	2024/10/31 15:25	2024/11/01 14:30	2024/11/01 09:17	2024/10/31 15:00	
COC Number		1019663-10-01	1019663-10-01	1019663-10-01	1019663-10-01	1019663-10-01	1019663-10-01	
	UNITS	<b>MW3-4</b>	<b>MW3-5</b>	<b>MW4-8</b>	<b>MW6-5</b>	<b>MW7-4</b>	<b>BH11-2</b>	<b>RDL QC Batch</b>

**Inorganics**

Moisture	%	18	18	38	16	17	18	1.0	9750496
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RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Bureau Veritas ID		AHZR61	AHZR62	AHZR63	AHZR64	AHZR65	AHZR66	
Sampling Date		2024/10/31 15:20	2024/11/01	2024/10/31 13:15	2024/10/31 15:30	2024/10/31 13:50	2024/10/31 09:31	
COC Number		1019663-10-01	1019663-10-01	1019663-10-01	1019663-10-01	1019663-10-01	1019663-10-01	
	UNITS	<b>BH11-6</b>	<b>QC-2</b>	<b>MW12-2</b>	<b>MW12-7</b>	<b>MW12-8</b>	<b>BH13-5</b>	<b>RDL QC Batch</b>

**Inorganics**

Moisture	%	20	14	15	19	22	26	1.0	9750496
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RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Bureau Veritas ID		AHZR86	AHZR91		AHZR97	AHZR97		
Sampling Date		2024/10/31 15:55	2024/11/01 14:40		2024/11/01 09:55	2024/11/01 09:55		
COC Number		1019663-10-01	1019663-10-01		1019663-10-01	1019663-10-01		
	UNITS	<b>MW4-9</b>	<b>MW6-8</b>	<b>QC Batch</b>	<b>MW7-7</b>	<b>MW7-7 Lab-Dup</b>	<b>RDL</b>	<b>QC Batch</b>

**Inorganics**

Moisture	%	17	31	9781054	19	19	1.0	9781582
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RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas ID		AHZS09	AHZS16	AHZS17	AHZS18	AHZS19	AHZS20	
Sampling Date		2024/10/31 15:25	2024/10/31 08:50	2024/10/31 09:00	2024/10/31 09:10	2024/10/31 09:20	2024/10/31 09:40	
COC Number		1019663-10-01	1019663-10-01	1019663-10-01	1019663-10-01	1019663-10-01	1019663-10-01	
	UNITS	<b>BH11-8</b>	<b>BH13-1</b>	<b>BH13-2</b>	<b>BH13-3</b>	<b>BH13-4</b>	<b>BH13-6</b>	<b>RDL QC Batch</b>

**Inorganics**

Moisture	%	43	11	7.6	9.8	25	34	1.0	9771979
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RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

BUREAU  
VERITAS

Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd

Client Project #: 122140392

Sampler Initials: HM

**RESULTS OF ANALYSES OF SOIL**

Bureau Veritas ID		AHZS21	AHZS22	AHZS23	AHZS23	AHZS24	AHZS26		
Sampling Date		2024/10/31 10:00	2024/10/31 10:10	2024/10/31 10:15	2024/10/31 10:15	2024/10/31 10:25	2024/10/31 10:50		
COC Number		1019663-10-01	1019663-10-01	1019663-10-01	1019663-10-01	1019663-10-01	1019663-10-01		
	UNITS	BH13-7	BH13-8	BH13-9	BH13-9 Lab-Dup	BH13-10	BH13-11	RDL	QC Batch
<b>Inorganics</b>									
Moisture	%	36	20	18	19	15	20	1.0	9771979
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
Lab-Dup = Laboratory Initiated Duplicate									

BUREAU  
VERITAS

Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: HM

### PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		AHZR58	AHZR62		AHZS18	AHZS19		
Sampling Date		2024/11/01 09:17	2024/11/01		2024/10/31 09:10	2024/10/31 09:20		
COC Number		1019663-10-01	1019663-10-01		1019663-10-01	1019663-10-01		
	UNITS	MW7-4	QC-2	QC Batch	BH13-3	BH13-4	RDL	QC Batch

#### F2-F4 Hydrocarbons

F4G-sg (Grav. Heavy Hydrocarbons)	ug/g	2400	3000	9761928	1300	1600	100	9776419
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RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Bureau Veritas ID		AHZS19	AHZS21		
Sampling Date		2024/10/31 09:20	2024/10/31 10:00		
COC Number		1019663-10-01	1019663-10-01		
	UNITS	BH13-4 Lab-Dup	BH13-7	RDL	QC Batch

#### F2-F4 Hydrocarbons

F4G-sg (Grav. Heavy Hydrocarbons)	ug/g	1600	830	100	9776419
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RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### MISCELLANEOUS (SOIL)

Bureau Veritas ID	AHZR67	
Sampling Date	2024/10/31	
COC Number	1019663-10-01	
	UNITS	TCLP
<b>Inorganics</b>		
Ignitability	N/A	NF/NI
QC Batch = Quality Control Batch		



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

## TEST SUMMARY

**Bureau Veritas ID:** AHZR54  
**Sample ID:** MW3-4  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9748849	N/A	2024/11/10	Automated Statchk
Hot Water Extractable Boron	ICP	9753952	2024/11/08	2024/11/08	Aswathy Neduvelli Suresh
Free (WAD) Cyanide	TECH	9755572	2024/11/08	2024/11/12	Prgya Panchal
Conductivity	AT	9757581	2024/11/11	2024/11/11	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9754630	2024/11/08	2024/11/08	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	9754367	2024/11/08	2024/11/08	Jaswinder Kaur
Moisture	BAL	9750496	N/A	2024/11/06	Muhammad Chhaidan
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9753795	2024/11/08	2024/11/08	Lingyun Feng
pH CaCl <sub>2</sub> EXTRACT	AT	9756537	2024/11/09	2024/11/09	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9748632	N/A	2024/11/12	Automated Statchk

**Bureau Veritas ID:** AHZR55  
**Sample ID:** MW3-5  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	9748691	N/A	2024/11/08	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755061	2024/11/08	2024/11/10	Mohammed Abdul Nafay Shoeb
Moisture	BAL	9750496	N/A	2024/11/06	Muhammad Chhaidan
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9751403	N/A	2024/11/07	Cheng-Yu Sha

**Bureau Veritas ID:** AHZR56  
**Sample ID:** MW4-8  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9748849	N/A	2024/11/10	Automated Statchk
Hot Water Extractable Boron	ICP	9753952	2024/11/08	2024/11/08	Aswathy Neduvelli Suresh
1,3-Dichloropropene Sum	CALC	9748691	N/A	2024/11/08	Automated Statchk
Free (WAD) Cyanide	TECH	9755572	2024/11/08	2024/11/12	Prgya Panchal
Conductivity	AT	9757581	2024/11/11	2024/11/11	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9754630	2024/11/08	2024/11/08	Sousan Besharatlou
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755061	2024/11/08	2024/11/10	Mohammed Abdul Nafay Shoeb
Acid Extractable Metals by ICPMS	ICP/MS	9754367	2024/11/08	2024/11/08	Jaswinder Kaur
Moisture	BAL	9750496	N/A	2024/11/06	Muhammad Chhaidan
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9753795	2024/11/08	2024/11/08	Lingyun Feng
pH CaCl <sub>2</sub> EXTRACT	AT	9756537	2024/11/09	2024/11/09	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9748632	N/A	2024/11/12	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9751403	N/A	2024/11/07	Cheng-Yu Sha



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

## TEST SUMMARY

**Bureau Veritas ID:** AHZR57  
**Sample ID:** MW6-5  
**Matrix:** Soil

**Collected:** 2024/11/01  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9748849	N/A	2024/11/10	Automated Statchk
Hot Water Extractable Boron	ICP	9753952	2024/11/08	2024/11/08	Aswathy Neduvelli Suresh
1,3-Dichloropropene Sum	CALC	9748691	N/A	2024/11/08	Automated Statchk
Free (WAD) Cyanide	TECH	9755572	2024/11/08	2024/11/12	Prgya Panchal
Conductivity	AT	9757581	2024/11/11	2024/11/11	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9754630	2024/11/08	2024/11/08	Sousan Besharatlou
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755061	2024/11/08	2024/11/10	Mohammed Abdul Nafay Shoeb
Acid Extractable Metals by ICPMS	ICP/MS	9754367	2024/11/08	2024/11/08	Jaswinder Kaur
Moisture	BAL	9750496	N/A	2024/11/06	Muhammad Chhaidan
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9753795	2024/11/08	2024/11/08	Lingyun Feng
pH CaCl2 EXTRACT	AT	9756537	2024/11/09	2024/11/09	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9748632	N/A	2024/11/12	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9751403	N/A	2024/11/07	Cheng-Yu Sha

**Bureau Veritas ID:** AHZR58  
**Sample ID:** MW7-4  
**Matrix:** Soil

**Collected:** 2024/11/01  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9748849	N/A	2024/11/10	Automated Statchk
Hot Water Extractable Boron	ICP	9754031	2024/11/08	2024/11/08	Thuy Linh Nguyen
1,3-Dichloropropene Sum	CALC	9748691	N/A	2024/11/11	Automated Statchk
Free (WAD) Cyanide	TECH	9755572	2024/11/08	2024/11/12	Prgya Panchal
Conductivity	AT	9757581	2024/11/11	2024/11/11	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9754630	2024/11/08	2024/11/08	Sousan Besharatlou
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755061	2024/11/08	2024/11/11	Mohammed Abdul Nafay Shoeb
F4G (CCME Hydrocarbons Gravimetric)	BAL	9761928	2024/11/13	2024/11/13	Rashmi Dubey
Acid Extractable Metals by ICPMS	ICP/MS	9754367	2024/11/08	2024/11/08	Jaswinder Kaur
Moisture	BAL	9750496	N/A	2024/11/06	Muhammad Chhaidan
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9753795	2024/11/08	2024/11/08	Lingyun Feng
pH CaCl2 EXTRACT	AT	9756537	2024/11/09	2024/11/09	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9748632	N/A	2024/11/12	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9751403	N/A	2024/11/07	Cheng-Yu Sha

**Bureau Veritas ID:** AHZR58 Dup  
**Sample ID:** MW7-4  
**Matrix:** Soil

**Collected:** 2024/11/01  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	TECH	9755572	2024/11/08	2024/11/12	Prgya Panchal
Hexavalent Chromium in Soil by IC	IC/SPEC	9754630	2024/11/08	2024/11/08	Sousan Besharatlou
pH CaCl2 EXTRACT	AT	9756537	2024/11/09	2024/11/09	Kien Tran



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

## TEST SUMMARY

**Bureau Veritas ID:** AHZR59  
**Sample ID:** BH11-2  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9748849	N/A	2024/11/10	Automated Statchk
Hot Water Extractable Boron	ICP	9753952	2024/11/08	2024/11/08	Aswathy Neduvelli Suresh
Free (WAD) Cyanide	TECH	9755572	2024/11/08	2024/11/12	Prgya Panchal
Conductivity	AT	9757581	2024/11/11	2024/11/11	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9754630	2024/11/08	2024/11/08	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	9754367	2024/11/08	2024/11/08	Jaswinder Kaur
Moisture	BAL	9750496	N/A	2024/11/06	Muhammad Chhaidan
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9753795	2024/11/08	2024/11/08	Lingyun Feng
pH CaCl <sub>2</sub> EXTRACT	AT	9756537	2024/11/09	2024/11/09	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9748632	N/A	2024/11/12	Automated Statchk

**Bureau Veritas ID:** AHZR61  
**Sample ID:** BH11-6  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	9748691	N/A	2024/11/08	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755061	2024/11/08	2024/11/10	Mohammed Abdul Nafay Shoeb
Moisture	BAL	9750496	N/A	2024/11/06	Muhammad Chhaidan
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9751403	N/A	2024/11/07	Cheng-Yu Sha

**Bureau Veritas ID:** AHZR62  
**Sample ID:** QC-2  
**Matrix:** Soil

**Collected:** 2024/11/01  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9748849	N/A	2024/11/10	Automated Statchk
Hot Water Extractable Boron	ICP	9754031	2024/11/08	2024/11/08	Thuy Linh Nguyen
1,3-Dichloropropene Sum	CALC	9748691	N/A	2024/11/11	Automated Statchk
Free (WAD) Cyanide	TECH	9755572	2024/11/08	2024/11/12	Prgya Panchal
Conductivity	AT	9757581	2024/11/11	2024/11/11	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9754630	2024/11/08	2024/11/08	Sousan Besharatlou
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755061	2024/11/08	2024/11/11	Mohammed Abdul Nafay Shoeb
F4G (CCME Hydrocarbons Gravimetric)	BAL	9761928	2024/11/13	2024/11/13	Rashmi Dubey
Acid Extractable Metals by ICPMS	ICP/MS	9754367	2024/11/08	2024/11/08	Jaswinder Kaur
Moisture	BAL	9750496	N/A	2024/11/06	Muhammad Chhaidan
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9753795	2024/11/08	2024/11/08	Lingyun Feng
pH CaCl <sub>2</sub> EXTRACT	AT	9756537	2024/11/09	2024/11/09	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9748632	N/A	2024/11/12	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9751403	N/A	2024/11/07	Cheng-Yu Sha



Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: HM

**TEST SUMMARY**

**Bureau Veritas ID:** AHZR63  
**Sample ID:** MW12-2  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9748849	N/A	2024/11/10	Automated Statchk
Hot Water Extractable Boron	ICP	9753952	2024/11/08	2024/11/08	Aswathy Neduvelli Suresh
Free (WAD) Cyanide	TECH	9755572	2024/11/08	2024/11/12	Prgya Panchal
Conductivity	AT	9757581	2024/11/11	2024/11/11	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPFC	9754630	2024/11/08	2024/11/08	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	9754367	2024/11/08	2024/11/08	Jaswinder Kaur
Moisture	BAL	9750496	N/A	2024/11/06	Muhammad Chhaidan
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9753795	2024/11/08	2024/11/08	Lingyun Feng
pH CuCl <sub>2</sub> EXTRACT	AT	9756537	2024/11/09	2024/11/09	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9748632	N/A	2024/11/12	Automated Statchk

**Bureau Veritas ID:** AHZR64  
**Sample ID:** MW12-7  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9750293	N/A	2024/11/07	Ravinder Gaidhu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755061	2024/11/08	2024/11/11	Mohammed Abdul Nafay Shoeb
Moisture	BAL	9750496	N/A	2024/11/06	Muhammad Chhaidan

**Bureau Veritas ID:** AHZR65  
**Sample ID:** MW12-8  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	9748691	N/A	2024/11/08	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755061	2024/11/08	2024/11/11	Mohammed Abdul Nafay Shoeb
Moisture	BAL	9750496	N/A	2024/11/06	Muhammad Chhaidan
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9751403	N/A	2024/11/07	Cheng-Yu Sha

**Bureau Veritas ID:** AHZR65 Dup  
**Sample ID:** MW12-8  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755061	2024/11/08	2024/11/11	Mohammed Abdul Nafay Shoeb

**Bureau Veritas ID:** AHZR66  
**Sample ID:** BH13-5  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9748849	N/A	2024/11/10	Automated Statchk
Hot Water Extractable Boron	ICP	9754031	2024/11/08	2024/11/08	Thuy Linh Nguyen
1,3-Dichloropropene Sum	CALC	9748691	N/A	2024/11/08	Automated Statchk
Free (WAD) Cyanide	TECH	9755572	2024/11/08	2024/11/12	Prgya Panchal

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Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM**TEST SUMMARY**

**Bureau Veritas ID:** AHZR66  
**Sample ID:** BH13-5  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	9757581	2024/11/11	2024/11/11	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9754630	2024/11/08	2024/11/08	Sousan Besharatlou
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9755061	2024/11/08	2024/11/11	Mohammed Abdul Nafay Shoeb
Acid Extractable Metals by ICPMS	ICP/MS	9754367	2024/11/08	2024/11/08	Jaswinder Kaur
Moisture	BAL	9750496	N/A	2024/11/06	Muhammad Chhaidan
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9753795	2024/11/08	2024/11/08	Lingyun Feng
pH CaCl <sub>2</sub> EXTRACT	AT	9756537	2024/11/09	2024/11/09	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9748632	N/A	2024/11/12	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9751403	N/A	2024/11/07	Cheng-Yu Sha

**Bureau Veritas ID:** AHZR66 Dup  
**Sample ID:** BH13-5  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	9757581	2024/11/11	2024/11/11	Kien Tran

**Bureau Veritas ID:** AHZR67  
**Sample ID:** TCLP  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Semivolatile Organic Compounds (TCLP)	GC/MS	9758575	2024/11/11	2024/11/12	Wendy Zhao
Cyanide (WAD) in Leachates	SKAL/CN	9754368	N/A	2024/11/08	Jency Sara Johnson
Fluoride by ISE in Leachates	ISE	9754357	2024/11/08	2024/11/09	Nachiketa Gohil
Total Metals in TCLP Leachate by ICPMS	ICP1/MS	9754504	2024/11/08	2024/11/08	Nan Raykha
Ignitability of a Sample	BAL	9758094	2024/11/11	2024/11/11	Jeremy Apoon
Nitrate& Nitrite as Nitrogen in Leachate	LACH	9754364	N/A	2024/11/12	Chandra Nandal
TCLP - % Solids	BAL	9751747	2024/11/07	2024/11/08	Abdul Rahman Mohammed
TCLP - Extraction Fluid		9755020	N/A	2024/11/08	Abdul Rahman Mohammed
TCLP - Initial and final pH	PH	9755028	N/A	2024/11/08	Abdul Rahman Mohammed
TCLP Zero Headspace Extraction		9752117	2024/11/07	2024/11/08	Arshdeep Jagayat
VOCs in ZHE Leachates	GC/MS	9753977	2024/11/08	2024/11/08	Noel Ramos

**Bureau Veritas ID:** AHZR67 Dup  
**Sample ID:** TCLP  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Semivolatile Organic Compounds (TCLP)	GC/MS	9758575	2024/11/11	2024/11/12	Wendy Zhao

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Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd

Client Project #: 122140392

Sampler Initials: HM

**TEST SUMMARY**

**Bureau Veritas ID:** AHZR86  
**Sample ID:** MW4-9  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hol Water Extractable Boron	ICP	9782283	2024/11/22	2024/11/22	Medhat Nasr
1,3-Dichloropropene Sum	CALC	9779775	N/A	2024/11/25	Automated Statchk
Free (WAD) Cyanide	TECH	9781975	2024/11/22	2024/11/22	Prgya Panchal
Conductivity	AT	9782811	2024/11/22	2024/11/22	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9782200	2024/11/22	2024/11/22	Sousan Besharatlou
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9781962	2024/11/22	2024/11/22	Jeevaraj Jeevaratnam
Acid Extractable Metals by ICPMS	ICP/MS	9782920	2024/11/22	2024/11/22	Daniel Teclu
Moisture	BAL	9781054	N/A	2024/11/21	Muhammad Chhaidan
pH CaCl2 EXTRACT	AT	9782879	2024/11/22	2024/11/22	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9780245	N/A	2024/11/25	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9782343	N/A	2024/11/22	Anna Gabrielyan

**Bureau Veritas ID:** AHZR91  
**Sample ID:** MW6-8  
**Matrix:** Soil

**Collected:** 2024/11/01  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hol Water Extractable Boron	ICP	9782283	2024/11/22	2024/11/22	Medhat Nasr
1,3-Dichloropropene Sum	CALC	9779775	N/A	2024/11/25	Automated Statchk
Free (WAD) Cyanide	TECH	9781975	2024/11/22	2024/11/22	Prgya Panchal
Conductivity	AT	9782811	2024/11/22	2024/11/22	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9782200	2024/11/22	2024/11/22	Sousan Besharatlou
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9781962	2024/11/22	2024/11/22	Jeevaraj Jeevaratnam
Acid Extractable Metals by ICPMS	ICP/MS	9782920	2024/11/22	2024/11/22	Daniel Teclu
Moisture	BAL	9781054	N/A	2024/11/21	Muhammad Chhaidan
pH CaCl2 EXTRACT	AT	9782879	2024/11/22	2024/11/22	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9780245	N/A	2024/11/25	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9782343	N/A	2024/11/22	Anna Gabrielyan

**Bureau Veritas ID:** AHZR97  
**Sample ID:** MW7-7  
**Matrix:** Soil

**Collected:** 2024/11/01  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9779565	N/A	2024/11/25	Automated Statchk
1,3-Dichloropropene Sum	CALC	9779775	N/A	2024/11/25	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9781962	2024/11/22	2024/11/22	Jeevaraj Jeevaratnam
Moisture	BAL	9781582	N/A	2024/11/21	Muhammad Chhaidan
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9781986	2024/11/22	2024/11/22	Margaret Kulczyk-Stanko
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9782343	N/A	2024/11/22	Anna Gabrielyan



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

## TEST SUMMARY

**Bureau Veritas ID:** AHZR97 Dup  
**Sample ID:** MW7-7  
**Matrix:** Soil

**Collected:** 2024/11/01  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	9781582	N/A	2024/11/21	Muhammad Chhaidan

**Bureau Veritas ID:** AHZS09  
**Sample ID:** BH11-8  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9771947	N/A	2024/11/18	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9773009	2024/11/18	2024/11/19	Mohammed Abdul Nafay Shoeb
Moisture	BAL	9771979	N/A	2024/11/18	Joe Thomas

**Bureau Veritas ID:** AHZS16  
**Sample ID:** BH13-1  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	9782634	2024/11/22	2024/11/22	Thuy Linh Nguyen
Free (WAD) Cyanide	TECH	9781287	2024/11/21	2024/11/22	Prgya Panchal
Conductivity	AT	9780464	2024/11/21	2024/11/21	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9780512	2024/11/21	2024/11/22	Sousan Besharatlou
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9771947	N/A	2024/11/18	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9773009	2024/11/18	2024/11/19	Mohammed Abdul Nafay Shoeb
Acid Extractable Metals by ICPMS	ICP/MS	9780686	2024/11/21	2024/11/23	Thuy Linh Nguyen
Moisture	BAL	9771979	N/A	2024/11/18	Joe Thomas
pH CaCl <sub>2</sub> EXTRACT	AT	9780505	2024/11/21	2024/11/21	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9771384	N/A	2024/11/22	Automated Statchk

**Bureau Veritas ID:** AHZS17  
**Sample ID:** BH13-2  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	9782456	2024/11/22	2024/11/23	Japneet Gill
Free (WAD) Cyanide	TECH	9781287	2024/11/21	2024/11/22	Prgya Panchal
Conductivity	AT	9780464	2024/11/21	2024/11/21	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9780512	2024/11/21	2024/11/22	Sousan Besharatlou
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9771947	N/A	2024/11/18	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9773009	2024/11/18	2024/11/19	Mohammed Abdul Nafay Shoeb
Acid Extractable Metals by ICPMS	ICP/MS	9780686	2024/11/21	2024/11/23	Thuy Linh Nguyen
Moisture	BAL	9771979	N/A	2024/11/18	Joe Thomas
pH CaCl <sub>2</sub> EXTRACT	AT	9780505	2024/11/21	2024/11/21	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9771384	N/A	2024/11/22	Automated Statchk



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Sampler Initials: HM

## TEST SUMMARY

**Bureau Veritas ID:** AHZS18  
**Sample ID:** BH13-3  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	9782634	2024/11/22	2024/11/22	Thuy Linh Nguyen
Free (WAD) Cyanide	TECH	9781307	2024/11/21	2024/11/22	Prgya Panchal
Conductivity	AT	9780464	2024/11/21	2024/11/21	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9781254	2024/11/21	2024/11/22	Rupinder Sihota
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9771947	N/A	2024/11/18	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9773009	2024/11/18	2024/11/19	Mohammed Abdul Nafay Shoeb
F4G (CCME Hydrocarbons Gravimetric)	BAL	9776419	2024/11/20	2024/11/20	Rashmi Dubey
Acid Extractable Metals by ICPMS	ICP/MS	9780686	2024/11/21	2024/11/23	Thuy Linh Nguyen
Moisture	BAL	9771979	N/A	2024/11/18	Joe Thomas
pH CaCl <sub>2</sub> EXTRACT	AT	9781125	2024/11/21	2024/11/21	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9771384	N/A	2024/11/22	Automated Statchk

**Bureau Veritas ID:** AHZS19  
**Sample ID:** BH13-4  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	9782456	2024/11/22	2024/11/23	Japneet Gill
Free (WAD) Cyanide	TECH	9781307	2024/11/21	2024/11/22	Prgya Panchal
Conductivity	AT	9780464	2024/11/21	2024/11/21	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9781254	2024/11/21	2024/11/22	Rupinder Sihota
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9771947	N/A	2024/11/18	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9773009	2024/11/18	2024/11/19	Mohammed Abdul Nafay Shoeb
F4G (CCME Hydrocarbons Gravimetric)	BAL	9776419	2024/11/20	2024/11/20	Rashmi Dubey
Acid Extractable Metals by ICPMS	ICP/MS	9780686	2024/11/21	2024/11/23	Thuy Linh Nguyen
Moisture	BAL	9771979	N/A	2024/11/18	Joe Thomas
pH CaCl <sub>2</sub> EXTRACT	AT	9781125	2024/11/21	2024/11/21	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9771384	N/A	2024/11/22	Automated Statchk

**Bureau Veritas ID:** AHZS19 Dup  
**Sample ID:** BH13-4  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
F4G (CCME Hydrocarbons Gravimetric)	BAL	9776419	2024/11/20	2024/11/20	Rashmi Dubey

**Bureau Veritas ID:** AHZS20  
**Sample ID:** BH13-6  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	9782634	2024/11/22	2024/11/22	Thuy Linh Nguyen
Free (WAD) Cyanide	TECH	9781287	2024/11/21	2024/11/22	Prgya Panchal
Conductivity	AT	9780464	2024/11/21	2024/11/21	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9780512	2024/11/21	2024/11/22	Sousan Besharatlou



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Report Date: 2024/11/26

Stantec Consulting Ltd  
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## TEST SUMMARY

**Bureau Veritas ID:** AHZS20  
**Sample ID:** BH13-6  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9771947	N/A	2024/11/19	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9773009	2024/11/18	2024/11/19	Mohammed Abdul Nafay Shoeb
Acid Extractable Metals by ICPMS	ICP/MS	9780686	2024/11/21	2024/11/23	Thuy Linh Nguyen
Moisture	BAL	9771979	N/A	2024/11/18	Joe Thomas
pH CaCl <sub>2</sub> EXTRACT	AT	9780505	2024/11/21	2024/11/21	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9771384	N/A	2024/11/22	Automated Statchk

**Bureau Veritas ID:** AHZS21  
**Sample ID:** BH13-7  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	9782456	2024/11/22	2024/11/23	Japneet Gill
Free (WAD) Cyanide	TECH	9781287	2024/11/21	2024/11/22	Prgya Panchal
Conductivity	AT	9780464	2024/11/21	2024/11/21	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9780512	2024/11/21	2024/11/22	Sousan Besharatlou
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9771947	N/A	2024/11/19	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9773009	2024/11/18	2024/11/19	Mohammed Abdul Nafay Shoeb
F4G (CCME Hydrocarbons Gravimetric)	BAL	9776419	2024/11/20	2024/11/20	Rashmi Dubey
Acid Extractable Metals by ICPMS	ICP/MS	9780686	2024/11/21	2024/11/23	Thuy Linh Nguyen
Moisture	BAL	9771979	N/A	2024/11/18	Joe Thomas
pH CaCl <sub>2</sub> EXTRACT	AT	9783050	2024/11/22	2024/11/22	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9771384	N/A	2024/11/22	Automated Statchk

**Bureau Veritas ID:** AHZS22  
**Sample ID:** BH13-8  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	9782634	2024/11/22	2024/11/22	Thuy Linh Nguyen
Free (WAD) Cyanide	TECH	9781287	2024/11/21	2024/11/22	Prgya Panchal
Conductivity	AT	9780464	2024/11/21	2024/11/21	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9780512	2024/11/21	2024/11/22	Sousan Besharatlou
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9771947	N/A	2024/11/19	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9773009	2024/11/18	2024/11/19	Mohammed Abdul Nafay Shoeb
Acid Extractable Metals by ICPMS	ICP/MS	9780686	2024/11/21	2024/11/23	Thuy Linh Nguyen
Moisture	BAL	9771979	N/A	2024/11/18	Joe Thomas
pH CaCl <sub>2</sub> EXTRACT	AT	9780505	2024/11/21	2024/11/21	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9771384	N/A	2024/11/22	Automated Statchk

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**TEST SUMMARY**

**Bureau Veritas ID:** AHZS23  
**Sample ID:** BH13-9  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	9782634	2024/11/22	2024/11/22	Thuy Linh Nguyen
Free (WAD) Cyanide	TECH	9781287	2024/11/21	2024/11/22	Prgya Panchal
Conductivity	AT	9780464	2024/11/21	2024/11/21	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9780512	2024/11/21	2024/11/22	Sousan Besharatlou
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9771947	N/A	2024/11/19	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9773009	2024/11/18	2024/11/19	Mohammed Abdul Nafay Shoeb
Acid Extractable Metals by ICPMS	ICP/MS	9780686	2024/11/21	2024/11/23	Thuy Linh Nguyen
Moisture	RAI	9771979	N/A	2024/11/18	Joe Thomas
pH CaCl <sub>2</sub> EXTRACT	AT	9780505	2024/11/21	2024/11/21	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9771384	N/A	2024/11/22	Automated Statchk

**Bureau Veritas ID:** AHZS23 Dup  
**Sample ID:** BH13-9  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	9771979	N/A	2024/11/18	Joe Thomas

**Bureau Veritas ID:** AHZS24  
**Sample ID:** BH13-10  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	9782634	2024/11/22	2024/11/22	Thuy Linh Nguyen
Free (WAD) Cyanide	TECH	9781287	2024/11/21	2024/11/22	Prgya Panchal
Conductivity	AT	9780464	2024/11/21	2024/11/21	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9780512	2024/11/21	2024/11/22	Sousan Besharatlou
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9771947	N/A	2024/11/19	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9773009	2024/11/18	2024/11/19	Mohammed Abdul Nafay Shoeb
Acid Extractable Metals by ICPMS	ICP/MS	9780686	2024/11/21	2024/11/23	Thuy Linh Nguyen
Moisture	BAL	9771979	N/A	2024/11/18	Joe Thomas
pH CaCl <sub>2</sub> EXTRACT	AT	9780505	2024/11/21	2024/11/21	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9771384	N/A	2024/11/22	Automated Statchk

**Bureau Veritas ID:** AHZS24 Dup  
**Sample ID:** BH13-10  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	9780464	2024/11/21	2024/11/21	Kien Tran



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## TEST SUMMARY

**Bureau Veritas ID:** AHZS26  
**Sample ID:** BH13-11  
**Matrix:** Soil

**Collected:** 2024/10/31  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	9782456	2024/11/22	2024/11/23	Japneet Gill
Free (WAD) Cyanide	TECH	9781287	2024/11/21	2024/11/22	Prgya Panchal
Conductivity	AT	9780464	2024/11/21	2024/11/21	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9780512	2024/11/21	2024/11/22	Sousan Besharatlou
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	9771947	N/A	2024/11/19	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9773009	2024/11/18	2024/11/19	Mohammed Abdul Nafay Shoeb
Acid Extractable Metals by ICPMS	ICP/MS	9780686	2024/11/21	2024/11/23	Thuy Linh Nguyen
Moisture	BAL	9771979	N/A	2024/11/18	Joe Thomas
pH CaCl <sub>2</sub> EXTRACT	AT	9780505	2024/11/21	2024/11/21	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9771384	N/A	2024/11/22	Automated Statchk



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Client Project #: 122140392  
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## GENERAL COMMENTS

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

Package 1	4.0°C
Package 2	3.7°C
Package 3	7.7°C

Revised Report [2024/11/25]: Additional analysis requested.

F1/BTEX Analysis: Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency.

F1/BTEX Analysis: Analysis was performed past the sample holding time. This may increase the variability associated with these results.

F24 Analysis: Analysis was performed past the sample holding time. This may increase the variability associated with these results.

Sample AHZR55 [MW3-5] : VOC/F1 Analysis: Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency.

Sample AHZR56 [MW4-8] : PAH Analysis: Detection limits were adjusted for high moisture content.

Hexavalent Chromium: Detection Limits were raised due to high moisture content.

Sample AHZR56 [MW4-8] : VOC/F1 Analysis: Detection limits were raised due to high moisture content and/or low weight of soil provided.

Sample AHZR58 [MW7-4] : PAH Analysis: Due to the sample matrix, sample required dilution. Detection limit were adjusted accordingly.

VOC/F1 Analysis: Due to a level of petroleum hydrocarbon compounds beyond the appropriate range, the sample required dilution. The detection limits were adjusted accordingly. In order to meet required regulatory criteria, results for selected compounds (obtained by a separate analysis using an appropriate low dilution) are included in the report.

Sample AHZR58 [MW7-4] : VOC/F1 Analysis: Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency.

Sample AHZR59 [BH11-2] : F24 : Analysis was performed past the sample holding time. This may increase the variability associated with these results.

Sample AHZR62 [QC-2] : PAH Analysis: Due to the sample matrix, sample required dilution. Detection limit were adjusted accordingly.

VOC/F1 Analysis: Due to a level of petroleum hydrocarbon compounds beyond the appropriate range, the sample required dilution. The detection limits were adjusted accordingly. In order to meet required regulatory criteria, results for selected compounds (obtained by a separate analysis using an appropriate low dilution) are included in the report.

Sample AHZR62 [QC-2] : VOC/F1 Analysis: Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency.

Sample AHZR63 [MW12-2] : PAH Analysis: Due to the sample matrix, sample required dilution. Detection limit were adjusted accordingly.

Sample AHZR64 [MW12-7] : F1/BTEX Analysis: Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency.

Sample AHZR65 [MW12-8] : VOC/F1 Analysis: Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency.

Sample AHZR66 [BH13-5] : PAH Analysis: Due to the sample matrix, sample required dilution. Detection limit were adjusted accordingly.



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Sample AHZR67 [TCLP] : NF/NI = Non Flammable and Non Ignitable

Sample AHZR86 [MW4-9] : VOC/F1 Analysis: The sample was analyzed after the 14 day holding time specified by the method had expired.

Sample AHZR91 [MW6-8] : VOC/F1 Analysis: The sample was analyzed after the 14 day holding time specified by the method had expired.

Sample AHZR97 [MW7-7] : VOC/F1 Analysis: The sample was analyzed after the 14 day holding time specified by the method had expired.

Sample AHZS09 [BH11-8] : F2-F4 Analysis: Detection limits were adjusted for high moisture content.

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



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Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

## QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9750293	RGA	Matrix Spike	1,4-Difluorobenzene	2024/11/06	99	%	60 - 140	
			4-Bromofluorobenzene	2024/11/06	105	%	60 - 140	
			D10-o-Xylene	2024/11/06	115	%	60 - 140	
			D4-1,2-Dichloroethane	2024/11/06	96	%	60 - 140	
			Benzene	2024/11/06	88	%	50 - 140	
			Toluene	2024/11/06	87	%	50 - 140	
			Ethylbenzene	2024/11/06	104	%	50 - 140	
			o-Xylene	2024/11/06	103	%	50 - 140	
			p+m-Xylene	2024/11/06	96	%	50 - 140	
			F1 (C6-C10)	2024/11/06	94	%	60 - 140	
9750293	RGA	Spiked Blank	1,4-Difluorobenzene	2024/11/06	102	%	60 - 140	
			4-Bromofluorobenzene	2024/11/06	103	%	60 - 140	
			D10-o-Xylene	2024/11/06	98	%	60 - 140	
			D4-1,2-Dichloroethane	2024/11/06	94	%	60 - 140	
			Benzene	2024/11/06	85	%	50 - 140	
			Toluene	2024/11/06	84	%	50 - 140	
			Ethylbenzene	2024/11/06	101	%	50 - 140	
			o-Xylene	2024/11/06	100	%	50 - 140	
			p+m-Xylene	2024/11/06	92	%	50 - 140	
			F1 (C6-C10)	2024/11/06	104	%	80 - 120	
9750293	RGA	Method Blank	1,4-Difluorobenzene	2024/11/06	101	%	60 - 140	
			4-Bromofluorobenzene	2024/11/06	95	%	60 - 140	
			D10-o-Xylene	2024/11/06	81	%	60 - 140	
			D4-1,2-Dichloroethane	2024/11/06	99	%	60 - 140	
			Benzene	2024/11/06	<0.020	ug/g		
			Toluene	2024/11/06	<0.020	ug/g		
			Ethylbenzene	2024/11/06	<0.020	ug/g		
			o-Xylene	2024/11/06	<0.020	ug/g		
			p+m-Xylene	2024/11/06	<0.040	ug/g		
			Total Xylenes	2024/11/06	<0.040	ug/g		
9750293	RGA	RPD	F1 (C6-C10)	2024/11/06	<10	ug/g		
			F1 (C6-C10) - BTEX	2024/11/06	<10	ug/g		
			Benzene	2024/11/06	NC	%	50	
			Toluene	2024/11/06	NC	%	50	
			Ethylbenzene	2024/11/06	NC	%	50	
			o-Xylene	2024/11/06	NC	%	50	
			p+m-Xylene	2024/11/06	NC	%	50	
			Total Xylenes	2024/11/06	NC	%	50	
			F1 (C6-C10)	2024/11/06	NC	%	30	
			F1 (C6-C10) - BTEX	2024/11/06	NC	%	30	
9750496	MUC	RPD	Moisture	2024/11/06	4.0	%	20	
9751403	CYS	Matrix Spike	4-Bromofluorobenzene	2024/11/07	106	%	60 - 140	
			D10-o-Xylene	2024/11/07	106	%	60 - 130	
			D4-1,2-Dichloroethane	2024/11/07	93	%	60 - 140	
			D8-Toluene	2024/11/07	97	%	60 - 140	
			Acetone (2-Propanone)	2024/11/07	84	%	60 - 140	
			Benzene	2024/11/07	98	%	60 - 140	
			Bromodichloromethane	2024/11/07	95	%	60 - 140	
			Bromoform	2024/11/07	104	%	60 - 140	
			Bromomethane	2024/11/07	86	%	60 - 140	
			Carbon Tetrachloride	2024/11/07	112	%	60 - 140	
			Chlorobenzene	2024/11/07	96	%	60 - 140	

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## QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
				Chloroform	2024/11/07	99	%	60 - 140	
				Dibromochloromethane	2024/11/07	101	%	60 - 140	
				1,2-Dichlorobenzene	2024/11/07	104	%	60 - 140	
				1,3-Dichlorobenzene	2024/11/07	106	%	60 - 140	
				1,4-Dichlorobenzene	2024/11/07	107	%	60 - 140	
				Dichlorodifluoromethane (FREON 12)	2024/11/07	96	%	60 - 140	
				1,1-Dichloroethane	2024/11/07	90	%	60 - 140	
				1,2-Dichloroethane	2024/11/07	96	%	60 - 140	
				1,1-Dichloroethylene	2024/11/07	98	%	60 - 140	
				cis-1,2-Dichloroethylene	2024/11/07	107	%	60 - 140	
				trans-1,2-Dichloroethylene	2024/11/07	109	%	60 - 140	
				1,2-Dichloropropane	2024/11/07	92	%	60 - 140	
				cis-1,3-Dichloropropene	2024/11/07	88	%	60 - 140	
				trans-1,3-Dichloropropene	2024/11/07	92	%	60 - 140	
				Ethylbenzene	2024/11/07	94	%	60 - 140	
				Ethylene Dibromide	2024/11/07	98	%	60 - 140	
				Hexane	2024/11/07	100	%	60 - 140	
				Methylene Chloride(Dichloromethane)	2024/11/07	99	%	60 - 140	
				Methyl Ethyl Ketone (2-Butanone)	2024/11/07	79	%	60 - 140	
				Methyl Isobutyl Ketone	2024/11/07	78	%	60 - 140	
				Methyl t-butyl ether (MTBE)	2024/11/07	94	%	60 - 140	
				Styrene	2024/11/07	93	%	60 - 140	
				1,1,1,2-Tetrachloroethane	2024/11/07	109	%	60 - 140	
				1,1,2,2-Tetrachloroethane	2024/11/07	86	%	60 - 140	
				Tetrachloroethylene	2024/11/07	106	%	60 - 140	
				Toluene	2024/11/07	98	%	60 - 140	
				1,1,1-Trichloroethane	2024/11/07	103	%	60 - 140	
				1,1,2-Trichloroethane	2024/11/07	90	%	60 - 140	
				Trichloroethylene	2024/11/07	109	%	60 - 140	
				Trichlorofluoromethane (FREON 11)	2024/11/07	108	%	60 - 140	
				Vinyl Chloride	2024/11/07	96	%	60 - 140	
				p+m-Xylene	2024/11/07	93	%	60 - 140	
				o-Xylene	2024/11/07	102	%	60 - 140	
				F1 (C6-C10)	2024/11/07	88	%	60 - 140	
9751403	CYS	Spiked Blank		4-Bromofluorobenzene	2024/11/07	105	%	60 - 140	
				D10-o-Xylene	2024/11/07	99	%	60 - 130	
				D4-1,2-Dichloroethane	2024/11/07	96	%	60 - 140	
				D8-Toluene	2024/11/07	96	%	60 - 140	
				Acetone (2-Propanone)	2024/11/07	87	%	60 - 140	
				Benzene	2024/11/07	97	%	60 - 130	
				Bromodichloromethane	2024/11/07	95	%	60 - 130	
				Bromoform	2024/11/07	103	%	60 - 130	
				Bromomethane	2024/11/07	85	%	60 - 140	
				Carbon Tetrachloride	2024/11/07	110	%	60 - 130	
				Chlorobenzene	2024/11/07	93	%	60 - 130	
				Chloroform	2024/11/07	99	%	60 - 130	
				Dibromochloromethane	2024/11/07	99	%	60 - 130	
				1,2-Dichlorobenzene	2024/11/07	101	%	60 - 130	
				1,3-Dichlorobenzene	2024/11/07	103	%	60 - 130	
				1,4-Dichlorobenzene	2024/11/07	104	%	60 - 130	
				Dichlorodifluoromethane (FREON 12)	2024/11/07	94	%	60 - 140	
				1,1-Dichloroethane	2024/11/07	90	%	60 - 130	



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9751403	CYS	Method Blank	1,2-Dichloroethane	2024/11/07	97	%	60 - 130	
			1,1-Dichloroethylene	2024/11/07	97	%	60 - 130	
			cis-1,2-Dichloroethylene	2024/11/07	106	%	60 - 130	
			trans-1,2-Dichloroethylene	2024/11/07	108	%	60 - 130	
			1,2 Dichloropropane	2024/11/07	92	%	60 - 130	
			cis-1,3-Dichloropropene	2024/11/07	88	%	60 - 130	
			trans-1,3-Dichloropropene	2024/11/07	90	%	60 - 130	
			Ethylbenzene	2024/11/07	91	%	60 - 130	
			Ethylene Dibromide	2024/11/07	96	%	60 - 130	
			Hexane	2024/11/07	98	%	60 - 130	
			Methylene Chloride(Dichloromethane)	2024/11/07	99	%	60 - 130	
			Methyl Ethyl Ketone (2-Butanone)	2024/11/07	82	%	60 - 140	
			Methyl Isobutyl Ketone	2024/11/07	82	%	60 - 130	
			Methyl t-butyl ether (MTBE)	2024/11/07	96	%	60 - 130	
			Styrene	2024/11/07	90	%	60 - 130	
			1,1,1,2-Tetrachloroethane	2024/11/07	106	%	60 - 130	
			1,1,2,2-Tetrachloroethane	2024/11/07	85	%	60 - 130	
			Tetrachloroethylene	2024/11/07	102	%	60 - 130	
			Toluene	2024/11/07	96	%	60 - 130	
			1,1,1-Trichloroethane	2024/11/07	101	%	60 - 130	
			1,1,2-Trichloroethane	2024/11/07	88	%	60 - 130	
			Trichloroethylene	2024/11/07	108	%	60 - 130	
			Trichlorofluoromethane (FREON 11)	2024/11/07	106	%	60 - 130	
			Vinyl Chloride	2024/11/07	94	%	60 - 130	
			p+m-Xylene	2024/11/07	89	%	60 - 130	
			o-Xylene	2024/11/07	100	%	60 - 130	
			F1 (C6-C10)	2024/11/07	86	%	80 - 120	
			4-Bromofluorobenzene	2024/11/07	107	%	60 - 140	
			D10 o Xylene	2024/11/07	98	%	60 - 130	
			D4-1,2-Dichloroethane	2024/11/07	94	%	60 - 140	
			D8-Toluene	2024/11/07	96	%	60 - 140	
			Acetone (2-Propanone)	2024/11/07	<0.49		ug/g	
			Benzene	2024/11/07	<0.0060		ug/g	
			Bromodichloromethane	2024/11/07	<0.040		ug/g	
			Bromoform	2024/11/07	<0.040		ug/g	
			Bromomethane	2024/11/07	<0.040		ug/g	
			Carbon Tetrachloride	2024/11/07	<0.040		ug/g	
			Chlorobenzene	2024/11/07	<0.040		ug/g	
			Chloroform	2024/11/07	<0.040		ug/g	
			Dibromochloromethane	2024/11/07	<0.040		ug/g	
			1,2-Dichlorobenzene	2024/11/07	<0.040		ug/g	
			1,3-Dichlorobenzene	2024/11/07	<0.040		ug/g	
			1,4-Dichlorobenzene	2024/11/07	<0.040		ug/g	
			Dichlorodifluoromethane (FREON 12)	2024/11/07	<0.040		ug/g	
			1,1-Dichloroethane	2024/11/07	<0.040		ug/g	
			1,2-Dichloroethane	2024/11/07	<0.049		ug/g	
			1,1-Dichloroethylene	2024/11/07	<0.040		ug/g	
			cis-1,2-Dichloroethylene	2024/11/07	<0.040		ug/g	
			trans-1,2-Dichloroethylene	2024/11/07	<0.040		ug/g	
			1,2-Dichloropropane	2024/11/07	<0.040		ug/g	
			cis-1,3-Dichloropropene	2024/11/07	<0.030		ug/g	
			trans-1,3-Dichloropropene	2024/11/07	<0.040		ug/g	

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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9751403	CYS	RPD		Ethylbenzene	2024/11/07	<0.010		ug/g	
				Ethylene Dibromide	2024/11/07	<0.040		ug/g	
				Hexane	2024/11/07	<0.040		ug/g	
				Methylene Chloride(Dichloromethane)	2024/11/07	<0.049		ug/g	
				Methyl Ethyl Ketone (2-Butanone)	2024/11/07	<0.40		ug/g	
				Methyl Isobutyl Ketone	2024/11/07	<0.40		ug/g	
				Methyl t-butyl ether (MTBE)	2024/11/07	<0.040		ug/g	
				Styrene	2024/11/07	<0.040		ug/g	
				1,1,1,2-Tetrachloroethane	2024/11/07	<0.040		ug/g	
				1,1,2,2-Tetrachloroethane	2024/11/07	<0.040		ug/g	
				Tetrachloroethylene	2024/11/07	<0.040		ug/g	
				Toluene	2024/11/07	<0.020		ug/g	
				1,1,1-Trichloroethane	2024/11/07	<0.040		ug/g	
				1,1,2-Trichloroethane	2024/11/07	<0.040		ug/g	
				Trichloroethylene	2024/11/07	<0.010		ug/g	
				Trichlorofluoromethane (FREON 11)	2024/11/07	<0.040		ug/g	
				Vinyl Chloride	2024/11/07	<0.019		ug/g	
				p+m-Xylene	2024/11/07	<0.020		ug/g	
				o-Xylene	2024/11/07	<0.020		ug/g	
				Total Xylenes	2024/11/07	<0.020		ug/g	
				F1 (C6-C10)	2024/11/07	<10		ug/g	
				F1 (C6-C10) - BTEX	2024/11/07	<10		ug/g	
				Acetone (2-Propanone)	2024/11/07	NC	%	50	
				Benzene	2024/11/07	NC	%	50	
				Bromodichloromethane	2024/11/07	NC	%	50	
				Bromoform	2024/11/07	NC	%	50	
				Bromomethane	2024/11/07	NC	%	50	
				Carbon Tetrachloride	2024/11/07	NC	%	50	
				Chlorobenzene	2024/11/07	NC	%	50	
				Chloroform	2024/11/07	NC	%	50	
				Dibromochloromethane	2024/11/07	NC	%	50	
				1,2-Dichlorobenzene	2024/11/07	NC	%	50	
				1,3-Dichlorobenzene	2024/11/07	NC	%	50	
				1,4-Dichlorobenzene	2024/11/07	NC	%	50	
				Dichlorodifluoromethane (FREON 12)	2024/11/07	NC	%	50	
				1,1-Dichloroethane	2024/11/07	NC	%	50	
				1,2-Dichloroethane	2024/11/07	NC	%	50	
				1,1-Dichloroethylene	2024/11/07	NC	%	50	
				cis-1,2-Dichloroethylene	2024/11/07	NC	%	50	
				trans-1,2-Dichloroethylene	2024/11/07	NC	%	50	
				1,2-Dichloropropane	2024/11/07	NC	%	50	
				cis-1,3-Dichloropropene	2024/11/07	NC	%	50	
				trans-1,3-Dichloropropene	2024/11/07	NC	%	50	
				Ethylbenzene	2024/11/07	NC	%	50	
				Ethylene Dibromide	2024/11/07	NC	%	50	
				Hexane	2024/11/07	NC	%	50	
				Methylene Chloride(Dichloromethane)	2024/11/07	NC	%	50	
				Methyl Ethyl Ketone (2-Butanone)	2024/11/07	NC	%	50	
				Methyl Isobutyl Ketone	2024/11/07	NC	%	50	
				Methyl t-butyl ether (MTBE)	2024/11/07	NC	%	50	
				Styrene	2024/11/07	NC	%	50	
				1,1,1,2-Tetrachloroethane	2024/11/07	NC	%	50	



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9753795	LFE	Matrix Spike	1,1,2,2-Tetrachloroethane	2024/11/07	NC		%	50
			Tetrachloroethylene	2024/11/07	NC		%	50
			Toluene	2024/11/07	NC		%	50
			1,1,1-Trichloroethane	2024/11/07	NC		%	50
			1,1,2-Trichloroethane	2024/11/07	NC		%	50
			Trichloroethylene	2024/11/07	NC		%	50
			Trichlorofluoromethane (FREON 11)	2024/11/07	NC		%	50
			Vinyl Chloride	2024/11/07	NC		%	50
			p+m-Xylene	2024/11/07	NC		%	50
			o-Xylene	2024/11/07	NC		%	50
			Total Xylenes	2024/11/07	NC		%	50
			F1 (C6-C10)	2024/11/07	NC		%	30
			F1 (C6-C10) - BTEX	2024/11/07	NC		%	30
			D10-Anthracene	2024/11/08	92		%	50 - 130
			D14-Terphenyl (FS)	2024/11/08	87		%	50 - 130
			D8-Acenaphthylene	2024/11/08	97		%	50 - 130
			Acenaphthene	2024/11/08	98		%	50 - 130
			Acenaphthylene	2024/11/08	116		%	50 - 130
			Anthracene	2024/11/08	107		%	50 - 130
			Benzo(a)anthracene	2024/11/08	NC		%	50 - 130
			Benzo(a)pyrene	2024/11/08	NC		%	50 - 130
			Benzo(b/j)fluoranthene	2024/11/08	NC		%	50 - 130
			Benzo(g,h,i)perylene	2024/11/08	NC		%	50 - 130
			Benzo(k)fluoranthene	2024/11/08	121		%	50 - 130
			Chrysene	2024/11/08	NC		%	50 - 130
			Dibenz(a,h)anthracene	2024/11/08	104		%	50 - 130
			Fluoranthene	2024/11/08	NC		%	50 - 130
			Fluorene	2024/11/08	100		%	50 - 130
			Indeno(1,2,3 cd)pyrene	2024/11/08	NC		%	50 - 130
			1-Methylnaphthalene	2024/11/08	89		%	50 - 130
			2-Methylnaphthalene	2024/11/08	92		%	50 - 130
			Naphthalene	2024/11/08	86		%	50 - 130
			Phenanthrene	2024/11/08	NC		%	50 - 130
			Pyrene	2024/11/08	NC		%	50 - 130
9753795	LFE	Spiked Blank	D10-Anthracene	2024/11/08	94		%	50 - 130
			D14-Terphenyl (FS)	2024/11/08	87		%	50 - 130
			D8-Acenaphthylene	2024/11/08	100		%	50 - 130
			Acenaphthene	2024/11/08	95		%	50 - 130
			Acenaphthylene	2024/11/08	106		%	50 - 130
			Anthracene	2024/11/08	98		%	50 - 130
			Benzo(a)anthracene	2024/11/08	100		%	50 - 130
			Benzo(a)pyrene	2024/11/08	97		%	50 - 130
			Benzo(b/j)fluoranthene	2024/11/08	99		%	50 - 130
			Benzo(g,h,i)perylene	2024/11/08	93		%	50 - 130
			Benzo(k)fluoranthene	2024/11/08	97		%	50 - 130
			Chrysene	2024/11/08	100		%	50 - 130
			Dibenz(a,h)anthracene	2024/11/08	86		%	50 - 130
			Fluoranthene	2024/11/08	99		%	50 - 130
			Fluorene	2024/11/08	95		%	50 - 130
			Indeno(1,2,3-cd)pyrene	2024/11/08	93		%	50 - 130
			1-Methylnaphthalene	2024/11/08	93		%	50 - 130
			2-Methylnaphthalene	2024/11/08	94		%	50 - 130



