



Soil & Groundwater Sampling Program

Property Adjacent to 1740 St. Laurent Boulevard, Ottawa, Ontario

Client:

11421247 Canada Inc.

Type of Document:

Draft

Project Name:

Soil & Groundwater Sampling Program

Project Number:

OTT-00260579-A0

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2020-10-09

Legal Notification

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Executive Summary

EXP Services Inc. (EXP) was retained by 11421247 Canada Inc. to complete a soil and groundwater sampling program adjacent to 1740 St. Laurent Boulevard, Ottawa, Ontario. An operating gas station is present on the property located at 1740 St. Laurent Boulevard. The objective of this investigation is to gain an understanding of current environmental conditions adjacent to the gas station.

This report has been prepared in accordance with general requirements outlined in CSA Standard Z769-00 (2013) and in accordance with generally accepted professional practices. Subject to this standard of care, EXP makes no express or implied warranties regarding its services and no third-party beneficiaries are intended. Limitation of liability, scope of report and third-party reliance are outlined in Section 6 of this report.

The gas station property is located approximately 130 metres (m) south of the intersection of Industrial Avenue and St. Laurent Boulevard. A gas station has been in operation at 1740 St. Laurent Boulevard since the 1980s. 11421247 Canada Inc. owns the property south and west of the gas station (hereafter referred to as the subject site) and is proposing to redevelop the property for residential purposes. The soil and groundwater sampling program was designed to gain an understanding of site conditions adjacent to the gas station.

It is understood that 11421247 Canada Inc. intends to redevelop the property located at 1740 to 1760 St. Laurent Boulevard. Current use is commercial and future use will be mixed commercial and residential. As such, a Record of Site Condition must be filed prior to re-development. EXP identified the gas station as an area of potential environmental concern (APEC). Based on the nature of the APEC, petroleum hydrocarbons (PHC), polycyclic aromatic hydrocarbons (PAH), metals and volatile organic compounds (VOC) were identified as contaminants of concern on the property.

A total of four boreholes were drilled, three of which were completed as monitoring wells.

A summary of the findings from the delineation soil and groundwater sampling program is as follows:

- Three soil samples and one field duplicate were submitted for chemical analysis of BTEX and PHC, metals, and VOC. All of the soil samples were within the MECP Table 3 SCS;
- Three groundwater samples were submitted for chemical analysis of BTEX and PHC, metals, and VOC. All of the samples within the MECP Table 3 standards;
- Bedrock was encountered at depths ranging from 5.9 to 7.6 mbgs; and
- The groundwater flow direction is easterly.

Based on the results of the soil and groundwater sampling program, it does not appear that the subject site south and west of the gas station have been adversely affected by the operation of the gas station.

This executive summary is a brief synopsis of the report and should not be read in lieu of reading the report in its entirety.

1.0 Introduction

EXP Services Inc. (EXP) was retained by 11421247 Canada Inc. to complete a soil and groundwater sampling program adjacent to 1740 St. Laurent Boulevard, Ottawa, Ontario. An operating gas station is present on the property located at 1740 St. Laurent Boulevard. The objective of this investigation is to gain an understanding of current environmental conditions adjacent to the gas station.

This report has been prepared in accordance with general requirements outlined in CSA Standard Z769-00 (2013) and in accordance with generally accepted professional practices. Subject to this standard of care, EXP makes no express or implied warranties regarding its services and no third-party beneficiaries are intended. Limitation of liability, scope of report and third-party reliance are outlined in Section 6 of this report.

Mark Devlin, B.Sc. conducted field assessment work and Leah Wells, E.I.T, was the report author for this project. Both were supervised by Patricia Stelmack, M.Sc., P.Eng.

1.1 Site Description

The gas station property is located approximately 130 metres (m) south of the intersection of Industrial Avenue and St. Laurent Boulevard on the west side of St. Laurent Boulevard, as shown on Figure 1 in Appendix A. A gas station has been in operation at 1740 St. Laurent Boulevard since the 1980s.

11421247 Canada Inc. owns the property south and west of the gas station (hereafter referred to as the subject site) and is proposing to redevelop the property for residential purposes. The soil and groundwater sampling program was designed to gain an understanding of site conditions adjacent to the gas station.

The property south adjacent to 1740 St. Laurent Boulevard includes a driveway that provides access to a St. Hubert's restaurant and the gas station. The land west of the gas station property is part of a vacant lot that is currently used by St. Hubert's to park delivery vehicles.

The site plan is shown on Figure 2 in Appendix A.

1.2 Applicable Site Condition Standards

Analytical results obtained for soil and groundwater samples were compared to Site Condition Standards (SCS) established under subsection 169.4(1) of the Environmental Protection Act, and presented in the document entitled *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act*, 2011. This document provides tabulated background SCS (Table 1) applicable to environmentally sensitive sites and effects-based generic SCS (Tables 2 to 9) applicable to non-environmentally sensitive sites. The effects-based SCS (Tables 2 to 9) are protective of human health and the environment for different groundwater conditions (potable and non-potable), land use scenarios (residential, parkland, institutional, commercial, industrial, community and agricultural/other), soil texture (coarse or medium/fine) and restoration depth (full or stratified).

Table 1 to 9 SCS are summarized as follows:

- Table 1 – applicable to sites where background concentrations must be met (full depth), such as sensitive sites where site-specific criteria have not been derived
- Table 2 – applicable to sites with potable groundwater and full depth restoration
- Table 3 – applicable to sites with non-potable groundwater and full depth restoration
- Table 4 – applicable to sites with potable groundwater and stratified restoration
- Table 5 – applicable to sites with non-potable groundwater and stratified restoration

- Table 6 – applicable to sites with potable groundwater and shallow soils (bedrock encountered at depths of 2 metres or less across one-third or more of the site)
- Table 7 – applicable to sites with non-potable groundwater and shallow soils (bedrock encountered at depths of 2 metres or less across one-third or more of the site)
- Table 8 – applicable to sites with potable groundwater and that are within 30 m of a water body
- Table 9 – applicable to sites with non-potable groundwater and that are within 30 m of a water body

Application of the generic or background SCS to a specific site is based on a consideration of site conditions related to soil pH, thickness and extent of overburden material, and proximity to an area of environmental sensitivity or of natural significance. For some chemical parameters, consideration is also given to soil textural classification with SCS having been derived for both coarse and medium-fine textured soil conditions.

For assessment purposes, EXP selected the 2011 Table 3 SCS in a non-potable groundwater condition for residential/parkland/institutional property use and medium and fine textured soils. The selection of this category was based on the following factors:

- Bedrock is greater than 2 metres below grade across the subject property;
- There are no surface water bodies within 30 metres of the subject property;
- The property is not located within an area of natural significance, does not include nor is adjacent to an area of natural significance, and does not include land that is within 30 metres of an area of natural significance;
- Potable water for the property is provided by the City of Ottawa through its water distribution system and no potable water wells were identified to be within 250 metres of the property;
- The property is not located in an area designated in a municipal official plan as a well-head protection area;
- Based on the results of an investigation elsewhere on the subject site, soil is considered to be medium and fine textured; and
- The ground floor of the future development is planned for commercial use and the upper floors are planned for residential use.

2.0 Background Information

2.1 Physical Setting

The subject site includes land south and west of 1740 St. Laurent Boulevard in Ottawa, Ontario. The property is located in a mixed commercial/residential area. Potable water is available from the City of Ottawa, and there are no potable water wells nearby.

A site plan is presented as Figure 2 in Appendix A.

The closest body of water is Greens Creek. The creek is approximately 1.7 km northeast of the gas station and flows in a northeasterly direction toward the Ottawa River, which is more than 6 km north of the gas station. The subject site is not a shallow soil property as defined in Section 43.1 of the regulation. It does not include all or part of a water body or is adjacent to a water body or includes land that is within 30 metres of a water body. In addition, the subject site is not located within an area of natural significance and it does not include land that is within 30 metres of an area of natural significance.

Bedrock in the general area of the subject site consists of shale, limestone, dolostone, and siltstone. Native surficial soil consists of fine-textured glaciomarine deposits of silt and clay with minor sand and gravel. Bedrock is approximately 6 meters below ground surface (mbgs) at the property. The local topography slopes to the northeast.

2.2 Background

It is understood that 11421247 Canada Inc. intends to redevelop the property located at 1740 to 1760 St. Laurent Boulevard. Current use is commercial and future use will be mixed commercial and residential. As such, a Record of Site Condition must be filed prior to re-development. EXP identified the gas station as an area of potential environmental concern (APEC).

Previous Phase II sampling programs have been undertaken at the gas station property by other companies.

AMEC Earth & Environmental Ltd. prepared a report entitled *Phase II Environmental Site Assessment (ESA), 1740-1760 St. Laurent Boulevard & 1757 Russell Road, Ottawa, Ontario*, January 2002. Nine boreholes were advanced across the gas station property, and three monitoring wells were installed. Groundwater samples were submitted for analysis of BTEX, TPH (gas/diesel), TPH (heavy oil), VOCs, and metals. Low level PHC concentrations were identified in the groundwater regime in the vicinity of the Petro Canada, however all concentrations were below their respective Table B criteria.

Terrapex Environmental Ltd. prepared a report entitled *Petro Canada, Phase II Environmental Site Assessment (ESA), 1740 St. Laurent Boulevard, Ottawa, Ontario*, June 2009. Ten boreholes were advanced across the site, five of which were completed as monitoring wells. No liquid phase petroleum product was observed during the drilling program. One soil sample from each of the boreholes and a groundwater sample from each of the monitoring wells were submitted for analysis of BTEX and PHC. All of the soil and groundwater samples submitted were less than the Table 3 SCS for commercial land use and fine-grained soil.

The current investigation was being done to gain an understanding of current environmental conditions adjacent to the gas station property. Based on the nature of the APEC, petroleum hydrocarbons (PHC), polycyclic aromatic hydrocarbons (PAH), metals and volatile organic compounds (VOC) were identified as contaminants of concern on the property.

The location of the APEC is shown in Figure 2 in Appendix A.

3.0 Investigation Methodology

3.1 General

The soil and groundwater sampling program investigation consisted of the drilling of boreholes to facilitate the installation of monitoring wells for geological characterization and the collection of soil and groundwater samples for chemical analysis.

3.2 Borehole Drilling

The site investigative activities consisted of the drilling of boreholes to facilitate the collection of soil samples for chemical analysis, to record relevant geotechnical information and the installation of monitoring wells for hydrogeological property characterization and the collection of groundwater samples for chemical analysis.

Prior to the commencement of drilling, the locations of underground public utilities including telephone, natural gas and electrical lines were marked at the subject property by public locating companies. A private utility locating contractor was also retained to clear the individual borehole locations.

From August 20th to 25th, 2020, four boreholes (BH20-09, BH20-10, BH20-11 and BH20-13) were drilled on the subject site adjacent to the gas station. The boreholes were completed by George Downing Estate Drilling Ltd (Downing), a licensed well contractor, using a CME 75 truck-mounted drill rig.

Bedrock was encountered between 5.9 and 7.6 metres below ground surface (mbgs) in all four boreholes. EXP staff continuously monitored the drilling activities to log the stratigraphy observed from the recovered samples, to record the depth of the samples, and to record total depths of borings. Field observations are documented on the borehole logs provided in Appendix B.

The locations of the boreholes and monitoring wells are presented on Figure 2 in Appendix A.

3.3 Soil Sampling

Soil samples for geologic characterization were collected on a continuous basis in the overburden materials using 5 cm diameter, 61 cm long, split spoon samplers advanced into the subsurface using the drill rig. A split spoon sample was collected approximately every 80 cm as drilling progressed. The split spoon samplers were decontaminated between sampling intervals by EXP staff using a potable water/phosphate-free detergent solution followed by rinses with potable water. The soil cores were removed from the samplers upon retrieval by drilling personnel. Geologic details of the recovered cores were logged by EXP field staff. EXP staff continuously monitored the drilling activities to log the stratigraphy observed from the recovered soil cores, to record the depth of soil sample collection, to record total depths of borings, and to record visual or olfactory observations of potential impacts. Field observations are summarized on the borehole logs provided in Appendix B.

Soil samples identified for possible laboratory analysis were collected from the split spoon sampler and placed directly into pre-cleaned, laboratory-supplied glass sample jars/vials. Samples to be analysed for PHC fraction F1 and BTEX were collected using a soil core sampler and placed into vials containing methanol as a preservative. The jars and vials were sealed with Teflon-lined lids to minimize head-space and reduce the potential for induced volatilization during storage/transport prior to analysis. All soil samples were placed in clean coolers containing ice prior to and during transportation to the subcontract laboratory, Bureau Veritas Laboratories (BV Labs) of Ottawa, Ontario.

3.4 Monitoring Well Development and Groundwater Monitoring and Sampling

Groundwater monitoring wells were installed in three of the boreholes (BH20-10, BH20-11 and BH20-13). The monitoring wells were installed in general accordance with the Ontario Water Resources Act - R.R.O. 1990, Regulation 903 (as amended) and were installed by Downing, a licensed well contractor, using a CME 75 truck-mounted drill rig.

The monitoring wells consisted of a 51 mm diameter Schedule 40 PVC screen that was no more than 3.0 m long and a 51 mm diameter Schedule 40 PVC riser pipe. The annular space around the wells was backfilled with sand to an average height of 0.3 m above the top of the screen. A bentonite seal was added from the top of the sand pack to approximately 0.3 m below ground surface. The monitoring wells were completed with flushmount casings. Details of the monitoring well installations are shown on the borehole logs provided in Appendix B.

Groundwater samples from all three monitoring wells were collected via a low flow sampling technique using a YSI 550 multi probe water quality meter. The YSI probe was calibrated using in-house reference standards. Prior to collecting the groundwater samples, water quality field parameters (turbidity, dissolved oxygen, conductivity, temperature, pH, and oxidation reduction potential) were monitored until stable readings were achieved. These parameters are considered to be stable when three consecutive readings meet the following conditions:

- Turbidity: within 10% for values greater than 5 nephelometric turbidity units (NTU), or three values less than 5 NTU;
- Dissolved oxygen: within 10% for values greater than 0.5 mg/L, or three values less than 0.5 mg/L;
- Conductivity: within 3%;
- Temperature: $\pm 1^{\circ}\text{C}$;
- pH: ± 0.1 unit; and,
- Oxidation reduction potential: ± 10 millivolts.

When stabilization occurs, equilibrium between groundwater within a monitor and the surrounding formation water is attained. As such, samples collected when stabilization occurs are considered to be representative of formation water.

Three groundwater samples and one field duplicate were collected in laboratory provided sample bottles and submitted to BV Labs for analysis of BTEX, PHC, metals and VOC. The groundwater samples were placed in clean coolers containing ice packs prior to and during transportation to BV Labs. The samples were transported to BV Labs within 24 hours of collection with a chain of custody.

3.5 Quality Assurance and Quality Control Measures

All soil and groundwater samples were placed in coolers containing ice packs prior to and during transportation to the contract laboratory, Bureau Veritas Laboratories (BV Labs). Bureau Veritas Laboratories is accredited to the ISO/IEC 17025:2005 standard - *General Requirements for the Competence of Testing and Calibration Laboratories*.

A QA/QC program was also implemented to ensure that the analytical results received are accurate and dependable. A QA/QC program is a system of documented checks that validate the reliability of the data. Quality Assurance is a system that ensures that quality control procedures are correctly performed and documented. Quality Control refers to the established procedures observed both in the field and in the laboratory, designed to ensure that the resulting end data meet intended quality objectives. The QA/QC program implemented by EXP incorporated the following components:

- Collecting and analysing field duplicate groundwater samples to ensure analytical precision;
- Using dedicated and/or disposable sampling equipment;
- Following proper decontamination protocols to minimize cross-contamination;
- Maintaining field notes and completing field forms to document field activities; and
- Using only laboratory-supplied sample containers and following prescribed sample protocols, including using proper preservation techniques, meeting sample hold times, and documenting sample transmission on chains of custody, to ensure the integrity of the samples is maintained.

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BV Labs QA/QC program involved the systematic analysis of control standards for the purpose of optimizing the measuring system as well as establishing system precision and accuracy and included calibration standards, method blanks, reference standards, spiked samples, surrogates and duplicates.

4.0 Results

4.1 Soil Quality

Chemical analyses were performed on selected soil samples recovered from BH20-09, BH20-10, BH20-11 and BH20-13.

Three soil samples and one field duplicate were submitted for chemical analysis of BTEX and PHC, metals and VOC. The results are presented in Tables 1 to 3 in Appendix C. All of the soil samples were within the MECP Table 3 SCS.

Copies of the laboratory Certificates of Analysis are provided in Appendix D.

4.2 Groundwater Quality

Chemical analyses were performed on groundwater samples collected from the monitoring wells using low flow sampling techniques.

Three groundwater samples, one field duplicate, and one field blank were collected from the monitoring wells and were submitted for chemical analysis of BTEX and PHC, metals, and VOC. The results are presented in Tables 4 to 6 in Appendix C. All of the groundwater samples were within the MECP Table 3 SCS.

Copies of the laboratory Certificates of Analysis are provided in Appendix D.

4.3 Groundwater Monitoring

On September 10, 2020, monitoring wells BH10, BH11, and BH14 were inspected for general physical condition, groundwater depth, and the presence of non-aqueous phase liquid. EXP used a Heron water level tape to measure the static water level in each monitoring well. The measuring tape was cleaned with phosphate-free soap and tap water, rinsed with distilled water after each measurement.

Groundwater monitoring and elevation data are provided below.

Table 4.1 – Monitoring and Elevation Data

| Monitoring Well ID/ Installation ID | Grade Elevation (metres) | Top of Casing Elevation (mbTOC) | Screen Depth (mbgs) | Depth to LNAPL (mbgs) | Depth to Groundwater (mbTOC) | Groundwater Elevation(metres) |
|--|--------------------------------|---------------------------------------|---------------------------|-----------------------------|------------------------------------|----------------------------------|
| BH20-10 | 69.86 | 69.73 | 0.7-3.7 | N/A | 1.71 | 68.02 |
| BH20-11 | 70.68 | 70.38 | 1.0-4.0 | N/A | 1.51 | 68.87 |
| BH20-13 | 71.07 | 70.88 | 1.5-4.5 | N/A | 1.76 | 69.12 |

Notes: Elevations were measured to a relative datum.

LNAPL – light non-aqueous phase liquid

mbgs – metres below ground surface

mbTOC – metres below top of monitor casing

Based on the groundwater elevations for the shallow monitoring wells in the above table, a groundwater contour plan was prepared. The groundwater flow direction was determined to be easterly. The groundwater contour plan is provided as Figure 3 in Appendix A.

4.4 Quality Assurance and Quality Control Results

Quality assurance and quality control measures were taken during the field activities to meet the objectives of the sampling and quality assurance plan to collect unbiased and representative samples to characterize existing conditions in the fill materials and groundwater at the site. QA/QC measures, included:

- Collection and analysis of blind duplicate groundwater samples to ensure sample collection precision;
- Analysis of a groundwater field blank for all parameters that were analysed to assess potential impact during sampling;
- Using dedicated and/or disposable sampling equipment;
- Following proper decontamination protocols to minimize cross-contamination;
- Maintaining field notes and completing field forms to document on-site activities; and
- Using only laboratory supplied sample containers and following prescribed sample protocols, including proper preservation, meeting sample hold times, proper chain of custody documentation, to ensure integrity of the samples.

Bureau Veritas Laboratories' (BV Labs) QA/QC program consisted of the preparation and analysis of laboratory duplicate samples to assess precision and sample homogeneity, method blanks to assess analytical bias, spiked blanks and QC standards to evaluate analyte recovery, matrix spikes to evaluate matrix interferences and surrogate compound recoveries to evaluate extraction efficiency. The laboratory QA/QC results are presented in the Quality Assurance Report provided in the Certificates of Analysis prepared by BV Labs. The QA/QC results are reported as percent recoveries for matrix spikes, spiked blanks and QC standards, relative percent difference for laboratory duplicates and analyte concentrations for method blanks.

Review of the laboratory QA/QC results reported indicated that they were all within acceptable control limits or below applicable alert criteria for the sampled media and analytical test groups. Based on the assessment of the QA/QC, the analytical results reported by BV labs are of acceptable quality and further data qualifications are not required.

For QA/QC purposes, the analytical sample results are quantitatively evaluated by calculating the relative percent difference (RPD) between the samples and their duplicates. To accurately calculate a statistically valid RPD, the concentration of the analytes found in both the original and duplicate sample must be greater than five times the reporting detection limit (RDL).

The results of the RPD calculations are provided in Appendix C in Tables 7 to 12. All of the RPD for soil and groundwater were either not calculable or within the applicable alert limits.

A field blank was prepared and submitted for laboratory analysis of all parameters tested in groundwater. All parameters in the field blank were non-detectable.

5.0 Conclusion

A total of four boreholes were drilled three of which were completed as monitoring wells.

A summary of the findings from the delineation soil and groundwater sampling program is as follows:

- Three soil samples and one field duplicate were submitted for chemical analysis of BTEX and PHC, metals, and VOC. All of the soil samples were within the MECP Table 3 SCS;
- Three groundwater samples were submitted for chemical analysis of BTEX and PHC, metals, and VOC. All of the groundwater samples within the MECP Table 3 standards;
- Bedrock was encountered at depths ranging from 5.9 to 7.6 mbgs; and
- The groundwater flow direction is easterly.

Based on the results of the soil and groundwater sampling program, it does not appear that the subject site south and west of the gas station have been adversely affected by the operation of the gas station.

6.0 References

This study was conducted in accordance with the applicable Regulations, Guidelines, Policies, Standards, Protocols and Objectives. Specific reference is made to the following documents.

- AMEC Earth & Environmental Ltd. *Phase II Environmental Site Assessment (ESA), 1740-1760 St. Laurent Boulevard & 1757 Russell Road, Ottawa, Ontario*, January 2002.
- Canadian Standards Association, *CSA-Z769-00 (R2013), Phase II Environmental Assessment Standard*, 2013.
- EXP Services Inc. *Phase One Environmental Site Assessment, 1740-1760 St. Laurent Boulevard, Ottawa, Ontario*, October 2020.
- Ontario Ministry of the Environment, Conservation and Parks, *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act*, April 15, 2011.
- Ontario Ministry of the Environment, Conservation and Parks, *Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*, July 1, 2011.
- Ontario Ministry of the Environment, Conservation and Parks, *Management of Excess Soil – A Guide for Best Management Practices*, January 2014.
- Ontario Regulation 153/04, made under the *Environmental Protection Act*, as amended.
- Ontario R.R.O. 1990, Regulation 347, made under the *Environmental Protection Act*, as amended.
- Ontario R.R.O. 1990, Regulation 903, made under the *Water Resources Act*, as amended.
- Terrapex Environmental Ltd. *Petro Canada, Phase II Environmental Site Assessment (ESA), 1740 St. Laurent Boulevard, Ottawa, Ontario*, June 2009.

7.0 General Limitations

Basis of Report

This report ("Report") is based on site conditions known or inferred by the investigation undertaken as of the date of the Report. Should changes occur which potentially impact the condition of the site the recommendations of EXP may require re-evaluation. Where special concerns exist, or 11421247 Canada Inc. ("the Client") has special considerations or requirements, these should be disclosed to EXP to allow for additional or special investigations to be undertaken not otherwise within the scope of investigation conducted for the purpose of the Report.

Reliance on Information Provided

The evaluation and conclusions contained in the Report are based on conditions in evidence at the time of site inspections and information provided to EXP by the Client and others. The Report has been prepared for the specific site, development, building, design or building assessment objectives and purpose as communicated by the Client. EXP has relied in good faith upon such representations, information and instructions and accepts no responsibility for any deficiency, misstatement or inaccuracy contained in the Report as a result of any misstatements, omissions, misrepresentation or fraudulent acts of persons providing information. Unless specifically stated otherwise, the applicability and reliability of the findings, recommendations, suggestions or opinions expressed in the Report are only valid to the extent that there has been no material alteration to or variation from any of the information provided to exp. If new information about the environmental conditions at the Site is found, the information should be provided to EXP so that it can be reviewed and revisions to the conclusions and/or recommendations can be made, if warranted.

Standard of Care

The Report has been prepared in a manner consistent with the degree of care and skill exercised by engineering consultants currently practicing under similar circumstances and locale. No other warranty, expressed or implied, is made. Unless specifically stated otherwise, the Report does not contain environmental consulting advice.

Complete Report

All documents, records, data and files, whether electronic or otherwise, generated as part of this assignment form part of the Report. This material includes, but is not limited to, the terms of reference given to EXP by the Client, communications between EXP and the Client, other reports, proposals or documents prepared by EXP for the Client in connection with the site described in the Report. In order to properly understand the suggestions, recommendations and opinions expressed in the Report, reference must be made to the Report in its entirety. EXP is not responsible for use by any party of portions of the Report.

Use of Report

The information and opinions expressed in the Report, or any document forming part of the Report, are for the sole benefit of the Client. No other party may use or rely upon the Report in whole or in part without the written consent of EXP. Any use of the Report, or any portion of the Report, by a third party are the sole responsibility of such third party. EXP is not responsible for damages suffered by any third party resulting from unauthorised use of the Report.

Report Format

Where EXP has submitted both electronic file and a hard copy of the Report, or any document forming part of the Report, only the signed and sealed hard copy shall be the original documents for record and working purposes. In the event of a dispute or discrepancy, the hard copy shall govern. Electronic files transmitted by EXP utilize specific software and hardware systems. EXP makes no representation about the compatibility of these files with the Client's current or future software and

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hardware systems. Regardless of format, the documents described herein are EXP's instruments of professional service and shall not be altered without the written consent of EXP.

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October 9, 2020

8.0 Signatures

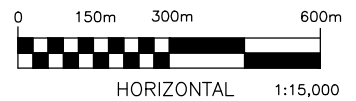
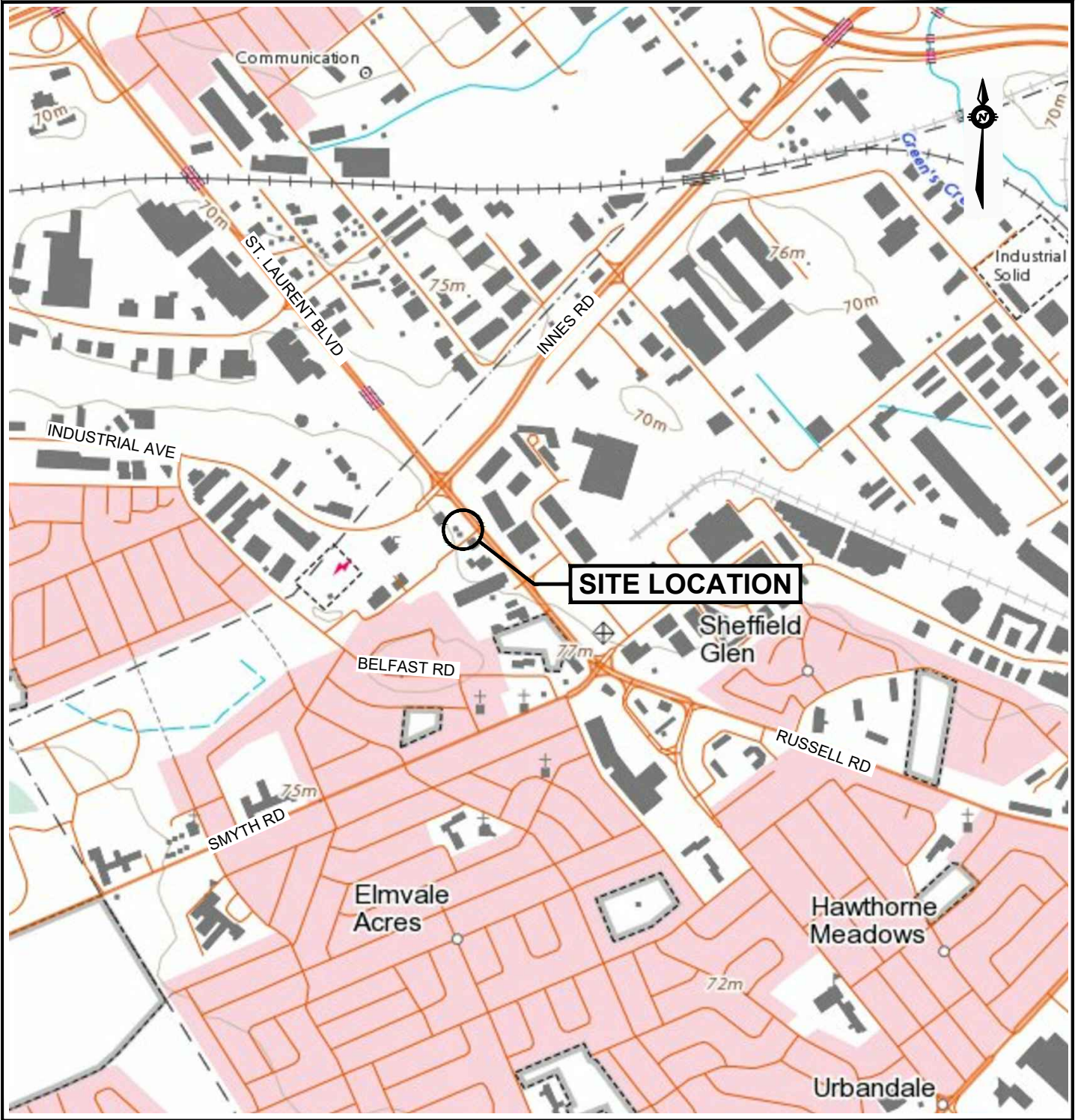
We trust this report meets your current needs. If you have any questions pertaining to the investigation undertaken by EXP, please do not hesitate to contact the undersigned.

