

Phase Two Environmental Site Assessment 1820-1846 Bank Street, Ottawa, Ontario

Client: Sun Life Assurance Company of Canada c/o BentallGreenOak (Canada) LP

Type of Document: Final

Project Name: Phase Two Environmental Site Assessment

Project Number: OTT-23002538-B0

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Date Submitted: September 30, 2024

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Sun Life Assurance Company of Canda c/o BentallGreenOak (Canada) LP Phase Two Environmental Site Assessment 1820-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0 September 30, 2024

Legal Notification

This report was prepared by EXP Services Inc. for the account of Sun Life Assurance Company of Canada c/o BentallGreenOak (Canada) LP.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. EXP Services Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this project.

Executive Summary

EXP Services Inc. (EXP) was retained by Sun Life Assurance Company of Canada c/o BentallGreenOak (Canada) LP to conduct a Phase Two Environmental Site Assessment (ESA) for the property located at 1820-1846 Bank Street in Ottawa, Ontario (hereinafter referred to as the 'Phase Two property'). At the time of the investigation, the Phase Two property was occupied by a commercial strip mall and associated parking lot.

The objective of the Phase Two ESA investigation was to assess the quality of the soil and groundwater conditions within the areas of potential environmental concern (APEC) identified in a Phase One ESA prepared by EXP. EXP understands that the most recent use of the Phase One property is commercial and that the proposed future use is residential and commercial. Consequently, since the proposed future use of the property is more sensitive than its previous use, a Record of Site Condition (RSC) will be required.

The Phase Two property has the municipal addresses of 1820-1846 Bank Street in Ottawa, Ontario and is located on the northwest corner of the intersection of Bank Street and Walkley Road. The Phase Two property is irregular in shape with an approximate area of 1.74 hectares.

The Phase Two property is occupied by single-storey, slab-on-grade commercial buildings containing multiple units. The building has an approximately footprint of 3,925 square meters (42,240 square feet). As of December 2023, the building tenants included Value Village, Algonquin Careers Academy, Ruby Inn (restaurant), Bel-O-Sol (tanning salon), Savannah Afro Caribbean (retail), and Hera Beauty (retail).

The legal description of the Phase Two property is Part Lot 23, Concession Junction Gore, as in CT131445 and NS95310 Except Parts 16, 17 and 18 on Expropriation NS275909 and Parts 1, 2 and 3 on Plan 5R284; subject to OT55584 Ottawa/Gloucester. The property identification number (PIN) is 040690603.

Multiple previous investigations have been conducted at the Phase Two property. A limited Phase II ESA was conducted by JWEL in 1999 to address the dry-cleaning operations. Concentrations of volatile organic compounds (VOC) in exceedance of the Ministry of the Environment (MOE) applicable standards were present in the groundwater. In addition, the north adjacent property was historically occupied by an industrial plant (Westinghouse), and a dry-cleaning operation and several gas stations and repair garages were identified to the northeast and northwest of the Phase One property. As these operations were located inferred cross-gradient to the site, they were not anticipated the contribute to APEC.

In February 2002, a total of three boreholes were advanced at the site by Trow to approximately 6.4 metres below ground surface. All three of the boreholes were completed as monitoring wells. Subsurface stratigraphy generally consisted of sandy silt fill to approximately 0.6 m bgs, overlying native silty sand with some gravel. Highly fractured shale bedrock was encountered approximately 2.0 to 2.5 m bgs in all three boreholes. It is noted that all of the monitoring wells were installed in the bedrock. A total of three soil samples were submitted for analysis of VOC, and one soil sample was submitted for analysis of polycyclic aromatic hydrocarbons (PAH), and metals. Three groundwater samples were submitted for analysis of VOC, and one groundwater sample was also submitted for analysis of PAH and metals. One soil sample (MW 101), and one groundwater sample (MW 102) exceeded the applicable non-potable criteria for tetrachloroethylene (PCE).

In February 2002, Trow retained a video inspection company to conduct video imaging to assess the integrity of the sewers in/around the dry-cleaning unit. A floor drain was noted in the dry-cleaning unit which connected to the sanitary sewer. The video assessment of the sanitary sewer indicated that the condition of the sanitary sewer in the vicinity of the floor drain/toilet was in suspect condition and may be allowing seepage of wastewater to the subsurface beneath the building. Swab samples were also collected from the sanitary sewer pipe in the vicinity of the dry-cleaning machine and submitted for analysis of VOC. Results of the swab analysis indicated that trichloroethylene (TCE) and PCE were present in the sanitary sewer and discharging waste PCE.



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It was noted that a new dry-cleaning machine was installed in March 2002. It was noted that the new unit was self-contained and not connected to the municipal sewers. Waste PCE was stored in tanks that formed part of the machine and was removed from the site by a licensed contractor.

It was recommended that bi-annual groundwater sampling be conducted to monitor the concentrations of VOCs. It was recommended that the floor drain in the vicinity of the dry-cleaning machine be capped, as the new machine was self-contained, and a sewer connection was no longer required. The 1999 JWEL monitoring well was decommissioned to prevent further migration of impacted groundwater.

An enhanced Phase I ESA investigation was conducted in 2013 by Pinchin. Three monitoring wells north of the dry-cleaning unit, and one monitoring well on the east part of the site in the area of the former gas station were sampled as part of this investigation. Groundwater samples were submitted for analysis of VOC and/or petroleum hydrocarbons (PHC). The groundwater samples were compared to the MECP Table 3 site condition standards (SCS) for commercial land use. All of the groundwater samples were within the Table 3 SCS. Based on the results of the groundwater sampling program, it was Pinchin's opinion that none of the on-site operations had resulted in any subsurface impacts. No additional subsurface investigation was recommended by Pinchin. Pinchin noted that, based on the age of the site building, there was potential for asbestos-containing materials to be present in the site-building.

EXP prepared a report entitled *Phase One Environmental Site Assessment, 1820-1846 Bank Street, Ottawa, Ontario,* dated September 30, 2024. The Phase One study area included the entire Phase Two property as well as properties within 250 m of the Phase Two property. Based on the results of the Phase One ESA, EXP identified eleven APECs on the Phase One property. A summary is provided in the table below:

Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On- Site or Off- Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
#1. Former on-site dry- cleaner	North end of site building	PCA #37 – Operations of dry cleaning equipment (where chemicals are used) (PCA 9)	On-site	VOC	Soil and groundwater
#2. Former on-site gas station	East part of Phase Two property	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 10)	On-site	PHC, VOC, metals	Soil and groundwater
#3. Former on-site rail siding	Northwest part of Phase Two property	PCA #46 – Rail yard, tracks, and spurs (PCA 1)	On-site	PAH, metals	Soil
#4. Fill material	Entire Phase Two property	PCA #30 – Importation of fill material of unknown quality (PCA 20)	On-site	PHC, PAH, metals	Soil
#5. Former dry cleaner at 1800 Bank Street & historical furnace oil leak from UST	Along north property line	PCA #37 – Operations of dry cleaning equipment (where chemicals are used) and PCA #28 – Gasoline and associated products storage in fixed tanks (PCAs 10 & 11)	Off-site	РНС, VOC	Soil and groundwater
#6. Former gas station at 1841 Bank Street	Along southeast property line	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 3)	Off-site	PHC, VOC	Soil and groundwater



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Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On- Site or Off- Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
#7. Repair garage at 1841 Bank Street	Along southeast property line	PCA #10 – Commercial autobody shop (PCA 4)	Off-site	PHC, VOC, metals	Soil and groundwater
#8. Gas station at 1847 Bank Street	Along southeast property line	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 7)	Off-site	PHC, VOC	Soil and groundwater
#9. Former car dealership at 1850 Bank Street	Along south property line	PCA #10 – Commercial autobody shop (PCA 14)	Off-site	PHC, VOC, metals	Soil and groundwater
#10. Former USTs associated with car dealership at 1850 Bank Street	Along south property line	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 15)	Off-site	ВТЕХ, РНС	Soil and groundwater
#11. Former rail line to the west of the site	Along west property line	PCA #46 – Rail yard, tracks, and spurs (PCA 2)	Off-site	PAH, metals	Soil

The Phase Two ESA was conducted in conjunction with a hydrogeological investigation and geotechnical investigation completed by EXP. The scope of work for the Phase Two ESA was as follows:

- Advancing eighteen boreholes on the subject property, and completing ten of them as monitoring wells (five shallow bedrock and five deep bedrock);
- Advancing six probe holes to confirm depth to bedrock in portions of the site;
- Submitting select soil samples for laboratory analysis of PHC fractions F1 to F4, VOC, PAH, metals and inorganics;
- Collecting four rounds of groundwater samples from the monitoring wells and submitting them for analysis of PHC, VOC, PAH, and/or metals;
- Comparing the results of the soil and groundwater chemical analyses to applicable criteria, as set out by the Ontario MECP;
- Conducting an elevation survey of the boreholes and monitoring wells;
- Preparing a report summarizing the results of the assessment activities.

For assessment purposes, EXP selected the Table 7 Generic Site Condition Standards for Shallow Soils in a Non-Potable Groundwater Condition for Residential/Parkland/Institutional properties, Coarse Textured Soil. The selection of this category was based on the following factors:

The selection of these categories was based on the following factors:

- Bedrock is less than 2 metres below grade across 2/3 of the subject property;
- The Phase Two property is not located within 30 metres of a waterbody;
- The Phase Two 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;
- The stratigraphy of the Site predominantly consists of coarse-textured soil, as per the grain size analysis. Results included in Appendix D;

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- The Phase Two property is located in an area serviced with potable water by the City of Ottawa through its water distribution system;
- The proposed future use of the Phase Two property is residential and commercial; and.
- It is the opinion of the Qualified Person who oversaw this work that the Phase Two property is not a sensitive site.

Considering that the Site will likely be developed in stages and recognizing that the depth to bedrock varies across the Site, EXP also utilized the Table 3 Generic Site Condition Standards for Ful Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition for Residential/Parkland/Institutional properties, Coarse Textured Soil for portions of the Site where those standards apply.

Seventeen soil samples and three duplicate sample were submitted for analysis of PHC, VOC, PAH and metals and inorganics. The following exceedances of the MECP Table 7 residential SCS were noted:

	Parameter	Table 7 Residential SCS		
VOC	Tetrachloroethylene	BH/MW-1 SS3, BH/MW-3 SS1, BH/MW4 SS2		
РНС	PHC F4	BH/MW9 AS1		
	Benzo(a)anthracene	BH-6 SS1, BH/MW-7 SS2B		
DAL	Benzo(a)pyrene	BH-6 SS1, BH/MW-7 SS2A, BH/MW7 SS2B		
гап	Benzo(b)fluoranthene	BH-6 SS1		
	Fluoranthene	BH-6 SS1, BH/MW-7 SS2A, BH/MW-7 SS2B		
Metals	Cobalt	BH/MW-1 SS3		
	Electrical Conductivity	BH/MW-1 SS2		
Inorganics	Sodium Adsorption Ratio	BH/MW-1 SS2 (and DUP 2), BH/MW-1 SS3, BH/MW-2 AS3, BH-6 SS1, BH-6 SS2, BH/MW-7 SS2A, BH/MW-7 SS2B, BH/MW-8 AS3, BH/MW-9 SS2, BH/MW-10 SS2 (and DUP 1), BH/MW-11 SS1, BH/MW-11 SS2 (and DUP 3)		
	рН	DUP 2 (BH/MW-1 SS2)		

In accordance with Section 49.1 of O.Reg. 153/04 if, in the opinion of the Qualified Person, the applicable SCS at the Phase Two property are exceeded solely due to the application of a substance to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both, the applicable SCS is deemed not to be exceeded. Road salt is considered to have been applied to the driving and parking surfaces on the Phase Two property. Therefore, for the purpose of this investigation, the elevated EC and SAR in the soil samples collected are deemed not to exceed the Table 7 SCS.

Four rounds of groundwater monitoring have been undertaken with samples being submitted for chemical analysis of VOC, PHC, PAH and metals. The following Table 7 exceedances were noted:

	Parameter	Table 7 Residential SCS
voc	Chloroform	BH/MW-3, BH/MW-7
	Hexane	BH/MW-8
	Tetrachloroethylene, Trichloroethylene	BH/MW-3, BH/MW-12 (TCE)

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PHC + BTEX	Benzene	BH/MW-8, BH/MW-10 (and DUP), BH/MW-12
	Ethylbenzene	BH/MW-8
	Xylenes	BH/MW-8
	PHC F1	BH/MW-8
Metals	Sodium	BH/MW-7

In accordance with Section 49.1.2 of O.Reg. 153/04, standards are deemed to be met if there has been a discharge of drinking water within the meaning of the Safe Drinking Water Act, 2002. As a municipal water source was used for bedrock coring, it is inferred that the municipal water is the source of the chloroform in the groundwater samples from BH/MW-3 and BH/MW-7, and the applicable SCS are deemed not to be exceeded for this parameter.

According to Section 49.1 of O.Reg. 153/04 if, in the opinion of the Qualified Person, the applicable SCS at the Phase Two property are exceeded solely due to the application of a substance to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both, the applicable SCS is deemed not to be exceeded. Road salt is considered to have been applied to the driving and parking surfaces on the Phase Two property. As all of the monitoring wells were located in the parking lot, for the purpose of this investigation, the elevated sodium levels in the groundwater samples collected from BH/MW-7 are deemed not to exceed the Table 7 SCS.

A soil sample collected from BH/MW-9 exceeded Table 7 SCS for PHC, and groundwater collected from BH/MW-8 exceeded Table 7 SCS for PHC, benzene, hexane, and xylenes. This impact is likely associated with the operation of the former on-site gas station.

Groundwater samples collected from BH/MW-10 and BH/MW-12 exceeded the Table 7 SCS for benzene. The groundwater impact identified in BH/MW-10 may originate from an off-site source. Additional investigation is required.

Soil samples collected from BH/MW-1, BH/MW-3, and BH/MW-4 and groundwater samples collected from BH/MW-3 and BH/MW-12 exceeded the Table 7 SCS for TCE. This impact is inferred to be associated with the operation of the former on-site dry cleaner.

Soil samples collected from the BH-6 and BH/MW-7 exceeded the Table 7 SCS for PAH. No groundwater exceedances for PAH were present in any of the groundwater samples collected from the Phase Two property. The PAH impact is inferred to be associated with poor-quality fill material.

A soil sample collected from BH/MW-1 exceeded the Table 7 SCS for cobalt. This sample was collected from the highly weathered shale layer, and the exceedance is inferred to be associated with naturally elevated levels of cobalt in the Ottawa area.

Additional studies are planned to delineate the Table 7 and/or Table 3 exceedances such that an appropriate remedial strategy can be prepared in conjunction with the overall development approach for the site. Remedial efforts will coincide the phased approach to site development.

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

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1.0 Introduction

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This report has been prepared in accordance with the Phase Two ESA standard as defined by Ontario Regulation 153/04 (as amended), 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 8 of this report.

1.1 Site Description

The Phase Two property has the municipal addresses of 1820-1846 Bank Street in Ottawa, Ontario and is located on the northwest corner of the intersection of Bank Street and Walkley Road. The Phase Two property is irregular in shape with an approximate area of 1.74 hectares. The Phase Two property site location and site layout are shown on Figure 1 and 2 in Appendix A.

The Phase Two property is occupied by single storey, slab on grade commercial buildings containing multiple units. The building has an approximately footprint of 3,925 square meters (42,240 square feet). As of December 2023, the building tenants included Value Village, Algonquin Careers Academy, Ruby Inn (restaurant), Bel-O-Sol (tanning salon), Savannah Afro Caribbean (retail), and Hera Beauty (retail).

The legal description of the Phase Two property is Part Lot 23, Concession Junction Gore, as in CT131445 and NS95310 Except Parts 16, 17 and 18 on Expropriation NS275909 and Parts 1, 2 and 3 on Plan 5R284; subject to OT55584 Ottawa/Gloucester. The property identification number (PIN) is 040690603.

Refer to Table 1.1 for the Site identification information.

Civic Address	1820-1846 Bank Street, Ottawa, Ontario
Current Land Use	Commercial
Proposed Future Land Use	Residential and commercial
Property Identification Number	040690603
UTM Coordinates	Zone 18, 447944 m E and 5024339 m N
Site Area	1.74 hectares
Property Owner	Sun Life Assurance Company of Canada

Table	1.1: Site	e Identification	Details
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A survey plan of the Phase Two property was completed by Annis, O'Sullivan, Vollebeck Ltd. in December 2017. A copy of the survey plan is provided in Appendix B.



1.2 Property Ownership

The registered owner of the Phase Two property is Sun Life Assurance Company of Canada. Authorization to proceed with this investigation was provided by Mr. Dylan Gillingham of BentallGreenOak on behalf of Sun Life Assurance Company of Canada. Contact information for Mr. Gillingham is 1875 Buckhorn Gate, Suite 601, Mississauga, Ontario, L4W 5P1.

1.3 Current and Proposed Future Use

The most recent use of the Phase One property is commercial and that the proposed future use is residential and commercial. Consequently, since the proposed future use of the property is more sensitive than its previous use an RSC will be required.

1.4 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 Table 7 Generic Site Condition Standards for Shallow Soils in a Non-Potable Groundwater Condition for Residential/Parkland/Institutional properties, Coarse Textured Soil. The selection of this category was based on the following factors:

The selection of these categories was based on the following factors:

• Bedrock is less than 2 metres below grade across 2/3 of the subject property;

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- The Phase Two property is not located within 30 metres of a waterbody;
- The Phase Two 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;
- The stratigraphy of the Site predominantly consists of coarse textured soil, as per the grain size analysis. Results included in Appendix D;
- The Phase Two property is located in an area serviced with potable water by the City of Ottawa through its water distribution system;
- The proposed future use of the Phase Two property is residential and commercial; and.
- It is the opinion of the Qualified Person who oversaw this work that the Phase Two property is not a sensitive site.

Considering that the Site will likely be developed in stages and recognizing that the depth to bedrock varies across the Site, EXP also utilized the Table 3 Generic Site Condition Standards for Ful Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition for Residential/Parkland/Institutional properties, Coarse Textured Soil for portions of the Site where those standards apply.

2.0 Background Information

2.1 Physical Setting

The Phase Two property has the municipal addresses of 1820-1846 Bank Street in Ottawa, Ontario and is located on the northwest corner of the intersection of Bank Street and Walkley Road. The Phase Two property is irregular in shape with an approximate area of 1.74 hectares.

The Phase Two property, and all other properties located, in whole or in part, within 250 metres of the boundaries of the Phase Two property, are supplied by a municipal drinking water system provided by the City of Ottawa. Further, the Phase Two property is not located in an area designated in the municipal official plan as a well-head protection area and no properties within the Phase Two study area have a well that is being used or is intended for use as a source of potable water. Thus, in accordance with Section 35 of Ontario Regulation 153/04, non-potable water standards apply to the Phase Two property.

In accordance with Section 41 of the Ontario Regulation 153/04 (as amended), the Phase Two property is not an environmentally sensitive area. In addition, the Phase Two property 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.

Based on the Phase Two ESA investigation, the depth to bedrock varies across the Site, fluctuating greater than and less than 2 m. Portions of the property is considered a shallow soil property as defined in Section 43.1 of the regulation as more than 1/3 of the whole Phase Two property has less than 2 metres of soil. Considering that the property may be developed in stages, portions of the Site may be severed during redevelopment, such that the full depth standards may apply.

Beneath any fill, the surficial geology of the subject site is characterised by Champlain Sea fine textured glacimarine deposits of silt and clay. The bedrock geology underlying the site consists of shale of the Carlsbad Formation. Previous investigations have determined that the site geology generally consists of clay, sand and gravel fill overlying shale bedrock. Bedrock is present between 0.9 m and 2.7 metres below ground surface across the Phase Two property (Figure 3 b). Topographically, the Phase Two property is relatively flat. Regionally, topography slopes to the west towards Sawmill Creek. Ground surface elevation at the Phase Two property is approximately 90 metres above sea level.

The inferred groundwater flow direction is to the north-northwest towards the Rideau River.

2.2 Past Investigations

Multiple previous investigations have been conducted at the Phase Two property. A limited Phase II ESA was conducted by JWEL in 1999 to address the dry-cleaning operations. Concentrations of volatile organic compound (VOC) in exceedance of the Ministry of the Environment (MOE) applicable standards were present in the groundwater. In addition, the north adjacent property was historically occupied by an industrial plant (Westinghouse), and a dry-cleaning operation and several gas stations and repair garages were identified to the northeast and northwest of the Phase One property. As these operations were located inferred cross-gradient to the site, they were not anticipated the contribute to areas of potential environmental concern (APEC).

In February 2002, a total of three boreholes were advanced at the site by Trow to approximately 6.4 metres below ground surface. All three of the boreholes were completed as monitoring wells. Subsurface stratigraphy generally consisted of sandy silt fill to approximately 0.6 m bgs, overlying native silty sand with some gravel. Highly fractured shale bedrock was encountered approximately 2.0 to 2.5 m bgs in all three boreholes. It is noted that all of the monitoring wells were installed in the bedrock. A total of three soil samples were submitted for analysis of VOC, one soil sample was submitted for analysis of polycyclic aromatic hydrocarbons (PAH), and metals. Three groundwater samples were submitted for analysis of VOC, and one groundwater sample was also submitted for analysis of PAH and metals. One soil sample (MW 101), and one groundwater sample (MW 102) exceeded the applicable non-potable criteria for PCE.

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In February 2002, Trow retained a video inspection company to conduct video imaging to assess the integrity of the sewers in/around the dry-cleaning unit. A floor drain was noted in the dry-cleaning unit which connected to the sanitary sewer. The video assessment of the sanitary sewer indicated that the condition of the sanitary sewer in the vicinity of the floor drain/toilet was in suspect condition and may be allowing seepage of wastewater to the subsurface beneath the building. Swab samples were also collected from the sanitary sewer pipe in the vicinity of the dry-cleaning machine and submitted for analysis of VOC. Results of the swab analysis indicated that trichloroethylene (TCE) and PCE were present in the sanitary sewer and discharging waste PCE.

It was noted that a new dry-cleaning machine was installed in March 2002. It was noted that the new unit was self-contained and not connected to the municipal sewers. Waste PCE was stored in tanks that formed part of the machine and is removed from site by a licensed contractor.

It was recommended that bi-annual groundwater sampling be conducted to monitor the concentrations of VOCs. It was recommended that the floor drain in the vicinity of the dry-cleaning machine be capped, as the new machine was self-contained, and a sewer connection was no longer required. The 1999 JWEL monitoring well was decommissioned to prevent further migration of impacted groundwater.

An enhanced Phase I ESA investigation was conducted in 2013 by Pinchin. Three monitoring wells north of the dry-cleaning unit, and one monitoring well on the east part of the site in the area of the former gas station were sampled as part of this investigation. Groundwater samples were submitted for analysis of VOC and/or petroleum hydrocarbons (PHC). The groundwater samples were compared to the MECP Table 3 site condition standards (SCS) for commercial land use. All of the groundwater samples were within the Table 3 SCS. Based on the results of the groundwater sampling program, it was Pinchin's opinion that none of the on-site operations had resulted in any subsurface impacts. No additional subsurface investigation was recommended by Pinchin. Pinchin noted that, based on the age of the site building, there was potential for asbestos containing materials to be present in the site building.

Most recently, EXP prepared a report entitled *Phase One Environmental Site Assessment, 1820-1846 Bank Street, Ottawa, Ontario,* dated August 14, 2023. The Phase One study area included the entire Phase Two property as well as properties within 250 m of the Phase Two property. Based on the results of the Phase One ESA, EXP identified eleven APECs on the Phase One property. A summary is provided in Table 2.1.

Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On- Site or Off- Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
#1. Former on-site dry- cleaner	North end of site building	PCA #37 – Operations of dry cleaning equipment (where chemicals are used) (PCA 9)	On-site	VOC	Soil and groundwater
#2. Former on-site gas station	East part of Phase Two property	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 10)	On-site	PHC, VOC, metals	Soil and groundwater
#3. Former on-site rail siding	Northwest part of Phase Two property	PCA #46 – Rail yard, tracks, and spurs (PCA 1)	On-site	PAH, metals	Soil
#4. Fill material	Entire Phase Two property	PCA #30 – Importation of fill material of unknown quality (PCA 20)	On-site	PHC, PAH, metals	Soil

Table 2.1: Findings of Phase One ESA



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Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On- Site or Off- Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
#5. Former dry cleaner at 1800 Bank Street & historical furnace oil leak from UST	Along north property line	PCA #37 – Operations of dry cleaning equipment (where chemicals are used) and PCA #28 – Gasoline and associated products storage in fixed tanks (PCAs 10 & 11)	Off-site	РНС, VOC	Soil and groundwater
#6. Former gas station at 1841 Bank Street	Along southeast property line	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 3)	Off-site	PHC, VOC	Soil and groundwater
#7. Repair garage at 1841 Bank Street	Along southeast property line	PCA #10 – Commercial autobody shop (PCA 4)	Off-site	PHC, VOC, metals	Soil and groundwater
#8. Gas station at 1847 Bank Street	Along southeast property line	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 7)	Off-site	PHC, VOC	Soil and groundwater
#9. Former car dealership at 1850 Bank Street	Along south property line	PCA #10 – Commercial autobody shop (PCA 14)	Off-site	PHC, VOC, metals	Soil and groundwater
#10. Former USTs associated with car dealership at 1850 Bank Street	Along south property line	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 15)	Off-site	ВТЕХ, РНС	Soil and groundwater
#11. Former rail line to the west of the site	Along west property line	PCA #46 – Rail yard, tracks, and spurs (PCA 2)	Off-site	PAH, metals	Soil

The locations of the APEC are shown on Figure 3 in Appendix A.

3.0 Scope of the Investigation

3.1 Overview of Site Investigation

The objective of the Phase Two ESA was to assess the quality of soil and groundwater quality on the Phase Two property. The field program was conducted in conjunction with geotechnical and hydrogeological investigations.

The most recent use of the was commercial, and it is proposed that residential and commercial buildings be constructed on the Phase Two property. As the proposed land use is more sensitive than the previous land use, an RSC will be required as per O. Reg. 153/04.

3.2 Scope of Work

As mentioned above, the Phase Two ESA was conducted in conjunction with a hydrogeological investigation and geotechnical investigation completed by EXP. The scope of work for the Phase Two ESA was as follows:

- Advancing eighteen boreholes on the subject property, and completing ten of them as monitoring wells (five shallow bedrock and five deep bedrock);
- Advancing six probe holes to determine depth to bedrock at various locations;
- Submitting select soil samples for laboratory analysis of PHC fractions F1 to F4, VOC, PAH, metals and inorganics;
- Collecting four rounds of groundwater samples from the monitoring wells and submitting them for analysis of PHC, VOC, PAH, and metals;
- Comparing the results of the soil and groundwater chemical analyses to applicable criteria, as set out by the Ontario MECP;
- Conducting an elevation survey of the boreholes;
- Preparing a report summarizing the results of the assessment activities.

This report has been prepared in accordance with the Phase Two ESA standard as defined by Ontario Regulation 153/04 (as amended), 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 8 of this report.

3.3 Media Investigated

The Phase Two ESA included the investigation of soil and groundwater on the Phase Two property. There are no waterbodies on the Phase Two property, therefore sediment or surface water sampling was not required.

The contaminants of potential concern (COPC) identified in the Phase One ESA were identified as target parameters for this Phase Two ESA. The APEC and COPC identified in the Phase One ESA are outlined in Section 2.2.

3.4 Phase One Conceptual Site Model

The Phase One conceptual site model (CSM) was developed by considering the following physical characteristics and pathways. The CSM showing the topography of the site, inferred groundwater flow, general site features, APEC, and PCA is shown in Figure 2 in Appendix A.

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3.4.1 Buildings and Structures

The Phase Two property is occupied by single storey, slab on grade commercial buildings containing multiple units. The building has an approximately footprint of 3,925 square meters (42,240 square feet). As of December 2023, the building tenants included Value Village, Algonquin Careers Academy, Ruby Inn (restaurant), Bel-O-Sol (tanning salon), Savannah Afro Caribbean (retail), and Hera Beauty (retail). Outside of the building footprint, the Phase Two property mainly consists of asphalt parking lot.

3.4.2 Water Bodies and Groundwater Flow Direction

There are no water bodies on the subject site. The closest body of water is Sawmill Creek, located approximately 300 m west of the Phase Two property. Sawmill Creek flows to the north towards the Rideau River. The inferred groundwater flow direction is to the north-northwest towards the Rideau River.

3.4.3 Areas of Natural Significance

There are no ANSI within the Phase Two study area.

3.4.4 Water Wells

There were 52 well records for the Phase Two study area. None of the well records appear to be for the Phase Two property, although historically there were monitoring wells present on the site.

Eighteen of the records were for water supply wells installed between 1949 and 1959. As municipal services are no present in the study area, it is unlikely that these wells are still in use.

The remaining well records were for monitoring wells. There were 17 records for the installation/abandonment of monitoring wells at 1841 Bank Street. Ten of the records were for monitoring wells installed by the city in the Bank Street right-of-way between Surrey Avenue and Alta Vista Drive.

3.4.5 Potentially Contaminating Activity

Based on the Phase One ESA, the following PCAs were identified:

- PCA 1: 1822 Bank Street former on-site rail siding (PCA #46)
- PCA 2: Glenhaven Private former rail line (PCA #46)
- PCA 3: 1841 Bank Street former gas station (PCA #28)
- PCA 4: 1841 Bank Street active repair garage (PCA #10)
- PCA 5: 1827 (1811 Bank Street former contractor's repair garage (PCA #10)
- PCA 6: 1827 (1811) Bank Street former UST (PCA #28)
- PCA 7: 1847 Bank Street active gas station (PCA #28)
- PCA 8: 1877 Bank Street former gas station (PCA #28)
- PCA 9: 1846 Bank Street (Phase Two property) former dry cleaner (PCA #37)
- PCA 10: 1832 Bank Street (Phase Two property) former gas station (PCA #28)
- PCA 11: 1800 Bank Street former dry cleaner (PCA #37) and historical furnace oil UST leak
- PCA 12: 1811 Bank Street car dealership with repair garage (PCA #10)

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- PCA 13: 1811 Bank Street gasoline and waste oil USTs for car dealership (PCA #28)
- PCA 14: 1850 Bank Street former car dealership with repair garage (PCA #10)
- PCA 15: 1850 Bank Street Former gasoline and waste oil USTs (PCA #28)
- PCA 16: 1792 Bank Street active repair garage (PCA #10)
- PCA 17: 1792 Bank Street former gas station (PCA #28)
- PCA 18: 1770 Bank Street car dealership with repair garage (PCA #10)
- PCA 19: 1770 Bank Street gasoline and waste oil UST for car dealership/repair garage (PCA #28)
- PCA 20: 1820-1846 Bank Street fill material of unknown quality (PCA #30)
- PCA 21: 2629 Alta Vista Drive dry cleaner (PCA #37)
- PCA 22: 2706 Alta Vista Drive dry cleaner (PCA #37)
- PCA 23: 1750 Bank Street former repair garage (PCA #10)
- PCA 24: 1750 Bank Street former gas stations (PCA #28)
- PCA 25: 1750 Bank Street former dry cleaner (PCA #37)

All of the on-site PCAs were determined to result in APECs. A dry cleaner (PCA 9) operated in the northernmost unit from the 1970s until 2018. A gas station (PCA 10) was present on the east part of the site for a brief period in the 1970s. Previous investigations conducted on this part of the site identified tetrachloroethylene (PCE) impacted soil and groundwater, although it is noted that the most recent investigation conducted by Pinchin Limited did not identify any exceedances of the applicable standards in the monitoring wells sampled near the former on-site dry cleaner or gas station. The previous investigation also identified between 0.9 m and 2 m of fill material on the Phase One property (PCA 20). A rail siding (PCA 1) was historically located on the Phase Two property prior to the construction of the existing site building.

With respect to off-site PCAs, due to the proximity and/or inferred upgradient location from the Phase Two property, the gas stations at 1841 and 1847 Bank Street, the repair garages/car dealerships at 1841 and 1850 Bank Street, the former rail line to the west, and the former dry cleaner at 1800 Bank Street were considered to contribute to APECs on the Phase Two property.

The remaining PCAs identified in the study area were located at least 100 m from the Phase Two property and/or down/crossgradient to the Phase Two property and were not considered to contribute to APECs on the Phase Two property.

3.4.6 Areas of Potential Environmental Concern

The APEC identified are summarized in Table 3.1.

Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On- Site or Off- Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
#1. Former on-site dry- cleaner	North end of site building	PCA #37 – Operations of dry cleaning equipment (where chemicals are used) (PCA 9)	On-site	VOC	Soil and groundwater

Table 3.1: Areas of Potential Environmental Concern



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Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On- Site or Off- Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
#2. Former on-site gas station	East part of Phase Two property	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 10)	On-site	PHC, VOC, metals	Soil and groundwater
#3. Former on-site rail siding	Northwest part of Phase Two property	PCA #46 – Rail yard, tracks, and spurs (PCA 1)	On-site	PAH, metals	Soil
#4. Fill material	Entire Phase Two property	PCA #30 – Importation of fill material of unknown quality (PCA 20)	On-site	PHC, PAH, metals	Soil
#5. Former dry cleaner at 1800 Bank Street & historical furnace oil leak from UST	Along north property line	PCA #37 – Operations of dry cleaning equipment (where chemicals are used) and PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 10 & 11)	Off-site	РНС, VOC	Soil and groundwater
#6. Former gas station at 1841 Bank Street	Along southeast property line	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 3)	Off-site	PHC, VOC	Soil and groundwater
#7. Repair garage at 1841 Bank Street	Along southeast property line	PCA #10 – Commercial autobody shop (PCA 4)	Off-site	PHC, VOC, metals	Soil and groundwater
#8. Gas station at 1847 Bank Street	Along southeast property line	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 7)	Off-site	РНС, VOC	Soil and groundwater
#9. Former car dealership at 1850 Bank Street	Along south property line	PCA #10 – Commercial autobody shop (PCA 14)	Off-site	PHC, VOC, metals	Soil and groundwater
#10. Former USTs associated with car dealership at 1850 Bank Street	Along south property line	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 15)	Off-site	ВТЕХ, РНС	Soil and groundwater
#11. Former rail line to the west of the site	Along west property line	PCA #46 – Rail yard, tracks, and spurs (PCA 2)	Off-site	PAH, metals	Soil

3.4.7 Underground Utilities

The Site is serviced with municipal sewer and water, hydro and natural gas. Sanitary and storm sewer lines are present throughout the Phase One property.

The locations of the utilities on the Phase Two property are shown on Figure 5.

3.4.8 Subsurface Stratigraphy

Beneath any fill, the surficial geology of the subject site is characterised by Champlain Sea fine textured glacimarine deposits of silt and clay. The bedrock geology underlying the site consists of shale of the Carlsbad Formation.

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Previous investigations have determined that the site geology generally consists of clay, sand and gravel fill overlying shale bedrock. Bedrock is present between 0.9 m and 2 metres below ground surface across the Phase Two property.

Topographically, the Phase Two property is relatively flat. Regionally, topography slopes to the west towards Sawmill Creek. Ground surface elevation at the Phase Two property is approximately 90 metres above sea level.

3.4.9 Uncertainty Analysis

The CSM is a simplification of reality, which aims to provide a description and assessment of any areas where potentially contaminating activity that occurred within the Phase Two study area may have adversely affected the Phase Two property. All information collected during this investigation, including records, interviews, and site reconnaissance, has contributed to the formulation of the CSM.

Information was assessed for consistency, however EXP has confirmed neither the completeness nor the accuracy of any of the records that were obtained or of any of the statements made by others. All reasonable inquiries to obtain accessible information were made, as required by Schedule D, Table 1, Mandatory Requirements for Phase Two Environmental Site Assessment Reports. The CSM reflects our best interpretation of the information that was available during this investigation.

3.5 Deviations from Sampling and Analysis Plan

The field investigative and sampling program was carried out following the requirements of the Phase Two property, as described in Section 4.

The SAAP indicated that eighteen boreholes would be advanced at the site. Due to conflict with existing utilities, one of the boreholes (BH-5) was not completed.

3.6 Impediments

No impediments were encountered during this investigation.

4.0 Investigation Method

4.1 General

The current investigation was performed following requirements given under Ontario Regulation 153/04 and in accordance with generally accepted professional practices.

The site investigative activities were conducted in conjunction with a hydrogeological investigation and geotechnical investigation and consisted of the advancement of boreholes on the site to facilitate the collection of soil and groundwater samples for visual inspection and chemical analyses.

Prior to the commencement of excavating, 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.

4.2 Borehole Drilling

The site investigative activities consisted of the drilling of boreholes to facilitate the collection of soil samples for visual inspection and chemical analysis. Select boreholes were instrumented with monitoring wells to facilitate the collection of groundwater samples.

The borehole locations were selected to address the APECs identified in the Phase One ESA, and to provide site coverage for geotechnical purposes. The exterior drilling program was completed between October 26 and November 3, 2023, by George Downing Estate Drilling Ltd. (Downing), a licensed well contractor. Downing advanced fifteen geotechnical boreholes (BH/MW-1, BH/MW-2, BH-6 to BH-18) across the Phase Two property, using a CME-75 truck mounted drill. On December 13 and 14, 2023, Strata Drilling Group (Strata) completed two interior environmental boreholes (BH-3 and BH-4) inside the former dry cleaner using a Geoprobe model 450 using direct push sampling for the overburden soils and cored the bedrock using a Hilti drill using an N-size core barrel.

BH/MW-1 to BH/MW-7 and BH/MW-11 to BH-18 the boreholes were extended past the depth of refusal through rock coring to termination depths of 2.6 m to 14.9 metres below ground surface. Monitoring wells diameter of either thirty-two (32) mm, thirty-eight (38) mm or fifty (50) mm diameter were installed in BH/MW-1, BH/MW-2, BH/MW-7 to BH/MW-12 and BH/MW-15 for long-term monitoring of the groundwater levels as well as groundwater sampling. The boreholes were backfilled upon completion of drilling. In addition, six probe holes were advance to determine the depth to bedock in certain portions of the site.

EXP staff continuously monitored the drilling activities to log the stratigraphy observed, to record the depth of soil sample collection, to record total depths of excavation, and to record visual or olfactory observations of potential impacts. Field observations are summarized on the borehole logs provided in Appendix E. Nitrile gloves (i.e., one pair per sample) were used during sample handling. No petroleum-based greases or solvents were used during drilling activities.

The locations and geodetic elevations of the boreholes were established by a survey crew from EXP and are shown in Figure 3 and 3b.

4.3 Soil Sampling

The soil sampling during the completion of this Phase Two ESA was undertaken in general accordance with the SAAP presented in Appendix C.

Soil samples were selected for laboratory analysis based on visual and olfactory evidence of impacts, where observed. Soil samples identified for possible laboratory analysis were 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

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containing methanol as a preservative. The jars and vials were sealed with Teflon-lined lids to minimize headspace 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. The samples were transported/submitted within 24 hours of collection to the laboratory following chain of custody protocols for chemical analysis. Soil samples were submitted for laboratory analysis of PHC, VOC, PAH, and metals and inorganics.

4.4 Groundwater: Monitoring Well Installation

Monitoring wells were installed in general accordance with the Ontario Water Resources Act - R.R.O. 1990, Regulation 903 (as amended). The monitoring wells consisted of a 52 mm diameter Schedule 40 PVC screen that was no more than 3.0 m long and a 32-, 38- or 52-mm diameter Schedule 40 PVC riser pipe that was at least 0.8 m long. 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 flush mount casings. Monitoring wells were installed in BH/MW-1, BH/MW-2, BH/MW-7 to BH/MW-12 and BH/MW-15.

Measures taken to minimize the potential for cross contamination or the introduction of contaminants during well construction included:

- The use of well pipe components (e.g. riser pipe and well screens) with factory machined threaded flush coupling joints
- Construction of wells without the use of glues or adhesives
- Removing the protective plastic wraps from well components at the time of borehole insertion to prevent contact with the ground and other surfaces
- Cleaning or disposal of drilling equipment between sampling locations

Details of the monitoring well installations are shown on the borehole logs provided in Appendix E.

4.5 Groundwater: Field Measurement and Water Quality Parameters

Field measurement of water quality parameters is described in Section 4.7.