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9753795	LFE	Method Blank	Naphthalene	2024/11/08	92	%	50 - 130	
			Phenanthrene	2024/11/08	97	%	50 - 130	
			Pyrene	2024/11/08	96	%	50 - 130	
			D10-Anthracene	2024/11/08	95	%	50 - 130	
			D14-Terphenyl (FS)	2024/11/08	87	%	50 - 130	
			D8-Acenaphthylene	2024/11/08	98	%	50 - 130	
			Acenaphthene	2024/11/08	<0.0050		ug/g	
			Acenaphthylene	2024/11/08	<0.0050		ug/g	
			Anthracene	2024/11/08	<0.0050		ug/g	
			Benzo(a)anthracene	2024/11/08	<0.0050		ug/g	
			Benzo(a)pyrene	2024/11/08	<0.0050		ug/g	
			Benzo(b/j)fluoranthene	2024/11/08	<0.0050		ug/g	
			Benzo(g,h,i)perylene	2024/11/08	<0.0050		ug/g	
			Benzo(k)fluoranthene	2024/11/08	<0.0050		ug/g	
			Chrysene	2024/11/08	<0.0050		ug/g	
			Dibenzo(a,h)anthracene	2024/11/08	<0.0050		ug/g	
			Fluoranthene	2024/11/08	<0.0050		ug/g	
			Fluorene	2024/11/08	<0.0050		ug/g	
			Indeno(1,2,3-cd)pyrene	2024/11/08	<0.0050		ug/g	
9753795	LFE	RPD	1-Methylnaphthalene	2024/11/08	<0.0050		ug/g	
			2-Methylnaphthalene	2024/11/08	<0.0050		ug/g	
			Naphthalene	2024/11/08	<0.0050		ug/g	
			Phenanthrene	2024/11/08	<0.0050		ug/g	
			Pyrene	2024/11/08	<0.0050		ug/g	
			Acenaphthene	2024/11/08	31	%	40	
			Acenaphthylene	2024/11/08	0.071	%	40	
			Anthracene	2024/11/08	9.3	%	40	
			Benzo(a)anthracene	2024/11/08	4.4	%	40	
			Benzo(a)pyrene	2024/11/08	0.24	%	40	
			Benzo(b/j)fluoranthene	2024/11/08	4.7	%	40	
			Benzo(g,h,i)perylene	2024/11/08	0.46	%	40	
			Benzo(k)fluoranthene	2024/11/08	1.2	%	40	
			Chrysene	2024/11/08	6.6	%	40	
			Dibenzo(a,h)anthracene	2024/11/08	1.1	%	40	
			Fluoranthene	2024/11/08	2.3	%	40	
			Fluorene	2024/11/08	25	%	40	
			Indeno(1,2,3-cd)pyrene	2024/11/08	4.2	%	40	
			1-Methylnaphthalene	2024/11/08	NC	%	40	
			2-Methylnaphthalene	2024/11/08	32	%	40	
9753952	ANF	Matrix Spike	Naphthalene	2024/11/08	NC	%	40	
			Phenanthrene	2024/11/08	5.2	%	40	
			Pyrene	2024/11/08	1.8	%	40	
			Hot Water Ext. Boron (B)	2024/11/08	96	%	75 - 125	
			Hot Water Ext. Boron (B)	2024/11/08	95	%	75 - 125	
9753952	ANF	Method Blank	Hot Water Ext. Boron (B)	2024/11/08	<0.050		ug/g	
			Hot Water Ext. Boron (B)	2024/11/08	0.81	%	40	
9753977	NRA	Matrix Spike	Leachable 4-Bromofluorobenzene	2024/11/08	102	%	70 - 130	
			Leachable D4-1,2-Dichloroethane	2024/11/08	98	%	70 - 130	
			Leachable D8-Toluene	2024/11/08	102	%	70 - 130	
			Leachable Benzene	2024/11/08	102	%	70 - 130	
			Leachable Carbon Tetrachloride	2024/11/08	109	%	70 - 130	
			Leachable Chlorobenzene	2024/11/08	99	%	70 - 130	



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9753977	NRA	Spiked Blank	Leachable Chloroform	2024/11/08	102	%	70 - 130	
			Leachable 1,2-Dichlorobenzene	2024/11/08	107	%	70 - 130	
			Leachable 1,4-Dichlorobenzene	2024/11/08	112	%	70 - 130	
			Leachable 1,2-Dichloroethane	2024/11/08	103	%	70 - 130	
			Leachable 1,1-Dichloroethylene	2024/11/08	99	%	70 - 130	
			Leachable Methylene Chloride(Dichloromethan)	2024/11/08	99	%	70 - 130	
			Leachable Methyl Ethyl Ketone (2-Butanone)	2024/11/08	104	%	60 - 140	
			Leachable Tetrachloroethylene	2024/11/08	104	%	70 - 130	
			Leachable Trichloroethylene	2024/11/08	107	%	70 - 130	
			Leachable Vinyl Chloride	2024/11/08	93	%	70 - 130	
			Leachable 4-Bromofluorobenzene	2024/11/08	102	%	70 - 130	
			Leachable D4-1,2-Dichloroethane	2024/11/08	99	%	70 - 130	
			Leachable D8-Toluene	2024/11/08	103	%	70 - 130	
			Leachable Benzene	2024/11/08	102	%	70 - 130	
			Leachable Carbon Tetrachloride	2024/11/08	108	%	70 - 130	
			Leachable Chlorobenzene	2024/11/08	98	%	70 - 130	
			Leachable Chloroform	2024/11/08	102	%	70 - 130	
			Leachable 1,2-Dichlorobenzene	2024/11/08	106	%	70 - 130	
			Leachable 1,4-Dichlorobenzene	2024/11/08	109	%	70 - 130	
			Leachable 1,2-Dichloroethane	2024/11/08	104	%	70 - 130	
			Leachable 1,1-Dichloroethylene	2024/11/08	99	%	70 - 130	
			Leachable Methylene Chloride(Dichloromethan)	2024/11/08	100	%	70 - 130	
			Leachable Methyl Ethyl Ketone (2-Butanone)	2024/11/08	107	%	60 - 140	
			Leachable Tetrachloroethylene	2024/11/08	100	%	70 - 130	
			Leachable Trichloroethylene	2024/11/08	105	%	70 - 130	
			Leachable Vinyl Chloride	2024/11/08	92	%	70 - 130	
9753977	NRA	Method Blank	Leachable 4-Bromofluorobenzene	2024/11/08	104	%	70 - 130	
			Leachable D4-1,2-Dichloroethane	2024/11/08	102	%	70 - 130	
			Leachable D8-Toluene	2024/11/08	93	%	70 - 130	
			Leachable Benzene	2024/11/08	<0.020		mg/L	
			Leachable Carbon Tetrachloride	2024/11/08	<0.020		mg/L	
			Leachable Chlorobenzene	2024/11/08	<0.020		mg/L	
			Leachable Chloroform	2024/11/08	<0.020		mg/L	
			Leachable 1,2-Dichlorobenzene	2024/11/08	<0.050		mg/L	
			Leachable 1,4-Dichlorobenzene	2024/11/08	<0.050		mg/L	
			Leachable 1,2-Dichloroethane	2024/11/08	<0.050		mg/L	
			Leachable 1,1-Dichloroethylene	2024/11/08	<0.020		mg/L	
			Leachable Methylene Chloride(Dichloromethan)	2024/11/08	<0.20		mg/L	
			Leachable Methyl Ethyl Ketone (2-Butanone)	2024/11/08	<1.0		mg/L	
			Leachable Tetrachloroethylene	2024/11/08	<0.020		mg/L	
			Leachable Trichloroethylene	2024/11/08	<0.020		mg/L	
			Leachable Vinyl Chloride	2024/11/08	<0.020		mg/L	
			Leachable Benzene	2024/11/08	NC	%	30	
			Leachable Carbon Tetrachloride	2024/11/08	NC	%	30	
			Leachable Chlorobenzene	2024/11/08	NC	%	30	
			Leachable Chloroform	2024/11/08	NC	%	30	
			Leachable 1,2-Dichlorobenzene	2024/11/08	NC	%	30	
			Leachable 1,4-Dichlorobenzene	2024/11/08	NC	%	30	
			Leachable 1,2-Dichloroethane	2024/11/08	NC	%	30	
			Leachable 1,1-Dichloroethylene	2024/11/08	NC	%	30	
			Leachable Methylene Chloride(Dichloromethan)	2024/11/08	NC	%	30	
			Leachable Methyl Ethyl Ketone (2-Butanone)	2024/11/08	NC	%	30	
9753977	NRA	RPD						



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			Leachable Tetrachloroethylene	2024/11/08	NC		%	30
			Leachable Trichloroethylene	2024/11/08	NC		%	30
			Leachable Vinyl Chloride	2024/11/08	NC		%	30
9754031	TLG	Matrix Spike	Hot Water Ext. Boron (B)	2024/11/08		NC	%	75 - 125
9754031	TLG	Spiked Blank	Hot Water Ext. Boron (B)	2024/11/08		101	%	75 - 125
9754031	TLG	Method Blank	Hot Water Ext. Boron (B)	2024/11/08	<0.050		ug/g	
9754031	TLG	RPD	Hot Water Ext. Boron (B)	2024/11/08	3.7		%	40
9754357	NGI	Matrix Spike	Leachable Fluoride (F-)	2024/11/09		97	%	80 - 120
9754357	NGI	Leachate Blank	Leachable Fluoride (F-)	2024/11/09	<0.10		mg/L	
9754357	NGI	Spiked Blank	Leachable Fluoride (F-)	2024/11/09		101	%	80 - 120
9754357	NGI	Method Blank	Leachable Fluoride (F-)	2024/11/09	<0.10		mg/L	
9754357	NGI	RPD	Leachable Fluoride (F-)	2024/11/09	1.9		%	25
9754364	C_N	Matrix Spike	Leachable Nitrite (N)	2024/11/12		99	%	80 - 120
9754364	C_N	Leachate Blank	Leachable Nitrate (N)	2024/11/12		90	%	80 - 120
9754364	C_N	Spiked Blank	Leachable Nitrate + Nitrite (N)	2024/11/12		92	%	80 - 120
9754364	C_N	Method Blank	Leachable Nitrite (N)	2024/11/12	<0.10		mg/L	
9754364	C_N	RPD	Leachable Nitrate (N)	2024/11/12	<1.0		mg/L	
9754364	C_N	Method Blank	Leachable Nitrate + Nitrite (N)	2024/11/12	<1.0		mg/L	
9754367	JWK	Matrix Spike	Leachable Nitrite (N)	2024/11/12		94	%	80 - 120
9754367	JWK	Spiked Blank	Leachable Nitrate (N)	2024/11/12		96	%	80 - 120
9754367	JWK	Method Blank	Leachable Nitrate + Nitrite (N)	2024/11/12		96	%	80 - 120
9754367	JWK	RPD	Leachable Nitrite (N)	2024/11/12	<0.10		mg/L	
9754367	JWK	Matrix Spike	Leachable Nitrate (N)	2024/11/12	<1.0		mg/L	
9754367	JWK	Leachate Blank	Leachable Nitrate + Nitrite (N)	2024/11/12	<1.0		mg/L	
9754367	JWK	Spiked Blank	Acid Extractable Antimony (Sb)	2024/11/08		103	%	75 - 125
9754367	JWK	Method Blank	Acid Extractable Arsenic (As)	2024/11/08		105	%	75 - 125
9754367	JWK	RPD	Acid Extractable Barium (Ba)	2024/11/08		99	%	75 - 125
9754367	JWK	Matrix Spike	Acid Extractable Beryllium (Be)	2024/11/08		100	%	75 - 125
9754367	JWK	Leachate Blank	Acid Extractable Boron (B)	2024/11/08		92	%	75 - 125
9754367	JWK	Spiked Blank	Acid Extractable Cadmium (Cd)	2024/11/08		102	%	75 - 125
9754367	JWK	Method Blank	Acid Extractable Chromium (Cr)	2024/11/08		100	%	75 - 125
9754367	JWK	RPD	Acid Extractable Cobalt (Co)	2024/11/08		98	%	75 - 125
9754367	JWK	Matrix Spike	Acid Extractable Copper (Cu)	2024/11/08		97	%	75 - 125
9754367	JWK	Leachate Blank	Acid Extractable Lead (Pb)	2024/11/08		92	%	75 - 125
9754367	JWK	Spiked Blank	Acid Extractable Molybdenum (Mo)	2024/11/08		96	%	75 - 125
9754367	JWK	Method Blank	Acid Extractable Nickel (Ni)	2024/11/08		99	%	75 - 125
9754367	JWK	RPD	Acid Extractable Selenium (Se)	2024/11/08		103	%	75 - 125
9754367	JWK	Matrix Spike	Acid Extractable Silver (Ag)	2024/11/08		95	%	75 - 125
9754367	JWK	Leachate Blank	Acid Extractable Thallium (Tl)	2024/11/08		95	%	75 - 125
9754367	JWK	Spiked Blank	Acid Extractable Uranium (U)	2024/11/08		99	%	75 - 125
9754367	JWK	Method Blank	Acid Extractable Vanadium (V)	2024/11/08		101	%	75 - 125
9754367	JWK	RPD	Acid Extractable Zinc (Zn)	2024/11/08		NC	%	75 - 125
9754367	JWK	Matrix Spike	Acid Extractable Mercury (Hg)	2024/11/08		91	%	75 - 125
9754367	JWK	Leachate Blank	Acid Extractable Antimony (Sb)	2024/11/08		104	%	80 - 120
9754367	JWK	Spiked Blank	Acid Extractable Arsenic (As)	2024/11/08		102	%	80 - 120
9754367	JWK	Method Blank	Acid Extractable Barium (Ba)	2024/11/08		96	%	80 - 120
9754367	JWK	RPD	Acid Extractable Beryllium (Be)	2024/11/08		98	%	80 - 120
9754367	JWK	Matrix Spike	Acid Extractable Boron (B)	2024/11/08		96	%	80 - 120
9754367	JWK	Leachate Blank	Acid Extractable Cadmium (Cd)	2024/11/08		99	%	80 - 120



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			Acid Extractable Chromium (Cr)	2024/11/08	97	%	80 - 120	
			Acid Extractable Cobalt (Co)	2024/11/08	96	%	80 - 120	
			Acid Extractable Copper (Cu)	2024/11/08	98	%	80 - 120	
			Acid Extractable Lead (Pb)	2024/11/08	91	%	80 - 120	
			Acid Extractable Molybdenum (Mo)	2024/11/08	91	%	80 - 120	
			Acid Extractable Nickel (Ni)	2024/11/08	98	%	80 - 120	
			Acid Extractable Selenium (Se)	2024/11/08	100	%	80 - 120	
			Acid Extractable Silver (Ag)	2024/11/08	93	%	80 - 120	
			Acid Extractable Thallium (Tl)	2024/11/08	93	%	80 - 120	
			Acid Extractable Uranium (U)	2024/11/08	96	%	80 - 120	
			Acid Extractable Vanadium (V)	2024/11/08	98	%	80 - 120	
			Acid Extractable Zinc (Zn)	2024/11/08	100	%	80 - 120	
			Acid Extractable Mercury (Hg)	2024/11/08	92	%	80 - 120	
9754367	JWK	Method Blank	Acid Extractable Antimony (Sb)	2024/11/08	<0.20		ug/g	
			Acid Extractable Arsenic (As)	2024/11/08	<1.0		ug/g	
			Acid Extractable Barium (Ba)	2024/11/08	<0.50		ug/g	
			Acid Extractable Beryllium (Be)	2024/11/08	<0.20		ug/g	
			Acid Extractable Boron (B)	2024/11/08	<5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2024/11/08	<0.10		ug/g	
			Acid Extractable Chromium (Cr)	2024/11/08	<1.0		ug/g	
			Acid Extractable Cobalt (Co)	2024/11/08	<0.10		ug/g	
			Acid Extractable Copper (Cu)	2024/11/08	<0.50		ug/g	
			Acid Extractable Lead (Pb)	2024/11/08	<1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2024/11/08	<0.50		ug/g	
			Acid Extractable Nickel (Ni)	2024/11/08	<0.50		ug/g	
			Acid Extractable Selenium (Se)	2024/11/08	<0.50		ug/g	
			Acid Extractable Silver (Ag)	2024/11/08	<0.20		ug/g	
			Acid Extractable Thallium (Tl)	2024/11/08	<0.050		ug/g	
			Acid Extractable Uranium (U)	2024/11/08	<0.050		ug/g	
			Acid Extractable Vanadium (V)	2024/11/08	<5.0		ug/g	
			Acid Extractable Zinc (Zn)	2024/11/08	<5.0		ug/g	
			Acid Extractable Mercury (Hg)	2024/11/08	<0.050		ug/g	
9754367	JWK	RPD	Acid Extractable Antimony (Sb)	2024/11/08	NC	%	30	
			Acid Extractable Arsenic (As)	2024/11/08	9.3	%	30	
			Acid Extractable Barium (Ba)	2024/11/08	4.4	%	30	
			Acid Extractable Beryllium (Be)	2024/11/08	NC	%	30	
			Acid Extractable Boron (B)	2024/11/08	NC	%	30	
			Acid Extractable Cadmium (Cd)	2024/11/08	NC	%	30	
			Acid Extractable Chromium (Cr)	2024/11/08	6.4	%	30	
			Acid Extractable Cobalt (Co)	2024/11/08	3.8	%	30	
			Acid Extractable Copper (Cu)	2024/11/08	3.9	%	30	
			Acid Extractable Lead (Pb)	2024/11/08	5.0	%	30	
			Acid Extractable Molybdenum (Mo)	2024/11/08	7.7	%	30	
			Acid Extractable Nickel (Ni)	2024/11/08	3.3	%	30	
			Acid Extractable Selenium (Se)	2024/11/08	NC	%	30	
			Acid Extractable Silver (Ag)	2024/11/08	NC	%	30	
			Acid Extractable Thallium (Tl)	2024/11/08	NC	%	30	
			Acid Extractable Uranium (U)	2024/11/08	6.4	%	30	
			Acid Extractable Vanadium (V)	2024/11/08	1.8	%	30	
			Acid Extractable Zinc (Zn)	2024/11/08	2.5	%	30	
9754368	JJH	Matrix Spike	Leachable WAD Cyanide (Free)	2024/11/08	94	%	80 - 120	
9754368	JJH	Leachate Blank	Leachable WAD Cyanide (Free)	2024/11/08	<0.010		mg/L	



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Batch	Init									
9754368	JJH	Spiked Blank			Leachable WAD Cyanide (Free)	2024/11/08	106	%	80 - 120	
9754368	JJH	Method Blank			Leachable WAD Cyanide (Free)	2024/11/08	<0.0020	mg/L		
9754368	JJH	RPD			Leachable WAD Cyanide (Free)	2024/11/08	NC	%	20	
9754504	N_R	Matrix Spike			Leachable Arsenic (As)	2024/11/08	102	%	80 - 120	
					Leachable Barium (Ba)	2024/11/08	NC	%	80 - 120	
					Leachable Boron (B)	2024/11/08	NC	%	80 - 120	
					Leachable Cadmium (Cd)	2024/11/08	99	%	80 - 120	
					Leachable Chromium (Cr)	2024/11/08	98	%	80 - 120	
					Leachable Lead (Pb)	2024/11/08	NC	%	80 - 120	
					Leachable Mercury (Hg)	2024/11/08	100	%	80 - 120	
					Leachable Selenium (Se)	2024/11/08	39 (1)	%	80 - 120	
					Leachable Silver (Ag)	2024/11/08	93	%	80 - 120	
					Leachable Uranium (U)	2024/11/08	97	%	80 - 120	
					Leachable Arsenic (As)	2024/11/08	<0.2	mg/L		
					Leachable Barium (Ba)	2024/11/08	<0.2	mg/L		
					Leachable Boron (B)	2024/11/08	<0.1	mg/L		
9754504	N_R	Leachate Blank			Leachable Cadmium (Cd)	2024/11/08	<0.05	mg/L		
					Leachable Chromium (Cr)	2024/11/08	<0.1	mg/L		
					Leachable Lead (Pb)	2024/11/08	<0.1	mg/L		
					Leachable Mercury (Hg)	2024/11/08	<0.001	mg/L		
					Leachable Selenium (Se)	2024/11/08	<0.1	mg/L		
					Leachable Silver (Ag)	2024/11/08	<0.01	mg/L		
					Leachable Uranium (U)	2024/11/08	<0.01	mg/L		
					Leachable Arsenic (As)	2024/11/08	NC	%	35	
					Leachable Barium (Ba)	2024/11/08	NC	%	35	
					Leachable Boron (B)	2024/11/08	NC	%	35	
					Leachable Cadmium (Cd)	2024/11/08	NC	%	35	
					Leachable Chromium (Cr)	2024/11/08	NC	%	35	
9754504	N_R	RPD			Leachable Lead (Pb)	2024/11/08	NC	%	35	
					Leachable Mercury (Hg)	2024/11/08	NC	%	35	
					Leachable Selenium (Se)	2024/11/08	NC	%	35	
					Leachable Silver (Ag)	2024/11/08	NC	%	35	
					Leachable Uranium (U)	2024/11/08	NC	%	35	
					Leachable Arsenic (As)	2024/11/08	NC	%	35	
					Leachable Barium (Ba)	2024/11/08	2.0	%	35	
					Leachable Boron (B)	2024/11/08	2.0	%	35	
					Leachable Cadmium (Cd)	2024/11/08	NC	%	35	
					Leachable Chromium (Cr)	2024/11/08	NC	%	35	
					Leachable Lead (Pb)	2024/11/08	3.3	%	35	
					Leachable Mercury (Hg)	2024/11/08	NC	%	35	
					Leachable Selenium (Se)	2024/11/08	NC	%	35	
9754504	N_R	Spiked Blank			Leachable Silver (Ag)	2024/11/08	NC	%	35	
					Leachable Uranium (U)	2024/11/08	NC	%	35	
					Leachable Arsenic (As)	2024/11/08	99	%	80 - 120	
					Leachable Barium (Ba)	2024/11/08	101	%	80 - 120	
					Leachable Boron (B)	2024/11/08	97	%	80 - 120	
					Leachable Cadmium (Cd)	2024/11/08	97	%	80 - 120	
					Leachable Chromium (Cr)	2024/11/08	98	%	80 - 120	
					Leachable Lead (Pb)	2024/11/08	97	%	80 - 120	
					Leachable Mercury (Hg)	2024/11/08	102	%	80 - 120	
					Leachable Selenium (Se)	2024/11/08	99	%	80 - 120	
					Leachable Silver (Ag)	2024/11/08	94	%	80 - 120	



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### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9754504	N_R	Method Blank	Leachable Uranium (U)	2024/11/08		97	%	80 - 120
			Leachable Arsenic (As)	2024/11/08	<0.2		mg/L	
			Leachable Barium (Ba)	2024/11/08	<0.2		mg/L	
			Leachable Boron (B)	2024/11/08	<0.1		mg/L	
			Leachable Cadmium (Cd)	2024/11/08	<0.05		mg/L	
			Leachable Chromium (Cr)	2024/11/08	<0.1		mg/L	
			Leachable Lead (Pb)	2024/11/08	<0.1		mg/L	
			Leachable Mercury (Hg)	2024/11/08	<0.001		mg/L	
			Leachable Selenium (Se)	2024/11/08	<0.1		mg/L	
			Leachable Silver (Ag)	2024/11/08	<0.01		mg/L	
			Leachable Uranium (U)	2024/11/08	<0.01		mg/L	
9754630	SB5	Matrix Spike [AHZR58-01]	Chromium (VI)	2024/11/08		60 (2)	%	70 - 130
9754630	SB5	Spiked Blank	Chromium (VI)	2024/11/08		94	%	80 - 120
9754630	SB5	Method Blank	Chromium (VI)	2024/11/08	<0.18		ug/g	
9754630	SB5	RPD [AHZR58-01]	Chromium (VI)	2024/11/08	NC		%	35
9755061	MSZ	Matrix Spike [AHZR65-02]	o-Terphenyl	2024/11/10		91	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/11/10		96	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2024/11/10		98	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2024/11/10		96	%	60 - 140
			o-Terphenyl	2024/11/10		90	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/11/10		102	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2024/11/10		104	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2024/11/10		102	%	80 - 120
			o-Terphenyl	2024/11/10		94	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/11/10	<7.0		ug/g	
9755061	MSZ	Method Blank	F3 (C16 C34 Hydrocarbons)	2024/11/10	<50		ug/g	
			F4 (C34-C50 Hydrocarbons)	2024/11/10	<50		ug/g	
			F2 (C10-C16 Hydrocarbons)	2024/11/11	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2024/11/11	NC		%	30
			F4 (C34-C50 Hydrocarbons)	2024/11/11	NC		%	30
9755572	GYA	Matrix Spike [AHZR58-01]	WAD Cyanide (Free)	2024/11/12		67 (3)	%	75 - 125
9755572	GYA	Spiked Blank	WAD Cyanide (Free)	2024/11/12		108	%	80 - 120
9755572	GYA	Method Blank	WAD Cyanide (Free)	2024/11/12	<0.01		ug/g	
9755572	GYA	RPD [AHZR58-01]	WAD Cyanide (Free)	2024/11/12	NC		%	35
9756537	KIT	Spiked Blank	Available (CaCl2) pH	2024/11/09		100	%	97 - 103
9756537	KIT	RPD [AHZR58-01]	Available (CaCl2) pH	2024/11/09	0.10		%	N/A
9757581	KIT	Spiked Blank	Conductivity	2024/11/11		103	%	90 - 110
9757581	KIT	Method Blank	Conductivity	2024/11/11	<0.002		mS/cm	
9757581	KIT	RPD [AHZR66-01]	Conductivity	2024/11/11	0.28		%	10
9758575	WZ	Matrix Spike [AHZR67-02]	Leachable 2,4,6-Tribromophenol	2024/11/12		96	%	10 - 130
			Leachable 2-Fluorobiphenyl	2024/11/12		80	%	30 - 130
			Leachable 2-Fluorophenol	2024/11/12		74	%	10 - 130
			Leachable D14-Terphenyl (FS)	2024/11/12		100	%	30 - 130
			Leachable D5-Nitrobenzene	2024/11/12		94	%	30 - 130
			Leachable D5-Phenol	2024/11/12		40	%	10 - 130
			Leachable Benzo(a)pyrene	2024/11/12		105	%	30 - 130
			Leachable m/p-Cresol	2024/11/12		70	%	10 - 130
			Leachable o-Cresol	2024/11/12		82	%	10 - 130
			Leachable Cresol Total	2024/11/12		76	%	10 - 130
			Leachable 2,4-Dichlorophenol	2024/11/12		101	%	10 - 130
			Leachable 2,4-Dinitrotoluene	2024/11/12		90	%	30 - 130
			Leachable Hexachlorobenzene	2024/11/12		98	%	30 - 130



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QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9758575	WZ	Spiked Blank		Leachable Hexachlorobutadiene	2024/11/12	74	%	30 - 130	
				Leachable Hexachloroethane	2024/11/12	68	%	30 - 130	
				Leachable Nitrobenzene	2024/11/12	94	%	30 - 130	
				Leachable Pentachlorophenol	2024/11/12	116	%	30 - 130	
				Leachable Pyridine	2024/11/12	46	%	10 - 130	
				Leachable 2,3,4,6-Tetrachlorophenol	2024/11/12	114	%	10 - 130	
				Leachable 2,4,5-Trichlorophenol	2024/11/12	107	%	10 - 130	
				Leachable 2,4,6-Trichlorophenol	2024/11/12	102	%	10 - 130	
				Leachable 2,4,6-Tribromophenol	2024/11/12	97	%	10 - 130	
				Leachable 2-Fluorobiphenyl	2024/11/12	83	%	30 - 130	
				Leachable 2-Fluorophenol	2024/11/12	69	%	10 - 130	
				Leachable D14-Terphenyl (FS)	2024/11/12	100	%	30 - 130	
				Leachable D5-Nitrobenzene	2024/11/12	96	%	30 - 130	
				Leachable D5-Phenol	2024/11/12	43	%	10 - 130	
				Leachable Benzo(a)pyrene	2024/11/12	106	%	30 - 130	
				Leachable m/p-Cresol	2024/11/12	75	%	10 - 130	
				Leachable o-Cresol	2024/11/12	85	%	10 - 130	
				Leachable Cresol Total	2024/11/12	80	%	10 - 130	
				Leachable 2,4-Dichlorophenol	2024/11/12	101	%	10 - 130	
				Leachable 2,4-Dinitrotoluene	2024/11/12	92	%	30 - 130	
				Leachable Hexachlorobenzene	2024/11/12	100	%	30 - 130	
				Leachable Hexachlorobutadiene	2024/11/12	75	%	30 - 130	
				Leachable Hexachloroethane	2024/11/12	68	%	30 - 130	
				Leachable Nitrobenzene	2024/11/12	95	%	30 - 130	
				Leachable Pentachlorophenol	2024/11/12	118	%	30 - 130	
				Leachable Pyridine	2024/11/12	48	%	10 - 130	
				Leachable 2,3,4,6-Tetrachlorophenol	2024/11/12	116	%	10 - 130	
				Leachable 2,4,5-Trichlorophenol	2024/11/12	108	%	10 - 130	
				Leachable 2,4,6-Trichlorophenol	2024/11/12	105	%	10 - 130	
9758575	WZ	Method Blank		Leachable 2,4,6-Tribromophenol	2024/11/12	90	%	10 - 130	
				Leachable 2-Fluorobiphenyl	2024/11/12	84	%	30 - 130	
				Leachable 2-Fluorophenol	2024/11/12	70	%	10 - 130	
				Leachable D14-Terphenyl (FS)	2024/11/12	100	%	30 - 130	
				Leachable D5-Nitrobenzene	2024/11/12	94	%	30 - 130	
				Leachable D5-Phenol	2024/11/12	40	%	10 - 130	
				Leachable Benzo(a)pyrene	2024/11/12	<0.10		ug/L	
				Leachable m/p-Cresol	2024/11/12	<2.5		ug/L	
				Leachable o-Cresol	2024/11/12	<2.5		ug/L	
				Leachable Cresol Total	2024/11/12	<2.5		ug/L	
				Leachable 2,4-Dichlorophenol	2024/11/12	<2.5		ug/L	
				Leachable 2,4-Dinitrotoluene	2024/11/12	<10		ug/L	
				Leachable Hexachlorobenzene	2024/11/12	<10		ug/L	
				Leachable Hexachlorobutadiene	2024/11/12	<10		ug/L	
				Leachable Hexachloroethane	2024/11/12	<10		ug/L	
				Leachable Nitrobenzene	2024/11/12	<10		ug/L	
				Leachable Pentachlorophenol	2024/11/12	<2.5		ug/L	
				Leachable Pyridine	2024/11/12	<10		ug/L	
				Leachable 2,3,4,6-Tetrachlorophenol	2024/11/12	<2.5		ug/L	
				Leachable 2,4,5-Trichlorophenol	2024/11/12	<0.50		ug/L	
				Leachable 2,4,6-Trichlorophenol	2024/11/12	<2.5		ug/L	
9758575	WZ	RPD [AHZR67-02]		Leachable Benzo(a)pyrene	2024/11/12	NC	%	40	
				Leachable m/p-Cresol	2024/11/12	NC	%	40	



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Leachable o-Cresol	2024/11/12	NC		%	40
			Leachable Cresol Total	2024/11/12	NC		%	40
			Leachable 2,4-Dichlorophenol	2024/11/12	NC		%	40
			Leachable 2,4-Dinitrotoluene	2024/11/12	NC		%	40
			Leachable Hexachlorobenzene	2024/11/12	NC		%	40
			Leachable Hexachlorobutadiene	2024/11/12	NC		%	40
			Leachable Hexachloroethane	2024/11/12	NC		%	40
			Leachable Nitrobenzene	2024/11/12	NC		%	40
			Leachable Pentachlorophenol	2024/11/12	NC		%	40
			Leachable Pyridine	2024/11/12	NC		%	40
			Leachable 2,3,4,6-Tetrachlorophenol	2024/11/12	NC		%	40
			Leachable 2,4,5-Trichlorophenol	2024/11/12	NC		%	40
			Leachable 2,4,6-Trichlorophenol	2024/11/12	NC		%	40
9761928	RDU	Matrix Spike	F4G-sg (Grav. Heavy Hydrocarbons)	2024/11/13		107	%	65 - 135
9761928	RDU	Spiked Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2024/11/13		102	%	65 - 135
9761928	RDU	Method Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2024/11/13	<100		ug/g	
9761928	RDU	RPD	F4G-sg (Grav. Heavy Hydrocarbons)	2024/11/13	5.1		%	50
9771947	GRU	Matrix Spike	1,4-Difluorobenzene	2024/11/18		99	%	60 - 140
			4-Bromofluorobenzene	2024/11/18		93	%	60 - 140
			D10-o-Xylene	2024/11/18		99	%	60 - 140
			D4-1,2-Dichloroethane	2024/11/18		79	%	60 - 140
			Benzene	2024/11/18		83	%	50 - 140
			Toluene	2024/11/18		82	%	50 - 140
			Ethylbenzene	2024/11/18		94	%	50 - 140
			o-Xylene	2024/11/18		91	%	50 - 140
			p+m-Xylene	2024/11/18		87	%	50 - 140
			F1 (C6-C10)	2024/11/18		103	%	60 - 140
9771947	GRU	Spiked Blank	1,4-Difluorobenzene	2024/11/18		101	%	60 - 140
			4-Bromofluorobenzene	2024/11/18		95	%	60 - 140
			D10-o-Xylene	2024/11/18		94	%	60 - 140
			D4-1,2-Dichloroethane	2024/11/18		79	%	60 - 140
			Benzene	2024/11/18		79	%	50 - 140
			Toluene	2024/11/18		80	%	50 - 140
			Ethylbenzene	2024/11/18		91	%	50 - 140
			o-Xylene	2024/11/18		88	%	50 - 140
			p+m-Xylene	2024/11/18		85	%	50 - 140
			F1 (C6-C10)	2024/11/18		101	%	80 - 120
9771947	GRU	Method Blank	1,4-Difluorobenzene	2024/11/18		103	%	60 - 140
			4-Bromofluorobenzene	2024/11/18		93	%	60 - 140
			D10-o-Xylene	2024/11/18		97	%	60 - 140
			D4-1,2-Dichloroethane	2024/11/18		78	%	60 - 140
			Benzene	2024/11/18	<0.020		ug/g	
			Toluene	2024/11/18	<0.020		ug/g	
			Ethylbenzene	2024/11/18	<0.020		ug/g	
			o-Xylene	2024/11/18	<0.020		ug/g	
			p+m-Xylene	2024/11/18	<0.040		ug/g	
			Total Xylenes	2024/11/18	<0.040		ug/g	
			F1 (C6-C10)	2024/11/18	<10		ug/g	
			F1 (C6-C10) - BTEX	2024/11/18	<10		ug/g	
9771947	GRU	RPD	Benzene	2024/11/18	NC		%	50
			Toluene	2024/11/18	NC		%	50
			Ethylbenzene	2024/11/18	NC		%	50



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QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			o-Xylene	2024/11/18	NC		%	50
			p+m-Xylene	2024/11/18	NC		%	50
			Total Xylenes	2024/11/18	NC		%	50
			F1 (C6-C10)	2024/11/18	NC		%	30
			F1 (C6-C10) - BTEX	2024/11/18	NC		%	30
9771979	JTS	RPD [AHZS23-02]	Moisture	2024/11/18	1.6		%	20
9773009	MSZ	Matrix Spike	o-Terphenyl	2024/11/19		81	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/11/19		84	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2024/11/19		86	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2024/11/19		85	%	60 - 140
9773009	MSZ	Spiked Blank	o-Terphenyl	2024/11/19		82	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/11/19		84	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2024/11/19		88	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2024/11/19		87	%	80 - 120
9773009	MSZ	Method Blank	o-Terphenyl	2024/11/19		79	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/11/19	<7.0		ug/g	
			F3 (C16-C34 Hydrocarbons)	2024/11/19	<50		ug/g	
			F4 (C34-C50 Hydrocarbons)	2024/11/19	<50		ug/g	
9773009	MSZ	RPD	F2 (C10-C16 Hydrocarbons)	2024/11/19	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2024/11/19	NC		%	30
			F4 (C34-C50 Hydrocarbons)	2024/11/19	NC		%	30
9776419	RDU	Matrix Spike [AHZS18-02]	F4G-sg (Grav. Heavy Hydrocarbons)	2024/11/20		92	%	65 - 135
9776419	RDU	Spiked Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2024/11/20		101	%	65 - 135
9776419	RDU	Method Blank	F4G-sg (Grav. Heavy Hydrocarbons)	2024/11/20	<100		ug/g	
9776419	RDU	RPD [AHZS19-02]	F4G-sg (Grav. Heavy Hydrocarbons)	2024/11/20	0		%	50
9780464	KIT	Spiked Blank	Conductivity	2024/11/21		101	%	90 - 110
9780464	KIT	Method Blank	Conductivity	2024/11/21	<0.002		mS/cm	
9780464	KIT	RPD [AHZS24-01]	Conductivity	2024/11/21	1.8		%	10
9780505	KIT	Spiked Blank	Available (CaCl2) pH	2024/11/21		100	%	97 - 103
9780505	KIT	RPD	Available (CaCl2) pH	2024/11/21	0.16		%	N/A
9780512	SBS	Matrix Spike	Chromium (VI)	2024/11/22		82	%	70 - 130
9780512	SBS	Spiked Blank	Chromium (VI)	2024/11/22		89	%	80 - 120
9780512	SBS	Method Blank	Chromium (VI)	2024/11/22	<0.18		ug/g	
9780512	SBS	RPD	Chromium (VI)	2024/11/22	NC		%	35
9780686	TLG	Matrix Spike	Acid Extractable Antimony (Sb)	2024/11/23		99	%	75 - 125
			Acid Extractable Arsenic (As)	2024/11/23		105	%	75 - 125
			Acid Extractable Barium (Ba)	2024/11/23		NC	%	75 - 125
			Acid Extractable Beryllium (Be)	2024/11/23		100	%	75 - 125
			Acid Extractable Boron (B)	2024/11/23		91	%	75 - 125
			Acid Extractable Cadmium (Cd)	2024/11/23		104	%	75 - 125
			Acid Extractable Chromium (Cr)	2024/11/23		104	%	75 - 125
			Acid Extractable Cobalt (Co)	2024/11/23		103	%	75 - 125
			Acid Extractable Copper (Cu)	2024/11/23		NC	%	75 - 125
			Acid Extractable Lead (Pb)	2024/11/23		94	%	75 - 125
			Acid Extractable Molybdenum (Mo)	2024/11/23		96	%	75 - 125
			Acid Extractable Nickel (Ni)	2024/11/23		NC	%	75 - 125
			Acid Extractable Selenium (Se)	2024/11/23		104	%	75 - 125
			Acid Extractable Silver (Ag)	2024/11/23		100	%	75 - 125
			Acid Extractable Thallium (Tl)	2024/11/23		101	%	75 - 125
			Acid Extractable Uranium (U)	2024/11/23		100	%	75 - 125
			Acid Extractable Vanadium (V)	2024/11/23		NC	%	75 - 125
			Acid Extractable Zinc (Zn)	2024/11/23		NC	%	75 - 125



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9780686	TLG	Spiked Blank	Acid Extractable Mercury (Hg)	2024/11/23	98	%	75 - 125	
			Acid Extractable Antimony (Sb)	2024/11/23	102	%	80 - 120	
			Acid Extractable Arsenic (As)	2024/11/23	101	%	80 - 120	
			Acid Extractable Barium (Ba)	2024/11/23	101	%	80 - 120	
			Acid Extractable Beryllium (Be)	2024/11/23	96	%	80 - 120	
			Acid Extractable Boron (B)	2024/11/23	94	%	80 - 120	
			Acid Extractable Cadmium (Cd)	2024/11/23	97	%	80 - 120	
			Acid Extractable Chromium (Cr)	2024/11/23	97	%	80 - 120	
			Acid Extractable Cobalt (Co)	2024/11/23	97	%	80 - 120	
			Acid Extractable Copper (Cu)	2024/11/23	95	%	80 - 120	
			Acid Extractable Lead (Pb)	2024/11/23	92	%	80 - 120	
			Acid Extractable Molybdenum (Mo)	2024/11/23	90	%	80 - 120	
			Acid Extractable Nickel (Ni)	2024/11/23	98	%	80 - 120	
			Acid Extractable Selenium (Se)	2024/11/23	99	%	80 - 120	
			Acid Extractable Silver (Ag)	2024/11/23	94	%	80 - 120	
			Acid Extractable Thallium (Tl)	2024/11/23	98	%	80 - 120	
			Acid Extractable Uranium (U)	2024/11/23	95	%	80 - 120	
			Acid Extractable Vanadium (V)	2024/11/23	98	%	80 - 120	
			Acid Extractable Zinc (Zn)	2024/11/23	100	%	80 - 120	
			Acid Extractable Mercury (Hg)	2024/11/23	97	%	80 - 120	
9780686	TLG	Method Blank	Acid Extractable Antimony (Sb)	2024/11/23	<0.20		ug/g	
			Acid Extractable Arsenic (As)	2024/11/23	<1.0		ug/g	
			Acid Extractable Barium (Ba)	2024/11/23	<0.50		ug/g	
			Acid Extractable Beryllium (Be)	2024/11/23	<0.20		ug/g	
			Acid Extractable Boron (B)	2024/11/23	<5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2024/11/23	<0.10		ug/g	
			Acid Extractable Chromium (Cr)	2024/11/23	<1.0		ug/g	
			Acid Extractable Cobalt (Co)	2024/11/23	<0.10		ug/g	
			Acid Extractable Copper (Cu)	2024/11/23	<0.50		ug/g	
			Acid Extractable Lead (Pb)	2024/11/23	<1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2024/11/23	<0.50		ug/g	
			Acid Extractable Nickel (Ni)	2024/11/23	<0.50		ug/g	
			Acid Extractable Selenium (Se)	2024/11/23	<0.50		ug/g	
			Acid Extractable Silver (Ag)	2024/11/23	<0.20		ug/g	
			Acid Extractable Thallium (Tl)	2024/11/23	<0.050		ug/g	
			Acid Extractable Uranium (U)	2024/11/23	<0.050		ug/g	
			Acid Extractable Vanadium (V)	2024/11/23	<5.0		ug/g	
			Acid Extractable Zinc (Zn)	2024/11/23	<5.0		ug/g	
			Acid Extractable Mercury (Hg)	2024/11/23	<0.050		ug/g	
9780686	TLG	RPD	Acid Extractable Antimony (Sb)	2024/11/23	NC	%	30	
			Acid Extractable Arsenic (As)	2024/11/23	1.2	%	30	
			Acid Extractable Barium (Ba)	2024/11/23	2.9	%	30	
			Acid Extractable Beryllium (Be)	2024/11/23	1.9	%	30	
			Acid Extractable Boron (B)	2024/11/23	2.7	%	30	
			Acid Extractable Cadmium (Cd)	2024/11/23	NC	%	30	
			Acid Extractable Chromium (Cr)	2024/11/23	1.6	%	30	
			Acid Extractable Cobalt (Co)	2024/11/23	0.86	%	30	
			Acid Extractable Copper (Cu)	2024/11/23	0.11	%	30	
			Acid Extractable Lead (Pb)	2024/11/23	0.39	%	30	
			Acid Extractable Molybdenum (Mo)	2024/11/23	NC	%	30	
			Acid Extractable Nickel (Ni)	2024/11/23	0.63	%	30	
			Acid Extractable Selenium (Se)	2024/11/23	NC	%	30	



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			Acid Extractable Silver (Ag)	2024/11/23	NC		%	30
			Acid Extractable Thallium (Tl)	2024/11/23	3.3		%	30
			Acid Extractable Uranium (U)	2024/11/23	2.6		%	30
			Acid Extractable Vanadium (V)	2024/11/23	2.5		%	30
			Acid Extractable Zinc (Zn)	2024/11/23	1.9		%	30
			Acid Extractable Mercury (Hg)	2024/11/23	NC		%	30
9781054	MUC	RPD	Moisture	2024/11/21	3.3		%	20
9781125	KIT	Spiked Blank	Available (CaCl2) pH	2024/11/21		100	%	97 - 103
9781125	KIT	RPD	Available (CaCl2) pH	2024/11/21	0.88		%	N/A
9781254	RSU	Matrix Spike	Chromium (VI)	2024/11/22		87	%	70 - 130
9781254	RSU	Spiked Blank	Chromium (VI)	2024/11/22		90	%	80 - 120
9781254	RSU	Method Blank	Chromium (VI)	2024/11/22	<0.18		ug/g	
9781254	RSU	RPD	Chromium (VI)	2024/11/22	NC		%	35
9781287	GYA	Matrix Spike	WAD Cyanide (Free)	2024/11/22		112	%	75 - 125
9781287	GYA	Spiked Blank	WAD Cyanide (Free)	2024/11/22		110	%	80 - 120
9781287	GYA	Method Blank	WAD Cyanide (Free)	2024/11/22	<0.01		ug/g	
9781287	GYA	RPD	WAD Cyanide (Free)	2024/11/22	NC		%	35
9781307	GYA	Matrix Spike	WAD Cyanide (Free)	2024/11/22		107	%	75 - 125
9781307	GYA	Spiked Blank	WAD Cyanide (Free)	2024/11/22		104	%	80 - 120
9781307	GYA	Method Blank	WAD Cyanide (Free)	2024/11/22	<0.01		ug/g	
9781307	GYA	RPD	WAD Cyanide (Free)	2024/11/22	NC		%	35
9781582	MUC	RPD [AHZR97-02]	Moisture	2024/11/21	0		%	20
9781962	JJE	Matrix Spike	o-Terphenyl	2024/11/22		91	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/11/22		97	%	60 - 140
			F3 (C16-C34 Hydrocarbons)	2024/11/22		100	%	60 - 140
			F4 (C34-C50 Hydrocarbons)	2024/11/22		94	%	60 - 140
9781962	JJE	Spiked Blank	o-Terphenyl	2024/11/22		94	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/11/22		98	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2024/11/22		101	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2024/11/22		94	%	80 - 120
9781962	JJE	Method Blank	o-Terphenyl	2024/11/22		94	%	60 - 140
			F2 (C10-C16 Hydrocarbons)	2024/11/22	<7.0		ug/g	
			F3 (C16-C34 Hydrocarbons)	2024/11/22	<50		ug/g	
			F4 (C34-C50 Hydrocarbons)	2024/11/22	<50		ug/g	
9781962	JJE	RPD	F2 (C10-C16 Hydrocarbons)	2024/11/22	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2024/11/22	NC		%	30
			F4 (C34-C50 Hydrocarbons)	2024/11/22	NC		%	30
9781975	GYA	Matrix Spike	WAD Cyanide (Free)	2024/11/22		96	%	75 - 125
9781975	GYA	Spiked Blank	WAD Cyanide (Free)	2024/11/22		106	%	80 - 120
9781975	GYA	Method Blank	WAD Cyanide (Free)	2024/11/22	<0.01		ug/g	
9781975	GYA	RPD	WAD Cyanide (Free)	2024/11/22	NC		%	35
9781986	MKS	Matrix Spike	D10-Anthracene	2024/11/22		88	%	50 - 130
			D14-Terphenyl (FS)	2024/11/22		105	%	50 - 130
			D8-Acenaphthylene	2024/11/22		82	%	50 - 130
			Acenaphthene	2024/11/22		85	%	50 - 130
			Acenaphthylene	2024/11/22		83	%	50 - 130
			Anthracene	2024/11/22		89	%	50 - 130
			Benzo(a)anthracene	2024/11/22		96	%	50 - 130
			Benzo(a)pyrene	2024/11/22		93	%	50 - 130
			Benzo(b,j)fluoranthene	2024/11/22		92	%	50 - 130
			Benzo(g,h,i)perylene	2024/11/22		94	%	50 - 130
			Benzo(k)fluoranthene	2024/11/22		96	%	50 - 130



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9781986	MKS	Spiked Blank	Chrysene	2024/11/22	94	%	50 - 130	
			Dibenz(a,h)anthracene	2024/11/22	105	%	50 - 130	
			Fluoranthene	2024/11/22	96	%	50 - 130	
			Fluorene	2024/11/22	94	%	50 - 130	
			Indeno(1,2,3-cd)pyrene	2024/11/22	93	%	50 - 130	
			1-Methylnaphthalene	2024/11/22	77	%	50 - 130	
			2-Methylnaphthalene	2024/11/22	75	%	50 - 130	
			Naphthalene	2024/11/22	64	%	50 - 130	
			Phenanthrene	2024/11/22	90	%	50 - 130	
			Pyrene	2024/11/22	96	%	50 - 130	
			D10-Anthracene	2024/11/22	88	%	50 - 130	
			D14-Terphenyl (FS)	2024/11/22	103	%	50 - 130	
			D8-Acenaphthylene	2024/11/22	85	%	50 - 130	
			Acenaphthene	2024/11/22	89	%	50 - 130	
			Acenaphthylene	2024/11/22	89	%	50 - 130	
			Anthracene	2024/11/22	90	%	50 - 130	
			Benzo(a)anthracene	2024/11/22	95	%	50 - 130	
			Benzo(a)pyrene	2024/11/22	93	%	50 - 130	
			Benzo(b/j)fluoranthene	2024/11/22	93	%	50 - 130	
			Benzo(g,h,i)perylene	2024/11/22	95	%	50 - 130	
			Benzo(k)fluoranthene	2024/11/22	94	%	50 - 130	
			Chrysene	2024/11/22	95	%	50 - 130	
			Dibenz(a,h)anthracene	2024/11/22	103	%	50 - 130	
			Fluoranthene	2024/11/22	97	%	50 - 130	
			Fluorene	2024/11/22	96	%	50 - 130	
			Indeno(1,2,3-cd)pyrene	2024/11/22	93	%	50 - 130	
			1-Methylnaphthalene	2024/11/22	91	%	50 - 130	
			2-Methylnaphthalene	2024/11/22	90	%	50 - 130	
			Naphthalene	2024/11/22	86	%	50 - 130	
			Phenanthrene	2024/11/22	92	%	50 - 130	
			Pyrene	2024/11/22	97	%	50 - 130	
9781986	MKS	Method Blank	D10-Anthracene	2024/11/22	93	%	50 - 130	
			D14-Terphenyl (FS)	2024/11/22	107	%	50 - 130	
			D8-Acenaphthylene	2024/11/22	86	%	50 - 130	
			Acenaphthene	2024/11/22	<0.0050	ug/g		
			Acenaphthylene	2024/11/22	<0.0050	ug/g		
			Anthracene	2024/11/22	<0.0050	ug/g		
			Benzo(a)anthracene	2024/11/22	<0.0050	ug/g		
			Benzo(a)pyrene	2024/11/22	<0.0050	ug/g		
			Benzo(b/j)fluoranthene	2024/11/22	<0.0050	ug/g		
			Benzo(g,h,i)perylene	2024/11/22	<0.0050	ug/g		
			Benzo(k)fluoranthene	2024/11/22	<0.0050	ug/g		
			Chrysene	2024/11/22	<0.0050	ug/g		
			Dibenz(a,h)anthracene	2024/11/22	<0.0050	ug/g		
			Fluoranthene	2024/11/22	<0.0050	ug/g		
			Fluorene	2024/11/22	<0.0050	ug/g		
			Indeno(1,2,3-cd)pyrene	2024/11/22	<0.0050	ug/g		
			1-Methylnaphthalene	2024/11/22	<0.0050	ug/g		
			2-Methylnaphthalene	2024/11/22	<0.0050	ug/g		
			Naphthalene	2024/11/22	<0.0050	ug/g		
			Phenanthrene	2024/11/22	<0.0050	ug/g		
			Pyrene	2024/11/22	<0.0050	ug/g		