Leah Wells, B.A.Sc., EIT
Environmental Engineer-in-Training
Earth and Environment

Patricia Stelmack, M.Sc., P.Eng.
Team Lead/Senior Project Manager
Earth and Environment

Appendix A: Figures

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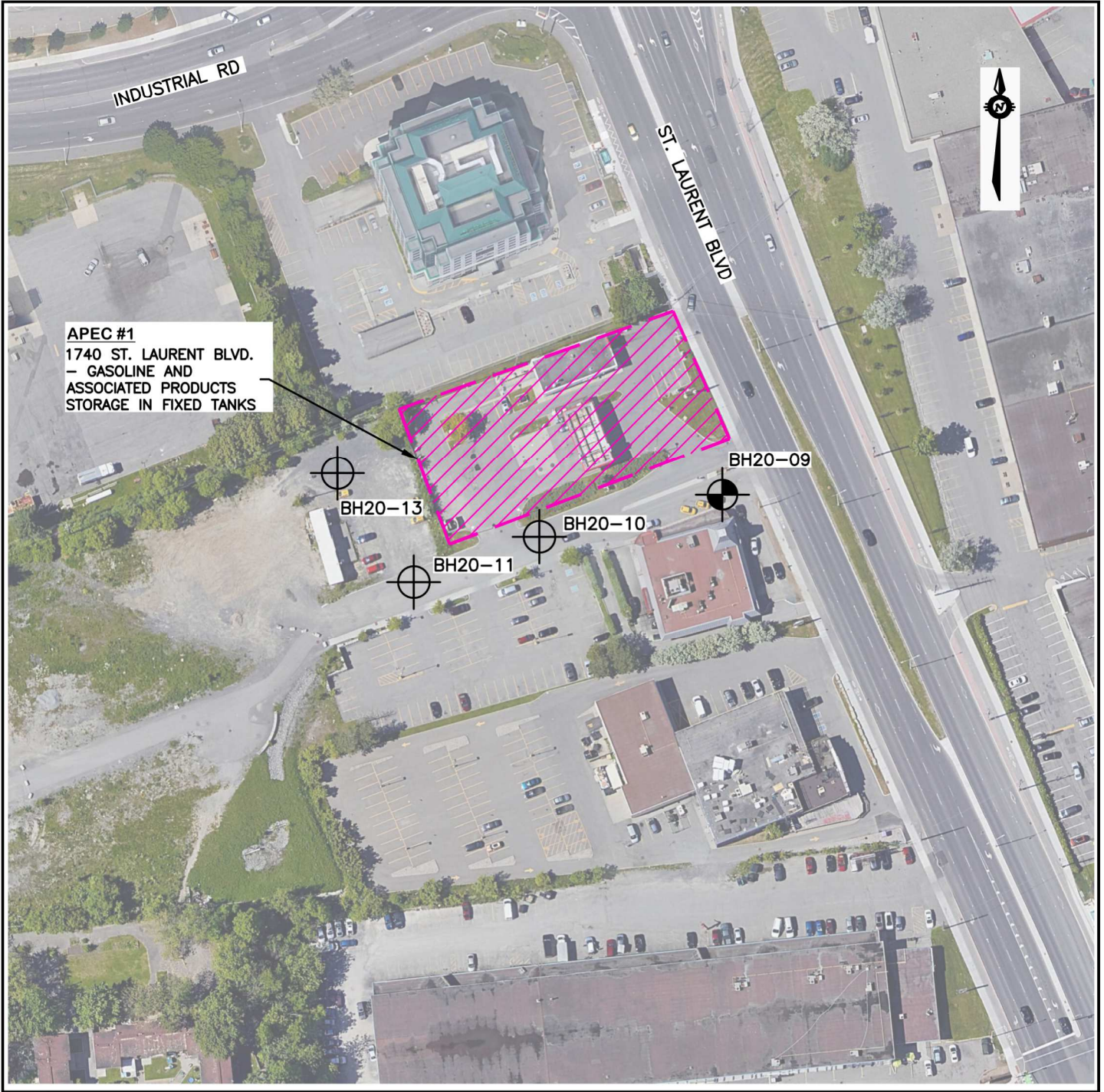
11421247 CANADA INC
PROPOSED RESIDENTIAL DEVELOPMENT

SITE LOCATION PLAN
 ADJACENT TO 1740 ST LAURENT BLVD, OTTAWA, ON

SCALE
 1:15,000
 SKETCH NO

FIG 1

Filename: E:\OTT\OTT-00260579-B0\60_Execution\65 Drawings\260579-B0 Fig 2 (Petro-Canada).dwg
 Last Saved: Oct 2, 2020 9:35 AM Last Plotted: Oct 2, 2020 9:37 AM Plotted by: CuiG



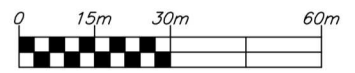
LEGEND:



BH20-09 BOREHOLE LOCATION AND NUMBER



BH20-11 MONITORING WELL LOCATION AND NUMBER



HORIZONTAL 1:1500

exp Services Inc.
 100-2650 Queensview Drive
 Ottawa, ON K2B 8H6
 www.exp.com



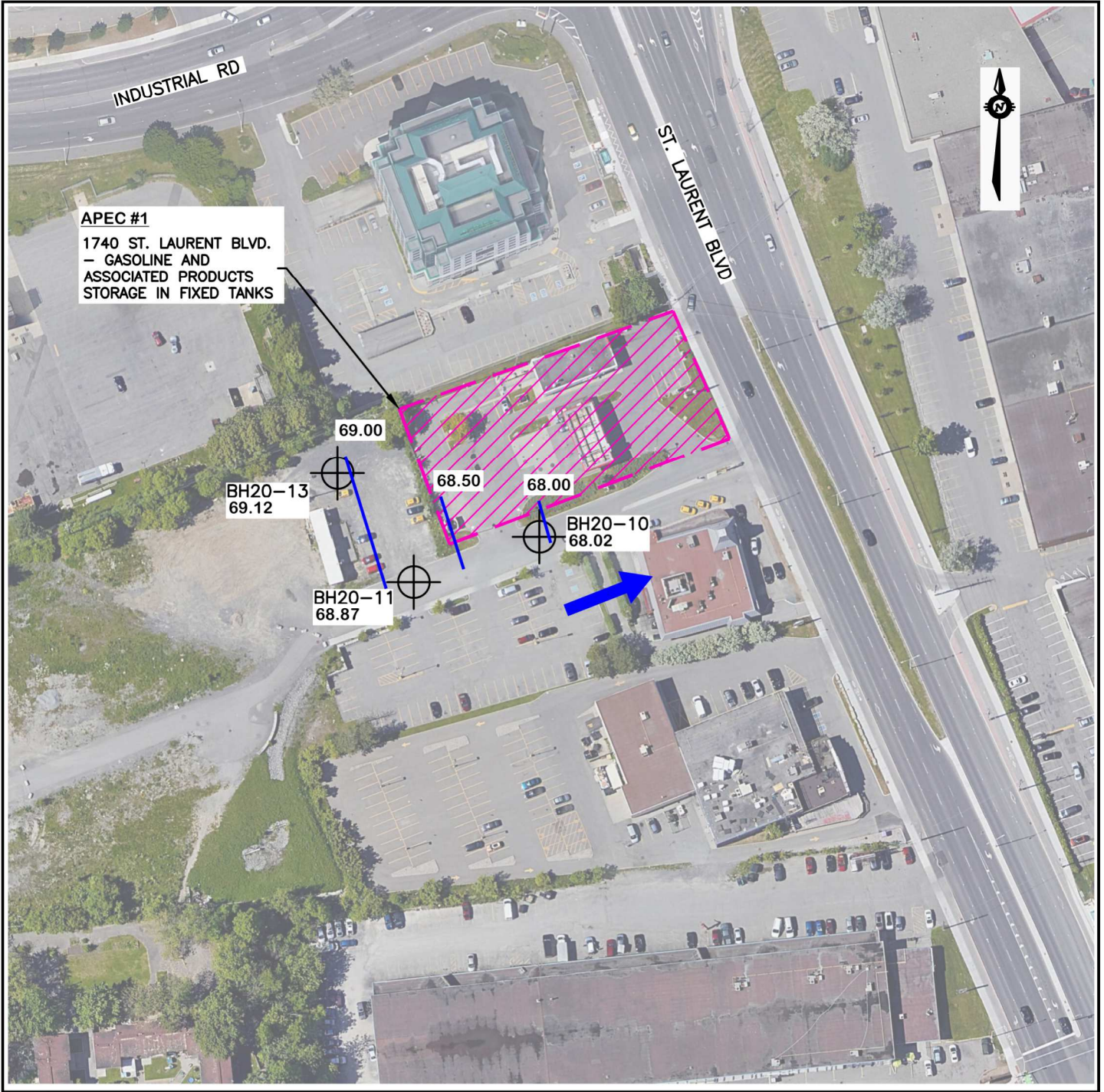
| | |
|---------|-----------------|
| DESIGN | L.W. |
| DRAWN | G.C. |
| DATE | SEPT. 2020 |
| FILE NO | OTT-00260579-B0 |

11421247 CANADA INC
PROPOSED RESIDENTIAL DEVELOPMENT
SITE PLAN
PHASE II ESA
 ADJACENT TO 1740 ST LAURENT BLVD, OTTAWA, ON


SCALE
 1:1,250
 SKETCH NO

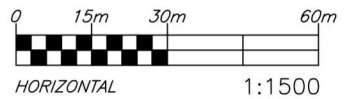
FIG 2

Filename: E:\OTT\OTT-00260579-B0_60_Execution\65 Drawings\260579-B0 Fig_3 (Petro-Canada).dwg
 Last Saved: Oct 2, 2020 9:34 AM Last Plotted: Oct 2, 2020 9:44 AM Plotted by: CuiG



LEGEND:

 **BH20-11**
 68.99 MONITORING WELL LOCATION, NUMBER AND
 GROUNDWATER ELEVATION



exp Services Inc.
 100-2650 Queensview Drive
 Ottawa, ON K2B 8H6
 www.exp.com



| | |
|---------|-----------------|
| DESIGN | L.W. |
| DRAWN | G.C. |
| DATE | SEPT. 2020 |
| FILE NO | OTT-00260579-B0 |

11421247 CANADA INC
PROPOSED RESIDENTIAL DEVELOPMENT
GROUNDWATER CONTOUR PLAN
PHASE II ESA
 ADJACENT TO 1740 ST LAURENT BLVD, OTTAWA, ON

SCALE
 1:1,250
 SKETCH NO

FIG 3

Appendix B: Borehole Logs

Explanation of Terms Used on Borehole Records

SOIL DESCRIPTION

Terminology describing common soil genesis:

Topsoil: mixture of soil and humus capable of supporting good vegetative growth.

Peat: fibrous fragments of visible and invisible decayed organic matter.

Fill: where fill is designated on the borehole log it is defined as indicated by the sample recovered during the boring process. The reader is cautioned that fills are heterogeneous in nature and variable in density or degree of compaction. The borehole description may therefore not be applicable as a general description of site fill materials. All fills should be expected to contain obstruction such as wood, large concrete pieces or subsurface basements, floors, tanks, etc.; none of these may have been encountered in the boreholes. Since boreholes cannot accurately define the contents of the fill, test pits are recommended to provide supplementary information. Despite the use of test pits, the heterogeneous nature of fill will leave some ambiguity as to the exact composition of the fill. Most fills contain pockets, seams, or layers of organically contaminated soil. This organic material can result in the generation of methane gas and/or significant ongoing and future settlements. Fill at this site may have been monitored for the presence of methane gas and, if so, the results are given on the borehole logs. The monitoring process does not indicate the volume of gas that can be potentially generated nor does it pinpoint the source of the gas. These readings are to advise of the presence of gas only, and a detailed study is recommended for sites where any explosive gas/methane is detected. Some fill material may be contaminated by toxic/hazardous waste that renders it unacceptable for deposition in any but designated land fill sites; unless specifically stated the fill on this site has not been tested for contaminants that may be considered toxic or hazardous. This testing and a potential hazard study can be undertaken if requested. In most residential/commercial areas undergoing reconstruction, buried oil tanks are common and are generally not detected in a conventional geotechnical site investigation.

Till: the term till on the borehole logs indicates that the material originates from a geological process associated with glaciation. Because of this geological process the till must be considered heterogeneous in composition and as such may contain pockets and/or seams of material such as sand, gravel, silt or clay. Till often contains cobbles (60 to 200 mm) or boulders (over 200 mm). Contractors may therefore encounter cobbles and boulders during excavation, even if they are not indicated by the borings. It should be appreciated that normal sampling equipment cannot differentiate the size or type of any obstruction. Because of the horizontal and vertical variability of till, the sample description may be applicable to a very limited zone; caution is therefore essential when dealing with sensitive excavations or dewatering programs in till materials.

Terminology describing soil structure:

Desiccated: having visible signs of weathering by oxidization of clay minerals, shrinkage cracks, etc.

Stratified: alternating layers of varying material or color with the layers greater than 6 mm thick.

Laminated: alternating layers of varying material or color with the layers less than 6 mm thick.

Fissured: material breaks along plane of fracture.

Varved: composed of regular alternating layers of silt and clay.

Slickensided: fracture planes appear polished or glossy, sometimes striated.

Blocky: cohesive soil that can be broken down into small angular lumps which resist further breakdown.

Lensed: inclusion of small pockets of different soil, such as small lenses of sand scattered through a mass of clay; not thickness.

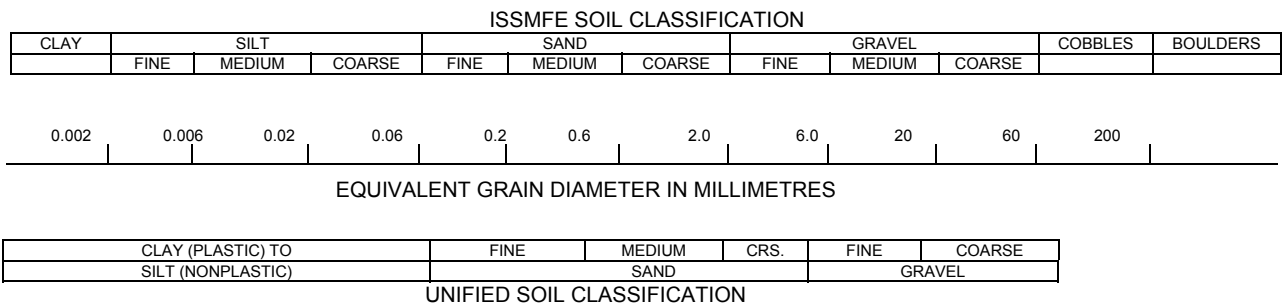
Seam: a thin, confined layer of soil having different particle size, texture, or color from materials above and below.

Homogeneous: same color and appearance throughout.

Well Graded: having wide range in grain sized and substantial amounts of all predominantly on grain size.

Uniformly Graded: predominantly on grain size.

All soil sample descriptions included in this report follow the ASTM D2487-11 Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System). The system divides soils into three major categories: (1) coarse grained, (2) fine-grained, and (3) highly organic. The soil is then subdivided based on either gradation or plasticity characteristics. The system provides a group symbol (e.g. SM) and group name (e.g. silty sand) for identification. The classification excludes particles larger than 76 mm. Please note that, with the exception of those samples where a grain size analysis has been made, all samples are classified visually in accordance with ASTM D2488-09a Standard Practice for Description and Identification of Soils (Visual-Manual Procedure). Visual classification is not sufficiently accurate to provide exact grain sizing or precise differentiation between size classification systems. Others may use different classification systems; one such system is the ISSMFE Soil Classification.



Terminology describing materials outside the USCS, (e.g. particles larger than 76 mm, visible organic matter, construction debris) is based upon the proportion of these materials present and as described below in accordance with Note 16 in ASTM D2488-09a:

Table a: Percent or Proportion of Soil, Pp

| | Criteria |
|--------|--|
| Trace | Particles are present but estimated to be less than 5% |
| Few | $5 \leq Pp \leq 10\%$ |
| Little | $15 \leq Pp \leq 25\%$ |
| Some | $30 \leq Pp \leq 45\%$ |
| Mostly | $50 \leq Pp \leq 100\%$ |

The standard terminology to describe cohesionless soils includes the compactness as determined by the Standard Penetration Test 'N' value:

Table b: Apparent Density of Cohesionless Soil

| | 'N' Value (blows/0.3 m) |
|------------|-------------------------|
| Very Loose | $N < 5$ |
| Loose | $5 \leq N < 10$ |
| Compact | $10 \leq N < 30$ |
| Dense | $30 \leq N < 50$ |
| Very Dense | $50 \leq N$ |

The standard terminology to describe cohesive soils includes consistency, which is based on undrained shear strength as measured by insitu vane tests, penetrometer tests, unconfined compression tests or similar field and laboratory analysis, Standard Penetration Test 'N' values can also be used to provide an approximate indication of the consistency and shear strength of fine grained, cohesive soils:

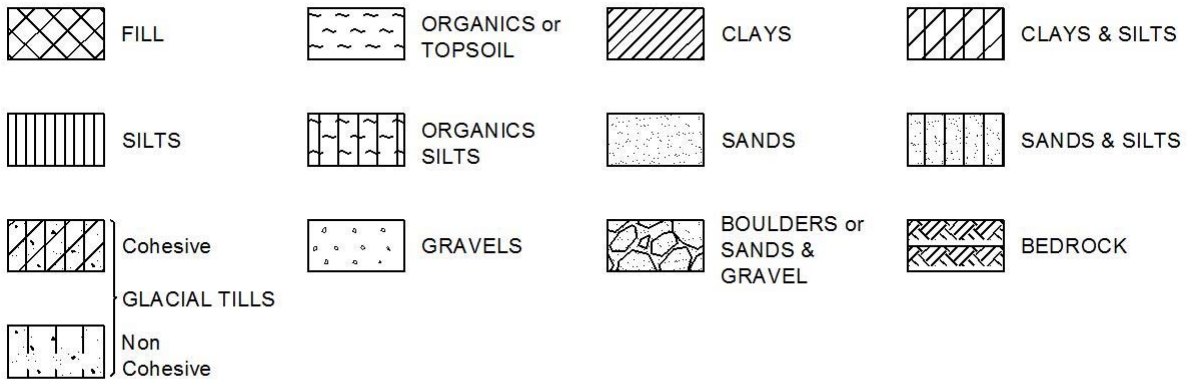
Table c: Consistency of Cohesive Soil

| Consistency | Vane Shear Measurement (kPa) | 'N' Value |
|-------------|------------------------------|-----------|
| Very Soft | <12.5 | <2 |
| Soft | 12.5-25 | 2-4 |
| Firm | 25-50 | 4-8 |
| Stiff | 50-100 | 8-15 |
| Very Stiff | 100-200 | 15-30 |
| Hard | >200 | >30 |

Note: 'N' Value - The Standard Penetration Test records the number of blows of a 140 pound (64kg) hammer falling 30 inches (760mm), required to drive a 2 inch (50.8mm) O.D. split spoon sampler 1 foot (305mm). For split spoon samples where full penetration is not achieved, the number of blows is reported over the sampler penetration in meters (e.g. 50/0.15).

STRATA PLOT

Strata plots symbolize the soil or bedrock description. They are combinations of the following basic symbols:



WATER LEVEL MEASUREMENT



Open Borehole or Test Pit



Monitoring Well, Piezometer or Standpipe

Log of Borehole BH9



Project No: OTT-00260579-A0
 Project: Geotechnical Investigation and PI/II ESA
 Location: 1740&1760 St Laurent Boulevard, Ottawa, ON

Figure No. 7
 Page. 1 of 2

Date Drilled: 8/25/20
 Drill Type: CME 75 (truck mount)
 Datum: Geodetic
 Logged by: ML Checked by: SP

Split Spoon Sample
 Auger Sample
 SPT (N) Value
 Dynamic Cone Test
 Shelby Tube
 Shear Strength by Vane Test
 Combustible Vapour Reading
 Natural Moisture Content
 Atterberg Limits
 Undrained Triaxial at % Strain at Failure
 Shear Strength by Penetrometer Test

| GWL | SOILS | SOIL DESCRIPTION | Geodetic m | Depth | Standard Penetration Test N Value | | | | Combustible Vapour Reading (ppm) | | | Natural Unit Wt. kN/m ³ |
|-----|-------|--|------------|-------|-----------------------------------|----|----|----|----------------------------------|-----|-----|------------------------------------|
| | | | | | Shear Strength | | | | Natural Moisture Content % | | | |
| | | | | | 20 | 40 | 60 | 80 | 250 | 500 | 750 | |
| | | ASPHALT PAVEMENT 60 mm | 69.3 | 0 | | | | | | | | |
| | | GRANULAR FILL | 69.2 | | | | | | | | | |
| | | FILL Sandy gravel, brown, moist | 68.9 | | | | | | | | | |
| | | SILTY CLAY TO SILTY SAND Brown to grey, moist, (firm to stiff) | 68.5 | 1 | | | | | X | | | SS1 |
| | | SILTY SANDY CLAY Grey, moist to wet, (very soft to firm) | 67.8 | | | | | | | | | |
| | | | | 2 | | | | | | X | | SS2 |
| | | | | | | | | | | | | |
| | | | | 3 | | | | | | X | | SS3 |
| | | | | | | | | | | | | |
| | | | | 4 | | | | | | X | | SS4 |
| | | | | | | | | | | | | |
| | | | | 5 | | | | | | X | | SS5 |
| | | | | | | | | | | | | |
| | | TILL Silty sand, some clay and gravel, grey, wet, (compact) | 64.7 | | | | | | | | | |
| | | | | 5 | | | | | | X | | SS6 |
| | | | | | | | | | | | | |
| | | Borehole Terminated at 5.9 m Depth at Auger Refusal | 63.4 | | | | | | | | | |

Continued Next Page

NOTES:
 1. Borehole data requires interpretation by EXP before use by others
 2.
 3.
 4. See Notes on Sample Descriptions
 5. Log to be read with EXP Report OTT-00260579-A0

| WATER LEVEL RECORDS | | |
|---------------------|-----------------|------------------|
| Date | Water Level (m) | Hole Open To (m) |
| completion | 2.5 | 5.8 |

| CORE DRILLING RECORD | | | |
|----------------------|-----------|--------|-------|
| Run No. | Depth (m) | % Rec. | RQD % |
| | | | |

LOG OF BOREHOLE LOGS OF BOREHOLES - 1740&1760 ST LAURENT.GPJ TROW/OTTAWA.GDT 8/31/20

Log of Borehole BH10



Project No: OTT-00260579-A0

Figure No. 8

Project: Geotechnical Investigation and PI/II ESA

Page. 1 of 2

Location: 1740&1760 St Laurent Boulevard, Ottawa, ON

Date Drilled: 8/24/20

Split Spoon Sample

Combustible Vapour Reading

Drill Type: CME 75 (truck mount)

Auger Sample

Natural Moisture Content

SPT (N) Value

Atterberg Limits

Datum: Geodetic

Dynamic Cone Test

Undrained Triaxial at

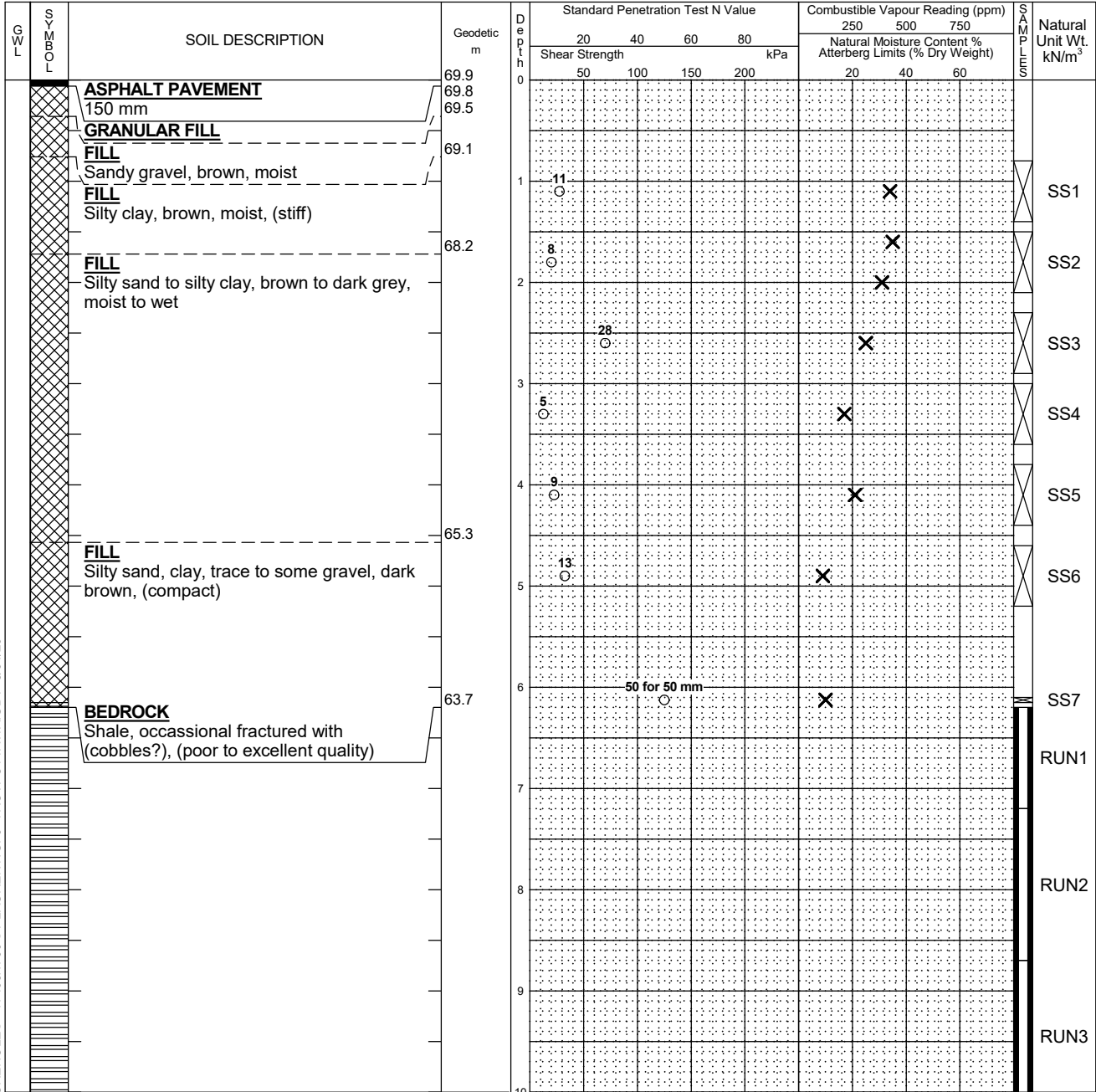
Shelby Tube

% Strain at Failure

Logged by: ML Checked by: SP

Shear Strength by Vane Test

Shear Strength by Penetrometer Test



Continued Next Page

NOTES:

- Borehole data requires interpretation by EXP before use by others
-
-
- See Notes on Sample Descriptions
- Log to be read with EXP Report OTT-00260579-A0

WATER LEVEL RECORDS

| Date | Water Level (m) | Hole Open To (m) |
|------|-----------------|------------------|
| | | |