All measurements of petroleum vapours in the monitor riser were made with an RKI Eagle 2 in methane elimination mode. Immediately after removing the well cap, the collection tube of the Eagle was inserted into the riser and the peak instrument reading was recorded. 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.

4.6 Groundwater: Sampling

All groundwater samples were collected via a low flow sampling technique using a Horiba U-52 multi probe water quality meter. The U-52 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 to ensure that the samples collected were representative of actual groundwater conditions. 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%;

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- Temperature: ± 1°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.

The groundwater sampling during the completion of this Phase Two ESA was undertaken in general accordance with industry standards. The groundwater samples were placed in clean coolers containing ice packs prior to and during transportation to the laboratory. The samples were transported to the laboratory within 24 hours of collection with a chain of custody.

4.7 Sediment: Sampling

There are no waterbodies present on the Phase Two property, therefore sediment sampling was not required.

4.8 Analytical Testing

The contracted laboratory selected to perform chemical analysis on all soil and groundwater samples was BV Labs. BV Labs is accredited laboratories under the Standards Council of Canada/Canadian Association for Laboratory Accreditation in accordance with ISO/IEC 17025:1999- General Requirements for the Competence of Testing and Calibration Laboratories.

4.9 Residue Management

Boreholes were backfilled with soil cuttings upon completion. The soil cuttings from monitoring well installations and purged water from groundwater development and sampling were placed in drums on the Phase Two property. The drums were collected by Clean Water Works on November 20, 2023. Fluids from cleaning drilling equipment were disposed of by the driller at their facility.

4.10 Elevation Surveying

An elevation survey was conducted by EXP. The ground surface elevation of each monitoring well location was surveyed relative to a geodetic reference. The Universal Transverse Mercator (UTM) coordinates of each monitoring well were also recorded so that their locations could be plotted accurately.

4.11 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. BV Labs 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:

- 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,

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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.

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.

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5.0 Review and Evaluation

5.1 Geology

All of the exterior boreholes are located in a paved area. A 50 mm to 120 mm thick asphaltic concrete layer was contacted in all the exterior the boreholes at the site with the exception of BH-16. For the two interior boreholes, a concrete slab 165-200 mm thick was encountered at the surface of BH/MW-3 and BH/MW-4.

A layer of fill was contacted underlying the asphaltic concrete or concrete all the boreholes. The fill extends to 0.3 to 1.8 m depths. The fill generally consists of sand and gravel.

A layer of glacial till was encountered underlying the fill at 0.3 m depth in BH/MW-9. The glacial till contains varying amounts of gravel, sand, silt and clay within the soil matrix as well as cobbles and boulders. A layer of highly weathered shale bedrock was contacted underlying the fill or the glacial till at depths of 0.7 m to 1.8 m depths in all of the boreholes except BH-14 and BH-16.

Auger refusal was met at 1.3 m to 2.8 m depths (Elevation 92.0 m to Elevation 88.2 m). In BH/MW-1 to BH/MW-7 and BH/MW-11 to BH-18 the boreholes were extended past the depth of refusal through rock coring to termination depths of 2.6 m to 14.9 (Elevation 89.4 m to 76.2 m). The rock coring determined the bedrock to be shale.

A plan view showing cross-sections is provided as Figure 5 in Appendix A, while the Phase Two property geology is depicted in cross-sections on Figure 6 in Appendix A. The borehole logs are included in Appendix E.

5.2 Groundwater: Elevations and Flow Direction

Prior to monitoring and sampling, the monitoring wells were inspected for general physical condition, groundwater depth, the presence of light non-aqueous phase liquid (LNAPL). None of the monitoring wells installed during previous investigations were monitored due to the poor condition of the wells.

Four rounds of overburden and bedrock groundwater monitoring and elevation data are provided below.

Borehole (BH)	Ground Surface Elevation (m)	Screened Material	Date of Measurement (Elapsed Time in Days from	Groundwater Depth Below Ground Surface (Elevation). (m)	
(/			Date of Installation)		
		HIGHLY WEATHERED SHALE & SHALE BEDROCK	November 23, 2023 (28)	1.8 (89.9)	
			December 6, 2023 (41)	2.2 (89.5)	
BH1 91.67	91.67		March 15, 2023 (140)	2.1 (89.6)	
			June 19, 2024 (237)	2.1 (89.6)	
		September 20, 2024	2.2 (89.5)		
			November 23, 2023 (24)	10.9 (81.7)	
BH2 92.59					
	92.59	SHALE BEDROCK	March 14, 2024 (136)	8.2 (84.4)	
			September 20, 2024	7.63 (85.0)	
BH3	92.06		December 21, 2023 (7)	2.3 (89.8)	

Table 5.1: Monitoring and Elevation Data



Sun Life Assurance Company of Canda c/o BentallGreenOak (Canada) LP Phase Two Environmental Site Assessment 1820-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0 September 30, 2024

			Date of Measurement		
Borehole Ground Surface (BH) Elevation (m)	Ground Surface Flevation (m)	Screened Material	(Elapsed Time in Days from	Groundwater Depth Below Ground Surface (Elevation), (m)	
			Date of Installation)		
			March 14, 2024 (91)	2.3 (89.8)	
		HIGHLY WEATHERED SHALE & SHALE BEDROCK	June 14, 2024 (188)	2.3 (89.8)	
			September 20, 2024	2.3 (89.8)	
			December 21, 2023 (7)	1.8 (90.3)	
DUIA	02.05	HIGHLY WEATHERED SHALE	March 14, 2024 (91)	1.9 (90.2)	
BH4	92.06	& SHALE BEDROCK	June 14, 2024 (188)	2.0 (90.0)	
			September 20, 2024	2.0 (90.0)	
			November 23, 2023 (28)	5.8 (86.8)	
			December 3, 2023 (41)	8.6 (87.0)	
BH7	92.51	SHALE BEDROCK	March 14, 2024 (140)	6.2 (86.3)	
			June 19, 2024 (237)	5.5 (87.0)	
			September 20, 2024	6.3 (86.5)	
			November 23, 2023 (28)	1.3 (91.2)	
		HIGHLY WEATHERED SHALE	December 6, 2023 (41)	1.3 (91.3)	
BH8	92.5		March 14, 2024 (140)	0.6 (91.9)	
			June 19, 2024 (237)	1.2 (91.3)	
			September 20, 2024	1.2 (91.3)	
		GLACIAL TILL AND	November 23, 2023 (28)	1.4 (91.3)	
	BH9 92.71	HIGHLY WEATHERED SHALE	December 6, 2023 (33)	1.3 (91.5)	
BH9			March 14, 2024 (132)	1.1 (91.7)	
			June 19, 2024 (229)	1.3 (91.5)	
			September 20, 2024	1.3 (91.5)	
			November 23, 2023 (24)	1.5 (90.1)	
			December 6, 2023 (37)	1.4 (90.2)	
BH10	91.66	HIGHLY WEATHERED SHALE	March 14, 2024 (136)	1.3 (90.4)	
			June 19, 2024 (233)	1.4 (90.2)	
			September 20, 2024	1.4 (90.2)	
			November 23, 2023 (22)	10.8 (79.6)	
	90.35	SHALE BEDROCK	December 6, 2023 (35)	10.2 (87.5)	
BH11			March 9, 2023 (134)	4.0 (86.3)	
			June 19, 2024 (231)	2.9 (87.5)	
			September 20, 2024	5.2 (85.2)	
BH12	91.6	SHALE BEDROCK			



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		Screened Material	Date of Measurement		
Borehole (BH)	Ground Surface		(Elapsed Time in Days from	Groundwater Depth Below Ground Surface (Elevation) (m)	
(811)			Date of Installation)		
			December 6, 2023 (33)	11.6 (80.0)	
			March 14, 2024 (132)	14.1 (77.5)	
			June 19, 2024 (229)	13.7 (77.9)	
			September 20, 2024	13.6 (78.0)	
			November 23, 2023 (21)	10.1 (82.1)	
BH15 92.2	SHALE BEDROCK	December 6, 2023 (34)	6.9 (85.4)		
		March 14, 2024 (133)	6.2 (86.0)		
			June 19, 2024 (230)	6.1 (86.1)	
			September 20, 2024	7.1 (85.2)	

Notes: Elevations were measured to a geodetic datum mbgs – metres below ground surface masl – metres above sea level mbTOC – metres below the top of monitor casing - - Not monitored N/O – not observed

Based on the groundwater level measurements, groundwater contours in the overburden and deep bedrock were plotted, as shown on Figures 4A and 4B. The groundwater flow direction in the deep bedrock aquifer was to the west, towards Sawmill Creek and the Rideau River. The groundwater flow direction in the shallow bedrock wells was to the northwest.

5.3 Groundwater: Hydraulic Gradients

Horizontal hydraulic gradients were estimated for the groundwater flow components identified in the bedrock aquifer based on the December 2023 groundwater elevations.

The horizontal hydraulic gradient is calculated across the using the following equation:

 $i = \Delta h / \Delta s$

Where,

i = horizontal hydraulic gradient; Δh (m) = groundwater elevation difference; and, Δs (m) = separation distance.

The horizontal hydraulic gradient was calculated to be 0.174 m/m.

On November 28, 2023, three rising head tests (BH/MW-1, BH/MW-7, and BH/MW-10) were conducted. The rising head test requires that the static water level be measured in each monitoring well prior to the removal of groundwater. Groundwater is removed from the monitoring well using a bailer. After the water level has been sufficiently lowered, an interface probe is lowered into the monitor as quickly as possible to measure the new water level. The time at which the new water level is measured is noted as time equal to zero. Water level readings are subsequently taken at frequent intervals. Both the water levels and the time they were taken are recorded.

The frequency of the time measurement is determined by the rate the water level recovers to the static water level. Measurements are taken until at least 70% recovery has been achieved or, in cases where recovery is extremely slow, until it

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is deemed that a sufficient amount of time has elapsed. Using the Hvorslev model, the hydraulic conductivity for the monitoring well was calculated.

All water level measurements were made with a Heron oil/water interface probe. Both the probe and the measuring tape that come into contact with liquids within a monitor are cleaned with phosphate-free soap and tap water, rinsed with distilled water and then finally rinsed with methanol after each hydraulic conductivity test is concluded.

Monitoring Well ID/ Installation ID	Horizon	Screen Depth (mbgs)	Initial Static Water Level (mbToC)	Water Level after Purging (mbToC)	% Recovery to Static after Elapsed time	Hydraulic Conductivity (m/s)
BH/MW-1	Highly weathered shale	4.6 to 5.9	2.46	1.82	86	1.31 x 10 ⁻⁹
BH/MW-7	Bedrock	10.3 to 13.7	11.52	8.99	99	1.25 x 10 ⁻¹⁰
BH/MW-10	Highly weathered shale	1.0 to 2.5	1.22	1.17	63	3.45 x 10 ⁻⁸

Table 5.2: Rising Head Tests

Notes: mbTOC - metres below the top of monitor casing

It was noted that the result of SWRT at BH-7 is presumed to be in error as the hydraulic conductivity value and recovery data does not match the observed trend at this well location.

5.4 Soil: Quality

In accordance with the scope of work, chemical analyses were performed on selected soil samples recovered from the boreholes.

Seventeen soil samples and three duplicate sample were submitted for analysis of PHC, VOC, PAH and metals and inorganics. A summary of the soil analytical results is presented in Tables 1 to 3 along with the Table 3 and 7 SCS comparators (Appendix F). The laboratory certificates are resented in Appendix G. The analytical results are also depicted graphically in Figures 7 to 12 (Appendix A)

The following exceedances of the MECP Table 3 and 7 residential SCS were noted:

- BH/MW-1 SS3, BH/MW-3 SS1 and BH/MW-4 SS2 exceeded for TCE; •
- BH/MW-9 AS1 exceeded for PHC F4; •
- BH-6 SS1, BH/MW-7 SS2A and BH/MW-7 SS2B exceeded for multiple PAH parameters; •
- BH/MW-1 SS3 exceeded for cobalt; and,
- BH/MW-1 SS2 and duplicate, BH/MW-1 SS3, BH/MW-2 AS3, BH-6 SS1, BH-6 SS2, BH/MW-7 SS2A, BH/MW-7 SS2B, BH/MW-8 AS3, BH/MW-9 SS2, BH/MW-10 SS2 and duplicate, BH/MW-11 SS1, BH/MW-11 SS2 and duplicate exceeded for EC and/or SAR.

In accordance with Section 49.1 of O.Reg. 153/04 if, in the opinion of the Qualified Person, the applicable SCS at the Phase Two property are exceeded solely due to the application of a substance to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both, the applicable SCS is deemed not to be exceeded. Road salt is considered to have been applied to the driving and parking surfaces on the Phase Two property. Therefore, for the purpose of this investigation, the elevated EC and SAR in the soil samples collected are deemed not to exceed the Table 7 SCS.

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5.5 Groundwater: Quality

All groundwater samples were collected via a low-flow sampling technique. EXP monitored several water quality parameters (such as water level, temperature, dissolved oxygen, conductivity, salinity, pH, oxygen reduction potential and turbidity) in order to ensure that the samples collected were representative of actual groundwater conditions.

A summary of the groundwater monitoring program is provided in Tables 4 to 6 along with the Table 3 and 7 SCS comparators in Appendix F and shown on Figures 13 to 18, in Appendix A. Copies of the laboratory Certificates of Analysis are provided in Appendix G.

Initially, eight groundwater samples, a duplicate sample, and field blank and a trip blank were submitted for chemical analysis of VOC. Six groundwater samples, a duplicate sample, a trip blank, and a field blank were submitted for were submitted for chemical analysis of PHC, PAH and metals. The following Table 7 exceedances were noted during the fall/winter 2023 sampling (Figure 14):

- BH/MW-8, BH/MW-10 and duplicate and BH/MW-12 exceeded for benzene;
- BH/MW-3 and BH/MW-7 exceeded for chloroform;
- BH/MW-8 exceeded for PHC F1, ethylbenzene, hexane, and xylenes;
- BH/MW-3 and BH/MW-12 exceeded for TCE; and,
- BH/MW-7 exceeded for sodium.

In comparison to Table 3, the following exceedances were noted from the initial sampling round (Figure 13):

- BH/MW-12 for PCE and TCE
- BH/MW-3 for PCE.

In accordance with Section 49.1.2 of O.Reg. 153/04, standards are deemed to be met if there has been a discharge of drinking water within the meaning of the Safe Drinking Water Act, 2002. As a municipal water source was used for bedrock coring, it is inferred that the municipal water is the source of the chloroform in the groundwater samples from BH/MW-3 and BH/MW-7, and the applicable SCS are deemed not to be exceeded for this parameter.

According to Section 49.1 of O.Reg. 153/04 if, in the opinion of the Qualified Person, the applicable SCS at the Phase Two property are exceeded solely due to the application of a substance to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both, the applicable SCS is deemed not to be exceeded. Road salt is considered to have been applied to the driving and parking surfaces on the Phase Two property. As all of the monitoring wells were located in the parking lot or service garage, for the purpose of this investigation, the elevated sodium levels in the groundwater samples collected from BH/MW-7 are deemed not to exceed the Table 7 SCS.

Recognizing that seasonal variation and/or sediment in the well water can influence groundwater analytical results, additional samples were collected March, June and September 2024 based on exceedances observed in the November and December 2023 sampling events. Additional groundwater samples were submitted for analysis of VOC (BH/MW-1, BH/MW-3, BH/MW-4, and BH/MW-12), one groundwater sample and one duplicate sample were submitted for analysis of BTEX and PHC (BH/MW-8), and one groundwater sample was submitted for analysis of BTEX.

In total, four rounds of groundwater sampling have been completed on the Site (November/December 2023, March 2024, June 2024 September 2024). Additional studies are planned to delineate the Table 7 and/or Table 3 exceedances such that an appropriate remedial strategy can be prepared in conjunction with the overall development approach for the site.

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5.5.1 Chemical Transformation and Contaminant Sources

A variety of physical, chemical and biochemical mechanisms affect the fate and transport of the potential COC in soil and groundwater, the contribution of which is dependent on the soil and groundwater conditions at the Phase Two property, as well as the chemical/physical properties of the COC. Relevant fate and transport mechanisms are natural attenuation mechanisms, including advection mixing, mechanical dispersion/molecular diffusion, phase partitions (i.e. sorption and volatilization), and possibly abiotic or biotic chemical reactions, which effectively reduce COC concentrations.

PAH-impacted soil was identified in the vicinity of BH-6 and BH/MW-7 and is associated with poor-quality fill material. PAHs preferentially sorb to soil. All PAH parameters in groundwater were below the detection limits.

TCE-impacted soil was identified at BH/MW-1, BH/MW-3 and BH/MW-4. TCE-impacted groundwater was identified at BH/MW-3 and BH/MW-12. It is noted that the TCE concentrations in the groundwater sample collected from BH/MW-3 decreased during the spring sampling event, and were below the Table 7 SCS, while TCE concentrations in BH/MW-12 increased from the fall sampling event. These impacts are assumed to be associated with historic dry-cleaning operations in the northernmost unit of the site-building. Since chlorinated VOC were detected in groundwater above the Table 7 SCS, there is potential for reductive dechlorination. Under anaerobic conditions, tetrachloroethylene can transform via a microbially mediated reductive dechlorination pathway into daughter products such as trichloroethylene, cis-1,2-dichloroethylene, and vinyl chloride. Evidence of reductive dechlorination was not observed in groundwater on the Phase Two property, as no daughter products were observed above the laboratory detection levels in the groundwater samples collected at the site.

5.5.2 Evidence of Non-Aqueous Phase Liquid

Inspection of the groundwater monitoring wells did not indicate the presence of non-aqueous phase liquid (NAPL).

5.5.3 Maximum Concentrations

Contaminants that exceeded the Table 7 SCS for residential land use were:

Soil: PHC F4, tetrachloroethylene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, fluoranthene, cobalt, SAR, and EC.

Groundwater: PHC F1, benzene, chloroform, ethylbenzene, hexane, tetrachloroethylene, trichloroethylene, xylenes and sodium.

It is noted that the electrical conductivity and sodium adsorption ratio soil exceedances and the sodium groundwater exceedance are attributed to the use of road salt in the parking lot. Therefore, in accordance with Section 49.1 of O.Reg. 153/04, these parameters are considered to meet the applicable SCS.

It is also noted that the chloroform exceedance is inferred to be associated with the use of municipal water for bedrock coring. Therefore, in accordance with Section 49.1.2 of O.Reg. 153/04, the groundwater standards for chloroform are deemed to be met.

Maximum soil and groundwater concentrations are shown on Tables 7 and 8 respectively in Appendix F.

5.6 Sediment: Quality

There are no water bodies on the Phase Two property, therefore sediment sampling was not required.

5.7 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:

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- Collection and analysis of blind duplicate soil and 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, and proper chain of custody documentation, to ensure the integrity of the
 samples.

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 Paracel and Caduceon. 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.

A review of the laboratory QA/QC results reported indicated that they were mostly within acceptable control limits or below applicable alert criteria for the sampled media and analytical test groups. 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 F in Tables 7 to 12. All of the RPD for soil and groundwater were either not calculable or within the applicable alert limits, with the exception of the soil sample BH/MW-11 SS2 which was outside of the acceptable RPD limits for hot water-soluble boron. As both the sample and the duplicate were within the applicable SCS for silver, the exceedance of the acceptable RPD does not affect the conclusions of this report.

6.0 Phase Two Conceptual Site Model

A Conceptual Site Model (CSM) provides a narrative, graphical and tabulated description integrating information related to the Phase Two property's geologic and hydrogeological conditions, areas of potential environmental concern/potential contaminating activities, the presence and distribution of contaminants of concern, contaminant fate and transport, and potential exposure pathways. The P2CSM was completed in accordance with Ontario Regulation 153/04, as amended (O.Reg.153/04), as defined by the Ontario Ministry of the Environment, Conservation and Parks (MECP).

6.1 Introduction

EXP Services Inc. (EXP) was retained by Sun Life Assurance Company of Canda c/o BentallGreenOak (Canada) LP to conduct a Phase Two ESA for the property located at 1820-1846 Bank Street in Ottawa, Ontario (hereinafter referred to as the 'Phase Two property'). At the time of the investigation, the Phase Two property was occupied by a commercial strip mall and associated parking lot.

The objective of the Phase Two ESA investigation was to assess the quality of the soil and groundwater conditions within the APEC identified in a Phase One ESA prepared by EXP.

6.2 Current and Proposed Future Uses

The most recent use of the Phase One property is commercial and that the proposed future use is residential and commercial. Consequently, since the proposed future use of the property is more sensitive than its previous use a will be required.

6.3 Site Description

The Phase Two property has the municipal addresses of 1820-1846 Bank Street in Ottawa, Ontario and is located on the northwest corner of the intersection of Bank Street and Walkley Road. The Phase Two property is irregular in shape with an approximate area of 1.74 hectares. The Phase Two property site location and site layout are shown on Figures 1 and 2 in Appendix A.

The Phase Two property is occupied by single-storey, slab-on-grade commercial buildings containing multiple units. The building has an approximate footprint of 3,925 square meters (42,240 square feet). As of December 2023, the building tenants included Value Village, Algonquin Careers Academy, Ruby Inn (restaurant), Bel-O-Sol (tanning salon), Savannah Afro Caribbean (retail), and Hera Beauty (retail).

The legal description of the Phase Two property is Part Lot 23, Concession Junction Gore, as in CT131445 and NS95310 Except Parts 16, 17 and 18 on Expropriation NS275909 and Parts 1, 2 and 3 on Plan 5R284; subject to OT55584 Ottawa/Gloucester. The property identification number (PIN) is 040690603.

Refer to Table 5.3 for the Site identification information.

Civic Address	1820-1846 Bank Street, Ottawa, Ontario
Current Land Use	Commercial
Proposed Future Land Use	Residential and commercial
Property Identification Number	040690603
UTM Coordinates	Zone 18, 447944 m E and 5024339 m N
Site Area	1.74 hectares

Table 5.3: Site Identification Details



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Property Owner

Sun Life Assurance Company of Canada

6.3.1 Buildings and Structures

The Phase Two property is currently occupied by a multi-tenant, slab-on-grade, single-storey, commercial building. The building has a footprint of approximately 3,925 square meters (43,240 square feet). Outside of the building footprint, the site property consists of asphalt parking and driving lanes.

The proposed development will consist of two apartment buildings ranging from twenty-five to thirty stories, and two mixeduse buildings ranging from twenty-four to forty stories. The buildings will be located around the edges of the site with a central park area located in the center of the property. It is understood that a two-storey community building and a mid-rise six-storey building are also being considered to be constructed within the northern area of the central park. It is assumed that the buildings will have three to four levels of underground parking. The proposed building locations are shown on Figure 5.

6.3.2 Utilities

The existing building on the Phase Two property is slab-on-grade and is serviced with municipal sewer and water, underground hydro and natural gas. The locations of the utilities on the Phase Two property are shown on Figure 5.

6.4 Geological and Hydrogeological Setting

A summary of factors that apply to the Phase Two property is provided in Table 5.4.

Minimum Depth to Bedrock	1.3 metres below ground surface			
Minimum Depth to Groundwater	Overburden – 1.28 (December 6, 2023) Bedrock – 6.85 (December 6, 2023)			
Shallow Soil Property	Yes, bedrock is less than 2.0 mbgs across 2/3 of the Phase Two property			
Proximity to water body or ANSI	Approximately 300 m west- Sawmill Creek			
Soil pH	Surface and sub-surface pH was within the applicable ranges			
Soil Texture	Coarse			
Current Property Use	Commercial			
Future Property Use	Residential and commercial			
Proposed Future Building	Two 25 to 40 storey residential apartment buildings, and two 24 to 40 storey mixed-use buildings all with three to four levels of underground parking			
Areas Containing Suspected Fill	Entire Phase Two property			

Table 5.4: Site Characteristics



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6.4.1 Site Stratigraphy

Beneath any fill, the surficial geology of the subject site is characterised by Champlain Sea fine textured glacimarine deposits of silt and clay. The bedrock geology underlying the site consists of shale of the Carlsbad Formation. Previous investigations have determined that the site geology generally consists of clay, sand and gravel fill overlying shale bedrock. Bedrock is present between 0.9 m and 2.7 metres below ground surface across the Phase One property. Topographically, the Phase Two property is relatively flat. Regionally, topography slopes to the west towards Sawmill Creek. Ground surface elevation at the Phase Two property is approximately 90 metres above sea level.

All of the exterior boreholes are located in a paved area. A 50 mm to 120 mm thick asphaltic concrete layer was contacted in all the exterior the boreholes at the site with the exception of BH-16. For the two interior boreholes, a concrete slab 165-200 mm thick was encountered at the surface of BH/MW-3 and BH/MW-4.

A layer of fill was contacted underlying the asphaltic concrete or concrete all the boreholes. The fill extends to 0.3 to 1.8 m depths. The fill generally consists of sand and gravel.

A layer of glacial till was encountered underlying the fill at 0.3 m depth in BH/MW-9. The glacial till contains varying amounts of gravel, sand, silt and clay within the soil matrix as well as cobbles and boulders. A layer of highly weathered shale bedrock was contacted underlying the fill or the glacial till at depths of 0.7 m to 1.8 m depths in all of the boreholes except BH-14 and BH-16.

Auger refusal was met at 1.3 m to 2.8 m depths (Elevation 92.0 m to Elevation 88.2 m). In BH/MW-1 to BH/MW-7 and BH/MW-11 to BH-18 the boreholes were extended past the depth of refusal through rock coring to termination depths of 2.6 m to 14.9 (Elevation 89.4 m to 76.2 m). The rock coring determined the bedrock to be shale.

A plan view showing cross-sections is provided as Figure 5 in Appendix A, while the Phase Two property geology is depicted in cross-sections on Figure 6 in Appendix A.

6.4.2 Approximate Depth to Water Table

The depth to groundwater was measured to range from 1.28 to 2.18 m below ground surface in the shallow bedrock wells, and 6.85 to 11.64 metres below ground surface in the deep bedrock wells.

Based on the groundwater level measurements, groundwater contours in the overburden and deep bedrock were plotted, as shown on Figures 4A and 4B. The groundwater flow direction in the deep bedrock aquifer was to the west, towards Sawmill Creek and the Rideau River. The groundwater flow direction in the shallow bedrock wells was to the northwest.

EXP notes that groundwater levels can be influenced by seasonal changes, the presence of subsurface structures, or fill, however based on the depth of the water table (within the bedrock), it is unlikely that any of these factors will affect the groundwater flow direction at the Phase Two property.

6.4.3 Hydrogeological Conditions

There are no water bodies on the subject site. There are no water bodies on the subject site. The closest body of water is Sawmill Creek, located approximately 300 m west of the Phase Two property. Sawmill Creek flows to the north towards the Rideau River. The inferred groundwater flow direction is to the north-northwest towards the Rideau River.

The hydraulic conductivity was calculated to range between 3.45 x 10⁻⁸ and 1.31 x 10⁻⁹ in the fractured bedrock.

Vertical hydraulic gradients were not calculated as overburden groundwater consisted of minimal perched water at the bedrock-overburden interface.

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6.4.4 Approximate Depth to Bedrock

Investigations at the Phase Two property have determined that the stratigraphy generally consisted of fill overlying glacial till. Bedrock was encountered between 1.3 to 2.7 m bgs.

6.4.5 Site Sensitivity

The Phase Two property, and all other properties located, in whole or in part, within 250 metres of the boundaries of the Phase Two property, are supplied by a municipal drinking water system provided by the City of Ottawa. Further, the Phase Two property is not located in an area designated in the municipal official plan as a well-head protection area and no properties within the Phase Two property study area has a well that is being used or is intended for use as a source of potable water. Thus, in accordance with Section 35 of Ontario Regulation 153/04, non-potable water standards apply to the Phase Two property.

In accordance with Section 41 of Ontario Regulation 153/04, the Phase Two property is not an environmentally sensitive area. In addition, the Phase Two property 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. The Phase Two property is located greater than 30 metres from a water body. In the opinion of the Qualified Person who oversaw the entire investigation, the Phase Two property is not a sensitive site.

Based on the Phase Two ESA investigation, the property is considered a shallow soil property as defined in Section 43.1 of the regulation, as the depth to bedrock is less than 2 metres across 2/3 of the Phase Two property.

Considering that the Site will likely be developed in stages and recognizing that the depth to bedrock varies across the Site, EXP also utilized the Table 3 Generic Site Condition Standards for Ful Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition for Residential/Parkland/Institutional properties, Coarse Textured Soil for portions of the Site where those standards apply.

6.5 Potentially Contaminating Activities

The following PCAs were identified:

- PCA 1: 1822 Bank Street former on-site rail siding (PCA #46)
- PCA 2: Glenhaven Private former rail line (PCA #46)
- PCA 3: 1841 Bank Street former gas station (PCA #28)
- PCA 4: 1841 Bank Street active repair garage (PCA #10)
- PCA 5: 1827 (1811 Bank Street former contractor's repair garage (PCA #10)
- PCA 6: 1827 (1811) Bank Street former UST (PCA #28)
- PCA 7: 1847 Bank Street active gas station (PCA #28)
- PCA 8: 1877 Bank Street former gas station (PCA #28)
- PCA 9: 1846 Bank Street (Phase Two property) former dry cleaner (PCA #37)
- PCA 10: 1832 Bank Street (Phase Two property) former gas station (PCA #28)
- PCA 11: 1800 Bank Street former dry cleaner (PCA #37)
- PCA 12: 1811 Bank Street car dealership with repair garage (PCA #10)
- PCA 13: 1811 Bank Street gasoline and waste oil USTs for car dealership (PCA #28)

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- PCA 14: 1850 Bank Street former car dealership with repair garage (PCA #10)
- PCA 15: 1850 Bank Street Former gasoline and waste oil USTs (PCA #28)
- PCA 16: 1792 Bank Street active repair garage (PCA #10)
- PCA 17: 1792 Bank Street former gas station (PCA #28)
- PCA 18: 1770 Bank Street car dealership with repair garage (PCA #10)
- PCA 19: 1770 Bank Street gasoline and waste oil UST for car dealership/repair garage (PCA #28)
- PCA 20: 1820-1846 Bank Street fill material of unknown quality (PCA #30)
- PCA 21: 2629 Alta Vista Drive dry cleaner (PCA #37)
- PCA 22: 2706 Alta Vista Drive dry cleaner (PCA #37)
- PCA 23: 1750 Bank Street former repair garage (PCA #10)
- PCA 24: 1750 Bank Street former gas stations (PCA #28)
- PCA 25: 1750 Bank Street former dry cleaner (PCA #37)

All of the on-site PCAs were determined to result in APECs. A dry cleaner (PCA 9) operated in the northernmost unit from the 1970s until 2018. A gas station (PCA 10) was present on the east part of the site for a brief period in the 1970s. Previous investigations conducted on this part of the site identified tetrachloroethylene (PCE) impacted soil and groundwater, although it is noted that the most recent investigation conducted by Pinchin Limited did not identify any exceedances of the applicable standards in the monitoring wells sampled near the former on-site dry cleaner or gas station. The previous investigation also identified between 0.9 m and 2 m of fill material on the Phase One property (PCA 20). A rail siding (PCA 1) was historically located on the Phase Two property prior to the construction of the existing site-building.

With respect to off-site PCAs, due to the proximity and/or inferred upgradient location from the Phase Two property, the gas stations at 1841 and 1847 Bank Street, the repair garages/car dealerships at 1841 and 1850 Bank Street, the former rail line to the west, and the former dry cleaner at 1800 Bank Street were considered to contribute to APECs on the Phase Two property.

The remaining PCAs identified in the study area were located at least 100 m from the Phase Two property and/or down/crossgradient to the Phase Two property and were not considered to contribute to APECs on the Phase Two property.

6.6 Areas of Potential Environmental Concern

The APEC identified are summarized in Table 5.5.

Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On- Site or Off- Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
#1. Former on-site dry- cleaner	North end of site building	PCA #37 – Operations of dry cleaning equipment (where chemicals are used) (PCA 9)	On-site	VOC	Soil and groundwater
#2. Former on-site gas station	East part of Phase Two property	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 10)	On-site	PHC, VOC, metals	Soil and groundwater

Table 5.5: Findings of Phase One ESA



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Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On- Site or Off- Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
#3. Former on-site rail siding	Northwest part of Phase Two property	PCA #46 – Rail yard, tracks, and spurs (PCA 1)	On-site	PAH, metals	Soil
#4. Fill material	Entire Phase Two property	PCA #30 – Importation of fill material of unknown quality (PCA 20)	On-site	PHC, PAH, metals	Soil
#5. Former dry cleaner at 1800 Bank Street & historical furnace oil leak from UST	Along north property line	PCA #37 – Operations of dry cleaning equipment (where chemicals are used) and PCA #28 – Gasoline and associated products storage in fixed tanks (PCA's 10 & 11)	Off-site	РНС, VOC	Soil and groundwater
#6. Former gas station at 1841 Bank Street	Along southeast property line	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 3)	Off-site	PHC, VOC	Soil and groundwater
#7. Repair garage at 1841 Bank Street	Along southeast property line	PCA #10 – Commercial autobody shop (PCA 4)	Off-site	PHC, VOC, metals	Soil and groundwater
#8. Gas station at 1847 Bank Street	Along southeast property line	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 7)	Off-site	PHC, VOC	Soil and groundwater
#9. Former car dealership at 1850 Bank Street	Along south property line	PCA #10 – Commercial autobody shop (PCA 14)	Off-site	PHC, VOC, metals	Soil and groundwater
#10. Former USTs associated with car dealership at 1850 Bank Street	Along south property line	PCA #28 – Gasoline and associated products storage in fixed tanks (PCA 15)	Off-site	ВТЕХ, РНС	Soil and groundwater
#11. Former rail line to the west of the site	Along west property line	PCA #46 – Rail yard, tracks, and spurs (PCA 2)	Off-site	PAH, metals	Soil

The locations of the APEC are shown on Figure 3 in Appendix A.

6.7 Previous Investigations

Multiple previous investigations have been conducted at the Phase Two property. A limited Phase II ESA was conducted by JWEL in 1999 to address the dry-cleaning operations. In addition, the north adjacent property was historically occupied by an industrial plant (Westinghouse), and a dry-cleaning operation and several gas stations and repair garages were identified to the northeast and northwest of the Phase One property. As these operations were located inferred cross-gradient to the site, they were not anticipated the contribute to areas of potential environmental concern. Concentrations of volatile organic compound (VOC) in exceedance of the Ministry of the Environment (MOE) applicable standards were present in the groundwater.

In February 2002, a total of three boreholes were advanced at the site by Trow to approximately 6.4 metres below ground surface. All three of the boreholes were completed as monitoring wells. Subsurface stratigraphy generally consisted of sandy silt fill to approximately 0.6 m bgs, overlying native silty sand with some gravel. Highly fractured shale bedrock was

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encountered approximately 2.0 to 2.5 m bgs in all three boreholes. It is noted that all of the monitoring wells were installed in the bedrock. A total of three soil samples were submitted for analysis of VOC, one soil sample was submitted for analysis of polycyclic aromatic hydrocarbons (PAH), and metals. Three groundwater samples were submitted for analysis of VOC, and one groundwater sample was also submitted for analysis of PAH and metals. One soil sample (MW 101), and one groundwater sample (MW 102) exceeded the applicable non-portable criteria for PCE.

In February 2002, Trow retained a video inspection company to conduct video imaging to assess the integrity of the sewers in/around the dry-cleaning unit. A floor drain was noted in the dry-cleaning unit which connected to the sanitary sewer. The video assessment of the sanitary sewer indicated that the condition of the sanitary sewer in the vicinity of the floor drain/toilet was in suspect condition and may be allowing seepage of wastewater to the subsurface beneath the building. Swab samples were also collected from the sanitary sewer pipe in the vicinity of the dry-cleaning machine and submitted for analysis of VOC. Results of the swab analysis indicated that trichloroethylene (TCE) and PCE were present in the sanitary sewer and discharging waste PCE.

It was noted that a new dry-cleaning machine was installed in March 2002. It was noted that the new unit was self-contained and not connected to the municipal sewers. Waste PCE was stored in tanks that formed part of the machine and is removed from the site by a licensed contractor.

It was recommended that bi-annual groundwater sampling be conducted to monitor the concentrations of VOCs. It was recommended that the floor drain in the vicinity of the dry-cleaning machine be capped, as the new machine was self-contained, and a sewer connection was no longer required. The 1999 JWEL monitoring well was decommissioned to prevent further migration of impacted groundwater.

An enhanced Phase I ESA investigation was conducted in 2013 by Pinchin. Three monitoring wells north of the dry-cleaning unit, and one monitoring well on the east part of the site in the area of the former gas station were sampled as part of this investigation. Groundwater samples were submitted for analysis of VOC and/or petroleum hydrocarbons (PHC). The groundwater samples were compared to the MECP Table 3 site condition standards (SCS) for commercial land use. All of the groundwater samples were within the Table 3 SCS. Based on the results of the groundwater sampling program, it was Pinchin's opinion that none of the on-site operations had resulted in any subsurface impacts. No additional subsurface investigation was recommended by Pinchin. Pinchin noted that, based on the age of the site building, there was potential for asbestos-containing materials to be present in the site-building.

6.8 Scope of the Investigation

The objective of the Phase Two ESA was to assess the quality of soil and groundwater quality on the Phase Two property. The field program was conducted in conjunction with geotechnical and hydrogeological investigations.

The following table summarizes the soil and groundwater locations on the Phase Two property, and the APECs each sample location addresses.

Area of Potential Environmental Concern (APEC)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)	Addressed by BH/MW/sample #
#1. Former on-site dry-cleaner	VOC	Soil and groundwater	BH/MW-3, BH/MW-4, BH/MW-12
#2. Former on-site gas station	PHC, VOC, metals	Soil and groundwater	BH/MW-7, BH/MW-8

Table 5.6: Summary of Investigation



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#3. Former on-site rail siding	PAH, metals	Soil	BH/MW-3, BH-6
#4. Fill material	PHC, PAH, metals	Soil	BH/MW-1, BH/MW-2, BH/MW-3, BH/MW-4, BH-6, BH/MW-7, BH/MW-8, BH/MW-9, BH/MW-10, BH/MW-11
#5. Former dry cleaner at 1800 Bank Street & historical furnace oil leak from UST	PHC, VOC	Soil and Groundwater	BH/MW-1
#6. Former gas station at 1841 Bank Street	РНС, VOC	Soil and Groundwater	BH/MW-8, BH/MW-9
#7. Repair garage at 1841 Bank Street	PHC, VOC, metals	Soil and groundwater	BH/MW-8, BH/MW-9
#8. Gas station at 1847 Bank Street	PHC, VOC	Soil and groundwater	BH/MW-8, BH/MW-9
#9. Former car dealership at 1850 Bank Street	PHC, VOC, metals	Soil and groundwater	BH/MW-10, BH/MW-11
#10. Former USTs associated with car dealership at 1850 Bank Street	ВТЕХ, РНС	Soil and groundwater	BH/MW-10, BH/MW-11
#11. Former rail line to the west of the site	PAH, metals	Soil	BH/MW-3, BH/MW-11

6.8.1 Investigation

The site investigative activities were conducted in conjunction with a hydrogeological investigation and geotechnical investigation and consisted of the advancement of boreholes on the site to facilitate the collection of soil and groundwater samples for visual inspection and chemical analyses.

Prior to the commencement of excavating, 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.

The borehole locations were selected to address the APECs identified in the Phase One ESA, and to provide site coverage for geotechnical purposes. The exterior drilling program was completed between October 26 and November 3, 2023, by George Downing Estate Drilling Ltd. (Downing), a licensed well contractor. Downing advanced fifteen geotechnical boreholes (BH/MW-1, BH/MW-2, BH-6 to BH-18) across the Phase Two property, using a CME-75 truck-mounted drill. On December 13 and 14, 2023, Strata Drilling Group (Strata) completed two interior environmental boreholes (BH/MW-3 and BH/MW-4) inside the former dry cleaner using a Geoprobe model 450 using direct push sampling for the overburden soils and cored the bedrock using a Hilti drill using an N-size core barrel.

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BH/MW-1 to BH/MW-7 and BH/MW-11 to BH-18 the boreholes were extended past the depth of refusal through rock coring to termination depths of 2.6 m to 14.9 metres below ground surface. Monitoring wells with diameters of either thirty-two (32) mm, thirty-eight (38) mm or fifty (50) mm diameter were installed in BH/MW-1, BH/MW-2, BH/MW-7 to BH/MW-12 and BH/MW-15 for long-term monitoring of the groundwater levels as well as groundwater sampling. The boreholes were backfilled upon completion of drilling.