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9781986	MKS	RPD	Acenaphthene	2024/11/22	NC		%	40
			Acenaphthylene	2024/11/22	NC		%	40
			Anthracene	2024/11/22	NC		%	40
			Benzo(a)anthracene	2024/11/22	NC		%	40
			Benzo(a)pyrene	2024/11/22	NC		%	40
			Benzo(b/j)fluoranthene	2024/11/22	NC		%	40
			Benzo(g,h,i)perylene	2024/11/22	NC		%	40
			Benzo(k)fluoranthene	2024/11/22	NC		%	40
			Chrysene	2024/11/22	NC		%	40
			Dibenzo(a,h)anthracene	2024/11/22	NC		%	40
			Fluoranthene	2024/11/22	NC		%	40
			Fluorene	2024/11/22	NC		%	40
			Indeno(1,2,3-cd)pyrene	2024/11/22	NC		%	40
			1-Methylnaphthalene	2024/11/22	NC		%	40
			2-Methylnaphthalene	2024/11/22	NC		%	40
			Naphthalene	2024/11/22	NC		%	40
			Phenanthrene	2024/11/22	NC		%	40
			Pyrene	2024/11/22	NC		%	40
9782200	SB5	Matrix Spike	Chromium (VI)	2024/11/22		19 (2)	%	70 - 130
9782200	SB5	Spiked Blank	Chromium (VI)	2024/11/22		90	%	80 - 120
9782200	SB5	Method Blank	Chromium (VI)	2024/11/22	<0.18		ug/g	
9782200	SB5	RPD	Chromium (VI)	2024/11/22	NC		%	35
9782283	MEN	Matrix Spike	Hot Water Ext. Boron (B)	2024/11/22		102	%	75 - 125
9782283	MEN	Spiked Blank	Hot Water Ext. Boron (B)	2024/11/22		95	%	75 - 125
9782283	MEN	Method Blank	Hot Water Ext. Boron (B)	2024/11/22	<0.050		ug/g	
9782283	MEN	RPD	Hot Water Ext. Boron (B)	2024/11/22	23		%	40
9782343	AYA	Matrix Spike	4-Bromofluorobenzene	2024/11/22		102	%	60 - 140
			D10-o-Xylene	2024/11/22		106	%	60 - 130
			D4-1,2-Dichloroethane	2024/11/22		101	%	60 - 140
			D8-Toluene	2024/11/22		106	%	60 - 140
			Acetone (2-Propanone)	2024/11/22		96	%	60 - 140
			Benzene	2024/11/22		99	%	60 - 140
			Bromodichloromethane	2024/11/22		97	%	60 - 140
			Bromoform	2024/11/22		91	%	60 - 140
			Bromomethane	2024/11/22		93	%	60 - 140
			Carbon Tetrachloride	2024/11/22		115	%	60 - 140
			Chlorobenzene	2024/11/22		92	%	60 - 140
			Chloroform	2024/11/22		102	%	60 - 140
			Dibromochloromethane	2024/11/22		98	%	60 - 140
			1,2-Dichlorobenzene	2024/11/22		98	%	60 - 140
			1,3-Dichlorobenzene	2024/11/22		101	%	60 - 140
			1,4-Dichlorobenzene	2024/11/22		102	%	60 - 140
			Dichlorodifluoromethane (FREON 12)	2024/11/22		96	%	60 - 140
			1,1-Dichloroethane	2024/11/22		99	%	60 - 140
			1,2-Dichloroethane	2024/11/22		103	%	60 - 140
			1,1-Dichloroethylene	2024/11/22		111	%	60 - 140
			cis-1,2-Dichloroethylene	2024/11/22		111	%	60 - 140
			trans-1,2-Dichloroethylene	2024/11/22		115	%	60 - 140
			1,2-Dichloropropane	2024/11/22		98	%	60 - 140
			cis-1,3-Dichloropropene	2024/11/22		89	%	60 - 140
			trans-1,3-Dichloropropene	2024/11/22		100	%	60 - 140
			Ethylbenzene	2024/11/22		98	%	60 - 140



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9782343	AYA	Spiked Blank	Ethylene Dibromide	2024/11/22	95	%	60 - 140	
			Hexane	2024/11/22	129	%	60 - 140	
			Methylene Chloride(Dichloromethane)	2024/11/22	100	%	60 - 140	
			Methyl Ethyl Ketone (2-Butanone)	2024/11/22	90	%	60 - 140	
			Methyl Isobutyl Ketone	2024/11/22	93	%	60 - 140	
			Methyl t-butyl ether (MTBE)	2024/11/22	95	%	60 - 140	
			Styrene	2024/11/22	100	%	60 - 140	
			1,1,1,2-Tetrachloroethane	2024/11/22	107	%	60 - 140	
			1,1,2,2-Tetrachloroethane	2024/11/22	87	%	60 - 140	
			Tetrachloroethylene	2024/11/22	102	%	60 - 140	
			Toluene	2024/11/22	99	%	60 - 140	
			1,1,1-Trichloroethane	2024/11/22	104	%	60 - 140	
			1,1,2-Trichloroethane	2024/11/22	97	%	60 - 140	
			Trichloroethylene	2024/11/22	106	%	60 - 140	
			Trichlorofluoromethane (FREON 11)	2024/11/22	111	%	60 - 140	
			Vinyl Chloride	2024/11/22	104	%	60 - 140	
			p+m-Xylene	2024/11/22	97	%	60 - 140	
			o-Xylene	2024/11/22	104	%	60 - 140	
			F1 (C6-C10)	2024/11/22	87	%	60 - 140	
			4-Bromofluorobenzene	2024/11/22	101	%	60 - 140	
			D1n-n-Xylene	2024/11/22	100	%	60 - 130	
			D4-1,2-Dichloroethane	2024/11/22	100	%	60 - 140	
			D8-Toluene	2024/11/22	105	%	60 - 140	
			Acetone (2-Propanone)	2024/11/22	94	%	60 - 140	
			Benzene	2024/11/22	98	%	60 - 130	
			Bromodichloromethane	2024/11/22	96	%	60 - 130	
			Bromoform	2024/11/22	92	%	60 - 130	
			Bromomethane	2024/11/22	91	%	60 - 140	
			Carbon Tetrachloride	2024/11/22	112	%	60 - 130	
			Chlorobenzene	2024/11/22	92	%	60 - 130	
			Chloroform	2024/11/22	100	%	60 - 130	
			Dibromochloromethane	2024/11/22	98	%	60 - 130	
			1,2-Dichlorobenzene	2024/11/22	97	%	60 - 130	
			1,3-Dichlorobenzene	2024/11/22	101	%	60 - 130	
			1,4-Dichlorobenzene	2024/11/22	102	%	60 - 130	
			Dichlorodifluoromethane (FREON 12)	2024/11/22	94	%	60 - 140	
			1,1-Dichloroethane	2024/11/22	97	%	60 - 130	
			1,2-Dichloroethane	2024/11/22	101	%	60 - 130	
			1,1-Dichloroethylene	2024/11/22	109	%	60 - 130	
			cis-1,2-Dichloroethylene	2024/11/22	109	%	60 - 130	
			trans-1,2-Dichloroethylene	2024/11/22	112	%	60 - 130	
			1,2-Dichloropropane	2024/11/22	97	%	60 - 130	
			cis-1,3-Dichloropropene	2024/11/22	90	%	60 - 130	
			trans-1,3-Dichloropropene	2024/11/22	101	%	60 - 130	
			Ethylbenzene	2024/11/22	97	%	60 - 130	
			Ethylene Dibromide	2024/11/22	95	%	60 - 130	
			Hexane	2024/11/22	128	%	60 - 130	
			Methylene Chloride(Dichloromethane)	2024/11/22	99	%	60 - 130	
			Methyl Ethyl Ketone (2-Butanone)	2024/11/22	90	%	60 - 140	
			Methyl Isobutyl Ketone	2024/11/22	93	%	60 - 130	
			Methyl t-butyl ether (MTBE)	2024/11/22	96	%	60 - 130	
			Styrene	2024/11/22	101	%	60 - 130	



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9782343	AYA	Method Blank	1,1,1,2-Tetrachloroethane	2024/11/22		106	%	60 - 130	
			1,1,2,2-Tetrachloroethane	2024/11/22		85	%	60 - 130	
			Tetrachloroethylene	2024/11/22		101	%	60 - 130	
			Toluene	2024/11/22		98	%	60 - 130	
			1,1,1-Trichloroethane	2024/11/22		102	%	60 - 130	
			1,1,2-Trichloroethane	2024/11/22		95	%	60 - 130	
			Trichloroethylene	2024/11/22		105	%	60 - 130	
			Trichlorofluoromethane (FREON 11)	2024/11/22		109	%	60 - 130	
			Vinyl Chloride	2024/11/22		103	%	60 - 130	
			p+m-Xylene	2024/11/22		96	%	60 - 130	
			o-Xylene	2024/11/22		104	%	60 - 130	
			F1 (C6-C10)	2024/11/22		84	%	80 - 120	
			4-Bromofluorobenzene	2024/11/22		101	%	60 - 140	
			D10-o-Xylene	2024/11/22		90	%	60 - 130	
			D4-1,2-Dichloroethane	2024/11/22		103	%	60 - 140	
			D8-Toluene	2024/11/22		95	%	60 - 140	
			Acetone (2-Propanone)	2024/11/22	<0.49			ug/g	
			Benzene	2024/11/22	<0.0060			ug/g	
			Bromodichloromethane	2024/11/22	<0.040			ug/g	
			Bromoform	2024/11/22	<0.040			ug/g	
			Bromomethane	2024/11/22	<0.040			ug/g	
			Carbon Tetrachloride	2024/11/22	<0.040			ug/g	
			Chlorobenzene	2024/11/22	<0.040			ug/g	
			Chloroform	2024/11/22	<0.040			ug/g	
			Dibromochloromethane	2024/11/22	<0.040			ug/g	
			1,2-Dichlorobenzene	2024/11/22	<0.040			ug/g	
			1,3-Dichlorobenzene	2024/11/22	<0.040			ug/g	
			1,4-Dichlorobenzene	2024/11/22	<0.040			ug/g	
			Dichlorodifluoromethane (FREON 12)	2024/11/22	<0.040			ug/g	
			1,1-Dichloroethane	2024/11/22	<0.040			ug/g	
			1,2-Dichloroethane	2024/11/22	<0.049			ug/g	
			1,1-Dichloroethylene	2024/11/22	<0.040			ug/g	
			cis-1,2-Dichloroethylene	2024/11/22	<0.040			ug/g	
			trans-1,2-Dichloroethylene	2024/11/22	<0.040			ug/g	
			1,2-Dichloropropane	2024/11/22	<0.040			ug/g	
			cis-1,3-Dichloropropene	2024/11/22	<0.030			ug/g	
			trans-1,3-Dichloropropene	2024/11/22	<0.040			ug/g	
			Ethylbenzene	2024/11/22	<0.010			ug/g	
			Ethylene Dibromide	2024/11/22	<0.040			ug/g	
			Hexane	2024/11/22	<0.040			ug/g	
			Methylene Chloride(Dichloromethane)	2024/11/22	<0.049			ug/g	
			Methyl Ethyl Ketone (2-Butanone)	2024/11/22	<0.40			ug/g	
			Methyl Isobutyl Ketone	2024/11/22	<0.40			ug/g	
			Methyl t-butyl ether (MTBE)	2024/11/22	<0.040			ug/g	
			Styrene	2024/11/22	<0.040			ug/g	
			1,1,1,2-Tetrachloroethane	2024/11/22	<0.040			ug/g	
			1,1,2,2-Tetrachloroethane	2024/11/22	<0.040			ug/g	
			Tetrachloroethylene	2024/11/22	<0.040			ug/g	
			Toluene	2024/11/22	<0.020			ug/g	
			1,1,1-Trichloroethane	2024/11/22	<0.040			ug/g	
			1,1,2-Trichloroethane	2024/11/22	<0.040			ug/g	
			Trichloroethylene	2024/11/22	<0.010			ug/g	



Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: HM

## QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9782343	AYA	RPD	Trichlorofluoromethane (FREON 11)	2024/11/22	<0.040		ug/g	
			Vinyl Chloride	2024/11/22	<0.019		ug/g	
			p+m-Xylene	2024/11/22	<0.020		ug/g	
			o-Xylene	2024/11/22	<0.020		ug/g	
			Total Xylenes	2024/11/22	<0.020		ug/g	
			F1 (C6-C10)	2024/11/22	<10		ug/g	
			F1 (C6-C10) - BTEX	2024/11/22	<10		ug/g	
			Acetone (2-Propanone)	2024/11/22	NC	%	50	
			Benzene	2024/11/22	NC	%	50	
			Bromodichloromethane	2024/11/22	NC	%	50	
			Bromoform	2024/11/22	NC	%	50	
			Bromomethane	2024/11/22	NC	%	50	
			Carbon Tetrachloride	2024/11/22	NC	%	50	
			Chlorobenzene	2024/11/22	NC	%	50	
			Chloroform	2024/11/22	NC	%	50	
			Dibromochloromethane	2024/11/22	NC	%	50	
			1,2-Dichlorobenzene	2024/11/22	NC	%	50	
			1,3-Dichlorobenzene	2024/11/22	NC	%	50	
			1,4-Dichlorobenzene	2024/11/22	NC	%	50	
			Dichlorodifluoromethane (FREON 12)	2024/11/22	NC	%	50	
			1,1-Dichloroethane	2024/11/22	NC	%	50	
			1,2-Dichloroethane	2024/11/22	NC	%	50	
			1,1-Dichloroethylene	2024/11/22	NC	%	50	
			cis-1,2-Dichloroethylene	2024/11/22	NC	%	50	
			trans-1,2-Dichloroethylene	2024/11/22	NC	%	50	
			1,2-Dichloropropane	2024/11/22	NC	%	50	
			cis-1,3-Dichloropropene	2024/11/22	NC	%	50	
			trans-1,3-Dichloropropene	2024/11/22	NC	%	50	
			Ethylbenzene	2024/11/22	NC	%	50	
			Ethylene Dibromide	2024/11/22	NC	%	50	
			Hexane	2024/11/22	NC	%	50	
			Methylene Chloride(Dichloromethane)	2024/11/22	NC	%	50	
			Methyl Ethyl Ketone (2-Butanone)	2024/11/22	NC	%	50	
			Methyl Isobutyl Ketone	2024/11/22	NC	%	50	
			Methyl t-butyl ether (MTBE)	2024/11/22	NC	%	50	
			Styrene	2024/11/22	NC	%	50	
			1,1,1,2-Tetrachloroethane	2024/11/22	NC	%	50	
			1,1,2,2-Tetrachloroethane	2024/11/22	NC	%	50	
			Tetrachloroethylene	2024/11/22	1.1	%	50	
			Toluene	2024/11/22	NC	%	50	
			1,1,1-Trichloroethane	2024/11/22	NC	%	50	
			1,1,2-Trichloroethane	2024/11/22	NC	%	50	
			Trichloroethylene	2024/11/22	NC	%	50	
			Trichlorofluoromethane (FREON 11)	2024/11/22	NC	%	50	
			Vinyl Chloride	2024/11/22	NC	%	50	
			p+m-Xylene	2024/11/22	NC	%	50	
			o-Xylene	2024/11/22	NC	%	50	
			Total Xylenes	2024/11/22	NC	%	50	
			F1 (C6-C10)	2024/11/22	NC	%	30	
			F1 (C6-C10) - BTEX	2024/11/22	NC	%	30	
9782456	JGC	Matrix Spike	Hot Water Ext. Boron (B)	2024/11/23	116	%	75 - 125	
9782456	JGC	Spiked Blank	Hot Water Ext. Boron (B)	2024/11/23	112	%	75 - 125	



Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

## QUALITY ASSURANCE REPORT(CONT'D)

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9782456	JGC		Method Blank	Hot Water Ext. Boron (B)	2024/11/23	<0.050		ug/g	
9782456	JGC		RPD	Hot Water Ext. Boron (B)	2024/11/23	13	%		40
9782634	TLG		Matrix Spike	Hot Water Ext. Boron (B)	2024/11/22		97	%	75 - 125
9782634	TLG		Spiked Blank	Hot Water Ext. Boron (B)	2024/11/22		97	%	75 - 125
9782634	TLG		Method Blank	Hot Water Ext. Boron (B)	2024/11/22	<0.050		ug/g	
9782634	TLG		RPD	Hot Water Ext. Boron (B)	2024/11/22	4.7	%		40
9782811	KIT		Spiked Blank	Conductivity	2024/11/22		103	%	90 - 110
9782811	KIT		Method Blank	Conductivity	2024/11/22	<0.002		mS/cm	
9782811	KIT		RPD	Conductivity	2024/11/25	1.8	%		10
9782879	KIT		Spiked Blank	Available (CaCl <sub>2</sub> ) pH	2024/11/22		100	%	97 - 103
9782879	KIT		RPD	Available (CaCl <sub>2</sub> ) pH	2024/11/22	0.49	%		N/A
9782920	DT1		Matrix Spike	Acid Extractable Antimony (Sb)	2024/11/22		93	%	75 - 125
				Acid Extractable Arsenic (As)	2024/11/22		93	%	75 - 125
				Acid Extractable Barium (Ba)	2024/11/22		NC	%	75 - 125
				Acid Extractable Beryllium (Be)	2024/11/22		99	%	75 - 125
				Acid Extractable Boron (B)	2024/11/22		93	%	75 - 125
				Acid Extractable Cadmium (Cd)	2024/11/22		96	%	75 - 125
				Acid Extractable Chromium (Cr)	2024/11/22		91	%	75 - 125
				Acid Extractable Cobalt (Co)	2024/11/22		89	%	75 - 125
				Acid Extractable Copper (Cu)	2024/11/22		91	%	75 - 125
				Acid Extractable Lead (Pb)	2024/11/22		94	%	75 - 125
				Acid Extractable Molybdenum (Mo)	2024/11/22		92	%	75 - 125
				Acid Extractable Nickel (Ni)	2024/11/22		93	%	75 - 125
				Acid Extractable Selenium (Se)	2024/11/22		91	%	75 - 125
				Acid Extractable Silver (Ag)	2024/11/22		95	%	75 - 125
				Acid Extractable Thallium (Tl)	2024/11/22		94	%	75 - 125
				Acid Extractable Uranium (U)	2024/11/22		97	%	75 - 125
				Acid Extractable Vanadium (V)	2024/11/22		NC	%	75 - 125
				Acid Extractable Zinc (Zn)	2024/11/22		NC	%	75 - 125
				Acid Extractable Mercury (Hg)	2024/11/22		92	%	75 - 125
9782920	DT1		Spiked Blank	Acid Extractable Antimony (Sb)	2024/11/22		114	%	80 - 120
				Acid Extractable Arsenic (As)	2024/11/22		103	%	80 - 120
				Acid Extractable Barium (Ba)	2024/11/22		105	%	80 - 120
				Acid Extractable Beryllium (Be)	2024/11/22		102	%	80 - 120
				Acid Extractable Boron (B)	2024/11/22		99	%	80 - 120
				Acid Extractable Cadmium (Cd)	2024/11/22		105	%	80 - 120
				Acid Extractable Chromium (Cr)	2024/11/22		99	%	80 - 120
				Acid Extractable Cobalt (Co)	2024/11/22		98	%	80 - 120
				Acid Extractable Copper (Cu)	2024/11/22		99	%	80 - 120
				Acid Extractable Lead (Pb)	2024/11/22		103	%	80 - 120
				Acid Extractable Molybdenum (Mo)	2024/11/22		100	%	80 - 120
				Acid Extractable Nickel (Ni)	2024/11/22		100	%	80 - 120
				Acid Extractable Selenium (Se)	2024/11/22		104	%	80 - 120
				Acid Extractable Silver (Ag)	2024/11/22		103	%	80 - 120
				Acid Extractable Thallium (Tl)	2024/11/22		104	%	80 - 120
				Acid Extractable Uranium (U)	2024/11/22		106	%	80 - 120
				Acid Extractable Vanadium (V)	2024/11/22		101	%	80 - 120
				Acid Extractable Zinc (Zn)	2024/11/22		106	%	80 - 120
				Acid Extractable Mercury (Hg)	2024/11/22		103	%	80 - 120
9782920	DT1		Method Blank	Acid Extractable Antimony (Sb)	2024/11/22	<0.20		ug/g	
				Acid Extractable Arsenic (As)	2024/11/22	<1.0		ug/g	
				Acid Extractable Barium (Ba)	2024/11/22	<0.50		ug/g	

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Bureau Veritas Job #: C4Y8641

Report Date: 2024/11/26

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: HM

## QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9782920	DT1	RPD	Acid Extractable Beryllium (Be)	2024/11/22	<0.20		ug/g	
			Acid Extractable Boron (B)	2024/11/22	<5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2024/11/22	<0.10		ug/g	
			Acid Extractable Chromium (Cr)	2024/11/22	<1.0		ug/g	
			Acid Extractable Cobalt (Co)	2024/11/22	<0.10		ug/g	
			Acid Extractable Copper (Cu)	2024/11/22	<0.50		ug/g	
			Acid Extractable Lead (Pb)	2024/11/22	<1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2024/11/22	<0.50		ug/g	
			Acid Extractable Nickel (Ni)	2024/11/22	<0.50		ug/g	
			Acid Extractable Selenium (Se)	2024/11/22	<0.50		ug/g	
			Acid Extractable Silver (Ag)	2024/11/22	<0.20		ug/g	
			Acid Extractable Thallium (Tl)	2024/11/22	<0.050		ug/g	
			Acid Extractable Uranium (U)	2024/11/22	<0.050		ug/g	
			Acid Extractable Vanadium (V)	2024/11/22	<5.0		ug/g	
			Acid Extractable Zinc (Zn)	2024/11/22	<5.0		ug/g	
			Acid Extractable Mercury (Hg)	2024/11/22	<0.050		ug/g	
			Acid Extractable Antimony (Sb)	2024/11/22	NC		%	30
			Acid Extractable Arsenic (As)	2024/11/22	1.8		%	30
			Acid Extractable Barium (Ba)	2024/11/22	0.18		%	30
			Acid Extractable Beryllium (Be)	2024/11/22	0.047		%	30
			Acid Extractable Boron (B)	2024/11/22	2.0		%	30
			Acid Extractable Cadmium (Cd)	2024/11/22	4.1		%	30
			Acid Extractable Chromium (Cr)	2024/11/22	7.1		%	30
			Acid Extractable Cobalt (Co)	2024/11/22	0.62		%	30
			Acid Extractable Copper (Cu)	2024/11/22	1.0		%	30
			Acid Extractable Lead (Pb)	2024/11/22	1.9		%	30
			Acid Extractable Molybdenum (Mo)	2024/11/22	NC		%	30
			Acid Extractable Nickel (Ni)	2024/11/22	0.89		%	30
			Acid Extractable Selenium (Se)	2024/11/22	NC		%	30
			Acid Extractable Silver (Ag)	2024/11/22	NC		%	30
			Acid Extractable Thallium (Tl)	2024/11/22	3.6		%	30
			Acid Extractable Uranium (U)	2024/11/22	0.75		%	30
			Acid Extractable Vanadium (V)	2024/11/22	0.95		%	30
			Acid Extractable Zinc (Zn)	2024/11/22	1.2		%	30
9783050	KIT	Spiked Blank	Available (CaCl2) pH	2024/11/22		100	%	97 - 103



Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### QUALITY ASSURANCE REPORT(CONT'D)

QA/QC			Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
Batch	Init	QC Type					%	N/A
9783050	KIT	RPD	Available (CaCl <sub>2</sub> ) pH	2024/11/22	0.013			
N/A = Not Applicable								
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.								
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.								
Leachate Blank: A blank matrix containing all reagents used in the leaching procedure. Used to determine any process contamination.								
Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.								
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.								
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.								
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)								
NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).								
(1) Matrix Spike exceeds acceptance limits, probable matrix interference								
(2) The matrix spike recovery was below the lower control limit. This may be due in part to the reducing environment of the sample. The sample was reanalyzed with the same results.								
(3) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.								



Bureau Veritas Job #: C4Y8641  
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Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: HM

### VALIDATION SIGNATURE PAGE

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

*Cristina Carriere*

---

Cristina Carriere, Senior Scientific Specialist

*Louise A. Harding*

---

Louise Harding, Scientific Specialist

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



CAY8641  
2024/05/05 15:20

Bureau Veritas  
6740 Chedoke-Cataraqui Road, Mississauga, Ontario L5N 2L6 Tel: (905) 817-5700 To-Jones 800-263-6264 Fax: (905) 817-5277 www.bvna.com

STANTEC CHAIN OF CUSTODY RECORD

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INVOICE INFORMATION:		REPORT INFORMATION (differ from invoice):		PROJECT INFORMATION:		Laboratory Use Only:													
Company Name: <b>#5072 Stantec Consulting Ltd</b>	Contact Name: <b>Marissa Ligito</b>	Location #: Project #: Project Name: Site #: Site ID:	Address: <b>675 Cochran Dr W, West Tower Suite 300 Markham ON L3R 0B8</b>	Phone: <b>(905) 484-7777</b>	Fax: <b>(905) 478-9326</b>	Phone: <b>Marissa.Ligito@stantec.com</b>	Burned Veritas Job #: <b>CA1673</b>												
ANALYSTS REQUESTED (PLEASE USE SPACES):		ANALYSTS REQUESTED (PLEASE USE SPACES):		ANALYSTS REQUESTED (PLEASE USE SPACES):		ANALYSTS REQUESTED (PLEASE USE SPACES):													
SUBMITTED ON THE BLANK VERITAS CHAIN OF CUSTODY		SUBMITTED ON THE BLANK VERITAS CHAIN OF CUSTODY		SUBMITTED ON THE BLANK VERITAS CHAIN OF CUSTODY		SUBMITTED ON THE BLANK VERITAS CHAIN OF CUSTODY													
Regulation 153 (2011)		Special Instructions:		Special Instructions:		Special Instructions:													
<input type="checkbox"/> Table 1 Rec/Park <input type="checkbox"/> Hydrofracture <input type="checkbox"/> Sani-Enviro By-Pass <input type="checkbox"/> Table 2 Rec/Carri <input type="checkbox"/> Contaminants <input type="checkbox"/> Storm Sewer By-Pass <input type="checkbox"/> Table 3 Non-Hazardous <input type="checkbox"/> Far TECG <input type="checkbox"/> MUSA <input type="checkbox"/> Table 4 PVIQO <input type="checkbox"/> Reg 405 Tables <input type="checkbox"/> Other _____																			
Include Criteria on Certificate of Analysis (Y/N)? <b>N</b>		Field Filtered (Please circle):		Method / HG / CP VI		Method / HG / CP VI													
Sample Barcode Label:		Sample Identification:	Date Sampled:	Time Sampled:	Matrix:	Comments:	Comments:												
1	MW 3-8	24/05/2019	09:01			3													
2	MW 3-5	24/05/2019	09:01			3													
3	TCAP					3													
4	MW 3-1	24/05/2019	09:10			3	HOLD												
5	MW 3-2	24/05/2019				3	HOLD												
6	MW 3-3	24/05/2019				3	HOLD												
7	MW 3-6	24/05/2019				3	HOLD												
8	MW 3-7	24/05/2019				3	HOLD												
9	MW 3-8	24/05/2019				3	HOLD												
10	MW 3-9	24/05/2019	11:15			3	HOLD												
* RELINQUISHED BY: (Signature/Print)		Date: (MM/DD/YY)	Time: (HH:MM:SS)	Received by: (Signature/Print)	Date: (MM/DD/YY)	Time: (HH:MM:SS)	Laboratory Use Only												
<b>Dale Charles</b>		<b>04/11/04</b>	<b>12:45</b>	<b>Gregory M J wj</b>	<b>2019/05/05</b>	<b>15:20</b>	<table border="1"> <tr> <td>Customer Sent</td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Processor</td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Transporter</td> <td>Yes</td> <td>No</td> </tr> <tr> <td>Customer Received</td> <td>Yes</td> <td>No</td> </tr> </table>	Customer Sent	Yes	No	Processor	Yes	No	Transporter	Yes	No	Customer Received	Yes	No
Customer Sent	Yes	No																	
Processor	Yes	No																	
Transporter	Yes	No																	
Customer Received	Yes	No																	
<p>*UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNATURE OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND AGREEMENT TO THESE TERMS AND CONDITIONS.</p> <p>*IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.</p> <p>**SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT <a href="http://WWW.BVNA.COM/ENVIRONMENTAL-LABORATORY/TEST-RESULTS/CHAIN-OF-CUSTODY-FORMS-COC5">WWW.BVNA.COM/ENVIRONMENTAL-LABORATORY/TEST-RESULTS/CHAIN-OF-CUSTODY-FORMS-COC5</a>.</p>																			
<p style="text-align: right;"><i>Greg</i></p>																			

Bureau Veritas Canada Inc.

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STANTES CHAIN OF CUSTODY RECORD

THE JOURNAL OF CLIMATE

Bureau Veritas Geobase (Zinc) Inc.

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Bureau Veritas  
640 Campbell Road, Mississauga, Ontario L5J 1A5 TEL: (905) 877-5777 FAX: (905) 877-5777 [www.bvna.com](http://www.bvna.com)

### STANTEC CHAIN OF CUSTODY RECORD

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INVOICE INFORMATION:		REPORT INFORMATION: (from invoice#)		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: <b>#6072 Stantec Consulting Ltd</b>	Company Name: <b>Marissa Luisito</b>	Quotation #: <b>CA1673</b>	Bureau Veritas Job #: <b></b>	COC #: <b>102-0653</b>	Project #: <b></b>	Book Order #: <b></b>	Book Order #: <b></b>
Accounts Payable Address: 6775 Cochrane Dr. W. West Tower Suite 300 Markham ON L3R 0B8 Phone: (905) 944-7777 Fax: (905) 476-9326 Email: <a href="mailto:SAPInvoices@Stantec.com">SAPInvoices@Stantec.com</a>	Contact Name: <b></b>	Task #: <b></b>	Phone: <b></b>	Proj. Contact: <b></b>	Site #: <b></b>	Comments: <b></b>	Comments: <b></b>
ANALYST REQUESTED (IF NECESSARY SEE SPECIMENS)		ANALYST REQUESTED (IF NECESSARY SEE SPECIMENS)		ANALYST REQUESTED (IF NECESSARY SEE SPECIMENS)		ANALYST REQUESTED (IF NECESSARY SEE SPECIMENS)	
REGULATORY 161 (2011) SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY		REGULATORY 161 (2011) SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY		REGULATORY 161 (2011) SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY		REGULATORY 161 (2011) SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY	
Other Regulations: <input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 <input type="checkbox"/> Table 4		Special Instructions: <input type="checkbox"/> COME <input type="checkbox"/> Sanitary Survey By-law <input type="checkbox"/> Reg. 508a <input type="checkbox"/> Storm Survey By-law <input type="checkbox"/> MSA <input type="checkbox"/> Municipality <input type="checkbox"/> FOI000 <input type="checkbox"/> Reg 406 Table <input type="checkbox"/> Other _____		REGULATORY 161 (2011) SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY		REGULATORY 161 (2011) SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY	
Include Criteria on Certificate of Analysis (COA)? <input checked="" type="checkbox"/>		Include Criteria on Certificate of Analysis (COA)? <input checked="" type="checkbox"/>		Include Criteria on Certificate of Analysis (COA)? <input checked="" type="checkbox"/>		Include Criteria on Certificate of Analysis (COA)? <input checked="" type="checkbox"/>	
Sample Number Label	Sample Location Number/Station	Date Sampled	Time Sampled	Media	Media	Comments	Comments
1	MW6-1	24/11/01	14:10	Set 1		3 HOLD	4 HOLD
2	MW6-2	14:10				3 HOLD	4 HOLD
3	MW6-3		14:25			3 HOLD	4 HOLD
4	MW6-7		14:40			3 HOLD	4 HOLD
5	MW6-8		14:40			3 HOLD	4 HOLD
6	MW7-1		09:50			3 HOLD	4 HOLD
7	MW7-2		09:00			3 HOLD	4 HOLD
8	MW7-3		09:10			3 HOLD	4 HOLD
9	MW7-5		09:25			3 HOLD	4 HOLD
10	MW7-6		09:43	N		3 HOLD	4 HOLD
RELINQUISHED BY: <i>J. Stantec</i>		Date: (YYMMDD) <b>24/11/01</b>	Time: (MM:SS:00) <b>12:15</b>	RECEIVED BY: (Signature/Print) <b>Marissa Luisito</b>	Date: (YYMMDD) <b>10/24/01</b>	Time: (MM:SS:00) <b>15:20</b>	Laboratory Use Only
							Comments: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Print</b>
							White: Bureau Veritas Yellow: Client <b>Print</b>
UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SUBMISSION OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGEMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR REVIEW AT <a href="http://WWW.BVNA.COM/TERMS/TERMS_OF_SERVICE.PDF">WWW.BVNA.COM/TERMS/TERMS_OF_SERVICE.PDF</a> . <a href="http://WWW.BVNA.COM/TERMS/TERMS_OF_SERVICE.PDF">WWW.BVNA.COM/TERMS/TERMS_OF_SERVICE.PDF</a> IS THE CONTRACTUAL AGREEMENT BETWEEN BUREAU VERITAS AND THE CUSTOMER.							
IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL LAT DELAYS.							
** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT <a href="http://WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/CHAIN-OF-CUSTODY-DOCS">WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/CHAIN-OF-CUSTODY-DOCS</a> .							

Bureau Veritas Canada Inc.

C4Y8631  
2024/11/05 15:20

Bureau Veritas  
5740 Carriolee Road, Mississauga, Ontario Canada L5H 2L6 Tel:(905) 617-5700 Toll-free: 1-866-5208 Fax:(905) 617-5777 www.bvra.com

**STANTEC  
SERVICES**

INVOICE INFORMATION:		REPORT INFORMATION (NOT all fields from invoice)		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: <b>\$3072 Stantec Consulting Ltd</b>	Contact Name: <b>Marissa Lustro</b>	Task #:	Bureau Veritas Job #:	Duration #:	C41673	Bento Order #:	
Address: <b>676 Cochrane Dr W, West Tower Suite 300 Markham ON L3R 0B8</b>	Admistr:	Project #:					1619625
Phone: <b>(905) 944-7777</b>	Fax: <b>(905) 479-9326</b>	Proj Cat:		CCDC #:		Project Manager:	
Email: <b>SAPInvoices@Stantec.com</b>		Site #:					Julie Cameron
		Sampled By:	H.M.				
		Comments:					
<b>ANALYSIS REQUESTED (PLEASE BE SPECIFIC)</b>							
<input checked="" type="checkbox"/> <b>Urgent</b> Time (TAT) Required Create Sample Within TAT if not specified. <input type="checkbox"/> <b>Standard</b> TAT = 6-7 Working days for most samples. Please note: Standard TAT includes time taken to build up sample and transport to lab. If you require faster turn around, please contact your Project Manager for details. <input type="checkbox"/> <b>Job Specific</b> Rush TAT (if applicable to entire submission) Date Required: Rush Certification Number: <input type="checkbox"/>							
O'Reilly 650 TCLP Benzene (Sediment analysis) O'Reilly 650 TCLP VOCs by HS & P-1A (S011) O'Reilly 153 VOCs by HS & P-1A (S011) O'Reilly 75nm O'Reilly 653 Metals & Inorganics (S011) O'Reilly 653 Particulate (S011) Metals / HG / C: VI Field Filtered (Please describe) Sediment (Sediment analysis) Sampled (Sediment analysis)							
<b>Include Criteria on Certificate of Analysis (Y/N)?</b> <input checked="" type="checkbox"/> <b>Service Standard Used:</b>							
1	<b>M</b>	<b>MW7 - 7</b>	<b>2011/10/01</b>	<b>0955</b>	<b>Seal</b>	<b>3</b>	<b>6/6/09</b>
2		<b>MW7 - 8</b>		<b>1005</b>		<b>3</b>	<b>10/09</b>
3		<b>MW7 - 9</b>		<b>1010</b>		<b>3</b>	<b>10/09</b>
4		<b>MW7 - 11</b>		<b>1045</b>		<b>3</b>	<b>10/09</b>
5		<b>MW7 - 12</b>		<b>V</b>	<b>1100</b>	<b>3</b>	<b>10/09</b>
6		<b>BH1 - 1</b>	<b>2011/10/01</b>	<b>1500</b>		<b>3</b>	<b>10/09</b>
7		<b>BH1 - 3</b>		<b>1540</b>		<b>3</b>	<b>10/09</b>
8		<b>BH1 - 4</b>		<b>1510</b>		<b>3</b>	<b>10/09</b>
9		<b>BH1 - 5</b>		<b>1520</b>		<b>3</b>	<b>10/09</b>
10		<b>BH1 - 7</b>		<b>1525</b>	<b>V</b>	<b>3</b>	<b>10/09</b>
<b>RECEIVED BY:</b> <b>Signature/Print</b> <b>Date: (MM/YY)</b> <b>Time: (MM/DD)</b> <b>RECEIVED BY:</b> <b>Signature/Print</b> <b>Date: (MM/YY)</b> <b>Time: (MM/DD)</b> <b>Jeff Schaefer</b> <b>100</b> <b>11/11/14</b> <b>1245</b> <b>Jeff Schaefer</b> <b>100</b> <b>11/11/05</b> <b>15:20</b>							
<b>Laboratory Use Only:</b> # item used and not submitted: <b>0</b> Time sensitive: <b>0</b> Time insensitive: <b>0</b> Temperature ( <b>°C</b> ) on Return: <b>0</b> Customer Seal: <b>Yes</b> <b>No</b> Printed: <b>Yes</b> <b>No</b> White Bureau Veritas Yellow Bureau Veritas							
<small>*LESS OTHERWISE ADVISED TO THE RELEASER, WORK UNQUOTELED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SEEING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVRA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCE-CODE-TERMS-AND-CONDITIONS.</small> <small>*IT IS THE RESPONSIBILITY OF THE RELEASER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.</small> <small>**SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVRA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCE-CODES-COCs.</small> <small>Bureau Veritas Canada (DPA) Inc.</small>							

See pg 1

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2024/07/05 15:20

Bureau Veritas  
8740 Caronelle Inc Road, Mississauga Ontario L5N 2L6 Tel:(905) 317-5700 Toll-free:800-563-0265 Fax:(905) 617-5777 www.bvms.ca

STANTEC CHAIN OF CUSTODY RECORD

Page 67

INVOICE INFORMATION:		REPORT INFORMATION/ details from Invoker(s):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: <b>#5072 Stantec Consulting Ltd</b>	Account Payable: <b>675 Cochrane Dr W, West Tower Suite 300</b> Markham ON L3R 0B3	Contact Name: <b>Mariissa Justis</b>	Address: <b>(905) 944-7777</b>	Phone: <b>(905) 479-3326</b>	Email: <b>SAPinv01@Stantec.com</b>	Q.Citation #: <b>C41673</b>	Bureau Veritas Job #: <b>1719663</b>
Task #: <b>Project #: P001</b>	Site #: <b>12345</b>	Task #: <b>Project #: P001</b>	Site #: <b>12345</b>	COC #: <b>12345</b>	Project Manager: <b>Jules Clement</b>	Call ID: 9884-501	Barcode
MORE REGULATED DRINKING WATER INTERFERED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS ENVIRONMENT WATER CHAIN OF CUSTODY		Other Regulations:		Special Instructions:		Regular Standard TAT:	
<input type="checkbox"/> Task 1 Residential <input type="checkbox"/> Task 2 Commercial <input type="checkbox"/> Task 3 Agricultural <input type="checkbox"/> Task 4 Industrial <input type="checkbox"/> Task 5 Other		<input type="checkbox"/> Malaria free <input type="checkbox"/> Sewer bylaw <input type="checkbox"/> Storm Sewer System <input type="checkbox"/> MNRSA <input type="checkbox"/> MNRDO <input type="checkbox"/> Reg 403 Table <input type="checkbox"/> Other _____				Own the equipment TAT is our responsibility Standard TAT = 5-7 working days for most tests. Please note: Standard TAT for certain tests such as BOD and Dissolved Gasses are > 5 days - contact your Project Manager or Client. Job Specific Test TAT will apply to testable submittals Rush Service: _____ Time Required: _____	
Include Criteria on Certificate of Analysis (M/N/P)		Field Tested (Please check):		Metals / Hg / Cr VI		Turnaround Test TAT Requested:	
Sample Barcode Label		Sample Location Identifier		Date Sampled:	Time Sampled:	Comments:	
1	BH1-8	24/07/1525	1525	1525	1525	3	HOLD
2						3	HOLD
3	MW12-1			1315		3	long
4	MW12-3			1310		3	NO TD
4	MW12-4			1310		3	HOLD
5	MW12-5			1310		3	HOLD
6	MW12-6			1310		3	HOLD
6	BH3-1			0850		3	HOLD
9	BH3-2			0900		3	HOLD
10	BH3-3			0910		3	HOLD
RElinquished By: Signature/Print		Date: (Y/M/D)	Time: (Y/M/D)	RElinquished By: Signature/Print		Date: (Y/M/D)	Time: (Y/M/D)
<i>Jesse Justis</i>		24/07/04	1245	<i>Jesse Justis</i>		24/07/05	15:10
Time Sampled:		Time Turnaround:		Transportation (T): on Rec'd		Laboratory Use Only:	
0		0		0		0	
e Jobs added and not transported		Time		Custody Seal		Yes No	
				Present		Initial	
						White Bureau Veritas Yellow: Client	
SAMPLES MUST BE SHIPPED IN A COOLER WITH ICE OR CHILLED UNTIL DELIVERY TO SHEARAY LABS.							
** IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL DELAYS.							
** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVRAC.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/CHAIN-CUSTODY-FORMS-COCs.							
Bureau Veritas Call id: 10-1111							

See pg 1

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2024/11/05 15:20

Bureau Veritas  
6740 Carpenter Road, Mississauga, Ontario L5N 2L6 Tel:(905) 611-5760 Toll-free:800-863-46765 Fax: (905) 817-5777 www.bv.com

**STANTEC  
RECORDS**

**STANTEC CHAIN OF CUSTODY RECORD**

Page 1 of 1

<b>INVOICE INFORMATION:</b>		<b>REPORT INFORMATION (if differs from invoice):</b>		<b>PROJECT INFORMATION:</b>	
Company Name: <b>Stantec Consulting Ltd</b> Contact Name: <b>Marissa Lusito</b> Address: <b>675 Cochrane Dr W, West Tower Suite 300</b> City: <b>Markham ON L3R 0B8</b> Phone: <b>(905) 844-7777</b> Email: <b>SAPInvoices@Stantec.com</b>		Duration #: <b>C41873</b> Task #: _____ Project #: <b>1078853</b> Project Control #: <b>COC #:</b> Site #: <b>CH1078853-16-C-1</b> Sampled By: <b>Marissa Lusito</b>		Bureau Veritas Job #: _____ Bottling Order #: <b>1078853</b> Project Manager: <b>Julie Clement</b>	
<b>NOT REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY</b>		<b>ANALYSIS REQUESTED (IF BASED ON SPECIFIC)</b>		<b>Laboratory Use Only:</b> <input checked="" type="checkbox"/> Bureau Veritas - Standard Test Request <input type="checkbox"/> Bureau Veritas - Special Test Request <input type="checkbox"/> Bureau Veritas - Special Test Request for non-project  <b>REGULAR (STANDARD) TAT:</b> <input type="checkbox"/> Same day TAT = 2-5 Working days or less. <small>Please note: Standard TAT for certain tests such as BOD and Dissolved Oxygen are &gt; 6 days - contact your Project Manager for details.</small> <input type="checkbox"/> Job Specific: Rush TAT (if applies to entire submission) <small>Job Specific Rush TAT: _____</small> <small>Time Frame: _____</small> <small>Rush Call in reason Number: _____</small>	
<b>Regulation 153 (2011)</b> <input type="checkbox"/> Table 1 Residential <input type="checkbox"/> Landline <input type="checkbox"/> CGRAE <input type="checkbox"/> Sewer System <input checked="" type="checkbox"/> Table 2 Industrial <input checked="" type="checkbox"/> Course <input type="checkbox"/> Reg 668 <input type="checkbox"/> Storm Sewer System <input type="checkbox"/> Table 3 <input type="checkbox"/> Mains <input type="checkbox"/> MUNSA <input type="checkbox"/> PWMO <input type="checkbox"/> Reg 405 Table <input type="checkbox"/> Other _____		Special Instructions:  <b>Field Filtered (Please check):</b> <input type="checkbox"/> Metabolites/Hg / Cr VI <input type="checkbox"/> O-Rings 153 PWMOs (Soil)		<b>Project Information:</b> <small>Project Description: _____</small> <small>Project Start Date: _____</small> <small>Project End Date: _____</small> <small>Project Manager: _____</small> <small>Project Lead: _____</small> <small>Project Status: _____</small> <small>Project Type: _____</small>	
<b>Include Criteria on Certificate of Analysis (Y/N)?</b> <input type="checkbox"/>		Sample Barcode Label Sample Label Information Sample Barcode Label Sample Label Information Color Sampled Time Sampled Metric		Temperature (°C) on House Time Sampling Date/Time of Analysis Received by (Signature/Print)	
1	BU13-4	201103100920	Seal	15:20	15:20
2	BU13-6	0940		3	Hold
3	BU13-7	1000		3	Hold
4	BU13-8	1010		3	Hold
5	BU13-9	1015		3	Hold
6	BU13-10	1025		3	Hold
7	BU13-11	1050	↓	3	Hold
8					
9					
10					
11					
<b>REFURNISHED BY: [Signature/Print]</b> <b>Date/Time:</b> <b>24/11/09</b>		<b>Time:</b> <b>1245</b> <b>Received by:</b> <b>bvlab105</b> <b>Date/Time of Analysis:</b> <b>15:20</b>		<b>Laboratory Use Only:</b> <input type="checkbox"/> if form used and not submitted <input checked="" type="checkbox"/> Time Sampling <input type="checkbox"/> Temperature (°C) on House <input type="checkbox"/> Date/Time of Analysis <input type="checkbox"/> Printed <input checked="" type="checkbox"/> Faxed <input type="checkbox"/> Email <input type="checkbox"/> Web <small>White: Standard Yellow: Special</small>	
<small>*SAMPLES NOT INDICATED AS "FRESH" ARE SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND AGREEMENT THAT ALL SAMPLES ARE IN FRESH CONDITION.</small> <small>*IT IS THE RESPONSIBILITY OF THE PUBLISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.</small> <small>**SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT <a href="http://www.bvna.ca">WWW.BVNA.CA</a> ENVIRONMENTAL LABORATORIES RESOURCES/CHAIN-OF-CUSTODY-FORMS-Docs.</small>					

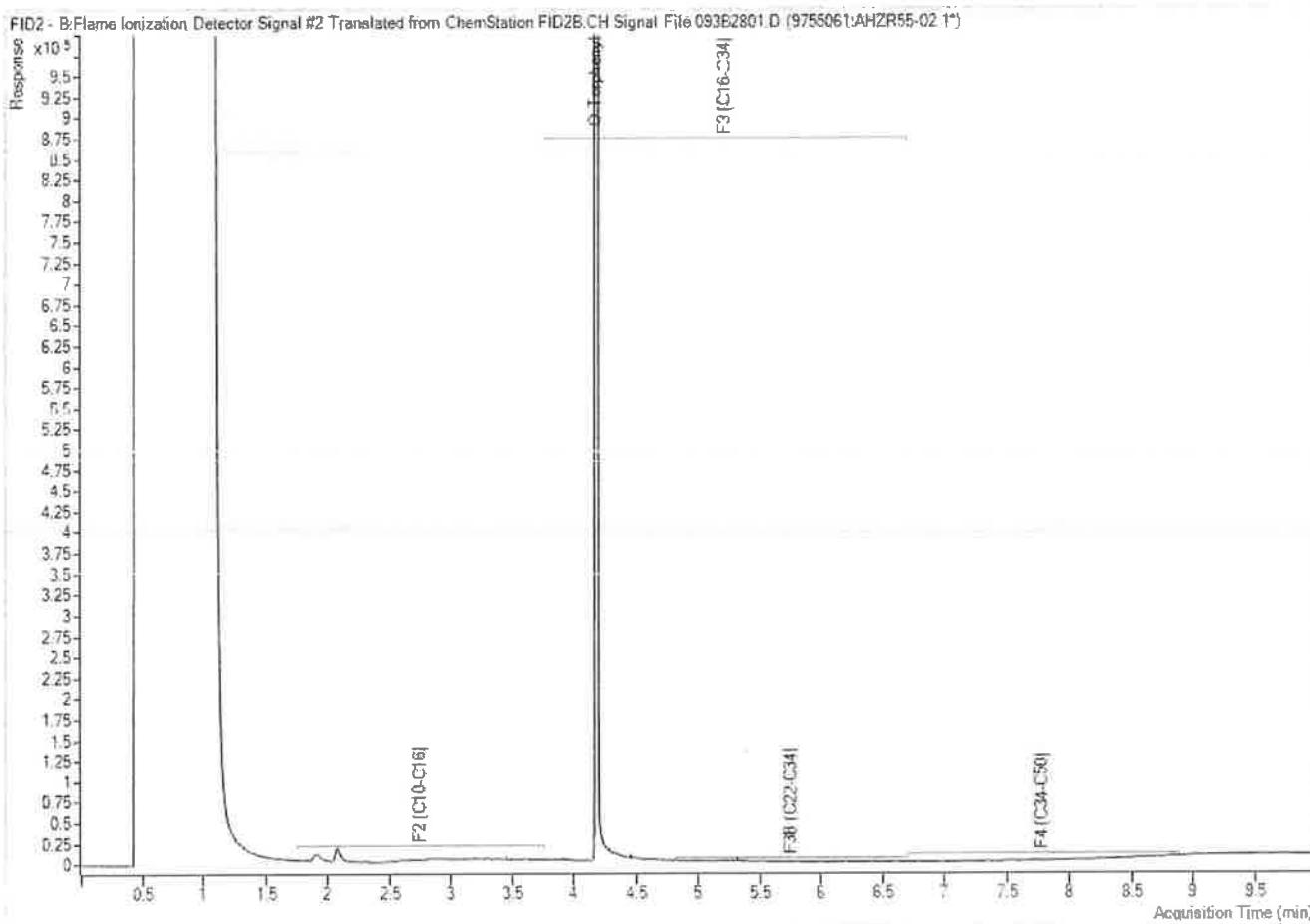
Bureau Veritas Canada (2018) Inc.