CORE DRILLING RECORD

| Run No. | Depth (m) | % Rec. | RQD % |
|---------|-------------|--------|-------|
| 1 | 6.2 - 7.2 | 100 | 36 |
| 2 | 7.2 - 8.7 | 100 | 68 |
| 3 | 8.7 - 10.2 | 98 | 98 |
| 4 | 10.2 - 11.4 | 100 | 95 |
| 5 | 11.4 - 13.2 | 100 | 92 |
| 6 | 13.2 - 14.7 | 100 | 96 |

LOG OF BOREHOLE LOGS OF BOREHOLES - 1740&1760 ST LAURENT. GPJ TROW/OTTAWA GDT. 8/31/20

Log of Borehole BH10



Project No: OTT-00260579-A0

Figure No. 8

Project: Geotechnical Investigation and PI/II ESA

Page. 2 of 2

| SOIL DESCRIPTION | Geodetic m | Standard Penetration Test N Value | | | | Combustible Vapour Reading (ppm) | | | Natural Unit Wt. kN/m ³ | |
|--|---------------|-----------------------------------|----|-----|-----|---|-----|-----|--|------|
| | | Shear Strength kPa | | | | Natural Moisture Content % Atterberg Limits (% Dry Weight) | | | | |
| | | 20 | 40 | 60 | 80 | 250 | 500 | 750 | | |
| BEDROCK Shale, occasional fractured with (cobbles?), (poor to excellent quality) (continued) | 59.9 | 10 | 50 | 100 | 150 | 200 | 20 | 40 | 60 | RUN4 |
| | | 11 | | | | | | | | RUN5 |
| | | 12 | | | | | | | | RUN5 |
| | | 13 | | | | | | | | RUN6 |
| | | 14 | | | | | | | | RUN6 |
| | | 55.2 | | | | | | | | |
| Borehole Terminated at 14.7 m Depth | | | | | | | | | | |

LOG OF BOREHOLE LOGS OF BOREHOLES - 1740&1760 ST LAURENT.GPJ TROW OTTAWA.GDT 8/31/20

- NOTES:
- Borehole data requires interpretation by EXP before use by others
 -
 -
 - See Notes on Sample Descriptions
 - Log to be read with EXP Report OTT-00260579-A0

| WATER LEVEL RECORDS | | |
|---------------------|-----------------|------------------|
| Date | Water Level (m) | Hole Open To (m) |
| | | |

| CORE DRILLING RECORD | | | |
|----------------------|-------------|--------|-------|
| Run No. | Depth (m) | % Rec. | RQD % |
| 1 | 6.2 - 7.2 | 100 | 36 |
| 2 | 7.2 - 8.7 | 100 | 68 |
| 3 | 8.7 - 10.2 | 98 | 98 |
| 4 | 10.2 - 11.4 | 100 | 95 |
| 5 | 11.4 - 13.2 | 100 | 92 |
| 6 | 13.2 - 14.7 | 100 | 96 |

Log of Borehole BH11



Project No: OTT-00260579-A0

Figure No. 9

Project: Geotechnical Investigation and PI/II ESA

Page. 1 of 1

Location: 1740&1760 St Laurent Boulevard, Ottawa, ON

Date Drilled: 8/25/20

Split Spoon Sample

Combustible Vapour Reading

Drill Type: CME 75 (truck mount)

Auger Sample

Natural Moisture Content

SPT (N) Value

Atterberg Limits

Datum: Geodetic

Dynamic Cone Test

Undrained Triaxial at

Shelby Tube

% Strain at Failure

Logged by: ML Checked by: SP

Shear Strength by Vane Test

Shear Strength by Penetrometer Test

| G W L | S O M E T H I N G S | SOIL DESCRIPTION | Geodetic m | D e p t h m | Standard Penetration Test N Value | | | | Combustible Vapour Reading (ppm) | | | Natural Unit Wt. kN/m ³ |
|-------------|--|---|---------------|----------------------------|-----------------------------------|--|--|--|---|-----|-----|--|
| | | | | | Shear Strength | | | | 250 | 500 | 750 | |
| | | | | | kPa | | | | Natural Moisture Content % Atterberg Limits (% Dry Weight) | | | |
| | | FILL Gravelly sand to sandy gravel | 70.7 | 0 | | | | | | | | |
| | | FILL Silty sand to silty clay, some gravel, brown, moist | 69.9 | 1 | | | | | X | | | SS1 |
| | | FILL Sand, trace silt and gravel, moist to wet (loose) | 69.2 | 2 | | | | | X | | | SS2 |
| | | Sand, some silt and gravel, Brown, wet, (loose) | 68.4 | 3 | | | | | | | | SS3 |
| | | TILL Silty sand to gravelly sand, some clay and gravel, dark brown to grey, wet, (compact to dense) | 66.9 | 4 | | | | | X | | | SS5 |
| | | | | 5 | | | | | X | | | SS6 |
| | | | | 6 | | | | | X | | | SS7 |
| | | | | 7 | | | | | X | | | SS8 |
| | | Borehole Terminated at 7.2 m Depth at Auger Refusal | 63.5 | | | | | | | | | |

LOG OF BOREHOLE LOGS OF BOREHOLES - 1740&1760 ST LAURENT.GPJ TROW OTTAWA GDT 8/31/20

NOTES:
 1. Borehole data requires interpretation by EXP before use by others
 2.
 3.
 4. See Notes on Sample Descriptions
 5. Log to be read with EXP Report OTT-00260579-A0

| WATER LEVEL RECORDS | | |
|---------------------|-----------------|------------------|
| Date | Water Level (m) | Hole Open To (m) |
| completion | 3.0 | No |

| CORE DRILLING RECORD | | | |
|----------------------|-----------|--------|-------|
| Run No. | Depth (m) | % Rec. | RQD % |
| | | | |

Log of Borehole BH13



Project No: OTT-00260579-A0

Figure No. 11

Project: Geotechnical Investigation and PI/II ESA

Page. 1 of 1

Location: 1740&1760 St Laurent Boulevard, Ottawa, ON

Date Drilled: 8/25/20

Split Spoon Sample

Combustible Vapour Reading

Drill Type: CME 75 (truck mount)

Auger Sample

Natural Moisture Content

SPT (N) Value

Atterberg Limits

Datum: Geodetic

Dynamic Cone Test

Undrained Triaxial at

Shelby Tube

% Strain at Failure

Logged by: ML Checked by: SP

Shear Strength by Vane Test

Shear Strength by Penetrometer Test

| G W L S O M E T H I N G S | SOIL DESCRIPTION | Geodetic m | D e p t h m | Standard Penetration Test N Value | | | | Combustible Vapour Reading (ppm) | | | Natural Unit Wt. kN/m ³ | |
|---|--|---------------|--------------------------------|-----------------------------------|----|----|----|---|-----|-----|--|-----|
| | | | | Shear Strength | | | | 250 | 500 | 750 | | |
| | | | | 20 | 40 | 60 | 80 | Natural Moisture Content % Atterberg Limits (% Dry Weight) | | | | |
| 50 | 100 | 150 | 200 | 20 | 40 | 60 | | | | | | |
| | FILL Sandy gravel, grey, moist, (compact) | 72 | 0 | 28 | | | | | X | | | SS1 |
| | FILL Gravelly sand, some silt, brown, moist, (compact) | 71.2 | 1 | 14 | | | | | X | | | SS2 |
| | SILTY CLAY TO CLAYEY SILT Grey to brown, moist to wet, (very soft to very stiff) | 70.5 | 2 | 16 | | | | | X | | | SS3 |
| | | | 3 | 7 | | | | | | X | | SS4 |
| | | | 4 | 2 | | | | | | X | | SS5 |
| | | | 5 | | | | | | | X | | SS6 |
| | TILL Silty sand, some clay and gravel, dark grey, wet, (compact to dense) | 67.4 | 6 | 11 | | | | | X | | | SS7 |
| | | | 7 | 43 | | | | | X | | | SS8 |
| | | | 8 | 37 | | | | | X | | | SS9 |
| | Borehole Terminated at 6.8 m Depth at Auger Refusal | 65.2 | | | | | | | | | | |

LOG OF BOREHOLE LOGS OF BOREHOLES - 1740&1760 ST LAURENT.GPJ TROW OTTAWA GDT 8/31/20

NOTES:
 1. Borehole data requires interpretation by EXP before use by others
 2.
 3.
 4. See Notes on Sample Descriptions
 5. Log to be read with EXP Report OTT-00260579-A0

| WATER LEVEL RECORDS | | |
|---------------------|-----------------|------------------|
| Date | Water Level (m) | Hole Open To (m) |
| completion | 3.0 | No |

| CORE DRILLING RECORD | | | |
|----------------------|-----------|--------|-------|
| Run No. | Depth (m) | % Rec. | RQD % |
| | | | |

Appendix C: Analytical Summary Tables

Table 1 - Petroleum Hydrocarbons in Soil
Property Adjacent to 1740 St. Laurent Boulevard, Ottawa, Ontario
OTT-00260579-A0

| Sample ID | MECP Table 3 SCS ¹ | BH9-SS3 | Dup (Field Duplicate of BH9-SS3) | BH10-SS4 | BH11-SS3 |
|----------------------------|-------------------------------|-------------|--|-------------|-------------|
| Sampling Date | | 25-Aug-2020 | 25-Aug-2020 | 25-Aug-2020 | 25-Aug-2020 |
| Sample Depth (mbgs) | | 2.3 to 2.9 | 2.3 to 2.9 | 3.0 to 3.6 | 2.3 to 2.9 |
| Bureau Veritas (BV) ID | | NMB843 | NMB844 | NMB842 | NMB845 |
| Date of Analysis | | 29-Aug-2020 | 29-Aug-2020 | 29-Aug-2020 | 29-Aug-2020 |
| BV Certificate of Analysis | | C0M0429 | C0M0429 | C0M0429 | C0M0429 |
| Benzene | 0.17 | <0.020 | <0.020 | <0.020 | <0.020 |
| Toluene | 6 | <0.020 | <0.020 | <0.020 | <0.020 |
| Ethylbenzene | 15 | <0.020 | <0.020 | <0.020 | <0.020 |
| Total Xylenes | 25 | <0.020 | <0.020 | <0.020 | <0.020 |
| F1 (C6-C10) - BTEX* | 65 | <10 | <10 | <10 | <10 |
| F2 (C10-C16) | 150 | <10 | <10 | <10 | <10 |
| F3 (C16-C34) | 1300 | <50 | <50 | <50 | <50 |
| F4 (C34-C50)** | 5600 | <50 | <50 | <50 | <50 |

NOTES:

- 1 Ontario Ministry of Environment, Conservation and Parks (MECP), Soil, Groundwater and Sediment Standards for use under Part XV.1 of the Environmental Protection Act, April 2011, Table 3 Full Depth Generic Site Condition Standards (SCS) in a Non-Potable Ground Water Condition for Residential/Parkland/Institutional property use and medium and fine textured soils.
All results are reported in ppm (ug/g) unless otherwise indicated.
- 2 Trip blank provided by laboratory was for water analysis. Therefore, results are reported in ug/L.
- * F1 fraction does not include BTEX.
- ** In instances where the PHC F2 to F4 chromatogram did not reach baseline, the F4 fraction result shown is the highest value obtained via the gas chromatograph/flame ionization detection method or the gravimetric
- <(RDL) Non-detectable results are shown as "< (RDL)" where RDL represents the reporting detection limit.
- NV No Value
- N/A Not Applicable
- Parameter not analyzed
- m bgs Metres below ground surface
- Indicates soil exceedance of MECP Table 3 SCS

Table 2 - Inorganic Parameters in Soil
Property Adjacent to 1740 St. Laurent Boulevard, Ottawa, Ontario
OTT-00260579-A0

| Sample ID | MECP Table 3 SCS ¹ | BH9-SS3 | Dup (Field Duplicate of BH9-SS3) | BH10-SS4 | BH11-SS3 |
|----------------------------|-------------------------------|-------------|--|-------------|-------------|
| Sampling Date | | 25-Aug-2020 | 25-Aug-2020 | 25-Aug-2020 | 25-Aug-2020 |
| Sample Depth (mbgs) | | 2.3 to 2.9 | 2.3 to 2.9 | 3.0 to 3.6 | 2.3 to 2.9 |
| Bureau Veritas (BV) ID | | NMB844 | NMB844 | NMB842 | NMB845 |
| Date of Analysis | | 31-Aug-2020 | 31-Aug-2020 | 31-Aug-2020 | 31-Aug-2020 |
| BV Certificate of Analysis | C0M0429 | C0M0429 | C0M0429 | C0M0429 | |
| Antimony | 7.5 | <0.20 | <0.20 | <0.20 | <0.20 |
| Arsenic | 18 | 1.3 | <1.0 | 1.6 | 1.3 |
| Barium | 390 | 89 | 150 | 150 | 24 |
| Beryllium | 5 | 0.31 | 0.44 | 0.43 | 0.23 |
| Boron (Total) | 120 | <5.0 | <5.0 | <5.0 | <5.0 |
| Cadmium | 1.2 | <0.10 | <0.10 | <0.10 | <0.10 |
| Chromium | 160 | 20 | 29 | 23 | 8.8 |
| Cobalt | 22 | 5.6 | 8.1 | 8 | 3.8 |
| Copper | 180 | 15 | 19 | 17 | 12 |
| Lead | 120 | 3.5 | 5.5 | 6.9 | 3.9 |
| Molybdenum | 6.9 | <0.50 | <0.50 | 0.97 | <0.50 |
| Nickel | 130 | 12 | 18 | 18 | 9.2 |
| Selenium | 2.4 | <0.50 | <0.50 | <0.50 | <0.50 |
| Silver | 25 | <0.20 | <0.20 | <0.20 | <0.20 |
| Thallium | 1 | 0.12 | 0.2 | 0.15 | 0.078 |
| Uranium | 23 | 0.58 | 0.62 | 1 | 0.35 |
| Vanadium | 86 | 38 | 47 | 38 | 16 |
| Zinc | 340 | 30 | 43 | 35 | 18 |

NOTES:

- 1 Ontario Ministry of Environment, Conservation and Parks (MECP), Soil, Groundwater and Sediment Standards for use under Part XV.1 of the Environmental Protection Act, April 2011, Table 3 Full Depth Generic Site Condition Standards (SCS) in a Non- Potable Ground Water Condition for Residential/Parkland/Institutional property use and medium and fine textured soils.
- All results are reported in ppm (ug/g) unless otherwise indicated.
- <(RDL) Non-detectable results are shown as "< (RDL)" where RDL represents the reporting detection limit.
- NV No Value
- N/A Not Applicable
- Parameter not analyzed
- m bgs Metres below ground surface
- Indicates soil exceedance of MECP Table 3 SCS

Table 3 - Volatile Organic Compounds in Soil
Property Adjacent to 1740 St. Laurent Boulevard, Ottawa, Ontario
OTT-00260579-A0

| Sample ID | MECP Table 3 SCS ¹ | BH9-SS3 | Dup (Field Duplicate of BH9-SS3) | BH10-SS4 | BH11-SS3 |
|-----------------------------------|-------------------------------|-------------|--|-------------|-------------|
| Sampling Date | | 25-Aug-2020 | 25-Aug-2020 | 25-Aug-2020 | 25-Aug-2020 |
| Sample Depth (mbgs) | | 2.3 to 2.9 | 2.3 to 2.9 | 3.0 to 3.6 | 2.3 to 2.9 |
| Bureau Veritas (BV) ID | | NMB844 | NMB844 | NMB842 | NMB845 |
| Date of Analysis | | 28-Aug-2020 | 28-Aug-2020 | 28-Aug-2020 | 28-Aug-2020 |
| BV Certificate of Analysis | | C0M0429 | C0M0429 | C0M0429 | C0M0429 |
| Acetone | 28 | <0.50 | <0.50 | <0.50 | <0.50 |
| Benzene | 0.17 | <0.020 | <0.020 | <0.020 | <0.020 |
| Bromodichloromethane | 13 | <0.050 | <0.050 | <0.050 | <0.050 |
| Bromoform | 0.26 | <0.050 | <0.050 | <0.050 | <0.050 |
| Bromomethane | 0.05 | <0.050 | <0.050 | <0.050 | <0.050 |
| Carbon Tetrachloride | 0.12 | <0.050 | <0.050 | <0.050 | <0.050 |
| Chlorobenzene | 2.7 | <0.050 | <0.050 | <0.050 | <0.050 |
| Chloroform | 0.18 | <0.050 | <0.050 | <0.050 | <0.050 |
| Dibromochloromethane | 9.4 | <0.050 | <0.050 | <0.050 | <0.050 |
| 1,2-Dichlorobenzene | 4.3 | <0.050 | <0.050 | <0.050 | <0.050 |
| 1,3-Dichlorobenzene | 6 | <0.050 | <0.050 | <0.050 | <0.050 |
| 1,4-Dichlorobenzene | 0.097 | <0.050 | <0.050 | <0.050 | <0.050 |
| Dichlorodifluoromethane | 25 | <0.050 | <0.050 | <0.050 | <0.050 |
| 1,1-Dichloroethane | 11 | <0.050 | <0.050 | <0.050 | <0.050 |
| 1,2-Dichloroethane | 0.05 | <0.050 | <0.050 | <0.050 | <0.050 |
| 1,1-Dichloroethylene | 0.05 | <0.050 | <0.050 | <0.050 | <0.050 |
| Cis-1,2-Dichloroethylene | 30 | <0.050 | <0.050 | <0.050 | <0.050 |
| Trans-1,2-Dichloroethylene | 0.75 | <0.050 | <0.050 | <0.050 | <0.050 |
| 1,2-Dichloropropane | 0.085 | <0.050 | <0.050 | <0.050 | <0.050 |
| Cis-1,3-Dichloropropylene | NV | <0.030 | <0.030 | <0.030 | <0.030 |
| Trans-1,3-Dichloropropylene | NV | <0.040 | <0.040 | <0.040 | <0.040 |
| 1,3-Dichloropropene (cis + trans) | 0.083 | <0.050 | <0.050 | <0.050 | <0.050 |
| Ethylbenzene | 15 | <0.020 | <0.020 | <0.020 | <0.020 |
| Ethylene Dibromide | 0.05 | <0.050 | <0.050 | <0.050 | <0.050 |
| Hexane(n) | 34 | <0.050 | <0.050 | <0.050 | <0.050 |
| Methyl Ethyl Ketone | 44 | <0.50 | <0.50 | <0.50 | <0.50 |
| Methylene Chloride | 0.96 | <0.050 | <0.050 | <0.050 | <0.050 |
| Methyl Isobutyl Ketone | 4.3 | <0.50 | <0.50 | <0.50 | <0.50 |
| Methyl-t-Butyl Ether | 1.4 | <0.050 | <0.050 | <0.050 | <0.050 |
| Styrene | 2.2 | <0.050 | <0.050 | <0.050 | <0.050 |
| 1,1,1,2-Tetrachloroethane | 0.05 | <0.050 | <0.050 | <0.050 | <0.050 |
| 1,1,2,2-Tetrachloroethane | 0.05 | <0.050 | <0.050 | <0.050 | <0.050 |
| Toluene | 6 | <0.020 | <0.020 | <0.020 | <0.020 |
| Tetrachloroethylene | 2.3 | <0.050 | <0.050 | <0.050 | <0.050 |
| 1,1,1-Trichloroethane | 3.4 | <0.050 | <0.050 | <0.050 | <0.050 |
| 1,1,2-Trichloroethane | 0.05 | <0.050 | <0.050 | <0.050 | <0.050 |
| Trichloroethylene | 0.52 | <0.050 | <0.050 | <0.050 | <0.050 |
| Trichlorofluoromethane | 5.8 | <0.050 | <0.050 | <0.050 | <0.050 |
| Vinyl Chloride | 0.022 | <0.020 | <0.020 | <0.020 | <0.020 |
| Total Xylenes | 25 | <0.020 | <0.020 | <0.020 | <0.020 |

NOTES:

1

Ontario Ministry of Environment, Conservation and Parks (MECP), Soil, Groundwater and Sediment Standards for use under Part XV.1 of the Environmental Protection Act, April 2011, Table 3 Full Depth Generic Site Condition Standards (SCS) in a Non- Potable Ground Water Condition for Residential/Parkland/Institutional property use and medium and finetextured soils.

All results are reported in ppm (ug/g) unless otherwise indicated.

<(RDL)

Non-detectable results are shown as "< (RDL)" where RDL represents the reporting detection limit

NV

No Value

N/A

Not Applicable

-

Parameter not analyzed

m bgs

Metres below ground surface

Indicates soil exceedance of MECP Table 3 SCS

Table 4 - Petroleum Hydrocarbons in Groundwater
Property Adjacent to 1740 St. Laurent Boulevard, Ottawa, Ontario
OTT-00260579-A0

| Sample ID | MECP Table 3 SCS ¹ | BH10 | DUP (Field Duplicate of BH10) | BH11 | BH14 | Field Blank | Trip Blank |
|----------------------------|----------------------------------|-------------|-------------------------------------|-------------|-------------|-------------|-------------|
| Sampling Date | | 10-Sep-2020 | 10-Sep-2020 | 10-Sep-2020 | 10-Sep-2020 | 10-Sep-2020 | 10-Sep-2020 |
| Screen Interval (mbgs) | | 0.7 to 3.7 | 0.7 to 3.7 | 1.0 to 4.0 | 1.5 to 4.5 | NA | NA |
| Bureau Veritas (BV) ID | | NPL781 | NPL786 | NPL782 | NPL783 | NPL784 | NPL785 |
| Date of Analysis | | 17-Sep-20 | 17-Sep-20 | 17-Sep-20 | 17-Sep-20 | 17-Sep-20 | 17-Sep-20 |
| BV Certificate of Analysis | | C0N6285 | C0N6285 | C0N6285 | C0N6285 | C0N6285 | C0N6285 |
| Benzene | 430 | 0.27 | 0.25 | <0.20 | <0.20 | <0.20 | <0.20 |
| Toluene | 18000 | 0.47 | 0.49 | <0.20 | <0.20 | <0.20 | <0.20 |
| Ethylbenzene | 2300 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| Total Xylenes | 4200 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| F1 (C6-C10) - BTEX | 750 | <25 | <25 | <25 | <25 | <25 | <25 |
| F2 (C10-C16) | 150 | <100 | <100 | <100 | <100 | <100 | - |
| F3 (C16-C34) | 500 | <200 | <200 | <200 | <200 | <200 | - |
| F4 (C34-C50) | 500 | <200 | <200 | <200 | <200 | <200 | - |

NOTES:

- 1 Ontario Ministry of Environment, Conservation and Parks (MECP), Soil, Groundwater and Sediment Standards for use under Part XV.1 of the Environmental Protection Act, April 2011, Table 3 Full Depth Generic Site Condition Standards (SCS) in a Non-Potable Ground Water Condition for all types of property use and medium and fine textured soils.
All results are reported in ppb (ug/L) unless otherwise indicated.
- <(RDL) Non-detectable results are shown as "< (RDL)" where RDL represents the reporting detection limit.
- NV No Value
- N/A Not Applicable
- Parameter not analyzed
- m bgs Metres below ground surface
- Indicates groundwater exceedance of MECP Table 3 SCS

Table 5 - Inorganic Parameters in Groundwater
Property Adjacent to 1740 St. Laurent Boulevard, Ottawa, Ontario
OTT-00260579-A0

| Sample ID | MECP Table 3 SCS ¹ | BH10 | DUP (Field Duplicate of BH10) | BH11 | BH14 | Field Blank |
|----------------------------|----------------------------------|-------------|-------------------------------------|-------------|-------------|-------------|
| Sampling Date | | 10-Sep-2020 | 10-Sep-2020 | 10-Sep-2020 | 10-Sep-2020 | 10-Sep-2020 |
| Screen Interval (mbgs) | | 0.7 to 3.7 | 0.7 to 3.7 | 1.0 to 4.0 | 1.5 to 4.5 | NA |
| Bureau Veritas (BV) ID | | NPL781 | NPL786 | NPL782 | NPL783 | NPL784 |
| Date of Analysis | | 16-Sep-20 | 16-Sep-20 | 16-Sep-20 | 16-Sep-20 | 16-Sep-20 |
| BV Certificate of Analysis | | C0N6285 | C0N6285 | C0N6285 | C0N6285 | C0N6285 |
| Antimony | 20000 | <0.50 | <0.50 | <0.50 | 0.85 | <0.50 |
| Arsenic | 1900 | <1.0 | <1.0 | <1.0 | 1.8 | <1.0 |
| Barium | 29000 | 190 | 190 | 75 | 100 | <2.0 |
| Beryllium | 67 | <0.40 | <0.40 | <0.40 | <0.40 | <0.40 |
| Boron | 45000 | 250 | 270 | 72 | 190 | <10 |
| Cadmium | 2.7 | <0.090 | <0.090 | <0.090 | <0.090 | <0.090 |
| Chromium | 810 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| Cobalt | 66 | 0.51 | 0.51 | 1.6 | 1.3 | <0.50 |
| Copper | 87 | <0.90 | <0.90 | 1.8 | 2.9 | <0.90 |
| Lead | 25 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Molybdenum | 9200 | 17 | 17 | 2.4 | 36 | <0.50 |
| Nickel | 490 | 1.3 | 1.3 | 2.2 | 4.3 | <1.0 |
| Sodium | NV | 560000 | 560000 | 220000 | 410000 | <100 |
| Selenium | 63 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 |
| Silver | 1.5 | <0.090 | <0.090 | <0.090 | <0.090 | <0.090 |
| Thallium | 510 | <0.050 | <0.050 | <0.050 | 0.063 | <0.050 |
| Uranium | 420 | 0.76 | 0.81 | 1.1 | 11 | <0.10 |
| Vanadium | 250 | <0.50 | <0.50 | <0.50 | 0.86 | <0.50 |
| Zinc | 1100 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |

NOTES:

- 1 Ontario Ministry of Environment, Conservation and Parks (MECP), Soil, Groundwater and Sediment Standards for use under Part XV.1 of the Environmental Protection Act, April 2011, Table 3 Full Depth Generic Site Condition Standards (SCS) in a Non-Potable Ground Water Condition for all types of property. All results are reported in ppb (ug/L) unless otherwise indicated.
- <(RDL) Non-detectable results are shown as "< (RDL)" where RDL represents the reporting detection limit.
- NV No Value
- N/A Not Applicable
- Parameter not analyzed
- m bgs Metres below ground surface
- Indicates groundwater exceedance of MECP Table 3 SCS

Table 6 - Volatile Organic Compounds in Groundwater
1740-1760 St. Laurent Boulevard, Ottawa, Ontario
OTT-00260579-A0

| Sample ID | MECP Table 3 SCS ¹ | BH10 | DUP (Field Duplicate of BH10) | BH11 | BH14 | Field Blank | Trip Blank |
|-----------------------------------|----------------------------------|-------------|-------------------------------------|-------------|-------------|-------------|-------------|
| Sampling Date | | 10-Sep-2020 | 10-Sep-2020 | 10-Sep-2020 | 10-Sep-2020 | 10-Sep-2020 | 10-Sep-2020 |
| Screen Interval (mbgs) | | 0.7 to 3.7 | 0.7 to 3.7 | 1.0 to 4.0 | 1.5 to 4.5 | NA | NA |
| Bureau Veritas (BV) ID | | NPL781 | NPL786 | NPL782 | NPL783 | NPL784 | NPL785 |
| Date of Analysis | 15-Sep-20 | 15-Sep-20 | 15-Sep-20 | 15-Sep-20 | 15-Sep-20 | 15-Sep-20 | |
| BV Certificate of Analysis | | C0N6285 | C0N6285 | C0N6285 | C0N6285 | C0N6285 | C0N6285 |
| Acetone | 130000 | <10 | 12 | <10 | <10 | <10 | <10 |
| Benzene | 430 | 0.27 | 0.25 | <0.20 | <0.20 | <0.20 | <0.20 |
| Bromodichloromethane | 85000 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Bromoform | 770 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Bromomethane | 56 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Carbon Tetrachloride | 8.4 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| Chlorobenzene | 630 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| Chloroform | 22 | 0.42 | 0.42 | <0.20 | <0.20 | <0.20 | <0.20 |
| Dibromochloromethane | 82000 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| 1,2-Dichlorobenzene | 9600 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| 1,3-Dichlorobenzene | 9600 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| 1,4-Dichlorobenzene | 67 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Dichlorodifluoromethane | 4400 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| 1,1-Dichloroethane | 3100 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| 1,2-Dichloroethane | 12 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| 1,1-Dichloroethylene | 17 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| Cis-1,2-Dichloroethylene | 17 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Trans-1,2-Dichloroethylene | 17 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| 1,2-Dichloropropane | 140 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| Cis-1,3-Dichloropropylene | NV | <0.30 | <0.30 | <0.30 | <0.30 | <0.30 | <0.30 |
| Trans-1,3-Dichloropropylene | NV | <0.40 | <0.40 | <0.40 | <0.40 | <0.40 | <0.40 |
| 1,3-Dichloropropene (cis + trans) | 45 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Ethylbenzene | 2300 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| Ethylene Dibromide | 0.83 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| Hexane(n) | 520 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 |
| Methyl Ethyl Ketone | 1500000 | <10 | <10 | <10 | <10 | <10 | <10 |
| Methylene Chloride | 5500 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 |
| Methyl Isobutyl Ketone | 580000 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 |
| Methyl-t-Butyl Ether | 1400 | <0.50 | <0.50 | 2.4 | <0.50 | <0.50 | <0.50 |
| Styrene | 9100 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| 1,1,1,2-Tetrachloroethane | 28 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| 1,1,2,2-Tetrachloroethane | 15 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Toluene | 18000 | 0.47 | 0.49 | <0.20 | <0.20 | <0.20 | <0.20 |
| Tetrachloroethylene | 17 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| 1,1,1-Trichloroethane | 6700 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| 1,1,2-Trichloroethane | 30 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Trichlorofluoromethane | 2500 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 |
| Trichloroethylene | 17 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| Vinyl Chloride | 1.7 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| m-Xylene & p-Xylene | NV | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| o-Xylene | NV | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |
| Total Xylenes | 4200 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 |

NOTES:

1

Ontario Ministry of Environment, Conservation and Parks (MECP), Soil, Groundwater and Sediment Standards for use under Part XV.1 of the Environmental Protection Act, April 2011, Table 3 Full Depth Generic Site Condition Standards (SCS) in a Non-Potable Ground Water Condition for all types of property use and medium and fine textured soils.
All results are reported in ppb (ug/L) unless otherwise indicated.