EXP staff continuously monitored the drilling activities to log the stratigraphy observed, to record the depth of soil sample collection, to record total depths of excavation, and to record visual or olfactory observations of potential impacts. Field observations are summarized on the borehole logs provided in Appendix E. Nitrile gloves (i.e., one pair per sample) were used during sample handling. No petroleum-based greases or solvents were used during drilling activities.

6.8.2 Soil Sampling

In accordance with the scope of work, chemical analyses were performed on selected soil samples recovered from the boreholes.

Seventeen soil samples and three duplicate sample were submitted for analysis of PHC, VOC, PAH and metals and inorganic. The following exceedances of the MECP Table 7 residential SCS were noted:

- BH/MW-1 SS3, BH/MW-3 SS1 and BH/MW-4 SS2 exceeded for TCE;
- BH/MW-9 AS1 exceeded for PHC F4;
- BH-6 SS1, BH//MW-7 SS2A and BH/MW-7 SS2B exceeded for multiple PAH parameters;
- BH/MW-1 SS3 exceeded for cobalt; and,
- BH/MW-1 SS2 and duplicate, BH/MW-1 SS3, BH/MW-2 AS3, BH-6 SS1, BH-6 SS2, BH/MW-7 SS2A, BH/MW-7 SS2B, BH/MW-8 AS3, BH/MW-9 SS2, BH/MW-10 SS2 and duplicate, BH/MW-11 SS1, BH/MW-11 SS2 and duplicate exceeded for EC and/or SAR.

In accordance with Section 49.1 of O.Reg. 153/04 if, in the opinion of the Qualified Person, the applicable SCS at the Phase Two property are exceeded solely due to the application of a substance to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both, the applicable SCS is deemed not to be exceeded. Road salt is considered to have been applied to the driving and parking surfaces on the Phase Two property. Therefore, for the purpose of this investigation, the elevated EC and SAR in the soil samples collected are deemed not to exceed the Table 7 SCS.

The soil sample collected from BH/MW-1 exceeded the Table 7 SCS for cobalt. This sample was collected from the highly weathered shale layer, and the exceedance is inferred to be associated with naturally elevated levels of cobalt in the Ottawa area.

6.8.3 Groundwater Sampling

All groundwater samples were collected via a low-flow sampling technique. EXP monitored several water quality parameters (such as water level, temperature, dissolved oxygen, conductivity, salinity, pH, oxygen reduction potential and turbidity) in order to ensure that the samples collected were representative of actual groundwater conditions.

In November and December 2023, eight groundwater samples, a duplicate sample, and field blank and a trip blank were submitted for chemical analysis of VOC. Six groundwater samples, a duplicate sample, a trip blank, and a field blank were submitted for were submitted for chemical analysis of PHC, PAH and metals. The following Table 7 exceedances were noted during the fall/winter 2023 sampling:

- BH/MW-8, BH/MW-10 and duplicate and BH/MW-12 exceeded for benzene;
- BH/MW-3 and BH/MW-7 exceeded for chloroform;

- BH/MW-8 exceeded for PHC F1, ethylbenzene, hexane, and xylenes;
- BH/MW-3 and BH/MW-12 exceeded for TCE; and,
- BH/MW-7 exceeded for sodium.

In comparison to Table 3, the following exceedances were noted from the initial sampling round (Figure 13):

- BH/MW-12 for PCE and TCE
- BH/MW-3 for PCE

In accordance with Section 49.1.2 of O.Reg. 153/04, standards are deemed to be met if there has been a discharge of drinking water within the meaning of the Safe Drinking Water Act, 2002. As a municipal water source was used for bedrock coring, it is inferred that the municipal water is the source of the chloroform in the groundwater samples from BH/MW-3 and BH/MW-7, and the applicable SCS are deemed not to be exceeded for this parameter.

According to Section 49.1 of O.Reg. 153/04 if, in the opinion of the Qualified Person, the applicable SCS at the Phase Two property are exceeded solely due to the application of a substance to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both, the applicable SCS is deemed not to be exceeded. Road salt is considered to have been applied to the driving and parking surfaces on the Phase Two property. As all of the monitoring wells were located in the parking lot or service garage, for the purpose of this investigation, the elevated sodium levels in the groundwater samples collected from BH/MW-7 are deemed not to exceed the Table 7 SCS.

In March, June and September 2024, additional samples were collected based on exceedances observed in the 2023 sampling event. Four groundwater samples were submitted for analysis of VOC (BH/MW-1, BH/MW-3, BH/MW-4, and BH/MW-12), one groundwater sample and one duplicate sample were submitted for analysis of BTEX and PHC (BH/MW-8), and one groundwater sample was submitted for analysis of BTEX. It is noted that no sample was collected from BH/MW-7 due to insufficient volume. The following exceedances were noted during the spring 2024 sampling:

- BH/MW-8 and duplicate, and BH/MW-12 exceeded for benzene;
- BH/MW-12 exceeded for TCE.

It is noted that the benzene concentration in BH/MW-8 (and duplicate) has decreased since the 2023 sampling event, and the benzene concentration in the groundwater sample and duplicate (0.70 μ g/L and 0.69 μ g/L) only slightly exceeded the Table 3 residential SCS for benzene (0.5 μ g/L). The concentrations of both benzene and TCE in the sample collected from BH/MW-12 were noted to fluctuate with subsequent sample. It is noted that a sediment free sample has not been able to be collected from BH/MW-12 due to the small diameter and deep construction of monitoring wells BH/MW-12.

Additional studies are planned to delineate the Table 7 and/or Table 3 exceedances such that an appropriate remedial strategy can be prepared in conjunction with the overall development approach for the site.

6.8.4 Contaminants of Concern

The following contaminants of concern were identified:

Soil: PHC, VOC, PAH, metals

Groundwater: PHC, VOC, metals

Contaminants that exceeded the Table 7 SCS for residential land use were:

Soil: PHC F4, tetrachloroethylene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, fluoranthene, cobalt, SAR, and EC.

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Groundwater: PHC F1, benzene, chloroform, ethylbenzene, hexane, tetrachloroethylene, trichloroethylene, xylenes and sodium.

It is noted that the electrical conductivity and sodium adsorption ratio soil exceedances and the sodium groundwater exceedance are attributed to the use of road salt in the parking lot. Therefore, in accordance with Section 49.1 of O.Reg. 153/04 these parameters are considered to meet the applicable SCS.

It is also noted that the chloroform exceedance is inferred to be associated with the use of municipal water for bedrock coring. Therefore, in accordance with Section 49.1.2 of O.Reg. 153/04, the groundwater standards for chloroform are deemed to be met.

6.8.5 Contaminant Fate and Transport

A variety of physical, chemical and biochemical mechanisms affect the fate and transport of the potential COC in soil and groundwater, the contribution of which is dependent on the soil and groundwater conditions at the Phase Two property, as well as the chemical/physical properties of the COC. Relevant fate and transport mechanisms are natural attenuation mechanisms, including advection mixing, mechanical dispersion/molecular diffusion, phase partitions (i.e. sorption and volatilization), and possibly abiotic or biotic chemical reactions, which effectively reduce COC concentrations.

PAH-impacted soil was identified in the vicinity of BH-6 and BH/MW-7 and is associated with poor-quality fill material. PAH impact appears to be limited to poor-quality fill material. PAHs preferentially sorb to soil. All PAH parameters in groundwater were below the detection limits.

TCE-impacted soil was identified at BH/MW-1, BH/MW-3 and BH/MW-4. TCE-impacted groundwater was identified at BH/MW-3 and BH/MW-12. It is noted that the TCE concentrations in the groundwater sample collected from BH/MW-3 decreased during the spring sampling event, and were below the Table 7 SCS, while TCE concentrations in BH/MW-12 increased from the fall sampling event. These impacts are assumed to be associated with historic dry-cleaning operations in the northernmost unit of the site-building. Since chlorinated VOC were detected in groundwater above the Table 7 SCS, there is potential for reductive dechlorination. Under anaerobic conditions, tetrachloroethylene can transform via a microbially mediated reductive dechlorination pathway into daughter products such as trichloroethylene, cis-1,2-dichloroethylene, and vinyl chloride. Evidence of reductive dechlorination was not observed in groundwater on the Phase Two property, as no daughter products were observed above the laboratory detection levels in the groundwater samples collected at the site.

PHC-impacted soil was identified at BH/MW-9. PHC and BTEX-impacted groundwater was identified at BH/MW-8. The source of the PHC impact in the vicinity of BH/MW-8 and BH/MW-9 is inferred to be the historic operation of a gas station on the Phase Two property. Benzene was detected in the groundwater sample and duplicate sample from BH/MW-10 and the groundwater sample from BH/MW-12. It is noted that the benzene concentrations in the groundwater sample collected from BH/MW-10 decreased during the spring sampling event, and were below the detection limits, while benzene concentrations in BH/MW-12 increased from the fall sampling event.

6.8.6 Preferential Pathways

The preferential pathways for contaminants present in soil and groundwater include underground utilities and surface features. Storm and sanitary sewers are present across the property, as shown on Figure 5.

Areas of impacted groundwater on the Phase Two property have not been delineated. It is possible that utilities on the site are provided immigration pathways or groundwater contaminants, particularly in the vicinity of the former dry cleaning unit.

6.8.7 Climactic Conditions

It is noted that climatic or meteorological conditions may influence the distribution and migration of COCs at the Phase Two property. Seasonal fluctuations in groundwater due to cyclical increases and decreases in precipitation can affect

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groundwater recharge and hence flow direction. Groundwater levels may be elevated in the spring and fall due to snow melt and/or increases in precipitation; and groundwater levels may be lowered in the winter and summer due to snow storage and/or increased evaporation. Such fluctuations have the potential to increase the vertical distribution of COCs in the capillary zone, as well as alter the direction of groundwater flow paths based on changes in infiltration rates.

6.8.8 Human Health Receptors and Exposure Pathways

Residential apartments with underground parking and ground floor commercial are currently proposed for the Phase Two property. The potential on-site human receptors are identified as property residents (adult, teen, child, toddler and infant), property visitors (adult, teen, child, toddler and infant), indoor and outdoor long-term workers, indoor and outdoor short-term workers, and construction workers.

Possible routes of exposure for human receptors include the following: incidental soil ingestion, soil particulate inhalation, and soil dermal contact.

6.8.9 Ecological Receptors and Exposure Pathways

While the footprint of the building and parking lot will occupy most of the property, there will be some landscaped areas on the Phase Two property. Therefore, the Phase Two property is capable of supporting some ecological receptors. Relevant ecological receptors include terrestrial vegetation (bushes, grasses and weeds); soil invertebrates (earthworms, millipedes and beetles); birds (seagulls, pigeons, sparrows and robins); and small terrestrial mammals (moles, voles, and mice).

Possible routes of exposure for ecological receptors are root uptake of soil (terrestrial vegetation), and soil particulate inhalation, soil dermal contact, and soil ingestion (soil invertebrates, mammals, and birds).

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7.0 Conclusion

During the current investigation, the soil and groundwater quality at the Phase Two property were investigated. Results were compared to Regulation 153/04 Table 3 and Table 7 SCS for residential/parkland/institutional use and coarse-textured soils.

Seventeen soil samples and three duplicate sample were submitted for analysis of PHC, VOC, PAH and metals and inorganics. The following exceedances of the MECP Table 7 residential SCS were noted:

	Parameter	Table 7 Residential SCS
VOC	Tetrachloroethylene	BH/MW-1 SS3, BH/MW-3 SS1, BH/MW4 SS2
РНС	PHC F4	BH/MW9 AS1
	Benzo(a)anthracene	BH-6 SS1, BH/MW-7 SS2B
DALL	Benzo(a)pyrene	BH-6 SS1, BH/MW-7 SS2A, BH/MW7 SS2B
гап	Benzo(b)fluoranthene	BH-6 SS1
	Fluoranthene	BH-6 SS1, BH/MW-7 SS2A, BH/MW-7 SS2B
Metals	Cobalt	BH/MW-1 SS3
	Electrical Conductivity	BH/MW-1 SS2
Inorganics	Sodium Adsorption Ratio	BH/MW-1 SS2 (and DUP 2), BH/MW-1 SS3, BH/MW-2 AS3, BH-6 SS1, BH-6 SS2, BH/MW-7 SS2A, BH/MW-7 SS2B, BH/MW-8 AS3, BH/MW-9 SS2, BH/MW-10 SS2 (and DUP 1), BH/MW-11 SS1, BH/MW-11 SS2 (and DUP 3)
	рН	DUP 2 (BH/MW-1 SS2)

In accordance with Section 49.1 of O.Reg. 153/04 if, in the opinion of the Qualified Person, the applicable SCS at the Phase Two property are exceeded solely due to the application of a substance to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both, the applicable SCS is deemed not to be exceeded. Road salt is considered to have been applied to the driving and parking surfaces on the Phase Two property. Therefore, for the purpose of this investigation, the elevated EC and SAR in the soil samples collected are deemed not to exceed the Table 7 SCS.

Eight groundwater samples, a duplicate sample, and field blank and a trip blank were submitted for chemical analysis of VOC. Six groundwater samples, a duplicate sample, a trip blank, and a field blank were submitted for were submitted for chemical analysis of PHC, PAH and metals. The following exceedances were noted:

Parameter Chloroform Hexane	Table 7 Residential SCS								
	Parameter	Fall 2023 Sampling	Spring 2024 Sampling						
	Chloroform	BH/MW-3, BH/MW-7	None						
voc	Hexane	BH/MW-8	None						
	Tetrachloroethylene, trichloroethylene	BH/MW-3, BH/MW-12	BH/MW-12						
PHC +	Benzene	BH/MW-8, BH/MW-10 (and DUP), BH/MW-12	BH/MW-8 (and DUP), BH/MW-12						
BTEX	Ethylbenzene	BH/MW-8	None						



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	Devementer	Table 7 Res	sidential SCS
	Parameter	Fall 2023 Sampling	Spring 2024 Sampling
	Xylenes	BH/MW-8	None
	PHC F1	BH/MW-8	None
Metals	Sodium	BH/MW-7	N/A

In accordance with Section 49.1.2 of O.Reg. 153/04, standards are deemed to be met if there has been a discharge of drinking water within the meaning of the Safe Drinking Water Act, 2002. As a municipal water source was used for bedrock coring, it is inferred that the municipal water is the source of the chloroform in the groundwater samples from BH/MW-3 and BH/MW-7, and the applicable SCS are deemed not to be exceeded for this parameter.

According to Section 49.1 of O.Reg. 153/04 if, in the opinion of the Qualified Person, the applicable SCS at the Phase Two property are exceeded solely due to the application of a substance to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both, the applicable SCS is deemed not to be exceeded. Road salt is considered to have been applied to the driving and parking surfaces on the Phase Two property. As all of the monitoring wells were located in the parking lot or service garage, for the purpose of this investigation, the elevated sodium levels in the groundwater samples collected from BH/MW-7 are deemed not to exceed the Table 7 SCS.

A soil sample collected from BH/MW-9 exceeded Table 7 SCS for PHC, and groundwater collected from BH/MW-8 exceeded Table 7 SCS for PHC, benzene, hexane, and xylenes. This impact is likely associated with the operation of the former on-site gas station.

Groundwater samples collected from BH/MW-10 and BH/MW-12 exceeded the Table 7 SCS for benzene. The groundwater impact identified in BH/MW-10 may originate from an off-site source. Additional investigation is required.

Soil samples collected from BH/MW-1, BH/MW-3, and BH/MW-4 and groundwater samples collected from BH/MW-3 and BH/MW-12 exceeded the Table 7 SCS for TCE. This impact is inferred to be associated with the operation of the former onsite dry cleaner.

Soil samples collected from the BH-6 and BH/MW-7 exceeded the Table 7 SCS for PAH. No groundwater exceedances for PAH were present in any of the groundwater samples collected from the Phase Two property. The PAH impact is inferred to be associated with poor quality fill material.

A soil sample collected from BH/MW-1 exceeded the Table 7 SCS for cobalt. This sample was collected from the highly weathered shale layer, and the exceedance is inferred to be associated with naturally elevated levels of cobalt in the Ottawa area.

Additional studies are planned to delineate the Table 7 and/or Table 3 exceedances such that an appropriate remedial strategy can be prepared in conjunction with the overall development approach for the site.

The Qualified Person can confirm that the Phase Two Environmental Site Assessment was conducted per the requirements of Ontario Regulation 153/04, as amended, and in accordance with generally accepted professional practices.

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8.0 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.

- EXP Services Inc., Phase One Environmental Site Assessment, 1820-1846 Bank Street, Ottawa, Ontario, September 2024.
- EXP Services Inc., Geotechnical Investigation, Proposed Walkley Development, 1820-1846 Bank Street, Ottawa, Ontario, August 2024.
- EXP Services Inc., Hydrogeological Investigation, 1820-1846 Bank Street, Ottawa, Ontario, September 2024.
- Ontario Ministry of the Environment, Conservation and Parks, *Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario*, December 1996.
- 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, *Guide for Completing Phase Two Environmental Site* Assessments under Ontario Regulation 153/04, June 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.

Sun Life Assurance Company of Canda c/o BentallGreenOak (Canada) LP Phase Two Environmental Site Assessment 1820-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0 September 30, 2024

9.0 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 reevaluation. Where special concerns exist, or Sun Life Assurance Company of Canda c/o BentallGreenOak (Canada) LP ("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 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 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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Sun Life Assurance Company of Canda c/o BentallGreenOak (Canada) LP Phase Two Environmental Site Assessment 1820-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0 September 30, 2024

10.0 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.

The Qualified Person confirms that the Phase Two Environmental Site Assessment was conducted per the requirements of Ontario Regulation 153/04, as amended, and in accordance with generally accepted professional practices.

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Leah Wells, P.Eng., QP_{ESA} Environmental Engineer Earth and Environment

G 0 lu Christopher Thomas Kimmer Chris Kimmerly, P.Geo., QPES PRACTISING MEMBER Senior Project Manager 0. 0703 Earth and Environment



Sun Life Assurance Company of Canda c/o BentallGreenOak (Canada) LP Phase Two Environmental Site Assessment 1820-1846 Bank Street, Ottawa, Ontario OTT-22002538-B0 September 30, 2024

Appendix A: Figures















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P Services Inc. www.exp.com	
.613.688.1899 f: +1.613.225.7337) Queensview Drive, Suite 100 wa, ON K2B 8H6, Canada	
HASE TWO ENVIRONMENTAL	project no. OTT-23002538-B0
	scale H = 1:1,000 V = 1:200
Γ (1820-1846 BANK ST.), OTTAWA, ONTARIO	FIG 6B

																		26-Oct
BH-1	Depth (mbgs)	В	E	T	X	F1	F2	F3	F4	F4 G	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC
SS1	0.9 to 1.5	<0.0060	<0.010	<0.020	<0.020	<10	<10	<50	<50	-	<0.040	< 0.049	<0.040	<0.040	<0.040	0.16	<0.010	< 0.01
DUP 1	0.9 to 1.5	<0.0060	<0.010	<0.020	<0.020	<10	<10	<50	<50		< 0.040	< 0.049	<0.040	<0.040	<0.040	0.27	<0.010	<0.01
SS3	1.7 to 2.3	<0.0060	<0.010	<0.020	<0.020	<10	<10	<50	<50	1	< 0.040	< 0.049	<0.040	<0.040	<0.040	0.90	<0.010	<0.01
	T	ř																30-Oct
BH-2	Depth (mbgs)	В	F	Т	X	F1	F2	F3	F4	F4 G	1 1-DCA	12-DCA	1 1-DCF	c-1 2-DCF	t-1 2-DCE	PCF	TCE	VC
SS1	0.2 to 0.8	<0.0060	<0.010	<0.020	<0.020	<10	<10	<50	<50	-	<0.040	<0.049	<0.040	<0.040	< 0.040	<0.040	<0.010	<0.01
AS3	1.7 to 2.3	<0.0060	<0.010	<0.020	0.12	50	44	<50	<50	-	<0.040	<0.049	<0.040	<0.040	<0.040	<0.040	<0.010	<0.01
	1																	
BH-3	Depth (mbgs)											3						14-Dec
DI1-0	Deput (moga)	В	E	Т	X	F1	F2	F3	F4	F4 G	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC
SS1	0.1 to 1.2	<0.0060	<0.010	<0.020	<0.020	<10	<10	<50	<50	-	< 0.040	< 0.049	<0.040	<0.040	<0.040	1.7	<0.010	<0.01
	1																	14-Dec
BH-4	Depth (mbgs)	B	F	т	x	F1	F2	F3	F4	F4 G	1.1-DCA	12-004	1.1-DCF	c-1 2-DCF	t-1.2-DCE	PCF	TCE	VC
SS2	12 to 15	<0.0060	<0.010	<0.020	<0.020	<10	<10	<50	<50		<0.040	<0.049	<0.040	<0.040	<0.040	0.89	<0.010	<0.01
	1.2 0 1.0	0.0000	-0.010	-0.020	-0.020	-10					0.010	0.010	-0.010	-0.010	-0.010	0.00	0.010	-0.0
PH 6	Denth (mhas)																	27-Oc
DU-0	Deput (mbgs)	В	E	T	X	F1	F2	F3	F4	F4 G	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC
SS1	0.1 to 0.7	<0.0060	<0.010	<0.020	<0.020	<10	<10	<50	<50		< 0.040	< 0.049	< 0.040	< 0.040	<0.040	<0.040	<0.010	< 0.01
SS2	0.9 to 1.3	<0.0060	< 0.010	<0.020	0.066	26	34	<50	<50	-	< 0.040	< 0.049	<0.040	<0.040	<0.040	<0.040	<0.010	< 0.01
														360 - S-				
BH-7	Depth (mbgs)	-	-	-				50		510	11000				LABOR			27-Oct
	001.00	B	E	1	X	F1	FZ	F3	F4	F4 G	1,1-DCA	1,2-DCA	1,1-DCE	C-1,2-DCE	1-1,2-DCE	PCE	ICE	VC
552A	0.9 10 1.2	<0.0060	<0.010	<0.020	<0.020	<10	<10	<00	<00	-	<0.040	<0.049	<0.040	<0.040	<0.040	<0.040	<0.010	<0.01
552B	1.2 1 1.5	<0.0060	<0.020	<0.020	<0.020	32	<20	<90	<00		<0.040	<0.049	<0.040	<0.040	<0.040	<0.040	<0.010	<0.01
																		27-Oct
BH-8	Depth (mbgs)	В	E	T	X	F1	F2	F3	F4	F4 G	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC
AS3	1.5 to 2.1	0.092	0.14	0.063	0.45	<10	<10	170	510	2500	<0.040	< 0.049	<0.040	<0.040	< 0.040	<0.040	<0.010	<0.01
													1				1	-
BH-9	Depth (mbgs)																	26-Oct
		В	E	T	X	F1	F2	F3	F4	F4 G	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC
AS1	0.1 to 0.5	<0.0060	0.01	<0.020	<0.020	<10	<10	150	450	3100	<0.040	< 0.049	<0.040	<0.040	<0.040	<0.040	<0.010	<0.01
SS2	0.8 to 2.4	0.029	0.14	0.10	<0.020	13	26	<50	<50	-	<0.040	<0.049	<0.040	<0.040	<0.040	<0.040	<0.010	<0.01
		-																26-Oct
BH-10	Depth (mbgs)	B	F	т	X	E1	F2	E3	FA	FAG	11.004	12.004	11.005	C-1 2-DCE	1.1 2.DCE	PCF	TCE	VC
AS1	0 17 to 0 7	<0.0060	<0.010	<0.020	<0.020	<10	<10	110	430	2400	<0.040	<0.049	<0.040	<0.040	<0.040	<0.040	<0.010	<0.01
SS2	0.9 to 1.5	<0.0060	<0.010	<0.020	<0.020	<10	<10	<50	<50		<0.040	<0.049	<0.040	<0.040	<0.040	<0.040	<0.010	<0.01
DUP 2	0.9 to 1.5	<0.0060	<0.010	<0.020	<0.020	<10	<10	<50	<50		<0.040	<0.049	<0.040	<0.040	<0.040	<0.040	<0.010	<0.01
DULT	0.0 10 1.0	-0.0000	-0.010		-0.020	-10	410				-0.040	-0.043	-0.040	-0.040	-0.040	-0.040	-0.010	-0.0
BU 44	Depth (mhms)																	30-Oc
BH-11	Deput (mogs)	В	E	T	X	F1	F2	F3	F4	F4 G	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC
		<0.0000	<0.010	<0.020	<0.020	<10	<10	69	88	-	< 0.040	< 0.049	<0.040	< 0.040	<0.040	<0.040	<0.010	<0.01
SS1	0.1 to 0.7	<0.0060	-0.010	-U.ULU		Conc. 201												
SS1 SS2	0.1 to 0.7 0.8 to 1.4	<0.0060	<0.010	<0.020	<0.020	<10	<10	<50	<50	-	<0.040	<0.049	< 0.040	< 0.040	< 0.040	<0.040	<0.010	<0.01



PARAMETERS	ABBREVIATION	REG 153/04 TABLE 3 SCS Residential	PARAMETERS	ABBREVIATION	REG 153/04 TABLE 7 SC Residential
Benzene	В	0.21	Benzene	В	0.21
Ethy Ibenzene	E	2	Ethylbenzene	E	1.1
Toluene	T	2.3	Toluene	T	2.3
Xylenes	Х	3.1	Xy lenes	X	3.1
PHC F1	PHC F1	55	PHC F1	PHC F1	55
PHC F2	PHC F2	98	PHC F2	PHC F2	98
PHC f3	PHC f3	300	PHC f3	PHC f3	300
PHC F4	PHC F4	2800	PHC F4	PHC F4	2800
1,1-Dichloroethane	1,1-DCA	3.5	1,1-Dichloroethane	1,1-DCA	3.5
1,2-Dichlororethane	1,2-DCA	0.05	1,2-Dichlororethane	1,2-DCA	0.05
1, 1-Dichloroethy lene	1,1-DCE	0.05	1,1-Dichloroethylene	1,1-DCE	0.05
Cis-1,2-Dichloroethy lene	c-1,2-DCE	3.4	Cis-1,2-Dichloroethylene	c-1,2-DCE	3.4
Trans-1,2,-Dichlorothy lene	t-1,2-DCE	0.084	Trans-1,2,-Dichlorothy lene	t-1,2-DCE	0.084
Tetrachloroethy lene	PCE	0.28	Tetrachloroethy lene	PCE	0.28
Trichloroethy lene	TCE	0.061	Trichloroethy lene	TCE	0.061
Vinyl Chloride	VC	0.02	Viny I Chloride	VC	0.02



<u> </u>		1																26 Oct 22		0414
BH-1	Depth (mbgs		Act	Δn	B(a)A	B(a)P	B/b/i)F	B(ahi)P	B(k)F	C	DA	FI	F	1(123)P	T.MN	N	P	26-Oct-23	L H - A MIM	dxa
SS1	09to15	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0071	1 <0.0050	<0.0050	<0.0050	HETTOTE 14-3-	
DUP 1	0.0 to 1.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0071	<0.0050	<0.0050	<0.0050	BH/MW-1	1 60 6
\$\$3	17 to 23	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0000	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0071	<0.0050	0.0069	<0.0050	(S) GS = 1	91.65
		-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0000	-0.0071	-0.0000	0.0000	-0.0000	E BR	89.0
PU 2	Denth (mhas)	1																30-Oct-23	C BH/MW-12	
DI-2	Depth (mbgs	Ace	Acl	An	B(a)A	B(a)P	B(b/j)F	B(ghi)P	B(k)F	С	DA	FI	F	I(123)P	T-MN	N	Р	Py	GS = 91.53	
SS1	0.2 to 0.8	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.0050	< 0.0050	< 0.0050	< 0.0050	<0.0050	< 0.0050	< 0.011	< 0.0050	0.0071	< 0.0050		TU
AS3	1.7 to 2.3	< 0.0050	< 0.0050	< 0.0050	0.0070	0.0061	0.010	<0.0050	<0.0050	0.0064	< 0.0050	0.015	< 0.0050	<0.0050	< 0.0071	< 0.0050	0.0065	0.014	BH/MW-3	1
		-																	GS = 92.06 (S) BH/I	MW-4
BH-3	Depth (mbgs)						-		-	-					-		1	4-Dec-23	(S) GS	= 92.06
004	0.1 = 1.0	Ace	Acl	An	B(a)A	B(a)P	B(b/j)F	B(ghi)P	B(k)F	C	DA	FI	F	I(123)P	T-MN	N	P	Py	and and a start and a start a star	1-30.1
551	0.1 10 1.2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.00/1	<0.0050	<0.0050	<0.0050		TELL
	1	Ť																14-Dec-23		esteving 05
BH-4	Depth (mbgs)	Ace	Acl	An	B(a)A	B(a)P	B(b/i)F	B(ahi)P	B(k)F	C	DA	FI	F	I(123)P	T-MN	N	Р	Pv		· C
SS2	1.2 to 1.5	< 0.0050	<0.0050	< 0.0050	<0.0050	<0.0050	< 0.0050	<0.0050	<0.0050	< 0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0071	<0.0050	<0.0050	<0.0050		1 - I
	1		1									1		1		1				-Martin
BH-6	Denth (mbas)																	27-Oct-23		
Bried	Deput (mbgs)	Ace	Acl	An	B(a)A	B(a)P	B(b/j)F	B(ghi)P	B(k)F	С	DA	FI	F	I(123)P	T-MN	N	Р	Py	BH-5	
SS1	0.1 to 0.7	0.18	0.0073	0.64	0.91	0.66	0.87	0.24	0.31	0.73	0.099	2.1	0.29	0.29	0.075	0.035	2.1	1.6	NOT DRILLED	-
SS2	0.9 to 1.3	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.0050	<0.0050	<0.0050	< 0.0050	<0.0050	< 0.0050	< 0.0050	<0.0050	< 0.0071	< 0.0050	0.011	<0.0050	S autor ores - Tall & D + H	5
	-	-																07.0 + 00		C
BH-7	Depth (mbgs)		L Asl L		Diala	D(a)D	DAL	Distin	D INF	-			-	1/422\0	TAN	N		27-Oct-23	ma outreast a line of the	WEW
0004	0.0 + 4.0	Ace	ACI	An	B(a)A	B(a)P	B(D/J)F	B(gni)P	B(K)F	0.07	DA	FI	F	I(123)P		N 0.0070	P	Py	- In store	PPA
SSZA	0.9101.2	0.012	<0.0050	0.16	0.45	0.38	0.52	0.17	0.20	0.37	0.061	0.86	0.024	0.19	0.043	0.0078	0.47	0.71		Tit
552B	1.2 0 1.5	0.069	<0.0050	0.22	0.58	0.58	0.78	0.27	0.30	0.46	0.093	0.99	0.048	0.31	0.053	0.016	0.40	0.82		do
		1																27-Oct-23	A Promo - Tail O	1/10
BH-8	Depth (mbgs)	Ace	Acl	An	B(a)A	B(a)P	B(b/i)F	B(ghi)P	B(k)F	С	DA	FI	F	I(123)P	T-MN	N	Р	Pv	- 000 mm - 000 mm	1
AS3	1.5 to 2.1	< 0.050	< 0.050	0.091	0.24	0.21	0.30	0.10	0.12	0.19	< 0.050	0.51	<0.050	0.12	< 0.071	< 0.050	0.36	0.38	- A	The
			1 1					200			1								The main states	"Him
BH.0	Denth (mbas)	v.																26-Oct-23	PM	TH.
Diris	Deput (mbgs	Ace	Acl	An	B(a)A	B(a)P	B(b/j)F	B(ghi)P	B(k)F	С	DA	FI	F	I(123)P	T-MN	N	Р	Py		IK
AS1	0.1 to 0.5	<0.050	<0.050	<0.050	< 0.050	<0.050	< 0.050	<0.050	<0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.071	< 0.050	<0.050	<0.050		IT
SS2	0.8 to 2.4	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.0050	< 0.0071	0.0056	0.010	< 0.0050	per cuores in the little pros	The
																				-11
BH-10	Depth (mbgs)																	26-Oct-23	the second	were -
		Ace	Acl	An	B(a)A	B(a)P	B(b/j)F	B(ghi)P	B(k)F	С	DA	FI	F	I(123)P	T-MN	N	Р	Ру	and country EXP.B	
AS1	0.17 to 0.7	<0.050	<0.050	<0.050	< 0.050	<0.050	<0.050	<0.050	< 0.050	<0.050	<0.050	<0.050	< 0.050	<0.050	<0.071	<0.050	<0.050	<0.050		N E
SS2	0.9 to 1.5	< 0.0050	<0.0050	<0.0050	< 0.0050	< 0.0050	<0.0050	<0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	<0.0050	<0.0050	< 0.0071	< 0.0050	<0.0050	< 0.0050	4 8 BLOU	/8#
DUP 2	0.9 to 1.5	< 0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	< 0.0050	< 0.0050	<0.0050	<0.0050	<0.0050	< 0.0071	< 0.0050	<0.0050	<0.0050		GS = 00
	1	-				-10 D.2							1							BR = 88
BH-11	Depth (mbgs))					Dame				1		-	1 111000				30-Oct-23	25 v 30 1	T S
		Ace	Acl	An	B(a)A	B(a)P	B(b/j)F	B(ghi)P	B(k)F	C	DA	FI	F	I(123)P	T-MN	N	P	Ру		A RANGE
\$\$1	0.1 to 0.7	< 0.0050	<0.0050	0.016	0.041	0.036	0.053	0.016	0.019	0.038	<0.0050	0.089	0.007	0.015	< 0.0071	<0.0050	0.068	0.073	BE O	Contraction of the second
SS2	0.8 to 1.4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	< 0.0050	0.0055	<0.0050	<0.0050	< 0.0071	< 0.0050	<0.0050	<0.0050	1 8 10	ACON A CONTRACT
DUP 3	0.8 to 1.4	< 0.0050	<0.0050	<0.0050	0.0082	0.0070	0.011	<0.0050	<0.0050	0.0094	<0.0050	0.018	<0.0050	<0.0050	<0.0071	< 0.0050	0.018	0.016	3	1189
	<u>.</u>																		LEGEND	
		PARAM	AETERS	4	BBREVIA	TION	REG	153/04 TA	BLE 3 SCS		PARAM	ETERS	A	BBREVIAT	ON	REG 153	04 TABLE	7 SCS		BH
								Residen	tial							R	esidential			Y
		Acena	phthene		Ace			7.9			Acenap	hthene		Ace			7.9		PROPERTY BOUNDARY	→ BH

PARAMETERS	ABBREVIATION	REG 153/04 TABLE 3 SCS Residential	PARAMETERS	ABBREVIATION	REG 153/04 TABLE 7 SCS Residential	
Acenaphthene	Ace	7.9	Acenaphthene	Ace	7.9	
Acenaphthy lene	Acl	0.15	Acenaphthylene	Acl	0.15	1
Anthracene	An	0.67	Anthracene	An	0.67	1
Benzo(a)anthracene	B(a)A	0.5	Benzo(a)anthracene	B(a)A	0.5	1
Benzo(a)py rene	B(a)P	0.3	Benzo(a)py rene	B(a)P	0.3	1
Benzo(b/j)fluoranthene	B(b/j)F	0.78	Benzo(b/j)fluoranthene	B(b/j)F	0.78	1
Benzo(g,h,i)pery lene	B(ghi)P	6.6	Benzo(g,h,i)pery lene	B(ghi)P	6.6	1
Benzo(k)fluoranthene	B(k)F	0.78	Benzo(k)fluoranthene	B(k)F	0.78	1
Chry sene	С	7	Chrysene	C	7	1
Dibenzo(a,h)anthracene	DA	0.1	Dibenzo(a,h)anthracene	DA	0.1	1
Fluoranthene	FI	0.69	Fluoranthene	FI	0.69	1
Fluorene	F	62	Fluorene	F	62	1
Indeno(1,2,3-cd)py rene	I(123)P	0.38	Indeno(1,2,3-cd)py rene	I(123)P	0.38	1
Methy Inaphthalene, 2-(1-)	T-MN	0.99	Methy Inaphthalene, 2-(1-)	T-MN	0.99	1
Naphthalene	N	0.6	Naphthalene	N	0.6	1
Phenanthrene	Р	6.2	Phenanthrene	Р	6.2	1
Pyrene	Py	78	Py rene	Py	78	1