Rec 181

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZR55

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW3-5

**Petroleum Hydrocarbons F2-F4 in Soil Chromatogram**

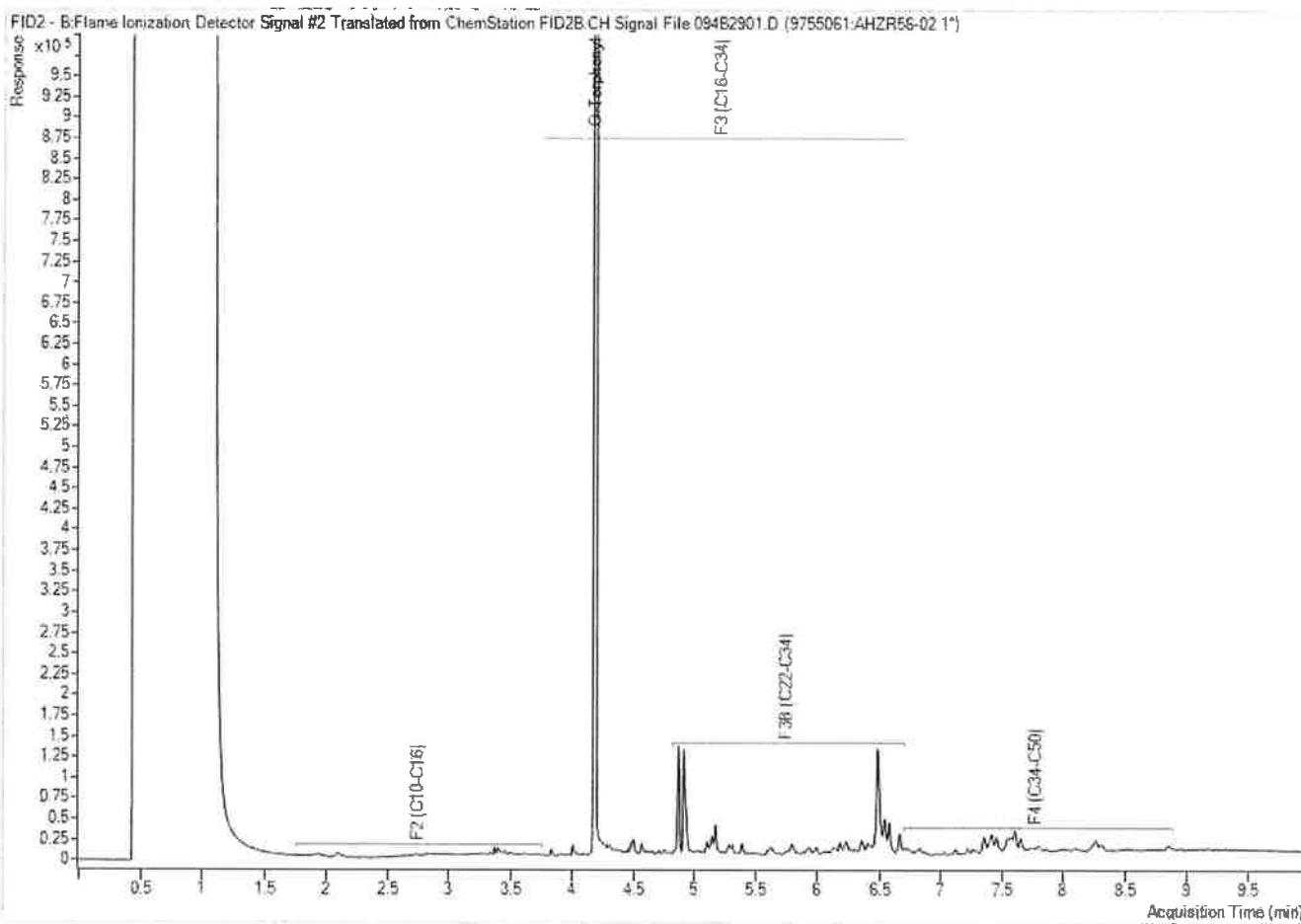


**Note:** This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZR56

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW4-8

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

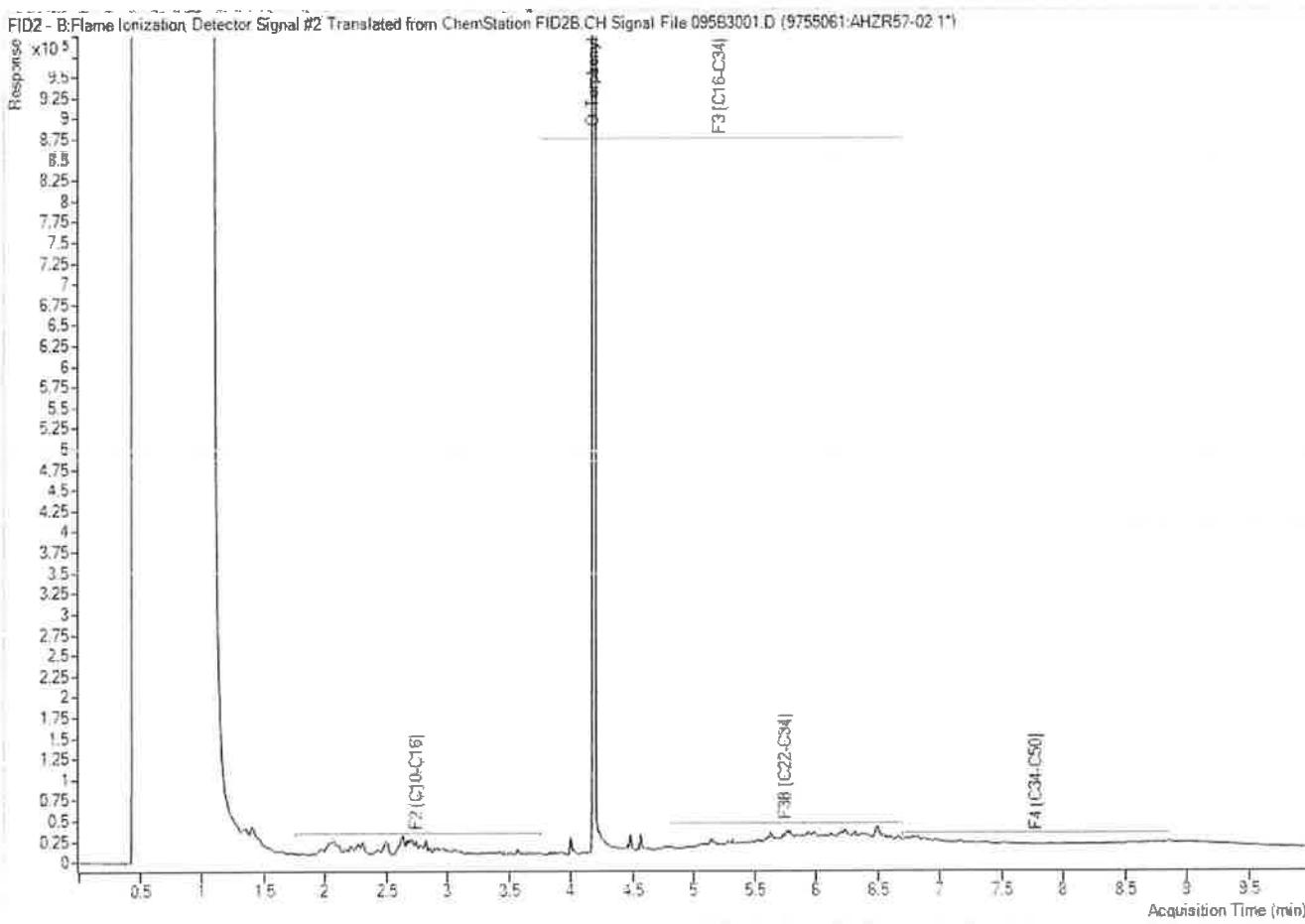


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZR57

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW6-5

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

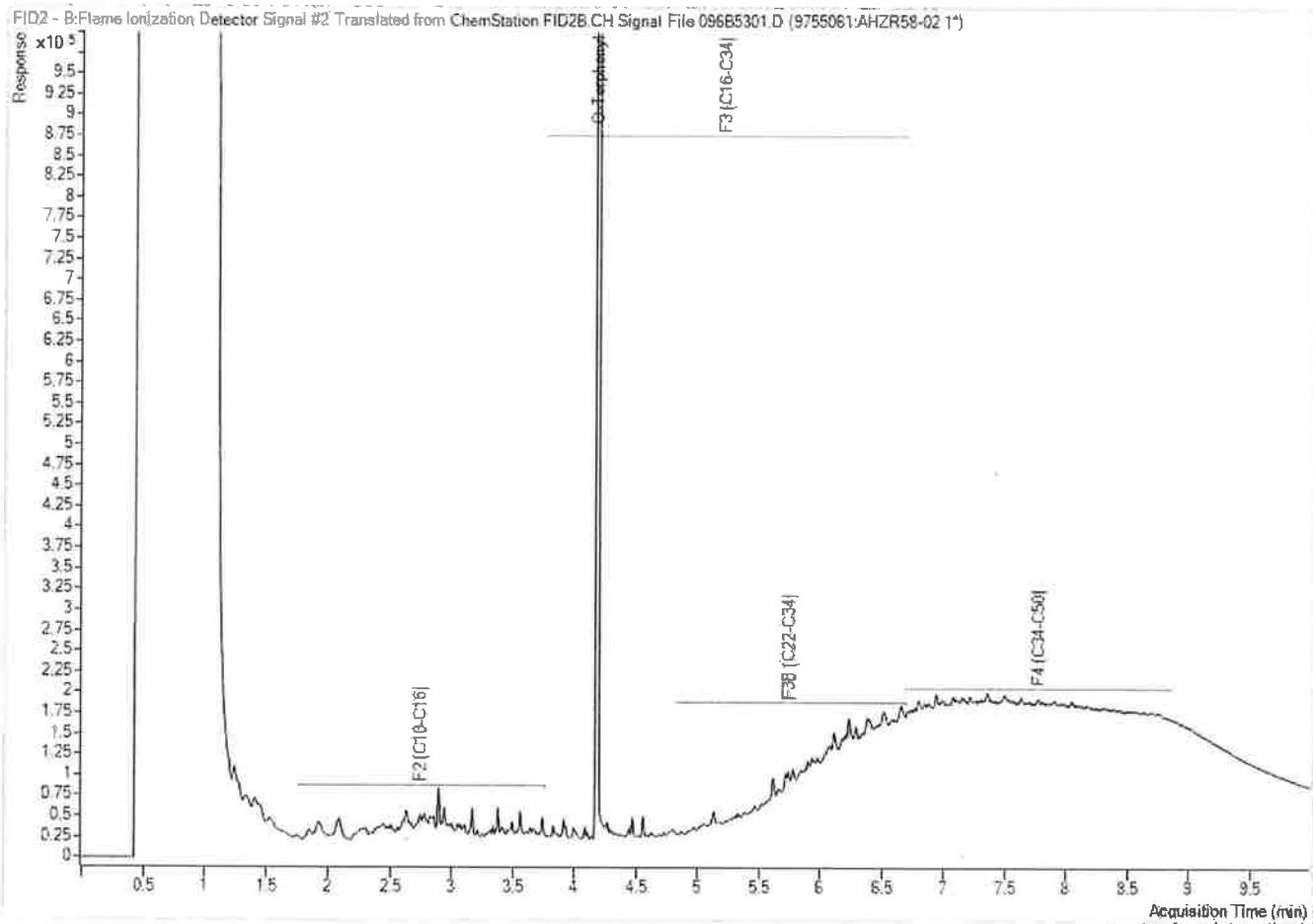


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZR58

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW7-4

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

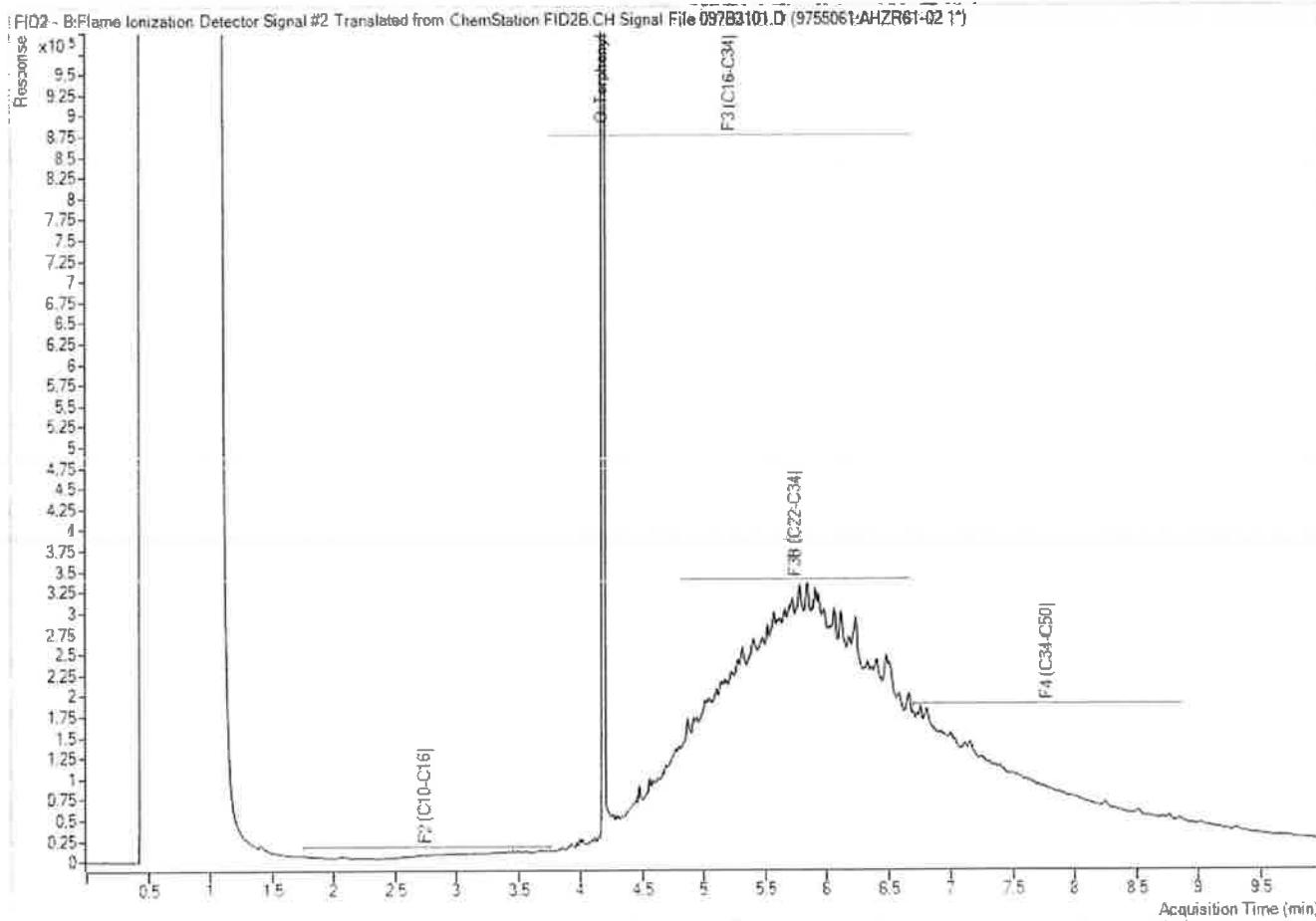


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZR61

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: BH11-6

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

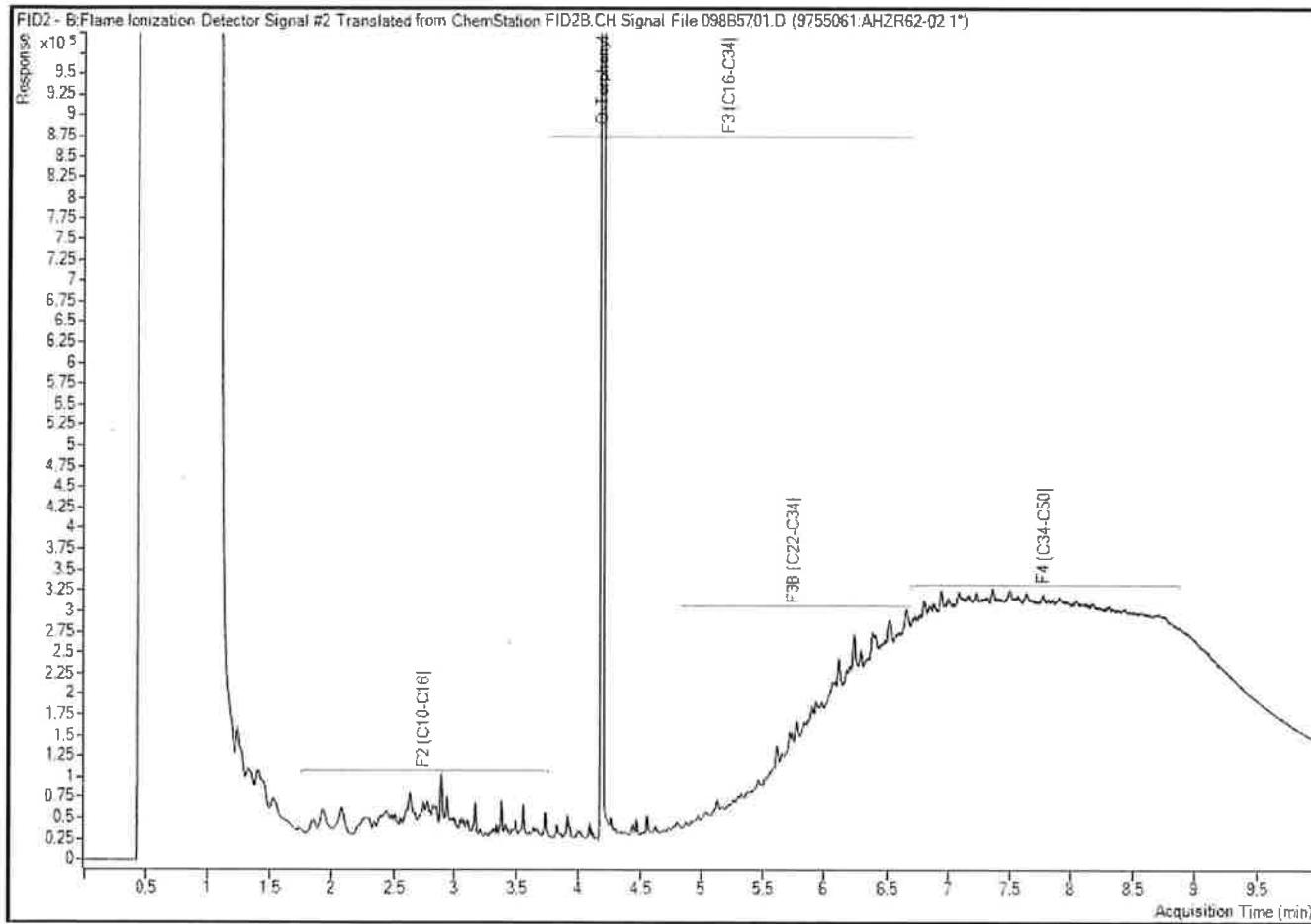


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZR62

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: QC-2

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

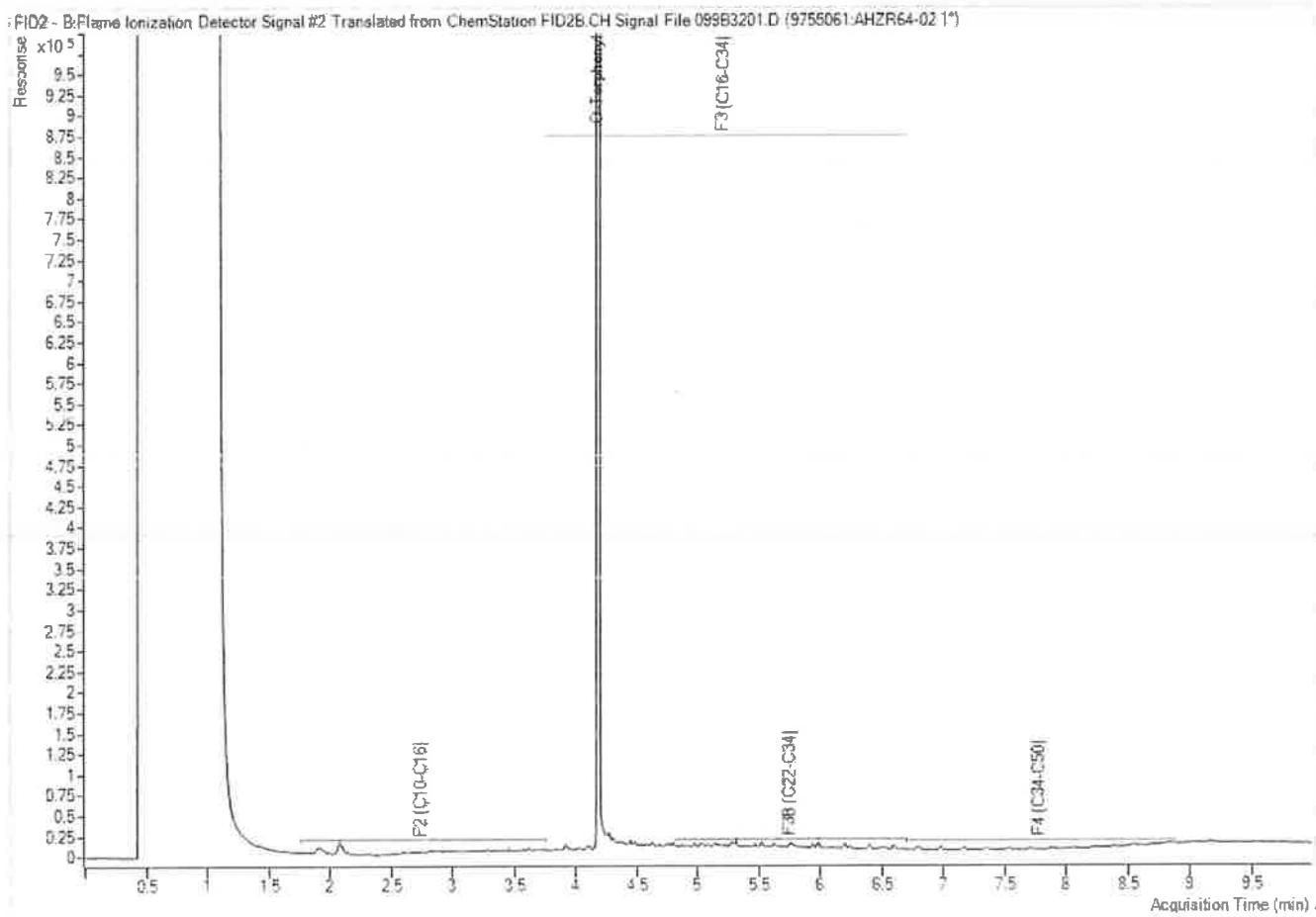


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZR64

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW12-7

**Petroleum Hydrocarbons F2-F4 In Soil Chromatogram**

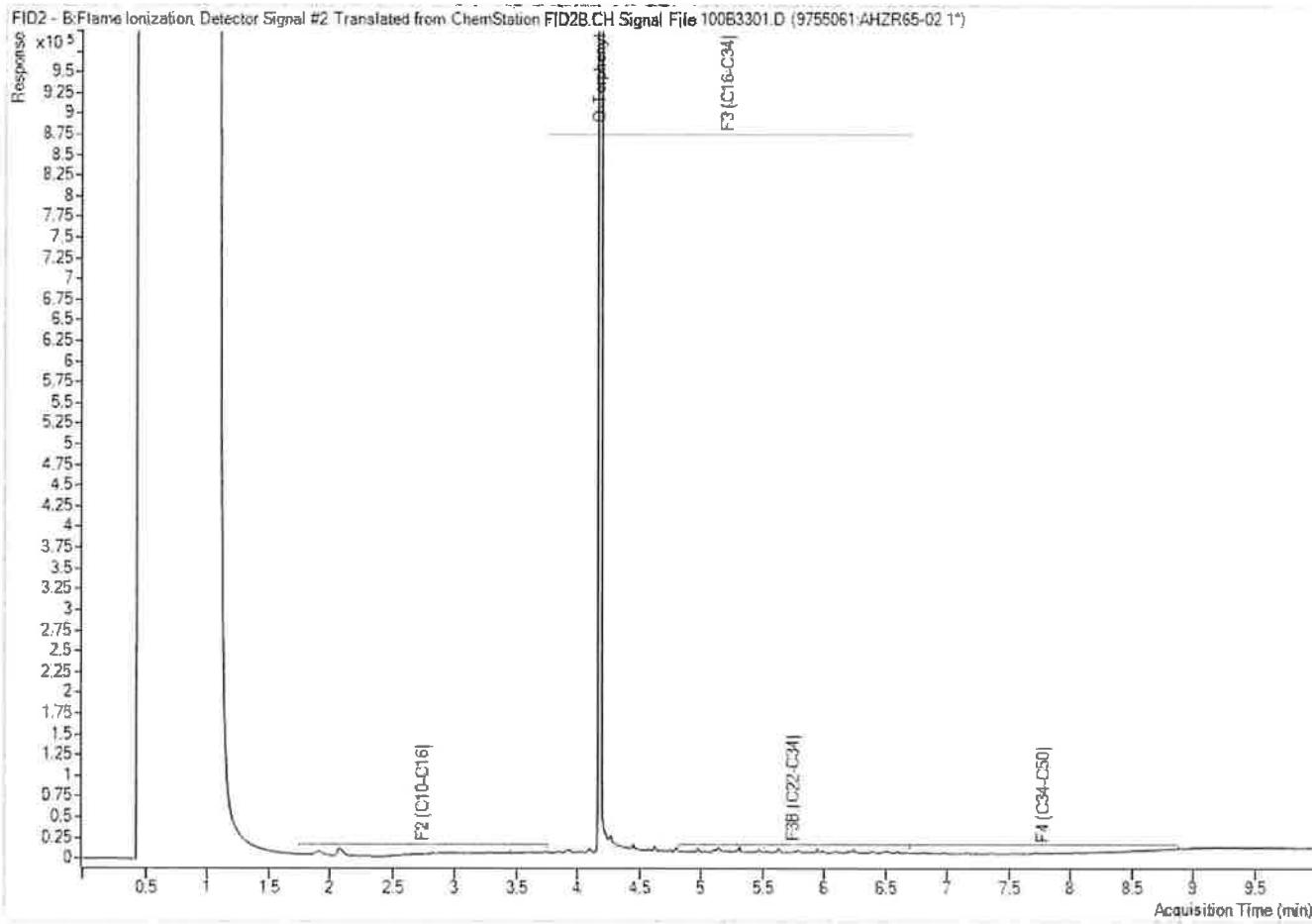


**Note:** This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZR65

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW12-8

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

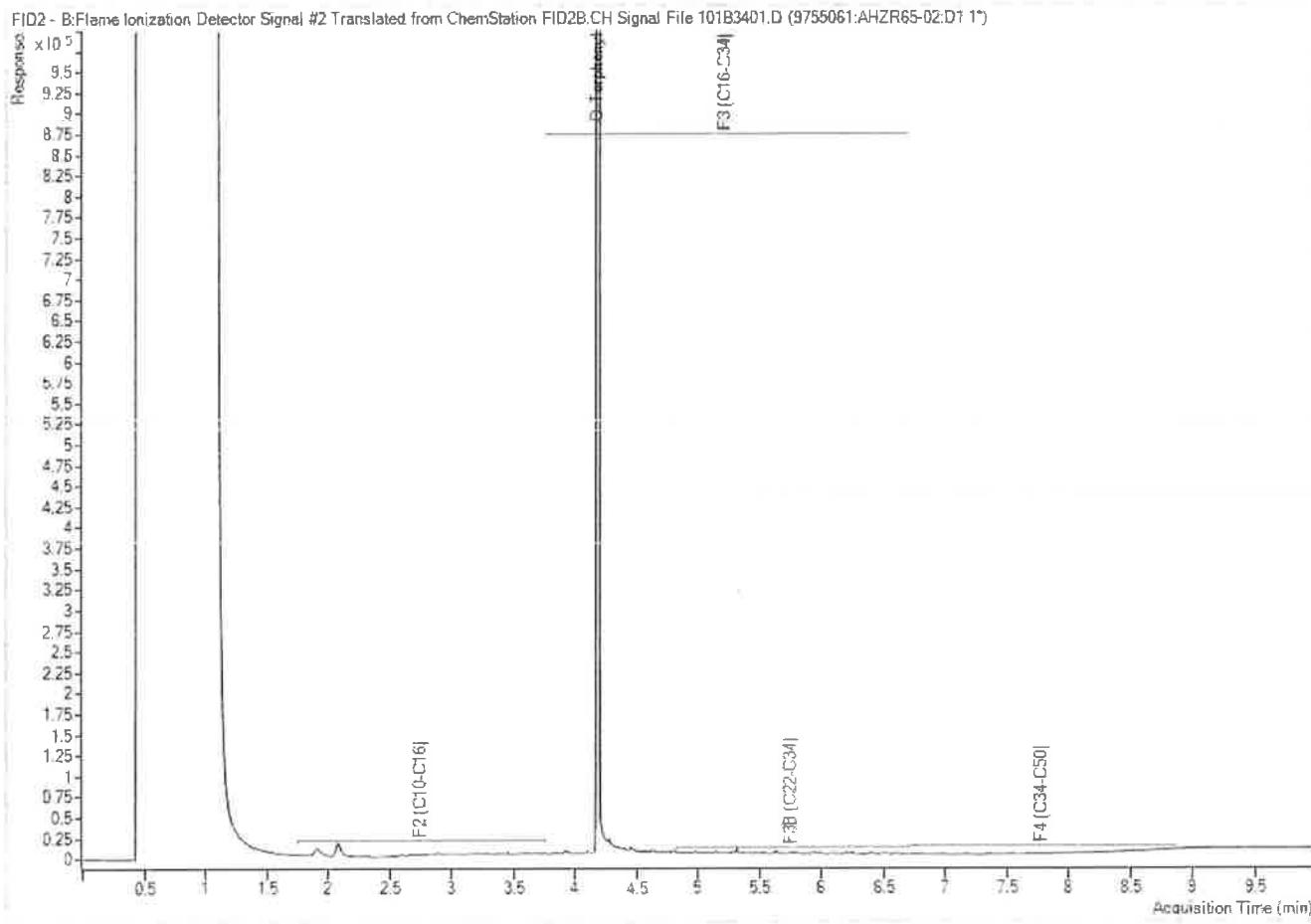


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZR65 Lab-  
Dup

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW12-8

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

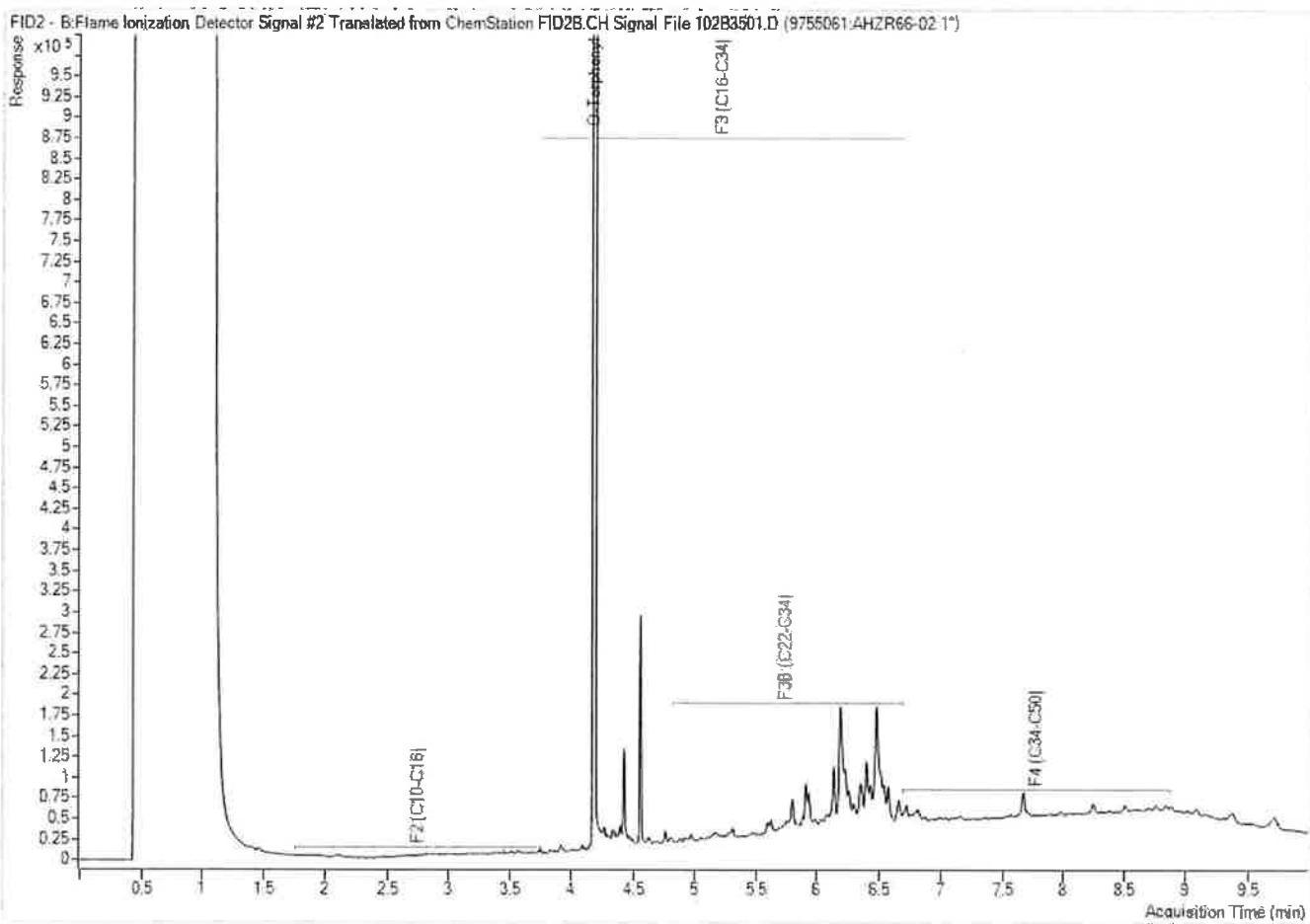


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZR66

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: BH13-5

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

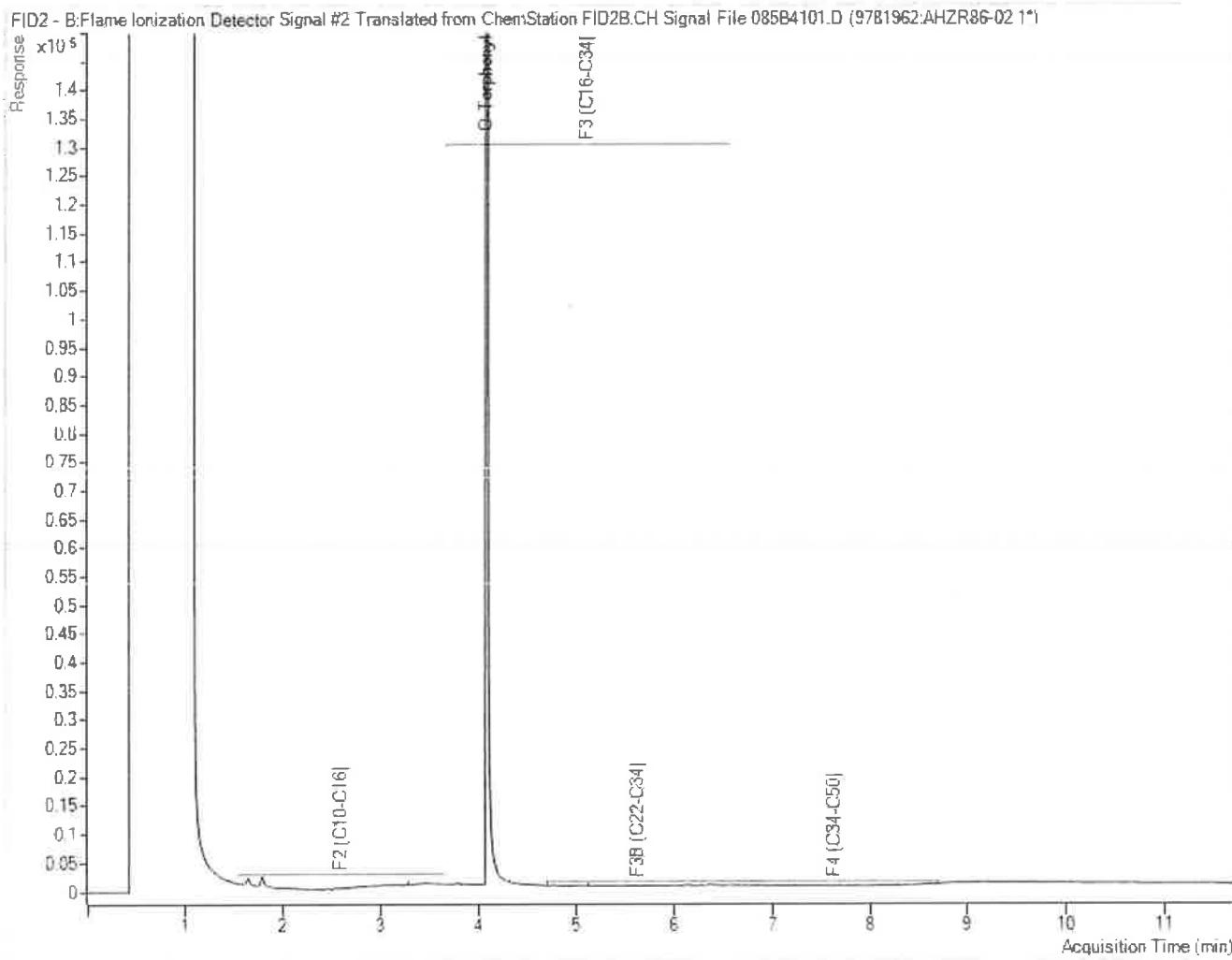


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZR86

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW4-9

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

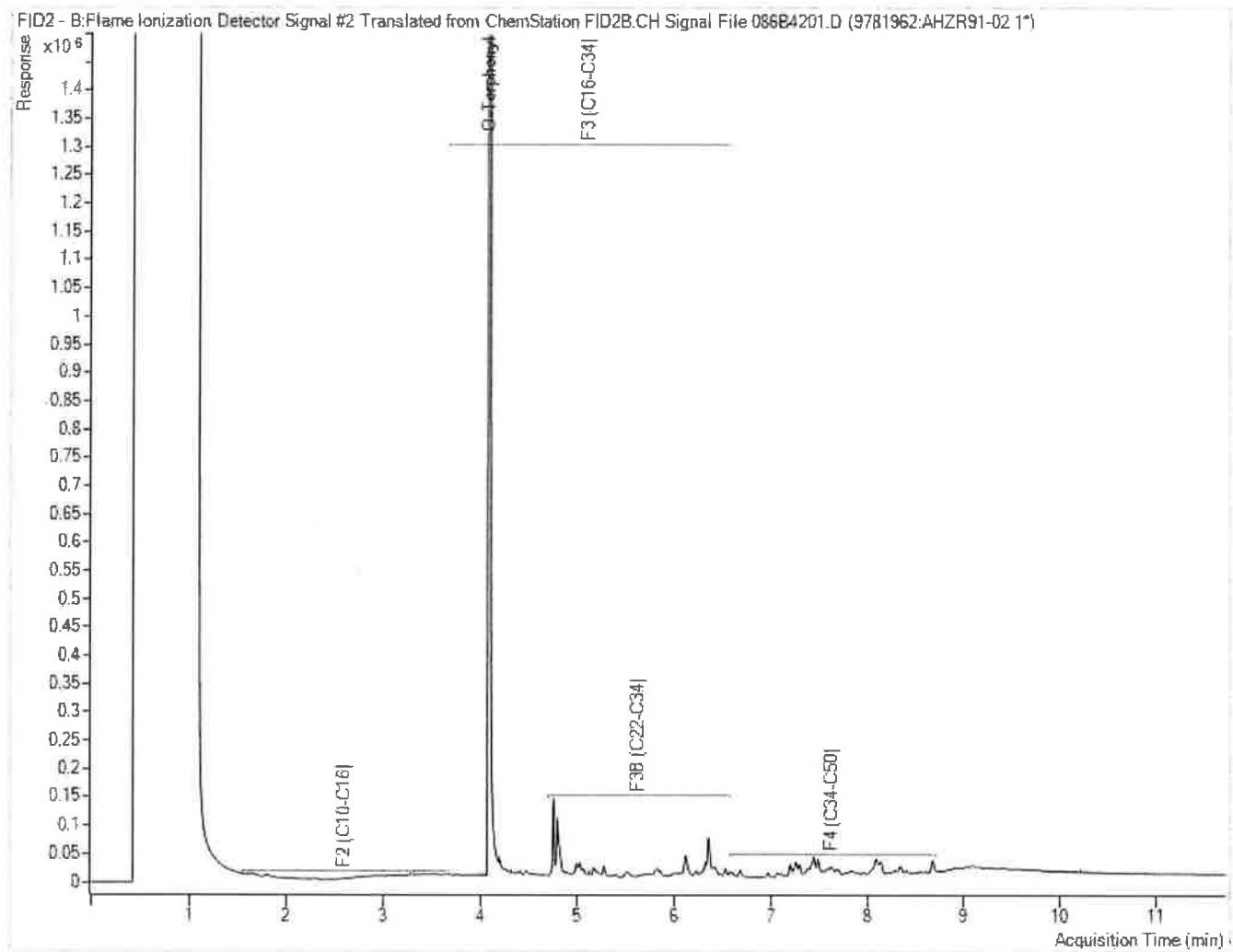


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZR91

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW6-8

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

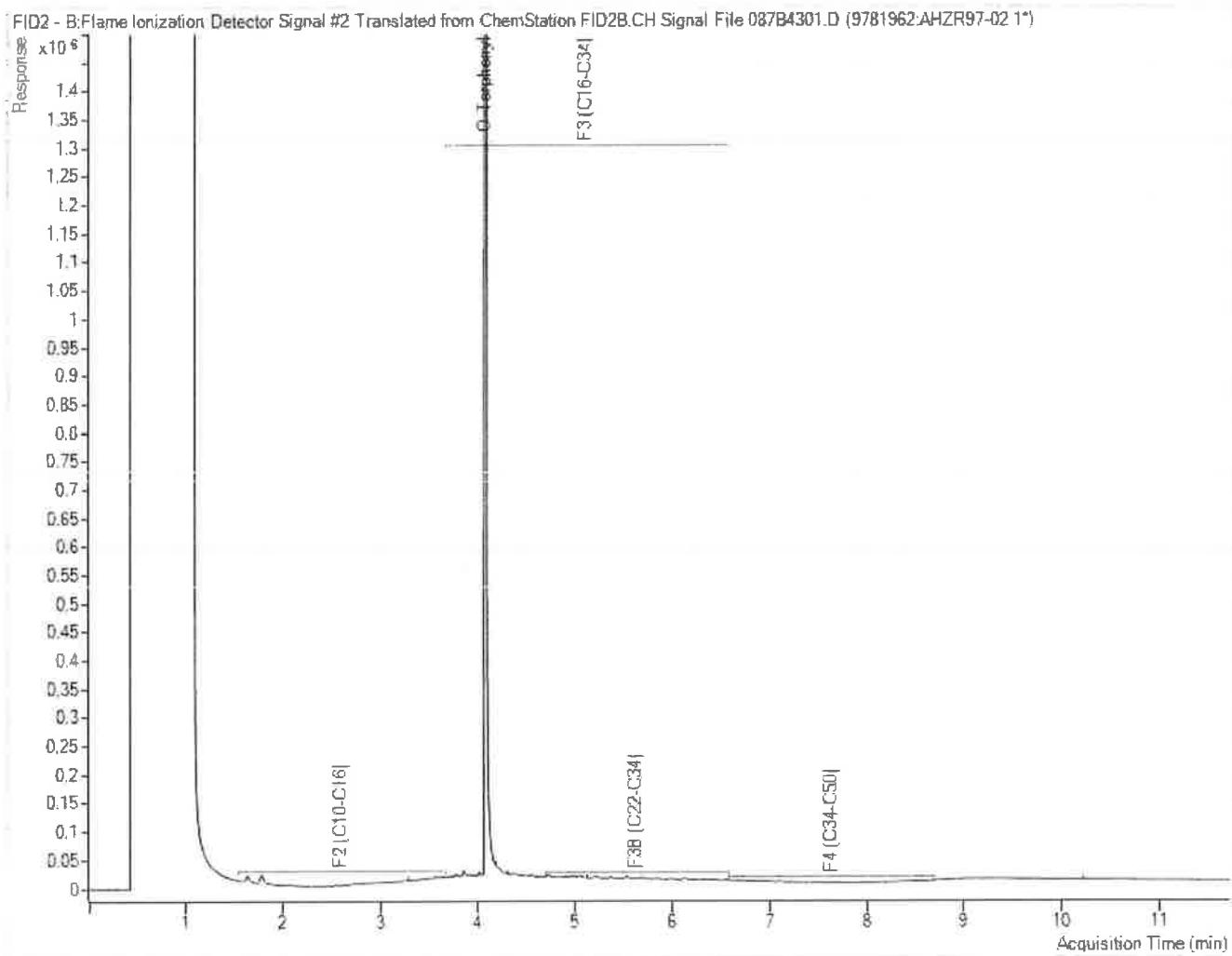


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZR97

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW7-7

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

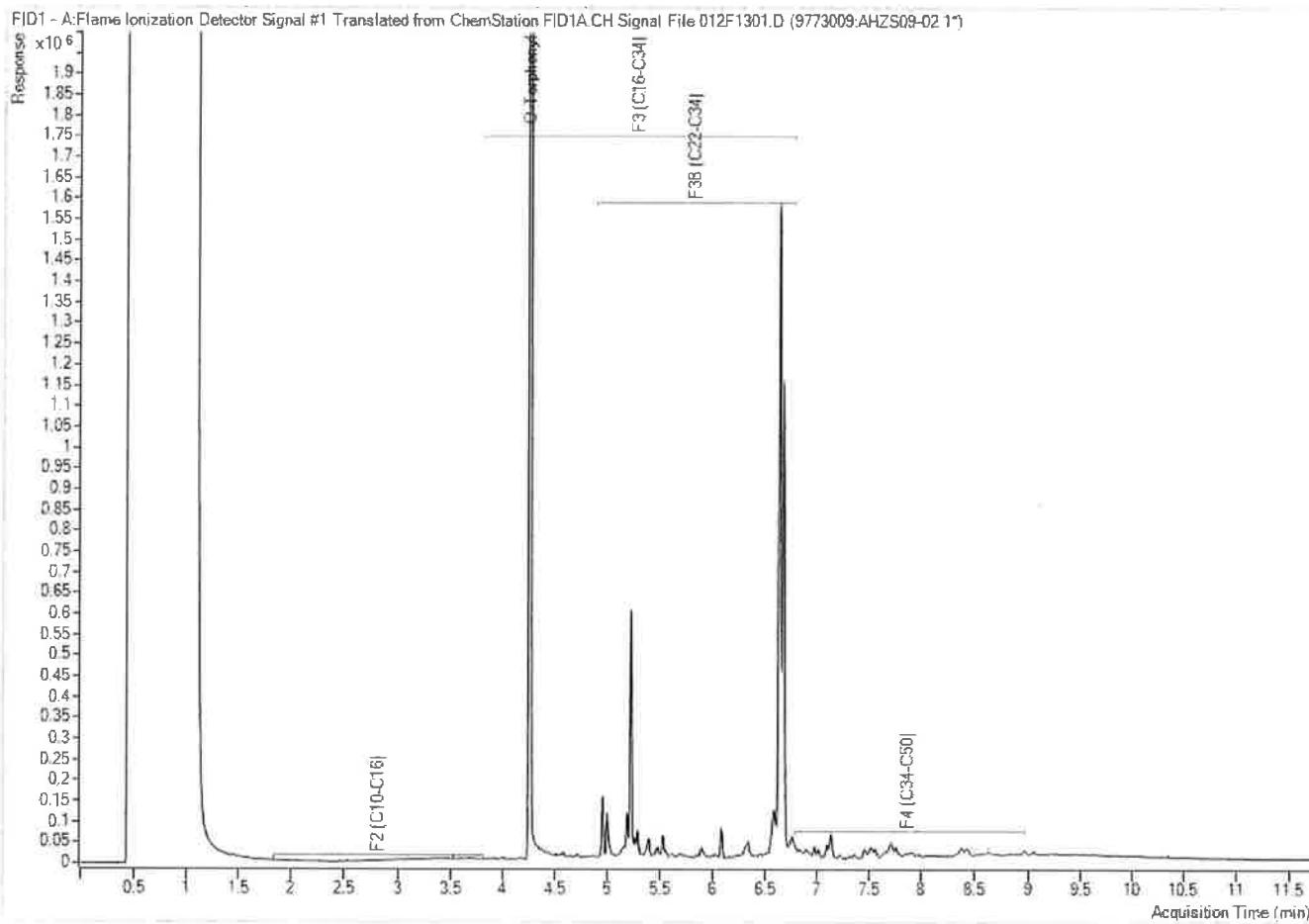


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZS09

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: BH11-8

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

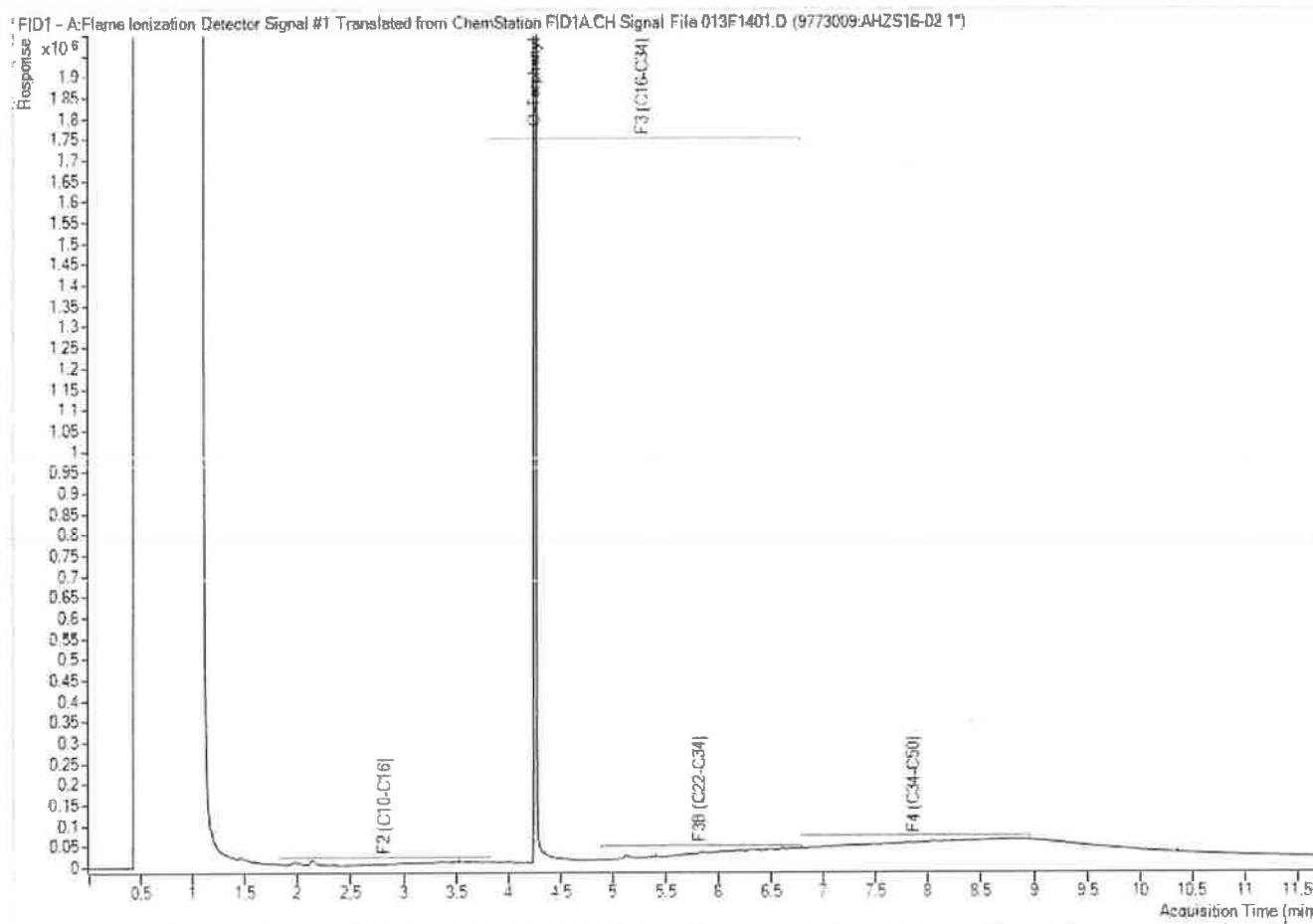


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZS16

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: BH13-1

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

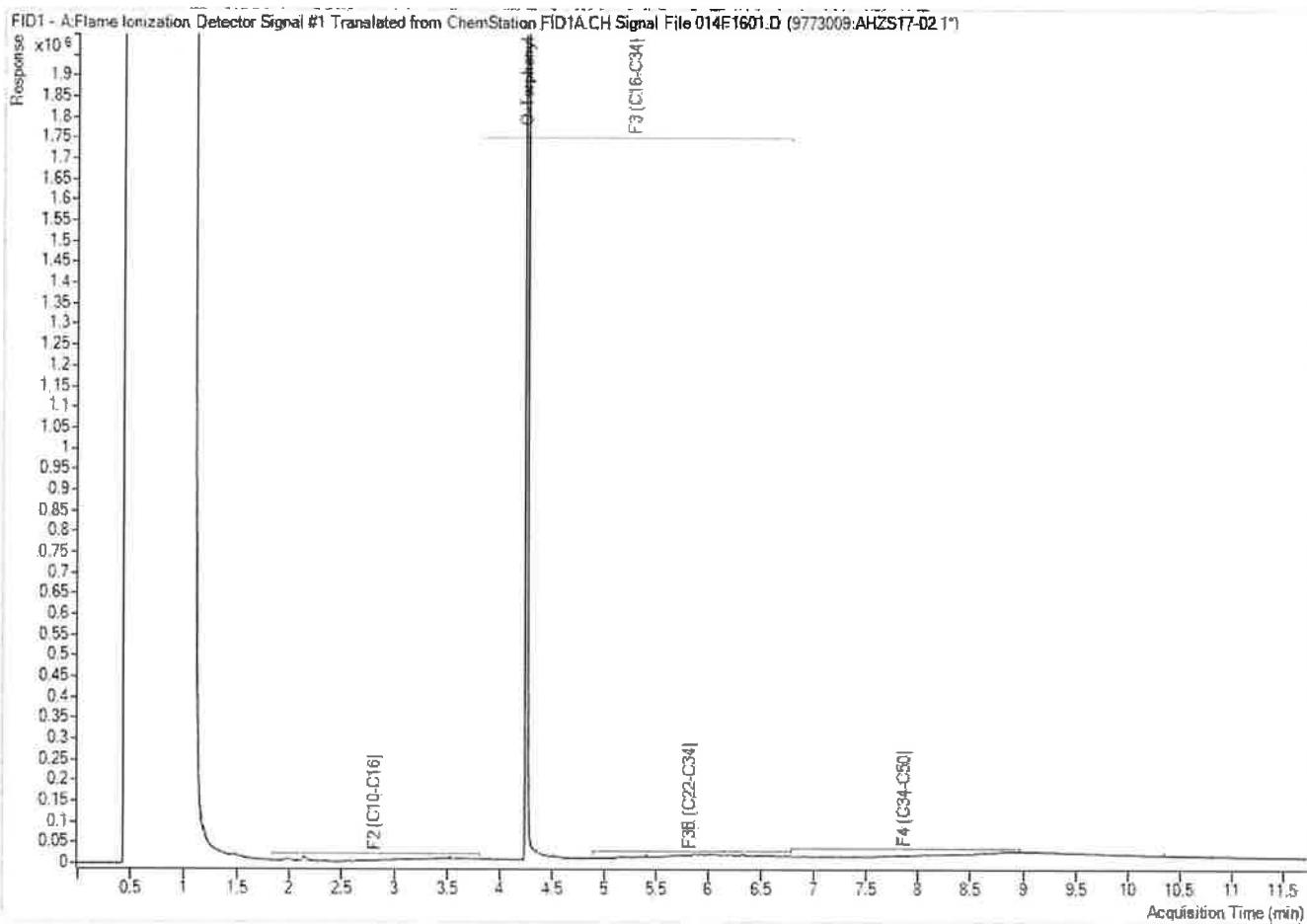


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZS17

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: BH13-2

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

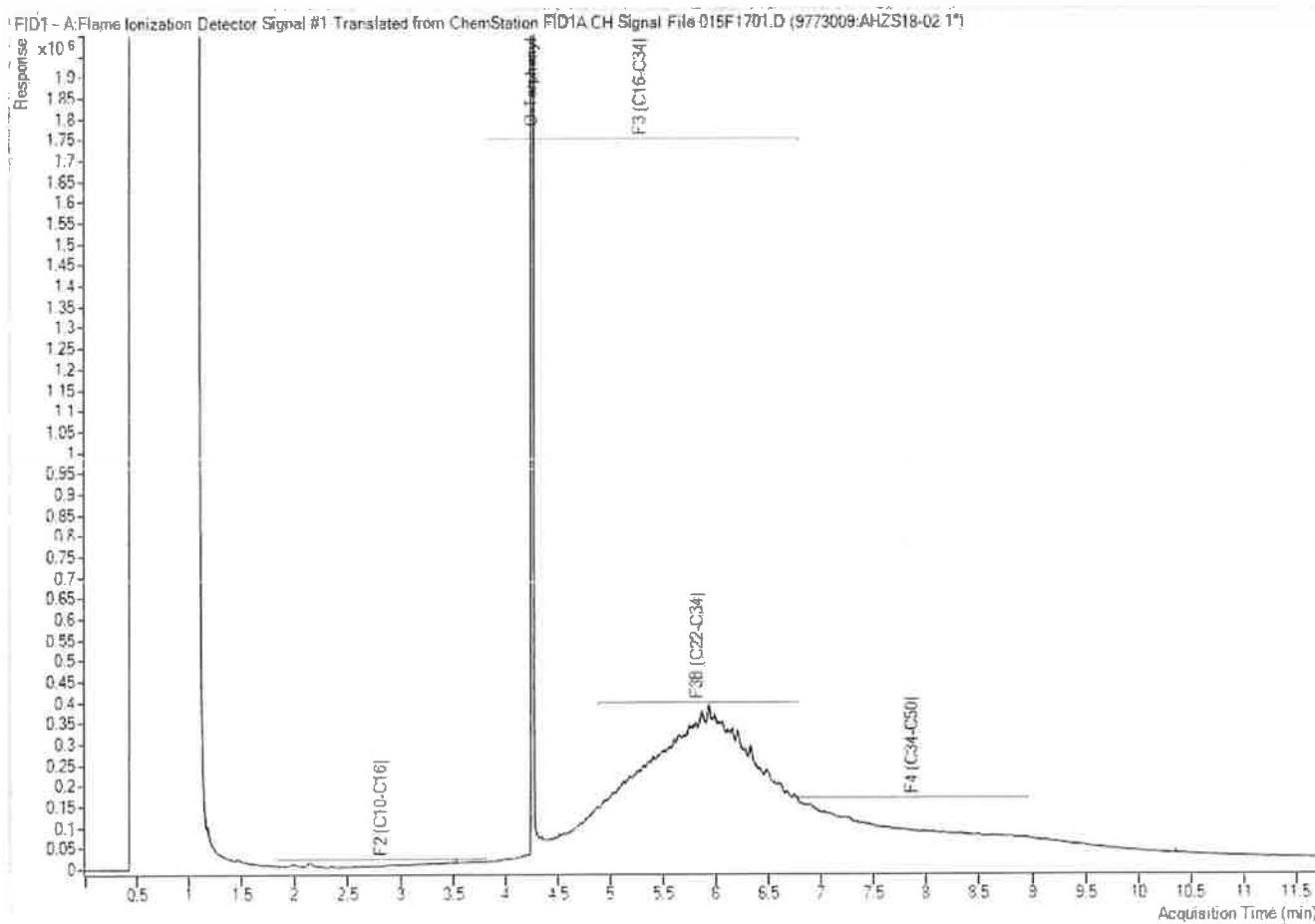


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZS18

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: BH13-3

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

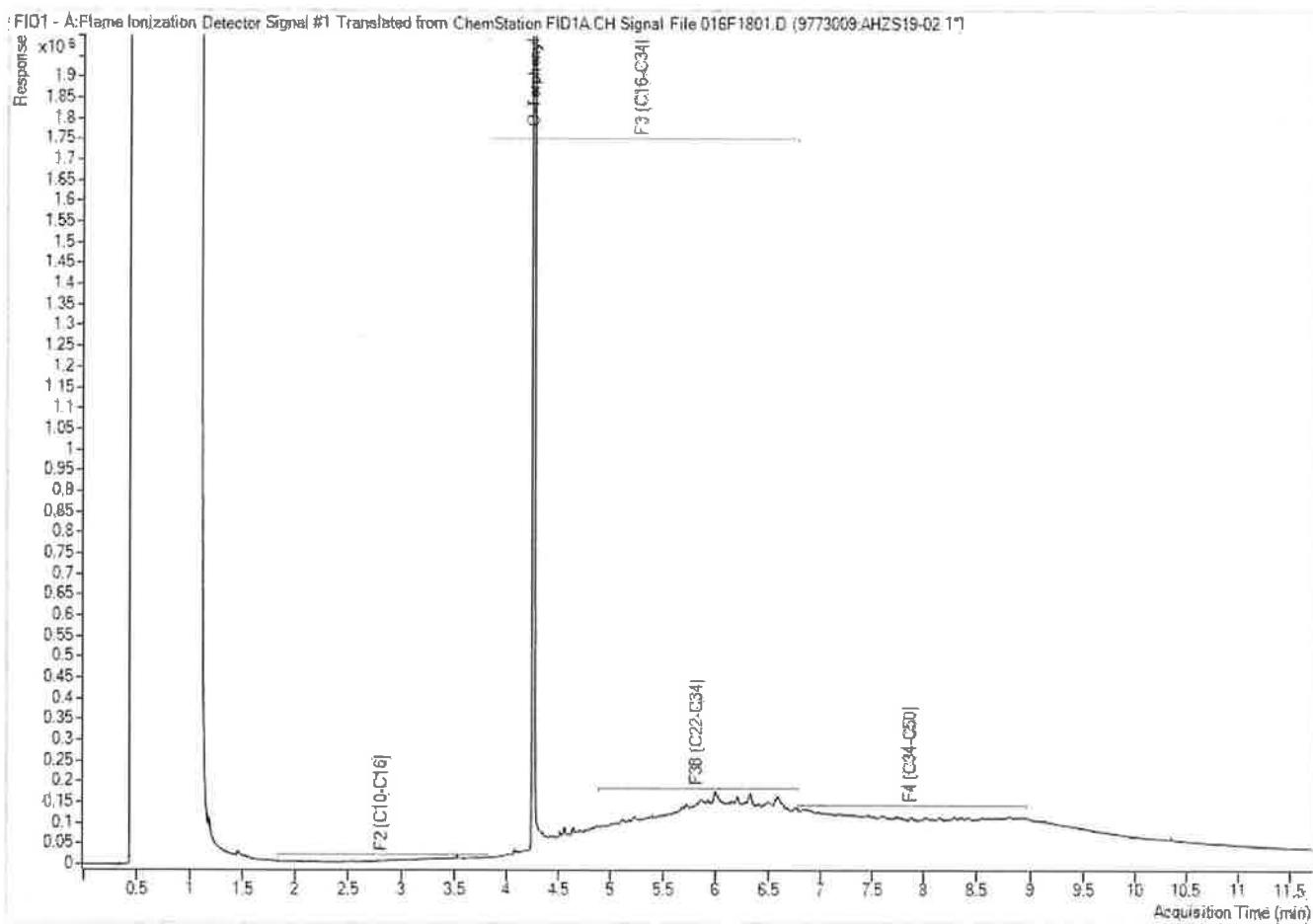


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZS19

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: BH13-4

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

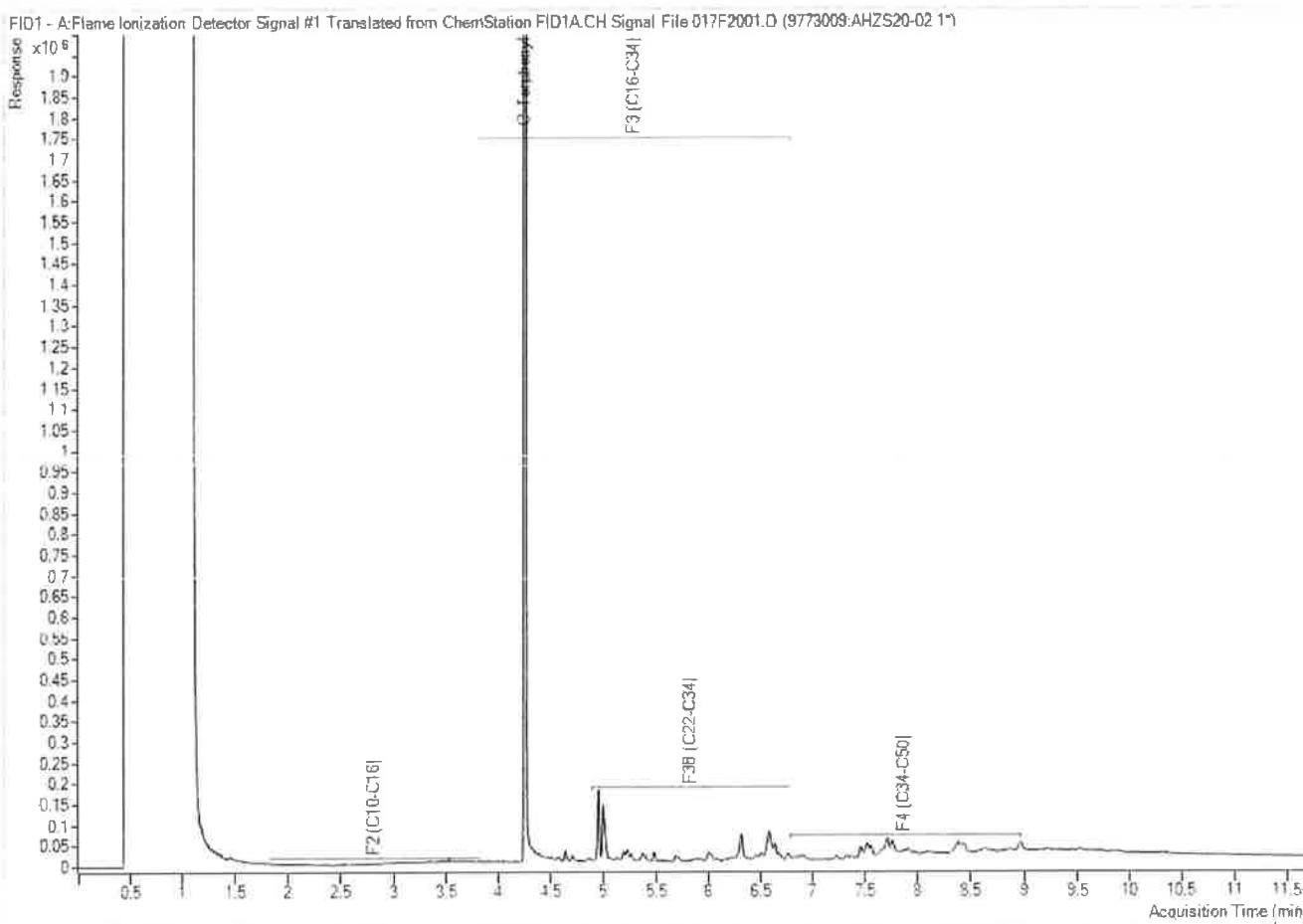


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZS20

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: BH13-6

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

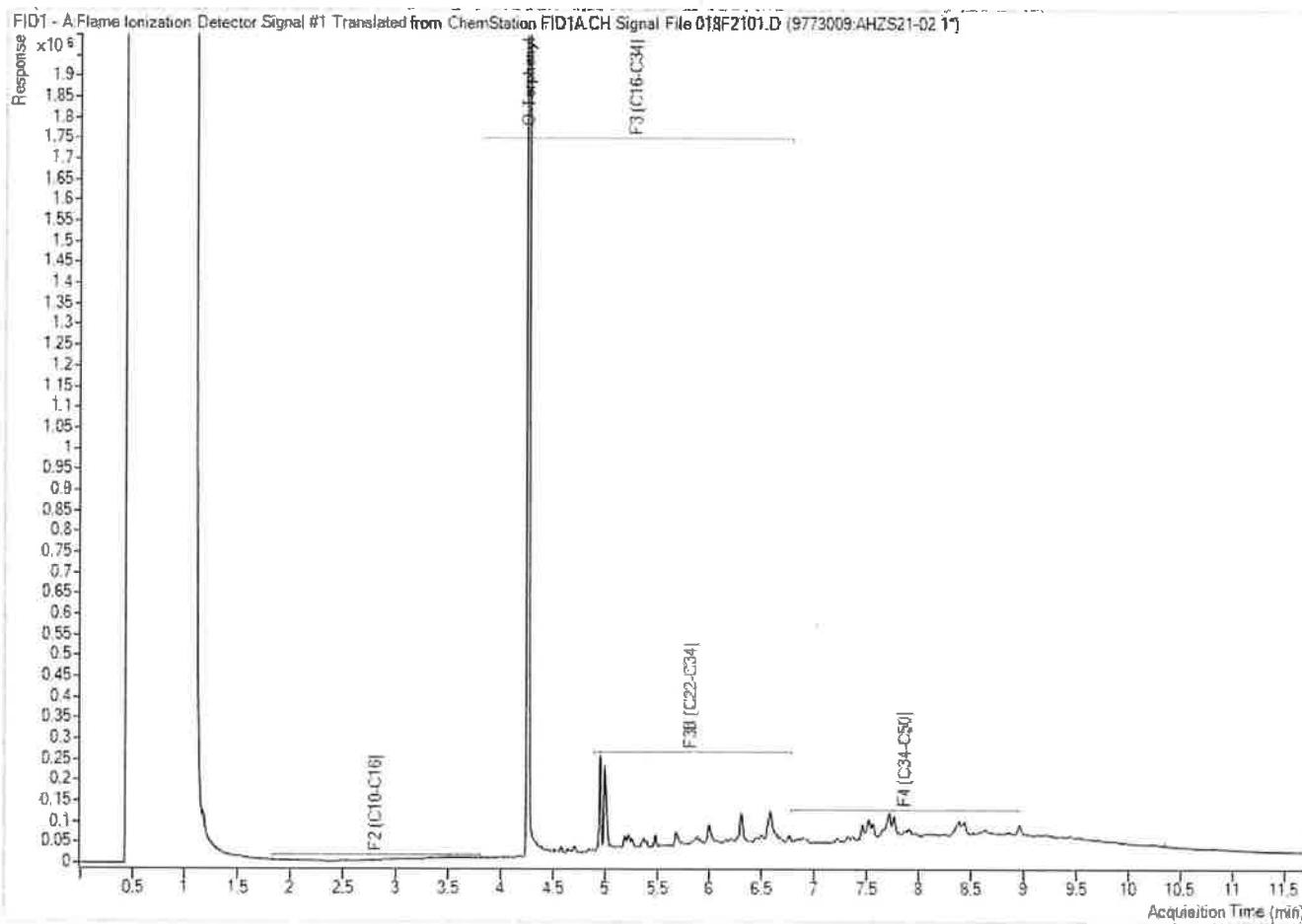


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZS21

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: BH13-7

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

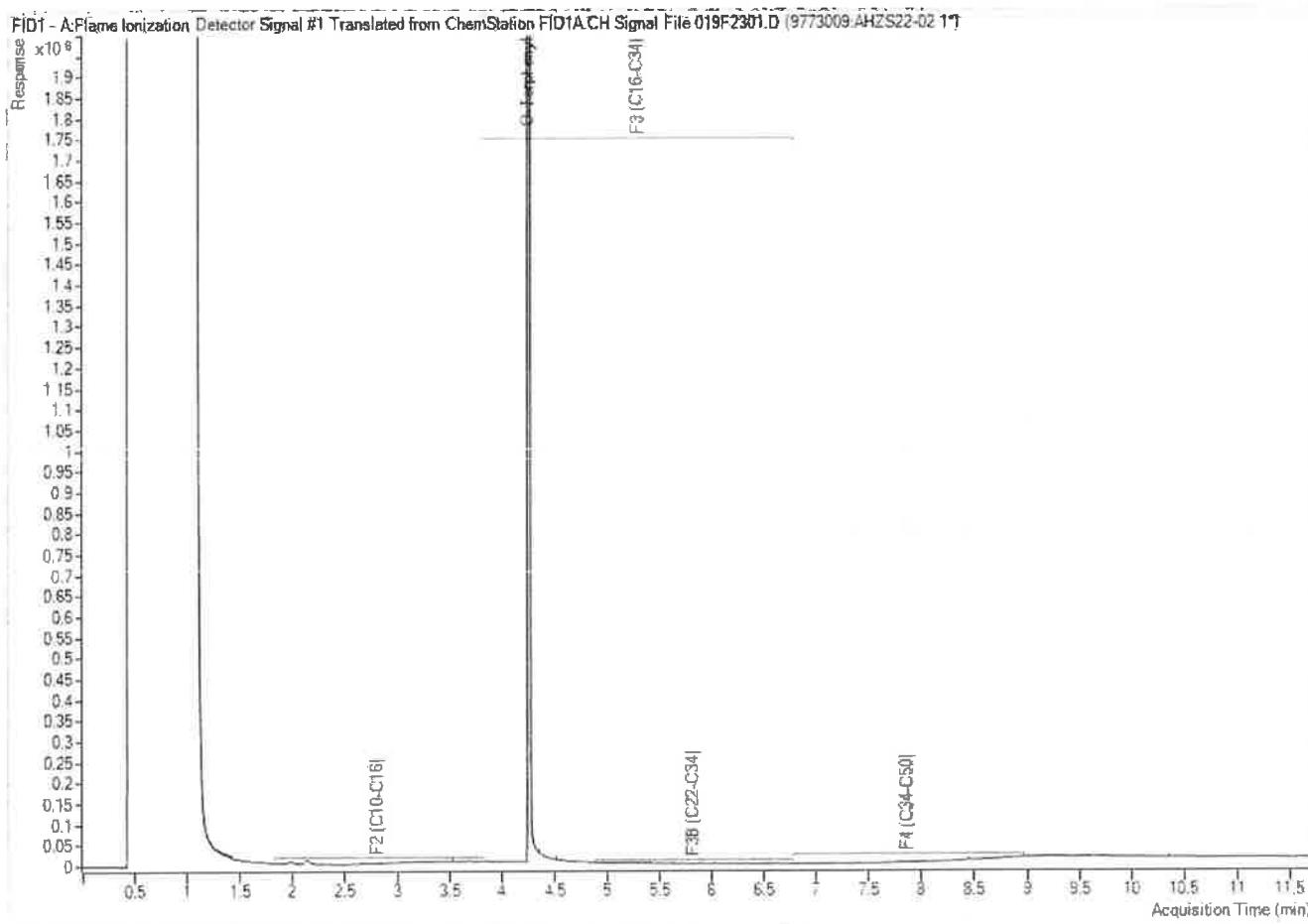


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZS22

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: BH13-8

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

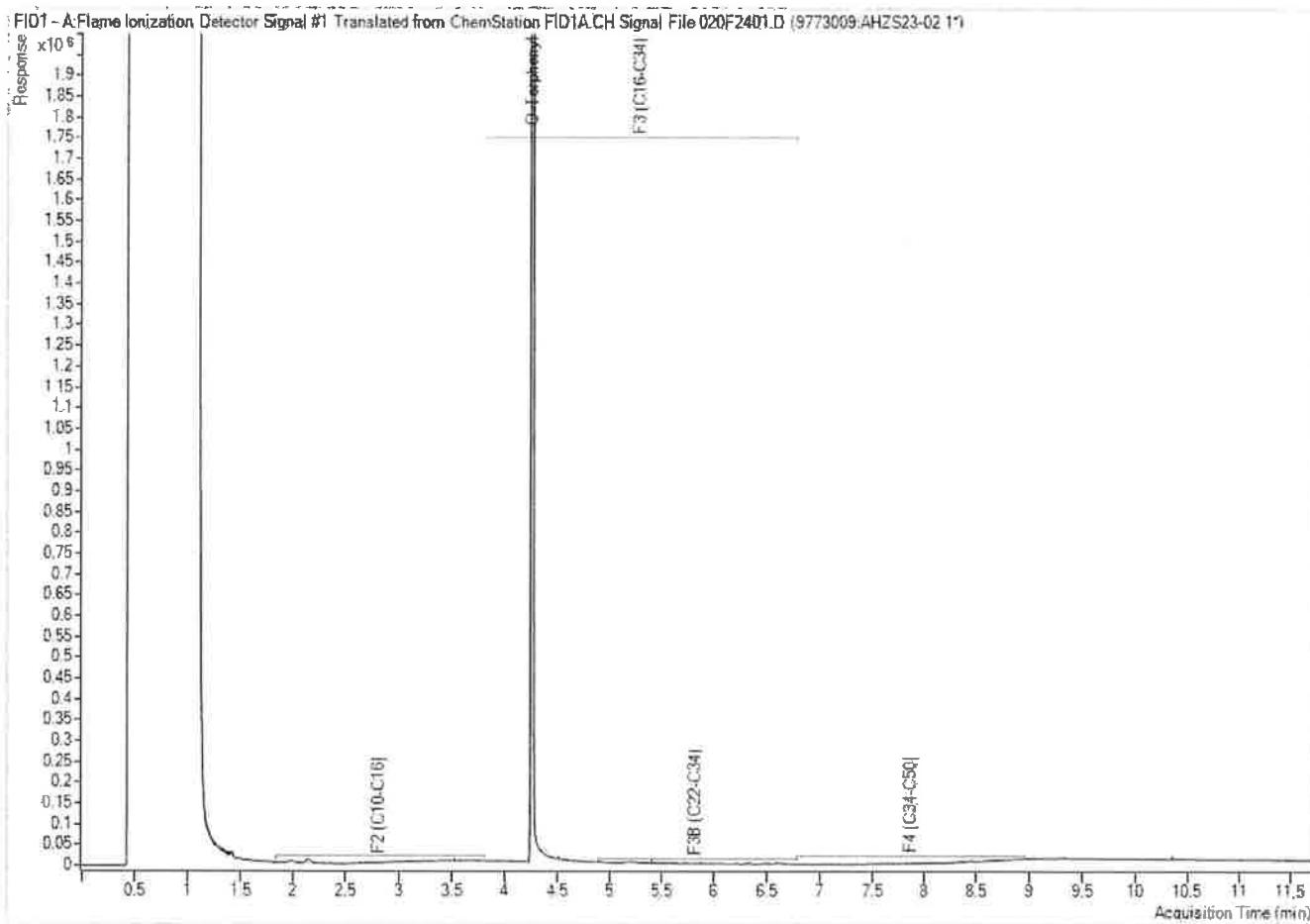


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZS23

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: BH13-9

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

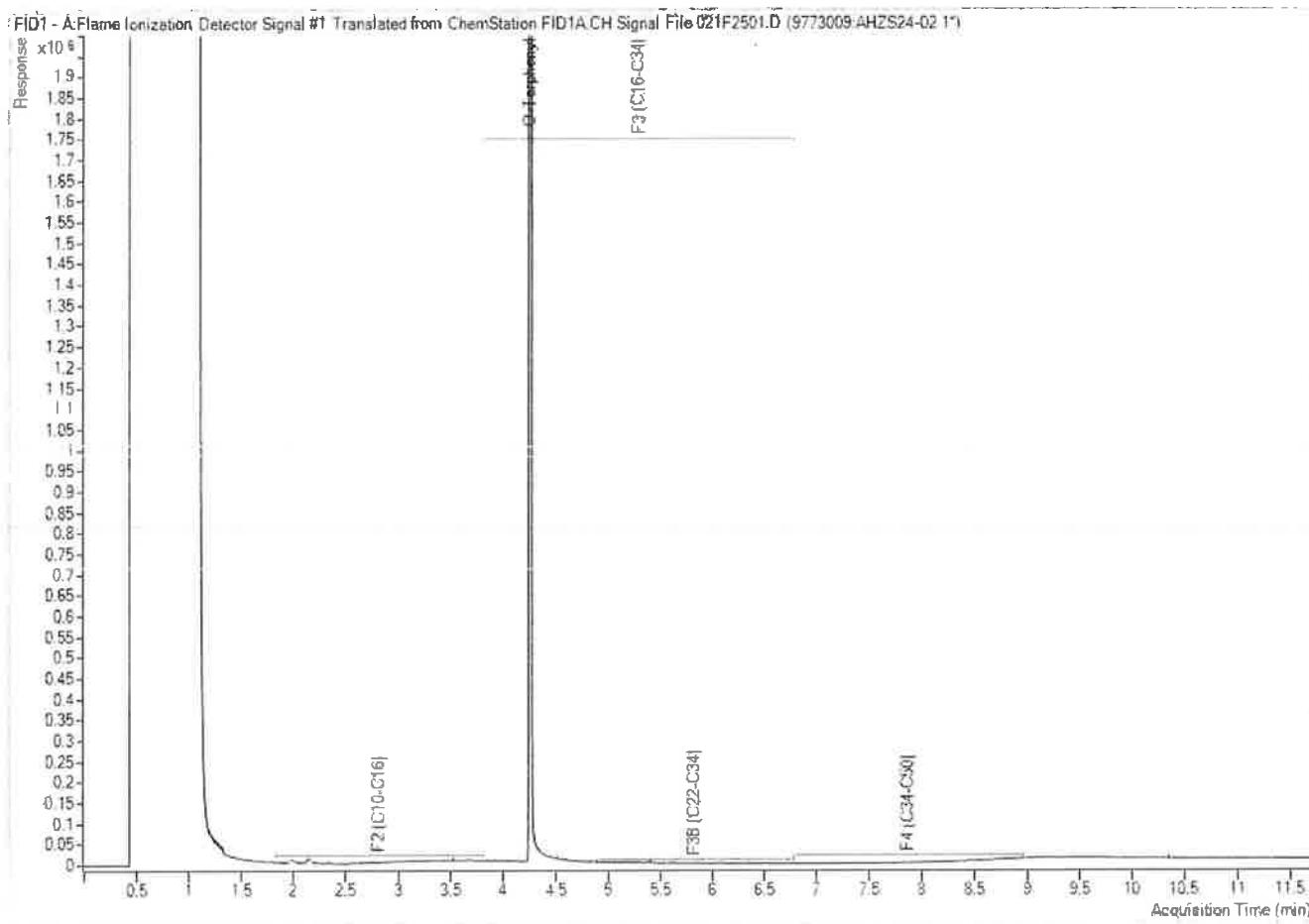


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZS24

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: BH13-10

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

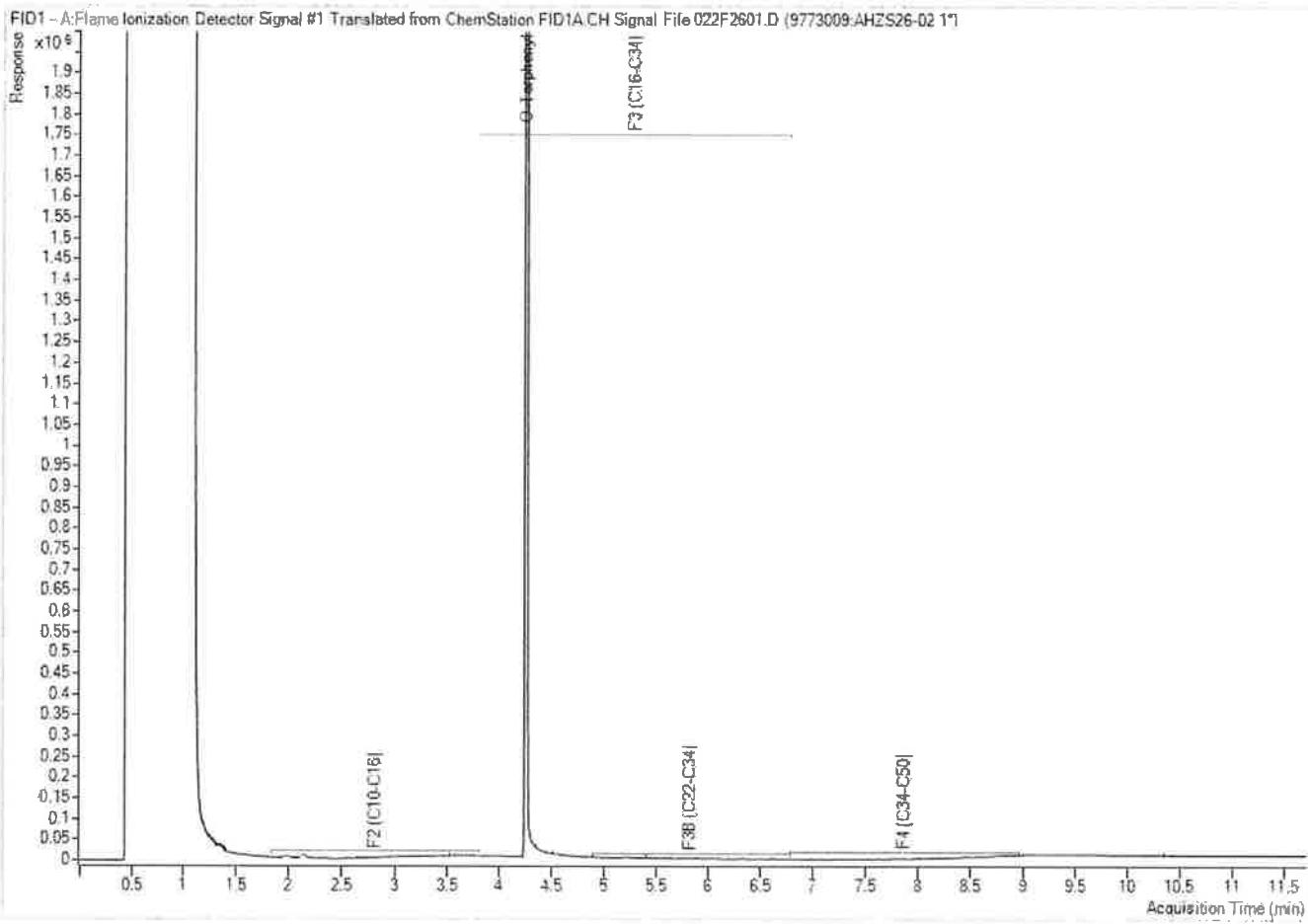


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Y8641  
Report Date: 2024/11/26  
Bureau Veritas Sample: AHZS26

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: BH13-11

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



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



Your Project #: 122140392  
Your C.O.C. #: 1021069-02-01

**Attention: Netta Benazon**

Stantec Consulting Ltd  
300 Hagey Blvd  
Suite 100  
Waterloo, ON  
CANADA N2L 0A4

**Report Date: 2024/11/12**

Report #: R8401724

Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C4Z0005**

Received: 2024/11/05, 15:20

Sample Matrix: Soil  
# Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum	1	N/A	2024/11/11	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron	1	2024/11/08	2024/11/08	CAM SOP-00408	R153 Ana. Prot. 2011
1,1-Dichloropropene Sum	2	N/A	2024/11/11		EPA 8260C m
Free (WAD) Cyanide	1	2024/11/08	2024/11/11	CAM SOP-00457	OMOE E3015 m
Conductivity	1	2024/11/09	2024/11/09	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1)	1	2024/11/08	2024/11/08	CAM SOP-00436	EPA 3060A/7199 m
Petroleum Hydrocarbons F2-F4 in Soil (2)	1	2024/11/11	2024/11/11	CAM SOP-00316	CCME CWS m
Petroleum Hydrocarbons F2-F4 in Soil (2)	1	2024/11/09	2024/11/10	CAM SOP-00316	CCME CWS m
Acid Extractable Metals by ICPMS	1	2024/11/08	2024/11/08	CAM SOP-00447	EPA 6020B m
Moisture	3	N/A	2024/11/07	CAM SOP-00415	Carter 2nd ed 70.2 m
PAH Compounds in Soil by GC/MS (SIM)	1	2024/11/09	2024/11/09	CAM SOP-00318	EPA 8270E
pH CaCl <sub>2</sub> EXTRACT	1	2024/11/08	2024/11/08	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR)	1	N/A	2024/11/11	CAM SOP-00102	EPA 6010C
Volatile Organic Compounds and F1 PHCs	2	N/A	2024/11/08	CAM SOP-00230	EPA 8260C m

**Remarks:**

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

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

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

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



Your Project #: 122140392  
Your C.O.C. #: 1021069-02-01

**Attention: Netta Benazon**

Stantec Consulting Ltd  
300 Hagey Blvd  
Suite 100  
Waterloo, ON  
CANADA N2L 0A4

**Report Date:** 2024/11/12  
**Report #:** R8401724  
**Version:** 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C4Z0005**

**Received:** 2024/11/05, 15:20

dilution methods.

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

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

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

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

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

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

**Encryption Key**

Please direct all questions regarding this Certificate of Analysis to:

Julie Clement, Technical Account Manager

Email: Julie.CLEMENT@bureauveritas.com

Phone# (613)868-6079

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

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.

For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Total Cover Pages : 2  
Page 2 of 17

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

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.



Bureau Veritas Job #: C4Z0005  
Report Date: 2024/11/12

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: VP

### O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		AICG79			
Sampling Date		2024/11/04 08:20			
COC Number		1021069-02-01			
	UNITS	MWS-2	RDL	MDL	QC Batch
<b>Calculated Parameters</b>					
Sodium Adsorption Ratio	N/A	0.27			9751336
<b>Inorganics</b>					
Conductivity	mS/cm	0.23	0.002	0.0005	9756629
Available (CaCl <sub>2</sub> ) pH	pH	7.73			9755294
WAD Cyanide (Free)	ug/g	<0.01	0.01	0.0019	9755655
Chromium (VI)	ug/g	<0.18	0.18	0.050	9754630
<b>Metals</b>					
Hot Water Ext. Boron (B)	ug/g	0.36	0.050	0.030	9754950
Acid Extractable Antimony (Sb)	ug/g	0.34	0.20	0.10	9754805
Acid Extractable Arsenic (As)	ug/g	2.1	1.0	0.10	9754805
Acid Extractable Barium (Ba)	ug/g	61	0.50	0.30	9754805
Acid Extractable Beryllium (Be)	ug/g	0.31	0.20	0.020	9754805
Acid Extractable Boron (B)	ug/g	<5.0	5.0	1.0	9754805
Acid Extractable Cadmium (Cu)	ug/g	0.17	0.10	0.030	9754805
Acid Extractable Chromium (Cr)	ug/g	14	1.0	0.20	9754805
Acid Extractable Cobalt (Co)	ug/g	4.2	0.10	0.020	9754805
Acid Extractable Copper (Cu)	ug/g	14	0.50	0.20	9754805
Acid Extractable Lead (Pb)	ug/g	68	1.0	0.10	9754805
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	0.50	0.10	9754805
Acid Extractable Nickel (Ni)	ug/g	8.9	0.50	0.20	9754805
Acid Extractable Selenium (Se)	ug/g	<0.50	0.50	0.10	9754805
Acid Extractable Silver (Ag)	ug/g	<0.20	0.20	0.040	9754805
Acid Extractable Thallium (Tl)	ug/g	0.082	0.050	0.010	9754805
Acid Extractable Uranium (U)	ug/g	0.49	0.050	0.030	9754805
Acid Extractable Vanadium (V)	ug/g	26	5.0	0.50	9754805
Acid Extractable Zinc (Zn)	ug/g	56	5.0	0.50	9754805
Acid Extractable Mercury (Hg)	ug/g	0.17	0.050	0.030	9754805
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					



Bureau Veritas Job #: C4Z0005  
Report Date: 2024/11/12

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: VP

### O.REG 153 PAHS (SOIL)

Bureau Veritas ID		AICG79			
Sampling Date		2024/11/04 08:20			
COC Number		1021069-02-01			
	UNITS	MW5-2	RDL	MDL	QC Batch
<b>Calculated Parameters</b>					
Methylnaphthalene, 2-(1-)	ug/g	<0.071	0.071	N/A	9751326
<b>Polyaromatic Hydrocarbons</b>					
Acenaphthene	ug/g	<0.050	0.050	0.0050	9756705
Acenaphthylene	ug/g	<0.050	0.050	0.0060	9756705
Anthracene	ug/g	<0.050	0.050	0.0040	9756705
Benzo(a)anthracene	ug/g	0.13	0.050	0.0040	9756705
Benzo(a)pyrene	ug/g	0.16	0.050	0.0040	9756705
Benzo(b/j)fluoranthene	ug/g	0.20	0.050	0.0060	9756705
Benzo(g,h,i)perylene	ug/g	0.13	0.050	0.0050	9756705
Benzo(k)fluoranthene	ug/g	0.068	0.050	0.0030	9756705
Chrysene	ug/g	0.13	0.050	0.0030	9756705
Dibenzo(a,h)anthracene	ug/g	<0.050	0.050	0.0030	9756705
Fluoranthene	ug/g	0.28	0.050	0.0060	9756705
Fluorene	ug/g	<0.050	0.050	0.0050	9756705
Indeno(1,2,3-cd)pyrene	ug/g	0.093	0.050	0.0030	9756705
1-Methylnaphthalene	ug/g	<0.050	0.050	0.0060	9756705
2-Methylnaphthalene	ug/g	<0.050	0.050	0.0070	9756705
Naphthalene	ug/g	<0.050	0.050	0.0040	9756705
Phenanthrene	ug/g	0.19	0.050	0.0040	9756705
Pyrene	ug/g	0.28	0.050	0.0030	9756705
<b>Surrogate Recovery (%)</b>					
D10-Anthracene	%	105			9756705
D14-Terphenyl (FS)	%	93			9756705
D8-Acenaphthylene	%	103			9756705

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable



Bureau Veritas Job #: C4Z0005  
Report Date: 2024/11/12

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: VP

### O.REG 153 VOCs BY HS & F1-F4 (SOIL)

<b>Bureau Veritas ID</b>		AICG80		AICG81			
<b>Sampling Date</b>		2024/11/04 11:50		2024/11/04 12:05			
<b>COC Number</b>		1021069-02-01		1021069-02-01			
	<b>UNITS</b>	MWS-5	QC Batch	QC-3	RDL	MDL	QC Batch
<b>Calculated Parameters</b>							
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	9751327	<0.050	0.050	0.010	9751327
<b>Volatile Organics</b>							
Acetone (2-Propanone)	ug/g	<0.49	9753885	<0.49	0.49	0.49	9753885
Benzene	ug/g	<0.0060	9753885	<0.0060	0.0060	0.0060	9753885
Bromodichloromethane	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
Bromoform	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
Bromomethane	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
Carbon Tetrachloride	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
Chlorobenzene	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
Chloroform	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
Dibromochloromethane	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
1,2-Dichlorobenzene	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
1,3-Dichlorobenzene	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
1,4-Dichlorobenzene	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
Dichlorodifluoromethane (FREON 12)	ug/g	<0.010	9753885	<0.040	0.040	0.040	9753885
1,1-Dichloroethane	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
1,2-Dichloroethane	ug/g	<0.049	9753885	<0.049	0.049	0.049	9753885
1,1-Dichloroethylene	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
cis-1,2-Dichloroethylene	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
trans-1,2-Dichloroethylene	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
1,2-Dichloropropane	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
cis-1,3-Dichloropropene	ug/g	<0.030	9753885	<0.030	0.030	0.030	9753885
trans-1,3-Dichloropropene	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
Ethylbenzene	ug/g	<0.010	9753885	<0.010	0.010	0.010	9753885
Ethylene Dibromide	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
Hexane	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
Methylene Chloride(Dichloromethane)	ug/g	<0.049	9753885	<0.049	0.049	0.049	9753885
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	9753885	<0.40	0.40	0.40	9753885
Methyl Isobutyl Ketone	ug/g	<0.40	9753885	<0.40	0.40	0.40	9753885
Methyl t-butyl ether (MTBE)	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
Styrene	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							



Bureau Veritas Job #: C4Z0005  
Report Date: 2024/11/12

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: VP

### O.REG 153 VOCs BY HS & F1-F4 (SOIL)

Bureau Veritas ID		AICG80		AICG81			
Sampling Date		2024/11/04 11:50		2024/11/04 12:05			
COC Number		1021069-02-01		1021069-02-01			
	UNITS	MW5-5	QC Batch	QC-3	RDL	MDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