<(RDL)

Non-detectable results are shown as "< (RDL)" where RDL represents the reporting detection limit.

NV

No Value

N/A

Not Applicable

-

Parameter not analyzed

m bgs

Metres below ground surface

Indicates groundwater exceedance of MECP Table 3 SCS

Table 7 - Relative Percent Differences - Petroleum Hydrocarbons in Soil
 Adjacent to 1740 St. Laurent Boulevard, Ottawa, Ontario
 OTT-00260579-A0

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| Parameter | Units | RDL | BH9-SS3 | Dup | RPD (%) | Alert Limit (%) |
|-------------------------------|-------|-------|-------------|-------------|---------|-----------------|
| | | | 25-Aug-2020 | 25-Aug-2020 | | |
| Petroleum Hydrocarbons | | | | | | |
| F1 PHCs (C6-C10) - BTEX | ug/g | 10 | <10 | <10 | nc | 60 |
| F2 PHCs (C10-C16) | ug/g | 10 | <10 | <10 | nc | 60 |
| F3 PHCs (C16-C34) | ug/g | 50 | <50 | <50 | nc | 60 |
| F4 PHCs (C34-C50) | ug/g | 50 | <50 | <50 | nc | 60 |
| Volatiles | | | | | | |
| Benzene | ug/g | 0.020 | <0.020 | <0.020 | nc | 100 |
| Toluene | ug/g | 0.020 | <0.020 | <0.020 | nc | 100 |
| Ethylbenzene | ug/g | 0.020 | <0.020 | <0.020 | nc | 100 |
| Total Xylenes | ug/g | 0.020 | <0.020 | <0.020 | nc | 100 |

NOTES:

Analysis by Bureau Veritas Laboratories

All results on dry weight basis; <RDL means not detected at reporting detection limit (RDL)

- means "not analysed"

nc means "not calculable" - one (or both) of the results are <5x RDL

Exceedances of alert limits are shown in **bold**

Table 8 - Relative Percent Differences - Inorganic Parameters in Soil
 Adjacent to 1740 St. Laurent Boulevard, Ottawa, Ontario
 OTT-00260579-A0

Page 1 of 1

| Parameter | Units | RDL | BH9-SS3 | Dup | RPD (%) | Alert Limit (%) |
|-----------------------------|-------|-------|-------------|-------------|---------|-----------------|
| | | | 25-Aug-2020 | 25-Aug-2020 | | |
| <i>Inorganic Parameters</i> | | | | | | |
| Antimony | ug/g | 0.20 | <0.20 | <0.20 | nc | 60 |
| Arsenic | ug/g | 1.0 | 1.3 | <1.0 | nc | 60 |
| Barium | ug/g | 0.50 | 89 | 150 | 51 | 60 |
| Beryllium | ug/g | 0.20 | 0.31 | 0.44 | 35 | 60 |
| Boron | ug/g | 5.0 | <5.0 | <5.0 | nc | 60 |
| Cadmium | ug/g | 0.10 | <0.10 | <0.10 | nc | 60 |
| Chromium | ug/g | 1.0 | 20 | 29 | 37 | 60 |
| Cobalt | ug/g | 0.10 | 5.6 | 8.1 | 36 | 60 |
| Copper | ug/g | 0.50 | 15 | 19 | 24 | 60 |
| Lead | ug/g | 1.0 | 3.5 | 5.5 | 44 | 60 |
| Molybdenum | ug/g | 0.50 | <0.50 | <0.50 | nc | 60 |
| Nickel | ug/g | 0.50 | 12 | 18 | 40 | 60 |
| Selenium | ug/g | 0.20 | <0.50 | <0.50 | nc | 60 |
| Silver | ug/g | 0.50 | <0.20 | <0.20 | nc | 60 |
| Thallium | ug/g | 0.050 | 0.12 | 0.2 | 50 | 60 |
| Uranium | ug/g | 0.050 | 0.58 | 0.62 | 7 | 60 |
| Vanadium | ug/g | 5.0 | 38 | 47 | 21 | 60 |
| Zinc | ug/g | 5.0 | 30 | 43 | 36 | 60 |

NOTES:

Analysis by Bureau Veritas Laboratories

All results on dry weight basis; <RDL means not detected at reporting detection limit (RDL)

- means "not analysed"

nc means "not calculable" - one (or both) of the results are <5x RDL

Exceedances of alert limits are shown in **bold**

Table 9 - Relative Percent Differences - Volatile Organic Compounds in Soil
Adjacent to 1740 St. Laurent Boulevard, Ottawa, Ontario
OTT-00260579-A0

Page 1 of 1

| Parameter | Units | RDL | BH9-SS3 | Dup | RPD (%) | Alert Limit (%) |
|------------------------------------|----------|-------|-------------|-------------|---------|-----------------|
| | | | 25-Aug-2020 | 25-Aug-2020 | | |
| Volatile Organic Parameters | | | | | | |
| Acetone | ug/g dry | 0.50 | <0.50 | <0.50 | nc | 100 |
| Benzene | ug/g dry | 0.020 | <0.020 | <0.020 | nc | 100 |
| Bromodichloromethane | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Bromoform | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Bromomethane | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Carbon Tetrachloride | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Chlorobenzene | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Chloroform | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Dibromochloromethane | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| 1,2-Dichlorobenzene | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| 1,3-Dichlorobenzene | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| 1,4-Dichlorobenzene | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Dichlorodifluoromethane | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| 1,1-Dichloroethane | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| 1,2-Dichloroethane | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| 1,1-Dichloroethylene | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Cis-1,2-Dichloroethylene | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Trans-1,2-Dichloroethylene | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| 1,2-Dichloropropane | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Cis-1,3-Dichloropropylene | ug/g dry | 0.030 | <0.030 | <0.030 | nc | 100 |
| Trans-1,3-Dichloropropylene | ug/g dry | 0.040 | <0.040 | <0.040 | nc | 100 |
| 1,3-Dichloropropene (cis + trans) | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Ethylbenzene | ug/g dry | 0.020 | <0.020 | <0.020 | nc | 100 |
| Ethylene Dibromide | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Hexane(n) | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Methyl Ethyl Ketone | ug/g dry | 0.50 | <0.50 | <0.50 | nc | 100 |
| Methylene Chloride | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Methyl Isobutyl Ketone | ug/g dry | 0.50 | <0.50 | <0.50 | nc | 100 |
| Methyl-t-Butyl Ether | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Styrene | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| 1,1,1,2-Tetrachloroethane | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| 1,1,2,2-Tetrachloroethane | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Toluene | ug/g dry | 0.020 | <0.020 | <0.020 | nc | 100 |
| Tetrachloroethylene | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| 1,1,1-Trichloroethane | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| 1,1,2-Trichloroethane | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Trichloroethylene | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Trichlorofluoromethane | ug/g dry | 0.050 | <0.050 | <0.050 | nc | 100 |
| Vinyl Chloride | ug/g dry | 0.020 | <0.020 | <0.020 | nc | 100 |
| Total Xylenes | ug/g dry | 0.020 | <0.020 | <0.020 | nc | 100 |

NOTES:

Analysis by Bureau Veritas Laboratories

All results on dry weight basis; <RDL means not detected at reporting detection limit (RDL)

- means "not analysed"

nc means "not calculable" - one (or both) of the results are <5x RDL

Exceedances of alert limits are shown in **bold**

Table 10 - Relative Percent Differences - Petroleum Hydrocarbons in Groundwater
 Adjacent to 1740 St. Laurent Boulevard, Ottawa, Ontario
 OTT-00260579-A0

Page 1 of 1

| Parameter | Units | RDL | BH10 | DUP | RPD (%) | Alert Limit (%) |
|-------------------------------|-------|------|-------------|-------------|---------|-----------------|
| | | | 10-Sep-2020 | 10-Sep-2020 | | |
| Petroleum Hydrocarbons | | | | | | |
| F1 PHCs (C6-C10) - BTEX | ug/L | 25 | <25 | <25 | nc | 60 |
| F2 PHCs (C10-C16) | ug/L | 100 | <100 | <100 | nc | 60 |
| F3 PHCs (C16-C34) | ug/L | 200 | <200 | <200 | nc | 60 |
| F4 PHCs (C34-C50) | ug/L | 200 | <200 | <200 | nc | 60 |
| Volatiles | | | | | | |
| Benzene | ug/L | 0.20 | 0.27 | 0.25 | 8 | 60 |
| Toluene | ug/L | 0.20 | 0.47 | 0.49 | 4 | 60 |
| Ethylbenzene | ug/L | 0.20 | <0.20 | <0.20 | nc | 60 |
| Total Xylenes | ug/L | 0.20 | <0.20 | <0.20 | nc | 60 |

NOTES:

Analysis by Bureau Veritas Laboratories

All results on dry weight basis; <RDL means not detected at reporting detection limit (RDL)

- means "not analysed"

nc means "not calculable" - one (or both) of the results are <5x RDL

Exceedances of alert limits are shown in **bold**

Table 11 - Relative Percent Differences - Inorganic Parameters in Soil
 Adjacent to 1740 St. Laurent Boulevard, Ottawa, Ontario
 OTT-00260579-A0

Page 1 of 1

| Parameter | Units | RDL | BH10 | DUP | RPD (%) | Alert Limit (%) |
|-----------------------------|-------|-------|-------------|-------------|---------|-----------------|
| | | | 10-Sep-2020 | 10-Sep-2020 | | |
| <i>Inorganic Parameters</i> | | | | | | |
| Antimony | ug/L | 0.50 | <0.50 | <0.50 | nc | 40 |
| Arsenic | ug/L | 1.0 | <1.0 | <1.0 | nc | 40 |
| Barium | ug/L | 2.0 | 190 | 190 | 0 | 40 |
| Beryllium | ug/L | 0.40 | <0.40 | <0.40 | nc | 40 |
| Boron | ug/L | 10 | 250 | 270 | 8 | 40 |
| Cadmium | ug/L | 0.090 | <0.090 | <0.090 | nc | 40 |
| Chromium | ug/L | 5.0 | <5.0 | <5.0 | nc | 40 |
| Cobalt | ug/L | 0.50 | 0.51 | 0.51 | 0 | 40 |
| Copper | ug/L | 0.90 | <0.90 | <0.90 | nc | 40 |
| Lead | ug/L | 0.50 | <0.50 | <0.50 | nc | 40 |
| Molybdenum | ug/L | 0.50 | 17 | 17 | 0 | 40 |
| Nickel | ug/L | 1.0 | 1.3 | 1.3 | 0 | 40 |
| Sodium | ug/L | 100 | 560000 | 560000 | 0 | 40 |
| Selenium | ug/L | 2.0 | <2.0 | <2.0 | nc | 40 |
| Silver | ug/L | 0.090 | <0.090 | <0.090 | nc | 40 |
| Thallium | ug/L | 0.050 | <0.050 | <0.050 | nc | 40 |
| Uranium | ug/L | 0.10 | 0.76 | 0.81 | 6 | 40 |
| Vanadium | ug/L | 0.50 | <0.50 | <0.50 | nc | 40 |
| Zinc | ug/L | 5.0 | <5.0 | <5.0 | nc | 40 |

NOTES:

Analysis by Bureau Veritas Laboratories

All results on dry weight basis; <RDL means not detected at reporting detection limit (RDL)

- means "not analysed"

nc means "not calculable" - one (or both) of the results are <5x RDL

Exceedances of alert limits are shown in **bold**

Table 12 - Relative Percent Differences - Volatile Organic Compounds in Groundwater
Adjacent to 1740 St. Laurent Boulevard, Ottawa, Ontario
OTT-00260579-A0

Page 1 of 1

| Parameter | Units | RDL | BH10 | DUP | RPD (%) | Alert Limit (%) |
|-----------------------------------|-------|------|-------------|-------------|---------|-----------------|
| | | | 10-Sep-2020 | 10-Sep-2020 | | |
| Acetone | ug/L | 10 | <10 | 12 | nc | 60 |
| Benzene | ug/L | 0.20 | 0.27 | 0.25 | nc | 60 |
| Bromodichloromethane | ug/L | 0.50 | <0.50 | <0.50 | nc | 60 |
| Bromoform | ug/L | 1.0 | <1.0 | <1.0 | nc | 60 |
| Bromomethane | ug/L | 0.50 | <0.50 | <0.50 | nc | 60 |
| Carbon Tetrachloride | ug/L | 0.20 | <0.20 | <0.20 | nc | 60 |
| Chlorobenzene | ug/L | 0.20 | <0.20 | <0.20 | nc | 60 |
| Chloroform | ug/L | 0.20 | 0.42 | 0.42 | nc | 60 |
| Dibromochloromethane | ug/L | 0.50 | <0.50 | <0.50 | nc | 60 |
| 1,2-Dichlorobenzene | ug/L | 0.50 | <0.50 | <0.50 | nc | 60 |
| 1,3-Dichlorobenzene | ug/L | 0.50 | <0.50 | <0.50 | nc | 60 |
| 1,4-Dichlorobenzene | ug/L | 0.50 | <0.50 | <0.50 | nc | 60 |
| 1,1-Dichloroethane | ug/L | 0.20 | <1.0 | <1.0 | nc | 60 |
| 1,2-Dichloroethane | ug/L | 0.50 | <0.20 | <0.20 | nc | 60 |
| 1,1-Dichloroethylene | ug/L | 0.20 | <0.50 | <0.50 | nc | 60 |
| Dichlorodifluoromethane | ug/L | 1.0 | <0.20 | <0.20 | nc | 60 |
| Cis-1,2-Dichloroethylene | ug/L | 0.50 | <0.50 | <0.50 | nc | 60 |
| Trans-1,2-Dichloroethylene | ug/L | 0.50 | <0.50 | <0.50 | nc | 60 |
| 1,2-Dichloropropane | ug/L | 0.20 | <0.20 | <0.20 | nc | 60 |
| Cis-1,3-Dichloropropylene | ug/L | 0.30 | <0.30 | <0.30 | nc | 60 |
| Trans-1,3-Dichloropropylene | ug/L | 0.40 | <0.40 | <0.40 | nc | 60 |
| 1,3-Dichloropropene (cis + trans) | ug/L | 0.50 | <0.50 | <0.50 | nc | 60 |
| Ethylbenzene | ug/L | 0.20 | <0.20 | <0.20 | nc | 60 |
| Ethylene Dibromide | ug/L | 0.20 | <0.20 | <0.20 | nc | 60 |
| Hexane(n) | ug/L | 1.0 | <1.0 | <1.0 | nc | 60 |
| Methyl Ethyl Ketone | ug/L | 10 | <10 | <10 | nc | 60 |
| Methylene Chloride | ug/L | 2.0 | <2.0 | <2.0 | nc | 60 |
| Methyl Isobutyl Ketone | ug/L | 5.0 | <5.0 | <5.0 | nc | 60 |
| Methyl-t-Butyl Ether | ug/L | 0.50 | <0.50 | <0.50 | nc | 60 |
| Styrene | ug/L | 0.50 | <0.50 | <0.50 | nc | 60 |
| 1,1,1,2-Tetrachloroethane | ug/L | 0.50 | <0.50 | <0.50 | nc | 60 |
| 1,1,1,2,2-Tetrachloroethane | ug/L | 0.50 | <0.50 | <0.50 | nc | 60 |
| Toluene | ug/L | 0.20 | 0.47 | 0.49 | nc | 60 |
| Tetrachloroethylene | ug/L | 0.20 | <0.20 | <0.20 | nc | 60 |
| 1,1,1-Trichloroethane | ug/L | 0.20 | <0.20 | <0.20 | nc | 60 |
| 1,1,1,2-Trichloroethane | ug/L | 0.50 | <0.50 | <0.50 | nc | 60 |
| Trichloroethylene | ug/L | 0.20 | <0.50 | <0.50 | nc | 60 |
| Trichlorofluoromethane | ug/L | 0.50 | <0.20 | <0.20 | nc | 60 |
| Vinyl Chloride | ug/L | 0.20 | <0.20 | <0.20 | nc | 60 |
| m-Xylene & p-Xylene | ug/L | 0.20 | <0.20 | <0.20 | nc | 60 |
| o-Xylene | ug/L | 0.20 | <0.20 | <0.20 | nc | 60 |
| Total Xylenes | ug/L | 0.20 | <0.20 | <0.20 | nc | 60 |

NOTES:

Analysis by Bureau Veritas Laboratories

<RDL means not detected at reporting detection limit (RDL)

- means "not analysed"

nc means "not calculable" - one (or both) of the results are <5x RDL

Exceedances of alert limits are shown in **bold**

EXP Services Inc.
11421247 Canada Inc.
Phase II Environmental Site Assessment
Adjacent to 1740 St. Laurent Boulevard, Ottawa, Ontario
OTT-00260579-A0
October 2, 2020

Appendix D: Laboratory Certificates of Analysis



Your Project #: OTT-00260579-AO
 Your C.O.C. #: 788417-01-01

Attention: Patricia Stelmack

exp Services Inc
 Ottawa Branch
 100-2650 Queensview Drive
 Ottawa, ON
 CANADA K2B 8H6

Report Date: 2020/09/02
 Report #: R6316053
 Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: COM0429

Received: 2020/08/26, 15:33

Sample Matrix: Soil
 # Samples Received: 5

| Analyses | Quantity | Date | | Laboratory Method | Analytical Method |
|---|----------|------------|------------|-------------------|----------------------|
| | | Extracted | Analyzed | | |
| 1,3-Dichloropropene Sum (1) | 3 | N/A | 2020/08/30 | | EPA 8260C m |
| 1,3-Dichloropropene Sum (1) | 1 | N/A | 2020/08/31 | | EPA 8260C m |
| 1,3-Dichloropropene Sum (1) | 1 | N/A | 2020/09/01 | | EPA 8260C m |
| Petroleum Hydrocarbons F2-F4 in Soil (1, 2) | 4 | 2020/08/28 | 2020/08/29 | CAM SOP-00316 | CCME CWS m |
| Petroleum Hydrocarbons F2-F4 in Soil (1, 2) | 1 | 2020/08/31 | 2020/09/01 | CAM SOP-00316 | CCME CWS m |
| Strong Acid Leachable Metals by ICPMS (1) | 5 | 2020/08/31 | 2020/08/31 | CAM SOP-00447 | EPA 6020B m |
| Moisture (1) | 4 | N/A | 2020/08/27 | CAM SOP-00445 | Carter 2nd ed 51.2 m |
| Moisture (1) | 1 | N/A | 2020/08/31 | CAM SOP-00445 | Carter 2nd ed 51.2 m |
| Volatile Organic Compounds and F1 PHCs (1) | 4 | N/A | 2020/08/28 | CAM SOP-00230 | EPA 8260C m |
| Volatile Organic Compounds and F1 PHCs (1) | 1 | N/A | 2020/08/31 | CAM SOP-00230 | EPA 8260C m |

Remarks:

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

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in BV Labs profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and BV Labs 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.

BV Labs liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. BV Labs 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 BV Labs, unless otherwise agreed in writing. BV Labs 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 BV Labs, results relate to the supplied samples tested.

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

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

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

(1) This test was performed by Bureau Veritas Laboratories Mississauga

(2) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed



Your Project #: OTT-00260579-A0
Your C.O.C. #: 788417-01-01

Attention: Patricia Stelmack

exp Services Inc
Ottawa Branch
100-2650 Queensview Drive
Ottawa, ON
CANADA K2B 8H6

Report Date: 2020/09/02
Report #: R6316053
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: COM0429

Received: 2020/08/26, 15:33

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

Katherine Szozda
Project Manager
02 Sep 2020 10:20:40

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bvlabs.com
Phone# (613) 274-0573

=====
BV Labs 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 Signature Page.



BUREAU
VERITAS

BV Labs Job #: COM0429
Report Date: 2020/09/02

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: PS

O.REG 153 ICPCMS METALS (SOIL)

| | | | | | | | | | |
|---------------|--------------|-----------------|---------------------|---------------------|----------------------------|---------------------|---------------------|------------|-----------------|
| BV Labs ID | | | NMB842 | NMB843 | NMB843 | NMB844 | NMB845 | | |
| Sampling Date | | | 2020/08/24 12:00 | 2020/08/25 08:00 | 2020/08/25 08:00 | 2020/08/25 08:00 | 2020/08/25 10:00 | | |
| COC Number | | | 788417-01-01 | 788417-01-01 | 788417-01-01 | 788417-01-01 | 788417-01-01 | | |
| | UNITS | Criteria | BH10-SS4 | BH9-SS3 | BH9-SS3 Lab-Dup | DUP | BH11-SS3 | RDL | QC Batch |

| Metals | | | | | | | | | |
|----------------------------------|------|------------|-------|-------|-------|-------|-------|-------|---------|
| Acid Extractable Antimony (Sb) | ug/g | 7.5 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6918411 |
| Acid Extractable Arsenic (As) | ug/g | 18 | 1.6 | 1.3 | 1.3 | <1.0 | 1.3 | 1.0 | 6918411 |
| Acid Extractable Barium (Ba) | ug/g | 390 | 150 | 89 | 80 | 150 | 24 | 0.50 | 6918411 |
| Acid Extractable Beryllium (Be) | ug/g | 5 | 0.43 | 0.31 | 0.27 | 0.44 | 0.23 | 0.20 | 6918411 |
| Acid Extractable Boron (B) | ug/g | 120 | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 5.0 | 6918411 |
| Acid Extractable Cadmium (Cd) | ug/g | 1.2 | <0.10 | <0.10 | <0.10 | <0.10 | <0.10 | 0.10 | 6918411 |
| Acid Extractable Chromium (Cr) | ug/g | 160 | 23 | 20 | 19 | 29 | 8.8 | 1.0 | 6918411 |
| Acid Extractable Cobalt (Co) | ug/g | 22 | 8.0 | 5.6 | 5.4 | 8.1 | 3.8 | 0.10 | 6918411 |
| Acid Extractable Copper (Cu) | ug/g | 180 | 17 | 15 | 14 | 19 | 12 | 0.50 | 6918411 |
| Acid Extractable Lead (Pb) | ug/g | 120 | 6.9 | 3.5 | 3.4 | 5.5 | 3.9 | 1.0 | 6918411 |
| Acid Extractable Molybdenum (Mo) | ug/g | 6.9 | 0.97 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6918411 |
| Acid Extractable Nickel (Ni) | ug/g | 130 | 18 | 12 | 11 | 18 | 9.2 | 0.50 | 6918411 |
| Acid Extractable Selenium (Se) | ug/g | 2.4 | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6918411 |
| Acid Extractable Silver (Ag) | ug/g | 25 | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6918411 |
| Acid Extractable Thallium (Tl) | ug/g | 1 | 0.15 | 0.12 | 0.13 | 0.20 | 0.078 | 0.050 | 6918411 |
| Acid Extractable Uranium (U) | ug/g | 23 | 1.0 | 0.58 | 0.59 | 0.62 | 0.35 | 0.050 | 6918411 |
| Acid Extractable Vanadium (V) | ug/g | 86 | 38 | 38 | 37 | 47 | 16 | 5.0 | 6918411 |
| Acid Extractable Zinc (Zn) | ug/g | 340 | 35 | 30 | 29 | 43 | 18 | 5.0 | 6918411 |

RDL = Reportable Detection Limit
 QC Batch = Quality Control Batch
 Lab-Dup = Laboratory Initiated Duplicate
 Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
 Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition
 Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soil



BUREAU
VERITAS

BV Labs Job #: COM0429
Report Date: 2020/09/02

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: PS

O.REG 153 ICPMS METALS (SOIL)

| | | | | | |
|---------------|--------------|-----------------|---------------------|------------|-----------------|
| BV Labs ID | | | NMB846 | | |
| Sampling Date | | | 2020/08/25 12:00 | | |
| COC Number | | | 788417-01-01 | | |
| | UNITS | Criteria | BH13-SS4 | RDL | QC Batch |

| Metals | | | | | |
|----------------------------------|------|------------|-------|-------|---------|
| Acid Extractable Antimony (Sb) | ug/g | 7.5 | <0.20 | 0.20 | 6918411 |
| Acid Extractable Arsenic (As) | ug/g | 18 | <1.0 | 1.0 | 6918411 |
| Acid Extractable Barium (Ba) | ug/g | 390 | 380 | 0.50 | 6918411 |
| Acid Extractable Beryllium (Be) | ug/g | 5 | 0.78 | 0.20 | 6918411 |
| Acid Extractable Boron (B) | ug/g | 120 | 6.6 | 5.0 | 6918411 |
| Acid Extractable Cadmium (Cd) | ug/g | 1.2 | <0.10 | 0.10 | 6918411 |
| Acid Extractable Chromium (Cr) | ug/g | 160 | 62 | 1.0 | 6918411 |
| Acid Extractable Cobalt (Co) | ug/g | 22 | 15 | 0.10 | 6918411 |
| Acid Extractable Copper (Cu) | ug/g | 180 | 33 | 0.50 | 6918411 |
| Acid Extractable Lead (Pb) | ug/g | 120 | 6.1 | 1.0 | 6918411 |
| Acid Extractable Molybdenum (Mo) | ug/g | 6.9 | 0.50 | 0.50 | 6918411 |
| Acid Extractable Nickel (Ni) | ug/g | 130 | 34 | 0.50 | 6918411 |
| Acid Extractable Selenium (Se) | ug/g | 2.4 | <0.50 | 0.50 | 6918411 |
| Acid Extractable Silver (Ag) | ug/g | 25 | <0.20 | 0.20 | 6918411 |
| Acid Extractable Thallium (Tl) | ug/g | 1 | 0.34 | 0.050 | 6918411 |
| Acid Extractable Uranium (U) | ug/g | 23 | 0.61 | 0.050 | 6918411 |
| Acid Extractable Vanadium (V) | ug/g | 86 | 84 | 5.0 | 6918411 |
| Acid Extractable Zinc (Zn) | ug/g | 340 | 100 | 5.0 | 6918411 |

RDL = Reportable Detection Limit
 QC Batch = Quality Control Batch
 Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
 Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition
 Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soil