		14. L																				COMPANY AND	Card State	100 A 1000						and the second s	
BH.4	Depth (mbas)	1.	65	2.53	12.	9		51 - 933		327		A. 28		6 - 85	2 28		2.55	63	65	10	125			26-Oct-23		11	-	Gen	20	alt	111
DIFT	Deptil (mogs)	Sb	As	Ba	Be	BE	B (HWS)	Cd	Cr	Cr VI	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	П	U	V	Zn	EC	SAR			30		T	DEL	and the second
SS1	0.9 to 1.5	<0.20	4.4	66	0.77	<5.0	0.092	0.1	25	0.22	10	23	11	<0.050	<0.50	28	<0.50	<0.20	0.14	0.61	30	49	1.1	11	1	and the second	1.0	-		5.0	A
DUP 1	0.9 to 1.5	<0.20	5.0	71	0.88	5.2	0.11	0.12	28	0.23	11	27	13	<0.050	<0.50	31	<0.50	<0.20	0.16	0.77	34	55	0.65	13	-		he was	BH/MM	1-1	ERS V	
SS3	1.7 b 2.3	0.20	7.6	100	1.0	6.5	0.16	0.13	32	<0.18	23	40	18	0.067	1.0	42	<0.50	<0.20	0.19	0.74	36	90	0.51	18			-		CASE	\$239	may
	1																			4.7.4					3 12			(S) GS	= 97.65 = 80.0	L.L.	T
	1	1																						30-Oct-23		- m	-	DA	1 - 09.0	1	12 1
BH-2	Depth (mbgs)	Sh	As	Ba	Re	B	B (HWS)	Cd	Cr	Cr VI	Co	Cu	Ph	Ha	Mo	Ni	Se	An	πΙ	11	V I	Zn	FC	SAR	10.0	T	BH/	WW-12	FT	1	* BI
004	02500	0.00	6.0	470	0.07	0.5	0.45	0.12	20	(0.49	40	40	20	<0.050	4.0	42	<0.50	rg 20.00	0.46	0.00	20	02	0.42	0.4	1	the 1	DI	1	A A	E 1	E GS = C
551	0.2 10 0.8	0.28	0.9	1/0	0.97	9.5	0.45	0.12	32	<0.18	18	40	20	<0.050	1.2	42	<0.50	40.20	0.10	0.98	32	93	0.42	8.1	00	GS =	91.53			4 4 4 2 8	BR =
AS3	1.7 to 2.3	0.23	8.1	110	0.65	<5.0	0.096	0.23	23	<0.18	11	19	19	<0.050	1.6	25	<0.50	<0.20	0.16	0.66	31	69	0.27	4.6	111	BR =	= 88.8	P &		ZUO	SA STRI
-																											(D)	11		1055	33E =
BH-3	Depth (mbas)																							14-Dec-23	BH/M	W-3		0			Dot the
DI-3	Depth (mbgs)	Sb	As	Ba	Be	BB	B (HWS)	Cd	Cr	Cr VI	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	П	U	V	Zn	EC	SAR	= 92.06	(S) .		BI	1/MW-4	a m	
SS1	0.1 10 1.2	<0.20	4.4	64	0.70	6.7		<0.10	23		11	24	12	<0.050	0.51	24	<0.50	<0.20	0.15	0.61	31	52	-		R = 90.0			1(5)	CE - 02 0	c 2	
		1																						-	7			10/	GS = 92.0	and her set	
	[1																						14-Dec-23	M	AL		742	BR = 90.		
BH-4	Depth (mbgs)	Ch	A. I	Pa	P.	p Ir	D (LIMO)	C4	C. 1	C- 1/1	Co	C., 1	Dh	Ha	Ma	MI I	0	An I	m 1	0 1	V I	7	EC.	PAD	H	10				P.A.	1.0
	101.15	30	AS	Da	De	7.0	D (nwo)	00	01	CT VI	00	- CU	FD	ny	-0.F0	NI	0.50	Ay	0.40	0 77	•	20	EC	JAR				T	and the	- Att	1.11
552	1.2 10 1.5	<0.20	3.0	50	0.56	7.0		<0.10	23		12	19	12	<0.050	40.50	21	40.50	<0.20	0.12	0.77	29	4/			RAD	1	1 day	Lin- m	alevin	BGOF	111
	1	-										-	-												Trat	11	Thil	* 3	a contra co	17	
BH-6	Depth (mbas)	L																						27-Oct-23	F EXA	1 11	11 Huter	I	TIT	JATA	6
		Sb	As	Ba	Be	B	B (HWS)	Cd	Cr	Cr VI	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	П	U	V	Zn	EC	SAR	Charles !!	4 1	1-1-1	T	1	- La	-
SS1	0.1 to 0.7	0.21	4.3	73	0.60	5.6	0.20	0.14	21	<0.18	14	22	23	<0.050	0.95	27	<0.50	<0.20	0.17	0.6	27	62	0.38	11	100		1 6 16	No. Ser		+	1900
SS2	0.9 to 1.3	0.35	6.8	290	0.98	7.6	0.21	0.30	30	<0.18	20	43	26	<0.050	1.8	48	<0.50	<0.20	0.20	0.74	32	100	0.53	18	1 Sh	AL	A lost	atta	PIER		SR3
	1									I.															113 1	1	100	11			and the
		1																						27-Oct-23	FR.	ABH-	-5	11		T	(etta
BH-7	Depth (mbgs)	Sh	Δs	Ba	Re	B I	B (HWS)	Cd	Cr	Cr VI	Co	Cu	Ph	На	Mo	Ni	Se	Aa	TI	11	VI	Zn	FC.	SAR	Est-	SA I	1 B	23			1 1 1
8824	00612	<0.20	1.2	24	0.21	<5.0	0.14	<0.10	- 11	(0.19	4.0	11	5.6	<0.050	11	0.2	<0.50	<0.20	0.12	0.40	20	19	0.22	5.0	1	NOT	DRILLE	District			1 H
332A	0.5 0 1.2	~0.20	1.0	31	0.21	-0.0	0.14	-0.10	11	-0.10	4.5	11	5.0	-0.000	1.1	9.2	-0.50	-0.20	0.12	0.43	20	10	0.22	0.0	0	C CERT	A	11			TH
552B	1.211.5	<0.20	3.4	140	0.62	0.0	0.20	0.12	24	<0.18	15	25	21	<0.050	1.2	30	40.50	40.20	0.14	1.1	28	6/	0.61	21	• 1	LE LOS	Per 1	63		and a	-11
-		-																							27	i de la	1 1	laton /		- et	
BH-8	Depth (mbas)																							27-Oct-23	•	Et a	118	18 hati	H	2世	
1000		Sb	As	Ba	Be	B	B (HWS)	Cd	Cr	Cr VI	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Π	U	V	Zn	EC	SAR	23	and the	in the	16891	T d	104	1
AS3	1.5 to 2.1	<0.20	2.7	290	0.36	11	0.56	<0.10	18	<0.18	8.5	17	18	<0.050	0.77	16	<0.50	<0.20	0.18	0.41	17	32	0.55	7.1		and the second	The star	- Theme	11 1	5 × 0	01
																									1		The s		1/10	2 AB	
DU O	Double (and have)																							26-Oct-23	IF .	· 12-			\$\\	do	1
BH-9	Depth (mbgs)	Sb	As	Ba	Be	BB	B (HWS)	Cd	Cr	Cr VI	Co	Cu	Pb	Ha	Mo	Ni	Se	Aq	П	U	V	Zn	EC	SAR	Nº -	1	ATEL			No.	all -
451	01005	<0.20	6.8	67	0.21	5.8	0.23	0.23	87	0.18	5.6	11	49	<0.050	4.8	13	<0.50	<0.20	0.15	0.57	13	29	0.15	0.44	1	21	- CODY	1 march	1	1.2	14 A
662	0.9 5 2.4	<0.20	6.5	140	0.02	7.4	0.14	0.17	20	20.10	10	40	16	<0.050	1.0	20	<0.50	0.20	0.16	0.69	22	00	0.69	26	- A			12 -1	CON/	1	1 The
	0.0 0 2.4	-0.20	0.0	140	0.03	1.4	0.14	0.17	20	-0.10	10	40	10	40.000	1.0	33	~0.00	-0.20	0.10	0.00	32	33	0.00	20	1	10				CAN-	-O Pris
	1	1																						26 Oct 22		100	- F	63	10 X	Vr let	BG
BH-10	Depth (mbgs)					- 13																		26-001-23	19	17		1 miles	In 1	1918 .	1
	1.5. 0 5.0	Sb	As	Ba	Be	B	B (HWS)	Cd	Cr	Cr VI	Co	Cu	Pb	Hg	Мо	Ni	Se	Ag	Π	U	V	Zn	EC	SAR	(hanne)	•	1	6223	ling	1 1	134
AS1	0.17 to 0.7	<0.20	7.2	27	0.43	6.8	0.19	0.36	14	<0.18	7.7	15	35	<0.050	3.1	19	<0.50	<0.20	0.22	0.61	23	40	0.24	4.1	111	15	100.2	Porto	1 1	the last	3//
SS2	0.9 to 1.5	<0.20	5.0	45	0.71	5.8	0.16	0.10	24	<0.18	13	28	16	<0.050	0.80	27	<0.50	<0.20	0.12	0.83	33	78	0.24	7.2	1			April 1		12	1
DUDA	0.9 to 1.5	<0.20	51	55	0.69	<5.0	0.11	0.11	24	<0.18	15	34	14	<0.050	0.95	30	<0.50	<0.20	0.12	0.71	30	80	0.31	7.0	1	Teller -	TO IN	NETRY.		- Val	
DUP 2			V. 1					W.11	24																	11. 180	19		1.	1383 20	
DUP 2	1		0.1		0.00			9.11	24		10														1 House	150		Contraction of the second second	1	Carlos D	
DUP 2	Denth (mbma)		5.1					9.11	24		10													26-Oct-23		-	11	al of	1	22	- Ez
BH-11	Depth (mbgs)	Sb	As	Ba	Be	B	B (HWS)	Cd	Cr	Cr VI	Co	Cu	Pb	Hg	Mo	Ni	Se	Ag	Π	U	v	Zn	EC	26-Oct-23 SAR		13	11	A CE		AF	LIENT
BH-11 SS1	Depth (mbgs)	Sb <0.20	As 2.9	Ba 32	Be 0.26	B E	B (HWS)	Cd <0.10	Cr 12	Cr VI	Co 5.7	Cu 14	Pb 7.5	Hg <0.050	Mo	Ni 11	Se <0.50	Ag <0.20	П 0.18	U 0.58	V 24	Z n 24	EC 0.60	26-Oct-23 SAR 18		E	11	A CAR		F	G 1 uent
BH-11 SS1 SS2	Depth (mbgs) 0.1 to 0.7 0.8 to 1.4	Sb <0.20 <0.20	As 2.9	Ba 32 51	Be 0.26 0.82	B E 5.4	B (HWS) 0.10	Cd <0.10	Cr 12 26	Cr VI <0.18	Co 5.7	Cu 14 30	Pb 7.5	Hg <0.050	Mo 1.4	Ni 11	Se <0.50 <0.50	Ag <0.20	TI 0.18 0.16	U 0.58	V 24 29	Zn 24	EC 0.60	26-Oct-23 SAR 18 7 7			11		F	T	THE LENT
BH-11 SS1 SS2 DUB 2	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4	Sb <0.20 <0.20	As 2.9 5.6 7.1	Ba 32 51	Be 0.26 0.82 0.97	B E 5.4 5.6 8.3	B (HWS) 0.10 0.11	Cd <0.10 <0.10 <0.10	Cr 12 26	Cr VI <0.18 <0.18	Co 5.7 16	Cu 14 30	Pb 7.5 18	Hg <0.050 <0.050 <0.050	Mo 1.4 0.70	Ni 11 31	Se <0.50 <0.50 <0.50	Ag <0.20 <0.20	TI 0.18 0.16	U 0.58 0.66	V 24 29	Zn 24 65	EC 0.60 0.26	26-Oct-23 SAR 18 7.7		E II	11	- A		T	IN DING 1 LENT
BH-11 SS1 SS2 DUP 3	Depth (m bgs) 0.1 to 0.7 0.8 to 1.4 0.8 to 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B E 5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI <0.18 <0.18 0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050	Mo 1.4 0.70 1.0	Ni 11 31 39	Se <0.50 <0.50 <0.50 <0.50	Ag <0.20 <0.20 <0.20	TI 0.18 0.16 0.20	U 0.58 0.66 0.65	V 24 29 33	Zn 24 65 79	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12			I			T	in DING 1 LENT
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B E 5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd <0.10 <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI <0.18 <0.18 0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050	Mo 1.4 0.70 1.0	Ni 11 31 39	Se <0.50 <0.50 <0.50	Ag <0.20 <0.20 <0.20	TI 0.18 0.16 0.20	U 0.58 0.66 0.65	V 24 29 33	Zn 24 65 79	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12		a a a	II O	2			THENT LINU
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B E 5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI <0.18 <0.18 0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050	Mo 1.4 0.70 1.0	Ni 11 31 39	Se <0.50 <0.50 <0.50	Ag <0.20 <0.20 <0.20 <0.20	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15	V 24 29 33	Zn 24 65 79	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12		BBB	H O	2		BH/MW-	Trian Power
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B 8 5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI <0.18 <0.18 0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050	Mo 1.4 0.70 1.0	Ni 11 31 39	Se <0.50 <0.50 <0.50 <0.50	Ag <0.20 <0.20 <0.20	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 153	V 24 29 33 3/04	Zn 24 65 79	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12	6	999	II O	2		BH/MW-	The Lond
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B 8 5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI <0.18 <0.18 0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 <0.050	Mo 1.4 0.70 1.0 IETERS	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV	Ag <0.20 <0.20 <0.20 <0.20	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15 TABLE 7	V 24 29 33 3/04 SCS	Zn 24 65 79	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12	6	a a a	II O	2	GS	BH/MW-	The Lond
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B 1 5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI <0.18 <0.18 0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 PARAM	Mo 1.4 0.70 1.0 NETERS	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV	Ag <0.20 <0.20 <0.20 <0.20	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider	V 24 29 33 3/04 SCS atial	Zn 24 65 79	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12	6 6	a a a	II O	2	GS	BH/MW- = 90.35 (D 2 = 88.2	Then the the the
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI <0.18 <0.18 0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 PARAM Antim	Mo 1.4 0.70 1.0 NETERS	Ni 11 31 39	Se ⊲0.50 <0.50 <0.50 ABBREV	Ag <0.20 <0.20 <0.20 <0.20	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15 TABLE 7 Residen 7.5	V 24 29 33 3/04 SCS atial	Zn 24 65 79	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12		a a a	I. C.	P	GS	BH/MW- = 90.35 (D = 88.2	Tuend Tuent
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B 8 5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI <0.18 <0.18 0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 PARAM Antim	Mo 1.4 0.70 1.0 NETERS	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb	Ag <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.2	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15 TABLE 7 Resider 7.5	V 24 29 33 3/04 SCS atial	Zn 24 65 79	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12		Priv.		P	GS	BH/MW- = 90.35 (D = 88.2	THE LEVI
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B [1 5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Cd <0.10 <0.10 <0.10	Cr 12 26 30 30	Cr VI 0.18 Ф.18 0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 PARAM Antim Arse	Mo 1.4 0.70 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	Ni 11 31 39	Se <0.50 <0.50 <0.50 <0.50 ABBREV Sb As	Ag ⊲.20 ⊲.20 ⊲.20 ⊲.20 IATION	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 153 TABLE 7 Resider 7.5 18	V 24 29 33 33 3704 SCS stial	Zn 24 65 79	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12	alley	Priv.	HE OF	P	GS BF	BH/MW- = 90.35 (D = 88.2	Turno Internet
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B [1 5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Cd <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI <0.18 <0.18 <0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 PARAM Antim Arse Bari	Mo 1.4 1.4 0.70 1.0 1.0	Ni 11 31 39	Se	Ag ⊲ 20 ⊲ 20 ⊲ 20 ⊲ 20	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 153 TABLE 7 Resider 7.5 18 390	V 24 29 33 33 3704 SCS stial	Zn 24 65 79	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12	alley	Priv.	HE OF	10	GS BF	BH/MW- = 90.35 (D = 88.2	The strength
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B [] 5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg 0.050 0.050 0.050 0.050 PARAM Antim Arse Bari Berv	Mo 1.4 0.70 1.0	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be	Ag ⊲.20 ⊲.20 ⊲.20 ⊲.20 ⊲.20	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 153 TABLE 7 Resider 7.5 18 390 4	V 24 29 33 3/04 SCS stial	Zn 24 65 79	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12	alley	Priv		P	GS Br	BH/MW- = 90.35 (D 2 = 88.2	Contraction of the strength
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B [1 5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd	Cr 12 26 30	Cr VI <0.18 <0.18 0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 <0.050 PARAM Antim Arse Barri Berry	Mo 1.4 0.70 1.0 NETERS nony enic ium Ilium (Total)	Ni 11 31 39	Se	Ag	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 420	V 24 29 33 3/04 SC S attal	Zn 24 65 79	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12	alley	Priv.		ID ID	GS BF	BH/MV- = 90.35 (D 2 = 88.2	The Pollo III
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd	Cr 12 26 30 0	Cr VI 0.18 0.18 0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron	Mo 1.4 1.4 0.70 1.0 1.0 IETERS 1.0 IETERS 1.0 IIIum 1.0	Ni 11 31 39 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B B B	Ag ⊲ 20 ⊲ 20	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120	V 24 29 33 33 33 33 34 55 5 5 5 5 5 5 5 5 5 5 5	Zn 24 65 79	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12	alley	Priv.		10	GS BF	BH/MW- = 90.35 (D 2 = 88.2	111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd	Cr 12 26 30 .	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W	Mo 1.4 1.70 1.0 1.0 1.0 IETERS 1.0 nony 1.0 enic 1.0 llium (Total) /ater Soluble 1.0	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B B H(HW)	Ag 40.20 40.20 40.20 10 and 10 a	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5	V 24 29 33 33 33/04 SCS attal	Zn 24 65 79	EC 0.60 0.25 0.22	26-Oct-23 SAR 18 7.7 12	alley	Priv.		ID ID	GS BH	BH/MW- = 90.35 (D = 88.2	C C C C C C C C C C C C C C C C C C C
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 <0.050 PARAM Antim Arse Ban Bery Boron ron (Hot W Cadn	Mo 1.4 0.70 1.0 HETERS nony enic ium Illium (Total) /ater Solubl	Ni 11 31 39 39 10 10 10 10 10 10 10 1	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW) Cd	Ag ⊲.20 ⊲.20 ⊲.20 ⊲.20 ⊲.20 s a s a wS) d	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 153 TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2	V 24 29 33 33 33 33 33 33 33 34 35 55 34 35 55 34 35 55 34 35 55 34 35 55 34 35 55 34 35 55 35 55 35 55 35 55 55 55 55 55 55	Zn 24 65 79 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12	alley	Priv.		10	GSBR	BH/MW- = 90.35 (D = 88.2	The second secon
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B 8 5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd	Cr 12 26 30	Cr VI 0.18 0.18 0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25 8 8 9 80	Hg <0.050 <0.050 <0.050 <0.050 PARAM Antim Arse Bari Berry Boron ron (Hot W Cadm Chromiur	Mo 1.4 0.70 1.0 IETERS nony enic ium Ilium (Total) //ater Solubl nium (Total)	Ni 11 31 39	Se <0.50 <0.50 <0.50 <0.50 BBBREV Sbb As Ba Be B (HW C	Ag ⊲ 20 ⊲ 20	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160	V 24 29 33 33 33 33 34 55 55 55 55 55 55 55 55 55 55 55 55 55	Zn 24 65 79 00000000000000000000000000000000000	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12	alley	Priv	II II IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	P	GSBF	BH/MW- = 90.35 (D = 88.2	
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd	Cr 12 26 30 0	Cr VI 0.18 Ø.18 0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur	Mo 1.4 0.70 1.0 IETERS nony enic ium Ilium (Total) //ater Solubl nium m (Total)	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B HW Cd Cd	Ag ⊲ 20 ⊲ 20	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 1.2 160 1.2	V 24 29 33 3/04 SC S atial	Zn 24 65 79 10 10 10 10 10 10 10 10 10 10 10 10 10	EC 0.60 0.22 0.22	26-Oct-23 SAR 18 7.7 12	PROP	Priv.		10 RY	GS	BH/MW- = 90.35 (D = 88.2	11 - 1 MON
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Cd <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chromi	Mo 1.4 0.70 1.0 1.0 IETERS nony enic ium Illium (Total) /ater Solubl nium m (Total) ium VI	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW) C dd C r	Ag ⊲.20 ⊲.20 ⊲.20 ⊲.20 ⊲.20 IATION	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8	V 24 29 33 33 3704 SCS attal	Zn 24 65 79 	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12	PROP	Priv Priv ERTY BO		to RY	GSBH	BH/MW- = 90.35 (D	11 11 11 11 11 11 11 11 11 11 11 11 11
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chrom Cot	Mo 1.4 0.70 1.0 IETERS nony enic ium Illium (Total) /ater Solubl nium m (Total) ium VI balt	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW) C cd Cr C r C cd	Ag	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 153 TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22	V 24 29 33 33 33 33 33 33 33 33 33 33 33 33 33	Zn 24 65 79 79 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12	PROP			ID RY	GSBH	BH/MW- = 90.35 (D = 88.2	111 111 111 111 111 111 111 111 111 11
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25 8 8 9 80	Hg <0.050 <0.050 <0.050 <0.050 PARAM Antim Arse Barn Berry Boron ron (Hot W Cadn Chromiur Chrom	Mo 1.4 0.70 1.0 IETERS nony enic ium Ilium (Total) //ater Solubl nium (Total) ium VI balt poer	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW) C d C r C r \ C r	Ag ⊲ 20 ⊲ 20 ⊲ 20 ⊲ 20 ⊲ 20 ⊲ 20 ⊲ 20 ⊲ 20 NS) d 20 NS)	n 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 2 2 140	V 24 29 33 3/04 SC S stial	Zn 24 65 79 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12	PROPI	Priv.		IP IP	GS BH	BH/MW- = 90.35 (D = 88.2 BH/MW BH-5	-11 -1 (S) = BOR
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 0	Be 0.26 0.82 0.97 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd	Cr 12 26 30	Cr VI 0.18 Ø.18 0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25 8 80	Hg <0.050 <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chrom Cot Cop	Mo 1.4 0.70 1.0 1.0 IETERS nony enic ium Illium (Total) /ater Solubl nium m (Total) jum VI balt oper	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW) Cd Cr Cr Classical (Cr) Cd Cr Cr	Ag ⊲ 20 ⊲ 20 ⊲ 20 ⊲ 20 ⊲ 20 □ ↓	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 20 20 20 20 20 20 20 20 20 20 20 20 20	V 24 29 33 3/04 SC S attial	Zn 24 65 79 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EC 0.60 0.28 0.22	26-Oct-23 SAR 18 7.7 12	PROP	Priv. Priv. ERTY BO		RY ATIONS	GSB	BH/MW- = 90.35 (D = 88.2 BH/MW BH-5	-11 -11 -11 -11 -1 -1 MON (S) = BOR
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 5	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Q.10 <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chromiur Cop Lee	Mo 1.4 0.70 1.0 1.0 IETERS nony enic ium Ilium (Total) /ater Solubl nium m (Total) ium VI balt oper ad	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B B B HW Cd Cr Cr Ca Cu Pb	Ag ⊲0.20 ⊲0.20 ⊲0.20 IATION 0 <th>TI 0.18 0.16 0.20</th> <th>U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 120</th> <th>V 24 29 33 3/04 SCS attal</th> <th>Zn 24 65 79 </th> <th>EC 0.60 0.25 0.22</th> <th>26-Oct-23 SAR 18 7.7 12</th> <th>PROP</th> <th>ERTY BO</th> <th></th> <th>10 RY ATIONS</th> <th>GSB</th> <th>BH/MW- = 99.35 (D = 88.2 BH/MW BH-5 GS = 91.</th> <th>11 11 11 11 11 11 11 11 11 11 11 11 11</th>	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 120	V 24 29 33 3/04 SCS attal	Zn 24 65 79 	EC 0.60 0.25 0.22	26-Oct-23 SAR 18 7.7 12	PROP	ERTY BO		10 RY ATIONS	GSB	BH/MW- = 99.35 (D = 88.2 BH/MW BH-5 GS = 91.	11 11 11 11 11 11 11 11 11 11 11 11 11
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Q.10 <0.10 <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25 25 Bo	Hg <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chromiur Chromic Cop Lei Merc	Mo 1.4 0.70 1.0 IETERS nony enic ium Illium (Total) /ater Solubl nium m (Total) jum VI balt opper ad cury	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW) C cd Cr C r C cd C r C cd Pb Ha	Ag	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 120 0.27	V 24 29 33 33 33 33 33 33 33 33 33 33 33 33 33	Zn 24 65 79 		26-Oct-23 SAR 18 7.7 12	PROP	ERTY BC		RY ATIONS ATIONS	GSBH	BH/MW- = 90.35 (D = 88.2 BH/MW BH-5 GS = 91. AR = 92	11 11 11 11 11 11 11 11 11 11
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Cd <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25 25 Bo	Hg <0.050 <0.050 <0.050 <0.050 PARAM Antim Arse Bari Berry Boron ron (Hot W Cadn Chromiur Chromiur Cot Cop Lee Merc Molv br	Mo 1.4 0.70 1.0 NETERS nony enic ium Ilium (Total) //ater Solubl nium (Total) ium VI balt oper ad cury denum	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW) C de C r C co C cu Pb Mg Mg	Ag	n 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 222 140 120 120 7 6 0 0 0 0 0 0 0 0 0 0 0 0 0	V 24 29 33 3/04 SC S stial	Zn 24 65 79 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		26-Oct-23 SAR 18 7.7 12	PROPUSAMPLITABLE	ERTY BC	DUNDAH EEDS REGUL/	RY ATIONS ATIONS	GS BH	BH/MW- = 90.35 (D = 88.2 BH/MW BH-5 GS = 91. AR = 90 BR = 85	111 111 111 111 111 111 111 111
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Q, 10 Q, 10 Q, 10 Q, 10	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25 8 80	Hg <0.050 <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chromiur Chromiur Cop Lee Merc Moly bo	Mo 1.4 0.70 1.0 IETERS nony enic ium Ilium (Total) /ater Solubl nium m (Total) ium VI balt oper ad cury denum kcl	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW) Cd C r C C cu Pb Hg Max	Ag ⊲ 20 ⊲ 20 ⊲ 20 ⊲ 20 ⊲ 20 IATION 0 6 6 6 6 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 222 140 120 0.27 6.9 4 120 120 120 120 120 120 120 120 120 120	V 24 29 33 3/04 SCS atial	Zn 24 65 79 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		26-Oct-23 SAR 18 7.7 12	PROPI SAMPL TABLE SAMPL TABLE NOT S	ERTY BC		IP IP RY ATIONS ATIONS	GSB	BH/MW- = 90.35 (D = 88.2) BH/MW BH-5 GS = 91. AR = 85	11 11 11 11 11 11 11 11 11 11
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 5	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Q.10 <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chr	Mo 1.4 0.70 1.0 1.0 IETERS nony enic ium Ilium (Total) /ater Solubl nium m (Total) ium VI balt oper ad cury denum ikel	Ni 11 31 39	Se	Ag ⊲0.20 ⊲0.20 ⊲0.20 IATION 0 <th>Π 0.18 0.16 0.20</th> <th>U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 120 0.27 6.9 100</th> <th>V 24 29 33 3/04 SC S atial</th> <th>Zn 24 65 79 </th> <th>EC 0.60 0.26 0.22</th> <th>26-Oct-23 SAR 18 7.7 12</th> <th>PROPI SAMPL TABLE SAMPL TABLE</th> <th>ERTY BO</th> <th></th> <th>RY ATIONS ATIONS</th> <th>GSBH</th> <th>BH/MW- = 90.35 (D = 88.2 BH/MW BH-5 GS = 91. AR = 90 BR = 85</th> <th>11 11 11 11 11 11 11 11 11 11</th>	Π 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 120 0.27 6.9 100	V 24 29 33 3/04 SC S atial	Zn 24 65 79 	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12	PROPI SAMPL TABLE SAMPL TABLE	ERTY BO		RY ATIONS ATIONS	GSBH	BH/MW- = 90.35 (D = 88.2 BH/MW BH-5 GS = 91. AR = 90 BR = 85	11 11 11 11 11 11 11 11 11 11
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Q.10 <0.10 <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25 80 80	Hg <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chromiur Chromiur Chromius Cot Cop Lee Merc Moly bo Nic Seler	Mo 1.4 0.70 1.0 IETERS nony enic ium Illium (Total) /ater Solubl nium m (Total) jum VI balt opper ad cury denum kel nium	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW C cd Cr C r C C cd Cu Pb Hg Mod Ni Se Se	Ag	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 3900 4 1200 1.5 1.2 160 8 222 1400 1200 0.277 6.9 1000 2.4	V 24 29 33 3/04 SCS atial	Zn 24 65 79 	EC 0.60 0.26 0.22	26-Oct-23 SAR 18 7.7 12	PROPI SAMPL TABLE SAMPL TABLE NOT S	ERTY BC E EXCE 7 SCS F AMPLED		RY ATIONS	GSBJ	BH/MW- = 90.35 (D = 88.2 BH/MW BH-5 GS = 91. AR = 90 BR = 85	11 11 11 11 11 11 11 11 11 11
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Q.10 <0.10 <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25 8 8 9 80	Hg <0.050 <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chromiur Chromiur Chromiur Cot Cop Lee Merc Moly bc Nic Seler Silu	Mo 1.4 0.70 1.0 IETERS nony enic ium Illium (Total) /ater Sclubl nium mium (Total) jum VI balt oper ad zury denum kel nium ver	Ni 11 31 39	Se <0.50 <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW) C de C r C co C cu Pb Hgg Mod N ici Si	Ag	π 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 222 140 120 0.27 6.9 100 100 124 20 100 100 100 100 100 100 100 100 100	V 24 29 33 3/04 SC S ttial	Zn 24 65 79 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		26-Oct-23 SAR 18 7.7 12	PROPI SAMPL TABLE NOT S	ERTY BC E EXCE 7 SCS F AMPLED	DUNDAH EEDS REGUL/ SREGUL/	RY ATIONS ATIONS	GS BH	BH/MW- = 90.35 (D = 88.2 BH/MW BH-5 GS = 91. AR = 90 BR = 85	11 11 11 11 11 11 11 11 11 11
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25 Bo	Hg <0.050 <0.050 <0.050 <0.050 0.050<br PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chromiur Chromiur Chromius Cop Lee Merc Moly bo Nic Seler Silv	Mo 1.4 0.70 1.0 1.0 IETERS nony enic ium Ilium (Total) /ater Solubl nium m (Total) ium VI balt oper ad cer wiry denum kel nium / er	Ni 11 31 39	Se <0.50 <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW) Cd C C C C C C O C C U Pb Hg Mod Ni Se Ag T T	Ag ⊲ 20 ⊲ 20 ⊲ 20 ⊲ 20 ⊲ 20 IATION 0 6 6 0 1 VS) 1 0 1 1 0 1 <p< th=""><th>TI 0.18 0.16 0.20</th><th>U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 222 140 120 0.27 6.9 100 2.4 20 4</th><th>V 24 29 33 3/04 SCS atial</th><th>Zn 24 65 79 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</th><th></th><th>26-Oct-23 SAR 18 7.7 12</th><th>PROPI SAMPL TABLE SAMPL TABLE NOT SJ</th><th>ERTY BC</th><th></th><th>RY ATIONS ATIONS</th><th></th><th>BH/MW- = 90.35 (D = 88.2 BH/MW BH-5 GS = 91. AR = 85</th><th>11 11 11 11 11 11 11 11 11 11</th></p<>	TI 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 222 140 120 0.27 6.9 100 2.4 20 4	V 24 29 33 3/04 SCS atial	Zn 24 65 79 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		26-Oct-23 SAR 18 7.7 12	PROPI SAMPL TABLE SAMPL TABLE NOT SJ	ERTY BC		RY ATIONS ATIONS		BH/MW- = 90.35 (D = 88.2 BH/MW BH-5 GS = 91. AR = 85	11 11 11 11 11 11 11 11 11 11
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 5	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Q.10 < 0.10 < 0.10 < 0.10	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chromiur Chromiur Chromius Cop Lea Merc Molybo Nic Seler Silv Thal	Mo 1.4 0.70 1.0 1.0 IETERS nony enic ium Ilium (Total) /ater Solubl nium m (Total) ium VI balt oper ad cury denum ikel nium y er Ilium	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW C da Cr C r C da C r C da C r N C da C da C r N Se Ag Mod Ni Se Ag T T T	Ag ⊲0.20 ⊲0.20 ⊲0.20 IATION 0 <th>П 0.18 0.16 0.20</th> <th>U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 120 0.27 6.9 100 2.4 20 1</th> <th>V 24 29 33 3/04 SCS atial</th> <th>Zn 24 65 79 </th> <th>EC 0.60 0.25 0.22 We GENI</th> <th>26-Oct-23 SAR 18 7.7 12 0 0 0 0 0 0 0 0 0 0 0 0 0</th> <th>PROPU SAMPL TABLE SAMPL TABLE NOT S</th> <th>ERTY BO</th> <th></th> <th>RY ATIONS ATIONS</th> <th>ex</th> <th>BH/MW BH-5 GS = 91. AR = 90 BR = 85</th> <th>11 11 11 11 11 11 11 11 11 11</th>	П 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 120 0.27 6.9 100 2.4 20 1	V 24 29 33 3/04 SCS atial	Zn 24 65 79 	EC 0.60 0.25 0.22 We GENI	26-Oct-23 SAR 18 7.7 12 0 0 0 0 0 0 0 0 0 0 0 0 0	PROPU SAMPL TABLE SAMPL TABLE NOT S	ERTY BO		RY ATIONS ATIONS	ex	BH/MW BH-5 GS = 91. AR = 90 BR = 85	11 11 11 11 11 11 11 11 11 11
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Q.10 <0.10 <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25 80 80	Hg <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chromiur Chromiur Chromius Cot Cop Lee Merc Moly bo Nic Seler Silv Thal Uran	Mo 1.4 0.70 1.0 IETERS nony enic ium Illium (Total) /ater Solubl nium m (Total) ium VI balt oper ad cury denum kel nium / er Illium nium	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW C cd Cr C r C C cd Cr C cd Cu Pb Hg Mod Ni Se Ag TI U	Ag <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20 <0.20	π 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 120 0.27 6.9 100 2.4 20 1 1 23	V 24 29 33 3/04 SCS atial	Zn 24 65 79	EC 0.60 0.25 0.22	26-Oct-23 SAR 18 7.7 12	PROPU SAMPL TABLE SAMPL TABLE NOT S	ERTY BC E EXCE 7 SCS F E MEET 7 SCS F AMPLED	DUNDAR	RY ATIONS ATIONS		BH/MW- = 90.35 (D = 88.2 BH-5 GS = 91. AR = 90 BR = 85	11 11 11 11 11 11 11 11 11 11
BH-11 SS1 SS2 DUP 3 UP 3 UP 5 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Q 10 Q Q 10 Q	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25 8 8 9 80	Hg <0.050 <0.050 <0.050 PARAM Antim Arse Barn Bery Boron ron (Hot W Cadm Chromiur Chroniur Chromiur Chromiur Chroniur Chromiur Chromiur	Mo 1.4 0.70 1.0 IETERS nony enic ium Illium (Total) /ater Solubl nium m (Total) ium VI balt oper ad cenum ikel nium ver Illium	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW) Cd C C C C C C C C C Pb Hg Moc Ni See Ag TI U V	Ag ⊲ 20 ⊲ 20	Π 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 120 0.27 6.9 100 2.4 20 1 1 23 86	V 24 29 33 3/04 SC S trial	Zn 24 65 79 E		26-Oct-23 SAR 18 7.7 12	PROPU SAMPL TABLE NOT SA	ERTY BC E EXCE 7 SCS F AMPLED		RY ATIONS ATIONS		BH/MW- = 90.35 (D = 88.2 BH/MW BH-5 (S = 91.) AR = 90 BR = 85	11 11 11 11 10 11 10 11 10 10
BH-11 SS1 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Q, 10 Q, 10 Q, 10 Q, 10	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg Hg 40.050 <0.050 <0.050 <0.050 <0.050 PARAM Antim Arse Barin Barin Boron ron (Hot W Cadn Chromiur Color Lei Merc Moly bo Nic Seler Silv Thal Uran vana vana vana	Mo 1.4 0.70 1.0 1.0 IETERS nony enic ium Ilium (Total) /ater Solubl nium m (Total) ium VI balt oper ad cury denum kel nium / rer Ilium nium cer	Ni 11 31 39	Se <0.50 <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW) Cd C C C C C C C C C C C C W C C C C C C W C C C C C C W C C W C C C C U Pb Hg Mod Ni See Ag TI U U	Ag ⊲ 20 ⊲ 20 ⊲ 20 ⊲ 20 ⊲ 20 IATION 0 6 6 0 6 0 1 1 0 1 1 0 1		U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 222 140 120 0.27 6.9 100 2.4 20 1 1 23	V 24 29 33 3/04 SCS atial	Zn 24 65 79 		26-Oct-23 SAR 18 7.7 12	PROPI SAMPL TABLE SAMPL TABLE NOT SJ	ERTY BC		RY ATIONS ATIONS	ex	BH/MW- = 90.35 (D = 88.2) BH/MW BH-5 GS = 91. ABR = 85 (C) BR = 85	11 11 11 11 11 11 11 11 11 11
BH-11 SS1 SS2 DUP 3 UB000 SS2 DUP 3 UB000 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Q.10 <q.10< td=""> <q.10< td=""> <q.10< td=""></q.10<></q.10<></q.10<>	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chromiur Chromiur Chromiur Chromiur Chromiur Chromiur Chromiur Chromiur Cop Lea Merc Molybo Nic Seler Silv Thal Uran Zir	Mo	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW Cd Cr Cr Cd Cr Cd Cu Pb Hg Mod Ni Se Ag Ti U V Zn Cn	Ag ⊲0.20 ⊲0.20 ⊲0.20 IATION 0 <th>П 0.18 0.16 0.20</th> <th>U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 120 0.27 6.9 100 2.4 20 1 23 86 340</th> <th>V 24 29 33 3/04 SCS atial</th> <th>Zn 24 65 79 </th> <th>EC 0.60 0.28 0.22 We GENI</th> <th>26-Oct-23 SAR 18 7.7 12 0 0 0 0 0 0 0 0 0 0 0 0 0</th> <th>PROPU SAMPL TABLE SAMPL TABLE NOT S</th> <th>ERTY BO</th> <th></th> <th>RY ATIONS ATIONS</th> <th></th> <th>BH/MW = 90.35 (D = 88.2 (D BH-5 GS = 91. AR = 90 BR = 85 (D </th> <th>11 11 11 11 11 11 11 11 10 11 10 10</th>	П 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 120 0.27 6.9 100 2.4 20 1 23 86 340	V 24 29 33 3/04 SCS atial	Zn 24 65 79 	EC 0.60 0.28 0.22 We GENI	26-Oct-23 SAR 18 7.7 12 0 0 0 0 0 0 0 0 0 0 0 0 0	PROPU SAMPL TABLE SAMPL TABLE NOT S	ERTY BO		RY ATIONS ATIONS		BH/MW = 90.35 (D = 88.2 (D BH-5 GS = 91. AR = 90 BR = 85 (D 	11 11 11 11 11 11 11 11 10 11 10 10
BH-11 SS1 SS2 DUP 3 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Q.10 <0.10 <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI 0.18 Ф.18 0.22	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25 80 80	Hg <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chromiur Chromiur Chromiur Chromius Cot Cop Lee Merc Molybo Nic Seler Silv Thal Uran Vana Zir	Mo 1.4 0.70 1.0 IETERS nony enic ium Illium (Total) /ater Solubl nium (Total) //ater Solubl nium //ater Solubl //a	Ni 11 31 39	Se <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW C cd Cr C r Cd C r Cd C r Ni Se Ag Mac Ni Se Ag TI U V Zn	Ag ⊲0.20 ⊲0.20 ⊲0.20 IATION 0 <th>π 0.18 0.16 0.20</th> <th>U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 120 0.27 6.9 100 2.4 20 1 23 86 340</th> <th>V 24 29 33 3/04 SCS atial</th> <th>Zn 24 65 79</th> <th></th> <th>26-Oct-23 SAR 18 7.7 12</th> <th>PROPU SAMPL TABLE SAMPL TABLE NOT S</th> <th>ERTY BO E EXCE 7 SCS F AMPLED</th> <th></th> <th>RY ATIONS ATIONS</th> <th></th> <th>BH/MW BH-5 GS = 91. AR = 90 BR = 85 CD CD ROJECT:</th> <th>11 11 11 11 11 11 11 11 11 11</th>	π 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 120 0.27 6.9 100 2.4 20 1 23 86 340	V 24 29 33 3/04 SCS atial	Zn 24 65 79		26-Oct-23 SAR 18 7.7 12	PROPU SAMPL TABLE SAMPL TABLE NOT S	ERTY BO E EXCE 7 SCS F AMPLED		RY ATIONS ATIONS		BH/MW BH-5 GS = 91. AR = 90 BR = 85 CD CD ROJECT:	11 11 11 11 11 11 11 11 11 11
BH-11 SS1 SS2 DUP 3 UP 3 UP 3 UP 3 UP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Q.10 <0.10 <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25 8 8 9 80	Hg <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chromiur Chromiur Chromius Cot Cop Lee Merc Moly bo Nic Seler Silv Thal Urar Vana Zir	Mo 1.4 0.70 1.0 IETERS nony enic ium Illium (Total) /ater Solubl nium (Total) ium VI balt oper ad cury denum kel nium rer Illium nium	Ni 11 31 39	Se <0.50 <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW) C de C r C C cd C cd C for C r C de Ni Ba Ag Mu See Ag TI U V Z n C	Ag	π 0.18 0.16 0.20	U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 222 140 1200 0.27 6.9 1000 2.4 20 1 23 86 340	V 24 29 33 3/04 SC S ttial	Zn 24 65 79 		26-Oct-23 SAR 18 7.7 12 NeSS	PROPU SAMPL TABLE NOT SJ	ERTY BC E EXCE 7 SCS F AMPLED		RY ATIONS ATIONS BGC		BH/MW- = 90.35 (D = 88.2 (D BH-5 (BR = 85) (BR = 85) (BR = 85) (C) (BR = 85) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	11 11 11 11 11 11 11 10 11 10 11 10 10
BH-11 SS1 SS2 DUP 3 UP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20 <0.20 0.22	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Cd <0.10 <0.10 <0.10	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg Hg 40.050 <0.050 <0.0	Mo 1.4 0.70 1.0 1.0 IETERS nony enic ium Ilium (Total) /ater Solubl nium m (Total) ium VI balt oper ad cer ium kel nium /er ium ium cer ium	Ni 11 31 39	Se <0.50 <0.50 <0.50 <0.50 ABBREV Sb As Ba Be B (HW) Cd C C C C C C C C C Pb Hg Mod Ni See Agg TI U V Zn <th>Ag ⊲ 20 ⊲ 20</th> <th></th> <th>U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 222 140 1200 0.27 6.9 1000 2.4 200 1 23 86 340</th> <th>V 24 29 33 3/04 SCS atial</th> <th>Zn 24 65 79 </th> <th></th> <th></th> <th>PROPI SAMPL TABLE SAMPL TABLE NOT SJ</th> <th>ERTY BC EE EXCE 7 SCS F AMPLED</th> <th></th> <th>RY ATIONS ATIONS BGC</th> <th></th> <th>BH/MW- = 90.35 (D = 88.2 BH/MW BH-5 GS = 91. GS = 91. GS</th> <th>11 11 11 10 11 10 11 10 10 11 10 10</th>	Ag ⊲ 20 ⊲ 20		U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 222 140 1200 0.27 6.9 1000 2.4 200 1 23 86 340	V 24 29 33 3/04 SCS atial	Zn 24 65 79 			PROPI SAMPL TABLE SAMPL TABLE NOT SJ	ERTY BC EE EXCE 7 SCS F AMPLED		RY ATIONS ATIONS BGC		BH/MW- = 90.35 (D = 88.2 BH/MW BH-5 GS = 91. GS	11 11 11 10 11 10 11 10 10 11 10 10
BH-11 SS1 SS2 DUP 3 UDP 3 UDP 6 DO 0000 SS2 DUP 3	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Q.10 <q.10< td=""> <q.10< td=""> <q.10< td=""> <q.10< td=""></q.10<></q.10<></q.10<></q.10<>	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chromiur Chromiur Chromiur Chromiur Chromiur Chromiur Chromiur Chromiur Cot Cop Lea Merc Moly bc Nic Seler Silv Thal Urar Vana Zir	Mo 1.4 0.70 1.0 1.0 IETERS nony enic ium Illium (Total) ium VI balt pper ad cury denum ikel nium ium ium ium ium ium ium ium ium ium	Ni 11 31 39	Se <0.50	Ag		U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 222 140 120 0.27 6.9 100 2.4 20 1 23 86 340	V 24 29 33 3/04 SCS atial	Zn 24 65 79 LEC			PROPU SAMPL TABLE SAMPL TABLE NOT SJ	ERTY BO				BH/MW- = 90.35 (D BH/MW BH-5 GS = 91. AR = 90 BR = 85 C C C C C C C C C C C C C C C C C C C	In the second se
BH-11 SS1 SS2 DUP 3 UP 3 U	Depth (mbgs) 0.1 b 0.7 0.8 b 1.4 0.8 b 1.4	Sb <0.20	As 2.9 5.6 7.1	Ba 32 51 65 1	Be 0.26 0.82 0.97	B [5.4 5.6 8.3	B (HWS) 0.10 0.11 0.21	Cd Q.10 <	Cr 12 26 30	Cr VI	Co 5.7 16 18	Cu 14 30 38	Pb 7.5 18 25	Hg <0.050 <0.050 <0.050 <0.050 PARAM Antim Arse Bari Bery Boron ron (Hot W Cadn Chromiur Chromiur Chromiur Chromiur Chromius Cop Lee Merc Molybo Nic Seler Silv Thal Uran Vana Zir	Mo 1.4 0.70 1.0 1.0 IETERS nony enic ium Illium (Total) /ater Sclubl nium m (Total) ium VI balt oper ad cury denum kel nium v er Illium nium nc	Ni 11 31 39	Se <0.50	Ag ⊲0.20 ⊲0.20 ⊲0.20 IATION 0 <td></td> <td>U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 120 0.27 6.9 100 2.4 200 1 23 86 340</td> <td>V 24 29 33 3/04 SCS atial</td> <td>Zn 24 65 79 LEC</td> <td></td> <td></td> <td>PROPU SAMPL TABLE SAMPL TABLE NOT SJ</td> <td>ERTY BO EE EXCE 7 SCS F AMPLED</td> <td></td> <td>RY ATIONS BGC SC</td> <td></td> <td>BH/MW = 90.35 (D BH/MW BH-5 GS = 91. AR = 90 BR = 85 C C C C C C C C C C C C C</td> <td>11 11 11 11 11 11 11 11 11 11</td>		U 0.58 0.66 0.65 REG 15: TABLE 7 Resider 7.5 18 390 4 120 1.5 1.2 160 8 22 140 120 0.27 6.9 100 2.4 200 1 23 86 340	V 24 29 33 3/04 SCS atial	Zn 24 65 79 LEC			PROPU SAMPL TABLE SAMPL TABLE NOT SJ	ERTY BO EE EXCE 7 SCS F AMPLED		RY ATIONS BGC SC		BH/MW = 90.35 (D BH/MW BH-5 GS = 91. AR = 90 BR = 85 C C C C C C C C C C C C C	11 11 11 11 11 11 11 11 11 11