1,1,2,2-Tetrachloroethane	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
Tetrachloroethylene	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
Toluene	ug/g	<0.020	9753885	<0.020	0.020	0.020	9753885
1,1,1-Trichloroethane	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
1,1,2-Trichloroethane	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
Trichloroethylene	ug/g	<0.010	9753885	<0.010	0.010	0.010	9753885
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	9753885	<0.040	0.040	0.040	9753885
Vinyl Chloride	ug/g	<0.019	9753885	<0.019	0.019	0.019	9753885
p+m-Xylene	ug/g	<0.020	9753885	<0.020	0.020	0.020	9753885
o-Xylene	ug/g	<0.020	9753885	<0.020	0.020	0.020	9753885
Total Xylenes	ug/g	<0.020	9753885	<0.020	0.020	0.020	9753885
F1 (C6-C10)	ug/g	<10	9753885	<10	10	2.0	9753885
F1 (C6-C10) - BTEX	ug/g	<10	9753885	<10	10	2.0	9753885
<b>F2-F4 Hydrocarbons</b>							
F2 (C10-C16 Hydrocarbons)	ug/g	<7.0	9758113	<7.0	7.0	5.0	9756782
F3 (C16-C34 Hydrocarbons)	ug/g	<50	9758113	140	50	5.0	9756782
F4 (C34-C50 Hydrocarbons)	ug/g	<50	9758113	120	50	10	9756782
Reached Baseline at C50	ug/g	Yes	9758113	Yes			9756782
<b>Surrogate Recovery (%)</b>							
o-Terphenyl	%	96	9758113	98			9756782
4-Bromofluorobenzene	%	100	9753885	98			9753885
D10-o-Xylene	%	99	9753885	100			9753885
D4-1,2-Dichloroethane	%	108	9753885	108			9753885
D8-Toluene	%	92	9753885	91			9753885
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							



Bureau Veritas Job #: C4Z0005  
Report Date: 2024/11/12

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: VP

### RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		AICG79		AICG80		AICG81			
Sampling Date		2024/11/04 08:20		2024/11/04 11:50		2024/11/04 12:05			
COC Number		1021069-02-01		1021069-02-01		1021069-02-01			
	UNITS	MWS-2	QC Batch	MWS-5	QC Batch	QC-3	RDL	MDL	QC Batch
<b>Inorganics</b>									
Moisture	%	9.7	9751746	13	9758063	17	1.0	0.50	9751746
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									



Bureau Veritas Job #: C4Z0005  
Report Date: 2024/11/12

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: VP

## TEST SUMMARY

**Bureau Veritas ID:** AICG79  
**Sample ID:** MW5-2  
**Matrix:** Soil

**Collected:** 2024/11/04  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9751326	N/A	2024/11/11	Automated Statchk
Hot Water Extractable Boron	ICP	9754950	2024/11/08	2024/11/08	Thuy Linh Nguyen
Free (WAD) Cyanide	TECH	9755655	2024/11/08	2024/11/11	Prgya Panchal
Conductivity	AT	9756629	2024/11/09	2024/11/09	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9754630	2024/11/08	2024/11/08	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	9754805	2024/11/08	2024/11/08	Daniel Teclu
Moisture	BAL	9751746	N/A	2024/11/07	Frances Gacayan
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9756705	2024/11/09	2024/11/09	Jonghan Yoon
pH CaCl <sub>2</sub> EXTRACT	AT	9755294	2024/11/08	2024/11/08	Kien Tran
Sodium Adsorption Ratio (SAR)	CALC/MET	9751336	N/A	2024/11/11	Automated Statchk

**Bureau Veritas ID:** AICG80  
**Sample ID:** MW5-5  
**Matrix:** Soil

**Collected:** 2024/11/04  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	9751327	N/A	2024/11/11	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9758113	2024/11/11	2024/11/11	Mohammed Abdul Nafay Shoeb
Moisture	BAL	9758063	N/A	2024/11/07	Raj Patel
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9753885	N/A	2024/11/08	Dina Wang

**Bureau Veritas ID:** AICG81  
**Sample ID:** QC-3  
**Matrix:** Soil

**Collected:** 2024/11/04  
**Shipped:**  
**Received:** 2024/11/05

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	9751327	N/A	2024/11/11	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9756782	2024/11/09	2024/11/10	Mohammed Abdul Nafay Shoeb
Moisture	BAL	9751746	N/A	2024/11/07	Frances Gacayan
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9753885	N/A	2024/11/08	Dina Wang



Bureau Veritas Job #: C4Z0005  
Report Date: 2024/11/12

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: VP

## GENERAL COMMENTS

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

Package 1	6.3°C
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Sample AICG79 [MW5 2] : PAH Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample AICG80 [MW5-5] : VOC/F1 Analysis: Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency.

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



## QUALITY ASSURANCE REPORT

QC Batch	Parameter	Matrix Spike			Spiked Blank			Method Blank			RPD
		Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	
9753885	4-Bromofluorobenzene	2024/11/08	103	60 - 140	102	60 - 140	98	%	%		
9753885	D10-o-Xylene	2024/11/08	107	60 - 130	91	60 - 130	94	%	%		
9753885	D4-1,2-Dichloroethane	2024/11/08	100	60 - 140	103	60 - 140	105	%	%		
9753885	D8-Toluene	2024/11/08	102	60 - 140	102	60 - 140	92	%	%		
9756705	D10-Anthracene	2024/11/09	79	50 - 130	99	50 - 130	103	%	%		
9756705	D14-Terphenyl (FS)	2024/11/09	73	50 - 130	89	50 - 130	92	%	%		
9756705	D8-Acenaphthylene	2024/11/09	100	50 - 130	105	50 - 130	107	%	%		
9756782	o-Terphenyl	2024/11/10	104	60 - 140	102	60 - 140	101	%	%		
9758113	o-Terphenyl	2024/11/11	99	60 - 140	101	60 - 140	97	%	%		
9751746	Moisture	2024/11/07						0	20		
9753885	1,1,1,2-Tetrachloroethane	2024/11/08	109	60 - 140	111	60 - 130	<0.040	ug/g	NC	50	
9753885	1,1,1-Trichloroethane	2024/11/08	97	60 - 140	99	60 - 130	<0.040	ug/g	NC	50	
9753885	1,1,2,2-Tetrachloroethane	2024/11/08	92	60 - 140	96	60 - 130	<0.040	ug/g	NC	50	
9753885	1,1,2-Trichloroethane	2024/11/08	99	60 - 140	103	60 - 130	<0.040	ug/g	NC	50	
9753885	1,1-Dichloroethane	2024/11/08	94	60 - 140	97	60 - 130	<0.040	ug/g	NC	50	
9753885	1,1-Dichloroethylene	2024/11/08	97	60 - 140	100	60 - 130	<0.040	ug/g	NC	50	
9753885	1,2-Dichlorobenzene	2024/11/08	102	60 - 140	103	60 - 130	<0.040	ug/g	NC	50	
9753885	1,2-Dichloroethane	2024/11/08	104	60 - 140	108	60 - 130	<0.049	ug/g	NC	50	
9753885	1,2-Dichloropropane	2024/11/08	98	60 - 140	101	60 - 130	<0.040	ug/g	NC	50	
9753885	1,3-Dichlorobenzene	2024/11/08	103	60 - 140	104	60 - 130	<0.040	ug/g	NC	50	
9753885	1,4-Dichlorobenzene	2024/11/08	104	60 - 140	105	60 - 130	<0.040	ug/g	NC	50	
9753885	Acetone (2-Propanone)	2024/11/08	98	60 - 140	105	60 - 140	<0.49	ug/g	NC	50	
9753885	Benzene	2024/11/08	98	60 - 140	102	60 - 130	<0.0060	ug/g	2.5	50	
9753885	Bromodichloromethane	2024/11/08	98	60 - 140	101	60 - 130	<0.040	ug/g	NC	50	
9753885	Bromoform	2024/11/08	98	60 - 140	103	60 - 130	<0.040	ug/g	NC	50	
9753885	Bromomethane	2024/11/08	84	60 - 140	88	60 - 140	<0.040	ug/g	NC	50	
9753885	Carbon Tetrachloride	2024/11/08	106	60 - 140	108	60 - 130	<0.040	ug/g	NC	50	
9753885	Chlorobenzene	2024/11/08	93	60 - 140	96	60 - 130	<0.040	ug/g	NC	50	
9753885	Chloroform	2024/11/08	100	60 - 140	103	60 - 130	<0.040	ug/g	NC	50	
9753885	cis-1,2-Dichloroethylene	2024/11/08	106	60 - 140	109	60 - 130	<0.040	ug/g	NC	50	
9753885	cis-1,3-Dichloropropene	2024/11/08	94	60 - 140	99	60 - 130	<0.030	ug/g	NC	50	

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## QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Matrix Spike			Spiked Blank			Method Blank			RPD		
		Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	Units	Value (%)	QC Limits	
9753885	Dibromochloromethane	2024/11/08	101	60 - 140	105	60 - 130	<0.040	ug/g	NC	50			
9753885	Dichlorodifluoromethane (FREON 12)	2024/11/08	77	60 - 140	81	60 - 140	<0.040	ug/g	NC	50			
9753885	Ethylbenzene	2024/11/08	96	60 - 140	99	60 - 130	<0.010	ug/g	NC	50			
9753885	Ethylene Diisomide	2024/11/08	99	60 - 140	103	60 - 130	<0.040	ug/g	NC	50			
9753885	F1 (C6-C10) - BTEx	2024/11/08					<10	ug/g	NC	30			
9753885	F1 (C6-C10)	2024/11/08	97	60 - 140	92	80 - 120	<10	ug/g	NC	30			
9753885	Hexane	2024/11/08	108	60 - 140	110	60 - 130	<0.040	ug/g	NC	50			
9753885	Methyl Ethyl Ketone (2-Butanone)	2024/11/08	98	60 - 140	104	60 - 140	<0.40	ug/g	NC	50			
9753885	Methyl Isobutyl Ketone	2024/11/08	97	60 - 140	102	60 - 130	<0.40	ug/g	NC	50			
9753885	Methyl t-butyl Ether (MTBE)	2024/11/08	99	60 - 140	103	60 - 130	<0.040	ug/g	NC	50			
9753885	Methylene Chloride(Dichloromethane)	2024/11/08	98	60 - 140	102	60 - 130	<0.049	ug/g	NC	50			
9753885	o-Xylene	2024/11/08	106	60 - 140	108	60 - 130	<0.020	ug/g	NC	50			
9753885	p+m-Xylene	2024/11/08	98	60 - 140	100	60 - 130	<0.020	ug/g	NC	50			
9753885	Styrene	2024/11/08	104	60 - 140	105	60 - 130	<0.040	ug/g	NC	50			
9753885	Tetrachloroethylene	2024/11/08	99	60 - 140	101	60 - 130	<0.040	ug/g	NC	50			
9753885	Toluene	2024/11/08	99	60 - 140	102	60 - 130	<0.020	ug/g	NC	50			
9753885	Total Xylenes	2024/11/08					<0.020	ug/g	NC	50			
9753885	trans-1,2-Dichloroethylene	2024/11/08	106	60 - 140	108	60 - 130	<0.040	ug/g	NC	50			
9753885	trans-1,3-Dichloropropene	2024/11/08	103	60 - 140	109	60 - 130	<0.040	ug/g	NC	50			
9753885	Trichloroethylene	2024/11/08	102	60 - 140	104	60 - 130	<0.010	ug/g	NC	50			
9753885	Trichlorofluoromethane (FREON 11)	2024/11/08	98	60 - 140	100	60 - 130	<0.040	ug/g	NC	50			
9753885	Vinyl Chloride	2024/11/08	91	60 - 140	94	60 - 130	<0.019	ug/g	NC	50			
9754630	Chromium (VI)	2024/11/08	60 (1)	70 - 130	94	80 - 120	<0.18	ug/g	NC	35			
9754805	Acid Extractable Antimony (Sb)	2024/11/08	114	75 - 125	110	80 - 120	<0.20	ug/g	NC	30			
9754805	Acid Extractable Arsenic (As)	2024/11/08	106	75 - 125	104	80 - 120	<1.0	ug/g	6.4	30			
9754805	Acid Extractable Barium (Ba)	2024/11/08	102	75 - 125	96	80 - 120	<0.50	ug/g	14	30			
9754805	Acid Extractable Beryllium (Be)	2024/11/08	101	75 - 125	93	80 - 120	<0.20	ug/g	NC	30			
9754805	Acid Extractable Boron (B)	2024/11/08	98	75 - 125	94	80 - 120	<5.0	ug/g	NC	30			
9754805	Acid Extractable Cadmium (Cd)	2024/11/08	104	75 - 125	100	80 - 120	<0.10	ug/g	NC	30			
9754805	Acid Extractable Chromium (Cr)	2024/11/08	105	75 - 125	101	80 - 120	<1.0	ug/g	8.9	30			
9754805	Acid Extractable Cobalt (Co)	2024/11/08	103	75 - 125	102	80 - 120	<0.10	ug/g	6.6	30			

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## QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Matrix Spike			SPIKED BLANK			Method Blank			RPD	QC Limits
		Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	RPD		
9754805	Acid Extractable Copper (Cu)	2024/11/08	104	75 - 125	99	80 - 120	<0.50	ug/g	10	30		
9754805	Acid Extractable Lead (Pb)	2024/11/08	104	75 - 125	98	80 - 120	<1.0	ug/g	12	30		
9754805	Acid Extractable Mercury (Hg)	2024/11/08	105	75 - 125	100	80 - 120	<0.050	ug/g	NC	30		
9754805	Acid Extractable Molybdenum (Mo)	2024/11/08	102	75 - 125	97	80 - 120	<0.50	ug/g	NC	30		
9754805	Acid Extractable Nickel (Ni)	2024/11/08	106	75 - 125	104	80 - 120	<0.50	ug/g	5.1	30		
9754805	Acid Extractable Selenium (Se)	2024/11/08	114	75 - 125	107	80 - 120	<0.50	ug/g	NC	30		
9754805	Acid Extractable Silver (Ag)	2024/11/08	97	75 - 125	93	80 - 120	<0.20	ug/g	NC	30		
9754805	Acid Extractable Thallium (Tl)	2024/11/08	101	75 - 125	98	80 - 120	<0.050	ug/g	9.1	30		
9754805	Acid Extractable Uranium (U)	2024/11/08	105	75 - 125	100	80 - 120	<0.050	ug/g	8.1	30		
9754805	Acid Extractable Vanadium (V)	2024/11/08	113	75 - 125	105	80 - 120	<5.0	ug/g	11	30		
9754805	Acid Extractable Zinc (Zn)	2024/11/08	NC	75 - 125	102	80 - 120	<5.0	ug/g	7.6	30		
9754950	Hot Water Ext. Boron (B)	2024/11/08	101	75 - 125	98	75 - 125	<0.050	ug/g	NC	40		
9755294	Available (CaCl <sub>2</sub> ) pH	2024/11/08	100	97 - 103					0.033	N/A		
9755655	WAD Cyanide (Free)	2024/11/11	98	75 - 125	104	80 - 120	<0.01	ug/g	NC	35		
9756629	Conductivity	2024/11/09			102	90 - 110	<0.002	mS/cm	3.9	10		
9756705	1-Methyl/naphthalene	2024/11/09	89	50 - 130	96	50 - 130	<0.0050	ug/g	NC	40		
9756705	2-Methyl/naphthalene	2024/11/09	92	50 - 130	99	50 - 130	<0.0050	ug/g	NC	40		
9756705	Acenaphthene	2024/11/09	97	50 - 130	99	50 - 130	<0.0050	ug/g	NC	40		
9756705	Acenaphthylene	2024/11/09	110	50 - 130	114	50 - 130	<0.0050	ug/g	NC	40		
9756705	Anthracene	2024/11/09	84	50 - 130	106	50 - 130	<0.0050	ug/g	NC	40		
9756705	Benzo(a)anthracene	2024/11/09	104	50 - 130	107	50 - 130	<0.0050	ug/g	NC	40		
9756705	Benzo(a)pyrene	2024/11/09	102	50 - 130	100	50 - 130	<0.0050	ug/g	NC	40		
9756705	Benzo(b,f)fluoranthene	2024/11/09	102	50 - 130	104	50 - 130	<0.0050	ug/g	NC	40		
9756705	Benzo(g,h,i)perylene	2024/11/09	91	50 - 130	92	50 - 130	<0.0050	ug/g	NC	40		
9756705	Benzo(k)fluoranthene	2024/11/09	103	50 - 130	102	50 - 130	<0.0050	ug/g	NC	40		
9756705	Chrysene	2024/11/09	104	50 - 130	107	50 - 130	<0.0050	ug/g	NC	40		
9756705	Dibenz(a,h)anthracene	2024/11/09	83	50 - 130	78	50 - 130	<0.0050	ug/g	NC	40		
9756705	Fluoranthene	2024/11/09	84	50 - 130	105	50 - 130	<0.0050	ug/g	NC	40		
9756705	Fluorene	2024/11/09	99	50 - 130	100	50 - 130	<0.0050	ug/g	NC	40		
9756705	Indeno(1,2,3-cd)pyrene	2024/11/09	93	50 - 130	90	50 - 130	<0.0050	ug/g	NC	40		
9756705	Naphthalene	2024/11/09	86	50 - 130	95	50 - 130	<0.0050	ug/g	NC	40		

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## QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd  
Client Project #: 12214C392  
Sampler Initials: VP

QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits			
Matrix Spike											SPIKED BLANK	Method Blank	RPD
9756705	Phenanthrene	2024/11/09	83	50 - 130	103	50 - 130	<0.0050	ug/g	NC	40			
9756705	Pyrene	2024/11/09	82	50 - 130	102	50 - 130	<0.0050	ug/g	NC	40			
9756782	F2 (C10-C16 Hydrocarbons)	2024/11/10	101	60 - 140	101	80 - 120	<7.0	ug/g	109 (2)	30			
9756782	F3 (C16-C34 Hydrocarbons)	2024/11/10	82	60 - 140	104	80 - 120	<50	ug/g	91 (2)	30			
9756782	F4 (C34-C50 Hydrocarbons)	2024/11/10	89	60 - 140	106	80 - 120	<50	ug/g	81 (2)	30			
9758063	Moisture	2024/11/11							0	20			
9758113	F2 (C10-C16 Hydrocarbons)	2024/11/11	108	60 - 140	102	80 - 120	<7.0	ug/g	NC	30			
9758113	F3 (C16-C34 Hydrocarbons)	2024/11/11	110	60 - 140	105	80 - 120	<50	ug/g	NC	30			
9758113	F4 (C34-C50 Hydrocarbons)	2024/11/11	109	60 - 140	104	80 - 120	<50	ug/g	NC	30			

N/A = Not Applicable

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

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

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

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

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

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

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

- (1) The matrix spike recovery was below the lower control limit. This may be due in part to the reducing environment of the sample. The sample was reanalyzed with the same results.
- (2) Duplicate results exceeded RPD acceptance criteria for flagged analytes. Sample extract was reanalyzed with the same results. This is likely due to sample heterogeneity.