BUREAU
VERITAS

BV Labs Job #: COM0429
Report Date: 2020/09/02

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: PS

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

| | | | | | | | | |
|---------------|--------------|-----------------|---------------------|---------------------|-----------------|---------------------|------------|-----------------|
| BV Labs ID | | | NMB842 | NMB843 | | NMB844 | | |
| Sampling Date | | | 2020/08/24 12:00 | 2020/08/25 08:00 | | 2020/08/25 08:00 | | |
| COC Number | | | 788417-01-01 | 788417-01-01 | | 788417-01-01 | | |
| | UNITS | Criteria | BH10-SS4 | BH9-SS3 | QC Batch | DUP | RDL | QC Batch |

| Inorganics | | | | | | | | |
|-------------------------------------|------|--------------|--------|--------|---------|--------|-------|---------|
| Moisture | % | - | 21 | 25 | 6913534 | 24 | 1.0 | 6919049 |
| Calculated Parameters | | | | | | | | |
| 1,3-Dichloropropene (cis+trans) | ug/g | 0.083 | <0.050 | <0.050 | 6912678 | <0.050 | 0.050 | 6912678 |
| Volatile Organics | | | | | | | | |
| Acetone (2-Propanone) | ug/g | 28 | <0.50 | <0.50 | 6915170 | <0.50 | 0.50 | 6915170 |
| Benzene | ug/g | 0.17 | <0.020 | <0.020 | 6915170 | <0.020 | 0.020 | 6915170 |
| Bromodichloromethane | ug/g | 13 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| Bromoform | ug/g | 0.26 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| Bromomethane | ug/g | 0.05 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| Carbon Tetrachloride | ug/g | 0.12 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| Chlorobenzene | ug/g | 2.7 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| Chloroform | ug/g | 0.17 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| Dibromochloromethane | ug/g | 9.4 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| 1,2-Dichlorobenzene | ug/g | 4.3 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| 1,3-Dichlorobenzene | ug/g | 6 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| 1,4-Dichlorobenzene | ug/g | 0.097 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| Dichlorodifluoromethane (FREON 12) | ug/g | 25 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| 1,1-Dichloroethane | ug/g | 11 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| 1,2-Dichloroethane | ug/g | 0.05 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| 1,1-Dichloroethylene | ug/g | 0.05 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| cis-1,2-Dichloroethylene | ug/g | 30 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| trans-1,2-Dichloroethylene | ug/g | 0.75 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| 1,2-Dichloropropane | ug/g | 0.085 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| cis-1,3-Dichloropropene | ug/g | 0.083 | <0.030 | <0.030 | 6915170 | <0.030 | 0.030 | 6915170 |
| trans-1,3-Dichloropropene | ug/g | 0.083 | <0.040 | <0.040 | 6915170 | <0.040 | 0.040 | 6915170 |
| Ethylbenzene | ug/g | 15 | <0.020 | <0.020 | 6915170 | <0.020 | 0.020 | 6915170 |
| Ethylene Dibromide | ug/g | 0.05 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| Hexane | ug/g | 34 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| Methylene Chloride(Dichloromethane) | ug/g | 0.96 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| Methyl Ethyl Ketone (2-Butanone) | ug/g | 44 | <0.50 | <0.50 | 6915170 | <0.50 | 0.50 | 6915170 |
| Methyl Isobutyl Ketone | ug/g | 4.3 | <0.50 | <0.50 | 6915170 | <0.50 | 0.50 | 6915170 |
| Methyl t-butyl ether (MTBE) | ug/g | 1.4 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |

RDL = Reportable Detection Limit
 QC Batch = Quality Control Batch
 Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
 Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition
 Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soil

BUREAU
VERITASBV Labs Job #: COM0429
Report Date: 2020/09/02exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: PS**O.REG 153 VOCS BY HS & F1-F4 (SOIL)**

| BV Labs ID | | | NMB842 | NMB843 | | NMB844 | | |
|--|-------|--------------|---------------------|---------------------|----------|---------------------|-------|----------|
| Sampling Date | | | 2020/08/24 12:00 | 2020/08/25 08:00 | | 2020/08/25 08:00 | | |
| COC Number | | | 788417-01-01 | 788417-01-01 | | 788417-01-01 | | |
| | UNITS | Criteria | BH10-SS4 | BH9-SS3 | QC Batch | DUP | RDL | QC Batch |
| Styrene | ug/g | 2.2 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| 1,1,1,2-Tetrachloroethane | ug/g | 0.05 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| 1,1,2,2-Tetrachloroethane | ug/g | 0.05 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| Tetrachloroethylene | ug/g | 2.3 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| Toluene | ug/g | 6 | <0.020 | <0.020 | 6915170 | <0.020 | 0.020 | 6915170 |
| 1,1,1-Trichloroethane | ug/g | 3.4 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| 1,1,2-Trichloroethane | ug/g | 0.05 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| Trichloroethylene | ug/g | 0.52 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| Trichlorofluoromethane (FREON 11) | ug/g | 5.8 | <0.050 | <0.050 | 6915170 | <0.050 | 0.050 | 6915170 |
| Vinyl Chloride | ug/g | 0.022 | <0.020 | <0.020 | 6915170 | <0.020 | 0.020 | 6915170 |
| p+m-Xylene | ug/g | - | <0.020 | <0.020 | 6915170 | <0.020 | 0.020 | 6915170 |
| o-Xylene | ug/g | - | <0.020 | <0.020 | 6915170 | <0.020 | 0.020 | 6915170 |
| Total Xylenes | ug/g | 25 | <0.020 | <0.020 | 6915170 | <0.020 | 0.020 | 6915170 |
| F1 (C6-C10) | ug/g | 65 | <10 | <10 | 6915170 | <10 | 10 | 6915170 |
| F1 (C6-C10) - BTEX | ug/g | 65 | <10 | <10 | 6915170 | <10 | 10 | 6915170 |
| F2-F4 Hydrocarbons | | | | | | | | |
| F2 (C10-C16 Hydrocarbons) | ug/g | 150 | <10 | <10 | 6914834 | <10 | 10 | 6919212 |
| F3 (C16-C34 Hydrocarbons) | ug/g | 1300 | <50 | <50 | 6914834 | <50 | 50 | 6919212 |
| F4 (C34-C50 Hydrocarbons) | ug/g | 5600 | <50 | <50 | 6914834 | <50 | 50 | 6919212 |
| Reached Baseline at C50 | ug/g | - | Yes | Yes | 6914834 | Yes | | 6919212 |
| Surrogate Recovery (%) | | | | | | | | |
| o-Terphenyl | % | - | 98 | 98 | 6914834 | 82 | | 6919212 |
| 4-Bromofluorobenzene | % | - | 85 | 81 | 6915170 | 83 | | 6915170 |
| D10-o-Xylene | % | - | 87 | 85 | 6915170 | 86 | | 6915170 |
| D4-1,2-Dichloroethane | % | - | 122 | 122 | 6915170 | 123 | | 6915170 |
| D8-Toluene | % | - | 88 | 88 | 6915170 | 86 | | 6915170 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch Criteria: Ontario Reg. 153/04 (Amended April 15, 2011) Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soil | | | | | | | | |



BUREAU
VERITAS

BV Labs Job #: COM0429
Report Date: 2020/09/02

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: PS

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

| BV Labs ID | | | NMB845 | NMB846 | | |
|--|--------------|-----------------|---------------------|---------------------|------------|-----------------|
| Sampling Date | | | 2020/08/25 10:00 | 2020/08/25 12:00 | | |
| COC Number | | | 788417-01-01 | 788417-01-01 | | |
| | UNITS | Criteria | BH11-SS3 | BH13-SS4 | RDL | QC Batch |
| Inorganics | | | | | | |
| Moisture | % | - | 19 | 29 | 1.0 | 6913534 |
| Calculated Parameters | | | | | | |
| 1,3-Dichloropropene (cis+trans) | ug/g | 0.083 | <0.050 | <0.050 | 0.050 | 6912678 |
| Volatile Organics | | | | | | |
| Acetone (2-Propanone) | ug/g | 28 | <0.50 | <0.50 | 0.50 | 6915170 |
| Benzene | ug/g | 0.17 | <0.020 | <0.020 | 0.020 | 6915170 |
| Bromodichloromethane | ug/g | 13 | <0.050 | <0.050 | 0.050 | 6915170 |
| Bromoform | ug/g | 0.26 | <0.050 | <0.050 | 0.050 | 6915170 |
| Bromomethane | ug/g | 0.05 | <0.050 | <0.050 | 0.050 | 6915170 |
| Carbon Tetrachloride | ug/g | 0.12 | <0.050 | <0.050 | 0.050 | 6915170 |
| Chlorobenzene | ug/g | 2.7 | <0.050 | <0.050 | 0.050 | 6915170 |
| Chloroform | ug/g | 0.17 | <0.050 | <0.050 | 0.050 | 6915170 |
| Dibromochloromethane | ug/g | 9.4 | <0.050 | <0.050 | 0.050 | 6915170 |
| 1,2-Dichlorobenzene | ug/g | 4.3 | <0.050 | <0.050 | 0.050 | 6915170 |
| 1,3-Dichlorobenzene | ug/g | 6 | <0.050 | <0.050 | 0.050 | 6915170 |
| 1,4-Dichlorobenzene | ug/g | 0.097 | <0.050 | <0.050 | 0.050 | 6915170 |
| Dichlorodifluoromethane (FREON 12) | ug/g | 25 | <0.050 | <0.050 | 0.050 | 6915170 |
| 1,1-Dichloroethane | ug/g | 11 | <0.050 | <0.050 | 0.050 | 6915170 |
| 1,2-Dichloroethane | ug/g | 0.05 | <0.050 | <0.050 | 0.050 | 6915170 |
| 1,1-Dichloroethylene | ug/g | 0.05 | <0.050 | <0.050 | 0.050 | 6915170 |
| cis-1,2-Dichloroethylene | ug/g | 30 | <0.050 | <0.050 | 0.050 | 6915170 |
| trans-1,2-Dichloroethylene | ug/g | 0.75 | <0.050 | <0.050 | 0.050 | 6915170 |
| 1,2-Dichloropropane | ug/g | 0.085 | <0.050 | <0.050 | 0.050 | 6915170 |
| cis-1,3-Dichloropropene | ug/g | 0.083 | <0.030 | <0.030 | 0.030 | 6915170 |
| trans-1,3-Dichloropropene | ug/g | 0.083 | <0.040 | <0.040 | 0.040 | 6915170 |
| Ethylbenzene | ug/g | 15 | <0.020 | <0.020 | 0.020 | 6915170 |
| Ethylene Dibromide | ug/g | 0.05 | <0.050 | <0.050 | 0.050 | 6915170 |
| Hexane | ug/g | 34 | <0.050 | <0.050 | 0.050 | 6915170 |
| Methylene Chloride(Dichloromethane) | ug/g | 0.96 | <0.050 | <0.050 | 0.050 | 6915170 |
| Methyl Ethyl Ketone (2-Butanone) | ug/g | 44 | <0.50 | <0.50 | 0.50 | 6915170 |
| Methyl Isobutyl Ketone | ug/g | 4.3 | <0.50 | <0.50 | 0.50 | 6915170 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch Criteria: Ontario Reg. 153/04 (Amended April 15, 2011) Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soil | | | | | | |



BUREAU
VERITAS

BV Labs Job #: COM0429
Report Date: 2020/09/02

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: PS

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

| BV Labs ID | | | NMB845 | NMB846 | | |
|--|-------|----------|---------------------|---------------------|-------|----------|
| Sampling Date | | | 2020/08/25 10:00 | 2020/08/25 12:00 | | |
| COC Number | | | 788417-01-01 | 788417-01-01 | | |
| | UNITS | Criteria | BH11-SS3 | BH13-SS4 | RDL | QC Batch |
| Methyl t-butyl ether (MTBE) | ug/g | 1.4 | <0.050 | <0.050 | 0.050 | 6915170 |
| Styrene | ug/g | 2.2 | <0.050 | <0.050 | 0.050 | 6915170 |
| 1,1,1,2-Tetrachloroethane | ug/g | 0.05 | <0.050 | <0.050 | 0.050 | 6915170 |
| 1,1,2,2-Tetrachloroethane | ug/g | 0.05 | <0.050 | <0.050 | 0.050 | 6915170 |
| Tetrachloroethylene | ug/g | 2.3 | <0.050 | <0.050 | 0.050 | 6915170 |
| Toluene | ug/g | 6 | <0.020 | <0.020 | 0.020 | 6915170 |
| 1,1,1-Trichloroethane | ug/g | 3.4 | <0.050 | <0.050 | 0.050 | 6915170 |
| 1,1,2-Trichloroethane | ug/g | 0.05 | <0.050 | <0.050 | 0.050 | 6915170 |
| Trichloroethylene | ug/g | 0.52 | <0.050 | <0.050 | 0.050 | 6915170 |
| Trichlorofluoromethane (FREON 11) | ug/g | 5.8 | <0.050 | <0.050 | 0.050 | 6915170 |
| Vinyl Chloride | ug/g | 0.022 | <0.020 | <0.020 | 0.020 | 6915170 |
| p+m-Xylene | ug/g | - | <0.020 | <0.020 | 0.020 | 6915170 |
| o-Xylene | ug/g | - | <0.020 | <0.020 | 0.020 | 6915170 |
| Total Xylenes | ug/g | 25 | <0.020 | <0.020 | 0.020 | 6915170 |
| F1 (C6-C10) | ug/g | 65 | <10 | <10 | 10 | 6915170 |
| F1 (C6-C10) - BTEX | ug/g | 65 | <10 | <10 | 10 | 6915170 |
| F2-F4 Hydrocarbons | | | | | | |
| F2 (C10-C16 Hydrocarbons) | ug/g | 150 | <10 | <10 | 10 | 6914834 |
| F3 (C16-C34 Hydrocarbons) | ug/g | 1300 | <50 | <50 | 50 | 6914834 |
| F4 (C34-C50 Hydrocarbons) | ug/g | 5600 | <50 | <50 | 50 | 6914834 |
| Reached Baseline at C50 | ug/g | - | Yes | Yes | | 6914834 |
| Surrogate Recovery (%) | | | | | | |
| o-Terphenyl | % | - | 98 | 96 | | 6914834 |
| 4-Bromofluorobenzene | % | - | 91 | 80 | | 6915170 |
| D10-o-Xylene | % | - | 91 | 82 | | 6915170 |
| D4-1,2-Dichloroethane | % | - | 117 | 123 | | 6915170 |
| D8-Toluene | % | - | 85 | 88 | | 6915170 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch Criteria: Ontario Reg. 153/04 (Amended April 15, 2011) Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soil | | | | | | |



BUREAU
VERITAS

BV Labs Job #: COM0429
Report Date: 2020/09/02

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: PS

TEST SUMMARY

BV Labs ID: NMB842
Sample ID: BH10-SS4
Matrix: Soil

Collected: 2020/08/24
Shipped:
Received: 2020/08/26

| Test Description | Instrumentation | Batch | Extracted | Date Analyzed | Analyst |
|--|-----------------|---------|------------|---------------|----------------------|
| 1,3-Dichloropropene Sum | CALC | 6912678 | N/A | 2020/08/30 | Automated Statchk |
| Petroleum Hydrocarbons F2-F4 in Soil | GC/FID | 6914834 | 2020/08/28 | 2020/08/29 | Jeevaraj Jeevaratnam |
| Strong Acid Leachable Metals by ICPMS | ICP/MS | 6918411 | 2020/08/31 | 2020/08/31 | Viviana Canzonieri |
| Moisture | BAL | 6913534 | N/A | 2020/08/27 | Prgya Panchal |
| Volatile Organic Compounds and F1 PHCs | GC/MSFD | 6915170 | N/A | 2020/08/28 | Denis Reid |

BV Labs ID: NMB843
Sample ID: BH9-SS3
Matrix: Soil

Collected: 2020/08/25
Shipped:
Received: 2020/08/26

| Test Description | Instrumentation | Batch | Extracted | Date Analyzed | Analyst |
|--|-----------------|---------|------------|---------------|----------------------|
| 1,3-Dichloropropene Sum | CALC | 6912678 | N/A | 2020/08/30 | Automated Statchk |
| Petroleum Hydrocarbons F2-F4 in Soil | GC/FID | 6914834 | 2020/08/28 | 2020/08/29 | Jeevaraj Jeevaratnam |
| Strong Acid Leachable Metals by ICPMS | ICP/MS | 6918411 | 2020/08/31 | 2020/08/31 | Viviana Canzonieri |
| Moisture | BAL | 6913534 | N/A | 2020/08/27 | Prgya Panchal |
| Volatile Organic Compounds and F1 PHCs | GC/MSFD | 6915170 | N/A | 2020/08/28 | Denis Reid |

BV Labs ID: NMB843 Dup
Sample ID: BH9-SS3
Matrix: Soil

Collected: 2020/08/25
Shipped:
Received: 2020/08/26

| Test Description | Instrumentation | Batch | Extracted | Date Analyzed | Analyst |
|---------------------------------------|-----------------|---------|------------|---------------|--------------------|
| Strong Acid Leachable Metals by ICPMS | ICP/MS | 6918411 | 2020/08/31 | 2020/08/31 | Viviana Canzonieri |

BV Labs ID: NMB844
Sample ID: DUP
Matrix: Soil

Collected: 2020/08/25
Shipped:
Received: 2020/08/26

| Test Description | Instrumentation | Batch | Extracted | Date Analyzed | Analyst |
|--|-----------------|---------|------------|---------------|--------------------|
| 1,3-Dichloropropene Sum | CALC | 6912678 | N/A | 2020/09/01 | Automated Statchk |
| Petroleum Hydrocarbons F2-F4 in Soil | GC/FID | 6919212 | 2020/08/31 | 2020/09/01 | Prabhjot Gulati |
| Strong Acid Leachable Metals by ICPMS | ICP/MS | 6918411 | 2020/08/31 | 2020/08/31 | Viviana Canzonieri |
| Moisture | BAL | 6919049 | N/A | 2020/08/31 | Kruti Jitesh Patel |
| Volatile Organic Compounds and F1 PHCs | GC/MSFD | 6915170 | N/A | 2020/08/28 | Denis Reid |

BV Labs ID: NMB845
Sample ID: BH11-SS3
Matrix: Soil

Collected: 2020/08/25
Shipped:
Received: 2020/08/26

| Test Description | Instrumentation | Batch | Extracted | Date Analyzed | Analyst |
|--|-----------------|---------|------------|---------------|----------------------|
| 1,3-Dichloropropene Sum | CALC | 6912678 | N/A | 2020/08/31 | Automated Statchk |
| Petroleum Hydrocarbons F2-F4 in Soil | GC/FID | 6914834 | 2020/08/28 | 2020/08/29 | Jeevaraj Jeevaratnam |
| Strong Acid Leachable Metals by ICPMS | ICP/MS | 6918411 | 2020/08/31 | 2020/08/31 | Viviana Canzonieri |
| Moisture | BAL | 6913534 | N/A | 2020/08/27 | Prgya Panchal |
| Volatile Organic Compounds and F1 PHCs | GC/MSFD | 6915170 | N/A | 2020/08/31 | Denis Reid |



BUREAU
VERITAS

BV Labs Job #: COM0429
Report Date: 2020/09/02

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: PS

TEST SUMMARY

BV Labs ID: NMB846
Sample ID: BH13-SS4
Matrix: Soil

Collected: 2020/08/25
Shipped:
Received: 2020/08/26

| Test Description | Instrumentation | Batch | Extracted | Date Analyzed | Analyst |
|--|-----------------|---------|------------|---------------|----------------------|
| 1,3-Dichloropropene Sum | CALC | 6912678 | N/A | 2020/08/30 | Automated Statchk |
| Petroleum Hydrocarbons F2-F4 in Soil | GC/FID | 6914834 | 2020/08/28 | 2020/08/29 | Jeevaraj Jeevaratnam |
| Strong Acid Leachable Metals by ICPMS | ICP/MS | 6918411 | 2020/08/31 | 2020/08/31 | Viviana Canzonieri |
| Moisture | BAL | 6913534 | N/A | 2020/08/27 | Prgya Panchal |
| Volatile Organic Compounds and F1 PHCs | GC/MSFD | 6915170 | N/A | 2020/08/28 | Denis Reid |



BUREAU
VERITAS

BV Labs Job #: COM0429
Report Date: 2020/09/02

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: PS

GENERAL COMMENTS

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

| | |
|-----------|-------|
| Package 1 | 7.3°C |
|-----------|-------|

Revised Report (2020/09/02): Table 3 criteria changed per client request

Results relate only to the items tested.



BUREAU
VERITAS

BV Labs Job #: COM0429
Report Date: 2020/09/02

QUALITY ASSURANCE REPORT

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: PS

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|---------------------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 6914834 | o-Terphenyl | 2020/08/28 | 92 | 60 - 130 | 92 | 60 - 130 | 98 | % | | |
| 6915170 | 4-Bromofluorobenzene | 2020/08/28 | 100 | 60 - 140 | 99 | 60 - 140 | 84 | % | | |
| 6915170 | D10-o-Xylene | 2020/08/28 | 91 | 60 - 130 | 99 | 60 - 130 | 84 | % | | |
| 6915170 | D4-1,2-Dichloroethane | 2020/08/28 | 110 | 60 - 140 | 111 | 60 - 140 | 110 | % | | |
| 6915170 | D8-Toluene | 2020/08/28 | 103 | 60 - 140 | 108 | 60 - 140 | 90 | % | | |
| 6919212 | o-Terphenyl | 2020/08/31 | 82 | 60 - 130 | 84 | 60 - 130 | 86 | % | | |
| 6913534 | Moisture | 2020/08/27 | | | | | | | 0 | 20 |
| 6914834 | F2 (C10-C16 Hydrocarbons) | 2020/08/28 | 92 | 50 - 130 | 92 | 80 - 120 | <10 | ug/g | NC | 30 |
| 6914834 | F3 (C16-C34 Hydrocarbons) | 2020/08/28 | 100 | 50 - 130 | 100 | 80 - 120 | <50 | ug/g | NC | 30 |
| 6914834 | F4 (C34-C50 Hydrocarbons) | 2020/08/28 | 97 | 50 - 130 | 96 | 80 - 120 | <50 | ug/g | NC | 30 |
| 6915170 | 1,1,1,2-Tetrachloroethane | 2020/08/28 | 93 | 60 - 140 | 109 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | 1,1,1-Trichloroethane | 2020/08/28 | 95 | 60 - 140 | 106 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | 1,1,2,2-Tetrachloroethane | 2020/08/28 | 93 | 60 - 140 | 108 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | 1,1,2-Trichloroethane | 2020/08/28 | 97 | 60 - 140 | 111 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | 1,1-Dichloroethane | 2020/08/28 | 97 | 60 - 140 | 106 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | 1,1-Dichloroethylene | 2020/08/28 | 99 | 60 - 140 | 107 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | 1,2-Dichlorobenzene | 2020/08/28 | 79 | 60 - 140 | 90 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | 1,2-Dichloroethane | 2020/08/28 | 97 | 60 - 140 | 105 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | 1,2-Dichloropropane | 2020/08/28 | 93 | 60 - 140 | 101 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | 1,3-Dichlorobenzene | 2020/08/28 | 80 | 60 - 140 | 92 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | 1,4-Dichlorobenzene | 2020/08/28 | 87 | 60 - 140 | 100 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | Acetone (2-Propanone) | 2020/08/28 | 109 | 60 - 140 | 112 | 60 - 140 | <0.50 | ug/g | NC | 50 |
| 6915170 | Benzene | 2020/08/28 | 96 | 60 - 140 | 105 | 60 - 130 | <0.020 | ug/g | NC | 50 |
| 6915170 | Bromodichloromethane | 2020/08/28 | 88 | 60 - 140 | 97 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | Bromoform | 2020/08/28 | 89 | 60 - 140 | 104 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | Bromomethane | 2020/08/28 | 102 | 60 - 140 | 115 | 60 - 140 | <0.050 | ug/g | NC | 50 |
| 6915170 | Carbon Tetrachloride | 2020/08/28 | 96 | 60 - 140 | 107 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | Chlorobenzene | 2020/08/28 | 81 | 60 - 140 | 94 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | Chloroform | 2020/08/28 | 93 | 60 - 140 | 103 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | cis-1,2-Dichloroethylene | 2020/08/28 | 89 | 60 - 140 | 97 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | cis-1,3-Dichloropropene | 2020/08/28 | 86 | 60 - 140 | 93 | 60 - 130 | <0.030 | ug/g | NC | 50 |
| 6915170 | Dibromochloromethane | 2020/08/28 | 91 | 60 - 140 | 106 | 60 - 130 | <0.050 | ug/g | NC | 50 |



BUREAU
VERITAS

BV Labs Job #: COM0429
Report Date: 2020/09/02

QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: PS

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|-------------------------------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 6915170 | Dichlorodifluoromethane (FREON 12) | 2020/08/28 | 80 | 60 - 140 | 100 | 60 - 140 | <0.050 | ug/g | NC | 50 |
| 6915170 | Ethylbenzene | 2020/08/28 | 73 | 60 - 140 | 84 | 60 - 130 | <0.020 | ug/g | NC | 50 |
| 6915170 | Ethylene Dibromide | 2020/08/28 | 92 | 60 - 140 | 105 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | F1 (C6-C10) - BTEX | 2020/08/28 | | | | | <10 | ug/g | NC | 30 |
| 6915170 | F1 (C6-C10) | 2020/08/28 | 101 | 60 - 140 | 97 | 80 - 120 | <10 | ug/g | NC | 30 |
| 6915170 | Hexane | 2020/08/28 | 98 | 60 - 140 | 108 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | Methyl Ethyl Ketone (2-Butanone) | 2020/08/28 | 89 | 60 - 140 | 92 | 60 - 140 | <0.50 | ug/g | NC | 50 |
| 6915170 | Methyl Isobutyl Ketone | 2020/08/28 | 77 | 60 - 140 | 81 | 60 - 130 | <0.50 | ug/g | NC | 50 |
| 6915170 | Methyl t-butyl ether (MTBE) | 2020/08/28 | 81 | 60 - 140 | 84 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | Methylene Chloride(Dichloromethane) | 2020/08/28 | 106 | 60 - 140 | 116 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | o-Xylene | 2020/08/28 | 76 | 60 - 140 | 88 | 60 - 130 | <0.020 | ug/g | NC | 50 |
| 6915170 | p+m-Xylene | 2020/08/28 | 78 | 60 - 140 | 89 | 60 - 130 | <0.020 | ug/g | NC | 50 |
| 6915170 | Styrene | 2020/08/28 | 58 (1) | 60 - 140 | 67 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | Tetrachloroethylene | 2020/08/28 | 81 | 60 - 140 | 95 | 60 - 130 | <0.050 | ug/g | 3.1 | 50 |
| 6915170 | Toluene | 2020/08/28 | 81 | 60 - 140 | 94 | 60 - 130 | <0.020 | ug/g | NC | 50 |
| 6915170 | Total Xylenes | 2020/08/28 | | | | | <0.020 | ug/g | NC | 50 |
| 6915170 | trans-1,2-Dichloroethylene | 2020/08/28 | 95 | 60 - 140 | 105 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | trans-1,3-Dichloropropene | 2020/08/28 | 85 | 60 - 140 | 98 | 60 - 130 | <0.040 | ug/g | NC | 50 |
| 6915170 | Trichloroethylene | 2020/08/28 | 95 | 60 - 140 | 104 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | Trichlorofluoromethane (FREON 11) | 2020/08/28 | 97 | 60 - 140 | 109 | 60 - 130 | <0.050 | ug/g | NC | 50 |
| 6915170 | Vinyl Chloride | 2020/08/28 | 106 | 60 - 140 | 122 | 60 - 130 | <0.020 | ug/g | NC | 50 |
| 6918411 | Acid Extractable Antimony (Sb) | 2020/08/31 | 98 | 75 - 125 | 103 | 80 - 120 | <0.20 | ug/g | NC | 30 |
| 6918411 | Acid Extractable Arsenic (As) | 2020/08/31 | 98 | 75 - 125 | 104 | 80 - 120 | <1.0 | ug/g | 2.1 | 30 |
| 6918411 | Acid Extractable Barium (Ba) | 2020/08/31 | NC | 75 - 125 | 102 | 80 - 120 | <0.50 | ug/g | 9.8 | 30 |
| 6918411 | Acid Extractable Beryllium (Be) | 2020/08/31 | 96 | 75 - 125 | 98 | 80 - 120 | <0.20 | ug/g | 14 | 30 |
| 6918411 | Acid Extractable Boron (B) | 2020/08/31 | 95 | 75 - 125 | 97 | 80 - 120 | <5.0 | ug/g | NC | 30 |
| 6918411 | Acid Extractable Cadmium (Cd) | 2020/08/31 | 100 | 75 - 125 | 100 | 80 - 120 | <0.10 | ug/g | NC | 30 |
| 6918411 | Acid Extractable Chromium (Cr) | 2020/08/31 | 91 | 75 - 125 | 103 | 80 - 120 | <1.0 | ug/g | 4.7 | 30 |
| 6918411 | Acid Extractable Cobalt (Co) | 2020/08/31 | 95 | 75 - 125 | 101 | 80 - 120 | <0.10 | ug/g | 3.6 | 30 |
| 6918411 | Acid Extractable Copper (Cu) | 2020/08/31 | 90 | 75 - 125 | 101 | 80 - 120 | <0.50 | ug/g | 5.5 | 30 |
| 6918411 | Acid Extractable Lead (Pb) | 2020/08/31 | 93 | 75 - 125 | 100 | 80 - 120 | <1.0 | ug/g | 3.6 | 30 |
| 6918411 | Acid Extractable Molybdenum (Mo) | 2020/08/31 | 98 | 75 - 125 | 100 | 80 - 120 | <0.50 | ug/g | NC | 30 |



BUREAU
VERITAS

BV Labs Job #: COM0429
Report Date: 2020/09/02

QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: PS

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|--------------------------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 6918411 | Acid Extractable Nickel (Ni) | 2020/08/31 | 92 | 75 - 125 | 104 | 80 - 120 | <0.50 | ug/g | 13 | 30 |
| 6918411 | Acid Extractable Selenium (Se) | 2020/08/31 | 101 | 75 - 125 | 106 | 80 - 120 | <0.50 | ug/g | NC | 30 |
| 6918411 | Acid Extractable Silver (Ag) | 2020/08/31 | 97 | 75 - 125 | 102 | 80 - 120 | <0.20 | ug/g | NC | 30 |
| 6918411 | Acid Extractable Thallium (Tl) | 2020/08/31 | 94 | 75 - 125 | 98 | 80 - 120 | <0.050 | ug/g | 14 | 30 |
| 6918411 | Acid Extractable Uranium (U) | 2020/08/31 | 94 | 75 - 125 | 98 | 80 - 120 | <0.050 | ug/g | 2.4 | 30 |
| 6918411 | Acid Extractable Vanadium (V) | 2020/08/31 | NC | 75 - 125 | 104 | 80 - 120 | <5.0 | ug/g | 3.5 | 30 |
| 6918411 | Acid Extractable Zinc (Zn) | 2020/08/31 | NC | 75 - 125 | 105 | 80 - 120 | <5.0 | ug/g | 3.2 | 30 |
| 6919049 | Moisture | 2020/08/31 | | | | | | | 0 | 20 |
| 6919212 | F2 (C10-C16 Hydrocarbons) | 2020/09/01 | 81 | 50 - 130 | 80 | 80 - 120 | <10 | ug/g | NC | 30 |
| 6919212 | F3 (C16-C34 Hydrocarbons) | 2020/09/01 | 90 | 50 - 130 | 89 | 80 - 120 | <50 | ug/g | NC | 30 |
| 6919212 | F4 (C34-C50 Hydrocarbons) | 2020/09/01 | 90 | 50 - 130 | 89 | 80 - 120 | <50 | ug/g | 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).