	0	20	4	10	60		80		100		120		140						0		20	40		60	80	1	00 120	
BH-1	Depth (mbgs)	Sb /	s Ba	Be	B	B (HWS)	Cd	Cr	Cr VI	Co	Cu	РЬ	Hg	Mo	Ni	Se	Ag	TI	U	V	Zn	26-0 EC SA	R	PARAMETER	s	ABB	REVIATION	REG 153/04 TABLE 7 SCS
551 DUD 1	0.9 to 1.5	<0.20 4	4 00 71	0.77	<5.0	0.092	0.1	25	0.22	10	23	11 1	40.050	<0.50	28	<0.50	40.20	0.14	0.61	30	49	0.65 1						Residential
SS3	1.7 to 2.3	0.20 7	6 100	1.0	6.5	0.16	0.13	32	<0.18	23	40	18	0.067	1.0	42	<0.50	<0.20	0.19	0.74	36	90	0.51 1	3	Antimony			Sb	7.5
			1.00			· · ·	-						1											Arsenic	-		As	18
BH-2	Depth (mbgs)	Sh 4	s Ra	Be	B	B (HWS)	Cd	Cr	Cr VI	Co	Cu I	Ph	Ha	Mo	Ni	Se	Aa	n	u 1	v	Zn	30-04	R -23	Barium		-	Ba	390
SS1	0.2 to 0.8	0.28 6	9 170	0.97	9.5	0.45	0.12	32	<0.18	18	40	20	0.050	1.2	42	<0.50	<0.20	0,16	0.98	32	93	0.42 8.	1	Beryllium			Be	4
AS3	1.7 to 2.3	0.23 8	1 110	0.65	<5.0	0.096	0.23	23	<0.18	11	19	19 .	⊲0.050	1.6	25	<0.50	⊲0.20	0.16	0.66	31	69	0.27 4.	6	Boron (Total)		2	B	120
				- 2540 - 55	1889 - A					0 N			No.									14.04	0.23	Doron (List Water C	alubla)			120
BH-3	Depth (mbgs)	Sb A	s Ba	Be	В	B (HWS)	Cd	Cr	Cr VI	Co	Cu	РЬ	Hg	Mo	Ni	Se	Ag	πI	U	v	Zn	EC SA	R	Boron (Hot water 5	oluble)	C	(HVVS)	1.5
SS1	0.1 to 1.2	<0.20 4	4 64	0.70	6.7	-	<0.10	23	•	11	24	12	<0.050	0.51	24	<0.50	<0.20	0.15	0.61	31	52			Cadmium			Ca	1.2
			1.2	162 2					· · · · · ·	V					- ×.									Chromium (Tot	al)		Cr	160
BH-4	Depth (mbgs)	Sh 4	e Ba	Be	R	B (HWS)	Cd [Cr	Cr VI	Col	Cu	Ph	Ha	Mo	Ni	Se	An	п	11	V	Zn	FC SA	C-23	Chromium V	1		Cr VI	8
SS2	1.2 to 1.5	<0.20 3	6 50	0.56	7.6		<0.10	23	-	12	19	12	<0.050	<0.50	21	<0.50	<0.20	0.12	0.77	29	47		<u>—</u> Г	Cobalt			Co	22
						1I			-															Copper			Cu	140
BH-6	Depth (mbgs)	- Ch 1		1 8-	1			0	0.10	- C- T	- C - 1	D	N - 1		Nº I	8. 1					7-	27-0	:t-23	Lead		÷	Pb	120
\$\$1	0.1 to 0.7	0.21 4	s Ba 3 73	0.60	5.6	B (HWS)	0.14	21	cr VI	14	22	23	Hg 0.050	MO 0.05	27	<0.50	Ag	0.17	0.6	27	2n 82	0.38 1	<u>-</u>	Mercury			Ha	0.27
SS2	0.9 to 1.3	0.35 6	8 290	0.98	7.6	0.21	0.30	30	<0.18	20	43	26	<0.050	1.8	48	<0.50	<0.20	0.20	0.74	32	100	0.53 1		Moly bdenum		<u>.</u>	Mo	6.9
																								Nickel			Ni	100
BH-7	Depth (mbgs)	Sh /	e Pa	- Re			Cd	Cr	C: VI	Col	C	Dh.	Ha	Ma	N:	80	Aa			V 1	7.0	27-0	zt-23	Selenium	-		Se	24
\$S2A	0.9 to 1.2	<0.20 1	3 31	0.21	<5.0	0.14	<0.10	11	<0.18	4.9	11	5.6	<0.050	1.1	9.2	<0.50	Ag <0.20	0.12	0.49	20	18	0.22 5	8	Ciluat			40	2.4
\$\$2B	1.2 ti 1.5	<0.20 3	4 140	0.62	6.6	0.26	0.12	24	<0.18	15	25	21	<0.050	1.2	30	<0.50	<0.20	0.14	1.1	28	67	0.61 2		Silver			Ag	20
						1																		Inallium				1
BH-8	Depth (mbgs)	Sh 1	e Ba	Be	1 8	B (HWS)	Cd	Cr I	Cr VI	Co	Cu I	Ph	Ha	Ma	Ni	Se	Aa	-		v 1	Zn	27-0	p	Uranium]		0	23
AS3	1.5 to 2.1	<0.20 2	7 290	0.36	11	0.56	<0.10	18	<0.18	8.5	17	18	<0.050	0.77	16	<0.50	<0.20	0.18	0.41	17	32	0.55 7.	1	Vanadium			V	86
1					1	1 1													1					Zinc			Zn	340
BH-9	Depth (mbgs)	61 I I		1 0.	1 0	In June 1	64	C: 1	C: 10	C . 1	C	Db 1	No. 1	M- 1	Nº I	e- 1		70 1			7-	26-0	1-23					
AS1	0.1 to 0.5	<0.20 6	s ba 8 6.7	0.21	5.8	0.23	0.23	8.7	0.18	5.6	11	49	40.050	4.8	13	<0.50	Ag ⊲0.20	0.15	0.57	13	29	0.15 0.4	4					
SS2	0.8 to 2.4	<0.20 6	5 140	0.83	7.1	0.14	0.17	28	<0.18	19	40	16	<0.050	1.3	39	<0.50	<0.20	0.16	0.68	32	99	0.68 2	5				200	NVD
						1. I.																						
BH-10	Depth (mbgs)	Sh 1	e De	De .			Cd	Cr 1	Ce VI	Cal	C+ 1	Dh	Hall	Ma	N:	80	A.a.			v	7	26-0	st-23					
AS1	0.17 to 0.7	<0.20 7	2 27	0.43	6.8	0.19	0.36	14	<0.18	7.7	15	35	<0.050	3.1	19	<0.50	Ag <0.20	0.22	0.61	23	40	0.24 4	1					
SS2	0.9 to 1.5	<0.20 5	0 45	0.71	5.8	0.16	0.10	24	<0.18	13	28	16	<0.050	0.80	27	<0.50	<0.20	0.12	0.83	33	78	0.24 7.	2	rular:		OUT NT		DDO ISOT
DUP 2	0.9 to 1.5	<0.20 5	1 55	0.69	<5.0	0.11	0.11	24	<0.18	15	34	14	<0.050	0.95	30	⊲0.50	<0.20	0.12	0.71	30	80	0.31 7.	0 D.	SEPTEMBER 2	2024	CLIENT	∛BGO	PROJECT:
BH-11	Depth (mbgs)	et l		1.0-	1.0	D (1140)	04 1	0	0.10	Cr. 1	0. 1	DL I	Ha 1	Ma	ALC: T	e. 1	A - 1	TP 1		V 1	7-	26-0	t-23 D	ESIGN CHEC	KED	I	4 000	
\$\$1	0.1 to 0.7	<0.20 2	9 32	0.26	54	0.10	<0.10	12	<0.18	57	14	7.5	<0.050	14	11	<0.50	Ag <0.20	0.18	0.58	24	24	0.60 1	<u>-</u>		CK	TITLE:	SOIL CR	OSS SEC
001	0.8 to 14	<0.20 5	6 51	0.82	5.6	0.11	<0.10	26	<0.18	16	30	18	<0.050	0.70	31	<0.50	<0.20	0.16	0.66	29	65	0.26 7	7	RAWN BY		14/41	KIEV CENTE	
332	0.0 00 1.4										- 1922	12												AD		1 10//1	FILVI LAIID	E ME DEVEL()



a 1:250 (m) Scale vation Ele

С

West

B'

BH/MW-8

BH-17

BH/MW-9

East



6 mbgs	1 1.5 to 4	n Interva	Scree														BH/MW-1
VC	TCE	PCE	t-1,2-DCE	c-1,2-DCE	1,1-DCE	1,2-DCA	1,1-DCA	CF	F4	F3	F2	F1	X	E	T	В	DATE
<0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.50	<0.20	1.7	<200	<200	<100	<25	<0.20	<0.20	<0.20	<0.17	30-Nov -23
<0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.50	<0.20	0.34	•	•	•		<0.20	<0.20	<0.20	<0.20	25-Mar-24
<0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.50	<0.20	0.34	-	-	•	•	<0.20	<0.20	<0.20	<0.20	20-Jun-24
<0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.50	<0.20	<0.20	-				0.33	<0.20	<0.20	<0.20	24-Sep-24
1 mbas	1.1 to 14	Interval 1	Screen					2					-				BH/MW-2
VC	TCE	PCE	t-1,2-DCE	c-1,2-DCE	1,1-DCE	1,2-DCA	1,1-DCA	CF	F4	F3	F2	F1	X	E	T	В	DATE
<0.20	< 0.20	<0.20	<0.50	<0.50	<0.20	<0.49	<0.20	<0.20	-	-			<0.20	<0.20	<0.20	4.6	20-Jun-24
<0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.49	<0.20	<0.20					<0.20	<0.20	<0.20	1.6	24-Sep-24
6 mbas	2 6 to 5	n Interva	Scree													1	BH/MW-3
VC	TCE	PCE	t-1,2-DCE	c-1,2-DCE	1,1-DCE	1,2-DCA	1,1-DCA	CF	F4	F3	F2	F1	X	E	T	В	ATE
<0.20	<0.20	3	<0.50	<0.50	<0.20	<0.49	<0.20	4.6		-	-		<0.20	<0.20	< 0.20	<0.20	21-Dec-23
<0.20	< 0.20	0.47	<0.50	<0.50	<0.20	<0.49	<0.20	<0.20	•				<0.20	<0.20	<0.20	<0.20	15-Mar-24
<0.20	<0.20	0.47	<0.50	<0.50	<0.20	<0.49	<0.20	<0.20	•		•		<0.20	<0.20	<0.20	<0.20	20-Jun-24
<0.20	<0.20	3.8	<0.50	<0.50	<0.20	<0.49	<0.20	<0.20					<0.20	<0.20	<0.20	<0.20	24-Sep-24
				110000													
4 mbgs	1 2.4 to 5	n Interva	Scree														BH/MW-4
VC	TCE	PCE	t-1,2-DCE	c-1,2-DCE	1,1-DCE	1,2-DCA	1,1-DCA	CF	F4	F3	F2	F1	X	E	Т	В	DATE
< 0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.49	<0.20	1.1		-		2 7 3	0.66	<0.20	2.1	0.34	21-Dec-23
<0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.49	<0.20	<0.20		8		~	1.7	0.26	1.4	<0.20	15-Mar-24
<0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.49	<0.20	0.34	1	- × _	•		<0.20	<0.20	< 0.20	<0.20	20-Jun-24
<0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.49	<0.20	<0.20	-	-		•	<0.20	<0.20	<0.20	<0.20	24-Sep-24
7 mbas	0 3 to 13	Interval 1	Screen													1	BH/MW-7
7 mbgs VC	0.3 to 13 TCE	PCE	Screen	c-1.2-DCE	1.1-DCE	1.2-DCA	1.1-DCA	CF	F4	F3	F2	F1	x	E	T	в	BH/MW-7
7 mbgs VC <0.20	0.3 to 13 TCE <0.20	PCE <0.20	Screen t-1,2-DCE <0.50	c-1,2-DCE <0.50	1,1-DCE <0.20	1,2-DCA <0.50	1,1-DCA <0.20	CF 2.3	F4 <200	F3	F2	F1 <25	X 0.28	E <0.20	T 0.81	B 0.41	BH/MW-7 ATE 6-Dec-23
7 mbgs VC <0.20	0.3 to 13 TCE <0.20	PCE <0.20	Screen t-1,2-DCE <0.50	c-1,2-DCE <0.50	1,1-DCE <0.20	1,2-DCA <0.50	1,1-DCA <0.20	CF 2.3	F4 <200	F3 <200	F2 <100	F1 <25	X 0.28	E <0.20	T 0.81	B 0.41	BH/MW-7 ATE 6-Dec-23
7 mbgs VC <0.20 0 mbgs	0.3 to 13 TCE <0.20	nterval 1 PCE <0.20 n Interva	Screen t-1,2-DCE <0.50 Scree	c-1,2-DCE <0.50	1,1-DCE <0.20	1,2-DCA	1,1-DCA <0.20	CF 2.3	F4 <200	F3 <200	F2 <100	F1 <25	X 0.28	E <0.20	T 0.81	B 0.41	BH/MW-7 ATE 6-Dec-23 BH/MW-8
7 mbgs VC <0.20 0 mbgs VC	0.3 to 13 TCE <0.20 I 0.7 to 2 TCE	nterval 1 PCE <0.20 n Interva PCE	Screen t-1,2-DCE <0.50 Scree t-1,2-DCE	c-1,2-DCE <0.50 c-1,2-DCE	1,1-DCE <0.20 1,1-DCE	1,2-DCA <0.50 1,2-DCA	1,1-DCA <0.20 1,1-DCA	CF 2.3 CF	F4 <200 F4	F3 <200 F3	F2 <100 F2	F1 <25 F1	X 0.28 X	E <0.20 E	T 0.81 T	B 0.41 B	BH/MW-7 DATE 6-Dec-23 BH/MW-8 DATE
7 mbgs VC <0.20 0 mbgs VC <0.20	0.3 to 13 TCE <0.20 I 0.7 to 2 TCE <0.20	nterval 1 PCE <0.20 n Interva PCE <0.20	Screen t-1,2-DCE <0.50 Scree t-1,2-DCE <0.50	c-1,2-DCE <0.50 c-1,2-DCE <0.50	1,1-DCE <0.20 1,1-DCE <0.20	1,2-DCA <0.50 1,2-DCA <0.50	1,1-DCA <0.20 1,1-DCA <0.20	CF 2.3 CF <0.20	F4 <200 F4 <200	F3 <200 F3 <200	F2 <100 F2 <100	F1 <25 F1 520	X 0.28 X 99	E <0.20 E 57	T 0.81 T 1.0	B 0.41 B 42 0.7	BH/MW-7 ATE 6-Dec-23 BH/MW-8 ATE 6-Dec-23 15 Max 24
7 mbgs VC <0.20 0 mbgs VC <0.20	0.3 to 13 TCE <0.20 I 0.7 to 2 TCE <0.20	nterval 1 PCE <0.20 n Interva PCE <0.20	Screen t-1,2-DCE <0.50 Scree t-1,2-DCE <0.50 -	c-1,2-DCE <0.50 c-1,2-DCE <0.50 -	1,1-DCE <0.20 1,1-DCE <0.20	1,2-DCA <0.50 1,2-DCA <0.50	1,1-DCA ⊲0.20 1,1-DCA ⊲0.20	CF 2.3 CF <0.20	F4 <200 F4 <200 <200 <200	F3 <200 F3 <200 <200 <200	F2 <100 F2 <100 <100	F1 <25 F1 520 <25 <25	X 0.28 X 99 2.5 2.3	E <0.20 E 57 1.2	T 0.81 T 1.0 <0.20	B 0.41 B 42 0.7	BH/MW-7 DATE 6-Dec-23 BH/MW-8 DATE 6-Dec-23 15-Mar-24 DIP
7 mbgs VC <0.20 0 mbgs VC <0.20 - -	0.3 to 13 TCE <0.20 I 0.7 to 2 TCE <0.20	nterval 1 PCE <0.20 n Interva PCE <0.20 -	Screen t-1,2-DCE <0.50 Scree t-1,2-DCE <0.50 - -	c-1,2-DCE <0.50 c-1,2-DCE <0.50	1,1-DCE <0.20 1,1-DCE <0.20	1,2-DCA <0.50 1,2-DCA <0.50	1,1-DCA <0.20 1,1-DCA <0.20	CF 2.3 CF <0.20 -	F4 <200 F4 <200 <200 <200 <200	F3 <200 F3 <200 <200 <200 <200 <200 <200 <200 <20	F2 <100 F2 <100 <100 <100 <100	F1 <25 F1 520 <25 <25 <25	X 0.28 X 99 2.5 2.3 3.1	E <0.20 E 57 1.2 1.2 6.5	T 0.81 T 1.0 <0.20 <0.20	B 0.41 B 42 0.7 0.69 4.2	BH/MW-7 DATE 6-Dec-23 BH/MW-8 DATE 6-Dec-23 15-Mar-24 DUP 20. Lm-24
7 mbgs VC <0.20 0 mbgs VC <0.20 - -	0.3 to 13 TCE <0.20 I 0.7 to 2 TCE <0.20 - - -	Interval 1 PCE <0.20 In Interva PCE <0.20 - - - - -	Screen t-1,2-DCE <0.50 Scree t-1,2-DCE <0.50 - - -	c-1,2-DCE <0.50 c-1,2-DCE <0.50 - -	1,1-DCE <0.20 1,1-DCE <0.20 - -	1,2-DCA <0.50 1,2-DCA <0.50	1,1-DCA <0.20 1,1-DCA <0.20 - -	CF 2.3 CF <0.20 - -	F4 <200 F4 <200 <200 <200 <200 <200 <200	F3 <200 F3 <200 <200 <200 <200 <200 <200 <200 200<br 200</td <td>F2 <100 F2 <100 <100 <100 <100 <90</td> <td>F1 <25 F1 520 <25 <25 72 <25</td> <td>X 0.28 X 99 2.5 2.3 3.1 <0.40</td> <td>E <0.20 E 57 1.2 1.2 6.5 0.69</td> <td>T 0.81 T 1.0 <0.20 <0.20 0.3 <0.20</td> <td>B 0.41 B 42 0.7 0.69 4.2 2.2</td> <td>BH/MW-7 DATE 6-Dec-23 BH/MW-8 DATE 6-Dec-23 15-Mar-24 DUP 20-Jun-24 24-Sen-24</td>	F2 <100 F2 <100 <100 <100 <100 <90	F1 <25 F1 520 <25 <25 72 <25	X 0.28 X 99 2.5 2.3 3.1 <0.40	E <0.20 E 57 1.2 1.2 6.5 0.69	T 0.81 T 1.0 <0.20 <0.20 0.3 <0.20	B 0.41 B 42 0.7 0.69 4.2 2.2	BH/MW-7 DATE 6-Dec-23 BH/MW-8 DATE 6-Dec-23 15-Mar-24 DUP 20-Jun-24 24-Sen-24
7 mbgs VC <0.20 0 mbgs VC <0.20 - - -	0.3 to 13 TCE <0.20 I 0.7 to 2 TCE <0.20 - - - -	Interval 1 PCE <0.20 In Interva PCE <0.20 - - - - -	Screen t-1,2-DCE <0.50 Scree t-1,2-DCE <0.50 - - - - - -	c-1,2-DCE <0.50 c-1,2-DCE <0.50 - - -	1,1-DCE <0.20 1,1-DCE <0.20 - - - -	1,2-DCA <0.50 1,2-DCA <0.50 - -	1,1-DCA <0.20 1,1-DCA <0.20 - - - -	CF 2.3 CF <0.20 - - -	F4 <200 F4 <200 <200 <200 <200 <200 <200	F3 <200 F3 <200 <200 <200 <200 <200 <200 <200	F2 <100	F1 <25 F1 520 <25 <25 72 <25	X 0.28 99 2.5 2.3 3.1 <0.40	E <0.20 E 57 1.2 1.2 6.5 0.69	T 0.81 T 1.0 <0.20 <0.20 <0.20 0.3 <0.20	B 0.41 B 42 0.7 0.69 4.2 2.2	BH/MW-7 DATE 6-Dec-23 BH/MW-8 DATE 6-Dec-23 15-Mar-24 DUP 20-Jun-24 24-Sep-24
7 mbgs VC <0.20 0 mbgs VC <0.20 - - - 2 mbgs	0.3 to 13 TCE <0.20 1 0.7 to 2 TCE <0.20 - - - - - - - - - - - -	nterval 1 PCE <0.20 n Interva PCE <0.20 n Interva	Screen t-1,2-DCE <0.50 Scree t-1,2-DCE <0.50 - - - - Scree	c-1,2-DCE <0.50 c-1,2-DCE <0.50 - - -	1,1-DCE <0.20 1,1-DCE <0.20 - - -	1,2-DCA <0.50 1,2-DCA <0.50 - -	1,1-DCA <0.20 1,1-DCA <0.20 - - -	CF 2.3 CF <0.20 - - -	F4 <200	F3 <200	F2 <100	F1 <25 F1 520 <25 <25 72 <25	X 0.28 99 2.5 2.3 3.1 <0.40	E <0.20 E 57 1.2 1.2 6.5 0.69	T 0.81 T 1.0 <0.20 <0.20 0.3 <0.20	B 0.41 42 0.7 0.69 4.2 2.2	BH/MW-7 DATE 6-Dec-23 BH/MW-8 DATE 6-Dec-23 15-Mar-24 DUP 20-Jun-24 24-Sep-24 BH/MW-9
7 mbgs VC <0.20 0 mbgs VC <0.20 - - - 2 mbgs VC	0.3 to 13 TCE <0.20 I 0.7 to 2 TCE <0.20 - - - - - - - - - - - - - - - - - - -	nterval 1 PCE <0.20 n Interva PCE <0.20 n Interva PCE PCE	Screen t-1,2-DCE <0.50 Scree t-1,2-DCE <0.50 - - - - Scree t-1,2-DCE t-1,2-DCE	c-1,2-DCE <0.50 c-1,2-DCE <0.50 - - - - - - - - - - - - - - -	1,1-DCE <0.20 1,1-DCE <0.20 - - - - - - - - - - - - - - - - - - -	1,2-DCA <0.50 	1,1-DCA <0.20 1,1-DCA <0.20 - - - - - - - - - - - -	CF 2.3 CF <0.20 - - - - CF	F4 <200	F3 <200	F2 <100	F1 <25 F1 520 <25 <25 72 <25 F1	X 0.28 99 2.5 2.3 3.1 <0.40 X	E <0.20 E 57 1.2 1.2 6.5 0.69 E	T 0.81 T 1.0 <0.20 <0.20 0.3 <0.20 T	B 0.41 B 42 0.7 0.69 4.2 2.2 B B	BH/MW-7 DATE 6-Dec-23 BH/MW-8 DATE 6-Dec-23 15-Mar-24 DUP 20-Jun-24 24-Sep-24 BH/MW-9 DATE
7 mbgs VC <0.20 0 mbgs VC <0.20 - - - - 2 mbgs VC <0.20	0.3 to 13 TCE <0.20 10.7 to 2 TCE <0.20 - - - - 10.9 to 2 TCE <0.20	Interval 1 PCE <0.20 In Interva PCE <0.20 - - - n Interva PCE <0.20 - - - - - - - - - - - - -	Screen t-1,2-DCE <0.50 Scree t-1,2-DCE <0.50 - - - Scree t-1,2-DCE <0.50	c-1,2-DCE <0.50 c-1,2-DCE <0.50 - - - - - - - - - - - - - - - - - - -	1,1-DCE <0.20 1,1-DCE <0.20 - - - - - - - - - - - - - - - - - - -	1,2-DCA <0.50 1,2-DCA <0.50 - - - - - - - - - - - - - - - - - - -	1,1-DCA <0.20 1,1-DCA <0.20 - - - - - - - - - - - - - - - - - - -	CF 2.3 CF <0.20 - - - - - - - - - - - - - - - - - - -	F4 <200	F3 <200	F2 <100	F1 <25 F1 520 <25 <25 72 <25 F1 <25	X 0.28 X 99 2.5 2.3 3.1 <0.40	E <0.20 E 57 1.2 1.2 6.5 0.69 E <0.20	T 0.81 T 1.0 <0.20	B 0.41 B 42 0.7 0.69 4.2 2.2 2.2 B S <0.17	BH/MW-7 DATE 6-Dec-23 BH/MW-8 DATE 6-Dec-23 15-Mar-24 DUP 20-Jun-24 24-Sep-24 BH/MW-9 DATE 29-Nov-23
7 mbgs VC <0.20 0 mbgs VC <0.20 - - - - - - - - - - - - - - - - - - -	0.3 to 13 TCE <0.20 1 0.7 to 2 TCE <0.20 - - - 1 0.9 to 2 TCE <0.20 - - - - - - - - - - - - -	Interval 1 PCE <0.20 n Interva PCE <0.20 n Interva PCE <0.20	Screen t-1,2-DCE <0.50 Scree t-1,2-DCE <0.50 - - - Scree t-1,2-DCE <0.50 - - Scree t-1,2-DCE Scree t-1,2-DCE	c-1,2-DCE <0.50 c-1,2-DCE <0.50 - - - - c-1,2-DCE c-1,2-DCE <0.50	1,1-DCE <0.20 1,1-DCE <0.20 - - - - - - - - - - - - - - - - - - -	1,2-DCA <0.50 	1,1-DCA <0.20 1,1-DCA <0.20 - - - - - - - - - - - - - - - - - - -	CF 2.3 CF <0.20 - - - - - - - - CF <0.20	F4 <200	F3 <200	F2 <100	F1 <25 F1 520 <25 <25 72 <25 F1 <25	x 0.28 99 2.5 2.3 3.1 <0.40 x <0.20	E <0.20 E 57 1.2 1.2 6.5 0.69 E <0.20	T 0.81 T 1.0 <0.20	B 0.41 B 42 0.7 0.69 4.2 2.2 B B <0.17	BH/MW-7 DATE 6-Dec-23 BH/MW-8 DATE 6-Dec-23 15-Mar-24 DUP 20-Jun-24 24-Sep-24 BH/MW-9 DDATE 29-Nov -23 BH/MW-10
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PARAMETERS	ABBREVIATION	REG 153/04 TABLE 3 STANDARDS
Benzene	В	44
loluene	1	18000
Ethylbenzene	E	2300
l otal Xy lenes	X	4200
F1	F1 (C6-C10)	/50
F2	F2 (C10-C16)	150
F3	F3 (C16-C34)	500
F4	F4 (C34-C50)	500
Chloroform	CF	2.4
1,1-Dichloroethane	1,1-DCA	320
1,2-Dichlororethane	1,2-DCA	1.6
1, 1-Dichloroethy lene	1,1-DCE	1.6
Cis-1,2-Dichloroethylene	c-1,2-DCE	1.6
I rans-1,2,-Dichlorothy lene	1-1,2-DCE	1.6
l etrachloroethy lene	PCE	1.6
Trichloroethy lene	TCE	1.6
Viny I Chloride	VC	0.5



BH/MW-1	<u> </u>													Scre	en Interv	al 1.5 to 4	4.6 mbgs	1
DATE	В	T	E	X	F1	F2	F3	F4	CF	1.1-DCA	1,2-DCA	1,1-DCE	c-1.2-DCE	t-1,2-DCE	PCE	TCE	VC	1
30-Nov-23	<0.17	<0.20	<0.20	<0.20	<25	<100	<200	<200	1.7	<0.20	<0.50	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20	1
25-Mar-24	<0.20	<0.20	<0.20	<0.20	-		-	-	0.34	<0.20	<0.50	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20	1
20-Jun-24	<0.20	<0.20	<0.20	<0.20		-			0.34	<0.20	<0.50	<0.20	< 0.50	<0.50	<0.20	<0.20	<0.20	1
24-Sep-24	<0.20	<0.20	<0.20	0.33	-				<0.20	<0.20	<0.50	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20	1
				1	1				1	1	1	-		1	1	1		f i i i
BH/MW-2	1													Screen	Interval	11.1 to 14	4.1 mbgs	
DATE	В	T	E	X	F1	F2	F3	F4	CF	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC	1
20-Jun-24	4.6	<0.20	<0.20	<0.20		•	-		<0.20	<0.20	<0.49	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20]
24-Sep-24	1.6	<0.20	<0.20	<0.20		•	-	1	<0.20	<0.20	<0.49	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20]
DU/MW 2	r			-	~~~									Sara	on Interv	al 2.6 to 1	5.6 mbas	
DATE	в	Т	E	x	F1	F2	F3	F4	CF	1.1-DCA	1.2-DCA	1.1-DCE	c-12-DCE	t-1.2-DCE	PCE	TCE	VC	
21-Dec-23	<0.20	<0.20	<0.20	<0.20					4.6	<0.20	<0.49	<0.20	<0.50	<0.50	3	<0.20	<0.20	1
15-Mar-24	<0.20	<0.20	<0.20	<0.20					<0.20	<0.20	<0.49	<0.20	<0.50	<0.50	0.47	<0.20	<0.20	
20-Jun-24	<0.20	<0.20	<0.20	<0.20	-				<0.20	<0.20	<0.49	<0.20	<0.50	<0.50	0.47	<0.20	<0.20	1
24-Sep-24	<0.20	<0.20	<0.20	<0.20	-				<0.20	<0.20	<0.49	<0.20	<0.50	<0.50	3.8	<0.20	<0.20	-
			-	1	1		-		1	1					0.000	1		1
BH/MW-4														Scre	en Interv	al 2.4 to 5	5.4 mbgs	1
DATE	В	T	E	X	F1	F2	F3	F4	CF	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC	1
21-Dec-23	0.34	2.1	<0.20	0.66		-	•		1.1	<0.20	<0.49	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20	1
15-Mar-24	<0.20	1.4	0.26	1.7		•	-	•	<0.20	<0.20	<0.49	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20	1
20-Jun-24	<0.20	<0.20	<0.20	<0.20			-	-	0.34	<0.20	<0.49	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20	1
24-Sep-24	<0.20	<0.20	<0.20	<0.20		•	•		<0.20	<0.20	<0.49	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20	1
		÷		184		<i></i>				<u>^</u>								
BH/MW-/				v	54	50	52	54	or	44.004	4 2 0 0 4	44.005	- 40 005	Screen	Interval	10.3 to 1.	3.7 mbgs	
E Dec 22	B	0.91	E	A 0.09	F1	F2	F3	F4	0.0	1,1-DCA	1,2-DCA	1,1-DCE	C-1,2-DCE	t-1,2-DCE	PCE CO. 20	1CE	VC	
0-Dec-23	0.41	0.01	×0.20	0.20	~20	<100	<200	~200	2.5	\$0.20	<0.50	×0.20	<0.50	\$0.50	<0.20	\$0.20	40.20	1
BH/MW-8	1													Scre	en Interv	al 0.7 to 2	2.0 mbgs	1
DATE	В	Т	E	X	F1	F2	F3	F4	CF	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC	1
6-Dec-23	42	1.0	57	99	520	<100	<200	<200	<0.20	<0.20	<0.50	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20	1
15-Mar-24	0.7	<0.20	1.2	2.5	<25	<100	<200	<200	-		-	-	-		-	-	-	1
DUP	0.69	<0.20	1.2	2.3	<25	<100	<200	<200			•	•	•	•		•	•	1
20-Jun-24	4.3	0.3	6.5	3.1	72	<100	<200	<200			× .	-	•	-				1
DUP	3.8	0.3	5.8	2.8	•	•	-	-	•		•	-	•	•		•	•	1
24-Sep-24	2.2	<0.20	0.69	<0.40	<25	<90	<200	<200	-		•	-	•				•	1
DH/MW/ 0														S	an Interv	al 0.0 to 1	2.2 mbcs	1
DATE	P	T	E	v	E4	E2	E2	E4	1 65	11.004	12.004	11.005	1 c.1 2 D.C.F.	t 1 2 DCF		at 0.9 to 7		
29-Nov-23	<0.17	<0.20	<0.20	<0.20	<25	<100	<200	<200	<0.20	<0.20	<0.50	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20	
20-1101-20	-0.11	40.20	40.20	40,20	4.5	100	-200	-200	40.20	-0.20	40.00	40.20	40.00	40.00	40.20	-0.20	40.20	1
BH/MW-10	1					_								Scre	en Interv	al 1.0 to 2	2.5 mbgs	1
DATE	В	T	E	X	F1	F2	F3	F4	CF	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC	1
29-Nov -23	0.54	<0.20	<0.20	<0.20	<25	<100	<200	<200	<0.20	<0.20	<0.50	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20	1
DUP	0.51	<0.20	<0.20	<0.20	<25	<100	<200	<200	<0.20	<0.20	<0.50	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20	1
20-Jun-24	<0.20	<0.20	<0.20	<0.40	•	-					-		•			•		1
24-Sep-24	<0.20	<0.20	<0.20	<0.40	•		•	•	•	-	•	-	-			•	-	1
BH/MW-12										1		1055			S	creen Inte	erval 11.0	to 14.0 mbgs
DATE	B	T	E	X	F1	F2	F3	F4	CF	н	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	1-1,2-DCE	PCE	TCE	VC
6-Dec-23	0.91	1.5	<0.20	0.96	<25	<100	<200	<200	1.6	<1.0	<0.20	<0.50	< 0.20	<0.50	<0.50	0.73	<0.20	<0.20
25-Mar-24	12	1.9	0.94	13	<25	<100	<200	<200	< 0.20	5	<0.20	<0.50	<0.20	<0.50	<0.50	5.3	0.48	<0.20
21-Jun-24	3.3	5.1	0.56	7.3		-	•		<0.20	5.9	<0.20	<0.50	<0.20	< 0.50	<0.50	<2.0	1.9	<0.20



SEPTEM	BER 2024	SF BGO	
ESIGN	CHECKED	4 5 6 6	
CK / MM	СК		
RAWN BY	S	WALKLEY CENTRE R	E-DEVELOPME

· · ·	0.00	0.00	0.00				
	PARAMETERS	ABBRE	VIATION	REG 153/04 TABLE 7 STANDARDS 0.5			
	Benzene	1	В	0	.5		
	Toluene		T	3	20		
	Ethylbenzene		E	1	<u>j4</u>		
	Total Xylenes		X	72			
	F1	F1 (C	6-C10)	420 150 500			
	F2	F2 (C	10-C16)				
	F3	F3 (C	16-C34)				
	F4	F4 (C3	34-C50)	5	00		
	Chloroform	0	F		2		
_	1,1-Dichloroethane	1,1-	DCA	1	1		
	1,2-Dichlororethane	1,2-	DCA	0	.5		
1	1,1-Dichloroethylene	1,1-	DCE	0	.5		
Ci	s-1,2-Dichloroethylene	c-1,2	2-DCE	1	.6		
Tra	ns-1,2,-Dichlorothy lene	t-1,2	-DCE	1.6			
	Tetrachloroethy lene	P	CE	0	.5		
	Trichloroethylene	T	0	.5			
	Viny I Chloride	V	/C	0	.5		



LEGEND			
	PROPERTY BOUNDARY	BH/MW-1	MO (S)
$\bullet \bullet$	SAMPLE EXCEEDS TABLE 7 SCS REGULATIONS	BH-5	BO
$\mathbf{\Phi}$	SAMPLE MEETS TABLE 7 SCS REGULATIONS	(89.49)	SH
*	NOT SAMPLED	(83.69)	DE
	*€	exp.	E) t: + 265 Ott