Bureau Veritas Job #: C4Z0005  
Report Date: 2024/11/12

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: VP

### VALIDATION SIGNATURE PAGE

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

Louise Harding, Scientific Specialist

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

2024/11/05 15:20  
STANTEC  
FBI - Water Quality

U.S. Army, Veterans  
6754 Larchmont Road, Mississauga, Ontario, Canada L3X 2L4 Tel: (905) 971-5100 Tollfree: 800-502-3286 Fax: (905) 617-5777 www.bureau.com

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NONT-2024-11-686



STANTEC

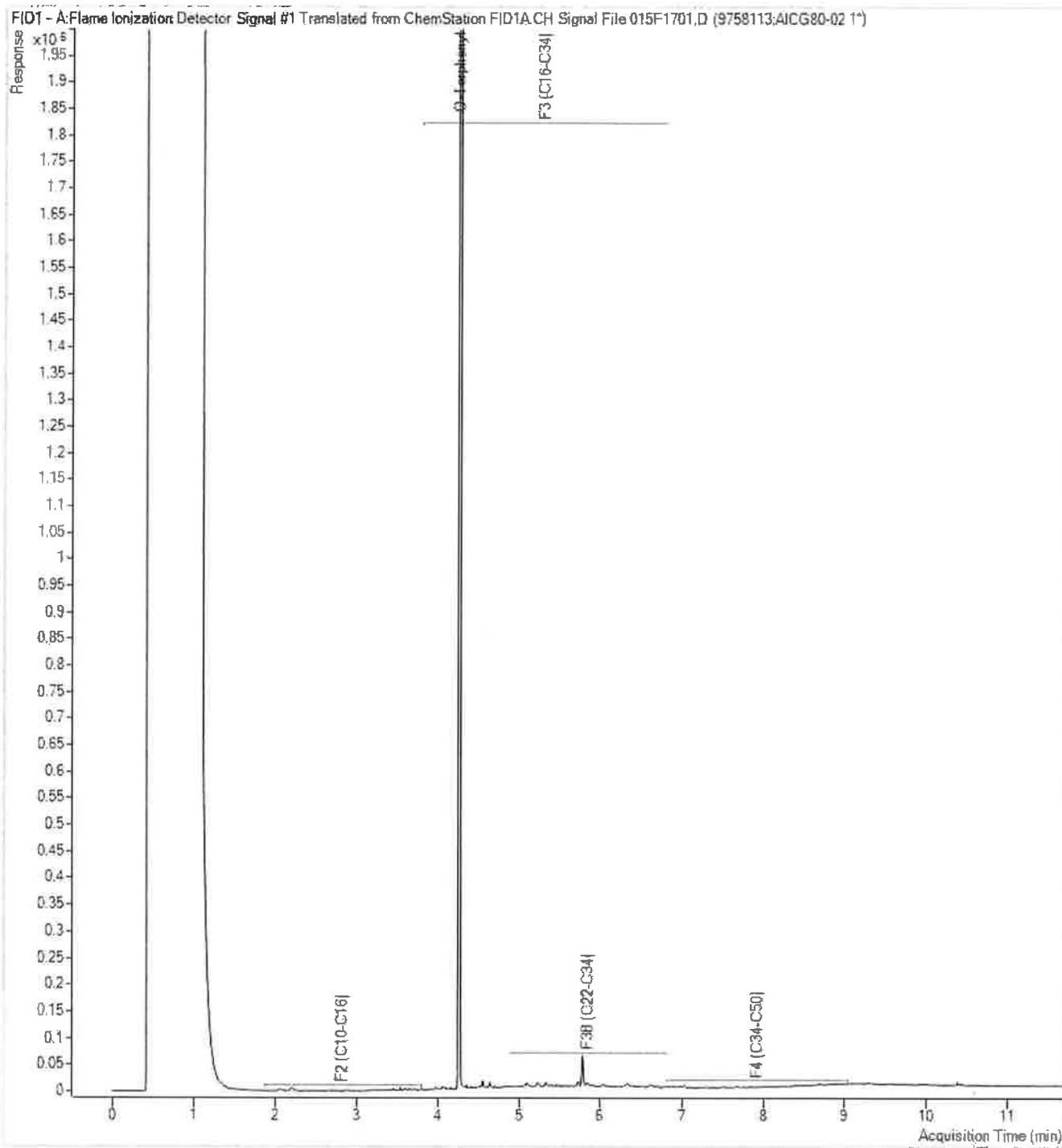
INVOICE INFORMATION		PROJECT INFORMATION:	
Customer Name: Accounts Payable 300 Hague Blvd Suite 100 Waterloo ON N2L 0A4 (519) 579-4410 SAPInvoice@stantec.com	Contact Name: Netta Benazon Address: #17 341 09 111 10 Baptist Hospital Phone: (519) 579-5733 Email: Netta.Benazon@stantec.com	Customer Name: Netta Benazon Address: #17 341 09 111 10 Baptist Hospital Phone: (519) 579-5733 Fax: Netta.Benazon@stantec.com	Project #: 122140392 Project Lead: Paul Gericke Size ft: Sponsor By: SAPInvoice@stantec.com
<b>MIC REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION AND NOT BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY</b>			
<b>Regulation 151 (2011)</b>			
<input type="checkbox"/> Name 1: <input type="checkbox"/> Fresh/Sale <input type="checkbox"/> Household <input type="checkbox"/> OEM/Ind <input type="checkbox"/> Other <input type="checkbox"/> Commercial <input type="checkbox"/> Root 500 <input type="checkbox"/> Stormwater <input type="checkbox"/> Municipal <input type="checkbox"/> For RSC <input type="checkbox"/> Reg 205 Trade <input type="checkbox"/> Other		Special Instructions:  5-14410 23875 21118779 2017 2017	
<b>Inclusive Criteria on Confidentiality (Y/N)?</b> Sample Barcode Label: 2010 Samples Time Sampled: Maine			
1	MW 5-7	11/09/24 8:26 AM	5/21/24 5:21 PM
2	MW 5-5	11/09/24 11:50 AM	5/21/24 5:21 PM
3	QC-3	11/09/24 11:50 AM	5/21/24 5:21 PM
4	MW 5-7, MW 5-9	8/10/24 8:26 AM	5/21/24 5:21 PM
5	MW 5-9, MW 5-8	11/09/24 11:50 AM	5/21/24 5:21 PM
6	MW 5-5, 7, MW 5-8	12/2/24 12:30 PM	5/21/24 5:21 PM
7	MW 5-5, 9, MW 5-8	12/2/24 12:30 PM	5/21/24 5:21 PM
8	MW 5-5-11	11:45	5/21/24 5:21 PM
9			5/21/24 5:21 PM
10			5/21/24 5:21 PM
<b>* RELINQUISHED BY (Signature/Print)</b> <i>11/09/24</i>		<b>RECEIVED BY (Signature/Print)</b> <i>Netta Benazon M J Clark</i>	Date: 11/04/2024 Time: 15:20 Laboratory Use Only # jars used and not submitted Time Sampled Terrestrial & Groundwater 7/15/17 White: Bureau Veritas Yellow: Client
UNLESS OTHERWISE AGREED TO IN WRITING, WORKS SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS, WHICH ARE AVAILABLE FOR REVIEW AT WWW.BUREAVERTITAS.COM/ENVIRONMENTAL-LABORATORIES/TERMS-AND-CONDITIONS. *IT IS THE RESPONSIBILITY OF THE RELEASER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY. ANY INCOMPLETE CHAIN OF CUSTODY RECORD, AN INACCURATE CHAIN OF CUSTODY, OR DELAYS IN ANALYTICAL, FAT DELAYS, OR SAMPLE CONTAINER PRESERVATION, HOLD TIME, AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BUREAVERTITAS.COM/ENVIRONMENTAL-LABORATORIES/SOURCES/CHAINS-OF-CUSTODY-FAT-DELAYS			

Bureau Veritas Canada (2013) Inc.

Bureau Veritas Job #: C4Z0005  
Report Date: 2024/11/12  
Bureau Veritas Sample: AICG80

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW5-5

**Petroleum Hydrocarbons F2-F4 in Soil Chromatogram**

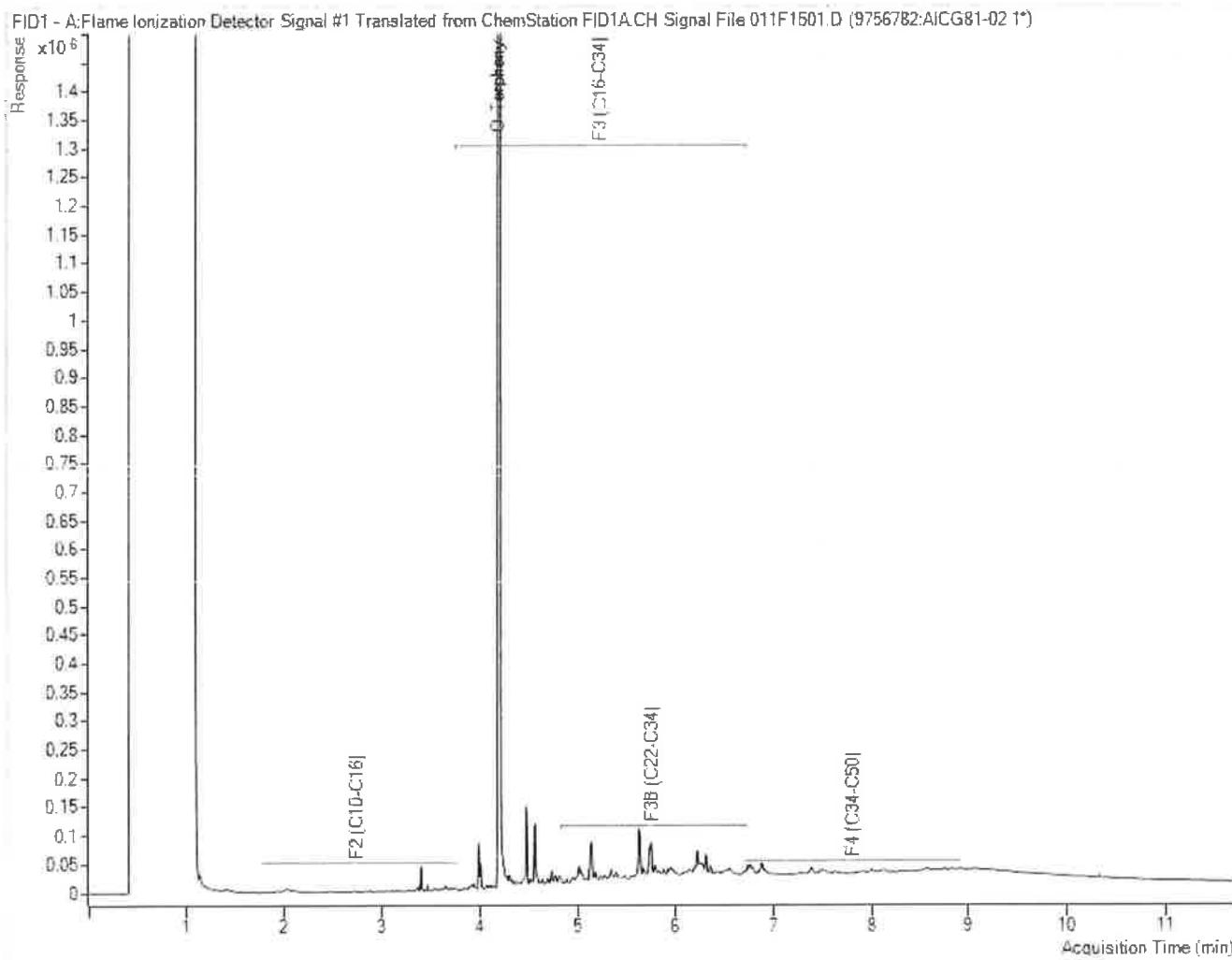


**Note:** This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Z0005  
Report Date: 2024/11/12  
Bureau Veritas Sample: AICG81

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: QC-3

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



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



Your Project #: 122140392  
Your C.O.C. #: 1021273-04-01

**Attention: Netta Benazon**

Stantec Consulting Ltd  
300 Hagey Blvd  
Suite 100  
Waterloo, ON  
CANADA N2L 0A4

**Report Date: 2024/11/14**

Report #: R8404781

Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C4Z1246**

**Received: 2024/11/06, 15:38**

Sample Matrix: Water

# Samples Received: 13

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum	11	N/A	2024/11/12	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum	13	N/A	2024/11/12		EPA 8260C m
Chloride by Automated Colourimetry	11	N/A	2024/11/12	CAM SOP-00463	SM 24 4500-Cl E m
Chromium (VI) in Water	2	N/A	2024/11/11	CAM SOP-00436	EPA 7199 m
Chromium (VI) in Water	9	N/A	2024/11/12	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	11	N/A	2024/11/11	CAM SOP-00457	OMOE E3015 m
Petroleum Hydrocarbons F2-F4 in Water (1)	12	2024/11/11	2024/11/12	CAM SOP-00316	CCME PHC-CWS m
Mercury	11	2024/11/11	2024/11/12	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	7	N/A	2024/11/11	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS	1	N/A	2024/11/12	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS	3	N/A	2024/11/08	CAM SOP-00447	EPA 6020B m
PAH Compounds in Water by GC/MS (SIM)	4	2024/11/11	2024/11/11	CAM SOP-00318	EPA 8270E
PAH Compounds in Water by GC/MS (SIM)	3	2024/11/11	2024/11/12	CAM SOP-00318	EPA 8270E
PAH Compounds in Water by GC/MS (SIM)	3	2024/11/13	2024/11/13	CAM SOP-00318	EPA 8270E
PAH Compounds in Water by GC/MS (SIM)	1	2024/11/13	2024/11/14	CAM SOP-00318	EPA 8270E
Volatile Organic Compounds and F1 PHCs	13	N/A	2024/11/11	CAM SOP-00230	EPA 8260C m

**Remarks:**

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

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

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



Your Project #: 122140392  
Your C.O.C. #: 1021273-04-01

**Attention: Netta Benazon**

Stantec Consulting Ltd  
300 Hagey Blvd  
Suite 100  
Waterloo, ON  
CANADA N2L 0A4

**Report Date: 2024/11/14**  
**Report #: R8404781**  
**Version: 1 - Final**

**CERTIFICATE OF ANALYSIS**

**BUREAU VERITAS JOB #: C421246**

**Received: 2024/11/06, 15:38**

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

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

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

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

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

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

**Encryption Key**

Please direct all questions regarding this Certificate of Analysis to:

Julie Clement, Technical Account Manager  
Email: Julie.CLEMENT@bureauveritas.com  
Phone# (613)868-6079

=====

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

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

Total Cover Pages : 2  
Page 2 of 49

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, LSN 2LB Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 METALS & INORGANICS PKG (WTR)

<b>Bureau Veritas ID</b>		AIFD17				AIFD18			
<b>Sampling Date</b>		2024/11/05 15:05				2024/11/05 14:05			
<b>COC Number</b>		1021273-04-01				1021273-04-01			
	<b>UNITS</b>	<b>MW2</b>	<b>RDL</b>	<b>MDL</b>	<b>QC Batch</b>	<b>MW3</b>	<b>RDL</b>	<b>MDL</b>	<b>QC Batch</b>
<b>Inorganics</b>									
WAD Cyanide (Free)	ug/L	<1	1	0.2	9757652	<1	1	0.2	9757652
Dissolved Chloride (Cl-)	mg/L	2200	20	13	9756113	600	5.0	3.3	9756113
<b>Metals</b>									
Chromium (VI)	ug/L	<1.0 (1)	1.0	0.60	9759381	<0.50	0.50	0.30	9757814
Mercury (Hg)	ug/L	<0.10	0.10	0.020	9758001	<0.10	0.10	0.020	9758001
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	0.00020	9755168	0.00056	0.00050	0.00020	9755168
Dissolved Arsenic (As)	mg/L	0.0055	0.0010	0.00010	9755168	0.0017	0.0010	0.00010	9755168
Dissolved Barium (Ba)	mg/L	0.80	0.0020	0.00030	9755168	0.25	0.0020	0.00030	9755168
Dissolved Beryllium (Be)	mg/L	<0.00040	0.00040	0.000050	9755168	<0.00040	0.00040	0.000050	9755168
Dissolved Boron (B)	mg/L	0.060	0.010	0.00060	9755168	0.094	0.010	0.00060	9755168
Dissolved Cadmium (Cd)	mg/L	<0.000090	0.000090	0.000090	9755168	<0.000090	0.000090	0.000090	9755168
Dissolved Chromium (Cr)	mg/L	<0.0050	0.0050	0.00070	9755168	<0.0050	0.0050	0.00070	9755168
Dissolved Cobalt (Co)	mg/L	0.0025	0.00050	0.000040	9755168	0.00071	0.00050	0.000040	9755168
Dissolved Copper (Cu)	mg/L	<0.00090	0.00090	0.00030	9755168	0.00095	0.00090	0.00030	9755168
Dissolved Lead (Pb)	mg/L	<0.00050	0.00050	0.000050	9755168	<0.00050	0.00050	0.000050	9755168
Dissolved Molybdenum (Mo)	mg/L	0.0044	0.00050	0.000070	9755168	0.0070	0.00050	0.000070	9755168
Dissolved Nickel (Ni)	mg/L	0.0016	0.0010	0.00040	9755168	0.0015	0.0010	0.00040	9755168
Dissolved Selenium (Se)	mg/L	<0.0020	0.0020	0.00020	9755168	<0.0020	0.0020	0.00020	9755168
Dissolved Silver (Ag)	mg/L	<0.000090	0.000090	0.000020	9755168	<0.000090	0.000090	0.000020	9755168
Dissolved Sodium (Na)	mg/L	730	0.50	0.10	9755168	280	0.10	0.020	9755168
Dissolved Thallium (Tl)	mg/L	<0.000050	0.000050	0.000020	9755168	<0.000050	0.000050	0.000020	9755168
Dissolved Uranium (U)	mg/L	0.00083	0.00010	0.000010	9755168	0.0015	0.00010	0.000010	9755168
Dissolved Vanadium (V)	mg/L	0.00064	0.00050	0.000090	9755168	0.00092	0.00050	0.000090	9755168
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	0.0010	9755168	0.0080	0.0050	0.0010	9755168
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
(1) Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.									



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 METALS & INORGANICS PKG (WTR)

<b>Bureau Veritas ID</b>		AIFD20				AIFD21			
<b>Sampling Date</b>		2024/11/05 13:05				2024/11/05 12:05			
<b>COC Number</b>		1021273-04-01				1021273-04-01			
	<b>UNITS</b>	<b>MW6</b>	<b>RDL</b>	<b>MDL</b>	<b>QC Batch</b>	<b>MW7</b>	<b>RDL</b>	<b>MDL</b>	<b>QC Batch</b>
<b>Inorganics</b>									
WAD Cyanide (Free)	ug/L	<1	1	0.2	9757652	2	1	0.2	9757652
Dissolved Chloride (Cl-)	mg/L	5200	50	33	9756113	6600	50	33	9756205
<b>Metals</b>									
Chromium (VI)	ug/L	<1.0 (1)	1.0	0.60	9759381	<2.5 (1)	2.5	1.5	9759381
Mercury (Hg)	ug/L	<0.10	0.10	0.020	9758001	<0.10	0.10	0.020	9758001
Dissolved Antimony (Sb)	mg/l	<0.0025	0.0025	0.0010	9755168	<0.0025	0.0025	0.0010	9755168
Dissolved Arsenic (As)	mg/L	<0.0050	0.0050	0.00050	9755168	<0.0050	0.0050	0.00050	9755168
Dissolved Barium (Ba)	mg/L	0.64	0.010	0.0015	9755168	1.3	0.010	0.0015	9755168
Dissolved Beryllium (Be)	mg/L	<0.0020	0.0020	0.00025	9755168	<0.0020	0.0020	0.00025	9755168
Dissolved Boron (B)	mg/L	0.33	0.050	0.0030	9755168	0.39	0.050	0.0030	9755168
Dissolved Cadmium (Cd)	mg/L	<0.00045	0.00045	0.00045	9755168	<0.00045	0.00045	0.00045	9755168
Dissolved Chromium (Cr)	mg/L	<0.025	0.025	0.0035	9755168	<0.025	0.025	0.0035	9755168
Dissolved Cobalt (Co)	mg/L	<0.0025	0.0025	0.00020	9755168	0.0042	0.0025	0.00020	9755168
Dissolved Copper (Cu)	mg/L	<0.0045	0.0045	0.0015	9755168	<0.0045	0.0045	0.0015	9755168
Dissolved Lead (Pb)	mg/L	<0.0025	0.0025	0.00025	9755168	<0.0025	0.0025	0.00025	9755168
Dissolved Molybdenum (Mo)	mg/L	<0.0025	0.0025	0.00035	9755168	0.0030	0.0025	0.00035	9755168
Dissolved Nickel (Ni)	mg/L	<0.0050	0.0050	0.0020	9755168	0.0051	0.0050	0.0020	9755168
Dissolved Selenium (Se)	mg/L	<0.010	0.010	0.0010	9755168	<0.010	0.010	0.0010	9755168
Dissolved Silver (Ag)	mg/L	<0.00045	0.00045	0.00010	9755168	<0.00045	0.00045	0.00010	9755168
Dissolved Sodium (Na)	mg/L	2700	0.50	0.10	9755168	3600	1.0	0.20	9755168
Dissolved Thallium (Tl)	mg/L	<0.00025	0.00025	0.00010	9755168	<0.00025	0.00025	0.00010	9755168
Dissolved Uranium (U)	mg/L	<0.00050	0.00050	0.000050	9755168	0.0017	0.00050	0.000050	9755168
Dissolved Vanadium (V)	mg/L	<0.0025	0.0025	0.00045	9755168	<0.0025	0.0025	0.00045	9755168
Dissolved Zinc (Zn)	mg/L	<0.025	0.025	0.0050	9755168	<0.025	0.025	0.0050	9755168
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
(1) Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.									



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 METALS & INORGANICS PKG (WTR)

Bureau Veritas ID		AIFD22			AIFD23		AIFD24			
Sampling Date		2024/11/06 10:45			2024/11/06 13:10		2024/11/06			
COC Number		1021273-04-01			1021273-04-01		1021273-04-01			
	UNITS	MW1	RDL	MDL	MW4	QC Batch	QC-01	RDL	MDL	QC Batch
<b>Inorganics</b>										
WAD Cyanide (Free)	ug/L	<1	1	0.2	<1	9757652	<1	1	0.2	9757652
Dissolved Chloride (Cl-)	mg/L	920	7.0	4.6	1700	9756113	1700	20	13	9756113
<b>Metals</b>										
Chromium (VI)	ug/L	<0.50	0.50	0.30	<0.50	9759381	<0.50	0.50	0.30	9757814
Mercury (Hg)	ug/L	<0.10	0.10	0.020	<0.10	9758001	<0.10	0.10	0.020	9758001
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	0.00020	0.0012	9755168	0.0013	0.00050	0.00020	9755168
Dissolved Arsenic (As)	mg/L	0.0011	0.0010	0.00010	0.0028	9755168	0.0028	0.0010	0.00010	9755168
Dissolved Barium (Ba)	mg/L	0.36	0.0020	0.00030	0.22	9755168	0.23	0.0020	0.00030	9755168
Dissolved Beryllium (Be)	mg/L	<0.00040	0.00040	0.000050	<0.00040	9755168	<0.00040	0.00040	0.000050	9755168
Dissolved Boron (B)	mg/L	0.040	0.010	0.00060	0.20	9755168	0.20	0.010	0.00060	9755168
Dissolved Cadmium (Cd)	mg/L	<0.000090	0.000090	0.000090	<0.000090	9755168	<0.000090	0.000090	0.000090	9755168
Dissolved Chromium (Cr)	mg/L	<0.0050	0.0050	0.00070	<0.0050	9755168	<0.0050	0.0050	0.00070	9755168
Dissolved Cobalt (Co)	mg/L	0.0017	0.00050	0.000040	<0.00050	9755168	<0.00050	0.00050	0.000040	9755168
Dissolved Copper (Cu)	mg/L	<0.00090	0.00090	0.00030	<0.00090	9755168	<0.00090	0.00090	0.00030	9755168
Dissolved Lead (Pb)	mg/L	<0.00050	0.00050	0.000050	<0.00050	9755168	<0.00050	0.00050	0.000050	9755168
Dissolved Molybdenum (Mo)	mg/L	0.00089	0.00050	0.000070	0.0060	9755168	0.0060	0.00050	0.000070	9755168
Dissolved Nickel (Ni)	mg/L	0.0023	0.0010	0.00040	<0.0010	9755168	<0.0010	0.0010	0.00040	9755168
Dissolved Selenium (Se)	mg/L	<0.0020	0.0020	0.00020	<0.0020	9755168	<0.0020	0.0020	0.00020	9755168
Dissolved Silver (Ag)	mg/L	<0.000090	0.000090	0.000020	<0.000090	9755168	<0.000090	0.000090	0.000020	9755168
Dissolved Sodium (Na)	mg/L	430	0.10	0.020	950	9755168	950	0.50	0.10	9755168
Dissolved Thallium (Tl)	mg/L	<0.000050	0.000050	0.000020	<0.000050	9755168	<0.000050	0.000050	0.000020	9755168
Dissolved Uranium (U)	mg/L	0.0020	0.00010	0.000010	0.00020	9755168	0.00020	0.00010	0.000010	9755168
Dissolved Vanadium (V)	mg/L	0.00063	0.00050	0.000090	0.0011	9755168	0.0010	0.00050	0.000090	9755168
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	0.0010	<0.0050	9755168	<0.0050	0.0050	0.0010	9755168

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 METALS & INORGANICS PKG (WTR)

<b>Bureau Veritas ID</b>		AIFD25				AIFD25			
<b>Sampling Date</b>		2024/11/06 10:00				2024/11/06 10:00			
<b>COC Number</b>		1021273-04-01				1021273-04-01			
	<b>UNITS</b>	<b>MW5</b>	<b>RDL</b>	<b>MDL</b>	<b>QC Batch</b>	<b>MW5 Lab-Dup</b>	<b>RDL</b>	<b>MDL</b>	<b>QC Batch</b>
<b>Inorganics</b>									
WAD Cyanide (Free)	ug/L	<1	1	0.2	9757652				
Dissolved Chloride (Cl-)	mg/L	630	6.0	4.0	9756113				
<b>Metals</b>									
Chromium (VI)	ug/L	<0.50	0.50	0.30	9759381				
Mercury (Hg)	ug/L	<0.10	0.10	0.020	9758001				
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	0.00020	9755168	<0.00050	0.00050	0.00020	9755168
Dissolved Arsenic (As)	mg/L	<0.0010	0.0010	0.00010	9755168	<0.0010	0.0010	0.00010	9755168
Dissolved Barium (Ba)	mg/L	0.15	0.0020	0.00030	9755168	0.15	0.0020	0.00030	9755168
Dissolved Beryllium (Be)	mg/L	<0.00040	0.00040	0.000050	9755168	<0.00040	0.00040	0.000050	9755168
Dissolved Boron (B)	mg/L	0.038	0.010	0.00060	9755168	0.038	0.010	0.00060	9755168
Dissolved Cadmium (Cd)	mg/L	<0.000090	0.000090	0.000090	9755168	<0.000090	0.000090	0.000090	9755168
Dissolved Chromium (Cr)	mg/L	<0.0050	0.0050	0.00070	9755168	<0.0050	0.0050	0.00070	9755168
Dissolved Cobalt (Co)	mg/L	0.0049	0.00050	0.000040	9755168	0.0049	0.00050	0.000040	9755168
Dissolved Copper (Cu)	mg/L	<0.00090	0.00090	0.00030	9755168	<0.00090	0.00090	0.00030	9755168
Dissolved Lead (Pb)	mg/L	<0.00050	0.00050	0.000050	9755168	<0.00050	0.00050	0.000050	9755168
Dissolved Molybdenum (Mo)	mg/L	0.0038	0.00050	0.000070	9755168	0.0037	0.00050	0.000070	9755168
Dissolved Nickel (Ni)	mg/L	0.0026	0.0010	0.00040	9755168	0.0023	0.0010	0.00040	9755168
Dissolved Selenium (Se)	mg/L	<0.0020	0.0020	0.00020	9755168	<0.0020	0.0020	0.00020	9755168
Dissolved Silver (Ag)	mg/L	<0.000090	0.000090	0.000020	9755168	<0.000090	0.000090	0.000020	9755168
Dissolved Sodium (Na)	mg/L	290	0.10	0.020	9755168	300	0.10	0.020	9755168
Dissolved Thallium (Tl)	mg/L	<0.000050	0.000050	0.000020	9755168	<0.000050	0.000050	0.000020	9755168
Dissolved Uranium (U)	mg/L	0.00071	0.00010	0.000010	9755168	0.00070	0.00010	0.000010	9755168
Dissolved Vanadium (V)	mg/L	0.00056	0.00050	0.000090	9755168	0.00053	0.00050	0.000090	9755168
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	0.0010	9755168	<0.0050	0.0050	0.0010	9755168
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
Lab-Dup = Laboratory Initiated Duplicate									



Bureau Veritas Job #: C4Z1246

Report Date: 2024/11/14

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: AS

## O.REG 153 METALS &amp; INORGANICS PKG (WTR)

Bureau Veritas ID		AIFD26				AIFD27			
Sampling Date		2024/11/06 12:35				2024/11/06 11:30			
COC Number		1021273-04-01				1021273-04-01			
	UNITS	MW12	RDL	MDL	QC Batch	MW10	RDL	MDL	QC Batch
<b>Inorganics</b>									
WAD Cyanide (Free)	ug/L	<1	1	0.2	9757652	<1	1	0.2	9757654
Dissolved Chloride (Cl-)	mg/L	38	1.0	0.66	9756113	2300	20	13	9756113
<b>Metals</b>									
Chromium (VI)	ug/L	<0.50	0.50	0.30	9759381	<1.0 (1)	1.0	0.60	9759381
Mercury (Hg)	ug/L	<0.10	0.10	0.020	9758001	<0.10	0.10	0.020	9758001
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	0.00020	9755168	<0.00050	0.00050	0.00020	9755168
Dissolved Arsenic (As)	mg/L	<0.0010	0.0010	0.00010	9755168	0.0033	0.0010	0.00010	9755168
Dissolved Barium (Ba)	mg/L	0.15	0.0020	0.00030	9755168	0.52	0.0020	0.00030	9755168
Dissolved Beryllium (Be)	mg/L	<0.00040	0.00040	0.000050	9755168	<0.00040	0.00040	0.000050	9755168
Dissolved Boron (B)	mg/L	0.014	0.010	0.00060	9755168	0.062	0.010	0.00060	9755168
Dissolved Cadmium (Cd)	mg/L	<0.000090	0.000090	0.000090	9755168	<0.000090	0.000090	0.000090	9755168
Dissolved Chromium (Cr)	mg/L	<0.0050	0.0050	0.00070	9755168	<0.0050	0.0050	0.00070	9755168
Dissolved Cobalt (Co)	mg/L	<0.00050	0.00050	0.000040	9755168	0.0013	0.00050	0.000040	9755168
Dissolved Copper (Cu)	mg/L	<0.00090	0.00090	0.00030	9755168	<0.00090	0.00090	0.00030	9755168
Dissolved Lead (Pb)	mg/L	<0.00050	0.00050	0.000050	9755168	<0.00050	0.00050	0.000050	9755168
Dissolved Molybdenum (Mo)	mg/L	0.00061	0.00050	0.000070	9755168	0.0036	0.00050	0.000070	9755168
Dissolved Nickel (Ni)	mg/L	<0.0010	0.0010	0.00040	9755168	0.0012	0.0010	0.00040	9755168
Dissolved Selenium (Se)	mg/L	<0.0020	0.0020	0.00020	9755168	<0.0020	0.0020	0.00020	9755168
Dissolved Silver (Ag)	mg/L	<0.000090	0.000090	0.000020	9755168	<0.000090	0.000090	0.000020	9755168
Dissolved Sodium (Na)	mg/L	9.5	0.10	0.020	9755168	720	0.50	0.10	9755168
Dissolved Thallium (Tl)	mg/L	<0.000050	0.000050	0.000020	9755168	<0.000050	0.000050	0.000020	9755168
Dissolved Uranium (U)	mg/L	<0.00010	0.00010	0.000010	9755168	0.00020	0.00010	0.000010	9755168
Dissolved Vanadium (V)	mg/L	0.00092	0.00050	0.000090	9755168	0.00057	0.00050	0.000090	9755168
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	0.0010	9755168	<0.0050	0.0050	0.0010	9755168
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									
(1) Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.									



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 METALS & INORGANICS PKG (WTR)

<b>Bureau Veritas ID</b>		AIFD28			
<b>Sampling Date</b>		2024/11/06 11:55			
<b>COC Number</b>		1021273-04-01			
	<b>UNITS</b>	<b>MW9</b>	<b>RDL</b>	<b>MDL</b>	<b>QC Batch</b>
<b>Inorganics</b>					
WAD Cyanide (Free)	ug/L	<1	1	0.2	9757654
Dissolved Chloride (Cl-)	mg/L	490	5.0	3.3	9756113
<b>Metals</b>					
Chromium (VI)	ug/L	<0.50	0.50	0.30	9759381
Mercury (Hg)	ug/L	<0.10	0.10	0.020	9758001
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	0.00020	9755168
Dissolved Arsenic (As)	mg/L	0.0020	0.0010	0.00010	9755168
Dissolved Barium (Ba)	mg/L	0.32	0.0020	0.00030	9755168
Dissolved Beryllium (Be)	mg/L	<0.00040	0.00040	0.000050	9755168
Dissolved Boron (B)	mg/L	0.045	0.010	0.00060	9755168
Dissolved Cadmium (Cd)	mg/L	<0.000090	0.000090	0.000090	9755168
Dissolved Chromium (Cr)	mg/L	<0.0050	0.0050	0.00070	9755168
Dissolved Cobalt (Co)	mg/L	<0.00050	0.00050	0.000040	9755168
Dissolved Copper (Cu)	mg/L	<0.000090	0.000090	0.000030	9755168
Dissolved Lead (Pb)	mg/L	<0.00050	0.00050	0.000050	9755168
Dissolved Molybdenum (Mo)	mg/L	0.0021	0.00050	0.000070	9755168
Dissolved Nickel (Ni)	mg/L	<0.0010	0.0010	0.00040	9755168
Dissolved Selenium (Se)	mg/L	<0.0020	0.0020	0.00020	9755168
Dissolved Silver (Ag)	mg/L	<0.000090	0.000090	0.000020	9755168
Dissolved Sodium (Na)	mg/L	220	0.10	0.020	9755168
Dissolved Thallium (Tl)	mg/L	<0.000050	0.000050	0.000020	9755168
Dissolved Uranium (U)	mg/L	0.00054	0.00010	0.000010	9755168
Dissolved Vanadium (V)	mg/L	<0.00050	0.00050	0.000090	9755168
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	0.0010	9755168
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 PAHS (WATER)

Bureau Veritas ID		AIFD17		AIFD18		AIFD20			
Sampling Date		2024/11/05 15:05		2024/11/05 14:05		2024/11/05 13:05			
COC Number		1021273-04-01		1021273-04-01		1021273-04-01			
	UNITS	MW2	QC Batch	MW3	QC Batch	MW6	RDL	MDL	QC Batch
<b>Calculated Parameters</b>									
Methylnaphthalene, 2-(1-)	ug/L	<0.071	9753939	<0.071	9753939	<0.071	0.071	N/A	9753939
<b>Polyaromatic Hydrocarbons</b>									
Acenaphthene	ug/L	<0.050	9758371	0.051	9762816	0.050	0.050	0.0030	9758371
Acenaphthylene	ug/L	<0.050	9758371	<0.050	9762816	<0.050	0.050	0.0030	9758371
Anthracene	ug/L	<0.050	9758371	<0.050	9762816	<0.050	0.050	0.0030	9758371
Benzo(a)anthracene	ug/L	<0.050	9758371	<0.050	9762816	<0.050	0.050	0.0030	9758371
Benzo(a)pyrene	ug/L	<0.0090	9758371	0.0096	9762816	0.065	0.0090	0.0030	9758371
Benzo(b/j)fluoranthene	ug/L	<0.050	9758371	<0.050	9762816	0.064	0.050	0.0030	9758371
Benzo(g,h,i)perylene	ug/L	<0.050	9758371	<0.050	9762816	0.070	0.050	0.0030	9758371
Benzo(k)fluoranthene	ug/L	<0.050	9758371	<0.050	9762816	<0.050	0.050	0.0030	9758371
Chrysene	ug/L	<0.050	9758371	<0.050	9762816	<0.050	0.050	0.0030	9758371
Dibenzo(a,h)anthracene	ug/L	<0.050	9758371	<0.050	9762816	<0.050	0.050	0.0030	9758371
Fluoranthene	ug/L	<0.050	9758371	<0.050	9762816	0.076	0.050	0.0030	9758371
Fluorene	ug/L	<0.050	9758371	<0.050	9762816	<0.050	0.050	0.0030	9758371
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	9758371	<0.050	9762816	0.058	0.050	0.0030	9758371
1-Methylnaphthalene	ug/L	<0.050	9758371	<0.050	9762816	0.057	0.050	0.0030	9758371
2-Methylnaphthalene	ug/L	<0.050	9758371	<0.050	9762816	<0.050	0.050	0.0030	9758371
Naphthalene	ug/L	0.16	9758371	<0.050	9762816	0.083	0.050	0.0030	9758371
Phenanthrene	ug/L	0.035	9758371	<0.030	9762816	0.15	0.030	0.0030	9758371
Pyrene	ug/L	<0.050	9758371	<0.050	9762816	0.073	0.050	0.0030	9758371
<b>Surrogate Recovery (%)</b>									
D10-Anthracene	%	96	9758371	107	9762816	107			9758371
D14-Terphenyl (FS)	%	98	9758371	110	9762816	110			9758371
D8-Acenaphthylene	%	90	9758371	102	9762816	94			9758371

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable



Bureau Veritas Job #: C4Z1246

Report Date: 2024/11/14

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: AS

**O.REG 153 PAHS (WATER)**

Bureau Veritas ID		AIFD20				AIFD21	AIFD22			
Sampling Date		2024/11/05 13:05				2024/11/05 12:05	2024/11/06 10:45			
COC Number		1021273-04-01				1021273-04-01	1021273-04-01			
	UNITS	MW6 Lab-Dup	RDL	MDL	QC Batch	MW7	MW1	RDL	MDL	QC Batch

**Calculated Parameters**

Methylnaphthalene, 2-(1-)	ug/L				<0.071	<0.071	0.071	N/A	9753939
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**Polyaromatic Hydrocarbons**

Acenaphthene	ug/L	0.053	0.050	0.0030	9758371	<0.050	<0.050	0.050	0.0030	9758371
Acenaphthylene	ug/L	<0.050	0.050	0.0030	9758371	<0.050	<0.050	0.050	0.0030	9758371
Anthracene	ug/L	<0.050	0.050	0.0030	9758371	<0.050	<0.050	0.050	0.0030	9758371
Benzo(a)anthracene	ug/L	<0.050	0.050	0.0030	9758371	<0.050	<0.050	0.050	0.0030	9758371
Benzo(a)pyrene	ug/L	0.061	0.0090	0.0030	9758371	<0.0090	<0.0090	0.0090	0.0030	9758371
Benzo(b/j)fluoranthene	ug/L	0.059	0.050	0.0030	9758371	<0.050	<0.050	0.050	0.0030	9758371
Benzo(g,h,i)perylene	ug/L	0.056	0.050	0.0030	9758371	<0.050	<0.050	0.050	0.0030	9758371
Benzo(k)fluoranthene	ug/L	<0.050	0.050	0.0030	9758371	<0.050	<0.050	0.050	0.0030	9758371
Chrysene	ug/L	<0.050	0.050	0.0030	9758371	<0.050	<0.050	0.050	0.0030	9758371
Dibenzo(a,h)anthracene	ug/L	<0.050	0.050	0.0030	9758371	<0.050	<0.050	0.050	0.0030	9758371
Fluoranthene	ug/L	0.080	0.050	0.0030	9758371	<0.050	<0.050	0.050	0.0030	9758371
Fluorene	ug/L	<0.050	0.050	0.0030	9758371	<0.050	<0.050	0.050	0.0030	9758371
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	0.050	0.0030	9758371	<0.050	<0.050	0.050	0.0030	9758371
1-Methylnaphthalene	ug/L	0.058	0.050	0.0030	9758371	<0.050	<0.050	0.050	0.0030	9758371
2-Methylnaphthalene	ug/L	<0.050	0.050	0.0030	9758371	<0.050	<0.050	0.050	0.0030	9758371
Naphthalene	ug/L	0.083	0.050	0.0030	9758371	<0.050	<0.050	0.050	0.0030	9758371
Phenanthrene	ug/L	0.15	0.030	0.0030	9758371	<0.030	<0.030	0.030	0.0030	9758371
Pyrene	ug/L	0.077	0.050	0.0030	9758371	<0.050	0.092	0.050	0.0030	9758371

**Surrogate Recovery (%)**

D10-Anthracene	%	97			9758371	92	95			9758371
D14-Terphenyl (FS)	%	100			9758371	91	98			9758371
D8-Acenaphthylene	%	91			9758371	88	89			9758371

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

N/A = Not Applicable



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 PAHS (WATER)

Bureau Veritas ID		AIFD23	AIFD24	AIFD25		AIFD26			
Sampling Date		2024/11/06 13:10	2024/11/06	2024/11/06 10:00		2024/11/06 12:35			
COC Number		1021273-04-01	1021273-04-01	1021273-04-01		1021273-04-01			
	UNITS	MW4	QC-01	MW5	QC Batch	MW12	RDL	MDL	QC Batch
<b>Calculated Parameters</b>									
Methylnaphthalene, 2-(1-)	ug/L	0.68	0.69	<0.071	9753939	<0.071	0.071	N/A	9753939
<b>Polyaromatic Hydrocarbons</b>									
Acenaphthene	ug/L	0.40	0.40	<0.050	9761914	<0.050	0.050	0.0030	9758371
Acenaphthylene	ug/L	0.065	0.059	<0.050	9761914	<0.050	0.050	0.0030	9758371
Anthracene	ug/L	0.13	0.12	<0.050	9761914	<0.050	0.050	0.0030	9758371
Benzo(a)anthracene	ug/L	<0.050	<0.050	<0.050	9761914	<0.050	0.050	0.0030	9758371
Benzo(a)pyrene	ug/L	0.042	0.042	0.021	9761914	<0.0090	0.0090	0.0030	9758371
Benzo(b/j)fluoranthene	ug/L	<0.050	<0.050	<0.050	9761914	<0.050	0.050	0.0030	9758371
Benzo(g,h,i)perylene	ug/L	<0.050	<0.050	<0.050	9761914	<0.050	0.050	0.0030	9758371
Benzo(k)fluoranthene	ug/L	<0.050	<0.050	<0.050	9761914	<0.050	0.050	0.0030	9758371
Chrysene	ug/L	<0.050	<0.050	<0.050	9761914	<0.050	0.050	0.0030	9758371
Dibeno(a,h)anthracene	ug/L	<0.050	<0.050	<0.050	9761914	<0.050	0.050	0.0030	9758371
Fluoranthene	ug/L	0.26	0.28	<0.050	9761914	<0.050	0.050	0.0030	9758371
Fluorene	ug/L	0.62	0.61	<0.050	9761914	<0.050	0.050	0.0030	9758371
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	<0.050	<0.050	9761914	<0.050	0.050	0.0030	9758371
1-Methylnaphthalene	ug/L	0.39	0.40	<0.050	9761914	<0.050	0.050	0.0030	9758371
2-Methylnaphthalene	ug/L	0.29	0.29	<0.050	9761914	<0.050	0.050	0.0030	9758371
Naphthalene	ug/L	2.2	2.2	<0.050	9761914	<0.050	0.050	0.0030	9758371
Phenanthrene	ug/L	1.0	1.0	<0.030	9761914	<0.030	0.030	0.0030	9758371
Pyrene	ug/L	0.18	0.19	<0.050	9761914	<0.050	0.050	0.0030	9758371
<b>Surrogate Recovery (%)</b>									
D10-Anthracene	%	109	109	108	9761914	97			9758371
D14-Terphenyl (FS)	%	103	107	94	9761914	98			9758371
D8-Acenaphthylene	%	106	103	102	9761914	88			9758371

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 PAHS (WATER)

Bureau Veritas ID		AIFD27			AIFD28			
Sampling Date		2024/11/06 11:30			2024/11/06 11:55			
COC Number		1021273-04-01			1021273-04-01			
	UNITS	MW10	RDL	MDL	MW9	RDL	MDL	QC Batch
<b>Calculated Parameters</b>								
Methylnaphthalene, 2-(1-)	ug/L	<0.071	0.071	N/A	<0.071	0.071	N/A	9753939
<b>Polyaromatic Hydrocarbons</b>								
Acenaphthene	ug/L	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
Acenaphthylene	ug/L	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
Anthracene	ug/L	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
Benzo(a)anthracene	ug/l	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
Benzo(a)pyrene	ug/L	<0.0090	0.0090	0.0030	<0.0090	0.0090	0.0030	9758371
Benzo(b/j)fluoranthene	ug/L	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
Benzo(g,h,i)perylene	ug/L	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
Benzo(k)fluoranthene	ug/L	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
Chrysene	ug/L	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
Dibenz(a,h)anthracene	ug/L	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
Fluoranthene	ug/L	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
Fluorene	ug/L	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
Indeno(1,2,3-cd)pyrene	ug/l	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
1-Methylnaphthalene	ug/L	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
2-Methylnaphthalene	ug/L	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
Naphthalene	ug/L	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
Phenanthrene	ug/L	<0.030	0.030	0.0030	<0.20 (1)	0.20	0.020	9758371
Pyrene	ug/L	<0.050	0.050	0.0030	<0.050	0.050	0.0030	9758371
<b>Surrogate Recovery (%)</b>								
D10-Anthracene	%	97			99			9758371
D14-Terphenyl (FS)	%	100			104			9758371
D8-Acenaphthylene	%	90			91			9758371

RDL = Reportable Detection Limit  
QC Batch = Quality Control Batch  
N/A = Not Applicable  
(1) Detection Limit was raised due to matrix interferences.



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 VOCs BY HS & F1-F4 (WATER)

Bureau Veritas ID		AIFD17			AIFD18	AIFD20			
Sampling Date		2024/11/05 15:05			2024/11/05 14:05	2024/11/05 13:05			
COC Number		1021273-04-01			1021273-04-01	1021273-04-01			
	UNITS	MW2	RDL	MDL	MW3	MW6	RDL	MDL	QC Batch
<b>Calculated Parameters</b>									
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	0.50	<0.50	<0.50	0.50	0.50	9753940
<b>Volatile Organics</b>									
Acetone (2-Propanone)	ug/L	<10	10	1.0	13	<10	10	1.0	9754785
Benzene	ug/L	<0.17	0.17	0.020	<0.17	0.30	0.17	0.020	9754785
Bromodichloromethane	ug/L	<0.50	0.50	0.050	<0.50	<0.50	0.50	0.050	9754785
Bromoform	ug/L	<1.0	1.0	0.10	<1.0	<1.0	1.0	0.10	9754785
Bromomethane	ug/L	<0.50	0.50	0.10	<0.50	<0.50	0.50	0.10	9754785
Carbon Tetrachloride	ug/L	<0.20	0.20	0.050	<0.20	<0.20	0.20	0.050	9754785
Chlorobenzene	ug/L	<0.20	0.20	0.010	<0.20	<0.20	0.20	0.010	9754785
Chloroform	ug/L	<0.30 (1)	0.30	0.075	<0.20	<0.20	0.20	0.050	9754785
Dibromochloromethane	ug/L	<0.50	0.50	0.050	<0.50	<0.50	0.50	0.050	9754785
1,2-Dichlorobenzene	ug/L	<0.50	0.50	0.050	<0.50	<0.50	0.50	0.050	9754785
1,3-Dichlorobenzene	ug/L	<0.50	0.50	0.050	<0.50	<0.50	0.50	0.050	9754785
1,4-Dichlorobenzene	ug/L	<0.50	0.50	0.050	<0.50	<0.50	0.50	0.050	9754785
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	0.050	<1.0	<1.0	1.0	0.050	9754785
1,1-Dichloroethane	ug/L	<0.20	0.20	0.050	<0.20	<0.20	0.20	0.050	9754785
1,2-Dichloroethane	ug/L	<0.50	0.50	0.020	<0.50	<0.50	0.50	0.020	9754785
1,1-Dichloroethylene	ug/L	<0.20	0.20	0.050	<0.20	<0.20	0.20	0.050	9754785
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	0.050	<0.50	<0.50	0.50	0.050	9754785
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	0.050	<0.50	<0.50	0.50	0.050	9754785
1,2-Dichloropropane	ug/L	<0.20	0.20	0.050	<0.20	<0.20	0.20	0.050	9754785
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	0.050	<0.30	<0.30	0.30	0.050	9754785
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	0.050	<0.40	<0.40	0.40	0.050	9754785
Ethylbenzene	ug/L	<0.20	0.20	0.010	<0.20	<0.20	0.20	0.010	9754785
Ethylene Dibromide	ug/L	<0.20	0.20	0.050	<0.20	<0.20	0.20	0.050	9754785
Hexane	ug/L	<1.0	1.0	0.10	<1.0	<1.0	1.0	0.10	9754785
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	0.10	<2.0	<2.0	2.0	0.10	9754785
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	10	0.50	<10	<10	10	0.50	9754785
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	0.10	<5.0	<5.0	5.0	0.10	9754785
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	0.050	<0.50	<0.50	0.50	0.050	9754785
Styrene	ug/L	<0.50	0.50	0.050	<0.50	<0.50	0.50	0.050	9754785

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

(1) The detection limit was raised due to matrix interference.