(1) The recovery was below the lower control limit. This may represent a low bias in some results for this specific analyte.



BUREAU
VERITAS

BV Labs Job #: COM0429

Report Date: 2020/09/02

exp Services Inc

Client Project #: OTT-00260579-A0

Sampler Initials: PS

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

A handwritten signature in black ink, appearing to read "Anastassia Hamanov", written over a horizontal line.

Anastassia Hamanov, Scientific Specialist



BV Labs 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 Signature Page.



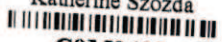
Bureau Veritas Laboratories
6740 Campobello Road, Mississauga, Ontario Canada L5N 2L8 Tel: (905) 817-5700 Toll-free: 800-563-6266 Fax: (905) 817-5777 www.bvlab.com

CHAIN OF CUSTODY RECORD

Page of

| | | | | | | | |
|---|--|--|--|--|--|--|--|
| INVOICE TO: Company Name: #17498 exp Services Inc Attention: Accounts Payable Address: 100-2650 Queensview Drive Ottawa ON K2B 8H6 Tel: (613) 688-1893 Fax: (613) 225-7337 Email: accounting.ottawa@exp.com, Karen.Burke@exp.com | | REPORT TO: Company Name: Attention: Patricia Stelmack Address: Tel: Fax: Email: patricia.stelmack@exp.com | | PROJECT INFORMATION: Quotation #: B91718 P.O. #: Project: OTT-00260579-A0 Project Name: Site #: Sampled By: | | Laboratory Use Only: BV Labs Job #:  Bottle Order #: 788417 COC #:  Project Manager: Katherine Szozda | |
|---|--|--|--|--|--|--|--|

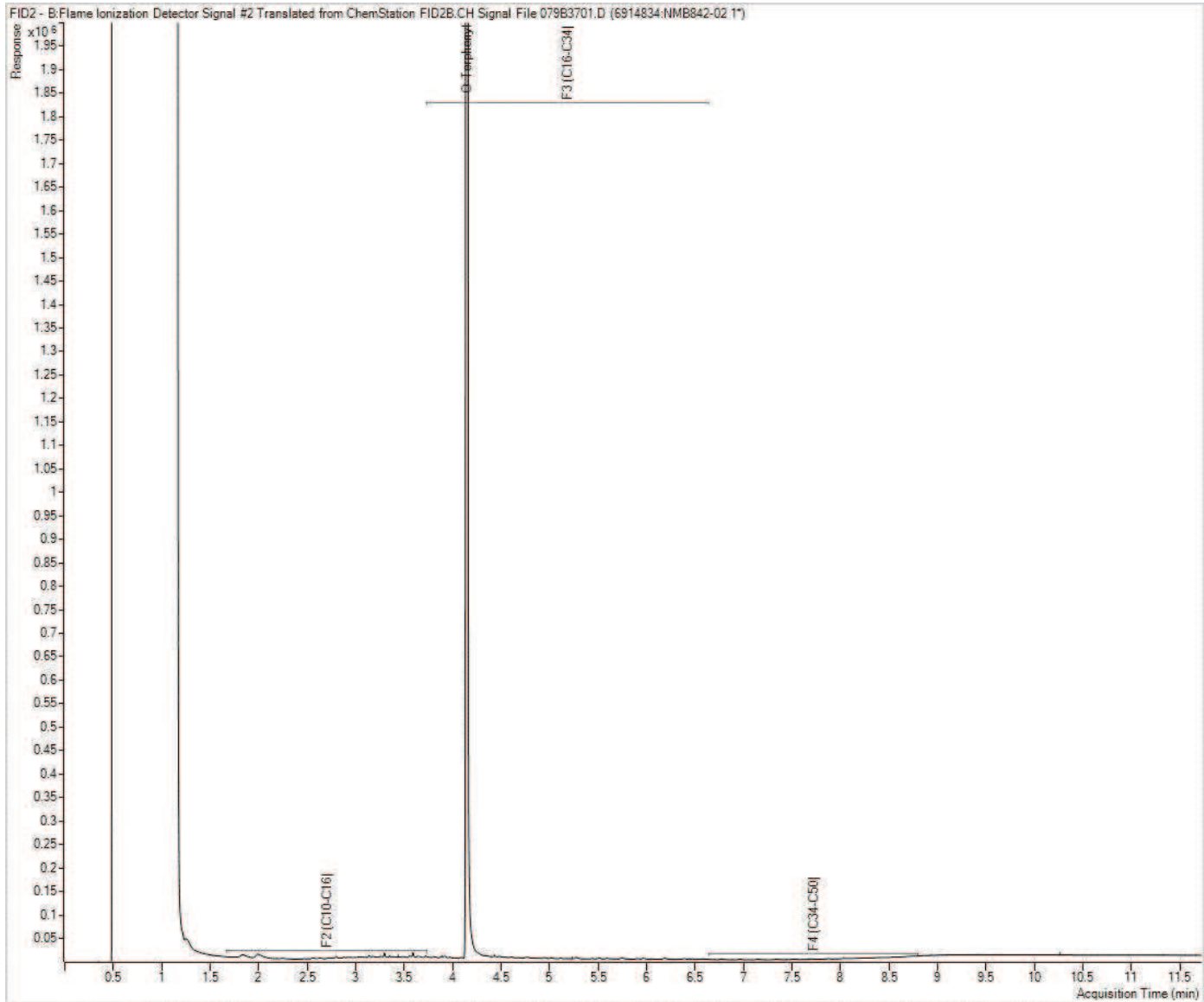
| MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BV LABS DRINKING WATER CHAIN OF CUSTODY | | | | | ANALYSIS REQUESTED (PLEASE BE SPECIFIC) | | Turnaround Time (TAT) Required: | | |
|---|-------------------------------------|--------------------------------------|--------------------------------------|---|--|-------------------------------------|---------------------------------|--|--|
| Regulation 1-2 (2011) | | Other Regulations | | Special Instructions | Field Filtered (please circle): Metals / Hg / Cr VI | O Reg 153 VOCs by HS & F1-F4 (Soil) | O Reg 153 ICPMS Metals (Soil) | Please provide advance notice for rush projects | |
| <input type="checkbox"/> Table 1 | <input type="checkbox"/> Res/Park | <input type="checkbox"/> Medium/Fine | <input type="checkbox"/> CCME | <input type="checkbox"/> Sanitary Sewer Bylaw | | | | Regular (Standard) TAT: (will be applied if Rush TAT is not specified) Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. | |
| <input type="checkbox"/> Table 2 | <input type="checkbox"/> Ind/Comm | <input type="checkbox"/> Coarse | <input type="checkbox"/> Reg 55B | <input type="checkbox"/> Storm Sewer Bylaw | | | | Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Time Required: _____ Rush Confirmation Number: _____ (call lab for #) | |
| <input type="checkbox"/> Table 3 | <input type="checkbox"/> Agri/Other | <input type="checkbox"/> For RSC | <input type="checkbox"/> MISA | Municipality _____ | | | | # of Bottles _____ Comments _____ | |
| <input type="checkbox"/> Table 4 | | | <input type="checkbox"/> PWQO | Reg 406 Table _____ | | | | | |
| <input type="checkbox"/> Table 5 | | | <input type="checkbox"/> Other _____ | | | | | | |
| Include Criteria on Certificate of Analysis (Y/N)? | | | | | | | | | |
| Sample Barcode Label | Sample (Location) Identification | Date Sampled | Time Sampled | Matrix | | | | | |
| BH10-554 | | Aug 24 | 12pm | S | | ✓ | ✓ | | |
| BH9-553 | | Aug 25 | 8am | S | | ✓ | ✓ | | |
| Dup | | Aug 25 | 8am | S | | ✓ | ✓ | | |
| BH11-553 | | Aug 25 | 10am | S | | ✓ | ✓ | | |
| BH13-553 | | Aug 25 | 12pm | S | | ✓ | ✓ | | |
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26-Aug-20 15:33
Katherine Szozda

COM0429
HGR ENV-410

04/26
RECEIVED IN OTTAWA

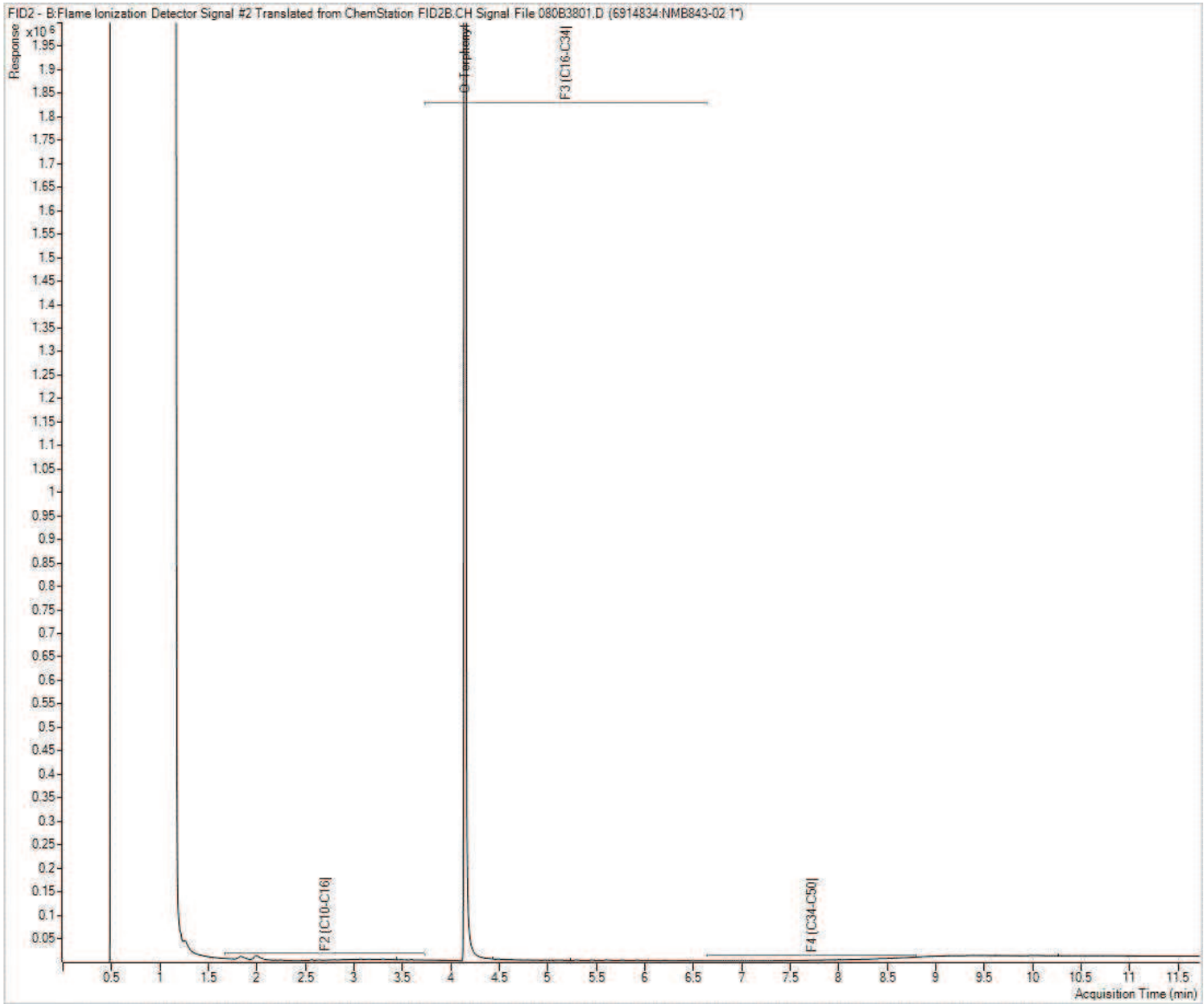
| | | | | | | | | | | | |
|--|------------------|------|--------------------------------|------------------|-------|-------------------------------|---|----------------------------|----------------------|-----|----|
| * RELINQUISHED BY: (Signature/Print) | Date: (YY/MM/DD) | Time | RECEIVED BY: (Signature/Print) | Date: (YY/MM/DD) | Time | # jars used and not submitted | Laboratory Use Only | | | | |
| <i>[Signature]</i> | | | <i>[Signature]</i> | 20/08/25 | 15:33 | | Time Sensitive | Temperature (°C) on Recept | Custody Seal Present | Yes | No |
| | | | | 20/08/27 | 08:20 | | | 5.6.11 | Intact | ✓ | |
| * UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BV LABS' 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.BVLABS.COM/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.BVLABS.COM/RESOURCES/CHAIN-OF-CUSTODY-FORMS. | | | | | | | SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BV LABS | | | | |
| | | | | | | | White: BV Labs Yellow: Client | | | | |

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



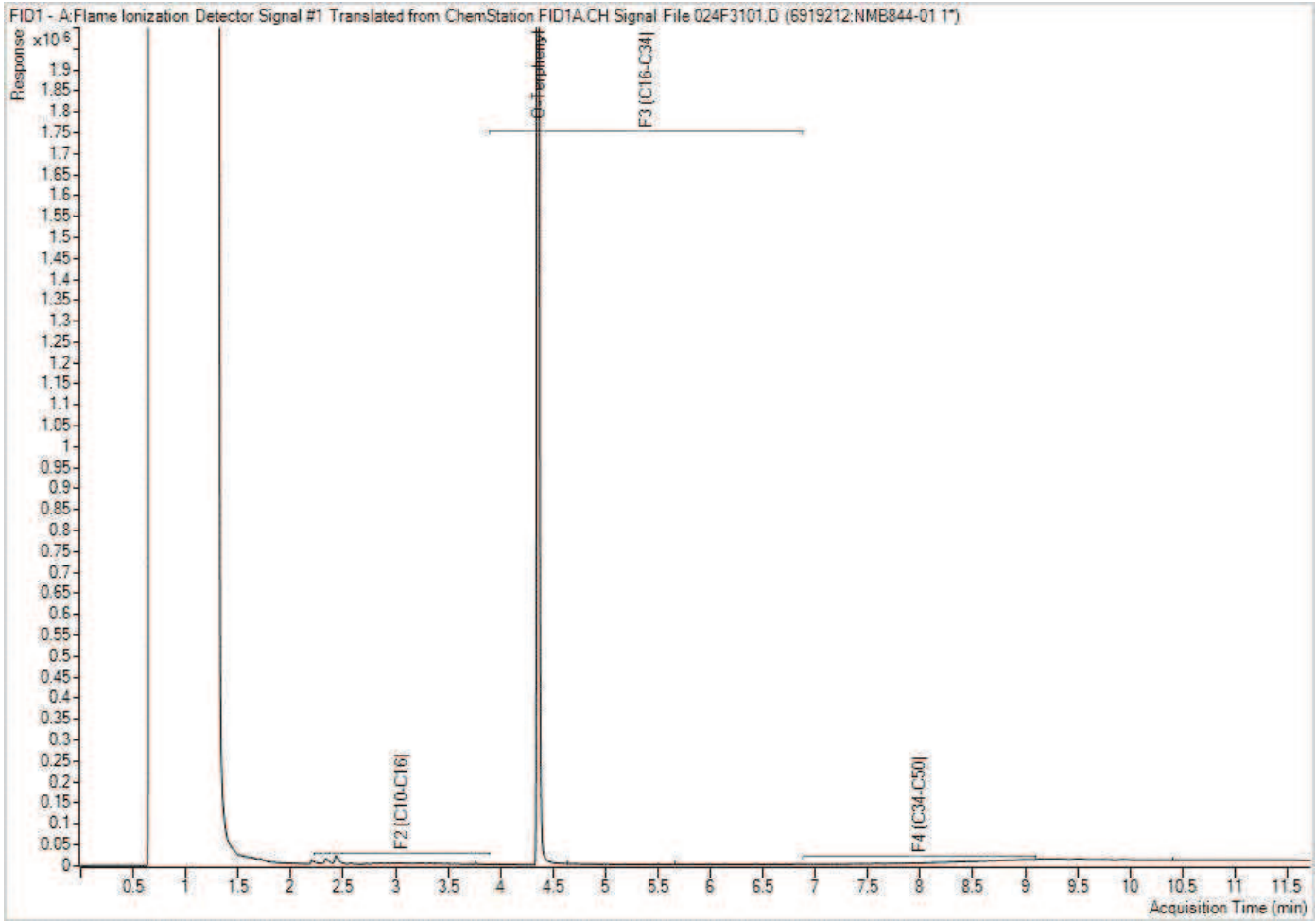
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



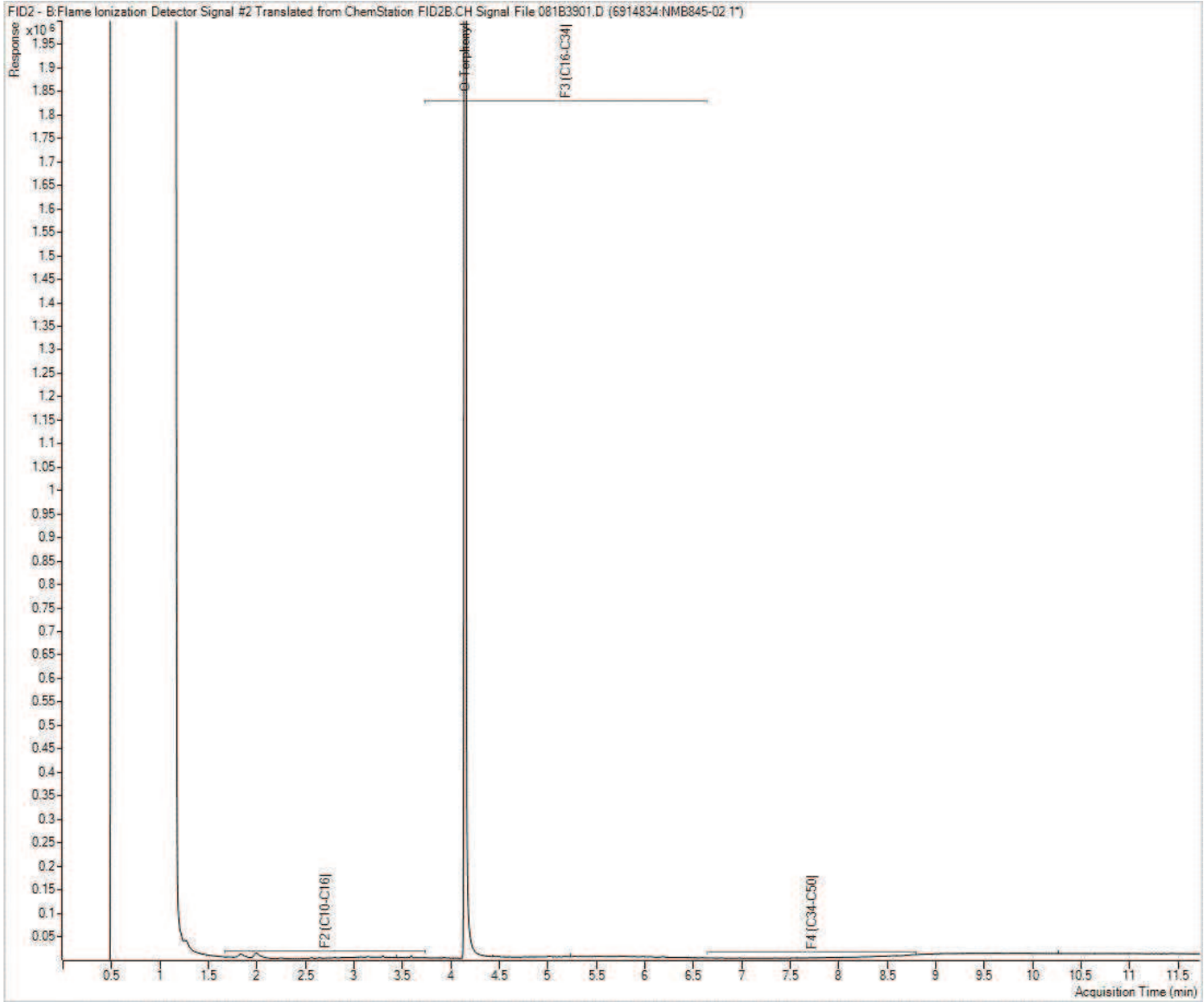
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



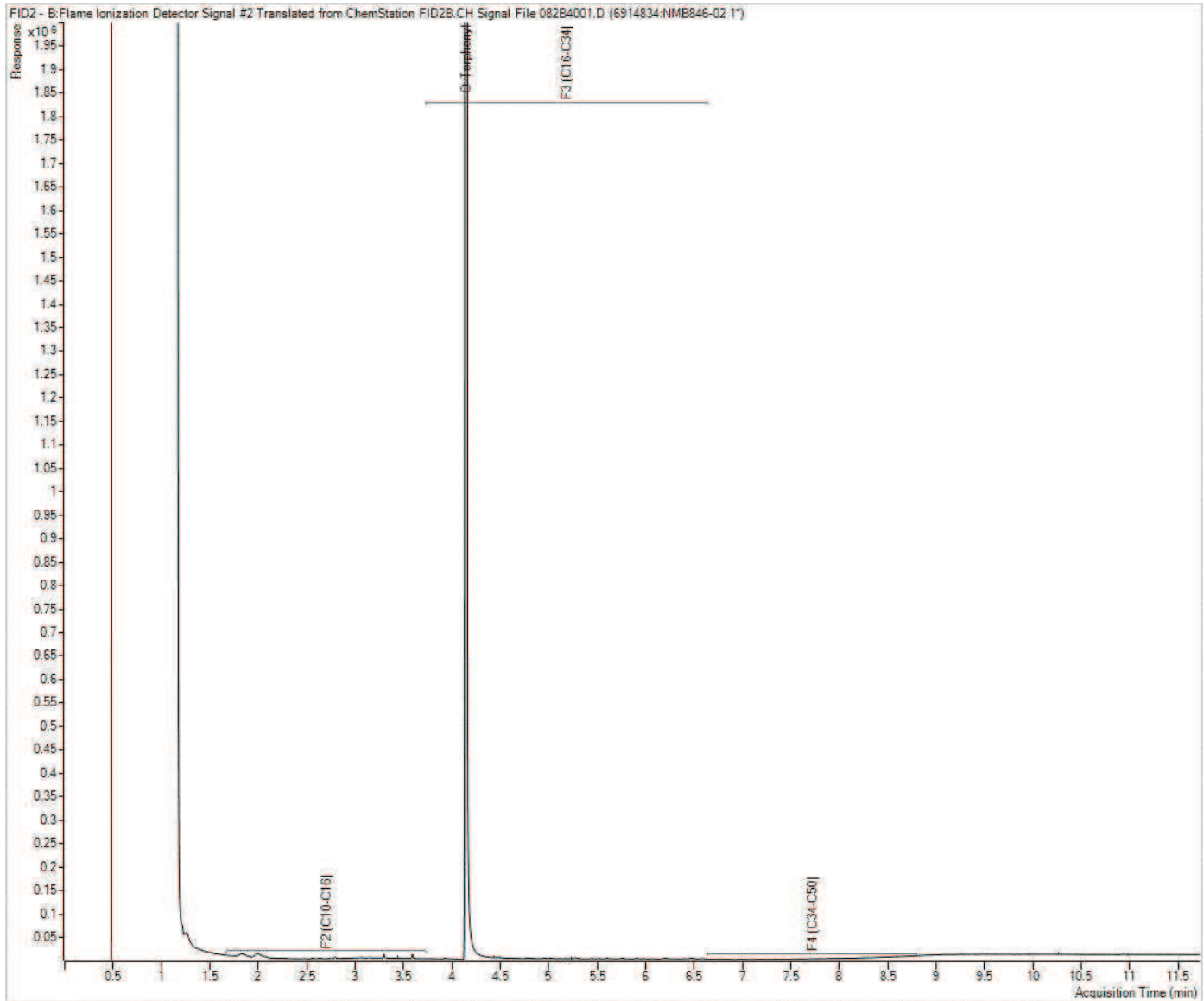
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



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

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



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



Your Project #: OTT-00260579-AO
 Your C.O.C. #: 791231-01-01

Attention: Patricia Stelmack

exp Services Inc
 Ottawa Branch
 100-2650 Queensview Drive
 Ottawa, ON
 CANADA K2B 8H6

Report Date: 2020/09/17
 Report #: R6334979
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: CON6285
Received: 2020/09/11, 17:05

Sample Matrix: Water
 # Samples Received: 6

| Analyses | Quantity | Date | Date | Laboratory Method | Analytical Method |
|--|----------|------------|------------|-------------------|-------------------|
| | | Extracted | Analyzed | | |
| 1,3-Dichloropropene Sum (1) | 6 | N/A | 2020/09/16 | | EPA 8260C m |
| Petroleum Hydrocarbons F2-F4 in Water (1, 2) | 5 | 2020/09/16 | 2020/09/17 | CAM SOP-00316 | CCME PHC-CWS m |
| Dissolved Metals by ICPMS (1) | 5 | N/A | 2020/09/16 | CAM SOP-00447 | EPA 6020B m |
| Volatile Organic Compounds and F1 PHCs (1) | 6 | N/A | 2020/09/15 | CAM SOP-00230 | EPA 8260C m |

Remarks:

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

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in BV Labs profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and BV Labs 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.

BV Labs liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. BV Labs 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 BV Labs, unless otherwise agreed in writing. BV Labs 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 BV Labs, results relate to the supplied samples tested.

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

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

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

(1) This test was performed by Bureau Veritas Laboratories Mississauga

(2) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories 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 #: OTT-00260579-A0
Your C.O.C. #: 791231-01-01

Attention: Patricia Stelmack

exp Services Inc
Ottawa Branch
100-2650 Queensview Drive
Ottawa, ON
CANADA K2B 8H6

Report Date: 2020/09/17
Report #: R6334979
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: CON6285
Received: 2020/09/11, 17:05

Encryption Key



Bureau Veritas Laboratories
17 Sep 2020 16:22:16

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Katherine Szozda, Project Manager
Email: Katherine.Szozda@bvlabs.com
Phone# (613)274-0573 Ext:7063633

=====
This report has been generated and distributed using a secure automated process.
BV Labs 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 Signature Page.