	DEITEOLI	
Л	CHECKED	
A	s	WALKLEY CENTRE RE-DEVELOPMEN

4.6 mbgs	rval 1.5 to	Screen Inte	S						c. 4										BH-1
Zn	V	U	Π	Na	Ag	Se	Ni	Мо	Pb	Cu	Co	Cr	Cd	В	Be	Ba	As	Sb	ATE
<5.0	<0.50	2.9	0.059	820000	<0.090	<2.0	6.3	11	<0.50	2.5	2.5	<5.0	<0.090	520	<0.40	1800	1.1	1.4	30-Nov -23
								308							10		5. di		
3.7 mbgs	al 10.3 to 1	een Interv	Scr																BH-7
Zn	V	U	Π	Na	Ag	Se	Ni	Mo	Pb	Cu	Co	Cr	Cd	В	Be	Ba	As	Sb	ATE
<5.0	0.59	2.4	<0.050	2300000	<0.090	<2.0	1.7	14	<0.50	0.99	<0.50	<5.0	<0.090	380	<0.40	1800	1.8	1.7	6-Dec-23
2.0 mbas	rval 0.7 to	creen Inte	5															1	BH-8
Zn	V	U	Π	Na	Ag	Se	Ni	Mo	Pb	Cu	Co	Cr	Cd	В	Be	Ba	As	Sb	ATE
<5.0	<0.50	1.7	<0.050	1300000	<0.090	<2.0	1.4	10	<0.50	1.1	0.53	<5.0	<0.090	76	<0.40	95	<1.0	<0.50	6-Dec-23
2 mbas	rval 0.9 to	creen Inte																· · · ·	BH-9
7n	V	11	n	Na	Aa	Se	Ni	Mo	Ph	Cu	Co	Cr	Cd	B	Bo	Ba	Ae	Sh	ATE
45.0	0.52	1.0	10.050	1400000	A9 000	10.0	0.0	1.0	10.50	0.0	00	-5.0	0.40	50	10.40	00	10	0.55	00 Nov 02
<0.0	0.53	1.0	<0.000	1100000	<0.090	<2.0	0.2	1.0	<0.50	2.3	2.4	<5.0	0.12	50	<0.40	69	<1.0	0.00	29-INOV -2.3
																			B 11 14
2.5 mbgs	erval 1.0 to	Screen Inte	5																BH-10
Zn	V	U	Π	Na	Ag	Se	Ni	Mo	Pb	Cu	Co	Cr	Cd	В	Be	Ba	As	Sb	ATE
<5.0	0.86	3.4	0.078	890000	0.093	<2.0	10	9.7	<0.50	4.5	5.9	<5.0	0.28	37	<0.40	150	<1.0	0.56	29-Nov -23
<5.0	0.58	3.3	0.07	880000	<0.090	<2.0	9.8	9.0	<0.50	3.6	5.5	<5.0	0.26	36	<0.40	140	<1.0	<0.50	DUP
		oon Intone	Ser																BH-12
4.0 mbgs	al 11.0 to 1	een interv	501																
4.0 mbgs Zn	al 11.0 to 1 V	U	TI	Na	Ag	Se	Ni	Mo	Pb	Cu	Co	Cr	Cd	В	Be	Ba	As	Sb	ATE

PARAMETERS	ABBREVIATION	REG 153/04 TABLE 7 STANDARDS	
Antimony	Sb	16000	ì
Arsenic	As	1500	
Barium	Ba	23000	
Boron	В	36000	
Cadmium	Cd	2.1	
Chromium	Cr	640	
Cobalt	Co	52	
Copper	Cu	69	
Lead	Pb	20	
Moly bdenum	Mo	70	
Nickel	Ni	390	
Selenium	Se	50	
Silver	Ag	1.2	
Sodium	Na	1800000	
Thallium	п	400	
Uranium	U	330	
Vanadium	v	200	
Zinc	Zn	890	

-2_Oct-202 by: SeverA
-B0_Ph- Plotted
23002538 3:55 PM
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	ABBREVIATION	REG 153/04 TABLE 7 STANDARDS
	В	0.5
	Т	320
	E	54
	х	72
	F1 (C6-C10)	420
	F2 (C10-C16)	150
	F3 (C16-C34)	500
	F4 (C34-C50)	500
	CF	2
	1,1-DCA	11
	1,2-DCA	0.5
i.	1,1-DCE	0.5
ne	c-1,2-DCE	1.6
ene	t-1,2-DCE	1.6
	PCE	0.5
	TCE	0.5



BH-1														Scree	en interva	1 1.5 10 4	1.6 mbg
DATE	В	T	E	X	F1	F2	F3	F4	CF	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC
30-Nov -23	<0.17	<0.20	<0.20	<0.20	<25	<100	<200	<200	1.7	<0.20	<0.50	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20
BH-3	T													Scree	en Interva	al 2.6 to 5	5.6 mbg
DATE	В	T	E	X	F1	F2	F3	F4	CF	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC
21-Dec-23	<0.20	<0.20	<0.20	<0.20	-	-	-	-	4.6	<0.20	<0.49	<0.20	<0.50	<0.50	3	<0.20	<0.20
BH-4	1													Scree	en Interva	al 2.4 to 5	5.4 mbg
DATE	В	Т	E	X	F1	F2	F3	F4	CF	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC
21-Dec-23	0.34	2.1	<0.20	0.66	•	•	•	-	1.1	<0.20	<0.49	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20
BH-7	1													Screen	Interval	10.3 to 13	3.7 m bg
DATE	В	T	E	X	F1	F2	F3	F4	CF	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC
6-Dec-23	0.41	0.81	<0.20	0.28	<25	<100	<200	<200	2.3	<0.20	<0.50	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20
BH-8	1													Scree	en Interva	al 0.7 to 2	2.0 mbg
DATE	В	T	E	X	F1	F2	F3	F4	CF	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC
6-Dec-23	42	1.0	57	99	520	<100	<200	<200	<0.20	<0.20	<0.50	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20
BH-9	1		~~.					· · ·						Scree	en Interva	al 0.9 to 2	2.2 mbg
DATE	B	T	E	X	F1	F2	F3	F4	CF	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC
29-Nov -23	<0.17	<0.20	<0.20	<0.20	<25	<100	<200	<200	<0.20	<0.20	<0.50	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20
BH-10	1													Scree	en Interva	al 1.0 to 2	2.5 m bg
DATE	В	T	E	X	F1	F2	F3	F4	CF	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC
29-Nov -23	0.54	<0.20	<0.20	<0.20	<25	<100	<200	<200	<0.20	<0.20	<0.50	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20
DUP	0.51	<0.20	<0.20	<0.20	<25	<100	<200	<200	<0.20	<0.20	<0.50	<0.20	<0.50	<0.50	<0.20	<0.20	<0.20
BH-12	1													Screen	Interval	11.0 to 14	4.0 m bg
DATE	В	Т	E	X	F1	F2	F3	F4	CF	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC
						-			-						and the second se		



Screen Interval 1 5 to 1.6 mbas



BHH														Jule	en miterva	ai 1.5 to .	. o mbg.
DATE	Ace	Acl	An	B(a)A	B(a)P	B(b/j)F	B(ghi)P	B(k)F	C	DA	FI	F	I(123)P	T-MN	N	P	Py
30-Nov-23	<0.050	<0.050	<0.050	<0.050	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	< 0.050	<0.050	<0.071	<0.050	<0.030	<0.050
BH-7	1													Screen	Interval	10.3 to 13	.7 mbgs
DATE	Ace	Acl	An	B(a)A	B(a)P	B(b/j)F	B(ghi)P	B(k)F	C	DA	FI	F	I(123)P	T-MN	N	Р	Py
6-Dec-23	<0.050	<0.050	<0.050	<0.050	0.026	<0.050	<0.050	<0.050	<0.050	<0.050	0.05	<0.050	<0.050	<0.071	<0.050	0.053	<0.050
BH-8	T			10										Scre	en Interva	al 0.7 to 2	2.0 mbg:
DATE	Ace	Acl	An	B(a)A	B(a)P	B(b/j)F	B(ghi)P	B(k)F	C	DA	FI	F	I(123)P	T-MN	N	P	Py
6-Dec-23	<0.050	<0.050	<0.050	<0.050	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	2.4	4.4	0.045	<0.050
BH-9	1		2	2								3		Scre	en Interva	al 0.9 to 2	2.2 mbg
DATE	Ace	Acl	An	B(a)A	B(a)P	B(b/j)F	B(ghi)P	B(k)F	C	DA	FI	F	I(123)P	T-MN	N	P	Py
29-Nov-23	<0.050	<0.050	<0.050	<0.050	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.071	<0.050	<0.030	<0.050
BH-10	1			12.										Scre	en Interva	al 1.0 to 2	2.5 mbg
DATE	Ace	Acl	An	B(a)A	B(a)P	B(b/j)F	B(ghi)P	B(k)F	C	DA	FI	F	I(123)P	T-MN	N	P	Py
29-Nov-23	<0.050	<0.050	<0.050	< 0.050	<0.0090	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	<0.050	<0.071	<0.050	< 0.030	< 0.050
DUP	<0.050	<0.050	<0.050	<0.050	<0.0090	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.071	<0.050	<0.030	<0.050
BH-12	Ť													Screen	Interval	11.0 to 14	l.0 mbg:
DATE	Ace	Acl	An	B(a)A	B(a)P	B(b/j)F	B(ghi)P	B(k)F	C	DA	FI	F	I(123)P	T-MN	N	P	Py
								0.050	0.050			0.050	0.050	.0.074	0.050	0.44	0.000



BH.1



Γ			4.6 mbgs	rval 1.5 to	Screen Inte	S																BH-1
L	ABBREVIATION	PARAMETERS	Zn	V	U	Π	Na	Ag	Se	Ni	Mo	Pb	Cu	Co	Cr	Cd	В	Be	Ba	As	Sb	DATE
			<5.0	<0.50	2.9	0.059	820000	<0.090	<2.0	6.3	11	<0.50	2.5	2.5	<5.0	<0.090	520	<0.40	1800	1.1	1.4	30-Nov -23
t	Sb	Antimony	2.7 mbrol	al 40 2 to 4	een Inter	Car															1	DH 7
t	As	Arsenic	3.7 mbgs	al 10.3 to 1	een Interv	50	No		6.	NI	Ma	DL	Cu	6.	<u></u>	64	P	Pe	Pa	4.0	Ch	DATE
t	Ba	Barium	<u>2n</u>	V 0.50	0	10.050	Na	Ag	Se	1.7	MO 14	PD ====	0.00	C0	CF 0	<0.000	200	De	1900	4.0	30	DATE Con 22
t	В	Boron	\$5.0	0.09	Z.4	¢0.050	2300000	<0.090	42.0	1.7	14	KU. 50	0.99	×0.50	\$5.0	<0.090	300	<0.40	1000	1.0	1.7	0-Dec-23
t	Cd	Cadmium	2.0 mbgs	erval 0.7 to	creen Inte	S															1	BH-8
t	Cr	Chromium	Zn	V	U	Π	Na	Ag	Se	Ni	Mo	Pb	Cu	Co	Cr	Cd	В	Be	Ba	As	Sb	DATE
t	Co	Cobalt	<5.0	<0.50	1.7	<0.050	1300000	< 0.090	<2.0	1.4	10	<0.50	1.1	0.53	<5.0	<0.090	76	< 0.40	95	<1.0	<0.50	6-Dec-23
t	Cu	Copper		1001						÷.		A		2		-	4	10 E	-			DUA
T	Pb	Lead	2.2 mbgs	rval 0.9 to	creen Inte								-				-	-	-			BH-9
t	Мо	Moly bdenum	Zn	V	U	11	Na	Ag	Se	NI	Mo	Pb	Cu	Co	Cr	Cd	В	Be	Ва	As	Sb	DATE
t	Ni	Nickel	<5.0	0.53	1.8	<0.050	1100000	<0.090	<2.0	6.2	1.6	<0.50	2.3	2.4	<5.0	0.12	50	<0.40	89	<1.0	0.55	29-Nov -23
t	Se	Selenium	25 mbas		area lat																	BU 40
t	Ag	Silver	2.5 mbgs	rvai 1.0 to	creen inte		No		0.	NI:	M- 1	DL I	0	0.	0-			D.	De	4.	OL I	BH-10
t	Na	Sodium	2n	V 0.00	0	0.079	Na	Ag	Se	NI 40	MO 0.7	PD	Cu	C0	Cr 45.0	0.00	B 27	Be	Ba 150	AS	50	DATE 00 Nov 02
t	п	Thallium	<0.0	0.00	3.4	0.078	890000	0.093	<2.0	10	9.7	<0.50	4.0	5.9	<5.0	0.28	3/	<0.40	100	<1.0	0.00	29-NOV-23
t	U	Uranium	\$0.0	0.00	3.3	0.07	000000	<0.090	42.0	9.0	9.0	×0.50	3.0	0.0	\$5.0	0.20	30	<0.40	140	<1.0	\$0.50	DUP
t	v	Vanadium	Ambaal	al 11 0 to 1	oon Inter	Car															1	DU 42
t	Zn	Zinc	4.0 mbgs		een Interv	50	No	A	6.	NI	Ma	DL	<u>C</u>	6	<u></u>	64	B	De	Pa	4.0	Ch.	DATE
_			20	V	0	11	Na	Ag	Se	NI	MO	PD	Cu	0.70	Cr	0.000	D	De	Da	AS	50	DATE
			15	0.88	1.9	<0.050	530000	<0.090	<2.0	3.2	30	0.55	3.9	0.78	<5.0	<0.090	180	<0.40	220	1.5	1.5	6-Dec-23

me: E:\OTT\OTT-23002538-B0\60 Execution\65 Drawings\23002538-B0_Ph-2_Oct-2024. Saved: Oct 9, 2024 9:36 AM Last Plotted: Oct 9, 2024 3:57 PM Plotted by: SeverA

*exp PROJECT: DATE LIEN ₿GO SEPTEMBER 2024 CHECKED DESIGN CK / MM CK TITLE: DRAWN BY AS

REG 153/04

TABLE 7

STANDARDS

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EXP Services Inc.

Sun Life Assurance Company of Canda c/o BentallGreenOak (Canada) LP Phase Two Environmental Site Assessment 1820-1846 Bank Street, Ottawa, Ontario OTT-22002538-B0 September 30, 2024

Appendix B: Survey Plan





EXP Services Inc.

Sun Life Assurance Company of Canda c/o BentallGreenOak (Canada) LP Phase Two Environmental Site Assessment 1820-1846 Bank Street, Ottawa, Ontario OTT-22002538-B0 September 30, 2024

Appendix C: Sampling and Analysis Plan



OTT-23002538-B0 Walkley Centre Development, 1820-1846 Bank Street, Ottawa, ON

Objectives:

The objective of this component of the project is to support future re-development of the site by completing a combined Geotechnical and Environmental investigation. A Record of Site Condition will be required for the site.

Drilling:

A total of 18 BH will be drilled for geotechnical/environmental purposes, and MW will be installed in 10 of them.

Based on the results of the Phase One ESA, a summary of the proposed work plan is as follows:

Area of Potential Environmental Concern (APEC)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)	Addressed by BH/MW/sample #
#1. Former on-site dry-cleaner	VOC	Soil and groundwater	BH/MW-3, BH/MW-4, BH/MW-12
#2. Former on-site gas station	PHC, VOC, metals	Soil and groundwater	BH/MW-7, BH/MW-8
#3. Former on-site rail siding	PAH, metals	Soil	BH/MW-3, BH-6
#4. Fill material	PHC, PAH, metals	Soil	BH/MW-1, BH/MW-2, BH/MW-3, BH/MW-4, BH-6, BH/MW-7, BH/MW-8, BH/MW-9, BH/MW- 10, BH/MW-11
#5. Former dry cleaner at 1800 Bank Street	VOC	Soil and Groundwater	BH/MW-1
#6. Former gas station at 1841 Bank Street	ΡΗϹ, VOC	Soil and Groundwater	BH/MW-8, BH/MW-9
#7. Repair garage at 1841 Bank Street	PHC, VOC, metals	Soil and groundwater	BH/MW-8, BH/MW-9
#8. Gas station at 1847 Bank Street	PHC, VOC	Soil and groundwater	BH/MW-8, BH/MW-9
#9. Former car dealership at 1850 Bank Street	PHC, VOC, metals	Soil and groundwater	BH/MW-10, BH/MW-11
#10. Former USTs associated with car dealership at 1850 Bank Street	ВТЕХ, РНС	Soil and groundwater	BH/MW-10, BH/MW-11
#11. Former rail line to the west of the site	PAH, metals	Soil	BH/MW-3, BH-5, BH/MW-11

- All monitoring wells to be screened across water table.
- Make sure that no screens straddle bedrock-soil interface. In other words, MW must be installed completely within bedrock or completely within overburden (most, if not all, will be in bedrock).
- As drilling progresses, log each sample, describing soil type, colour, staining, odour, petroleum vapour.

Soil Sampling:

- Two soil samples shall be submitted from BH/MW-1 to BH/MW-11 for analysis of PHC, VOC, PAH and metals and inorganics (sodium adsorption ratio, electrical conductivity, pH), to address preliminary excess soil requirements as wells as the APECs identified at the site.
- Three duplicate samples shall also be submitted for analysis.
- Samples should be submitted to Bureau Veritas.
- Results to be sent to chris.kimmerly@exp.com and leah.wells@exp.com

Low Flow Groundwater Sampling

- Monitor all 10 monitoring wells and record petroleum vapours, depth to water, and depth to LNAPL, if any.
- Groundwater samples shall be submitted from select monitoring wells for the parameters summarized in the table.
- One duplicate sample, a trip blank, and a field blank should be submitted for analysis.
- Samples should be submitted to Bureau Veritas.
- Results to be sent to <u>chris.kimmerly@exp.com</u> and <u>leah.wells@exp.com</u>
- Prior to sampling, ensure the following field parameters are stable (per the field measurement table): pH, conductivity, turbidity, DO, temperature and ORP
- EXP will survey ground elevations and top of pipe elevations, as well as UTM coordinates

EXP Services Inc.

Sun Life Assurance Company of Canda c/o BentallGreenOak (Canada) LP Phase Two Environmental Site Assessment 1820-1846 Bank Street, Ottawa, Ontario OTT-22002538-B0 September 30, 2024

Appendix D: Grain Size Analyses







EXP Project N	o.: OTT-23002538-A0	Project Name :		Geotechnical In	vestigat	ion - Walkley	Cen	tre Re-d	evelopment	
Client :	Sun Life Assurance Company of Canada	Project Location	:	1840-1846 Walk	ley Road	l, Ottawa				
Date Sampled	October 26, 2023	Borehole No:		BH1	San	nple No.:	SS	63	Depth (m) :	1.5-2.1
Sample Descri	ption :	% Silt and Clay	35	% Sand	46	% Gravel		19	Figuro :	D 1
Sample Descri	ption :	Silty Sand	and G	ravel (SM)					Figure .	D-1



100-2650 Queensview Drive

Grain-Size Distribution Curve Method of Test For Sieve Analysis of Aggregate **ASTM C-136**

Ottawa, ON K2B 8H6

*exp



Unified Soil Classification System

EXP Project No.:	OTT-23002538-A0	Project Name :		Geotechnical In	vestigat	ion - Walkey Cen	tre Red	evelopment	
Client :	Sun Life Assurance Company	Project Location	1 :	1822-1846 Bank	Street				
Date Sampled :	October 31, 2023	Borehole No:		BH17	Sample	: 69	61	Depth (m) :	0.1-0.2
Sample Composition :		Gravel (%)	54	Sand (%)	38	Silt & Clay (%)	8	Figure	D 2
Sample Description :	FILL: Poo	orly Graded Gra	ly Graded Gravel with Silt and Sand (GP-GM)						D-2



100-2650 Queensview Drive

Ottawa, ON K2B 8H6

Grain-Size Distribution Curve Method of Test For Sieve Analysis of Aggregate ASTM C-136

SAND GRAVEL CLAY AND SILT Fine Medium Coarse Coarse Fine GRAIN SIZE IN MICROMETERS SIEVE DESIGNATION (Imperial) 50 75 #200 3 1 5 10 30 3⁄8" 1⁄2" 3⁄4" 1" #50 #16 #4 3" #100 100 95 90 85 80 75 70 65 60 Ш 55 50 45 40 35 30 25 20 15 10 5 0 0.001 0.01 0.1 1 10 100 Grain size (mm)

EXP Project No.:	OTT-23002538-A0	Project Name :		Geotechnical Ir	nvestigat	ion - Walkey Cen	tre Red	evelopment	
Client :	Sun Life Assurance Company	Project Location	1 :	1822-1846 Banl	k Street				
Date Sampled :	November 2, 2023	Borehole No:		BH18	Sample	: G	S1	Depth (m) :	0.1-0.2
Sample Composition :		Gravel (%)	27	Sand (%)	56	Silt & Clay (%)	17	Eiguro I	D 2
Sample Description :	FILL: W	ell Graded Sand with Silt and Gravel (GW-GM)						rigure .	D-3

Unified Soil Classification System

*exr



100-2650 Queensview Drive

Grain-Size Distribution Curve Method of Test For Sieve Analysis of Aggregate ASTM C-136

Ottawa, ON K2B 8H6



Unified Soil Classification System

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		υL	AI	AND	SILI				Fii	ne			Me	dium	Coar	se		F	ine		Co	arse	•
		GRAIN	SIZE I	N MICRON	METERS									SIEVE DESI	IGNATION	l (Imp	erial)			1			
1	3	5		10		30	50 7 #20	5 10	#100	#	50			#16		#4		3	/s" 1/2"	³ ⁄4" 1"			3
00																							
95 <u> </u>																							
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EXP Project No.:	OTT-23002538-A0	Project Name :		Geotechnical In	ivestigat	ion - Walkey Cen	tre Red	evelopment	
Client :	Sun Life Assurance Company	Project Location	1 :	1822-1846 Bank	Street				
Date Sampled :	November 1, 2023	Borehole No:		BH12	Sample	: G	S1	Depth (m) :	0.1-0.2
Sample Composition :		Gravel (%)	46	Sand (%)	44	Silt & Clay (%)	10	Figure	D 4
Sample Description :	FILL: W	/ell Graded Gra	h Silt & Sand (0			Figure .	D-4		

*exp





EXP Project N	lo.: OTT-23002538-A0	Project Name :		Geotechnical Inv	/estigati	on - Walkley	Cent	re Re-d	evelopment	
Client :	Sun Life Assurance Company of Canada	Project Location	:	1840-1846 Walki	ey Road	, Ottawa				
Date Sampled	: October 26, 2023	Borehole No:		BH10	Sam	ple No.:	SS	3	Depth (m) :	1.5-2.1
Sample Descri	ption :	% Silt and Clay	28	% Sand	52	% Gravel		20	Figure :	
Sample Descri	Sample Description :		d and G	ravel (SM)		Figure .	D-5			





EXP Project N	lo.: OTT-23002538-A0	Project Name :		Geotechnical Inv	/estigati	on - Walkley C	entre Re-d	evelopment		
Client :	Sun Life Assurance Company of Canada	Project Location	1:	1840-1846 Walki	ey Road	, Ottawa				
Date Sampled	: November 1, 2023	Borehole No:		BH12	Sam	ple No.:	SS2	Depth (m) :	0.8-1.4	
Sample Descri	ption :	% Silt and Clay	25	% Sand	62	% Gravel	13	Eiguro :	De	
Sample Descri	ption :	Silty	y Sand (nd (SM)						





EXP Project N	lo.: OTT-23002538-A0	Project Name :		Geotechnical Inv	/estigati	on - Walkley	Centre R	e-development	
Client :	Sun Life Assurance Company of Canada	Project Location	:	1840-1846 Walki	ey Road	, Ottawa			
Date Sampled	: November 3, 2023	Borehole No:		BH13	Sam	ple No.:	SS2	Depth (m) :	0.8-1.4
Sample Descri	ption :	% Silt and Clay	30	% Sand	63	% Gravel	7	Figure :	57
Sample Descri	ample Description :		y Sand (SM)		Figure .	D-7		





EXP Project N	lo.: OTT-23002538-A0	Project Name :		Geotechnical Inv	/estigati	on - Walkley	Centre R	e-development	
Client :	Sun Life Assurance Company of Canada	Project Location	:	1840-1846 Walki	ey Road	, Ottawa			
Date Sampled	: November 2, 2023	Borehole No:		BH18	Sam	ple No.:	SS2	Depth (m) :	0.8-1.4
Sample Descri	iption :	% Silt and Clay	24	% Sand	73	% Gravel	3	Eiguro :	D 8
Sample Descri	Sample Description :		y Sand (SM)		Figure .	D-8		

EXP Services Inc.

Sun Life Assurance Company of Canda c/o BentallGreenOak (Canada) LP Phase Two Environmental Site Assessment 1820-1846 Bank Street, Ottawa, Ontario OTT-22002538-B0 September 30, 2024

Appendix E: Borehole Logs



	Log o	f Bo	D	rehole BH01	1	* •	'n
Project No:	OTT-23008400-B0				-		P.
Project:	Geotechnical Investigation - Walkley Ce	ntre Deve	lop	oment	F		I
Location:	1822-1846 Bank Street, Ottawa, Ontario	0				Page. I of I	
Date Drilled:	'October 26, 2023		_	Split Spoon Sample		Combustible Vapour Reading	
Drill Type:	CME-55 Truck-Mounted Drill Rig		_	Auger Sample		Natural Moisture Content X	
Datum:	Geodetic Elevation		_	Dynamic Cone Test		Undrained Triaxial at	
Logged by:	M.Z. Checked by: D.W.			Shear Strength by + Vane Test S	:	Shear Strength by Penetrometer Test	
G Y M W B L O L	SOIL DESCRIPTION	Geodetic Elevation m	D e p t h	Standard Penetration Test N Value 20 40 60 80 Shear Strength 50 100 150 200	kPa	Combustible Vapour Reading (ppm) 250 500 750 A Natural Moisture Content % Attreberg Limits (% Dry Weight) 20 40 60	ural Wt. m ³
ASP GR/ FILL San com HIG Silty dens	HALTIC CONCRETE ~ 100 mm thick INULAR FILL	91.6 91.6 91.4 90.3	0			40 60 3 K S S X S S X S S X S S	51 51 52 53
	-	89.0 89			: : : : :	····	

0TTAWA.GDT 1/17/24																
		Borehole Terminated at 5.9 m Depth														
		_	_		5											26.0 CORE3
		Black, Fair to Good Rock Quality, Medium Strong 	_		4											CORE2 25.8
			89.0 88.8	89	3											CORE1
		— HIGHLY WEATHERED SHALE Silty sand and gravel, black, moist, (very dense)	_		2			57 ••••			*				X	SS3
		FILL Sand and gravel, brown, moist, (loose to compact)	 90.3		1						*				A	SS1
	XXX	\neg Sand and clushed dravel, drev, moist	Н			-÷÷:⊕	· · · · · · · ·	+	+ + + + + + + + + + + + + + + + + + +	· : · : · : · ! · !	⊢÷÷÷X-	$ \cdots $	+++++++++++++++++++++++++++++++++++++++	$ \cdots \cdots $	۱¥۲	004

ΠLO	NOTES:	WA ⁻	TER LEVEL RECO	RDS		CORE DF	RILLING RECOR	D
GIN	use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
OLE	2.50 mm monitoring well installed upon completion	11/23/2023	1.7		1	2.7 - 2.9	60	0
Ť	3. Field work was supervised by an EXP representative.	12/06/2023	2.7		2	2.9 - 4.5	97	69
F BOR	4. See Notes on Sample Descriptions				3	4.5 - 5.9	100	82
LOG O	5.Log to be read with EXP Report OTT-23008400-B0							

	Logo	f Bo	C	reh	ole	В	H02			*		yn
Project No:	ОТТ-23008400-В0				-		F	iauro Na	、 E-:	2		
Project:	Geotechnical Investigation - Walkley Ce	ntre Deve	lop	ment					, <u> </u>	- 2		1
Location:	1822-1846 Bank Street, Ottawa, Ontario)						Page	e. <u>I</u> or			
Date Drilled:	'October 30, 2023			Split Spo	on Sample			Combustik	ole Vapour Rea	iding		
Drill Type:	CME-55 Truck-Mounted Drill Rig			Auger Sa	ample			Natural Mo	oisture Content	Ľ		×
Datum:	Geodetic Elevation			Dynamic	Cone Test	_		Undrained	Triaxial at	I		•
Logged by:	M.Z. Checked by: D.W.		-	Shelby To Shear Str Vane Tes	ube rength by st		+ s	% Strain a Shear Stre Penetrome	ength by eter Test			▲
G Y W B U O	SOIL DESCRIPTION	Geodetic Elevation m	D e p t	Sta 2 Shear S	ndard Penetrat 0 40 trength	tion Tes 60	st N Value 80 kPa	Combustil 250 Natura Atterber	ble Vapour Read 500 al Moisture Cont g Limits (% Dry	ing (ppm) 750 ent % Weight)	SAMPL	Natural Unit Wt. kN/m ³
ASP GRA Silty (com	HALTIC CONCRETE ~ 100 mm thick NULAR FILL sand with gravel, brown, moist, – pact)	92.6 92.5 91.7	0	5 	0 100	150		20	40	60 • • • • • • • • • • • • • • • • • • •	Š	SS1
Silty	ILY WEATHERED SHALE - sand with gravel, black, moist	51.7	1			50/100 i	,	× ×				SS2
	-		2			50/0 m	im					SS3
Black Black Medi	LE BEDROCK (, Good to Excellent Rock Quality, – um Strong –	-	3								· · · · · · · · · · · · · · · · · · ·	CORE1
	-		5								•	CORE2

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83.7 9 \leftrightarrow \langle \cdot \rangle \Rightarrow

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÷:;;;

CORE3

CORE4

26.7

CORE5

023.GPJ TROW OTTAWA.GDT 1/17/24		
3INT LOGS 11.15.2	N	0
LOG OF BOREHOLE	2	2.: 3. 1.: 5.

Continued Next Deep		10					CORE
TES:	W/A		RDS		CORE DE		חי
Borehole data requires interpretation by EXP before use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
31 mm monitoring well installed upon completion	11/23/2023	10.9		1	2.7 - 4.2	84	80
Field work was supervised by an EXP representative.	12/06/2023	8.9		2	4.2 - 5.6	100	96
See Notes on Sample Descriptions				3	5.6 - 7.2	100	81
				4	7.2 - 8.7	100	97
Log to be read with EXP Report OTT-23008400-B0				5	8.7 - 10.3	100	100
				6	10.3 - 11.8	98	77
				7	11.8 - 13.1	100	100
				8	13.1 - 14.1	100	85

Log of Borehole <u>BH02</u>



Project: Geotechnical Investigation - Walkley Centre Development

Project No: <u>OTT-23008400-B0</u>

Figure No.

	ojec	t. <u>Geolechnical Investigation</u> - Walkley C	entre Deve	iop	рп	ent						Pa	age.	_2	2_ of	_2	_		
	s		Geodetic	D	D	St	tanda	rd Pe	netration 1	est N Val	ue	Comb	ustible	Vapo	our Rea	ding (pp	m)	S A	Natural
W L	М В	SOIL DESCRIPTION	Elevation	p t	e p t t	Shear	20 Stren	 ath	0 6	50 a	30 kPa	Na Atter	atural N berg L	√oistu _imits	ure Con (% Drv	tent % Weight	;)	M P L	Unit Wt.
	Ľ		82.6	h 10	h 10		50	1	00 1	50 <u>2</u>	00		20	4	0	60	, 	E S	KIN/III
		Black, Good to Excellent Rock Quality,																-	
		— Medium Strong (continued)	-			÷ • • •													
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:E		_	- 78.5	14	14	<u>.</u>													
		Borehole Terminated at 14.1 m Depth																	
						:::											::		
																	::		
//24																			
1/1																			
GDT																			
AWA																			
FO																			
ROW																	::		
- -																			
23.GF																			
5.20																	::		
11.1																			_
о М	DTES:																		

2	NOTES:	WA ⁻	TER LEVEL RECO	RDS		CORE DF	RILLING RECOR	D
S S	1. Borehole data requires interpretation by EXP before use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
비분	2.31 mm monitoring well installed upon completion	11/23/2023	10.9		1	2.7 - 4.2	84	80
Ĭ	3. Field work was supervised by an EXP representative.	12/06/2023	8.9		2	4.2 - 5.6	100	96
Ř	4. See Notes on Sample Descriptions				3	5.6 - 7.2	100	81
Ĩ	·····				4	7.2 - 8.7	100	97
	5. Log to be read with EXP Report OTT-23008400-B0				5	8.7 - 10.3	100	100
٥Į					6	10.3 - 11.8	98	77
			•		7	11.8 - 13.1	100	100
					8	13.1 - 14.1	100	85

Project.	Geotechnical Investigation	alklev Centre Dov	alor	ment				l	Figure	No	E-3	_		
ocation:	1822-1846 Bank Street Ottaw	a Ontario		Inent					Pa	ige	1_ of	_1_		
		a, Ontano												
	12/14/23		-	Split Spoon Auger Samp	Sam ble	ple		3	Combu: Natural	stible Va Moisture	pour Rea e Content	ding		×
nii Type:			-	SPT (N) Val	ue	act	С)	Atterbe	rg Limits	ial at	l		-O
atum:			-	Shelby Tube) 	551			% Strai	n at Fail	ure			\oplus
bgged by:	MR Checked by:_	LW		Shear Stren Vane Test	gth b	у	+ s	-	Penetro	ometer T	by est			
S		Geodetic	D	Standa	rd Pe	netration	Test N Va	alue	Combu	istible Va	pour Read	ng (ppm)	S	Natura
M B O	SOIL DESCRIPTION	Elevation	e p t	20 Shear Stree	ngth	40	60	80 kPa	Na Atter	tural Moi berg Limi	sture Conte ts (% Dry \	ent % Veight)		Unit W
_ ∠CON	CRETE ~ 165 mm thick	92.1 91.9	0	50	1	00 1	150	200		20	40	60	Š	
FILL Sand	. trace gravel. brown-grev. moist													
	, <u> </u>												1	551
		90.8	1											_
HIGH	LY WEATHERED SHALE sand with gravel, black, moist				; ; ; ; ; ; ; ;								X	SS2
		00.0												
SHAL	E BEDROCK	90.0												
	, FOUT TO FAIT ROCK QUAIITY	-			2									
		_	3											
		-												
		-	4											
		-	5											
Bo	prehole Terminated at 5.4 m De	86.7 epth												
TES:]			L::::!:	:::	1::::	 	· · : : : : : : : : : : : : : : : : : :	1::::	1::::	1::::	1:::		1
Borehole data re	equires interpretation by EXP before	WATE	ER L	EVEL RECO	DRDS	B Hole Op	en	Run	Co	DRE DR	ILLING R % Re	ECORE) R	QD %
200 by 001013	nonitoring well was installed upon	Date 12/21/2022	L	<u>evel (m)</u> 2.3	+	To (m)	No.	(m 1.5 -	ı) 2.5	40			0
.A 38mm PVC n	ionitoning won was instance apon	12/21/2023												-
A 38mm PVC n completion. . Field work was	supervised by an EXP representative.	12/2 1/2023						2	2.5 -	3.5 4.5	100			43 50

			- 1				F	igure N	No	E-4	_		
roject:	Geotechnical Investigation - Walkley C	entre Deve	elo	pment				Pa	ge	l_of	1		
ocation:	1822-1846 Bank Street, Ottawa, Ontar	io											
ate Drilled:	12/14/23		-	Split Spoon Sample				Combus	tible Vap	our Read	ding		
orill Type:	Hilti / Geoprobe		_	SPT (N) Value		0		Atterber	g Limits	Content	F		-Õ
atum:	Geodetic Elevation		_	Dynamic Cone Test Shelby Tube				Undraine % Strain	ed Triaxia 1 at Failur	ilat e			\oplus
ogged by:	MR Checked by: LW			Shear Strength by Vane Test		+ s		Shear S Penetro	trength by meter Tes	y st			
S Y M		Geodetic	De	Standard Penetra	ation T	est N Value		Combus 2	stible Vapo	our Readii	ng (ppm) 50	S A M	Natura
B O L	SOIL DESCRIPTION	m m	t h	Shear Strength	15	<u> </u>	kPa	Atterb	berg Limits	(% Dry V	/eight)	LES	kN/m
	CRETE ~ 200 mm thick	91.9	0						Ĭ	Ĭ		Ň	
Sand	, trace gravel, brown-grey, moist	-										Į	SS1
												1	201
		90.8											600
Bilty s	ILY WEATHERED SHALE sand with gravel, black, moist	-										\uparrow	332
		90.1	2		••••								
Black	<u>_E BEDROCK</u> , Fair to Excellent Rock Quality												
		-						····					
		_	3										
		1											
		-	4										
												-	
		7											
		-	5										
B	prehole Terminated at 5.4 m Depth	86.7										-	
					:::		:::				1111		

2	NOTES:	WA	TER LEVEL RECO	RDS		CORE DF	RILLING RECOR	D
B	use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
	2. A 38mm PVC monitoring well was installed upon completion.	12/21/2023	1.8		1	1.5 - 2.4	42	0
击					2	2.4 - 3.4	43	65
ĞГ	3. Field work was supervised by an EXP representative.				3	3.4 - 4.5	100	95
B	4. See Notes on Sample Descriptions				4	4.5 - 5.4	100	100
	5.Log to be read with EXP Report OTT-23008400-B0							

	Log of Bo	rehole BH06	i [%] eyn
Project No:	ОТТ-23008400-В0		Figure No E-5
Project:	Geotechnical Investigation - Walkley Centre Develo	pment	$\frac{1}{1} = \frac{1}{1}$
Location:	1822-1846 Bank Street, Ottawa, Ontario		Page 01
Date Drilled:	October 27, 2023	Split Spoon Sample	Combustible Vapour Reading
Drill Type:	CME-55 Truck-Mounted Drill Rig	Auger Sample II SPT (N) Value O	Natural Moisture Content X Atterberg Limits ————————————————————————————————————
Datum:	Geodetic Elevation	Dynamic Cone Test	Undrained Triaxial at \oplus Strain at Failure
Logged by:	M.Z. Checked by: D.W.	Shear Strength by + Vane Test S	Shear Strength by Penetrometer Test

C	Ģ	S Y M	SOIL DESCRIPTION	Geodetic	De		:	5tai 2(ndard P)	ene 40	etration I	estini va 0	aiu 80	e)	Com	250	(ible Vap 0 5 Irol Mois	500 500 500 500 500 500 500 500 500 500	ng (ppm) 750	M	Natural
ľ	Ϊ	B O L		m	t h	5	Shea	ar S	trength	40	-	-0		kPa	Atte	erbe	arg Limit	sture Conte s (% Dry \	Veight)	LE	kN/m ³
			ASPHALTIC CONCRETE - 80 mm thick	92 91.9	0			50				50	20	<u> </u>	X	- <u>20</u>	<u>.</u>	40			GS1
			FILL			13	3	16 O												X	SS1
	k	***	- Slity sand with gravel, brown, moist, - (compact)	1																\mathbb{N}	001
	Ě	\times		91.1	1	13	7	3								:		<u>+::::</u> :			
	Ē		Silty sand with gravel, black, moist, (loose)	90.7	Ľ		<u>.</u>	:::							×	:	· • • • • • • • • • • • • • • • • • • •	÷		÷Х	SS2
	Ē		SHALE BEDROCK																		
			Black, Very Poor Rock Quality				÷					•••••				÷		+			
	Ē			-	2		<u></u>	<u></u>	••••		<u> </u>	• • • • • •		• • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·	4	· · · · · · · · · · · · · · · · · · ·	+		-	CORE1
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	Ē			89.4		Ë	<u>::</u>		••••		· · · · · · · ·			· · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	#	· · · · · · · · · · · · · · · · · · ·	+		-	
			Borehole Terminated at 2.6 m Depth																		
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ő N	NOT	TES:								_			Г								
TL.	1.E	Boreho	le data requires interpretation by EXP before	WATE	RL	.EV	ELI	RE	CORD	s				D	(JOF			ECORE	_	
5	ι	use by	others Da	te		W	ater	r m		F	IOLE ODE	n		Run	De	epth m	ו ו	% Re	ю.	R	QD %

LOG OF BOREHOLE 2. Borehole was backfilled with soil cuttings upon completion. 3. Field work was supervised by an EXP representative.