BUREAU  
VERITAS

Bureau Veritas Job #: C4Z1246

Report Date: 2024/11/14

Stantec Consulting Ltd

Client Project #: 122140392

Sampler Initials: AS

**O.REG 153 VOCs BY HS & F1-F4 (WATER)**

Bureau Veritas ID		AIFD17		AIFD18	AIFD20				
Sampling Date		2024/11/05 15:05		2024/11/05 14:05	2024/11/05 13:05				
COC Number		1021273-04-01		1021273-04-01	1021273-04-01				
	UNITS	MW2	RDL	MDL	MW3	MW6	RDL		
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	0.050	<0.50	<0.50	0.50	0.050	9754785
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	0.050	<0.50	<0.50	0.50	0.050	9754785
Tetrachloroethylene	ug/L	<0.20	0.20	0.050	<0.20	<0.20	0.20	0.050	9754785
Toluene	ug/L	0.37	0.20	0.010	<0.20	0.29	0.20	0.010	9754785
1,1,1-Trichloroethane	ug/L	<0.20	0.20	0.050	<0.20	<0.20	0.20	0.050	9754785
1,1,2-Trichloroethane	ug/L	<0.50	0.50	0.050	<0.50	<0.50	0.50	0.050	9754785
Trichloroethylene	ug/L	<0.20	0.20	0.050	<0.20	<0.20	0.20	0.050	9754785
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	0.10	<0.50	<0.50	0.50	0.10	9754785
Vinyl Chloride	ug/L	<0.20	0.20	0.050	<0.20	<0.20	0.20	0.050	9754785
p+m-Xylene	ug/L	0.22	0.20	0.010	<0.20	0.41	0.20	0.010	9754785
o-Xylene	ug/L	<0.20	0.20	0.010	<0.20	<0.20	0.20	0.010	9754785
Total Xylenes	ug/L	0.22	0.20	0.010	<0.20	0.41	0.20	0.010	9754785
F1 (C6-C10)	ug/L	<25	25	20	<25	46	25	20	9754785
F1 (C6-C10) - BTEX	ug/L	<25	25	20	<25	45	25	20	9754785
<b>F2-F4 Hydrocarbons</b>									
F2 (C10-C16 Hydrocarbons)	ug/L	<90	90	50	<90	<90	90	50	9758370
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	70	<200	<200	200	70	9758370
F4 (C34-C50 Hydrocarbons)	ug/l	<200	200	50	<200	<200	200	50	9758370
Reached Baseline at C50	ug/L	Yes			Yes	Yes			9758370
<b>Surrogate Recovery (%)</b>									
o-Terphenyl	%	110			105	105			9758370
4-Bromofluorobenzene	%	99			98	99			9754785
D4-1,2-Dichloroethane	%	105			107	106			9754785
D8-Toluene	%	92			92	93			9754785

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 VOCs BY HS & F1-F4 (WATER)

<b>Bureau Veritas ID</b>		AIFD20			AIFD21	AIFD22				
<b>Sampling Date</b>		2024/11/05 13:05			2024/11/05 12:05	2024/11/06 10:45				
<b>COC Number</b>		1021273-04-01			1021273-04-01	1021273-04-01				
	<b>UNITS</b>	<b>MW6 Lab-Dup</b>	<b>RDL</b>	<b>MDL</b>	<b>QC Batch</b>	<b>MW7</b>	<b>MW1</b>	<b>RDL</b>	<b>MDL</b>	<b>QC Batch</b>

#### Calculated Parameters

1,3-Dichloropropene (cis+trans)	ug/L				<0.50	<0.50	0.50	0.50	9753940
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#### Volatile Organics

Acetone (2-Propanone)	ug/L				<10	<10	10	1.0	9754785
Benzene	ug/L				<0.17	<0.17	0.17	0.020	9754785
Bromodichloromethane	ug/L				<0.50	<0.50	0.50	0.050	9754785
Bromoform	ug/L				<1.0	<1.0	1.0	0.10	9754785
Bromomethane	ug/L				<0.50	<0.50	0.50	0.10	9754785
Carbon Tetrachloride	ug/L				<0.20	<0.20	0.20	0.050	9754785
Chlorobenzene	ug/L				<0.20	<0.20	0.20	0.010	9754785
Chloroform	ug/L				0.20	<0.20	0.20	0.050	9754785
Dibromochloromethane	ug/L				<0.50	<0.50	0.50	0.050	9754785
1,2-Dichlorobenzene	ug/L				<0.50	<0.50	0.50	0.050	9754785
1,3-Dichlorobenzene	ug/L				<0.50	<0.50	0.50	0.050	9754785
1,4-Dichlorobenzene	ug/L				<0.50	<0.50	0.50	0.050	9754785
Dichlorodifluoromethane (FREON 12)	ug/L				<1.0	<1.0	1.0	0.050	9754785
1,1-Dichloroethane	ug/L				<0.20	<0.20	0.20	0.050	9754785
1,2-Dichloroethane	ug/L				<0.50	<0.50	0.50	0.020	9754785
1,1-Dichloroethylene	ug/L				<0.20	<0.20	0.20	0.050	9754785
cis-1,2-Dichloroethylene	ug/L				<0.50	<0.50	0.50	0.050	9754785
trans-1,2-Dichloroethylene	ug/L				<0.50	<0.50	0.50	0.050	9754785
1,2-Dichloropropane	ug/L				<0.20	<0.20	0.20	0.050	9754785
cis-1,3-Dichloropropene	ug/L				<0.30	<0.30	0.30	0.050	9754785
trans-1,3-Dichloropropene	ug/L				<0.40	<0.40	0.40	0.050	9754785
Ethylbenzene	ug/L				<0.20	<0.20	0.20	0.010	9754785
Ethylene Dibromide	ug/L				<0.20	<0.20	0.20	0.050	9754785
Hexane	ug/L				<1.0	<1.0	1.0	0.10	9754785
Methylene Chloride(Dichloromethane)	ug/L				<2.0	<2.0	2.0	0.10	9754785
Methyl Ethyl Ketone (2-Butanone)	ug/L				<10	<10	10	0.50	9754785
Methyl Isobutyl Ketone	ug/L				<5.0	<5.0	5.0	0.10	9754785
Methyl t-butyl ether (MTBE)	ug/L				<0.50	<0.50	0.50	0.050	9754785
Styrene	ug/L				<0.50	<0.50	0.50	0.050	9754785

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 VOCs BY HS & F1-F4 (WATER)

Bureau Veritas ID		AIFD20			AIFD21	AIFD22		
Sampling Date		2024/11/05 13:05			2024/11/05 12:05	2024/11/06 10:45		
COC Number		1021273-04-01			1021273-04-01	1021273-04-01		
	UNITS	MW6 Lab-Dup	RDL	MDL	QC Batch	MW7	MW1	RDL
1,1,1,2-Tetrachloroethane	ug/L				<0.50	<0.50	0.50	0.050
1,1,2,2-Tetrachloroethane	ug/L				<0.50	<0.50	0.50	0.050
Tetrachloroethylene	ug/L				<0.20	<0.20	0.20	0.050
Toluene	ug/L				<0.20	<0.20	0.20	0.010
1,1,1-Trichloroethane	ug/L				<0.20	<0.20	0.20	0.050
1,1,2-Trichloroethane	ug/L				<0.50	<0.50	0.50	0.050
Trichloroethylene	ug/L				<0.20	<0.20	0.20	0.050
Trichlorofluoromethane (FREON 11)	ug/L				<0.50	<0.50	0.50	0.10
Vinyl Chloride	ug/L				<0.20	<0.20	0.20	0.050
p+m-Xylene	ug/L				<0.20	<0.20	0.20	0.010
o-Xylene	ug/L				<0.20	<0.20	0.20	0.010
Total Xylenes	ug/L				<0.20	<0.20	0.20	0.010
F1 (C6-C10)	ug/L				<25	<25	25	20
F1 (C6-C10) - NTGX	ug/L				<25	<25	25	20
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/L	<90	90	50	9758370	<90	<90	90
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	70	9758370	<200	<200	200
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	50	9758370	<200	<200	200
Reached Baseline at C50	ug/L	Yes			9758370	Yes	Yes	
Surrogate Recovery (%)								
o-Terphenyl	%	111			9758370	111	106	
4-Bromofluorobenzene	%					99	98	
D4-1,2-Dichloroethane	%					108	108	
D8-Toluene	%					91	92	

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate



Bureau Veritas Job #: C4Z1246

Report Date: 2024/11/14

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: AS

**O.REG 153 VOCs BY HS & F1-F4 (WATER)**

Bureau Veritas ID		AIFD23	AIFD24	AIFD25	AIFD26			
Sampling Date		2024/11/06 13:10	2024/11/06	2024/11/06 10:00	2024/11/06 12:35			
COC Number		1021273-04-01	1021273-04-01	1021273-04-01	1021273-04-01			
	UNITS	MW4	QC-01	MW5	MW12	RDL	MDL	QC Batch
<b>Calculated Parameters</b>								
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.50	9753940
<b>Volatile Organics</b>								
Acetone (2-Propanone)	ug/L	<10	<10	<10	<10	10	1.0	9754785
Benzene	ug/L	0.60	0.60	<0.17	<0.17	0.17	0.020	9754785
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.050	9754785
Bromoform	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	0.10	9754785
Bromomethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.10	9754785
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	0.050	9754785
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	0.010	9754785
Chloroform	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	0.050	9754785
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.050	9754785
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.050	9754785
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.050	9754785
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.050	9754785
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	0.050	9754785
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	0.050	9754785
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.020	9754785
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	0.050	9754785
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.050	9754785
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.050	9754785
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	0.050	9754785
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	<0.30	0.30	0.050	9754785
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	0.050	9754785
Ethylbenzene	ug/L	0.28	0.28	<0.20	<0.20	0.20	0.010	9754785
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	0.050	9754785
Hexane	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	0.10	9754785
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	0.10	9754785
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	<10	10	0.50	9754785
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	0.10	9754785
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.050	9754785
Styrene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.050	9754785

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 VOCs BY HS & F1-F4 (WATER)

Bureau Veritas ID		AIFD23	AIFD24	AIFD25	AIFD26			
Sampling Date		2024/11/06 13:10	2024/11/06	2024/11/06 10:00	2024/11/06 12:35			
COC Number		1021273-04-01	1021273-04-01	1021273-04-01	1021273-04-01			
	UNITS	MW4	QC-01	MW5	MW12	RDL	MDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.050	9754785
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.050	9754785
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	0.050	9754785
Toluene	ug/L	0.50	0.51	<0.20	<0.20	0.20	0.010	9754785
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	0.050	9754785
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.050	9754785
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	0.050	9754785
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	0.10	9754785
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	0.050	9754785
p+m-Xylene	ug/L	2.3	2.3	<0.20	<0.20	0.20	0.010	9754785
o-Xylene	ug/L	0.23	0.23	<0.20	<0.20	0.20	0.010	9754785
Total Xylenes	ug/L	2.5	2.5	<0.20	<0.20	0.20	0.010	9754785
F1 (C6-C10)	ug/L	30	36	<25	<25	25	20	9754785
F1 (C6-C10) - BTEX	ug/L	26	32	<25	<25	25	20	9754785
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/L	<90	<90	<90	<90	90	50	9758370
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	<200	200	70	9758370
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	<200	200	50	9758370
Reached Baseline at C50	ug/L	Yes	Yes	Yes	Yes			9758370
Surrogate Recovery (%)								
o-Terphenyl	%	112	110	112	112			9758370
4-Bromofluorobenzene	%	98	98	98	99			9754785
D4-1,2-Dichloroethane	%	106	105	108	107			9754785
D8-Toluene	%	93	93	92	92			9754785
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 VOCs BY HS & F1-F4 (WATER)

Bureau Veritas ID		AIFD27	AIFD28				AIFD30			
Sampling Date		2024/11/06 11:30	2024/11/06 11:55				2024/11/06			
COC Number		1021273-04-01	1021273-04-01				1021273-04-01			
	UNITS	MW10	MW9	RDL	MDL	QC Batch	TRIP BLANK	RDL	MDL	QC Batch
<b>Calculated Parameters</b>										
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	0.50	0.50	9753940	<0.50	0.50	0.50	9753940
<b>Volatile Organics</b>										
Acetone (2-Propanone)	ug/L	<10	<10	10	1.0	9754785	<10	10	1.0	9754785
Benzene	ug/L	<0.17	<0.17	0.17	0.020	9754785	<0.17	0.17	0.020	9754785
Bromodichloromethane	ug/L	<0.50	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
Bromoform	ug/L	<1.0	<1.0	1.0	0.10	9754785	<1.0	1.0	0.10	9754785
Bromomethane	ug/L	<0.50	<0.50	0.50	0.10	9754785	<0.50	0.50	0.10	9754785
Carbon Tetrachloride	ug/L	<0.20	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
Chlorobenzene	ug/L	<0.20	<0.20	0.20	0.010	9754785	<0.20	0.20	0.010	9754785
Chloroform	ug/L	<0.20	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
Dibromochloromethane	ug/L	<0.50	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	1.0	0.050	9754785	<1.0	1.0	0.050	9754785
1,1-Dichloroethane	ug/L	<0.20	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
1,2-Dichloroethane	ug/L	<0.50	<0.50	0.50	0.020	9754785	<0.50	0.50	0.020	9754785
1,1-Dichloroethylene	ug/L	<0.20	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
1,2-Dichloropropane	ug/L	<0.20	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	0.30	0.050	9754785	<0.30	0.30	0.050	9754785
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	0.40	0.050	9754785	<0.40	0.40	0.050	9754785
Ethylbenzene	ug/L	<0.20	<0.20	0.20	0.010	9754785	<0.20	0.20	0.010	9754785
Ethylene Dibromide	ug/L	<0.20	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
Hexane	ug/L	<1.0	<1.0	1.0	0.10	9754785	<1.0	1.0	0.10	9754785
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	2.0	0.10	9754785	<2.0	2.0	0.10	9754785
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	10	0.50	9754785	<10	10	0.50	9754785
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	5.0	0.10	9754785	<5.0	5.0	0.10	9754785
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
Styrene	ug/L	<0.50	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 VOCs BY HS & F1-F4 (WATER)

Bureau Veritas ID		AIFD27	AIFD28			AIFD30				
Sampling Date		2024/11/06 11:30	2024/11/06 11:55			2024/11/06				
COC Number		1021273-04-01	1021273-04-01			1021273-04-01				
	UNITS	MW10	MW9	RDL	MDL	QC Batch	TRIP BLANK	RDL	MDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
Tetrachloroethylene	ug/L	<0.20	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
Toluene	ug/L	<0.20	1.3	0.20	0.010	9754785	<0.20	0.20	0.010	9754785
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
Trichloroethylene	ug/L	<0.20	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	0.50	0.10	9754785	<0.50	0.50	0.10	9754785
Vinyl Chloride	ug/L	<0.20	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
p+m-Xylene	ug/L	<0.20	<0.20	0.20	0.010	9754785	<0.20	0.20	0.010	9754785
o-Xylene	ug/L	<0.20	<0.20	0.20	0.010	9754785	<0.20	0.20	0.010	9754785
Total Xylenes	ug/L	<0.20	<0.20	0.20	0.010	9754785	<0.20	0.20	0.010	9754785
F1 (C6-C10)	ug/L	<25	<25	25	20	9754785	<25	25	20	9754785
F1 (C6-C10) - BTEX	ug/L	<25	<25	25	20	9754785	<25	25	20	9754785
F2-F4 Hydrocarbons										
F2 (C10-C16 Hydrocarbons)	ug/L	<90	<90	90	50	9758370				
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	200	70	9758370				
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	200	50	9758370				
Reached Baseline at C50	ug/L	Yes	Yes			9758370				
Surrogate Recovery (%)										
o-Terphenyl	%	110	109			9758370				
4-Bromofluorobenzene	%	98	98			9754785	98			9754785
D4-1,2-Dichloroethane	%	109	108			9754785	107			9754785
D8-Toluene	%	92	91			9754785	91			9754785

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 VOCs BY HS & F1-F4 (WATER)

Bureau Veritas ID		AIFF00		<th>AIFF00</th> <td></td> <td></td> <td></td>	AIFF00				
Sampling Date		2024/11/06			2024/11/06				
COC Number		1021273-04-01			1021273-04-01				
	UNITS	QC-02	RDL	MDL	QC Batch	QC-02 Lab-Dup	RDL	MDL	QC Batch
<b>Calculated Parameters</b>									
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	0.50	9753940				
<b>Volatile Organics</b>									
Acetone (2-Propanone)	ug/L	<10	10	1.0	9754785	<10	10	1.0	9754785
Benzene	ug/L	<0.17	0.17	0.020	9754785	<0.17	0.17	0.020	9754785
Bromodichloromethane	ug/L	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
Bromoform	ug/L	<1.0	1.0	0.10	9754785	<1.0	1.0	0.10	9754785
Bromomethane	ug/L	<0.50	0.50	0.10	9754785	<0.50	0.50	0.10	9754785
Carbon Tetrachloride	ug/L	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
Chlorobenzene	ug/L	<0.20	0.20	0.010	9754785	<0.20	0.20	0.010	9754785
Chloroform	ug/L	2.0	0.20	0.050	9754785	2.0	0.20	0.050	9754785
Dibromochloromethane	ug/L	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
1,2-Dichlorobenzene	ug/L	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
1,3-Dichlorobenzene	ug/L	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
1,4-Dichlorobenzene	ug/L	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	0.050	9754785	<1.0	1.0	0.050	9754785
1,1-Dichloroethane	ug/L	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
1,2-Dichloroethane	ug/L	<0.50	0.50	0.020	9754785	<0.50	0.50	0.020	9754785
1,1-Dichloroethylene	ug/L	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
1,2-Dichloropropane	ug/L	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	0.050	9754785	<0.30	0.30	0.050	9754785
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	0.050	9754785	<0.40	0.40	0.050	9754785
Ethylbenzene	ug/L	<0.20	0.20	0.010	9754785	<0.20	0.20	0.010	9754785
Ethylene Dibromide	ug/L	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
Hexane	ug/L	<1.0	1.0	0.10	9754785	<1.0	1.0	0.10	9754785
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	0.10	9754785	<2.0	2.0	0.10	9754785
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	10	0.50	9754785	<10	10	0.50	9754785
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	0.10	9754785	<5.0	5.0	0.10	9754785
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
Styrene	ug/L	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### O.REG 153 VOCs BY HS & F1-F4 (WATER)

Bureau Veritas ID		AIFF00			AIFF00				
Sampling Date		2024/11/06			2024/11/06				
COC Number		1021273-04-01			1021273-04-01				
	UNITS	QC-02	RDL	MDL	QC Batch	QC-02 Lab-Dup	RDL	MDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
Tetrachloroethylene	ug/L	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
Toluene	ug/L	<0.20	0.20	0.010	9754785	<0.20	0.20	0.010	9754785
1,1,1-Trichloroethane	ug/L	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
1,1,2-Trichloroethane	ug/L	<0.50	0.50	0.050	9754785	<0.50	0.50	0.050	9754785
Trichloroethylene	ug/L	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	0.10	9754785	<0.50	0.50	0.10	9754785
Vinyl Chloride	ug/L	<0.20	0.20	0.050	9754785	<0.20	0.20	0.050	9754785
p+m-Xylene	ug/L	<0.20	0.20	0.010	9754785	<0.20	0.20	0.010	9754785
o-Xylene	ug/L	<0.20	0.20	0.010	9754785	<0.20	0.20	0.010	9754785
Total Xylenes	ug/L	<0.20	0.20	0.010	9754785	<0.20	0.20	0.010	9754785
F1 (C6-C10)	ug/L	<25	25	20	9754785	<25	25	20	9754785
F1 (C6-C10) - RTFX	ug/l	<25	25	20	9754785	<25	25	20	9754785
<b>F2-F4 Hydrocarbons</b>									
F2 (C10-C16 Hydrocarbons)	ug/L	<90	90	50	9758370				
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	70	9758370				
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	50	9758370				
Reached Baseline at C50	ug/L	Yes			9758370				
<b>Surrogate Recovery (%)</b>									
o-Terphenyl	%	110			9758370				
4-Bromofluorobenzene	%	98			9754785	100			9754785
D4-1,2-Dichloroethane	%	105			9754785	105			9754785
D8-Toluene	%	92			9754785	93			9754785

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

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Bureau Veritas Job #: C4Z1246

Report Date: 2024/11/14

Stantec Consulting Ltd  
 Client Project #: 122140392  
 Sampler Initials: AS

**TEST SUMMARY**

**Bureau Veritas ID:** AIFD17  
**Sample ID:** MW2  
**Matrix:** Water

**Collected:** 2024/11/05  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9753939	N/A	2024/11/12	Automated Statchk
1,3-Dichloropropene Sum	CALC	9753940	N/A	2024/11/12	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9756113	N/A	2024/11/12	Massarat Jan
Chromium (VI) in Water	IC	9759381	N/A	2024/11/12	Rupinder Sihota
Free (WAD) Cyanide	SKAL/CN	9757652	N/A	2024/11/11	Jency Sara Johnson
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9758370	2024/11/11	2024/11/12	Mohammed Abdul Nafay Shoeb
Mercury	CV/AA	9758001	2024/11/11	2024/11/12	Maitri PATIL
Dissolved Metals by ICPMS	ICP/MS	9755168	N/A	2024/11/11	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9758371	2024/11/11	2024/11/11	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9754785	N/A	2024/11/11	Dina Wang

**Bureau Veritas ID:** AIFD18  
**Sample ID:** MW3  
**Matrix:** Water

**Collected:** 2024/11/05  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9753939	N/A	2024/11/12	Automated Statchk
1,3-Dichloropropene Sum	CALC	9753940	N/A	2024/11/12	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9756113	N/A	2024/11/12	Massarat Jan
Chromium (VI) in Water	IC	9757814	N/A	2024/11/11	Surleen Kaur Romana
Free (WAD) Cyanide	SKAL/CN	9757652	N/A	2024/11/11	Jency Sara Johnson
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9758370	2024/11/11	2024/11/12	Mohammed Abdul Nafay Shoeb
Mercury	CV/AA	9758001	2024/11/11	2024/11/12	Maitri PATIL
Dissolved Metals by ICPMS	ICP/MS	9755168	N/A	2024/11/08	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9762816	2024/11/13	2024/11/14	Jiaxuan (Simon) Xi
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9754785	N/A	2024/11/11	Dina Wang

**Bureau Veritas ID:** AIFD20  
**Sample ID:** MW6  
**Matrix:** Water

**Collected:** 2024/11/05  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9753939	N/A	2024/11/12	Automated Statchk
1,3-Dichloropropene Sum	CALC	9753940	N/A	2024/11/12	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9756113	N/A	2024/11/12	Massarat Jan
Chromium (VI) in Water	IC	9759381	N/A	2024/11/12	Rupinder Sihota
Free (WAD) Cyanide	SKAL/CN	9757652	N/A	2024/11/11	Jency Sara Johnson
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9758370	2024/11/11	2024/11/12	Mohammed Abdul Nafay Shoeb
Mercury	CV/AA	9758001	2024/11/11	2024/11/12	Maitri PATIL
Dissolved Metals by ICPMS	ICP/MS	9755168	N/A	2024/11/11	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9758371	2024/11/11	2024/11/11	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9754785	N/A	2024/11/11	Dina Wang



Bureau Veritas Job #: C4Z1246

Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

**TEST SUMMARY**

**Bureau Veritas ID:** AIFD20 Dup  
**Sample ID:** MW6  
**Matrix:** Water

**Collected:** 2024/11/05  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9758370	2024/11/11	2024/11/12	Mohammed Abdul Nafay Shoeb
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9758371	2024/11/11	2024/11/11	Jonghan Yoon

**Bureau Veritas ID:** AIFD21  
**Sample ID:** MW7  
**Matrix:** Water

**Collected:** 2024/11/05  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9753939	N/A	2024/11/12	Automated Statchk
1,3-Dichloropropene Sum	CALC	9753940	N/A	2024/11/12	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9756205	N/A	2024/11/12	Massarat Jan
Chromium (VI) in Water	IC	9759381	N/A	2024/11/12	Rupinder Sihota
Free (WAD) Cyanide	SKAL/CN	9757652	N/A	2024/11/11	Jency Sara Johnson
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9758370	2024/11/11	2024/11/12	Mohammed Abdul Nafay Shoeb
Mercury	CV/AA	9758001	2024/11/11	2024/11/12	Maitri PATIL
Dissolved Metals by ICPMS	ICP/MS	9755168	N/A	2024/11/12	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9758371	2024/11/11	2024/11/11	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9754785	N/A	2024/11/11	Dina Wang

**Bureau Veritas ID:** AIFD22  
**Sample ID:** MW1  
**Matrix:** Water

**Collected:** 2024/11/06  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9753939	N/A	2024/11/12	Automated Statchk
1,3-Dichloropropene Sum	CALC	9753940	N/A	2024/11/12	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9756113	N/A	2024/11/12	Massarat Jan
Chromium (VI) in Water	IC	9759381	N/A	2024/11/12	Rupinder Sihota
Free (WAD) Cyanide	SKAL/CN	9757652	N/A	2024/11/11	Jency Sara Johnson
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9758370	2024/11/11	2024/11/12	Mohammed Abdul Nafay Shoeb
Mercury	CV/AA	9758001	2024/11/11	2024/11/12	Maitri PATIL
Dissolved Metals by ICPMS	ICP/MS	9755168	N/A	2024/11/11	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9758371	2024/11/11	2024/11/11	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9754785	N/A	2024/11/11	Dina Wang

**Bureau Veritas ID:** AIFD23  
**Sample ID:** MW4  
**Matrix:** Water

**Collected:** 2024/11/06  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9753939	N/A	2024/11/12	Automated Statchk
1,3-Dichloropropene Sum	CALC	9753940	N/A	2024/11/12	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9756113	N/A	2024/11/12	Massarat Jan
Chromium (VI) in Water	IC	9759381	N/A	2024/11/12	Rupinder Sihota
Free (WAD) Cyanide	SKAL/CN	9757652	N/A	2024/11/11	Jency Sara Johnson



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

## TEST SUMMARY

**Bureau Veritas ID:** AIFD23  
**Sample ID:** MW4  
**Matrix:** Water

**Collected:** 2024/11/06  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9758370	2024/11/11	2024/11/12	Mohammed Abdul Nafay Shoeb
Mercury	CV/AA	9758001	2024/11/11	2024/11/12	Maitri PATIL
Dissolved Metals by ICPMS	ICP/MS	9755168	N/A	2024/11/11	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9761914	2024/11/13	2024/11/13	Joe Paino
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9754785	N/A	2024/11/11	Dina Wang

**Bureau Veritas ID:** AIFD24  
**Sample ID:** QC-01  
**Matrix:** Water

**Collected:** 2024/11/06  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9753939	N/A	2024/11/12	Automated Statchk
1,3-Dichloropropene Sum	CALC	9753940	N/A	2024/11/12	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9756113	N/A	2024/11/12	Massarat Jan
Chromium (VI) in Water	IC	9757814	N/A	2024/11/11	Surleen Kaur Romana
Free (WAD) Cyanide	SKAL/CN	9757652	N/A	2024/11/11	Jency Sara Johnson
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9758370	2024/11/11	2024/11/12	Mohammed Abdul Nafay Shoeb
Mercury	CV/AA	9758001	2024/11/11	2024/11/12	Maitri PATIL
Dissolved Metals by ICPMS	ICP/MS	9755168	N/A	2024/11/11	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9761914	2024/11/13	2024/11/13	Joe Paino
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9754785	N/A	2024/11/11	Dina Wang

**Bureau Veritas ID:** AIFD25  
**Sample ID:** MW5  
**Matrix:** Water

**Collected:** 2024/11/06  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9753939	N/A	2024/11/12	Automated Statchk
1,3-Dichloropropene Sum	CALC	9753940	N/A	2024/11/12	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9756113	N/A	2024/11/12	Massarat Jan
Chromium (VI) in Water	IC	9759381	N/A	2024/11/12	Rupinder Sihota
Free (WAD) Cyanide	SKAL/CN	9757652	N/A	2024/11/11	Jency Sara Johnson
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9758370	2024/11/11	2024/11/12	Mohammed Abdul Nafay Shoeb
Mercury	CV/AA	9758001	2024/11/11	2024/11/12	Maitri PATIL
Dissolved Metals by ICPMS	ICP/MS	9755168	N/A	2024/11/08	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9761914	2024/11/13	2024/11/13	Joe Paino
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9754785	N/A	2024/11/11	Dina Wang

**Bureau Veritas ID:** AIFD25 Dup  
**Sample ID:** MW5  
**Matrix:** Water

**Collected:** 2024/11/06  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals by ICPMS	ICP/MS	9755168	N/A	2024/11/08	Azita Fazaeli



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

## TEST SUMMARY

**Bureau Veritas ID:** AIFD26  
**Sample ID:** MW12  
**Matrix:** Water

**Collected:** 2024/11/06  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9753939	N/A	2024/11/12	Automated Statchk
1,3-Dichloropropene Sum	CALC	9753940	N/A	2024/11/12	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9756113	N/A	2024/11/12	Massarat Jan
Chromium (VI) in Water	IC	9759381	N/A	2024/11/12	Rupinder Sihota
Free (WAD) Cyanide	SKAL/CN	9757652	N/A	2024/11/11	Jency Sara Johnson
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9758370	2024/11/11	2024/11/12	Mohammed Abdul Nafay Shoeb
Mercury	CV/AA	9758001	2024/11/11	2024/11/12	Maitri PATIL
Dissolved Metals by ICPMS	ICP/MS	9755168	N/A	2024/11/11	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9758371	2024/11/11	2024/11/12	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9754785	N/A	2024/11/11	Dina Wang

**Bureau Veritas ID:** AIFD27  
**Sample ID:** MW10  
**Matrix:** Water

**Collected:** 2024/11/06  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9753939	N/A	2024/11/12	Automated Statchk
1,3-Dichloropropene Sum	CALC	9753940	N/A	2024/11/12	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9756113	N/A	2024/11/12	Massarat Jan
Chromium (VI) in Water	IC	9759381	N/A	2024/11/12	Rupinder Sihota
Free (WAD) Cyanide	SKAL/CN	9757654	N/A	2024/11/11	Prgya Panchal
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9758370	2024/11/11	2024/11/12	Mohammed Abdul Nafay Shoeb
Mercury	CV/AA	9758001	2024/11/11	2024/11/12	Maitri PATIL
Dissolved Metals by ICPMS	ICP/MS	9755168	N/A	2024/11/11	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9758371	2024/11/11	2024/11/12	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9754785	N/A	2024/11/11	Dina Wang

**Bureau Veritas ID:** AIFD28  
**Sample ID:** MW9  
**Matrix:** Water

**Collected:** 2024/11/06  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9753939	N/A	2024/11/12	Automated Statchk
1,3-Dichloropropene Sum	CALC	9753940	N/A	2024/11/12	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9756113	N/A	2024/11/12	Massarat Jan
Chromium (VI) in Water	IC	9759381	N/A	2024/11/12	Rupinder Sihota
Free (WAD) Cyanide	SKAL/CN	9757654	N/A	2024/11/11	Prgya Panchal
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9758370	2024/11/11	2024/11/12	Mohammed Abdul Nafay Shoeb
Mercury	CV/AA	9758001	2024/11/11	2024/11/12	Maitri PATIL
Dissolved Metals by ICPMS	ICP/MS	9755168	N/A	2024/11/08	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9758371	2024/11/11	2024/11/12	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9754785	N/A	2024/11/11	Dina Wang



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

## TEST SUMMARY

**Bureau Veritas ID:** AIFD30  
**Sample ID:** TRIP BLANK  
**Matrix:** Water

**Collected:** 2024/11/06  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	9753940	N/A	2024/11/12	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9754785	N/A	2024/11/11	Dina Wang

**Bureau Veritas ID:** AIFF00  
**Sample ID:** QC-02  
**Matrix:** Water

**Collected:** 2024/11/06  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	9753940	N/A	2024/11/12	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9758370	2024/11/11	2024/11/12	Mohammed Abdul Nafay Shoeb
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9754785	N/A	2024/11/11	Dina Wang

**Bureau Veritas ID:** AIFF00 Dup  
**Sample ID:** QC-02  
**Matrix:** Water

**Collected:** 2024/11/06  
**Shipped:**  
**Received:** 2024/11/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9754785	N/A	2024/11/11	Dina Wang



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

## GENERAL COMMENTS

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

Package 1	15.3°C
Package 2	15.3°C

Sample AIFD18 [MW3] : PAH-SIM-L : Used part 07 from VOC vials for analysis since part 06 is not available.

Sample AIFD20 [MW6] : Metal Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample AIFD21 [MW7] : Metal Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

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

## QUALITY ASSURANCE REPORT

Stantec Consulting Ltd  
Client Project #: 12214-0392  
Sampler Initials: AS

QC Batch	Parameter	Matrix Spike		Spiked Blank		Method Blank		RPD		
		Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits
9754785	4-Bromofluorobenzene	2024/11/11	102	70 - 130	101	70 - 130	100	%	%	%
9754785	D4-1,2-Dichloroethane	2024/11/11	100	70 - 130	98	70 - 130	102	%	%	%
9754785	D8-Toluene	2024/11/11	102	70 - 130	101	70 - 130	94	%	%	%
9758370	o-Terphenyl	2024/11/12	110	60 - 140	113	60 - 140	110	%	%	%
9758371	D10-Anthracene	2024/11/12	95	50 - 130	96	50 - 130	111	%	%	%
9758371	D14-Terphenyl (FS)	2024/11/12	101	50 - 130	104	50 - 130	114	%	%	%
9758371	D8-Acenaphthylene	2024/11/12	92	50 - 130	92	50 - 130	104	%	%	%
9761914	D10-Anthracene	2024/11/13	108	50 - 130	108	50 - 130	112	%	%	%
9761914	D14-Terphenyl (FS)	2024/11/13	113	50 - 130	109	50 - 130	113	%	%	%
9761914	D8-Acenaphthylene	2024/11/13	103	50 - 130	102	50 - 130	97	%	%	%
9762816	D10-Anthracene	2024/11/13	105	50 - 130	107	50 - 130	106	%	%	%
9762816	D14-Terphenyl (FS)	2024/11/13	104	50 - 130	108	50 - 130	104	%	%	%
9762816	D8-Acenaphthylene	2024/11/13	104	50 - 130	99	50 - 130	85	%	%	%
9754785	1,1,1,2-Tetrachloroethane	2024/11/11	108	70 - 130	109	70 - 130	<0.50	ug/L	NC	30
9754785	1,1,1-Trichloroethane	2024/11/11	95	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
9754785	1,1,2,2-Tetrachloroethane	2024/11/11	92	70 - 130	92	70 - 130	<0.50	ug/L	NC	30
9754785	1,1,2-Trichloroethane	2024/11/11	99	70 - 130	99	70 - 130	<0.50	ug/L	NC	30
9754785	1,1-Dichloroethane	2024/11/11	92	70 - 130	93	70 - 130	<0.20	ug/L	NC	30
9754785	1,1-Dichloroethylene	2024/11/11	95	70 - 130	98	70 - 130	<0.20	ug/L	NC	30
9754785	1,2-Dichlorobenzene	2024/11/11	104	70 - 130	105	70 - 130	<0.50	ug/L	NC	30
9754785	1,2-Dichloroethane	2024/11/11	103	70 - 130	104	70 - 130	<0.50	ug/L	NC	30
9754785	1,2-Dichloropropane	2024/11/11	97	70 - 130	99	70 - 130	<0.20	ug/L	NC	30
9754785	1,3-Dichlorobenzene	2024/11/11	103	70 - 130	105	70 - 130	<0.50	ug/L	NC	30
9754785	1,4-Dichlorobenzene	2024/11/11	104	70 - 130	107	70 - 130	<0.50	ug/L	NC	30
9754785	Acetone (2-Propanone)	2024/11/11	97	60 - 140	98	60 - 140	<10	ug/L	NC	30
9754785	Benzene	2024/11/11	96	70 - 130	99	70 - 130	<0.17	ug/L	NC	30
9754785	Bromodichloromethane	2024/11/11	97	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
9754785	Bromoform	2024/11/11	98	70 - 130	98	70 - 130	<1.0	ug/L	NC	30
9754785	Bromomethane	2024/11/11	82	60 - 140	84	60 - 140	<0.50	ug/L	NC	30
9754785	Carbon Tetrachloride	2024/11/11	104	70 - 130	104	70 - 130	<0.20	ug/L	NC	30
9754785	Chlorobenzene	2024/11/11	94	70 - 130	96	70 - 130	<0.20	ug/L	NC	30



## QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	RPD					
		Date	% Recovery	QC Limits	% Recovery	QC Limits	Method Blank
9754785	Chloroform	2024/11/11	97	70 - 130	98	70 - 130	<0.20
9754785	cis-1,2-Dichloroethylene	2024/11/11	105	70 - 130	106	70 - 130	<0.50
9754785	cis-1,3-Dichloropropene	2024/11/11	98	70 - 130	102	70 - 130	<0.30
9754785	DibromoChloromethane	2024/11/11	103	70 - 130	102	70 - 130	<0.50
9754785	Dichlorodifluoromethane (FREON 12)	2024/11/11	76	50 - 140	77	60 - 140	<1.0
9754785	Ethylbenzene	2024/11/11	99	70 - 130	101	70 - 130	<0.20
9754785	Ethylene Dibromide	2024/11/11	101	70 - 130	100	70 - 130	<0.20
9754785	F1 (C6-C10) - BTEX	2024/11/11					<25
9754785	F1 (C6-C10)	2024/11/11	91	50 - 140	91	60 - 140	<25
9754785	Hexane	2024/11/11	106	70 - 130	109	70 - 130	<1.0
9754785	Methyl Ethyl Ketone (2-Butanone)	2024/11/11	99	50 - 140	101	60 - 140	<10
9754785	Methyl Isobutyl Ketone	2024/11/11	100	70 - 130	103	70 - 130	<5.0
9754785	Methyl t-butyl ether (MTBE)	2024/11/11	100	70 - 130	102	70 - 130	<0.50
9754785	Methylene Chloride(Dichloromethane)	2024/11/11	96	70 - 130	97	70 - 130	<2.0
9754785	o-Xylene	2024/11/11	107	70 - 130	110	70 - 130	<0.20
9754785	p-m-Xylene	2024/11/11	100	70 - 130	103	70 - 130	<0.20
9754785	Styrene	2024/11/11	104	70 - 130	105	70 - 130	<0.50
9754785	Tetrachloroethylene	2024/11/11	97	70 - 130	98	70 - 130	<0.20
9754785	Toluene	2024/11/11	99	70 - 130	101	70 - 130	<0.20
9754785	Total Xylenes	2024/11/11					<0.20
9754785	trans-1,2-Dichloroethylene	2024/11/11	103	70 - 130	104	70 - 130	<0.50
9754785	trans-1,3-Dichloropropene	2024/11/11	107	70 - 130	112	70 - 130	<0.40
9754785	Trichloroethylene	2024/11/11	101	70 - 130	103	70 - 130	<0.20
9754785	Trichlorofluoromethane (FREON 11)	2024/11/11	95	70 - 130	96	70 - 130	<0.50
9754785	Vinyl Chloride	2024/11/08	88	70 - 130	90	70 - 130	<0.20
9755168	Dissolved Antimony (Sb)	2024/11/08	102	80 - 120	102	80 - 120	<0.000050
9755168	Dissolved Arsenic (As)	2024/11/08	99	80 - 120	100	80 - 120	<0.0010
9755168	Dissolved Barium (Ba)	2024/11/08	101	80 - 120	101	80 - 120	<0.0020
9755168	Dissolved Beryllium (Be)	2024/11/08	97	80 - 120	97	80 - 120	<0.00040
9755168	Dissolved Boron (B)	2024/11/08	94	80 - 120	93	80 - 120	<0.010
9755168	Dissolved Cadmium (Cd)	2024/11/08	97	80 - 120	98	80 - 120	<0.000090

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Bureau Veritas Job #: C4Z1246  
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## QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

QC Batch	Parameter	Matrix Spike			SPiked Blank			Method Blank			RPD
		Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	Units	
9755168	Dissolved Chromium (Cr)	2024/11/08	97	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20	
9755168	Dissolved Cobalt (Co)	2024/11/08	93	80 - 120	95	80 - 120	<0.00050	mg/L	0.36	20	
9755168	Dissolved Copper (Cu)	2024/11/08	98	80 - 120	98	80 - 120	<0.00090	mg/L	NC	20	
9755168	Dissolved Lead (Pb)	2024/11/08	91	80 - 120	94	80 - 120	<0.00050	mg/L	NC	20	
9755168	Dissolved Molybdenum (Mo)	2024/11/08	103	80 - 120	100	80 - 120	<0.00050	mg/L	3.1	20	
9755168	Dissolved Nickel (Ni)	2024/11/08	93	80 - 120	96	80 - 120	<0.0010	mg/L	1.1	20	
9755168	Dissolved Selenium (Se)	2024/11/08	97	80 - 120	97	80 - 120	<0.0020	mg/L	NC	20	
9755168	Dissolved Silver (Ag)	2024/11/08	89	80 - 120	96	80 - 120	<0.000090	mg/L	NC	20	
9755168	Dissolved Sodium (Na)	2024/11/08	NC	80 - 120	96	80 - 120	<0.10	mg/L	2.2	20	
9755168	Dissolved Thallium (Tl)	2024/11/08	92	80 - 120	95	80 - 120	<0.000050	mg/L	NC	20	
9755168	Dissolved Uranium (U)	2024/11/08	94	80 - 120	94	80 - 120	<0.00010	mg/L	1.8	20	
9755168	Dissolved Vanadium (V)	2024/11/08	98	80 - 120	99	80 - 120	<0.00050	mg/L	5.5	20	
9755168	Dissolved Zinc (Zn)	2024/11/08	92	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20	
9756113	Dissolved Chloride (Cl-)	2024/11/12	NC	80 - 120	96	80 - 120	<1.0	mg/L	1.1	20	
9756205	Dissolved Chloride (Cl-)	2024/11/12	NC	80 - 120	96	80 - 120	<1.0	mg/L	0.068	20	
9757552	WAD Cyanide (Free)	2024/11/11	94	80 - 120	102	80 - 120	<1	ug/L	NC	20	
9757654	WAD Cyanide (Free)	2024/11/11	97	80 - 120	105	80 - 120	<1	ug/L	NC	20	
9757814	Chromium (VI)	2024/11/11	102	80 - 120	101	80 - 120	<0.50	ug/L	NC	20	
9758001	Mercury (Hg)	2024/11/12	96	75 - 125	98	80 - 120	<0.10	ug/L	NC	20	
9758370	F2 (C10-C16 Hydrocarbons)	2024/11/12	106	60 - 140	112	60 - 140	<90	ug/L	NC	30	
9758370	F3 (C16-C34 Hydrocarbons)	2024/11/12	110	60 - 140	119	60 - 140	<200	ug/L	NC	30	
9758370	F4 (C34-C50 Hydrocarbons)	2024/11/12	99	60 - 140	103	60 - 140	<200	ug/L	NC	30	
9758371	1-Methylnaphthalene	2024/11/11	87	50 - 130	84	50 - 130	<0.050	ug/L	1.9	30	
9758371	2-Methylnaphthalene	2024/11/11	85	50 - 130	81	50 - 130	<0.050	ug/L	NC	30	
9758371	Acenaphthene	2024/11/11	93	50 - 130	92	50 - 130	<0.050	ug/L	4.7	30	
9758371	Acenaphthylene	2024/11/11	96	50 - 130	93	50 - 130	<0.050	ug/L	NC	30	
9758371	Anthracene	2024/11/11	95	50 - 130	97	50 - 130	<0.050	ug/L	NC	30	
9758371	Benz(a)anthracene	2024/11/11	103	50 - 130	104	50 - 130	<0.050	ug/L	NC	30	
9758371	Benz(a)pyrene	2024/11/11	98	50 - 130	99	50 - 130	<0.0090	ug/L	7.1	30	
9758371	Benz(b)fluoranthene	2024/11/11	102	50 - 130	103	50 - 130	<0.050	ug/L	6.9	30	
9758371	Benz(g,h,i)perylene	2024/11/11	88	50 - 130	90	50 - 130	<0.050	ug/L	23	30	

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

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.



## QUALITY ASSURANCE REPORT(CONT'D)

QC Batch	Parameter	Matrix Spike			Spiked Blank			Method Blank			RPD
		Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	
9758371	Benz(a)fluoranthene	2024/11/11	103	50 - 130	105	50 - 130	<0.050	ug/L	NC	30	
9758371	Chrysene	2024/11/11	103	50 - 130	105	50 - 130	<0.050	ug/L	NC	30	
9758371	Dibenz(a,h)anthracene	2024/11/11	89	50 - 130	89	50 - 130	<0.050	ug/L	NC	30	
9758371	Fluoranthene	2024/11/11	103	50 - 130	104	50 - 130	<0.050	ug/L	4.5	30	
9758371	Fluorene	2024/11/11	101	50 - 130	101	50 - 130	<0.050	ug/L	NC	30	
9758371	Indeno[1,2,3-cd]pyrene	2024/11/11	84	50 - 130	86	50 - 130	<0.050	ug/L	16	30	
9758371	Naphthalene	2024/11/11	83	50 - 130	81	50 - 130	<0.050	ug/L	0.53	30	
9758371	Phenanthrene	2024/11/11	99	50 - 130	101	50 - 130	<0.030	ug/L	3.9	30	
9758371	Pyrene	2024/11/11	104	50 - 130	105	50 - 130	<0.050	ug/L	4.7	30	
9759381	Chromium (VI)	2024/11/12	103	50 - 120	103	80 - 120	<0.50	ug/L	NC	20	
9761914	1-Methylnaphthalene	2024/11/13	97	50 - 130	92	50 - 130	<0.050	ug/L	NC	30	
9761914	2-Methylnaphthalene	2024/11/13	94	50 - 130	87	50 - 130	<0.050	ug/L	NC	30	
9761914	Acenaphthene	2024/11/13	106	50 - 130	100	50 - 130	<0.050	ug/L	NC	30	
9761914	Acenaphthylene	2024/11/13	108	50 - 130	102	50 - 130	<0.050	ug/L	NC	30	
9761914	Anthracene	2024/11/13	110	50 - 130	104	50 - 130	<0.050	ug/L	NC	30	
9761914	Benz(a)anthracene	2024/11/13	114	50 - 130	108	50 - 130	<0.050	ug/L	NC	30	
9761914	Benz(a)pyrene	2024/11/13	116	50 - 130	111	50 - 130	<0.0030	ug/L	NC	30	
9761914	Benz(b/f)fluoranthene	2024/11/13	117	50 - 130	112	50 - 130	<0.050	ug/L	NC	30	
9761914	Benzo(g,h,i)perylene	2024/11/13	116	50 - 130	117	50 - 130	<0.050	ug/L	NC	30	
9761914	Benz(k)fluoranthene	2024/11/13	109	50 - 130	104	50 - 130	<0.050	ug/L	NC	30	
9761914	Chrysene	2024/11/13	117	50 - 130	113	50 - 130	<0.050	ug/L	NC	30	
9761914	Dibenz(a,h)anthracene	2024/11/13	112	50 - 130	108	50 - 130	<0.050	ug/L	NC	30	
9761914	Fluoranthene	2024/11/13	129	50 - 130	114	50 - 130	<0.050	ug/L	NC	30	
9761914	Fluorene	2024/11/13	110	50 - 130	105	50 - 130	<0.050	ug/L	NC	30	
9761914	Indeno[1,2,3-cd]pyrene	2024/11/13	122	50 - 130	116	50 - 130	<0.050	ug/L	NC	30	
9761914	Naphthalene	2024/11/13	91	50 - 130	86	50 - 130	<0.050	ug/L	NC	30	
9761914	Phenanthrene	2024/11/13	111	50 - 130	106	50 - 130	<0.030	ug/L	NC	30	
9761914	Pyrene	2024/11/14	116	50 - 130	106	50 - 130	<0.050	ug/L	NC	30	
9762816	1-Methylnaphthalene	2024/11/14	111	50 - 130	106	50 - 130	<0.050	ug/L	NC	30	
9762816	2-Methylnaphthalene	2024/11/14	111	50 - 130	107	50 - 130	<0.050	ug/L	NC	30	
9762816	Acenaphthene	2024/11/14									

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**BUREAU  
VERITAS**  
Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

## QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	QC Limits
			% Recovery	QC Limits	% Recovery	QC Limits	Value	Units		
9762816	Acenaphthylene	2024/11/14	112	50 - 130	108	50 - 130	<0.050	ug/L	NC	30
9762816	Anthracene	2024/11/14	107	50 - 130	108	50 - 130	<0.050	ug/L	NC	30
9762816	Benzo(a)anthracene	2024/11/14	103	50 - 130	106	50 - 130	<0.050	ug/L	NC	30
9762816	Benzo(a)pyrene	2024/11/14	101	50 - 130	115	50 - 130	<0.0090	ug/L	NC	30
9762816	Benzo(b,j)fluoranthene	2024/11/14	101	50 - 130	121	50 - 130	<0.050	ug/L	NC	30
9762816	Benzo(g,h,i)perylene	2024/11/14	101	50 - 130	122	50 - 130	<0.050	ug/L	NC	30
9762816	Benzo(k)fluoranthene	2024/11/14	92	50 - 130	117	50 - 130	<0.050	ug/L	NC	30
9762816	Chrysene	2024/11/14	101	50 - 130	110	50 - 130	<0.050	ug/L	NC	30
9762816	Dibenz(a,h)anthracene	2024/11/14	95	50 - 130	110	50 - 130	<0.050	ug/L	NC	30
9762816	Fluoranthene	2024/11/14	115	50 - 130	117	50 - 130	<0.050	ug/L	NC	30
9762816	Fluorene	2024/11/14	110	50 - 130	105	50 - 130	<0.050	ug/L	NC	30
9762816	Indeno(1,2,3-cd)pyrene	2024/11/14	101	50 - 130	126	50 - 130	<0.050	ug/L	NC	30
9762816	Naphthalene	2024/11/14	104	50 - 130	103	50 - 130	<0.050	ug/L	NC	30
9762816	Phenanthrene	2024/11/14	108	50 - 130	106	50 - 130	<0.030	ug/L	NC	30
9762816	Pyrene	2024/11/14	112	50 - 130	114	50 - 130	<0.050	ug/L	NC	30

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

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

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

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

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

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

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



Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14

Stantec Consulting Ltd  
Client Project #: 122140392  
Sampler Initials: AS

### VALIDATION SIGNATURE PAGE

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

Louise Harding, Scientific Specialist

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

C4Z1246  
2024/11/06 15:38

Bureau Veritas Road - Mississauga, ON L5N 2L6 Tel: (905) 875-5755 Toll-Free: (800) 263-3505 Fax: (905) 875-4277 www.bv.com



Page 1 of 2

**RESULTS**

**REPORT TO:**

**REPORT TO:**

**PROJECT INFORMATION:**

**W#:**

**Bottle Order #:**

**Customer #:**

**P.O. #:**

**Address:**

**Project Name:**

**Telephone:**

**COC #:**

**Fax:**

**Date:**

**Email:**

**Site #:**

**Sampled By:**

**Comments:**

**ANALYSIS REQUESTED (PLEASE BE SPECIFIC):**

**Turnaround Time (TAT) Required:**

**Please provide advance notice for rush projects:**

**Regular (Standard) TAT:**

**(will be applied if Request TAT is not specified).**

**Standard TAT = 5-7 Working days for most tests.**

**Please note: Samples sent TAT for certain tests such as BOD and Dissolved Solids are 5 days - depending upon Project Manager's office.**

**Job Specific Rush TAT\* (If applicable to entire submittal)**

**Due Date:**

**Rush Confirmation Number:**

**Time Required:**

**Call back for B1:**

**Comments:**

**Documents:**

**Comments:**

C4Z1246  
2024/11/06 15:38

Bureau Veritas  
5-10 Carondelet Road, 5th Floor, Chancery Chambers, 15A, 2nd Floor, 1st Flr, 1075, 617-5720, Tel: 00 86 021 5475 8177, www.bv-veritas.com

CHAIN OF CUSTODY RECORD

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:	
Company Name: <b>#9197 Sstantec Consulting Ltd</b>		Company Name: <b>Neta Benazon</b>		Quotation #:	C41573
Address: 300 Hwy Blvd Suite 100 Waterloo ON N2L 5B4		Address: 122140392		P.O. #:	
Tel: (519) 578-4410 Email: SAP-utilities@stantec.com		Fax: netta.benazon@stantec.com; Marissa.lustro@stantec.com		Project Name:	102123
Sample By:		Analysis Requested (Please Be Specific)		Sampled By:	Jule Clemerit
<b>MCE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY</b>					
<input checked="" type="checkbox"/> <b>Regulated by MCE</b> <input type="checkbox"/> <b>Regulated by Provincial Government</b> <input type="checkbox"/> <b>Regulated by Municipal Government</b> <input type="checkbox"/> <b>Regulated by First Nations</b> <input type="checkbox"/> <b>Regulated by RSC</b> <input type="checkbox"/> <b>Regulated by Other</b>					
<b>Include Criteria on Certificate of Analysis (Y/N)?</b>					
Sample Number/Lab ID:	Sample Location/Identification:	Date Sampled:	Time Sampled:	Native:	
1	MU9	11/06/24	14:55	Water	X
2	trip blank	NA	NA	NA	X
2	Filter Blank	NA	NA	NA	X
4					
5					
6					
7					
8					
9					
10					
* REINFORCED BY: (Signature/Pen)		Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	
<i>Arie Blank</i>		2024/11/06	16:45	Date: (YY/MM/DD)	
				Time: (MM:SS/00)	
				Time:	Time (MM:SS/00)
				Time Sampled:	Time Received:
				Temperature (°C):	Temperature (°C):
				On Hold:	On Hold:
				Comments:	Comments:
<b>Laboratory Use Only</b>					
Bureau Veritas Job #:		COC #:		Customer Seal Present	
				Initials	
<small>* UNLESS OTHERWISE AGREED IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENTS ACKNOWLEDGES AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT <a href="http://WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/DOC-TERMS-CONDITIONS">WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/DOC-TERMS-CONDITIONS</a>.</small>					
<small>* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANA...TICAL TAT DELAYS.</small>					
<small>** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT <a href="http://WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/CHANCUSTOD">WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/CHANCUSTOD</a> FORMS-COC5.</small>					

Bureau Veritas Canada Inc.