BUREAU
VERITAS

BV Labs Job #: CON6285
Report Date: 2020/09/17

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: MAD

VOLATILE ORGANICS BY GC/MS (WATER)

| | | | | |
|--|--------------|-------------------|------------|-----------------|
| BV Labs ID | | NPL785 | | |
| Sampling Date | | 2020/09/10 | | |
| COC Number | | 791231-01-01 | | |
| | UNITS | TRIP BLANK | RDL | QC Batch |
| Calculated Parameters | | | | |
| 1,3-Dichloropropene (cis+trans) | ug/L | <0.50 | 0.50 | 6940697 |
| Volatile Organics | | | | |
| Acetone (2-Propanone) | ug/L | <10 | 10 | 6938656 |
| Benzene | ug/L | <0.20 | 0.20 | 6938656 |
| Bromodichloromethane | ug/L | <0.50 | 0.50 | 6938656 |
| Bromoform | ug/L | <1.0 | 1.0 | 6938656 |
| Bromomethane | ug/L | <0.50 | 0.50 | 6938656 |
| Carbon Tetrachloride | ug/L | <0.20 | 0.20 | 6938656 |
| Chlorobenzene | ug/L | <0.20 | 0.20 | 6938656 |
| Chloroform | ug/L | <0.20 | 0.20 | 6938656 |
| Dibromochloromethane | ug/L | <0.50 | 0.50 | 6938656 |
| 1,2-Dichlorobenzene | ug/L | <0.50 | 0.50 | 6938656 |
| 1,3-Dichlorobenzene | ug/L | <0.50 | 0.50 | 6938656 |
| 1,4-Dichlorobenzene | ug/L | <0.50 | 0.50 | 6938656 |
| Dichlorodifluoromethane (FREON 12) | ug/L | <1.0 | 1.0 | 6938656 |
| 1,1-Dichloroethane | ug/L | <0.20 | 0.20 | 6938656 |
| 1,2-Dichloroethane | ug/L | <0.50 | 0.50 | 6938656 |
| 1,1-Dichloroethylene | ug/L | <0.20 | 0.20 | 6938656 |
| cis-1,2-Dichloroethylene | ug/L | <0.50 | 0.50 | 6938656 |
| trans-1,2-Dichloroethylene | ug/L | <0.50 | 0.50 | 6938656 |
| 1,2-Dichloropropane | ug/L | <0.20 | 0.20 | 6938656 |
| cis-1,3-Dichloropropene | ug/L | <0.30 | 0.30 | 6938656 |
| trans-1,3-Dichloropropene | ug/L | <0.40 | 0.40 | 6938656 |
| Ethylbenzene | ug/L | <0.20 | 0.20 | 6938656 |
| Ethylene Dibromide | ug/L | <0.20 | 0.20 | 6938656 |
| Hexane | ug/L | <1.0 | 1.0 | 6938656 |
| Methylene Chloride(Dichloromethane) | ug/L | <2.0 | 2.0 | 6938656 |
| Methyl Ethyl Ketone (2-Butanone) | ug/L | <10 | 10 | 6938656 |
| Methyl Isobutyl Ketone | ug/L | <5.0 | 5.0 | 6938656 |
| Methyl t-butyl ether (MTBE) | ug/L | <0.50 | 0.50 | 6938656 |
| Styrene | ug/L | <0.50 | 0.50 | 6938656 |
| 1,1,1,2-Tetrachloroethane | ug/L | <0.50 | 0.50 | 6938656 |
| 1,1,1,2-Tetrachloroethane | ug/L | <0.50 | 0.50 | 6938656 |
| Tetrachloroethylene | ug/L | <0.20 | 0.20 | 6938656 |
| Toluene | ug/L | <0.20 | 0.20 | 6938656 |
| 1,1,1-Trichloroethane | ug/L | <0.20 | 0.20 | 6938656 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch | | | | |



BUREAU
VERITAS

BV Labs Job #: CON6285
Report Date: 2020/09/17

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: MAD

VOLATILE ORGANICS BY GC/MS (WATER)

| | | | | |
|--|--------------|-------------------|------------|-----------------|
| BV Labs ID | | NPL785 | | |
| Sampling Date | | 2020/09/10 | | |
| COC Number | | 791231-01-01 | | |
| | UNITS | TRIP BLANK | RDL | QC Batch |
| 1,1,2-Trichloroethane | ug/L | <0.50 | 0.50 | 6938656 |
| Trichloroethylene | ug/L | <0.20 | 0.20 | 6938656 |
| Trichlorofluoromethane (FREON 11) | ug/L | <0.50 | 0.50 | 6938656 |
| Vinyl Chloride | ug/L | <0.20 | 0.20 | 6938656 |
| p+m-Xylene | ug/L | <0.20 | 0.20 | 6938656 |
| o-Xylene | ug/L | <0.20 | 0.20 | 6938656 |
| Total Xylenes | ug/L | <0.20 | 0.20 | 6938656 |
| F1 (C6-C10) | ug/L | <25 | 25 | 6938656 |
| F1 (C6-C10) - BTEX | ug/L | <25 | 25 | 6938656 |
| Surrogate Recovery (%) | | | | |
| 4-Bromofluorobenzene | % | 101 | | 6938656 |
| D4-1,2-Dichloroethane | % | 103 | | 6938656 |
| D8-Toluene | % | 99 | | 6938656 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch | | | | |



BUREAU
VERITAS

BV Labs Job #: CON6285
Report Date: 2020/09/17

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: MAD

O.REG 153 DISSOLVED ICPMS METALS (WATER)

| | | | | | | | | |
|---------------|--------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------|-----------------|
| BV Labs ID | | NPL781 | NPL782 | NPL783 | NPL784 | NPL786 | | |
| Sampling Date | | 2020/09/10 14:00 | 2020/09/10 16:00 | 2020/09/10 15:00 | 2020/09/10 14:00 | 2020/09/10 14:00 | | |
| COC Number | | 791231-01-01 | 791231-01-01 | 791231-01-01 | 791231-01-01 | 791231-01-01 | | |
| | UNITS | BH10 | BH11 | BH14 | FB | DUP | RDL | QC Batch |

| Metals | | | | | | | | |
|---------------------------|------|--------|--------|--------|--------|--------|-------|---------|
| Dissolved Antimony (Sb) | ug/L | <0.50 | <0.50 | 0.85 | <0.50 | <0.50 | 0.50 | 6942169 |
| Dissolved Arsenic (As) | ug/L | <1.0 | <1.0 | 1.8 | <1.0 | <1.0 | 1.0 | 6942169 |
| Dissolved Barium (Ba) | ug/L | 190 | 75 | 100 | <2.0 | 190 | 2.0 | 6942169 |
| Dissolved Beryllium (Be) | ug/L | <0.40 | <0.40 | <0.40 | <0.40 | <0.40 | 0.40 | 6942169 |
| Dissolved Boron (B) | ug/L | 250 | 72 | 190 | <10 | 270 | 10 | 6942169 |
| Dissolved Cadmium (Cd) | ug/L | <0.090 | <0.090 | <0.090 | <0.090 | <0.090 | 0.090 | 6942169 |
| Dissolved Chromium (Cr) | ug/L | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 5.0 | 6942169 |
| Dissolved Cobalt (Co) | ug/L | 0.51 | 1.6 | 1.3 | <0.50 | 0.51 | 0.50 | 6942169 |
| Dissolved Copper (Cu) | ug/L | <0.90 | 1.8 | 2.9 | <0.90 | <0.90 | 0.90 | 6942169 |
| Dissolved Lead (Pb) | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6942169 |
| Dissolved Molybdenum (Mo) | ug/L | 17 | 2.4 | 36 | <0.50 | 17 | 0.50 | 6942169 |
| Dissolved Nickel (Ni) | ug/L | 1.3 | 2.2 | 4.3 | <1.0 | 1.3 | 1.0 | 6942169 |
| Dissolved Selenium (Se) | ug/L | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 2.0 | 6942169 |
| Dissolved Silver (Ag) | ug/L | <0.090 | <0.090 | <0.090 | <0.090 | <0.090 | 0.090 | 6942169 |
| Dissolved Sodium (Na) | ug/L | 560000 | 220000 | 410000 | <100 | 560000 | 100 | 6942169 |
| Dissolved Thallium (Tl) | ug/L | <0.050 | <0.050 | 0.063 | <0.050 | <0.050 | 0.050 | 6942169 |
| Dissolved Uranium (U) | ug/L | 0.76 | 1.1 | 11 | <0.10 | 0.81 | 0.10 | 6942169 |
| Dissolved Vanadium (V) | ug/L | <0.50 | <0.50 | 0.86 | <0.50 | <0.50 | 0.50 | 6942169 |
| Dissolved Zinc (Zn) | ug/L | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 5.0 | 6942169 |

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



BUREAU
VERITAS

BV Labs Job #: CON6285
Report Date: 2020/09/17

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: MAD

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

| BV Labs ID | | NPL781 | NPL782 | NPL783 | NPL784 | NPL786 | | |
|---------------|--------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------|-----------------|
| Sampling Date | | 2020/09/10 14:00 | 2020/09/10 16:00 | 2020/09/10 15:00 | 2020/09/10 14:00 | 2020/09/10 14:00 | | |
| COC Number | | 791231-01-01 | 791231-01-01 | 791231-01-01 | 791231-01-01 | 791231-01-01 | | |
| | UNITS | BH10 | BH11 | BH14 | FB | DUP | RDL | QC Batch |

| Calculated Parameters | | | | | | | | |
|-------------------------------------|------|-------|-------|-------|-------|-------|------|---------|
| 1,3-Dichloropropene (cis+trans) | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6940697 |
| Volatile Organics | | | | | | | | |
| Acetone (2-Propanone) | ug/L | <10 | <10 | <10 | <10 | 12 | 10 | 6938656 |
| Benzene | ug/L | 0.27 | <0.20 | <0.20 | <0.20 | 0.25 | 0.20 | 6938656 |
| Bromodichloromethane | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6938656 |
| Bromoform | ug/L | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 1.0 | 6938656 |
| Bromomethane | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6938656 |
| Carbon Tetrachloride | ug/L | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6938656 |
| Chlorobenzene | ug/L | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6938656 |
| Chloroform | ug/L | 0.42 | <0.20 | <0.20 | <0.20 | 0.42 | 0.20 | 6938656 |
| Dibromochloromethane | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6938656 |
| 1,2-Dichlorobenzene | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6938656 |
| 1,3-Dichlorobenzene | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6938656 |
| 1,4-Dichlorobenzene | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6938656 |
| Dichlorodifluoromethane (FREON 12) | ug/L | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 1.0 | 6938656 |
| 1,1-Dichloroethane | ug/L | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6938656 |
| 1,2-Dichloroethane | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6938656 |
| 1,1-Dichloroethylene | ug/L | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6938656 |
| cis-1,2-Dichloroethylene | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6938656 |
| trans-1,2-Dichloroethylene | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6938656 |
| 1,2-Dichloropropane | ug/L | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6938656 |
| cis-1,3-Dichloropropene | ug/L | <0.30 | <0.30 | <0.30 | <0.30 | <0.30 | 0.30 | 6938656 |
| trans-1,3-Dichloropropene | ug/L | <0.40 | <0.40 | <0.40 | <0.40 | <0.40 | 0.40 | 6938656 |
| Ethylbenzene | ug/L | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6938656 |
| Ethylene Dibromide | ug/L | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6938656 |
| Hexane | ug/L | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 1.0 | 6938656 |
| Methylene Chloride(Dichloromethane) | ug/L | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 2.0 | 6938656 |
| Methyl Ethyl Ketone (2-Butanone) | ug/L | <10 | <10 | <10 | <10 | <10 | 10 | 6938656 |
| Methyl Isobutyl Ketone | ug/L | <5.0 | <5.0 | <5.0 | <5.0 | <5.0 | 5.0 | 6938656 |
| Methyl t-butyl ether (MTBE) | ug/L | <0.50 | 2.4 | <0.50 | <0.50 | <0.50 | 0.50 | 6938656 |
| Styrene | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6938656 |
| 1,1,1,2-Tetrachloroethane | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6938656 |
| 1,1,2,2-Tetrachloroethane | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6938656 |
| Tetrachloroethylene | ug/L | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6938656 |
| Toluene | ug/L | 0.47 | <0.20 | <0.20 | <0.20 | 0.49 | 0.20 | 6938656 |

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch



BUREAU
VERITAS

BV Labs Job #: CON6285
Report Date: 2020/09/17

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: MAD

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

| BV Labs ID | | NPL781 | NPL782 | NPL783 | NPL784 | NPL786 | | |
|--|--------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------|-----------------|
| Sampling Date | | 2020/09/10 14:00 | 2020/09/10 16:00 | 2020/09/10 15:00 | 2020/09/10 14:00 | 2020/09/10 14:00 | | |
| COC Number | | 791231-01-01 | 791231-01-01 | 791231-01-01 | 791231-01-01 | 791231-01-01 | | |
| | UNITS | BH10 | BH11 | BH14 | FB | DUP | RDL | QC Batch |
| 1,1,1-Trichloroethane | ug/L | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6938656 |
| 1,1,2-Trichloroethane | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6938656 |
| Trichloroethylene | ug/L | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6938656 |
| Trichlorofluoromethane (FREON 11) | ug/L | <0.50 | <0.50 | <0.50 | <0.50 | <0.50 | 0.50 | 6938656 |
| Vinyl Chloride | ug/L | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6938656 |
| p+m-Xylene | ug/L | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6938656 |
| o-Xylene | ug/L | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6938656 |
| Total Xylenes | ug/L | <0.20 | <0.20 | <0.20 | <0.20 | <0.20 | 0.20 | 6938656 |
| F1 (C6-C10) | ug/L | <25 | <25 | <25 | <25 | <25 | 25 | 6938656 |
| F1 (C6-C10) - BTEX | ug/L | <25 | <25 | <25 | <25 | <25 | 25 | 6938656 |
| F2-F4 Hydrocarbons | | | | | | | | |
| F2 (C10-C16 Hydrocarbons) | ug/L | <100 | <100 | <100 | <100 | <100 | 100 | 6947971 |
| F3 (C16-C34 Hydrocarbons) | ug/L | <200 | <200 | <200 | <200 | <200 | 200 | 6947971 |
| F4 (C34-C50 Hydrocarbons) | ug/L | <200 | <200 | <200 | <200 | <200 | 200 | 6947971 |
| Reached Baseline at C50 | ug/L | Yes | Yes | Yes | Yes | Yes | | 6947971 |
| Surrogate Recovery (%) | | | | | | | | |
| o-Terphenyl | % | 100 | 100 | 101 | 100 | 102 | | 6947971 |
| 4-Bromofluorobenzene | % | 103 | 104 | 103 | 102 | 103 | | 6938656 |
| D4-1,2-Dichloroethane | % | 100 | 103 | 103 | 103 | 101 | | 6938656 |
| D8-Toluene | % | 98 | 96 | 97 | 98 | 96 | | 6938656 |
| RDL = Reportable Detection Limit QC Batch = Quality Control Batch | | | | | | | | |



BUREAU
VERITAS

BV Labs Job #: CON6285
Report Date: 2020/09/17

exp Services Inc
Client Project #: OTT-00260579-A0
Sampler Initials: MAD

TEST SUMMARY

BV Labs ID: NPL781
Sample ID: BH10
Matrix: Water

Collected: 2020/09/10
Shipped:
Received: 2020/09/11

| Test Description | Instrumentation | Batch | Extracted | Date Analyzed | Analyst |
|--|-----------------|---------|------------|---------------|-------------------------|
| 1,3-Dichloropropene Sum | CALC | 6940697 | N/A | 2020/09/16 | Automated Statchk |
| Petroleum Hydrocarbons F2-F4 in Water | GC/FID | 6947971 | 2020/09/16 | 2020/09/17 | Margaret Kulczyk-Stanko |
| Dissolved Metals by ICPMS | ICP/MS | 6942169 | N/A | 2020/09/16 | Arefa Dabhad |
| Volatile Organic Compounds and F1 PHCs | GC/MSFD | 6938656 | N/A | 2020/09/15 | Denis Reid |

BV Labs ID: NPL782
Sample ID: BH11
Matrix: Water

Collected: 2020/09/10
Shipped:
Received: 2020/09/11

| Test Description | Instrumentation | Batch | Extracted | Date Analyzed | Analyst |
|--|-----------------|---------|------------|---------------|-------------------------|
| 1,3-Dichloropropene Sum | CALC | 6940697 | N/A | 2020/09/16 | Automated Statchk |
| Petroleum Hydrocarbons F2-F4 in Water | GC/FID | 6947971 | 2020/09/16 | 2020/09/17 | Margaret Kulczyk-Stanko |
| Dissolved Metals by ICPMS | ICP/MS | 6942169 | N/A | 2020/09/16 | Arefa Dabhad |
| Volatile Organic Compounds and F1 PHCs | GC/MSFD | 6938656 | N/A | 2020/09/15 | Denis Reid |

BV Labs ID: NPL783
Sample ID: BH14
Matrix: Water

Collected: 2020/09/10
Shipped:
Received: 2020/09/11

| Test Description | Instrumentation | Batch | Extracted | Date Analyzed | Analyst |
|--|-----------------|---------|------------|---------------|-------------------------|
| 1,3-Dichloropropene Sum | CALC | 6940697 | N/A | 2020/09/16 | Automated Statchk |
| Petroleum Hydrocarbons F2-F4 in Water | GC/FID | 6947971 | 2020/09/16 | 2020/09/17 | Margaret Kulczyk-Stanko |
| Dissolved Metals by ICPMS | ICP/MS | 6942169 | N/A | 2020/09/16 | Arefa Dabhad |
| Volatile Organic Compounds and F1 PHCs | GC/MSFD | 6938656 | N/A | 2020/09/15 | Denis Reid |

BV Labs ID: NPL784
Sample ID: FB
Matrix: Water

Collected: 2020/09/10
Shipped:
Received: 2020/09/11

| Test Description | Instrumentation | Batch | Extracted | Date Analyzed | Analyst |
|--|-----------------|---------|------------|---------------|-------------------------|
| 1,3-Dichloropropene Sum | CALC | 6940697 | N/A | 2020/09/16 | Automated Statchk |
| Petroleum Hydrocarbons F2-F4 in Water | GC/FID | 6947971 | 2020/09/16 | 2020/09/17 | Margaret Kulczyk-Stanko |
| Dissolved Metals by ICPMS | ICP/MS | 6942169 | N/A | 2020/09/16 | Arefa Dabhad |
| Volatile Organic Compounds and F1 PHCs | GC/MSFD | 6938656 | N/A | 2020/09/15 | Denis Reid |

BV Labs ID: NPL785
Sample ID: TRIP BLANK
Matrix: Water

Collected: 2020/09/10
Shipped:
Received: 2020/09/11

| Test Description | Instrumentation | Batch | Extracted | Date Analyzed | Analyst |
|--|-----------------|---------|-----------|---------------|-------------------|
| 1,3-Dichloropropene Sum | CALC | 6940697 | N/A | 2020/09/16 | Automated Statchk |
| Volatile Organic Compounds and F1 PHCs | GC/MSFD | 6938656 | N/A | 2020/09/15 | Denis Reid |



BUREAU
VERITAS

BV Labs Job #: CON6285

Report Date: 2020/09/17

exp Services Inc

Client Project #: OTT-00260579-A0

Sampler Initials: MAD

TEST SUMMARY

BV Labs ID: NPL786

Sample ID: DUP

Matrix: Water

Collected: 2020/09/10

Shipped:

Received: 2020/09/11

| Test Description | Instrumentation | Batch | Extracted | Date Analyzed | Analyst |
|--|-----------------|---------|------------|---------------|-------------------------|
| 1,3-Dichloropropene Sum | CALC | 6940697 | N/A | 2020/09/16 | Automated Statchk |
| Petroleum Hydrocarbons F2-F4 in Water | GC/FID | 6947971 | 2020/09/16 | 2020/09/17 | Margaret Kulczyk-Stanko |
| Dissolved Metals by ICPMS | ICP/MS | 6942169 | N/A | 2020/09/16 | Arefa Dabhad |
| Volatile Organic Compounds and F1 PHCs | GC/MSFD | 6938656 | N/A | 2020/09/15 | Denis Reid |



BUREAU
VERITAS

BV Labs Job #: CON6285

Report Date: 2020/09/17

exp Services Inc

Client Project #: OTT-00260579-A0

Sampler Initials: MAD

GENERAL COMMENTS

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

| | |
|-----------|-------|
| Package 1 | 4.7°C |
|-----------|-------|

Results relate only to the items tested.



BUREAU
VERITAS

BV Labs Job #: CON6285

Report Date: 2020/09/17

QUALITY ASSURANCE REPORT

exp Services Inc

Client Project #: OTT-00260579-A0

Sampler Initials: MAD

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|------------------------------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 6938656 | 4-Bromofluorobenzene | 2020/09/15 | 101 | 70 - 130 | 104 | 70 - 130 | 100 | % | | |
| 6938656 | D4-1,2-Dichloroethane | 2020/09/15 | 107 | 70 - 130 | 101 | 70 - 130 | 102 | % | | |
| 6938656 | D8-Toluene | 2020/09/15 | 100 | 70 - 130 | 99 | 70 - 130 | 98 | % | | |
| 6947971 | o-Terphenyl | 2020/09/17 | 105 | 60 - 130 | 106 | 60 - 130 | 103 | % | | |
| 6938656 | 1,1,1,2-Tetrachloroethane | 2020/09/15 | 99 | 70 - 130 | 102 | 70 - 130 | <0.50 | ug/L | NC | 30 |
| 6938656 | 1,1,1-Trichloroethane | 2020/09/15 | 92 | 70 - 130 | 94 | 70 - 130 | <0.20 | ug/L | 2.3 | 30 |
| 6938656 | 1,1,2,2-Tetrachloroethane | 2020/09/15 | 99 | 70 - 130 | 103 | 70 - 130 | <0.50 | ug/L | NC | 30 |
| 6938656 | 1,1,2-Trichloroethane | 2020/09/15 | 100 | 70 - 130 | 101 | 70 - 130 | <0.50 | ug/L | NC | 30 |
| 6938656 | 1,1-Dichloroethane | 2020/09/15 | 91 | 70 - 130 | 94 | 70 - 130 | <0.20 | ug/L | 2.6 | 30 |
| 6938656 | 1,1-Dichloroethylene | 2020/09/15 | 97 | 70 - 130 | 103 | 70 - 130 | <0.20 | ug/L | NC | 30 |
| 6938656 | 1,2-Dichlorobenzene | 2020/09/15 | 89 | 70 - 130 | 93 | 70 - 130 | <0.50 | ug/L | NC | 30 |
| 6938656 | 1,2-Dichloroethane | 2020/09/15 | 102 | 70 - 130 | 101 | 70 - 130 | <0.50 | ug/L | NC | 30 |
| 6938656 | 1,2-Dichloropropane | 2020/09/15 | 90 | 70 - 130 | 90 | 70 - 130 | <0.20 | ug/L | NC | 30 |
| 6938656 | 1,3-Dichlorobenzene | 2020/09/15 | 90 | 70 - 130 | 93 | 70 - 130 | <0.50 | ug/L | NC | 30 |
| 6938656 | 1,4-Dichlorobenzene | 2020/09/15 | 97 | 70 - 130 | 99 | 70 - 130 | <0.50 | ug/L | NC | 30 |
| 6938656 | Acetone (2-Propanone) | 2020/09/15 | NC | 60 - 140 | 99 | 60 - 140 | <10 | ug/L | 10 | 30 |
| 6938656 | Benzene | 2020/09/15 | 95 | 70 - 130 | 97 | 70 - 130 | <0.20 | ug/L | NC | 30 |
| 6938656 | Bromodichloromethane | 2020/09/15 | 96 | 70 - 130 | 97 | 70 - 130 | <0.50 | ug/L | 1.1 | 30 |
| 6938656 | Bromoform | 2020/09/15 | 108 | 70 - 130 | 108 | 70 - 130 | <1.0 | ug/L | NC | 30 |
| 6938656 | Bromomethane | 2020/09/15 | 97 | 60 - 140 | 101 | 60 - 140 | <0.50 | ug/L | NC | 30 |
| 6938656 | Carbon Tetrachloride | 2020/09/15 | 93 | 70 - 130 | 94 | 70 - 130 | <0.20 | ug/L | NC | 30 |
| 6938656 | Chlorobenzene | 2020/09/15 | 90 | 70 - 130 | 93 | 70 - 130 | <0.20 | ug/L | 1.2 | 30 |
| 6938656 | Chloroform | 2020/09/15 | 89 | 70 - 130 | 91 | 70 - 130 | <0.20 | ug/L | 4.5 | 30 |
| 6938656 | cis-1,2-Dichloroethylene | 2020/09/15 | 93 | 70 - 130 | 94 | 70 - 130 | <0.50 | ug/L | NC | 30 |
| 6938656 | cis-1,3-Dichloropropene | 2020/09/15 | 102 | 70 - 130 | 94 | 70 - 130 | <0.30 | ug/L | NC | 30 |
| 6938656 | Dibromochloromethane | 2020/09/15 | 106 | 70 - 130 | 106 | 70 - 130 | <0.50 | ug/L | 3.3 | 30 |
| 6938656 | Dichlorodifluoromethane (FREON 12) | 2020/09/15 | 71 | 60 - 140 | 91 | 60 - 140 | <1.0 | ug/L | NC | 30 |
| 6938656 | Ethylbenzene | 2020/09/15 | 87 | 70 - 130 | 91 | 70 - 130 | <0.20 | ug/L | NC | 30 |
| 6938656 | Ethylene Dibromide | 2020/09/15 | 106 | 70 - 130 | 103 | 70 - 130 | <0.20 | ug/L | NC | 30 |
| 6938656 | F1 (C6-C10) - BTEX | 2020/09/15 | | | | | <25 | ug/L | 7.6 | 30 |
| 6938656 | F1 (C6-C10) | 2020/09/15 | 87 | 60 - 140 | 96 | 60 - 140 | <25 | ug/L | 7.6 | 30 |
| 6938656 | Hexane | 2020/09/15 | 92 | 70 - 130 | 97 | 70 - 130 | <1.0 | ug/L | NC | 30 |