4. See Notes on Sample Descriptions

5. Log to be read with EXP Report OTT-23008400-B0

VVA	IER LEVEL RECO	RDS		COREL	DRILLING RECOR	RD.
е	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
			1	1.3 - 2.6	100	0

Project No:	ОТТ-23008400-В0	og of B	60	reho	le <u>B</u>	<u>H07</u>		F 6	exp
Project:	Geotechnical Investigation - W	alkley Centre De	evelo	pment			Figure No.	<u> </u>	I
Location:	1822-1846 Bank Street, Ottaw	a, Ontario		-			Page.	1_of_2_	
Date Drilled:	'October 27, 2023			Split Spoon S	Sample		Combustible V	apour Reading	
Drill Type [.]	CME-55 Truck-Mounted Drill Ri	ia		Auger Sampl	e		Natural Moistu	re Content	\mathbf{x}
Datum:		9		SPT (N) Valu Dynamic Cor	e ne Test 🛛 🗕	0	Atterberg Limit Undrained Tria	s xial at	⊢–⊖
Loggod by:				Shelby Tube			% Strain at Fai	lure	\oplus
Logged by.	M.Z. Checked by:	D.vv.		Shear Streng Vane Test	th by	+ s	Penetrometer	Test	
S Y W B U	SOIL DESCRIPTION	Geode Elevati	tic E on p	Standar 20 Shear Streng	d Penetration Tes 40 60	st N Value 80 kPa	Combustible V 250 Natural Mc Atterberg Lin	apour Reading (ppm 500 750 isture Content % hits (% Dry Weight)) S A P Unit Wt. L kN/m ³
	HALTIC CONCRETE ~ 70 mm ti	92.5 hick / 92.4	h C	50	100 150	200	20	40 60	S
	NULAR FILL d and crushed gravel, grey, moist	92.4		20 ••••			×		ss1
Silty (com	sand with gravel, brown, moist, npact) HLY WEATHERED SHALE		21	8 then 50/100 n	im				ss2
- Silty dens	sand with gravel, black, moist, (v se)	ery – 90.7			50/Bouncing				ssa
Black	<u>LE BEDROCK</u> k, Very Poor Rock Quality	_	2						CORE1
Black	LE BEDROCK k, Poor to Excellent Rock Quality, edium Strong	89.9 , Weak	3						
		_	4						CORE2 25.3
		_							
		_	5						CORE3
		_	6	······································					
		-	7						CORE4 25.9
		_	8						
		8	4.1						
			g						CORE6
	Continued Next Page		1		******			*****	֥ 23.9
NOTES: 1.Borehole data	requires interpretation by EXP before	WA	TERI	LEVEL RECO	RDS		CORE D	RILLING RECOR	D
use by others		Date		Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
2.31 mm monitor 3. Field work was	ring well installed upon completion s supervised by an EXP representative.	11/23/2023 12/06/2023		5.6 5.6		1 2 3	1.8 - 2.7 2.7 - 4.2 4.2 - 5.7	76 100 100	47 78 100
4. See Notes on \$ 5. Log to be read	cample Descriptions with EXP Report OTT-23008400-B0					456	5.7 - 7.2 7.2 - 8.8 8.8 - 10.3	100 100 100	58 80 85

71

71

100

100

10.3 - 11.8

11.8 - 13.4

7

Log of Borehole BH07



Project: Geotechnical Investigation - Walkley Centre Development

Figure No.

Pro	DJect: Geotechnical Investigation - Wa	Ikley Centre Devel	lop	oment				_	Pa	qe.	2	of	2		
	S Y	Geodetic	D	Star	idard Pe	netration 1	est N Val	ue	Combu 2	stible \	apoui/apoui	Readin	ig (ppm)	S	Natural
W	M SOIL DESCRIPTION	Elevation	e p t	20 Shear St	rength	40 6	60 I	30 kPa	Nat Attert	tural M berg Li	oisture mits (%	e Conter % Dry W	nt % /eight)	- ™ L	Unit Wt. kN/m ³
	L SHALE BEDROCK Black, Poor to Excellent Rock Quality, N – to Medium Strong (continued)	82.5 Weak 	10				50 2	00		20	40	6	0		CORE
		- - - 78.8	12											• • • • • • • • • • • • • • • • • • •	CORE8 25.6 CORE9
5 11.15.2023.GPJ TROW OTTAWA.GDT 1/17/24	Borehole Terminated at 13.7 m De	apth													
	res: 1					•••••	· · · · · ·	· · · · ·							
ILNIO 1.E	Borehole data requires interpretation by EXP before set by others	Date	۲L	EVEL RE	JORDS	Hole Op	en	Run	CC Dep	URE D	RILL	ING RE % Rec	CORD	R	QD %

ΞLO	NOTES:	WA	TER LEVEL RECO	RDS		CORE DF	RILLING RECOR	D
0IN	use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
ОГЕ	2.31 mm monitoring well installed upon completion	11/23/2023	5.6		1	1.8 - 2.7	76	47
Ť	3. Field work was supervised by an EXP representative.	12/06/2023	5.6		2	2.7 - 4.2	100	78
0R	4 See Notes on Sample Descriptions				3	4.2 - 5.7	100	100
ш					4	5.7 - 7.2	100	58
0	5. Log to be read with EXP Report OTT-23008400-B0				5	7.2 - 8.8	100	80
ŏ					6	8.8 - 10.3	100	85
_					7	10.3 - 11.8	100	71
					8	11.8 - 13.4	100	71

Project No: <u>OTT-23008400-B0</u>

Log	of	Bore	hole	BH08
<u> </u>				

Project No: <u>OTT-23008400-B0</u>

	*ex	D.
E-7		

r toject No.	011-23000400-00		Eigure No E-7						
Project:	Geotechnical Investigation - Walkley Centre Dev	velopment							
Location:	1822-1846 Bank Street, Ottawa, Ontario	1822-1846 Bank Street, Ottawa, Ontario							
Date Drilled:	'October 26, 2023	Split Spoon Sample	\boxtimes	Combustible Vapour Reading					
Drill Type:	CME-55 Truck-Mounted Drill Rig	Auger Sample — SPT (N) Value		Natural Moisture Content X Atterberg Limits ————————————————————————————————————					
Datum:	Geodetic Elevation	Dynamic Cone Test Shelby Tube		Undrained Triaxial at \oplus Strain at Failure					
Logged by:	M.Z. Checked by: D.W.	Shear Strength by Vane Test	+ s	Shear Strength by Penetrometer Test					