White: Bureau Veritas Yellow: Client

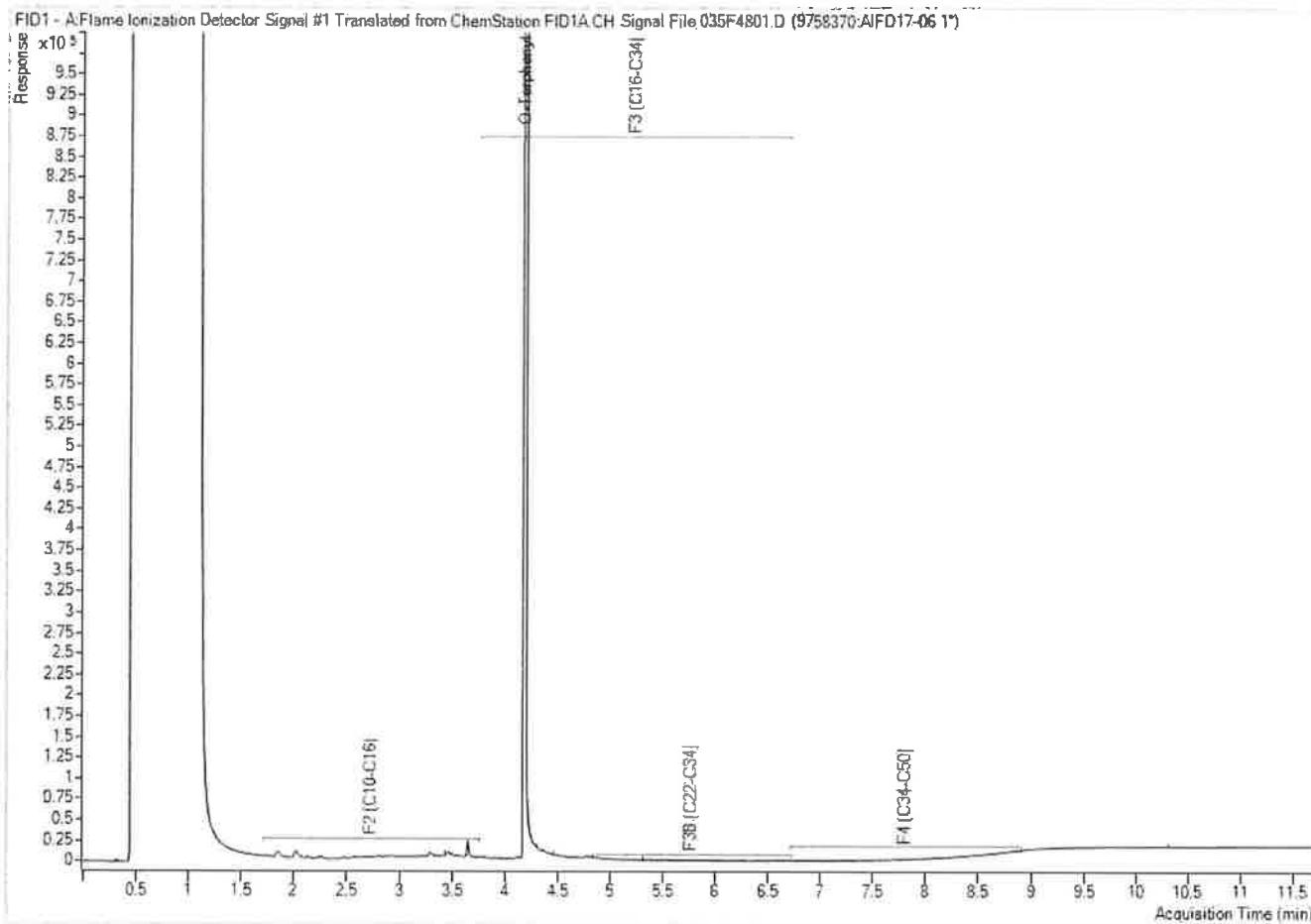
Black: Bureau Veritas

Bureau Veritas Canada Inc.

Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14  
Bureau Veritas Sample: AIFD17

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW2

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

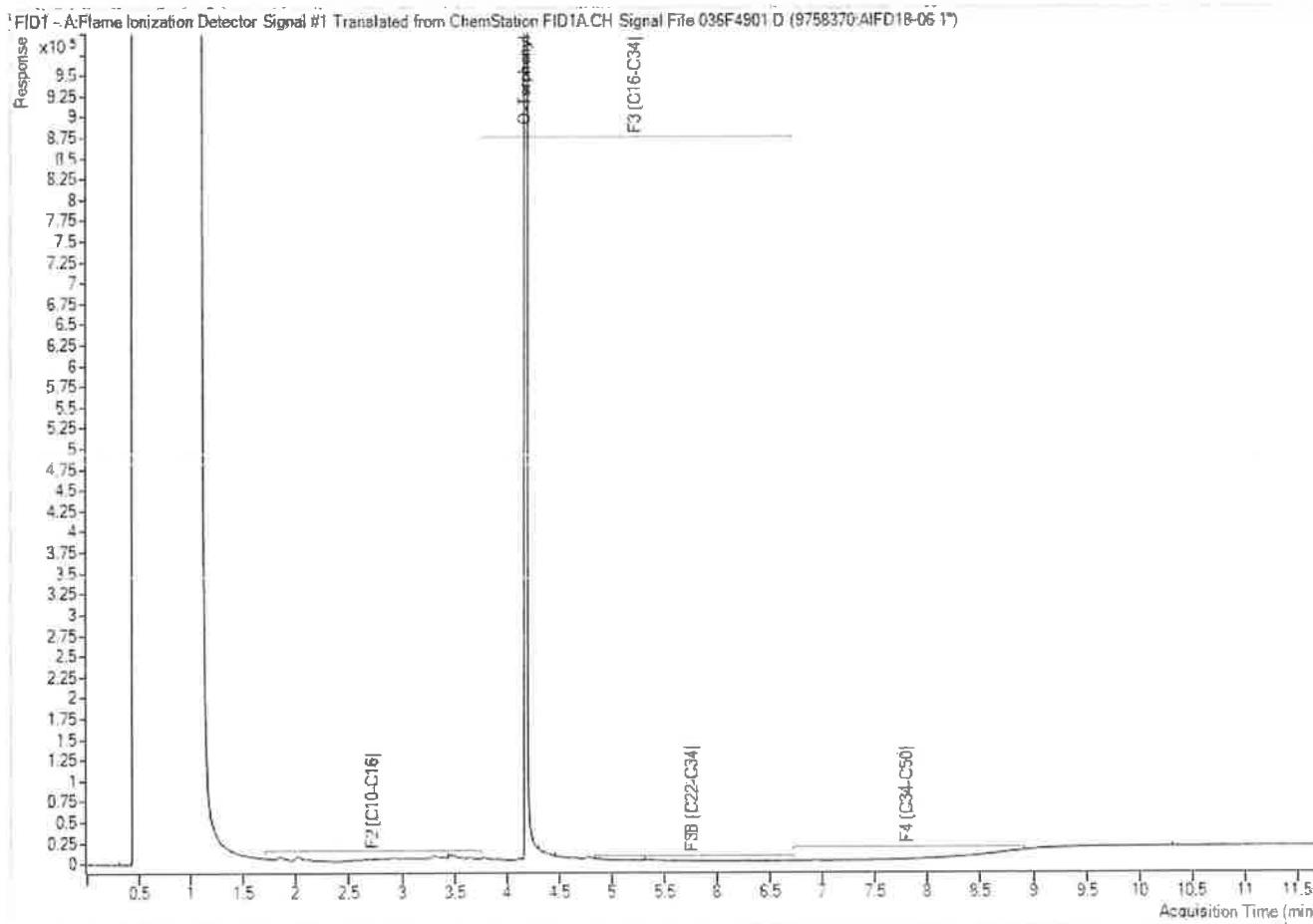


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14  
Bureau Veritas Sample: AIFD18

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW3

**Petroleum Hydrocarbons F2-F4 in Water Chromatogram**

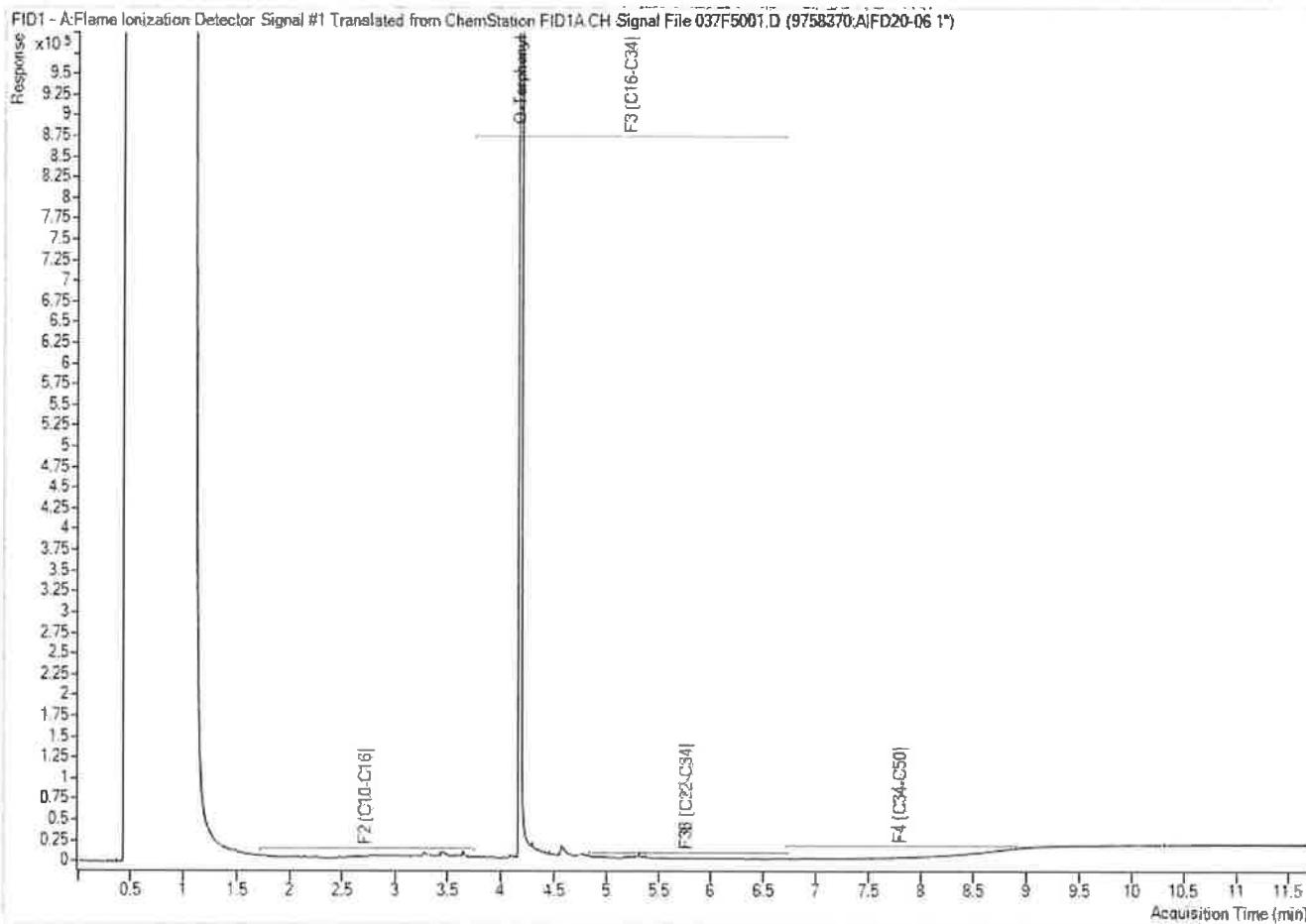


**Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.**

Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14  
Bureau Veritas Sample: AIFD20

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW6

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

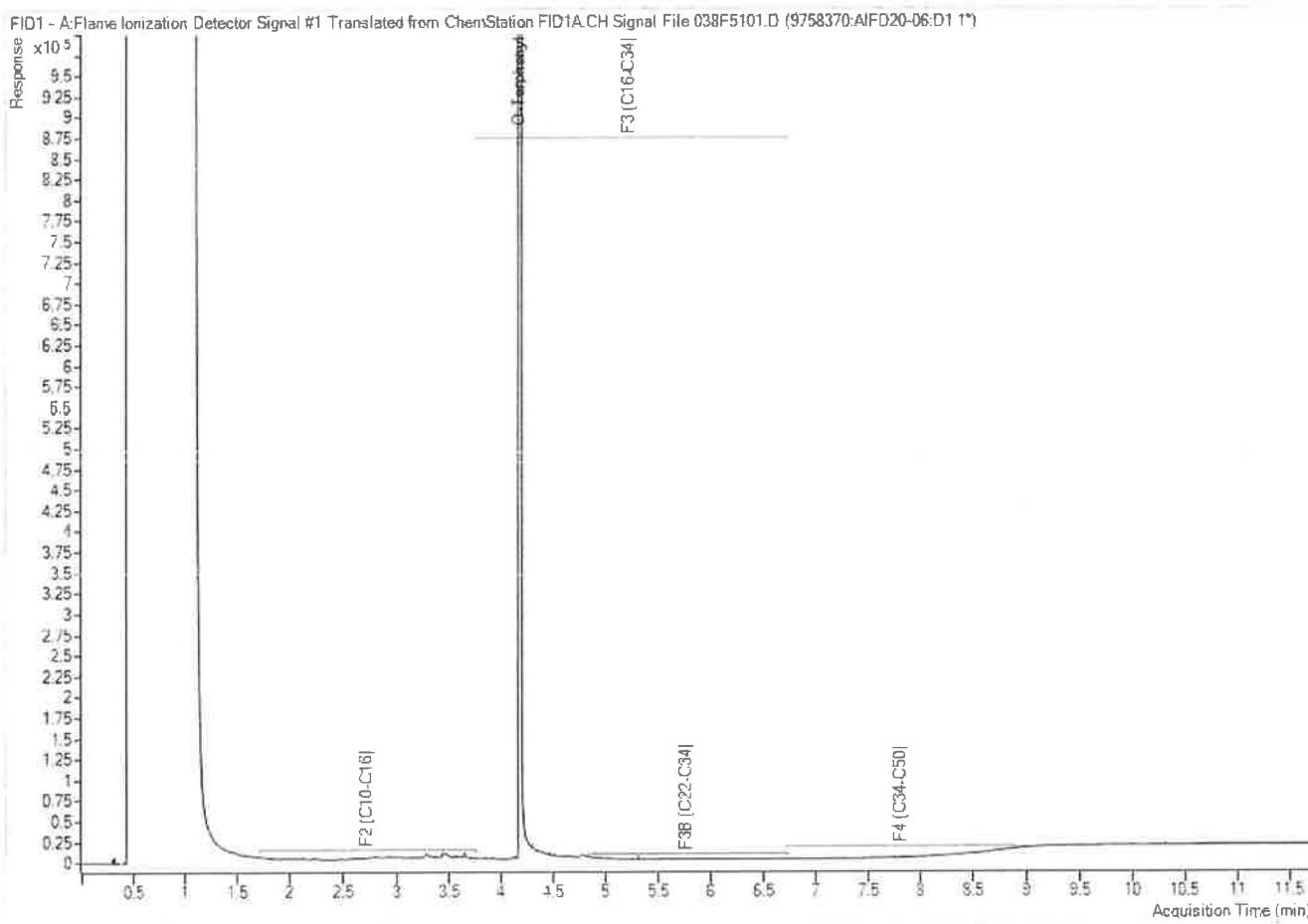


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14  
Bureau Veritas Sample: AIFD20 Lab-Dup

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW6

**Petroleum Hydrocarbons F2-F4 in Water Chromatogram**

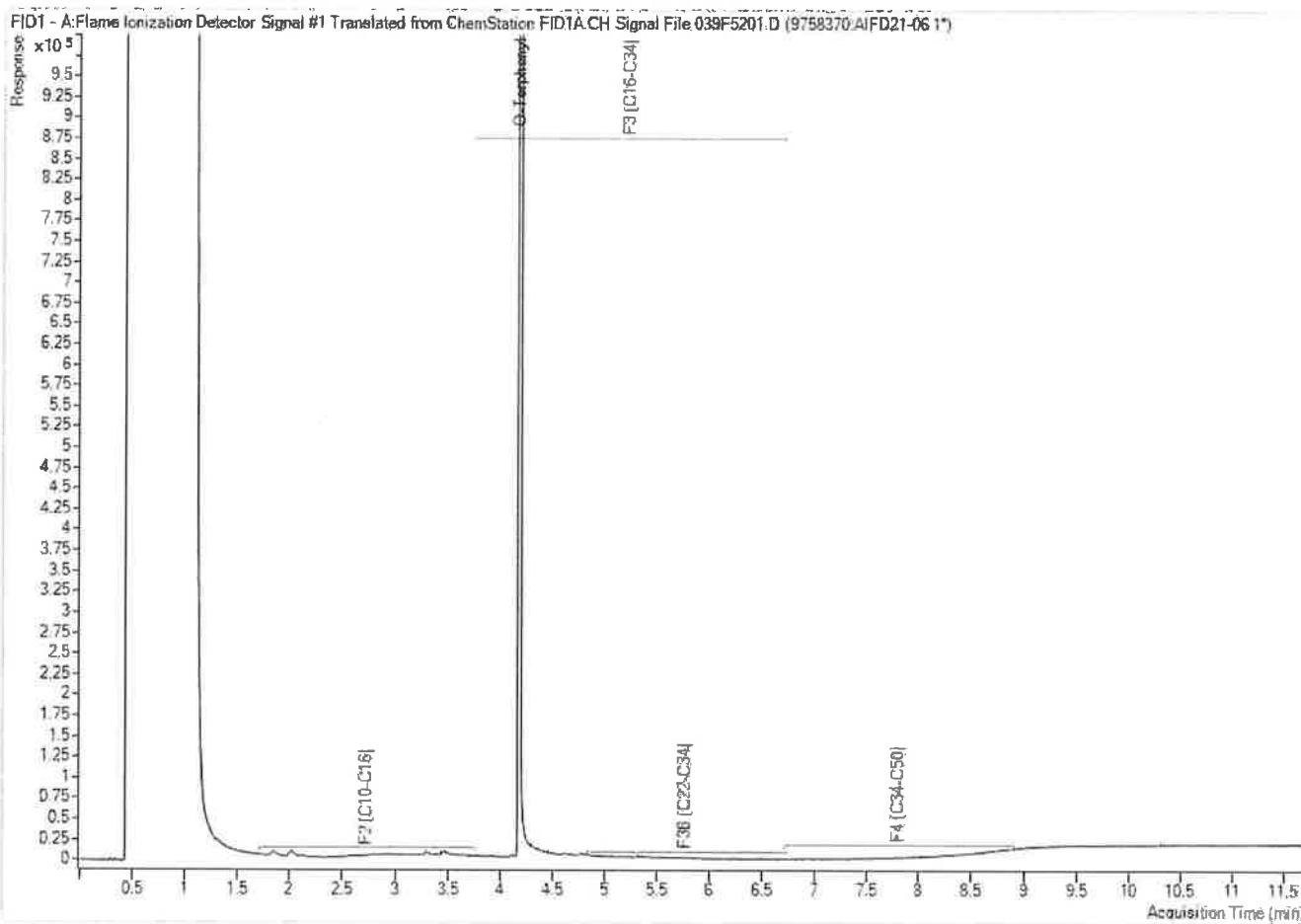


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14  
Bureau Veritas Sample: AIFD21

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW7

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

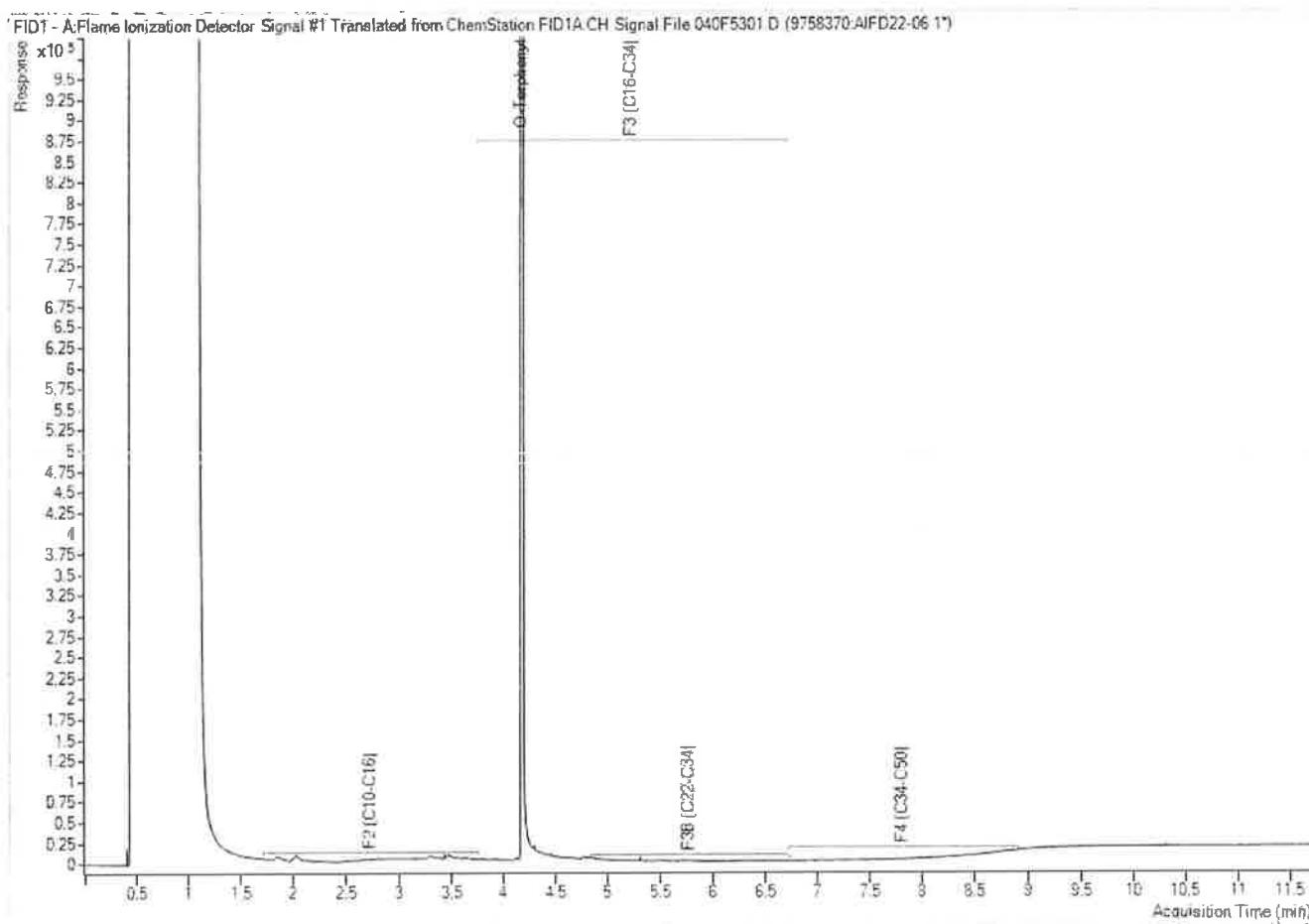


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14  
Bureau Veritas Sample: AIFD22

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW1

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

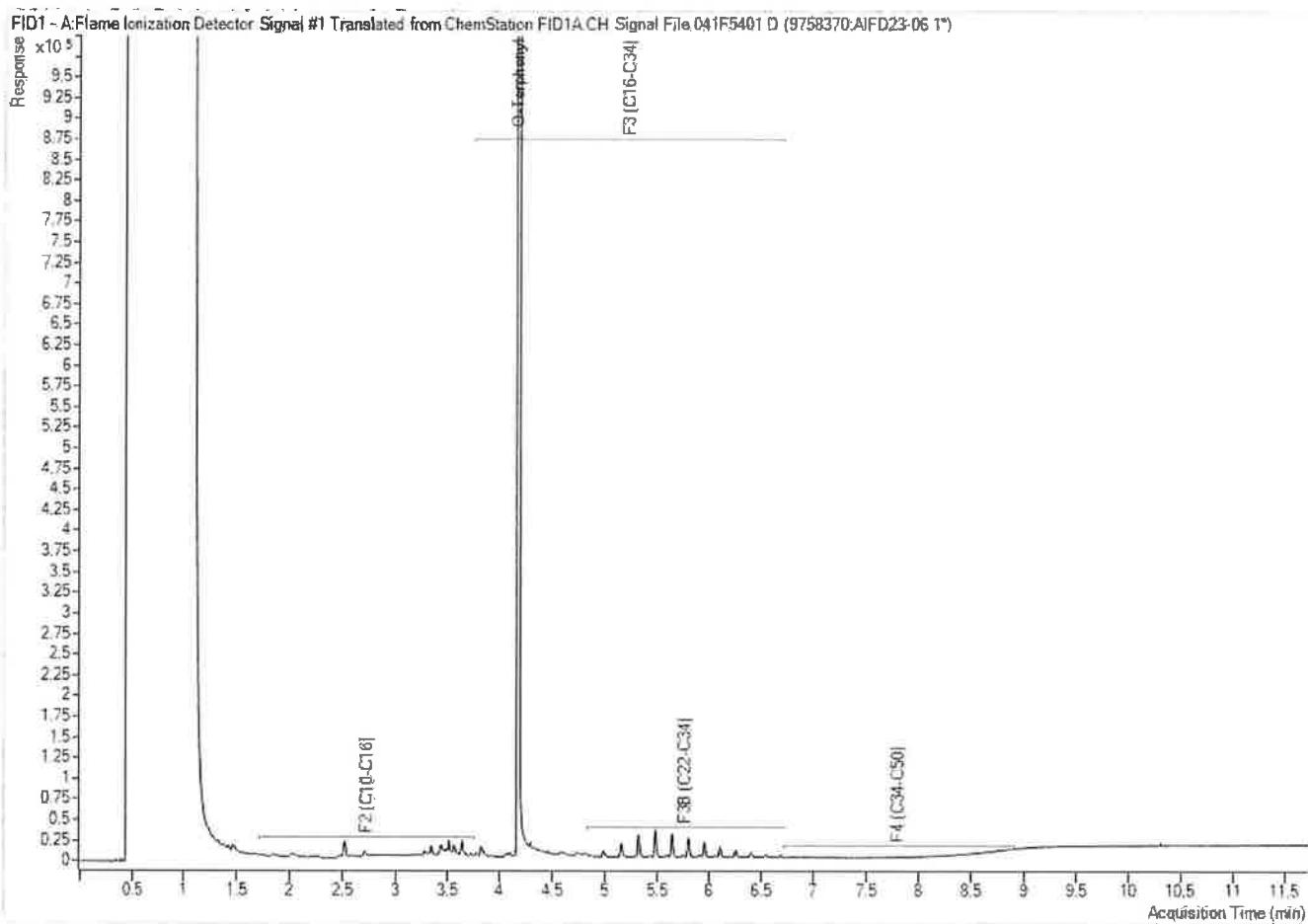


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14  
Bureau Veritas Sample: AIFD23

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW4

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

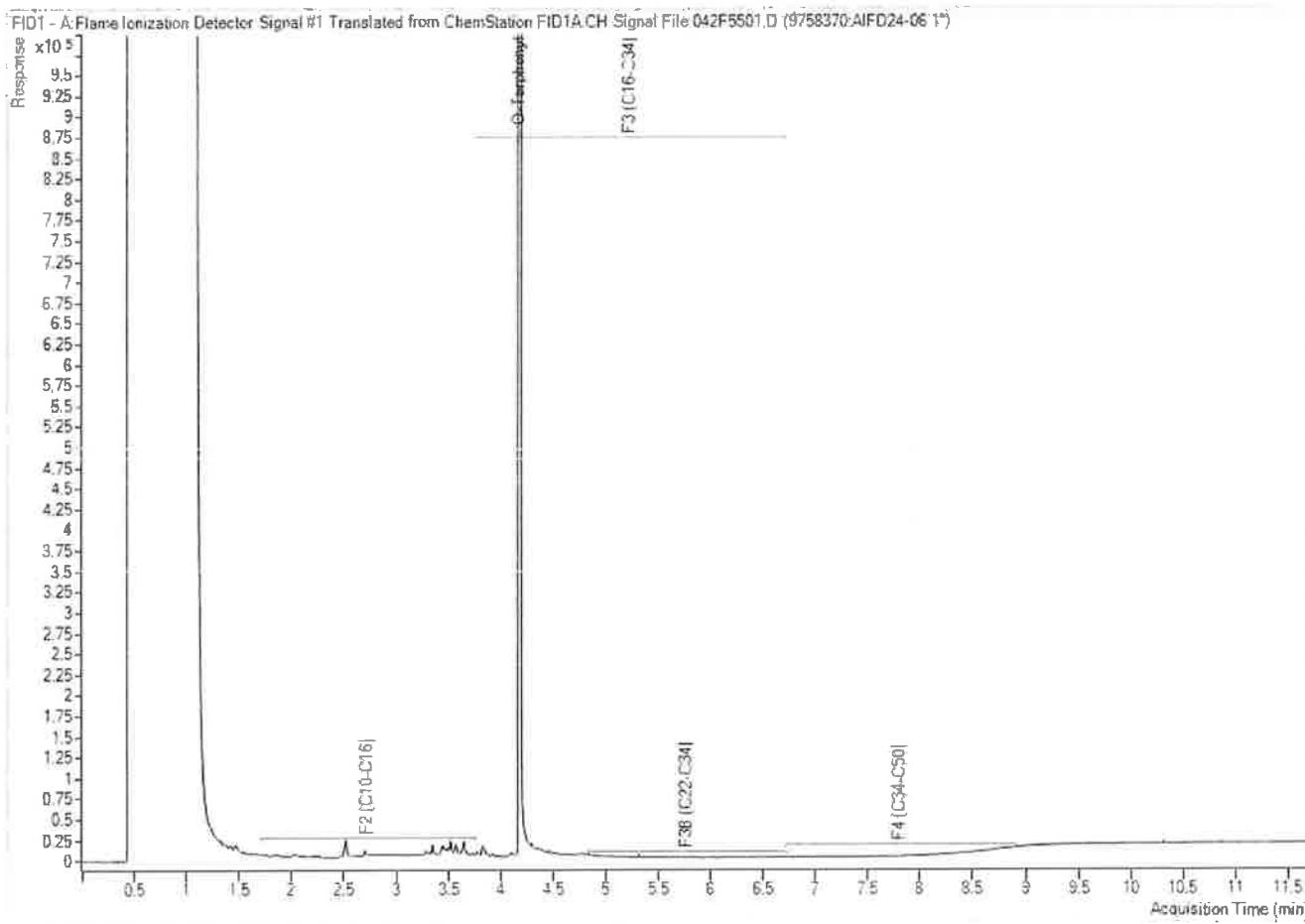


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14  
Bureau Veritas Sample: AIFD24

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: QC-01

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

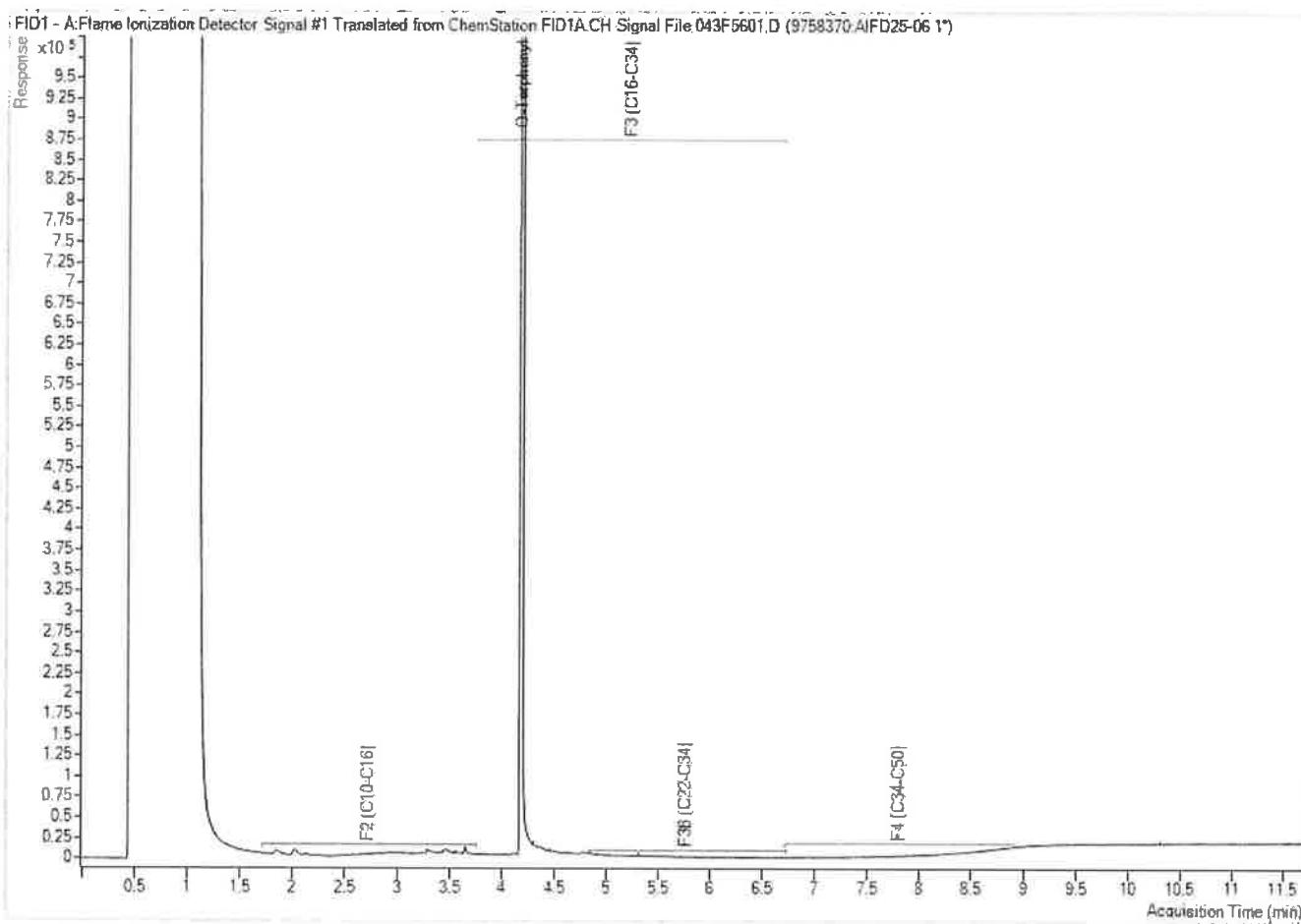


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14  
Bureau Veritas Sample: AIFD25

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW5

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



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

Bureau Veritas Job #: C4Z1246

Report Date: 2024/11/14

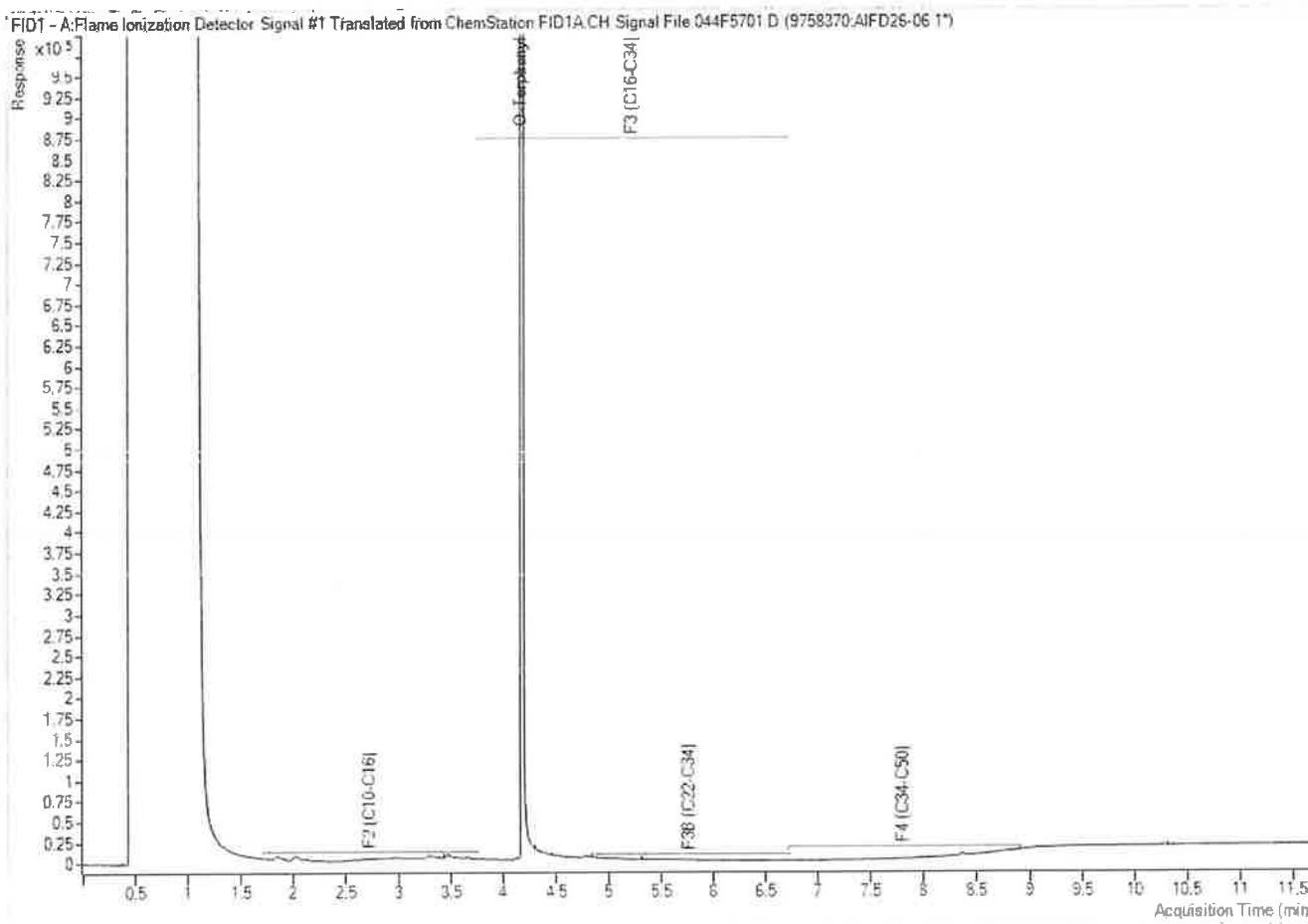
Bureau Veritas Sample: AIFD26

Stantec Consulting Ltd

Client Project #: 122140392

Client ID: MW12

**Petroleum Hydrocarbons F2-F4 in Water Chromatogram**

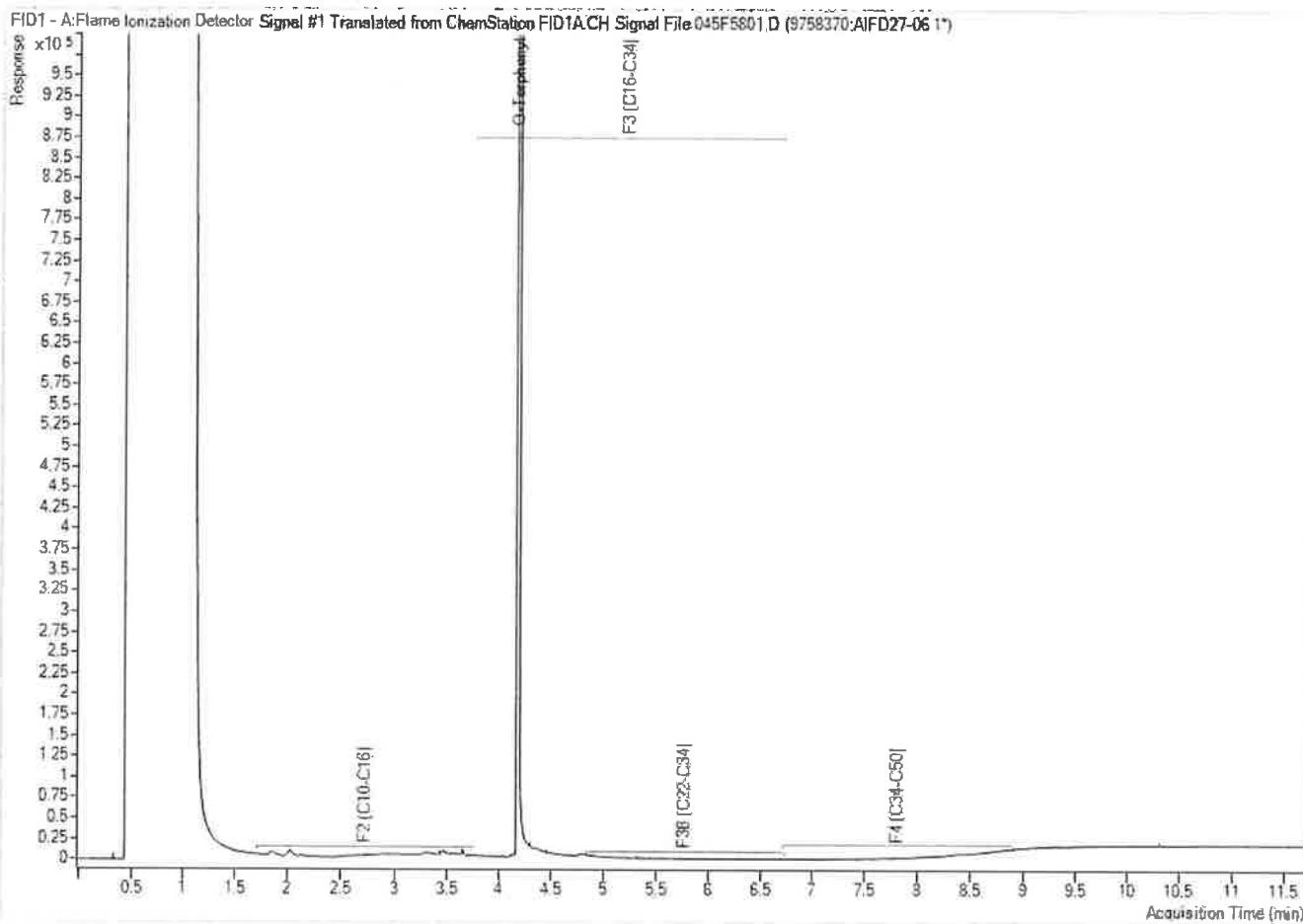


**Note:** This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14  
Bureau Veritas Sample: AIFD27

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: MW10

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



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

Bureau Veritas Job #: C4Z1246

Report Date: 2024/11/14

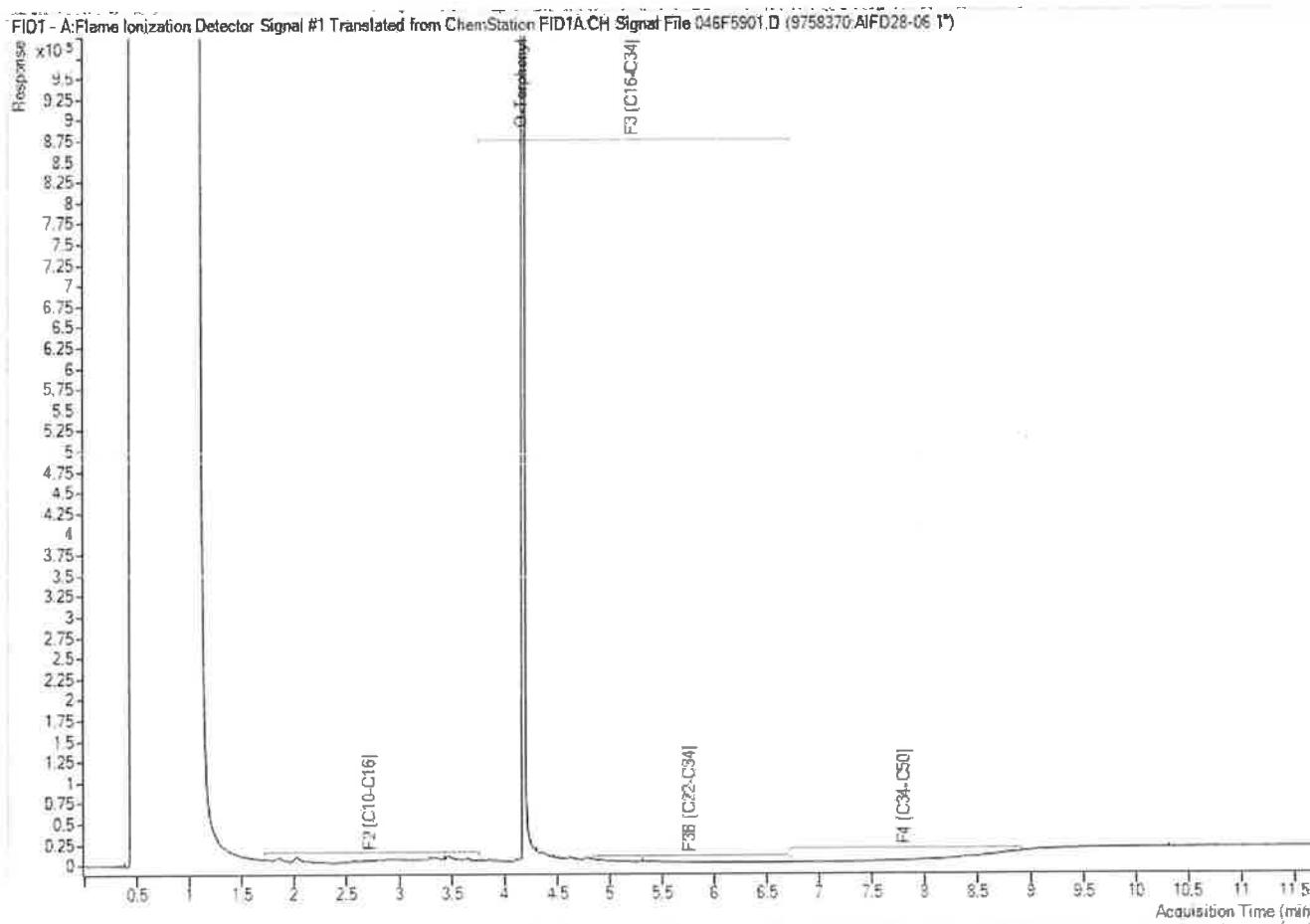
Bureau Veritas Sample: AIFD28

Stantec Consulting Ltd

Client Project #: 122140392

Client ID: MW9

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

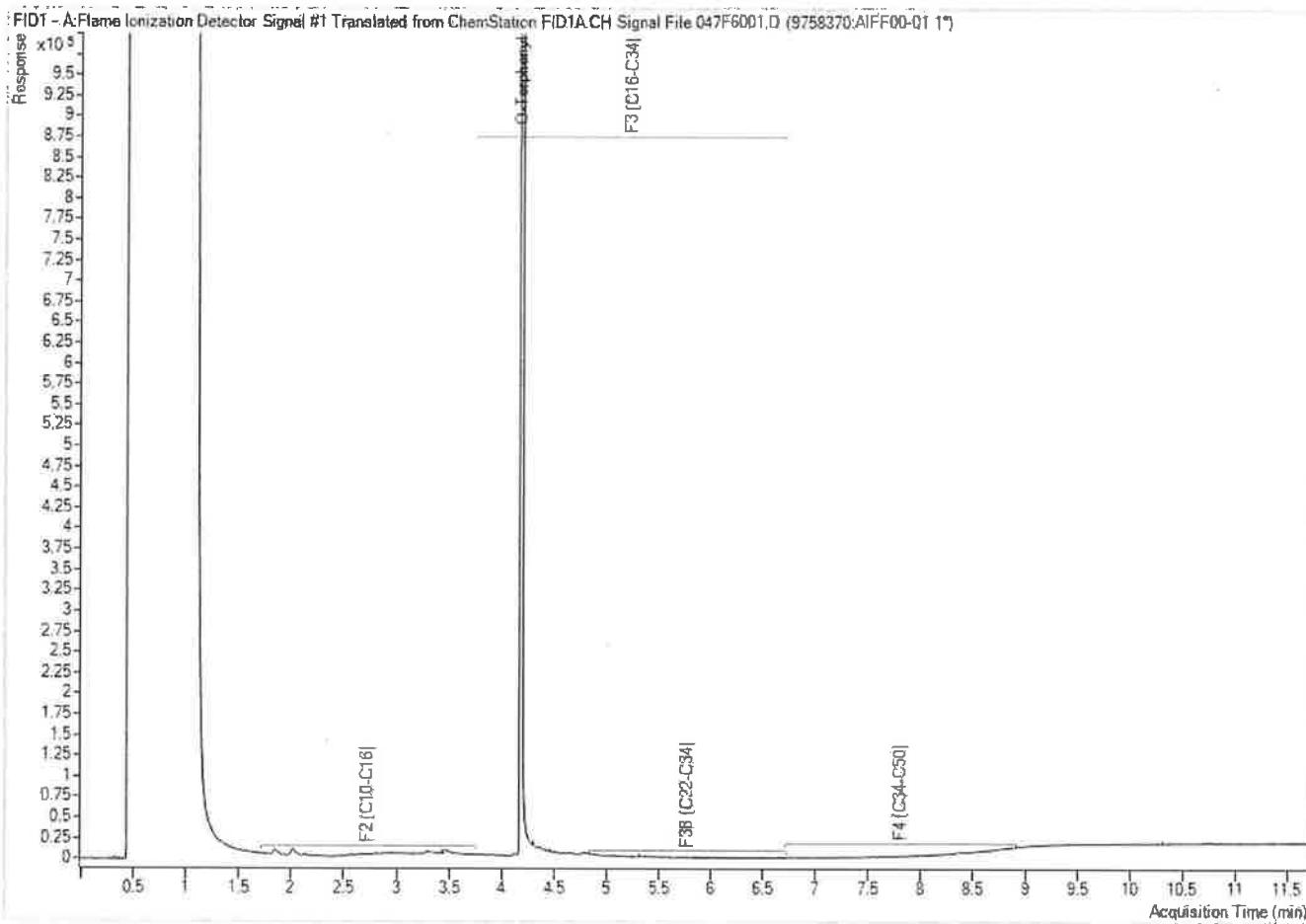


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Bureau Veritas Job #: C4Z1246  
Report Date: 2024/11/14  
Bureau Veritas Sample: AIFF00

Stantec Consulting Ltd  
Client Project #: 122140392  
Client ID: QC-02

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



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