BUREAU
VERITAS

BV Labs Job #: CON6285

Report Date: 2020/09/17

QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc

Client Project #: OTT-00260579-A0

Sampler Initials: MAD

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|-------------------------------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 6938656 | Methyl Ethyl Ketone (2-Butanone) | 2020/09/15 | 109 | 60 - 140 | 102 | 60 - 140 | <10 | ug/L | 12 | 30 |
| 6938656 | Methyl Isobutyl Ketone | 2020/09/15 | 98 | 70 - 130 | 96 | 70 - 130 | <5.0 | ug/L | NC | 30 |
| 6938656 | Methyl t-butyl ether (MTBE) | 2020/09/15 | 89 | 70 - 130 | 91 | 70 - 130 | <0.50 | ug/L | NC | 30 |
| 6938656 | Methylene Chloride(Dichloromethane) | 2020/09/15 | 96 | 70 - 130 | 98 | 70 - 130 | <2.0 | ug/L | NC | 30 |
| 6938656 | o-Xylene | 2020/09/15 | 88 | 70 - 130 | 93 | 70 - 130 | <0.20 | ug/L | NC | 30 |
| 6938656 | p+m-Xylene | 2020/09/15 | 91 | 70 - 130 | 96 | 70 - 130 | <0.20 | ug/L | NC | 30 |
| 6938656 | Styrene | 2020/09/15 | 91 | 70 - 130 | 95 | 70 - 130 | <0.50 | ug/L | NC | 30 |
| 6938656 | Tetrachloroethylene | 2020/09/15 | 90 | 70 - 130 | 93 | 70 - 130 | <0.20 | ug/L | NC | 30 |
| 6938656 | Toluene | 2020/09/15 | 87 | 70 - 130 | 88 | 70 - 130 | <0.20 | ug/L | NC | 30 |
| 6938656 | Total Xylenes | 2020/09/15 | | | | | <0.20 | ug/L | NC | 30 |
| 6938656 | trans-1,2-Dichloroethylene | 2020/09/15 | 94 | 70 - 130 | 99 | 70 - 130 | <0.50 | ug/L | NC | 30 |
| 6938656 | trans-1,3-Dichloropropene | 2020/09/15 | 109 | 70 - 130 | 94 | 70 - 130 | <0.40 | ug/L | NC | 30 |
| 6938656 | Trichloroethylene | 2020/09/15 | 98 | 70 - 130 | 100 | 70 - 130 | <0.20 | ug/L | NC | 30 |
| 6938656 | Trichlorofluoromethane (FREON 11) | 2020/09/15 | 94 | 70 - 130 | 103 | 70 - 130 | <0.50 | ug/L | NC | 30 |
| 6938656 | Vinyl Chloride | 2020/09/15 | 84 | 70 - 130 | 98 | 70 - 130 | <0.20 | ug/L | NC | 30 |
| 6942169 | Dissolved Antimony (Sb) | 2020/09/16 | 101 | 80 - 120 | 99 | 80 - 120 | <0.50 | ug/L | NC | 20 |
| 6942169 | Dissolved Arsenic (As) | 2020/09/16 | 97 | 80 - 120 | 97 | 80 - 120 | <1.0 | ug/L | NC | 20 |
| 6942169 | Dissolved Barium (Ba) | 2020/09/16 | 97 | 80 - 120 | 97 | 80 - 120 | <2.0 | ug/L | 0.32 | 20 |
| 6942169 | Dissolved Beryllium (Be) | 2020/09/16 | 92 | 80 - 120 | 93 | 80 - 120 | <0.40 | ug/L | NC | 20 |
| 6942169 | Dissolved Boron (B) | 2020/09/16 | 99 | 80 - 120 | 98 | 80 - 120 | <10 | ug/L | 2.0 | 20 |
| 6942169 | Dissolved Cadmium (Cd) | 2020/09/16 | 98 | 80 - 120 | 98 | 80 - 120 | <0.090 | ug/L | NC | 20 |
| 6942169 | Dissolved Chromium (Cr) | 2020/09/16 | 91 | 80 - 120 | 92 | 80 - 120 | <5.0 | ug/L | NC | 20 |
| 6942169 | Dissolved Cobalt (Co) | 2020/09/16 | 94 | 80 - 120 | 97 | 80 - 120 | <0.50 | ug/L | NC | 20 |
| 6942169 | Dissolved Copper (Cu) | 2020/09/16 | 97 | 80 - 120 | 97 | 80 - 120 | <0.90 | ug/L | NC | 20 |
| 6942169 | Dissolved Lead (Pb) | 2020/09/16 | 94 | 80 - 120 | 98 | 80 - 120 | <0.50 | ug/L | NC | 20 |
| 6942169 | Dissolved Molybdenum (Mo) | 2020/09/16 | 95 | 80 - 120 | 95 | 80 - 120 | <0.50 | ug/L | NC | 20 |
| 6942169 | Dissolved Nickel (Ni) | 2020/09/16 | 91 | 80 - 120 | 95 | 80 - 120 | <1.0 | ug/L | NC | 20 |
| 6942169 | Dissolved Selenium (Se) | 2020/09/16 | 97 | 80 - 120 | 100 | 80 - 120 | <2.0 | ug/L | NC | 20 |
| 6942169 | Dissolved Silver (Ag) | 2020/09/16 | 94 | 80 - 120 | 93 | 80 - 120 | <0.090 | ug/L | NC | 20 |
| 6942169 | Dissolved Sodium (Na) | 2020/09/16 | NC | 80 - 120 | 94 | 80 - 120 | <100 | ug/L | 0.55 | 20 |
| 6942169 | Dissolved Thallium (Tl) | 2020/09/16 | 97 | 80 - 120 | 98 | 80 - 120 | <0.050 | ug/L | NC | 20 |
| 6942169 | Dissolved Uranium (U) | 2020/09/16 | 98 | 80 - 120 | 100 | 80 - 120 | <0.10 | ug/L | 4.0 | 20 |



BUREAU
VERITAS

BV Labs Job #: CON6285

Report Date: 2020/09/17

QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc

Client Project #: OTT-00260579-A0

Sampler Initials: MAD

| QC Batch | Parameter | Date | Matrix Spike | | SPIKED BLANK | | Method Blank | | RPD | |
|----------|---------------------------|------------|--------------|-----------|--------------|-----------|--------------|-------|-----------|-----------|
| | | | % Recovery | QC Limits | % Recovery | QC Limits | Value | UNITS | Value (%) | QC Limits |
| 6942169 | Dissolved Vanadium (V) | 2020/09/16 | 92 | 80 - 120 | 93 | 80 - 120 | <0.50 | ug/L | NC | 20 |
| 6942169 | Dissolved Zinc (Zn) | 2020/09/16 | 94 | 80 - 120 | 97 | 80 - 120 | <5.0 | ug/L | NC | 20 |
| 6947971 | F2 (C10-C16 Hydrocarbons) | 2020/09/17 | 103 | 50 - 130 | 106 | 60 - 130 | <100 | ug/L | NC | 30 |
| 6947971 | F3 (C16-C34 Hydrocarbons) | 2020/09/17 | 110 | 50 - 130 | 109 | 60 - 130 | <200 | ug/L | NC | 30 |
| 6947971 | F4 (C34-C50 Hydrocarbons) | 2020/09/17 | 99 | 50 - 130 | 102 | 60 - 130 | <200 | 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 $\leq 2x$ RDL).



BUREAU
VERITAS

BV Labs Job #: CON6285

Report Date: 2020/09/17

exp Services Inc

Client Project #: OTT-00260579-A0

Sampler Initials: MAD

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

A handwritten signature in black ink, appearing to read "Anastassia Hamanov", written over a horizontal line.

Anastassia Hamanov, Scientific Specialist

BV Labs 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 Signature Page.

11-Sep-20 17:05

Katherine Szozda



CON6285

DSG ENV-618

Presence of Visible Particulate/Sediment

Maxxam Analytics

CAM FCD-01013/5

Page 1 of 1

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

Bottle Types

| | Sample ID | All | CrVI | Inorganics | | | | Organics | | | | | | | | | Hydrocarbons | | | | | | Volatiles | | | | Other | | | | | | | | | |
|----|-----------|-----|------|------------|---------|----|----------------|----------------|----------------|------------|------------|------------------|------------------|-----------------|-----------------|------------|--------------|--------------|-----------|-----------|-----------|-----------|--------------|--------------|-----|------------|-------|------------|------------|------------|--|--|--|--|--|--|
| | | | | CN | General | Hg | Metals (Diss.) | Organic 1 of 2 | Organic 2 of 2 | PCB 1 of 2 | PCB 2 of 2 | Pest/Herb 1 of 2 | Pest/Herb 2 of 2 | SVOC/ABN 1 of 2 | SVOC/ABN 2 of 2 | PAH 1 of 2 | PAH 2 of 2 | Dioxin/Furan | F1 Vial 1 | F1 Vial 2 | F1 Vial 3 | F1 Vial 4 | F2-F4 1 of 2 | F2-F4 2 of 2 | F4G | VOC Vial 1 | | VOC Vial 2 | VOC Vial 3 | VOC Vial 4 | | | | | | |
| 1 | BH10 | TS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | BH11 | TS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | BH14 | TS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | DUP | TS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Comments: Except Metals

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

Recorded By: (signature/print) *DIPIKA SINGH*

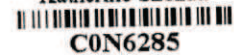


Bureau Veritas Laboratories
6740 Campbell Road, Mississauga, Ontario Canada L5N 2L8 Tel: (905) 817-5700 Toll-free 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

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11-Sep-20 17:05

Katherine Szoza
CON6285



INVOICE TO:
Company Name: #17498 exp Services Inc
Attention: Accounts Payable
Address: 100-2650 Queensview Drive
Ottawa ON K2B 8H6
Tel: (613) 688-1899 Fax: (613) 225-7337
Email: accounting.ottawa@exp.com; Karen.Burke@exp.com;

REPORT TO:
Company Name:
Attention: Patricia Stelmack
Address:
Tel:
Email: patricia.stelmack@exp.com

PROJECT INFORMATION:
Quotation #: B91718
P.O. #:
Project: OTT-00260579-A0
Project Name:
Site #:
Sampled By: MAD

DSG ENV-618



C791231-01-01

e Only:
Bottle Order #: 791231
Project Manager: Katherine Szoza

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

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

Field Filtered (please circle):
Metals / hg / Cr / VI

O Reg 153 VOCs by HS & F1-F4

O Reg 153 Dissolved IC/PMS Metals (Water)

PAC FI / VOC

Turnaround Time (TAT) Required:

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

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

| Sample Barcode Label | Sample (Location) Identification | Date Sampled | Time Sampled | Matrix | Field Filtered | O Reg 153 VOCs | O Reg 153 Dissolved Metals | | | | | | # of Bottles | Comments |
|----------------------|----------------------------------|--------------|--------------|--------|----------------|----------------|----------------------------|--|--|---|--|--|--------------|----------|
| 1 | BH10 | Sept 10 2020 | 2:00pm | GW | Y | X | X | | | | | | 6 | |
| 2 | BH11 | | 4:00pm | GW | Y | | | | | | | | 6 | |
| 3 | BH14 | | 3:00pm | GW | Y | | | | | | | | 6 | |
| 4 | FB | | 2:00pm | DI | | | | | | | | | 6 | |
| 5 | Trip Blank | | | DI | | | | | | X | | | 3 | |
| 6 | Dup | | 2:00pm | GW | Y | X | X | | | | | | 6 | |

| | | | | | | | | | | | | | |
|---|------------------------------|-----------------|---|------------------------------|---------------|-------------------------------|---------------------|----------------|---------------------------------------|----------------------|--------|-----|----|
| RELINQUISHED BY: (Signature/Print) Mark Devlin | Date: (YY/MM/DD) 20/09/20 | Time 11:24am | RECEIVED BY: (Signature/Print) Katherine Szoza | Date: (YY/MM/DD) 20/09/20 | Time 17:05 | # jars used and not submitted | Laboratory Use Only | Time Sensitive | Temperature (°C) on Receipt 41.7/3 | Custody Seal Present | Intact | Yes | No |
|---|------------------------------|-----------------|---|------------------------------|---------------|-------------------------------|---------------------|----------------|---------------------------------------|----------------------|--------|-----|----|

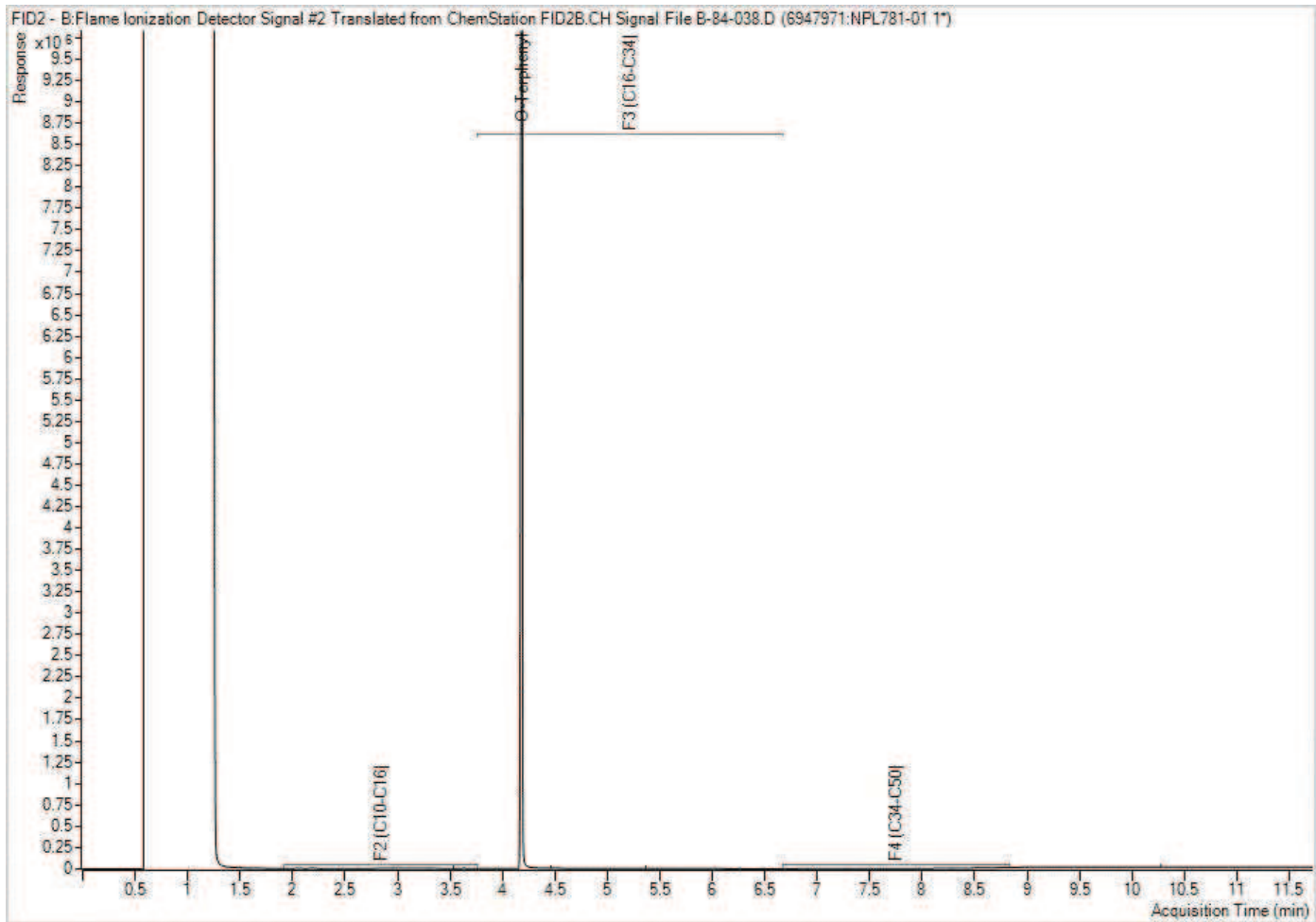
* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BV LABS' STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVLABS.COM/TERMS-AND-CONDITIONS.
** IT 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.BVLABS.COM/RESOURCES/CHAIN-OF-CUSTODY-FORMS.

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

White: BV Labs Yellow: Client

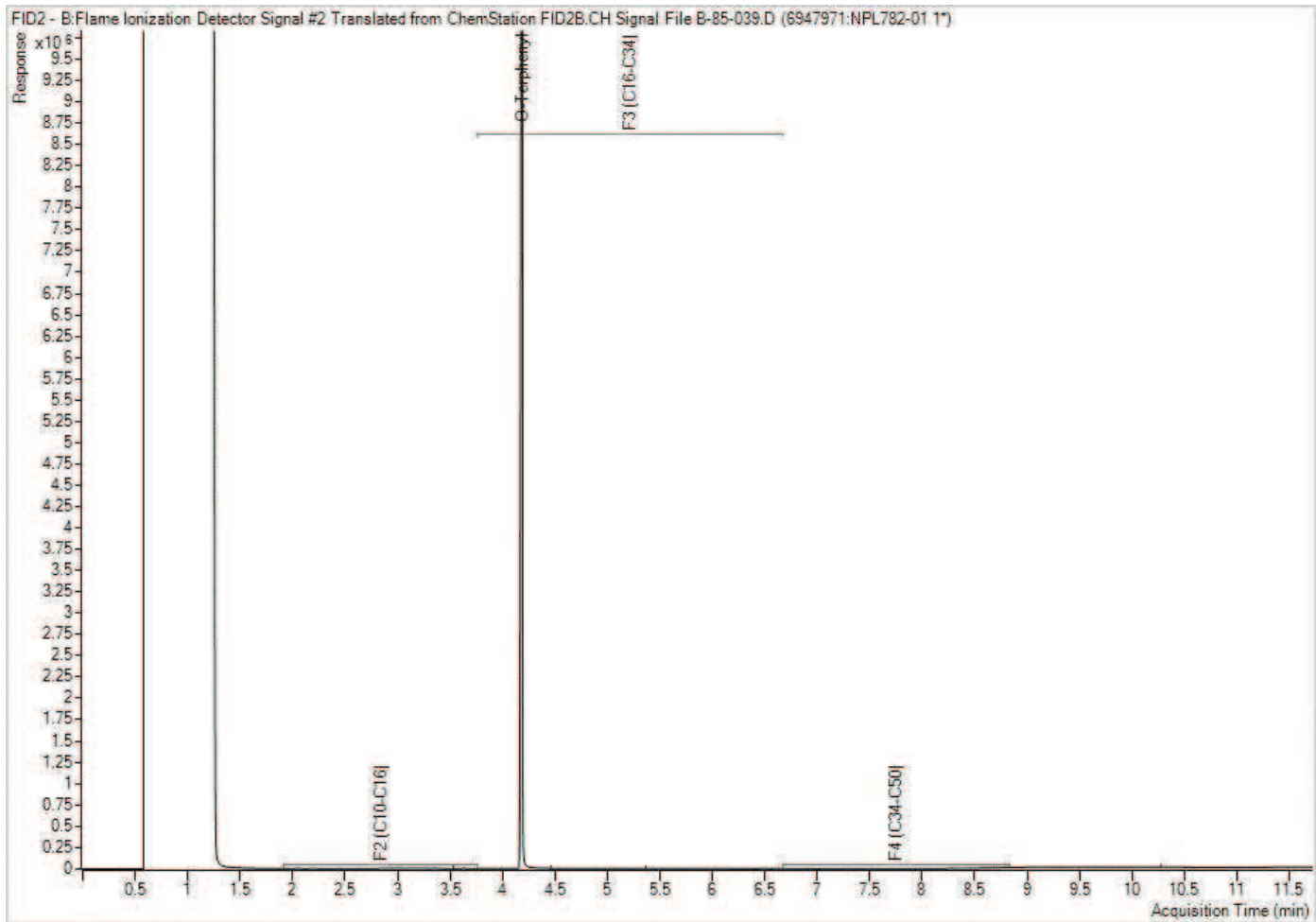
4374

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



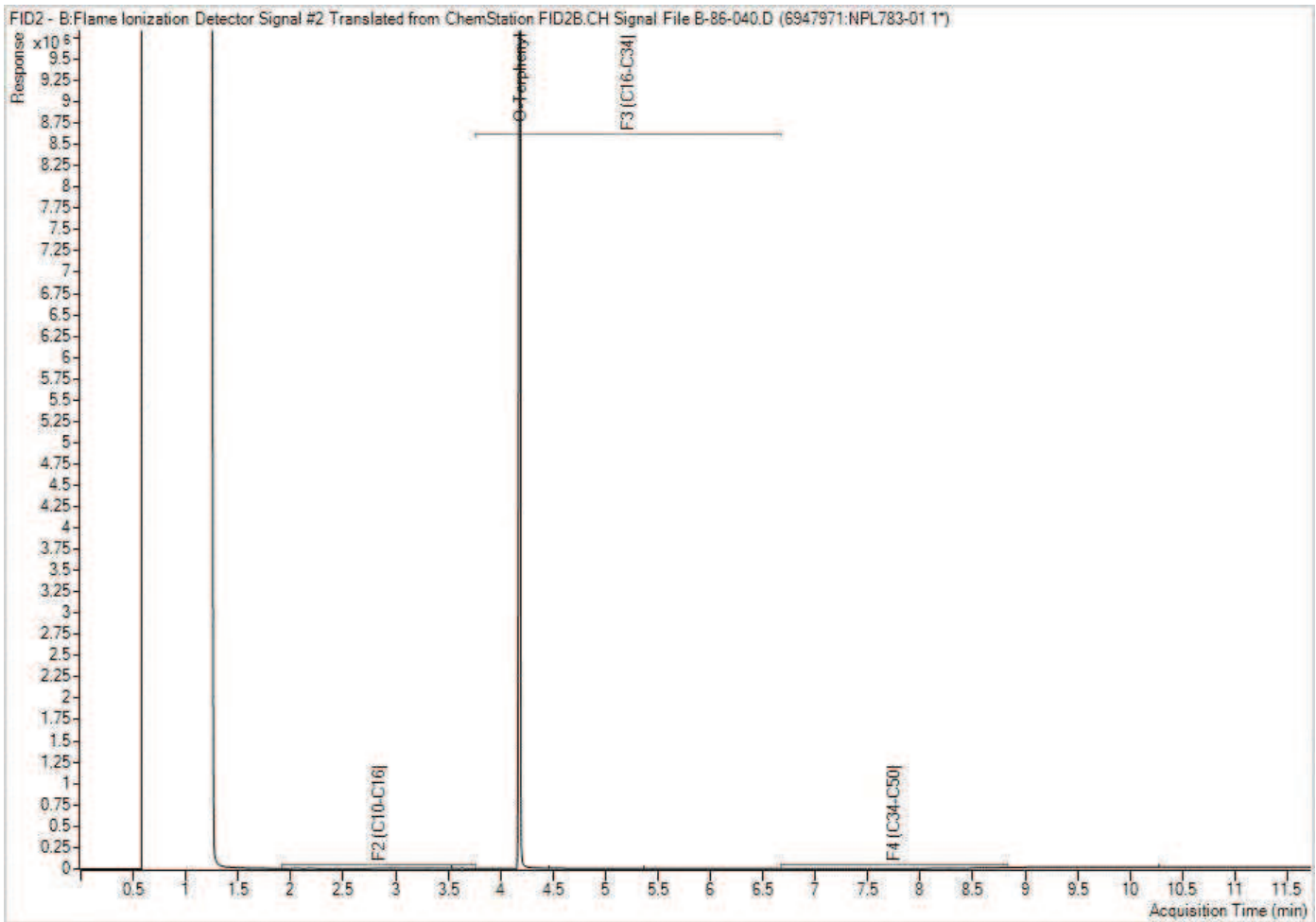
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



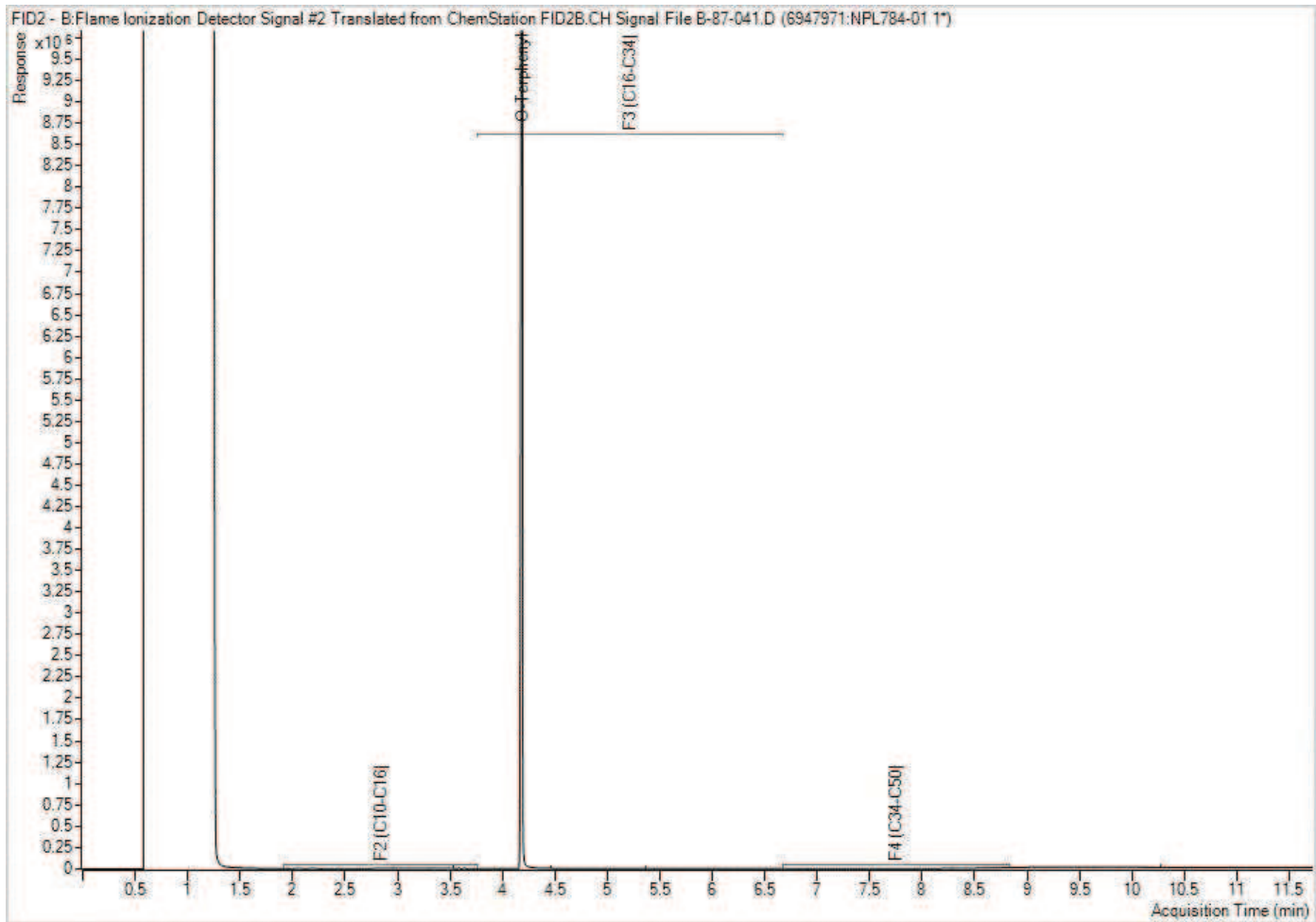
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



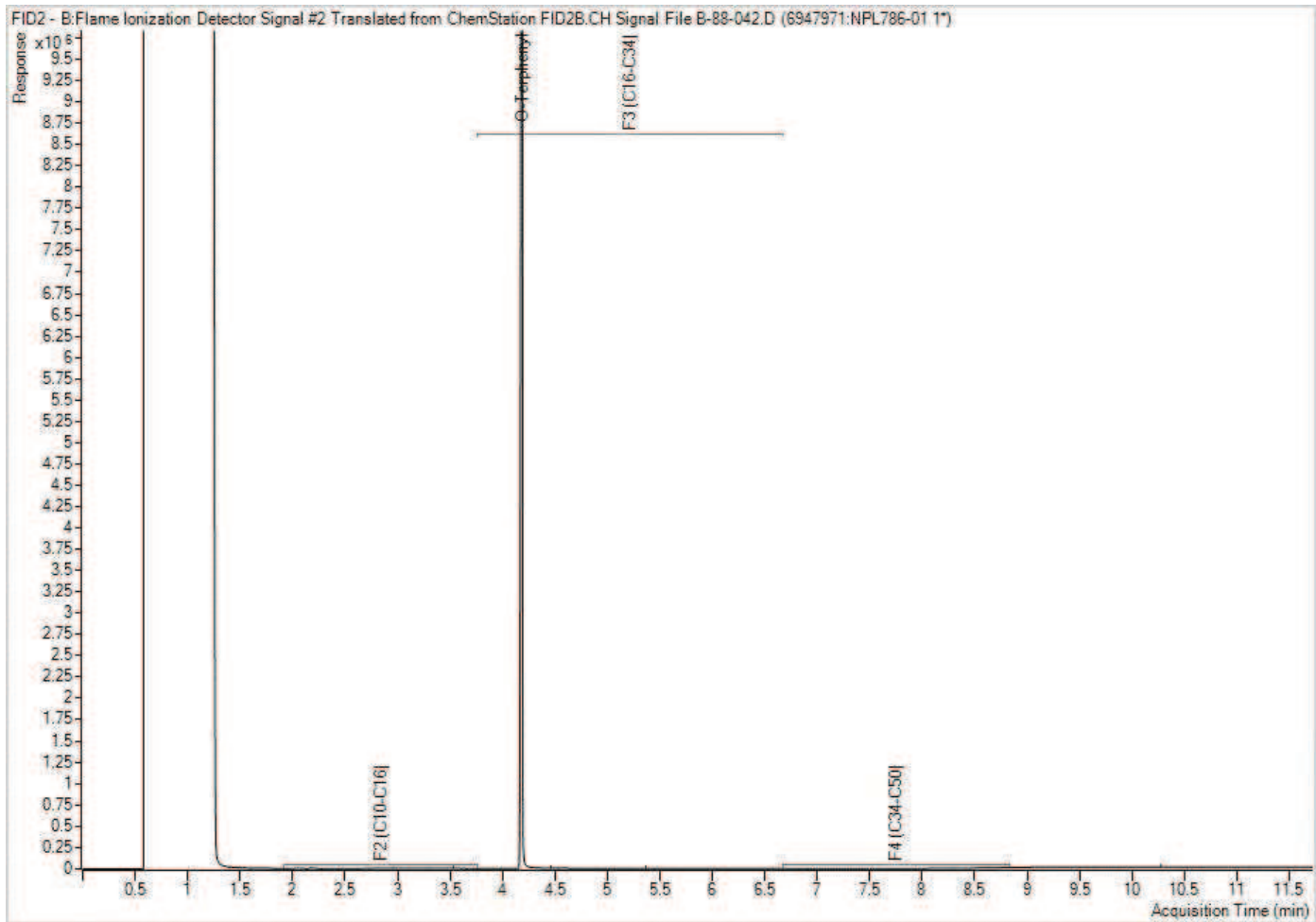
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



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

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



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