	_	S Y		Geod	etic	D		Sta	ndard H	Per	etration I	est N Va	lue	Combus 2	stible Vapo	00 Readir	ig (ppm) 50	Å	Natural
	₩,	M B	SOIL DESCRIPTION	Eleva	tion	p p	0-	20)	4	06	60	80	Nat	ural Moist	ure Conter	nt %	P	Unit Wt.
	-	0 L		m		ĥ	Sne	ar S Fi	n ength ງ	10	10 1	50	к⊮а 200	Aller		(/0DIYW	eignit) O	LE C	kN/m°
		~~~	$\overline{}$ ASPHALTIC CONCRETE ~ 90 mm thick	92.5		0													
		$\bigotimes$	FILI				10	j ::										1//	
		$\times$	- Sand with crushed gravel with silt and -	-			·· 0	<u>}</u>	· • • • • •					X				١X	SS1
		$\times\!\!\times\!\!\times$	asphaltic concrete debris brown moist															14	
÷	Цł	$\otimes$	(compact)				33		:::::		::::::	13333		X		11111	3333		
		$\times$	_(	1.	01 2	1	1	1	::::			13353					:::::	١V	SS2
	Ħ	$\times\!\!\times\!\!\times$		Q1 1	91.5		::::ī		:::::::		: : : : : : : : : : : : : : : : : : :	12212	*****				2222	1/\	UUL
- i:	H:	$\sim$	- HIGHLY WEATHERED SHALE -	51.1			$\cdot$	: · · · ·	• • • • • •		· · · · · · · · ·		+ :					( )	
[.	Ħ		Silty sand with gravel black moist								50/75 mn	1						NΛ	
	H:F										•••••							١XI	SS3
	8.			90.4		2				-								/ \	
			Auger Refusal at 2.1 m Depth				:::	::	÷ ÷ ÷	:	::::								
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ТLO	NOTES:	WA	TER LEVEL RECOR	RDS		CORE DRILLING RECORD						
GIN	use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %				
OLE	2.50 mm monitoring well installed upon completion	11/23/2023	1.2	. ,								
REH	3. Field work was supervised by an EXP representative.	12/06/2023	1.2									
BO	4. See Notes on Sample Descriptions											
LOG OF	5.Log to be read with EXP Report OTT-23008400-B0											

		Log of Borehole	<b>BH09</b>	
Project No:	OTT-23008400-B0	-		

	*ex	D.
-8	• • • •	•

Project No:	ОТТ-23008400-В0			Eiguro No. E-8
Project:	Geotechnical Investigation - Walkley Centre Dev	velopment		
Location:	1822-1846 Bank Street, Ottawa, Ontario			Page. I of I
Date Drilled:	'October 26, 2023	Split Spoon Sample	$\boxtimes$	Combustible Vapour Reading
Drill Type:	CME 55 Truck Mounted Drill Pig	Auger Sample		Natural Moisture Content
Dim Type.		— SPT (N) Value	0	Atterberg Limits
Datum:	Geodetic Elevation	Dynamic Cone Test		Undrained Triaxial at
		Shelby Tube		
Logged by:	M.Z. Checked by: D.W.	Shear Strength by Vane Test	+ s	Penetrometer Test

G		S Y M	SOIL DESCRIPTION	Geo Elev	detic	D e p		Sta 2	anda 20	ira Pe	eneti 40	ration	festin 60	i vaii 8	ue 30	Combus 2: Nat	stible vapo 50 50 ural Moist	our Readir 00 75 ure Contei	ng (ppm) 50 nt %	A M P	Natural Unit Wt
Ľ		P L		02.7	m	ĥ	Sh	ear S	Stren	ngth 1	100	1	50	2	kPa 00	Atterb	berg Limits	(% Dry W	(eight)	Ĺ	kN/m ³
	К	$\times$	ASPHALTIC CONCRETE ~ 100 mm thick	92.7		0				:::			1			X					GS1
	Ĭ,	Ž	Sand and crushed gravel grev moist	92.4							-		133							XI	SS1
	Ŵ		GLACIAL TILL													X				$\square$	
		Ø)-	Silty sand with gravel and shale fragments,			1				32,2	6 th	en 50/	25 m	n						M	660
	K		brown, moist, (compact)	91.3	91.5	1						Ň		: : :						M	332
			- HIGHLY WEATHERED SHALE -							12	tho	n 50/2	5 mm								
	Ë		Sity sand with gravel, black, moist									0.2				X				XI	SS3
				90.5		2		•						•••							
			Auger Refusal at 2.2 m Depth																		
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TLO	NOTES:	TAW	TER LEVEL RECOR	RDS		CORE DF	RILLING RECOR	D
UD N	use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
5	2.50 mm monitoring well installed upon completion	11/23/2023	1.3					
Ť	3. Field work was supervised by an EXP representative.	12/06/2023	1.2					
BO	4. See Notes on Sample Descriptions							
LOG OF	5.Log to be read with EXP Report OTT-23008400-B0							

	Log of B	O	rehole BH [*]	10	÷.	אב	'n
Project No:	OTT-23008400-B0				F-9		'P'
Project:	Geotechnical Investigation - Walkley Centre Dev	velop	oment				I
Location:	1822-1846 Bank Street, Ottawa, Ontario				Page. <u>1</u> of <u>1</u>		
Date Drilled:	<u>'October 26, 2023</u>		Split Spoon Sample	3	Combustible Vapour Reading		
Drill Type:	CME-55 Truck-Mounted Drill Rig	_	Auger Sample		Natural Moisture Content Atterberg Limits	× ⊸	
Datum:	Geodetic Elevation		Dynamic Cone Test	-	Undrained Triaxial at % Strain at Failure	$\oplus$	
Logged by:	M.Z. Checked by: D.W.		Shear Strength by Vane Test S	- 6	Shear Strength by Penetrometer Test	<b></b>	
G Y M B O L L	SOIL DESCRIPTION Geodetin Elevatio m 91 7	c Dep n pth	Standard Penetration Test N Va           20         40         60           Shear Strength         50         100         150	alue 80 kPa 200	Combustible Vapour Reading (ppm) 250 500 750 Natural Moisture Content % Atterberg Limits (% Dry Weight) 20 40 60	S M P Uni E S	tural t Wt. /m ³
	HALTIC CONCRETE ~ 120 mm thick 91.6 91.6 91.5 91.5	0	14 O		×	X s	S1

mm thick 91.0 FILL Silty sand with gravel and asphalt fragments, brown, moist, (compact) .; ..... × SS2  $\left\{ \cdot, \cdot, \cdot \right\}$ HIGHLY WEATHERED SHALE Silty sand with gravel, black, moist, (compact to very dense) 90.4 ···· n 1.5.2.1 • • • • • • •  $i \cdot i \leftrightarrow i$ ÷. ; .;. . . . .12, 30 then 50/75 mm. Х SS3 1-2-0-1 ..... . . . . . . . 50/75 m X SS4 89.2  $i \sim \odot :$ Auger Refusal at 2.5 m Depth LOGS 11.15.2023.GPJ TROW OTTAWA.GDT 1/17/24 ..... ור

귀	4 Deschola data as mines intermentation by EVD before	WA	TER LEVEL RECO	RDS		CORE D	RILLING RECOR	D
GIN	use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
IJ	2.50 mm monitoring well installed upon completion	11/23/2023	1.4					
REH	3. Field work was supervised by an EXP representative.	12/06/2023	1.4					
BO	4. See Notes on Sample Descriptions							
LOG OF	5.Log to be read with EXP Report OTT-23008400-B0							

Log of Borehole <u>BH11</u> ^{\$} exp													
Project No:	OTT-23008400-B0					Firming Na F-10		$^{\text{P}}$					
Project:	Geotechnical Investigation - Walkley Centre	e Devel	ор	ment				I					
Location:	1822-1846 Bank Street, Ottawa, Ontario					Page. I of Z							
Date Drilled:	'October 30, 2023		ŗ	Split Spoon Sample	$\boxtimes$	Combustible Vapour Reading							
Drill Type:	CME-55 Truck-Mounted Drill Rig		4	Auger Sample SPT (N) Value		Natural Moisture Content Atterberg Limits		<b>×</b> €					
Datum:	Geodetic Elevation		I	Dynamic Cone Test		Undrained Triaxial at % Strain at Failure		Ð					
Logged by:	M.Z. Checked by: D.W.	-		Shear Strength by Vane Test	+ s	Shear Strength by Penetrometer Test		<b></b>					
G Y M B O L	SOIL DESCRIPTION	Geodetic Elevation m 0.4	D e p t h	Standard Penetration T 20 40 6 Shear Strength 50 100 15	est N Value i0 80 kPa 50 200	Combustible Vapour Reading (ppm) 250 500 750 Natural Moisture Content % Atterberg Limits (% Dry Weight) 20 40 60	SAMPLES	Natural Unit Wt. kN/m ³					
ASP GRA	HALTIC CONCRETE ~ 90 mm thick	0.3 0.3		42. 0				SS1					

		GRANULAR FILL	90.3		ł				:::::		::::		3	<u>::</u> }	SS1
N N					Į						;;		÷.,	::Ľ	
		Silty sand with gravel and shale fragme	ents,				32		331		::::		333	3	1 1
		brown, moist, (compact)	Л		1		$\overline{O}$		:::::		:::::		223	X	SS2
		HIGHLY WEATHERED SHALE									:			::Ľ	4
		- Silty sand with gravel, black, moist, (de	ense to -		ţ	3313413	40 thon 50/75 mm				:			-	1
		very dense)			ł					X	:::::			ΞX	SS3
		_	88.2		2						;;			<u>.</u>	4
		SHALE BEDROCK			ł				331		::::		333	÷1	
		<ul> <li>Black, Very Poor Rock Quality</li> </ul>	- 87.8		ł				<u></u>		2 - 2 - 2 - 2			<u></u>	CORE1
		SHALE BEDROCK									;				
		_Black, Fair to Excellent Rock Quality,	_		3		:::::::::::::::::::::::::::::::::::::::	::::	::::	:::::	::::		***	:::	
		Medium Strong to Strong			ļ				::::::::::::::::::::::::::::::::::::::		::::::::::::::::::::::::::::::::::::::	+	÷.	÷:	
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SS SS		Continued Next Page			10 l					[]		1			
ηČ	NOTES:		v	VATER	I F	-VEL RECOR	RDS			COF			COR	D	
INT	1. Boreho	ble data requires interpretation by EXP before				Water	Hole Open	F	Run	Depth		% Rec		F	
ш	use by		Date		Le	evel (m)	To (m)	1	No.	(m)					
힉	2.31 mm	i monitoring well installed upon completion	11/23/2023			10.7			1	2.2 - 2.	6	89			0
Ε	3. Field v	vork was supervised by an EXP representative.	12/06/2023			10.7			2	2.6 - 4.		100			02
BO	4. See N	otes on Sample Descriptions							3	4.1-5.	2	100			92 03
Ь	5. Log to	be read with EXP Report OTT-23008400-B0							5	J.U - 7. 72 - 8	6	100			89
90									6	8.6 - 10	0.1	100			85

10.1 - 11.7

11.7 - 13.2

7

8

97

92

100

100

# Log of Borehole BH11





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### Project: Geotechnical Investigation - Walkley Centre Development

Figure No.

	· · · · · · · · · · · · · · · · · · ·									Pa	ge	2_ of	_2_		
	\$	Geodetic	D	,	Sta	andard Per	netration 1	est N Val	ue	Combus	stible Va	pour Rea	ding (ppm)	S	Natur
v	M B SOIL DESCRIPTION	Elevation	e p	Ch	2	20 4	0 6	50 E	30	Nat	ural Moi	sture Cor	tent %	- M  P	Unit W
		m 90.4	h	Sn	ear 5	Strength	00 1	50 2	кРа 00	Allerb 2	erg Limi '0	40	60	ES	kN/m
	SHALE BEDROCK Black Fair to Excellent Rock Quality	80.4	10	) 											
	— Medium Strong to Strong (continued)	_			12					*****			****		
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NOTES:	WA ⁻	TER LEVEL RECO	RDS		CORE DF	RILLING RECOR	D
use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
2.31 mm monitoring well installed upon completion	11/23/2023	10.7		1	2.2 - 2.6	89	0
3. Field work was supervised by an EXP representative.	12/06/2023	10.7		2	2.6 - 4.1	100	68
4 See Notes on Sample Descriptions				3	4.1 - 5.6	100	92
				4	5.6 - 7.2	100	93
5. Log to be read with EXP Report OTT-23008400-B0				5	7.2 - 8.6	100	89
				6	8.6 - 10.1	100	85
		•		7	10.1 - 11.7	100	97
				8	11.7 - 13.2	100	92

Log of Borehole BH12 Sevr													
Project No:	OTT-23008400-B0				E-11	SND.							
Project:	Geotechnical Investigation - Walkley Cent	tre Devel	lopment		$\frac{1}{1} = \frac{1}{2}$	I							
Location:	1822-1846 Bank Street, Ottawa, Ontario		Page. <u>1</u> of <u>2</u>										
Date Drilled:	'November 1, 2023		Split Spoon Sample	$\boxtimes$	Combustible Vapour Reading								
Drill Type:	CME-55 Truck-Mounted Drill Rig		Auger Sample SPT (N) Value		Natural Moisture Content Atterberg Limits	<b>×</b>							
Datum:	Geodetic Elevation		Dynamic Cone Test		Undrained Triaxial at % Strain at Failure	Ð							
Logged by:	M.Z. Checked by: D.W.	_	Shear Strength by Vane Test	+ s	Shear Strength by Penetrometer Test	•							
G Y M B W B L	SOIL DESCRIPTION	Geodetic Elevation	D Standard Penetration Test N p 20 40 60	Value 80	Combustible Vapour Reading (ppm) 250 500 750 Natural Moisture Content % Atterberg Limits (% Dry Weight)	A M P Unit Wt.							

	ΨĮ	B	SOIL DESCRIPTION		Elevatio	on p t	Shear S	20 Strenath	40 0	50	80 kPa	Nat Atterb	ural Moi berg Lim	sture Conte its (% Drv V	nt % /eight)	P	Unit Wt.
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		~~	ASPHALTIC CONCRETE - 90 mm th	ick /	91.5	0		<u> </u>		1			Ĭ.		Î÷÷		,
	Q	₩.		<u></u> г	91.3			29				X				∷‡\/	ΊΙΙ
		$\times$	Gravel with silt and sand well graded					<u>- 0</u> :				× .				ΞX	SS1
	X	$\otimes$	moist	grey,	90.9			łiżż		1.5.5.5.5			li i i i			÷۲	
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			Silty sand with gravel and shale fragm	ients,			1.5 2.1 .5	P	142152	1.5 2			1.532.22	;‡?:;??		∷‡Ň	SS2
			brown, moist, (compact)		90.2			1	:::::::::::::::::::::::::::::::::::::::	1.5			1.5 3 3.	; ‡ ; ; ; ; ;	1.5.5.5	ΞĽ.	
			HIGHLY WEATHERED SHALE	t			3313	1:33	112132	13333		13333	1.3 3 3 3	:::::::	1323	÷.	
			Silty sand and gravel, black, moist, (ve	ery /			$\sim \sim \cdot \cdot \cdot$	$\pm \pm \pm \pm$	110100	$\sim \sim \sim$		$\sim \cdots \sim$	12224	* * * * * * *	200	÷	
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			SHALE BEDROCK		1	2			140100	1.2.2.2.2				; ; .; .; ; ;		÷.	CORE1
			Black, Very Poor Rock Quality				13313	1133	112133	13333			1333	::::::	1333	33	
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			Black Good to Excellent Back Quality	, —	-	3	++++++++++++++++++++++++++++++++++++++	+ + + + + + + + + + + + + + + + + + +	* + * * * *	+ ÷ ÷ ÷ ÷	+:::::	+÷÷÷÷	$+ \div \div$	<del>:   : : : : :</del>	l : : :	÷	
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٩Č	NOT	ES:			14/4	TED I			20							<u> </u>	
Ę	1.B	orehol	e data requires interpretation by EXP before		vvA				5			CC	JKE UH			ر	
5	us	se by o	others	Dat	e	.	Water	[	Hole Op	en	Run	Dep	th	% Re	c.	R	QD %
щΪ	2.2	1 mm	monitoring well installed upon completion	40/00/	2000		<u>evel (m)</u>		lo (m	)	No.	(m	)				
ğ	2.3			12/06/2	2023		11.5					1.4 - 1	2.8	66			U
辿	3. Fi	eld w	ork was supervised by an EXP representative.								2	2.8 - 4	4.4	100			/9
۶	4.5	ee No	tes on Sample Descriptions								3	4.4 -	5.9	100			84
I I I	4.0		as an aumpio Docompuolio	1		1						50	71	100			00

LOG OF B 5. Log to be read with EXP Report OTT-23008400-B0 4 5 6 7.4 - 9 9 - 10.5 7 10.5 - 12 8

12 - 13.3

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# Log of Borehole BH12



#### Project: Geotechnical Investigation - Walkley Centre Development

Project No: <u>OTT-23008400-B0</u>

Figure No.

Р	rojec	L. Geolechnical Investigation - Wa	aikley Centre Deve	elop	pm	ient							_	Р	age	e. 2	2 o	of	2		
	S		Geodetic	D	5	5	Stanc	ard Pe	enet	ration 7	Test	N Val	ue	Com	ousti 25(	ible Vapo	ur Rea	ading	(ppm	I) S	Natural
W	M B O	SOIL DESCRIPTION	Elevation	p t		Shea	20 r Stre	ength	40	(	60	8	30 kPa	N Atte	latur	ral Moistr	ure Co s (% Dr	ntent y We	; wight)	P L	
	Ľ	SHALE BEDROCK Black, Good to Excellent Rock Quality		h 10	0		50		100	1	150	2	00		20	4	,0 	60			25.8
		— Medium Strong ( <i>continued)</i> —		11	1																
		_	80.1							· · · · · · · · · · · · · · · · · · ·											CORE7
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			77.6	14	4																CORES
S 11.15.2023.GPJ TROW OTTAWA.GDT 1/17/24																					
	OTES:					/						7									
	. Boreho use by	ole data requires interpretation by EXP before v others	Date	κL	LE\ W	/⊨L F /ater	KEC		S Ho	le Op	en	_	Run	De	JOF Spth		LING % I	Rec.		D F	RQD %

12/06/2023

LOG OF BOREHOLE 3. Field work was supervised by an EXP representative. 4. See Notes on Sample Descriptions

2.31 mm monitoring well installed upon completion

5. Log to be read with EXP Report OTT-23008400-B0



Ρ	roject No:	<u>отт-23008400-во</u>	f Bo	D	rehole <u>B</u>	<u>H13</u>		. 1	E_12	<b>€</b>	жр.
Ρ	roject:	Geotechnical Investigation - Walkley Cer	ntre Deve	lop	oment		Figure N	IO			I
L	ocation:	1822-1846 Bank Street, Ottawa, Ontario	)				Pag	je. <u>1</u>	ot _	2	
D	ate Drilled:	'November 3, 2023		_	Split Spoon Sample		Combust	tible Vapou	r Readi	ing	
D	rill Type:	CME-55 Truck-Mounted Drill Rig		_	Auger Sample		Natural M	Aoisture Co	ntent	L	×
D	atum:	Geodetic Elevation		-	Dynamic Cone Test		Undraine	d Triaxial a	t	ſ	—O —
L	ogged by:	M.Z. Checked by: D.W.			Shelby Tube Shear Strength by Vane Test	+ s	% Strain Shear St Penetron	rength by neter Test			<b></b>
	S Y		Geodetic	D	Standard Penetration Te	est N Value	Combus 25	tible Vapour	Readin 75	g (ppm)	Natural
W	BOU	SOIL DESCRIPTION	Elevation m	p t h	20 40 60 Shear Strength	) 80 kPa	Natu Atterb	ural Moisture erg Limits (%	Conten Dry W	t % F eight) L	Unit Wt.
	ASP ASP GRA Sand	HALTIC CONCRETE ~ 50 mm thick / NULAR FILL and crushed gravel, grey, moist /	94 94.0 93.6	0	50 100 15 		20		60		SS1
	FILL Silty brow	sand with gravel and shale fragments, n, moist, (compact)	-	1			×				SS2 21.7
	HIGH Silty	LY WEATHERED SHALE sand with gravel, black, moist	92.3 92.0	2	8,37, 50/25 m	m	×				SS3
	Black	LE BEDROCK , Very Poor Rock Quality									CORE1
	SHA			3							CORE2
	Blaci	<, Good to Excellent Rock Quality, um Strong	-	5							CORE3
		-	-	6							CORE4
		-		8							26.0 CORE5

3S 11.15.2023.GPJ TROW OTTAWA	Continued Next Page	-	9					CORES
Ĩ	NOTES:	WATE	R LEVEL RECOF	RDS		CORE DF	RILLING RECOR	D
GIN	1. Borehole data requires interpretation by EXP before use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
IJ	2. Borehole was backfilled with soil cuttings upon				1	2 - 2.6	77	0
H					2	2.6 - 4.1	100	7
ß	3. Field work was supervised by an EXP representative.				3	4.1 - 5.7	100	95
Щ	4. See Notes on Sample Descriptions				4	5.7 - 7.1	100	95
0 U	5 Log to be read with EXP Report OTT-23008400-B0				5	7.1 - 8.7	100	100
Š					6	8.7 - 10.3	100	91
					7	10.3 - 11.8	100	100
					8	11.8 - 13.3	100	90

..GDT 1/17/24

# Log of Borehole BH13



#### Project: Geotechnical Investigation - Walkley Centre Development

Project No: <u>OTT-23008400-B0</u>

Figure No.

r-	ojec		aikiey Cerilie Del		nien						Pa	ge.	2_ of	_2		
6	S Y		Geodetic	Ď	Sta	andard	l Pen	etration T	est N Va	lue	Combu 2	stible Va	apour Read 500	ling (ppr 750	n) S A	Natural
W	M B O	SOIL DESCRIPTION	Elevation	י p t	2 Shear S	20 Strengt	4( th	) 6	0	80 kPa	Nat Atterb	ural Mo berg Lim	isture Cont hits (% Dry	ent % Weight)	– № L	Unit Wt.
	Ľ		84	h 10	5	50	10	0 15	50 2	200	2	0	40	60	Š	
		Black, Good to Excellent Rock Quality	<i>י</i> ,												÷ <b>I</b>	
		—Medium Strong (continued)	_					· · · · · ·	••••••				· · · · · · · ·		÷.	
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		_	_		33.3											
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		_	79.8	14												20.9
		Borehole Terminated at 14.2 m D	Depth													
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ы М	DTES:		WAT	ERI	EVEL RF	ECOR	NDS				CC	RE DF		RECOR	D	
	.Boreho use bv	ole data requires interpretation by EXP before v others			Water		  -	lole Ope	n	Run	Dep	th	8 R		R	RQD %
_ 2 ال	.Boreho	ole was backfilled with soil cuttings upon	Date	L	_evel (m)	-+		To (m)		No.	(m 2 - 2	) .6	77			0
빏	comple	etion.								2	2.6 - 4	4.1	100	)		7
ЧОВ 3	. Field v	vork was supervised by an EXP representative.								3	4.1 -	5.7 7 1	100			95 05
비	. See No	be read with EXP Percet OTT 22008400 Pc								4 5	5.7 - 7.1 - 1	1.1 8.7	100	)		90 100
ö  ⁵	. Log to	ре теао with EXP Report UTI-23008400-B0								6	8.7 - 1	0.3	100	D		91

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8.7 - 10.3

10.3 - 11.8

11.8 - 13.3

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		Log o	f Bo	D	rehole	BH14		* _	nve
Proj	ect No:	OTT-23008400-B0			—		Firmer No. E-13	C	
Proj	ect:	Geotechnical Investigation - Walkley Ce	ntre Deve	lop	oment			2	
Loca	ation:	1822-1846 Bank Street, Ottawa, Ontario	D				Page. I of	<u>Z</u>	
Date	Drilled:	'October 31, 2023		_	Split Spoon Sample	$\boxtimes$	Combustible Vapour Readin		
Drill	Туре:	CME-55 Truck-Mounted Drill Rig			Auger Sample		Natural Moisture Content		×
Datu	Datum: Geodetic Elevation			-	Dynamic Cone Test		Undrained Triaxial at		
Logo	Logged by: M.Z. Checked by: D.W.			-	Shelby Tube Shear Strength by Vane Test	■ + s	% Strain at Failure Shear Strength by Penetrometer Test		▲
	s		Geodetic	D	Standard Penetratio	n Test N Value	Combustible Vapour Reading	(ppm)	S A Natural
W I	N B D	SOIL DESCRIPTION	Elevation	e p t h	20 40 Shear Strength	60 80 kPa	Natural Moisture Content Atterberg Limits (% Dry Wei	% ight)	P Unit Wt. kN/m ³
	ASP GRA Sanc FILL Silty and c (dens SHA Black Black	HALTIC CONCRETE       ~ 90 mm thick         NULAR FILL	92.6 92.5 92.2 91.3 90.0	0	50 100 	150 200	20 40 60		SS1 SS2 CORE1
		-	-						CORE2
		-	-	5					20.2 CORE3

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	_	8					CORE5
	_						
	_	9					······································
		10					CORE6
Continued Next Page		-					
NOTES.	WAT	FER LEVEL RECO	RDS		CORE DF	RILLING RECOR	D
1. Borehole data requires interpretation by EXP before use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
2. Borehole was backfilled with soil cuttings upon completion.				1	1.3 - 2.6	90	8
3 Field work was supervised by an FXP representative				2	2.6 - 4.2	100	85
4 See Notes on Semple Descriptions				3	4.2 - 5.7	100	94
4. See Notes of Sample Descriptions				5	72-87	100	93
5. Log to be read with EXP Report OTT-23008400-B0				6	8.7 - 10.3	100	98
			L]	7	10.3 - 11.8	100	100
				8	11.8 - 13.3	100	100

# Log of Borehole BH14



#### Project: Geotechnical Investigation - Walkley Centre Development

Project No: <u>OTT-23008400-B0</u>

Figure No. ~

PI	ojeci	L. Geotecnnical investigation - Wal	kiey Centre Dev	elop	pm	ient						Pa	ge.	2_ of	_2		
G	S Y		Geodetic	, D	2	Si	tandai	rd Per	netration 1	est N Va	lue	Combu 2	stible Va 50	apour Read 500	ding (ppn 750	n) S A	Natural
W L	B O	SOIL DESCRIPTION	Elevatior m	n p t		Shear	20 Stren	4 gth	0 6	50	80 kPa	Nat Attert	tural Mo berg Lin	isture Cont hits (% Dry	tent % Weight)	PL	Unit Wt. kN/m ³
	L	SHALE BEDROCK	82.6	10			50	1(	00 <u>1</u>	50 2 ••••••	200 •••••••	2 • • • • • • • •	20  -:::::	40	60		
		Black, Poor to Excellent Rock Quality, V	Veak													÷	
		- to Medium Strong (continued)	_													:::	
		_	_	11	1												
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		Borehole Terminated at 14.1 m De	pth														
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	n ⊑S: Boreho	ble data requires interpretation by EXP before	WAT	ERL	_E\	/EL R	ECO	RDS				CC	DRE DI		RECOR	D	
5	use by	others	Date	L	W Lev	/ater /el (m	)		Hole Op To (m)	en	Run No.	Dep (m	th )	% R	ec.	F	RQD %
되 ^{2.}	Boreho comple	ble was backfilled with soil cuttings upon etion.								Ţ	1	1.3 -	2.6	90	) 0		8
비 3.	Field w	vork was supervised by an EXP representative.									2	2.0 - · 4.2 -	<del>-</del> .∠ 5.7	10	0		94
8 4.	See No	otes on Sample Descriptions									4	5.7 -	7.2	10	0		95 02
0 5.	Log to	be read with EXP Report OTT-23008400-B0									5 6	7.2 - 8.7 - 1	ö.7 10.3	10 10	0 0		93 98

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8.7 - 10.3

10.3 - 11.8

11.8 - 13.3

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	Log o	f Bo	)ľ	ehole BH	115	÷.	avn
Project No:	OTT-23008400-B0					F-14	$\sum P$
Project:	Geotechnical Investigation - Walkley Cer	ntre Devel	lop	ment	F		1
Location:	1822-1846 Bank Street, Ottawa, Ontario	I				Page. <u>1</u> of <u>2</u>	
Date Drilled:	'November 1, 2023			Split Spoon Sample		Combustible Vapour Reading	
Drill Type:	CME-55 Truck-Mounted Drill Rig			Auger Sample SPT (N) Value	•	Natural Moisture Content Atterberg Limits	<b>×</b> —⊖
Datum:	Geodetic Elevation			Dynamic Cone Test	<b>—</b>	Undrained Triaxial at % Strain at Failure	$\oplus$
Logged by:	M.Z. Checked by: D.W.			Shear Strength by Vane Test	+ s	Shear Strength by Penetrometer Test	•
G Y M B O L	SOIL DESCRIPTION	Geodetic Elevation m 92 2	Depth	Standard Penetration Test N 20 40 60 Shear Strength 50 100 150	Value 80 kPa 200	Combustible Vapour Reading (ppm) 250 500 750 Natural Moisture Content % Atterberg Limits (% Dry Weight) 20 40 60	S M P Unit Wt. E S N/m ³
	PHALTIC CONCRETE - 50 mm thick	92.1		28			B GS1

R	$R \times $	ASPHALTIC CONCRETE - 50 mm un		92.1		1333343			\$1331		13333		13333	: <b>B</b>	GS1
Ň		GRANULAR FILL				1333343	28:::::::::::::::::::::::::::::::::::::	:::::	1::2::		13253	1::::::	2010	∷t∕/	
Q.		Sand and crushed gravel, grey, moist,	_	01 5		<u></u>	<u> </u>	****	+	<b>X</b>	<u></u>	<u> </u>	****	ΗŇ	551
R	₩ E	(compact)		31.5					<u>+::::</u> :			<u>+ : : : : :</u> :	2212	٤È	1 1
ž,		HIGHLY WEATHERED SHALE			1			m	+ : - : : :			<u> </u>		<u>: / /</u>	1
<u>S</u>		Silty sand with gravel, black, moist			·		· · · · · • • · · ·		<u>+;;;;;</u> ;	: X:::		<u>+ : : : : :</u> :		ŧΧ	SS2
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		- <u>SHALE BEDROCK</u>	_				<del></del>	<del></del>	+ • • • •			+ • • • • •		-	
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DT 1/17/24			-	85	4 7										CORE4 26.0
A.GDT 1/17/24	2		-	85	4 7										CORE4 26.0
4WA.GDT 1/17/24			-	85	4 7 8										CORE4 26.0
TTAWA.GDT 1/17/24			-	85	4 7 8										CORE4 26.0 CORE5
V OTTAWA.GDT 1/17/24			-	85	6 4 7 8										CORE4 26.0 CORE5
ROW OTTAWA.GDT 1/17/24			-	85	6 4 7 8										CORE4 26.0 CORE5
TROW OTTAWA.GDT 1/17/24				85	6 4 7 8										CORE4 26.0 CORE5
PJ TROW OTTAWA.GDT 1/17/24			-	85	6 4 7 8 9										CORE4 26.0 CORE5
3.GPJ TROW OTTAWA.GDT 1/17/24				85	6 4 7 8 9										CORE4 26.0 CORE5
2023.GPJ TROW OTTAWA.GDT 1/17/24				85	6 4 7 8 9										CORE4 26.0 CORE5
.15.2023.GPJ TROW OTTAWA.GDT 1/17/24				85	6 4 7 8 9										CORE4 26.0 CORE5
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0GS 11.15.2023.GPJ TROW OTTAWA.GDT 1/17/24		Continued Next Page	-	85	6 4 7 8 9 9										CORE4 26.0 CORE5 CORE6
ГLOGS 11.15.2023.GPJ ТROW ОТТАWA.GDT 1/17/24		Continued Next Page	-	85	4 7 8 9 		DRDS				DRE DRI		CORD		CORE4 26.0 CORE5 CORE6
ЫИТ LOGS 11.15.2023.GPJ TROW ОТТАWA.GDT 1/17/24	I .Borel	Continued Next Page		85	6 4 7 8 9 		DRDS					LLING RE			CORE4 26.0 CORE5 CORE6
E GINT LOGS 11.15.2023.GPJ TROW OTTAWA.GDT 1/17/24	IOTES:	Continued Next Page		85 WAT	6 4 7 8 9 		DRDS Hole Ope To (m)		Run No.		DRE DRI th	LLING Rec	ECORD		CORE4 26.0 CORE5 CORE6
OLE GINT LOGS 11.15.2023.GPJ TROW OTTAWA.GDT 1/17/24	IOTES: UOTES: USE L	Continued Next Page Continued Next Page Theole data requires interpretation by EXP before by others m monitoring well installed upon completion		85 WAT 3 023	6 4 7 8 9 	EVEL RECC Water 	DRDS Hole Ope To (m)	n	Run No. 1	ССС ССС ССС ССС ССС	DRE DRI 1 3	LLING RE 71	ECORD		CORE4 26.0 CORE5 CORE5
REHOLE         GINT LOGS         11.15.2023.GPJ         TROW OTTAWA.GDT         1/17/24	IOTES: 1.Borel use b 2.31 m 3.Field	Continued Next Page nole data requires interpretation by EXP before by others m monitoring well installed upon completion work was supervised by an EXP representative.		85 WAT 3 023 023	6 4 7 8 9 10 ER L	EVEL RECC Water evel (m) 10.0 6.8	DRDS Hole Ope To (m)	n	Run No. 1 2	CCC Depp (m 1.4- 3-4	DRE DRI th ) 3 .4	LLING RE 71 100	ECORD		CORE4 26.0 CORE5 CORE5
30REHOLE GINT LOGS 11.15.2023.GPJ TROW OTTAWA.GDT 1/17/24	IOTES: 1. Borel use t 2.31 m 3. Field	Continued Next Page nole data requires interpretation by EXP before ny others m monitoring well installed upon completion work was supervised by an EXP representative. Notes on Sample Descriptions		85 WAT 9 023 023	6 4 7 8 9 	EVEL RECC Water .evel (m) 10.0 6.8	DRDS           Hole Ope To (m)		Run No. 1 2 3	CCC Dep m 1.4 - 3 - 4 4.4 -	DRE DRI 1	LLING RE % Rec 71 100 100	CORD	R	CORE4 26.0 CORE5 CORE5 QD % 0 34 64
DF BOREHOLE GINT LOGS 11.15.2023.GPJ TROW OTTAWA.GDT 1/17/24	IOTES: 1. Borel 2.31 m 3. Field 4. See 1	Continued Next Page December 2015 December		85 WAT 023 023	6 4 7 8 9 	EVEL RECC Water .evel (m) 10.0 6.8	DRDS Hole Ope To (m)		Run No. 1 2 3 4	CCC Dep m 1.4- 3-4 4.4- 6-7	DRE DRI 1	LLING RE % Rec 71 100 100	ECORD	R	CORE4 26.0 CORE5 CORE5 QD % 0 34 64 74
G OF BOREHOLE GINT LOGS 11.15.2023.GPJ TROW OTTAWA.GDT 1/17/24	IOTES: 1. Borel use b 2.31 m 3. Field 4. See I	Continued Next Page December 2017-23008400-B0		85 WAT 9 023 023	6 4 7 8 9 	EVEL RECC Water .evel (m) 10.0 6.8	PRDS           Hole Ope To (m)	n 	Run No. 1 2 3 4 5	CCC Dep (m 1.4- 3-4 4.4- 6-7 7.5-5	PRE DRI th ) 3 .4 6 .5 9.1	LLING RE 71 100 100 100 100	ECORD		CORE4 26.0 CORE5 CORE5 QD % 0 34 64 74 72



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# Log of Borehole BH15



Figure No.

## Project: Geotechnical Investigation - Walkley Centre Development

Project No: <u>OTT-23008400-B0</u>

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	S Y		Geodetic	D		St	tandar	d Per	netration T	Fest	N Va	alue	Combu	stible	Vapo 50	our Readir	ng (ppm 50	) S A	Natural
W	M B	SOIL DESCRIPTION	Elevation	p t	-	boor	20 Strop	4 ath	0 6	60		80 kPa	Na Attor	tural N	/oisti	ure Conter	nt %	⊢P	Unit Wt.
1	L		m 82.2	h		near -	50	901 1(	0 1	50		200		20		0 6	0	Ē	kN/m°
		SHALE BEDROCK	]	10	<u>'</u>														
		Black, Fair to Excellent Rock Quality, — Medium Strong to Strong (continued)									• • •						÷		26.1
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		Borehole Terminated at 13.7 m Depth								E								:	
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Ŏ N	DTES:																		

2	NOTES:	WA	TER LEVEL RECO	RDS		CORE DRILLING RECORD							
UD	use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %					
픵	2.31 mm monitoring well installed upon completion	11/23/2023	10.0		1	1.4 - 3	71	0					
Ĭ	3. Field work was supervised by an EXP representative.	12/06/2023	6.8		2	3 - 4.4	100	34					
В	4. See Notes on Sample Descriptions				3	4.4 - 6	100	64					
Ë.					4	6 - 7.5	100	74					
0	5. Log to be read with EXP Report OT I-23008400-B0				5	7.5 - 9.1	100	72					
١Č					6	9.1 - 10.6	100	92					
					7	10.6 - 12.2	100	66					
					8	12.2 - 13.7	100	84					
	Log o	f Bo	)	rehol	e l	3H	16				° c	ב	yn
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Project No:	ОТТ-23008400-В0							-iouro N	-	F-15		رمر	$\gamma P$
Project:	Geotechnical Investigation - Walkley Cer	ntre Deve	lop	oment			r	Pad	o e 1	of	2		
Location:	1822-1846 Bank Street, Ottawa, Ontario	)							·	_ • •	_		
Date Drilled:	'November 2, 2023			Split Spoon Sar	nple	×	3	Combust	ible Vapo	our Readi	ng		
Drill Type:	CME-55 Truck-Mounted Drill Rig			Auger Sample			]	Natural M	loisture C	Content	1		Х Д
Datum:	Geodetic Elevation		-	Dynamic Cone	Γest		-	Undraine % Strain	d Triaxial at Failure	at	I		⊕
Logged by:	M.Z. Checked by: D.W.			Shear Strength Vane Test	у	+ s	5	Shear Str Penetrom	ength by neter Test	t			<b>A</b>
G W B O L	SOIL DESCRIPTION	Geodetic Elevation m	D e p t h	Standard F 20 Shear Strength 50	enetration 40 100	Test N Va 60 150	alue 80 kPa 200	Combust 250 Natu Atterbe	tible Vapou 0 500 ral Moistu erg Limits ( ) 40	ur Reading 0 75 re Conten (% Dry Wo	g (ppm) 0 t % eight) )	SAMPLES	Natural Unit Wt. kN/m ³
GRA Sand FILL Silty fragr	NULAR FILL and crushed gravel, grey, moist / sand with gravel and wood/brick nents, brown, moist, (compact)	91.9		14 				× ×					GS1 SS1 22.9
	· · · · · · · · _	90.6		5,t	, unen 50/	/ 5 mm		×				X	SS2

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87.9

SHALE BEDROCK Black, Very Poor to Fair Rock Quality,

Black, Excellent Rock Quality, Medium

Medium Strong

SHALE BEDROCK

Strong

5.2023.GPJ TROW OTTAWA.GDT 1/17/24

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CORE1

CORE2

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\$ 11.15.2								CORE6
Ö.	Continued Next Page		10					
IT LO	NOTES:	WA	TER LEVEL RECO	RDS		CORE DF	RILLING RECOR	D
GIN	use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
OLE	2. Borehole was backfilled with soil cuttings upon completion				1	1.5 - 2.7	100	0
Ш					2	2.7 - 4.2	100	73
OR	3. Field work was supervised by an EXP representative.				3	4.2 - 5.7	100	92
ЪЕ	4. See Notes on Sample Descriptions				4	5.7 - 7.2	100	100
0	5 Log to be read with EXP Report OTT-23008400-B0				5	7.2 - 8.8	100	92
LOO	5. Edg to be read with EXT Report OTT-25000+00-b0				6	8.8 - 10.3	100	100
					7	10.3 - 11.8	100	92
					8	11.8 - 13.3	100	93

# Log of Borehole BH16



LOG OF BOREHOLE GINT LOGS 11.15.2023.GPJ TROW OTTAWA.GDT 1/17/24

4. See Notes on Sample Descriptions

5. Log to be read with EXP Report OTT-23008400-B0



#### Project: Geotechnical Investigation - Walkley Centre Development

Figure No.

Bit MLE BEDROCK Database interpetation by 5CP bitters on synthmedian by 5	PI	ojec	L. Geolechnical Investigation - Wa	aikley Centre Dev	/eiop	oment					Paę	ge.	2 of	2		
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SHALE BEDROCK         Image: The transmission of transmission of the transmissinteremetry of the transmission of the transmission of t	G W L	Ь В	SOIL DESCRIPTION	Elevation	n p	20 Shear Si	0 itrength	40 60	) (	30 kPa	Nati Atterb	ural Mois erg Limit	ture Conte	nt % /eight)	P	Unit Wt.
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Strong (continued)			SHALE BEDROCK Black, Excellent Rock Quality, Medium	n											1	
NUES         WITER LEVEL RECORDS         Image: Section 1 and the section 1 by DP bates         Image: Section 1 and the section 1 by DP bates         Image: Section 1 and the section 1 by DP bates         Image: Section 1 and the section 1 by DP bates         Image: Section 1 and the section 1 by DP bates         Image: Section 1 and the section 1 by DP bates         Image: Section 1 and the section			-Strong (continued)	_				· · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · ·	• • • • • • • • • • • • • • • • • • • •	+ (+ ) + + + + + + + + + + + + + + + + +			
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NOTES:         NOTES:<			—	-	11											CORE7
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NOTES:       1. Dorrhole data requires interpretation by EXP bolfor use by others         1. Dorrhole data requires interpretation by EXP bolfor use by others       WATER LEVEL RECORDS         2. Borehole was backflied with soil cuttings upon completion.       WATER LEVEL RECORDS         3. End with was supervised by an EXP representative.       WATER LEVEL RECORDS			Borehole Terminated at 14.9 m D	epth					****							
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NOTES:       WATER LEVEL RECORDS       CORE DRILLING RECORD         1. Borehole data requires interpretation by EXP before use by others       Date       Water       Hole Open         2. Borehole was backfilled with soil cuttings upon completion.       3. Field work was supervised by an EXP representative.       Mater       Hole Open       Run       Depth       % Rec.       RQD %         3. Field work was supervised by an EXP representative.       No.       1       1.5 - 2.7       100       0																
NOTES:       WATER LEVEL RECORDS       CORE DRILLING RECORD         1. Borehole data requires interpretation by EXP before use by others       Date       Water       Hole Open         2. Borehole was backfilled with soil cuttings upon completion.       Date       Water       Hole Open       No.       (m)         3. Field work was supervised by an EXP representative.       Second and an and an and an and an and and a																
NOTES: 1. Borehole data requires interpretation by EXP before use by others     WATER LEVEL RECORDS     CORE DRILLING RECORD       2. Borehole was backfilled with soil cuttings upon completion.     Date     Water Level (m)     Hole Open To (m)     Run No.     Depth No.     % Rec.     RQD %       3. Field work was supervised by an EXP representative.     Seventative.     Seventative.     Seventative.     Seventative.     Seventative.						L::::I	. : : : :	1::::1	<u> </u>		. : : : :	. : : : :	1::::	1::::	1	
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8.8 - 10.3

10.3 - 11.8

11.8 - 13.3

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Project No:	ОТТ-23008400-В0	of Bo	C	re	h	ole	e <u> </u>	<u>3H</u>	<u>17</u>				*	E	хр
Project:	Geotechnical Investigation - Walkley Ce	entre Deve	elo	pmen	nt					Figure N	No	E-16	5		
Location:	1822-1846 Bank Street. Ottawa. Ontari	0								Pa	ge. <u>1</u>	of	2		
Date Drilled:	October 31, 2023			Split	Sno	oon Somn				Combus	tible Van	our Peor	ding		
Drill Type:	CME-55 Truck-Mounted Drill Rig		-	Auge	er Sa	ample	iic			Natural I	Moisture (	Content	ung		×
Datum:	Geodetic Elevation		-	SPT ( Dyna	(N) mic	Value Cone Te	st	0		Atterberg Undraine	g Limits ed Triaxial	at	F		Ð
l ogged by:	MZ Checked by: DW		-	Shelt	oy T Ir St	Tube trength by	,	<b>—</b>		% Strain Shear St	i at Failure trength by	e v			•
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G Y		Geodetic	E		Sta	andard Pen	netration ⁻	Fest N Val	ue	Combus 25	stible Vapo 50 50	ur Readir 0 7	ng (ppm) 50	S A M	Natural
	SOIL DESCRIPTION	Elevation m	p t h	She	ar S	20 4 Strength 50 10	0 1	50 2	kPa	Atterb	ural Moistu berg Limits 20 40	re Conte (% Dry W	nt % Veight) 50		Unit Wt. kN/m ³
	PHALTIC CONCRETE ~ 80 mm thick	92.4 92.3 92.0	C			.25								$\overline{\nabla}$	
Gra	vel with silt and sand, poorly graded, grey,									<b>X</b>				Д	881
	L cond with group brown moint		1											$\forall$	660
	HLY WEATHERED SHALE			· · · · ·								• • • • • • • •		Д	332
den	se)					20, th	nen 50/10	0 mm		××				V	22.0 SS3
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IT LO	NOTES: 1 Borehole data requires interpretation by EXP before	WA	ATER LEVEL RECO	RDS		CORE DF	RILLING RECOR	.D
UD	use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
HOLE	<ol> <li>Borehole was backfilled with soil cuttings upon completion.</li> </ol>				1	2.1 - 2.6	81 100	0
ORE	3. Field work was supervised by an EXP representative.				3	4.2 - 5.7	100	93
ШШ	4. See Notes on Sample Descriptions				4	5.7 - 7.2	100	100
0	5. Log to be read with EXP Report OTT-23008400-B0				5	7.2 - 8.7	100	83
2					6	8.7 - 10.3	100	100
					7	10.3 - 11.8	100	100

8 11.8 - 13.3

100

# Log of Borehole BH17



#### Project: Geotechnical Investigation - Walkley Centre Development

Project No: <u>OTT-23008400-B0</u>

Figure No.

	Jec		antey Centre Deve	μOh								Pa	ige.	2_ of	_2		
	S V		Geodetic	D		Sta	andard	Per	etration T	est N Va	lue	Combu	ustible Va	pour Rea	ding (ppn	1) S A	Natural
G W L	Ь В	SOIL DESCRIPTION	Elevation	e p t	Sh	2 ear S	20 Strengt	4 h	0 6	0	80 kPa	Na Atter	tural Mois	sture Con	tent % Weight)		Unit Wt
	Ľ			h 10	)		50 50	10	00 15	50 2	200		20	40	60	Ē	KN/m°
		SHALE BEDROCK Black Good to Excellent Rock Quality	,					••••								::: :::	
		-Strong (continued)	-			••••		•	• • • • • • • •	••••••	+ : · · · · · ·						
		_	_	11		<u></u>					<u></u>					÷:-	CORE
						•		•								···· ·	
		_	_														
					133	••••		•									
		_	_	12												÷::	
								••••			1.221						
		_															CORE
		_	_	13							<u> </u>						26.1
			79.1			••••		•								 	
		SHALE BEDROCK	_			• • • • •		•			<u></u>				(·   ·> (· )		
		DIACK, MOOF KOCK QUAIITY														÷	
		_	_	14	ı <del>Li i</del>	• • • •		•	· · · · · · · · · ·		+ + + + + + + + + + + + + + + + + + + +		1			<u>:</u>	CORF
																	00.1
		_	_			· · · · · ·										<u></u>	
		Borobole Terminated at 14.8 m D	77.6		177	÷÷					+			+		÷	
NC	TES				L::						· · · · · ·				:::		ı
1.	Boreho	ole data requires interpretation by EXP before	WATE	RL	EVE.	L RE	ECOR	DS I	Hole Ope	n	Run	C	ORE DR	RILLING I	RECOR	D F	RQD %
2.	Boreho	ble was backfilled with soil cuttings upon	Date	L	_evel	(m)	-+		To (m)		No.	(m 21-	1) 26	بر			0
	comple	etion.									2	2.1 -	4.2	10	0		73
3.	Field v	vork was supervised by an EXP representative.									3	4.2 -	5.7	10	0		93
14	See N	otes on Sample Descriptions									4	5.7 -	7.2	10	0		100
			1 I I I I I I I I I I I I I I I I I I I										~ ~				00

7

8

10.3 - 11.8

11.8 - 13.3

100

95

100

Pı	oject No:	ОТТ-23008400-В0	of Bo	D	reho	le _	BH [^]	8				*6	9	хр.
Pr	oject:	Geotechnical Investigation - Walkley Ce	ntre Deve	lor	oment				Figure I	No	E-17			I
Lo	, ocation:	1822-1846 Bank Street, Ottawa, Ontario	D					_	Pa	ge. <u>1</u>	of	2		
Da	ate Drilled:	'November 2, 2023			Split Spoon S	ample	M		Combus	tible Van	our Readi	na		
Dr	ill Type:	CME-55 Truck-Mounted Drill Rig		-	Auger Sampl	e			Natural	Moisture (	Content	- Ing		×
Da	atum:	Geodetic Elevation			SPT (N) Valu Dynamic Cor	e ie Test			Atterber Undrain	g Limits ed Triaxial	at	F		÷ Ф
	aaed pv.	MZ Checked by: DW		•	Shelby Tube	th by			% Strair Shear S	n at Failure trength by	e 1			•
20	ggod by.				Vane Test	urby	S		Penetro	meter Tes	t			•
G	S Y		Geodetic	De	Standar	d Penetratio	on Test N Val	Je	Combu 2	stible Vapo 50          50	ur Readin 0 75	g (ppm) 0	S A M	Natural
Ľ	B O L	SOIL DESCRIPTION	Elevation m	p t h	20 Shear Streng	40 jth 100	150 2	kPa	Attert	tural Moistu berg Limits	re Conten (% Dry Wo	t % eight)	PLEQ	Unit Wt. kN/m ³
	ASI GR San moi	PHALTIC CONCRETE - 100 mm thick ANULAR FILL d with silt and gravel, well graded, grey, st	_91.3 _91.2 _90.9	0								, 	8	GS1 SS1
	FIL Silty	v sand with gravel, brown, moist, (loose)	_	1	9 •••	· · · · · · · · · · · ·							X	SS2
	HIG	HLY WEATHERED SHALE	89.5 89.4			: 38 : O							Х	SS3
	Silty	v sand with gravel, black, moist, (very se)		2										CORE1
	Blac	ALE BEDROCK k, Very Poor to Fair Rock Quality - -	-	3										CORE2
	Blac Blac Mec	- ALE BEDROCK k, Good to Excellent Rock Quality, jium Strong -		4									-	CORE3
		-	-	6										CORE4 26.0
		-	-	7									-	
		-	-	9										
		-											ľ	CORE6 26.1

GINT LOGS 11.15.2023.GPJ TROW OTTAWA.GDT 1/17/24 NOTES: 1. Borehole data requires interp use by others LOG OF BOREHOLE 2. Borehole was backfilled with completion. 3. Field work was supervised by

		10						
Continued Next Page		10						
NOTES:	WA	TER LEVEL RECO	RDS		CORE DF	RILLING RECOR	D	
use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %	
2. Borehole was backfilled with soil cuttings upon completion.				1	1.9 - 2.5	77	0	
				2	2.5 - 4.1	100	68	
3. Field work was supervised by an EXP representative.				3	4.1 - 5.6	100	81	
4. See Notes on Sample Descriptions				4	5.6 - 7.2	100	90	
5 Log to be read with EXP Report OTT-23008400-B0				5	7.2 - 8.7	100	90	
e. Esg to be foud with Ext. https://err 2000-to-De				6	8.7 - 10.2	100	95	
				7	10.2 - 11.8	100	100	
				8	11.8 - 13.3	100	100	

# Log of Borehole BH18



Figure No.

#### Project: Geotechnical Investigation - Walkley Centre Development

Project No: <u>OTT-23008400-B0</u>

Р	rojec	L. Geotechnical Investigation - Walk	cley Centre Dev	elop	ment				Pa	ge.	2 of	2	
GW	S Y ⊠∎	SOIL DESCRIPTION	Geodetic	, D e n p	Standar 20	d Penetration Test I 40 60	N Value 80		Combus 21 Nat	stible Vap 50 5 ural Mois	our Readir 500 75 ture Conter	ng (ppm) 50 nt %	S A M P Unit Wt
Ë	BO L	SHALE BEDROCK	81.3	' ť h 10	Shear Streng 50	gth 100 150 ↔ i • · · · · · · · · · · · · ·	200	kPa ······	Atterb		40 6	(eight) 0	kN/m ³
		Black, Good to Excellent Rock Quality, — Medium Strong <i>(continued)</i>	_										
		_	_	11				·····					CORE
		_	_										
		_		12									
		_	_	13									25.9
		_	_					·····					
		_	_	14									CORE
		- Berehele Termineted at 14.7 m Der											
GS 11.15.2023.GPJ TROW OTTAWA.GDT 1/17/24													
	DTES: . Boreho	ble data requires interpretation by EXP before	WAT	ERL	EVEL RECO	RDS			cc	RE DRI		ECORD	
2 PLE	use by Boreho. comple	others	Date	L	vvater .evel (m)	Hole Open To (m)		Run No. 1	Dep (m) 1.9 - 2	in ) 2.5	% Rec	). 	RQD %
HINGRE 3	. Field v	vork was supervised by an EXP representative.						2 3 4	2.5 - 4 4.1 - 5 5.6 - 7	4.1 5.6 7.2	100 100 100		68 81 90
	. Log to	be read with EXP Report OTT-23008400-B0						5 6	7.2 - 8 8.7 - 1	8.7 0.2	100 100		90 95

A Banchala data annuina internatation hu EVD hafara	WA	TER LEVEL RECO	RDS		CORE DF	RECOR	.D	
use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %	
2. Borehole was backfilled with soil cuttings upon completion.				1	1.9 - 2.5	77	0	
				2	2.5 - 4.1	100	68	
3. Field work was supervised by an EXP representative.				3	4.1 - 5.6	100	81	
4. See Notes on Sample Descriptions				4	5.6 - 7.2	100	90	
5 Log to be read with EXP Report OTT-23008400-B0				5	7.2 - 8.7	100	90	
o. Log to be foud with Ext. Hepoir of 1 2000 for Bo				6	8.7 - 10.2	100	95	
				7	10.2 - 11.8	100	100	
				8	11.8 - 13.3	100	100	

roject:	Geotechnical Investigation - Walkle	ey Centre De	eve	lopme	nt				- F	-igure	1N0	·	∠ I	- 1		I
ocation:	1822-1846 Bank Street, Ottawa, Or	ntario							_	P	age		0	<u> </u>		
ate Drille	ed: 'June 17, 2024		-	Split Spo	oon Sam	ple		$\boxtimes$		Comb	ustible	e Vapo	ur Readi	ing		
ill Type:	CME-55 Truck-Mounted Drill Rig		_	Auger S SPT (N)	ample Value					Natura Atterbe	al Moi erg Li	sture C mits	Content	F		× ⊸
atum:	Geodetic Elevation		_	Dynamic	Cone T	est	_	_		Undrai % Stra	ined ⁻	Friaxial Failure	at			$\oplus$
ogged by	r: M.Z. Checked by: I.T.			Shear S Vane Te	ube trength k st	у		∎ + s		Shear Penetr	Strer	igth by er Tes	t			•
S Y M		Geodetic	De	Sta	andard P	enetratio	on Test	t N Valu 80	ie D	Comb	ustib 250	e Vapo 50	our Readi	ng (ppm) '50	S A M	Natural
B O L	SOIL DESCRIPTION	m 92 19	t h	Shear	Strength	100	150	20	kPa 0	Atte	atura erberg 20	Limits	(% Dry V	Veight)	LES	kN/m ³
	SPHALTIC CONCRETE ~ 80 mm thick RANULAR FILL	92.1	0												•	
∭ī	and and crushed gravel, grey, moist	91.5										··· · · · · · ·			-	
₩N	<u>VERBURDEN</u> ot Sampled	_	1						· · · · · · · · · · · ·			··· · · · · ·			•	
															-	
<u> </u>		90.1	2					·······	• • • • • • • •			· · · · · · ·	· · · · · · · · ·		-	
	ack														-	
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		_	5									··· ·· · · · · · · · · · · · · · · · ·			-	
								······				··· · · · · ·			•	
	Auger Refusal at 6.0 m Depth	00.2	6													
				: : : :	: : : :		11	::::		1:::	:   :	: : :	1 : : : :	1::::		

BAN	NOTES:	WAT	ER LEVEL RECO	RDS		CORE DR	ILLING RECOF	RD
1822	use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
Ы	2. Borehole was backfilled upon completion.							
ЯËН	3. Field work was supervised by an EXP representative.							
BQF	4. See Notes on Sample Descriptions							
Ь	5. Log to be read with EXP Report OTT-23002538-B0							
POG								

P	roject No	D: <u>OTT-23002538-B0</u>	f Pr	0	be	hol	e _	PH	<u>-2</u>	-:		22	**(	exp.
Ρ	roject:	Geotechnical Investigation - Walkley	Centre De	eve	elopmen	t			- I	-igure i	NO	<u> </u>	- 1	1
Lo	ocation:	1822-1846 Bank Street, Ottawa, Onta	ario							Pa	ge		<u> </u>	
Da	ate Drille	ed: 'June 17, 2024		_	Split Spor	on Sample	e	$\boxtimes$		Combus	tible Vapo	our Readi	ng	
Dr	ill Type:	CME-55 Truck-Mounted Drill Rig		_	Auger Sa	mple /alue				Natural I	Moisture ( a Limits	Content	F	×
Da	atum:	Geodetic Elevation			Dynamic	Cone Tes	t			Undrain	ed Triaxia	lat	I	•
Lo	ogged by	/: M.Z. Checked by: I.T.			Shelby Tu Shear Str Vane Tes	ube ength by it		∎ + s		% Strain Shear S Penetro	trength by meter Tes	e / .t		▲
	S Y		Geodetic	D	Sta	ndard Pen	etration T	est N Valu	le	Combu:	stible Vap	our Readii	ng (ppm) 50	S A Natural
	M B O	SOIL DESCRIPTION	Elevation m	p t h	2 Shear S	0 4 Strength	0 6	0 8	0 kPa	Nat Attert	ural Moist berg Limits	ure Conte s (% Dry V	nt % Veight)	PUnit Wt. kN/m ³
		SPHALTIC CONCRETE ~ 150 mm thick	93.59 93.4	0	5	0 10	0 1	50 20	00	2	20 4	10 E	50 	S
	G S	RANULAR FILL and and crushed gravel, grey, moist	_						· · · · · · · · · · · · · · · · · · ·					
	δ	VERBURDEN	92.8											
	₩ [−] ñ	ot Sampled		1										
			_					············				· · · · · · · · · · ·		
			-01 5	2										
		GHLY WEATHERED SHALE		-										
			-											
			_	3										
			 89.8											
		Auger Refusal at 3.8 m Depth	89.8											

OREHOLE 1822 BANK GINT LOGS 06.21.2024.GPJ TROW OTTAWA.GDT 8/27/24

<u> </u>			,					
	VOTES:	WAT	ER LEVEL RECC	RDS		CORE DR	RILLING RECOF	RD
7701	<ol> <li>Borehole data requires interpretation by EXP before use by others</li> </ol>	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
۲ ۲	2. Borehole was backfilled upon completion.			,,				
빌	3. Field work was supervised by an EXP representative.							
	4. See Notes on Sample Descriptions							
10 C C C	5.Log to be read with EXP Report OTT-23002538-B0							

Project:	Geotechnical Investigation - V	Valkley Centre De	eve	lopme	nt				F	igure	No	23	-		
_ocation:	1822-1846 Bank Street, Ottaw	va, Ontario								Pa	ige	<u>1</u> of	_1_		
)ate Drilled:	June 17 2024	, -		Split Spr		mplo				Combu	ctible Var	our Pood	ng	r	-
rill Type:	CME-55 Truck-Mounted Drill R	Ϊα	-	Auger S	ample	nhie				Natural	Moisture	Content	ng	>	×
)atum:	Geodetic Elevation		-	SPT (N) Dynamic	Value c Cone	Test		0		Atterbe Undrair	rg Limits ned Triaxi	al at	F		Э Ф
ogged by:	M.Z. Checked by:	I.T.	_	Shelby T Shear S Vane Te	Fube trength est	by		+ s		% Strai Shear S Penetro	n at Failu Strength b ometer Te	re oy est			▲
S Y M B O	SOIL DESCRIPTION	Geodetic Elevation m	D e p t h	Shear	andard 20 Strengt	Penetr 40 h	ration 1 6	Fest N Va 60	lue 80 kPa	Combu 2 Na Atter	istible Vaj 250 itural Mois berg Limi	pour Readi 500 7 sture Conte ts (% Dry V	ng (ppm) 50 Int % Veight)	SAMP U	Jatura Init Wt kN/m ³
	HALTIC CONCRETE ~ 120 mm	92.12 thick92.0	0		50	100	1	50 2	200		20	40	30 	- -	
GRAI Sand	NULAR FILL I and crushed gravel, grey, mois	st –													
	RBURDEN	91.4	1												
	ILY WEATHERED SHALE	90.9													
Black	< c	-													
		_	2	•••••••			• • • • • •							-	
		_													
														-	
		_	3											-	
		-					· · · · · · ·								
		_	4				· · · · · · · · ·								
														•	
		86.9	5											-	
	Auger Refusal at 5.2 m Depth	1													
OTES:		WATE	RLI	EVEL R	ECOF	DS				CC	DRE DR	ILLING R	ECORD	)	
1 Dorohola J-4	aquiroo interpretation by EVD Lafana														

51	2. Borenole was backfilled upon completion.
0	
τl	3 Field work was supervised by an EXP representative
ш	5.1 leid work was supervised by an EXT representative.

LOG OF BORE 4. See Notes on Sample Descriptions

5.Log to be read with EXP Report OTT-23002538-B0

**/		ind bo		OUNE DI		
Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %

P	rojec	t No:	ОТТ-23002538-В0	f Pr	0	be	ho	le	•	PH	<b>-4</b>						e	exp.
P	rojec	:t:	Geotechnical Investigation - Walkley	Centre De	eve	lopmer	nt				F	igure	No	D	24	-		I
Ł	, ocati	on:	1822-1846 Bank Street, Ottawa, Onta	rio							_	Ρ	age	э́	_ of	1	-	
D	ate D	)rilled:	'June 17, 2024			Split Spo	on Sam	ple				Comb	ustik	ole Vapo	our Readi	na		
D	rill Ty	/pe:	CME-55 Truck-Mounted Drill Rig		-	Auger Sa	ample					Natura	al Mo	oisture C	Content			×
D	۔ atum	:	Geodetic Elevation		-	Dynamic	value Cone T	est		0		Undra	erg I ined	Limits Triaxia	at			—
L	ogge	d by:	M.Z. Checked by: I.T.		-	Shelby T Shear St Vane Te	ube rength b st	у		■ + s		% Stra Shear Penet	ain a Stre rome	t Failure ength by eter Tes	e t			▲
G W L	SY MBO-		SOIL DESCRIPTION	Geodetic Elevation m	D e p t h	Sta 2 Shear S	indard P 20 Strength	enetrat 40	ion T 6	est N Valı 0 8	ue 60 kPa	Comb Atte	250 250 Jatur erbei	ble Vapo ) 50 al Moistr rg Limits	our Readi 00 7 ure Conte (% Dry V	ng (pp 50 nt % Veight	om) S A N ) L	Natural Unit Wt. kN/m ³
	L	ASPI	HALTIC CONCRETE ~ 90 mm thick	92.47 92.4	0		50	100	15	50 20	00		20	4	0 (	50 		<u>5</u>
		OVE Not S	RBURDEN Sampled	91.7	1									· · · · · · · · · · · · · · · · · · ·				
		HIGH Black	ILY WEATHERED SHALE	91.0														
		_	-	_	2													
		_	-		3													
				_														
				_	4													
		_	-	87.6														
			Auger Refusal at 4.9 m Depth															

	I
8/27/24	
<b>FROW OTTAWA.GDT</b>	
LOGS 06.21.2024.GPJ 1	
GINT	
<b>1822 BANK</b>	
OREHOLE	

¥.								
2 BAN	NOTES:	WAT	ER LEVEL RECO	RDS		CORE DF	ILLING RECOR	۶D
1822	use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
OLE	2. Borehole was backfilled upon completion.							
REH	3. Field work was supervised by an EXP representative.							
BO	4. See Notes on Sample Descriptions							
LOG OF	5.Log to be read with EXP Report OTT-23002538-B0							

roiect:	Geotechnical Investigation - Walkley	/ Centre Dr	eve	lonme	nt			F	igure l	No	25	_		
ocation:	1822-1846 Bank Street, Ottawa, On	tario							Pa	ge	1_ of	_1_		
ate Drilled:	'June 17. 2024			Split Sp	on Sam		5	 a	Combus	tihle Van	our Read	ina		
rill Type:	CME-55 Truck-Mounted Drill Rig		-	Auger S	ample	JIE			Natural	Moisture	Content	"'y		×
atum:	Geodetic Elevation		-	SPT (N) Dynamic	Value : Cone Te	est	(	- -	Atterber Undrain	g Limits ed Triaxia	al at	ŀ		
paged pv.	MZ Checked by: LT		-	Shelby T	ube				% Strair Shear S	n at Failur trength b	e y			•
33)-	••••••••••••••••••••••••••••••••			Vane Te	st	y	ŝ	5	Penetro	meter Te	st			
S Y M		Geodetic	De	Sta	andard Pe	enetration	Test N V	alue	Combu 2	stible Vap 50 5	our Read	ing (ppm) 750	S A M	Natura
B O L	SOIL DESCRIPTION	Elevation m	p t h	Shear	20 Strength 50	100	150	80 kPa	Atteri	tural Mois perg Limit	ture Conte s (% Dry \ 40	ent % Weight) 60		Unit W
	HALTIC CONCRETE ~ 80 mm thick	92.49	0						×					GS1
	and crushed gravel, grey, moist			Ċ		· · · · · · · · · · · · · · · · · · ·							ΞŇ	SS1
OVE Not S	RBURDEN Sampled		1											
				0					*				Ň	552
		90.7					· · · · · · · · ·							

BAN	NOTES:	w/	ATER LEVEL RECC	RDS		CORE DF	RILLING RECO	RD
1822	use by others	Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
Ш	2. Borehole was backfilled upon completion.			, <i>, ,</i>	1	1.3 - 2.6	100	0
REHC	3. Field work was supervised by an EXP representative.							
BOF	4. See Notes on Sample Descriptions							
Ы	5.Log to be read with EXP Report OTT-23002538-B0							
DG								

	Log o	f Pro	0	behole	Ρ	H-	6		P	yn	
Project No:	OTT-23002538-B0								U		
Project:	Geotechnical Investigation - Walkley C	Centre De	ve	lopment			ł	-igure No. <u>20</u>		I	
Location:	1822-1846 Bank Street, Ottawa, Ontar	rio						Page. <u>I</u> of <u>I</u>			
Date Drilled:	'June 17, 2024			Split Spoon Sample		$\boxtimes$		Combustible Vapour Reading			
Drill Type:	CME 55 Truck Mounted Drill Pig			Auger Sample				Natural Moisture Content		×	
Dim Type.				SPT (N) Value		0		Atterberg Limits	H	-O	
Datum:	Geodetic Elevation			Dynamic Cone Test	_	_		Undrained Triaxial at % Strain at Failure		$\oplus$	
Logged by:	M.Z. Checked by: I.T.			Shelby Tube Shear Strength by Vane Test		+ s		Shear Strength by Penetrometer Test		<b></b>	
G Y W B U O L	SOIL DESCRIPTION	Geodetic Elevation m	D e p t	Standard Penetration 20 40 Shear Strength	ion Test N 60	N Value 80	kPa	Combustible Vapour Reading (ppr 250 500 750 Natural Moisture Content % Atterberg Limits (% Dry Weight) 20 40 60	n) SAMPLE	Natural Unit Wt. kN/m ³	

	Ϊ	B O			m	" P t	Shear St	ength			kPa	Atter	berg Limi	ts (% Dry W	eight)	Ļ	kN/m ³
L		L			92.26	0	50		100 1	50 2	200	1	20	40 6	0	5	
	R	$\propto$	ASPHALTIC CONCRETE ~ 90 mm th	ick _	92.2				12132	13333			13333				
	Ř	XX.	GRANULAR FILL	Γ	92.0		3333	1333	12032	13363	111111	13333	13333		2211	21	
	ß	XX-	-∖Sand and crushed gravel, grey, mois	t									1.2.2.2.3		****	÷.	
	Ŕ	$\otimes$	OVERBURDEN									:::::::	12221		::::::::::::::::::::::::::::::::::::::	2	
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4. See Notes on Sample Descriptions 5. Log to be read with EXP Report OTT-23002538-B0 LOG OF BC

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Date	Water Level (m)	Hole Open To (m)	Run No.	Depth (m)	% Rec.	RQD %
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## **EXP** Services Inc.

Sun Life Assurance Company of Canda c/o BentallGreenOak (Canada) LP Phase Two Environmental Site Assessment 1820-1846 Bank Street, Ottawa, Ontario OTT-22002538-B0 September 30, 2024

**Appendix F: Analytical Summary Tables** 



# Table 1 - Analytical Results in Soil - PHC and VOC 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-80

			Provincial										s	amples									
Sample ID	UNITS	MECP Table 3 Residential ²	MECP Table 7 Recidential ¹	BH/MW-1 552	DUP 2 (BH/MW-1 SS2)	BH/MW-1 553	BH/MW-2 551	BH/MW-2 AS3	BH/MW-3 55-1	BH/MW-4 SS-2	BH-6 551	BH-6 552	BH/MW-7 SS2A	BH/MW-7 SS2B	BH/MW-8 AS3	BH/MW-9 AS1	BH/MW-9 552	BH/MW-10 AS1	BH/MW-10 552	DUP 1 (BH/MW-10 SS2)	BH/MW-11 SS1	BH/MW-11 552	DUP 3 (BH/MW-11 552)
Lab ID	UNITS	neascarcar	Rearbeingin	BH-1 552	DUP 2	BH-1 553	BH-2 SS1	BH-2 AS3	BH-3 55-1	BH-4 SS-2	BH-6 551	BH-6 SS2	BH-7 SS2A	BH-7 5528	BH-8 AS3	BH-9 AS1	BH-9 SS2	BH-10 AS1	BH-10 SS2	DUP 1	BH-11 551	BH-11 552	DUP 3
Sampling Date				26-Oct-23	26-Oct-23	26-Oct-23	30-Oct-23	30-Oct-23	14-Dec-23	14-Dec-23	27-Oct-23	27-Oct-23	27-Oct-23	27-Oct-23	27-Oct-23	26-Oct-23	26-Oct-23	26-Oct-23	26-Oct-23	26-Oct-23	20-Oct-23	30-Oct-23	30-Oct-23
Sample Depth (mbgs)				0.9 to 1.5	0.9 to 1.5	1.7 to 2.3	0.2 to 0.8	1.7 to 2.3	0.1 to 1.2	1.2 to 1.5	0.1 to 0.7	0.9 to 1.3	0.9 to 1.2	1.2 to 1.5	1.5 to 2.1	0.1 to 0.5	0.8 to 2.4	0.1 to 0.7	0.9 to 1.5	0.9 to 1.5	0.1 to 0.7	0.8 to 1.4	0.8 to 1.4
Petroleum Hydrocarbons																							
F1 PHC (C6-C10)	HR/R	55	55	<10	<10	<10	<10	50	<10	<10	<10	26	<10	32	<10	<10	13	<10	<10	<10	<10	<10	<10
F2 PHC (C10-C16)	µg/g	98	98	<10	<10	19	<10	44	<10	<10	<15	34	<10	<20	<10	<10	26	<10	<10	<10	<10	<10	24
F3 PHC (C16-C34)	µg/g	300	300	<0	<50	<\$0	<0	<50	<50	<0	<60	<50	<0	<95	170	150	<50	110	<0	<50	69	<50	57
F4 PHC (C34-C50)	µ8/8	2800	2800	<50	< <u>s</u> 0	<s0< td=""><td>&lt;<u>5</u>0</td><td>&lt;50</td><td>&lt;0</td><td>&lt;0</td><td>&lt;50</td><td>&lt;\$0</td><td>&lt;0</td><td>&lt;50</td><td>510</td><td>450</td><td>&lt;50</td><td>430</td><td>&lt;50</td><td>&lt;50</td><td>88</td><td>&lt;50</td><td><s0< td=""></s0<></td></s0<>	< <u>5</u> 0	<50	<0	<0	<50	<\$0	<0	<50	510	450	<50	430	<50	<50	88	<50	<s0< td=""></s0<>
F4 PHC (C34-C50) Gravimetric	µg/g	2800	2800												2500	3100		2400					
Volatile Organic Compounds																							
Acetone	HR/R	16	16	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	40.49	<0.49	<0.49	<0.49	<0.49
Benzene	µg/g	0.21	0.21	<0.0060	<0.0060	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060	<0.0050	0.092	<0.0060	0.029	<0.0060	<0.0060	<0.0060	<0.0050	<0.0060	<0.0060
Bromodichloromethane	HR/R	13	13	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Bromoform	µg/g	0.27	0.27	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Bromomethane	µg/g	0.05	0.05	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Carbon Tetrachloride	µg/g	0.05	0.05	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Chlorobenzene	H8/8	2.4	2.4	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Chloroform	HR/R	0.05	0.05	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Dibromochloromethane	48/8	9.4	9.4	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
1,2-Dichlorobenzene	µ8/8	3.4	3.4	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
1,3-Dichlorobenzene	HR/R	4.8	4.8	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
1,4-Dichlorobenzene	48/8	0.083	0.083	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Dichlorodifluoromethane	HR/R	16	16	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
1,1-Dichloroethane	µ8/8	3.5	3.5	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	40.040	<0.040	<0.040	40.040	<0.040
1,2-Dichloroethane	µ8/8	0.05	0.05	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	40.049	<0.049	<0.049	40.049	<0.049
1,1-Dichloroethylene	HR/R	0.05	0.05	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	40.040	40.040	<0.040	40.040	<0.040
Us-1,2-Dichloroethylene	µ8/8	3.4	3.4	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	40.040	<0.040	<0.040	40.040	<0.040
Trans-1,2-Dichloroethylene	HR/R	0.084	0.084	40.040	<0.040	<0.040	×0.040	<0.040	40.040	×0.040	<0.040	<0.040	<0.040	<0.040	40.040	<0.040	×0.040	40.040	40.040	40.040	<0.040	40.040	40.040
1,2-Dichloropropane	H8/8	0.05	0.05	40.040	10.040	40.040	10.040	10.040	10.040	10.040	10.040	10.040	10.040	10.040	40.040	10.040	10.040	40.040	40.040	40.040	40.040	10.040	40.040
Ch-1,3-Dichloropropylene	H8/8	NV NV	NV NV	40.030	40.050	40.030	10.030	10.050	40.030	10.050	10.050	10.050	10.040	40.030	40.050	10.050	40.050	40.050	40.030	40.030	40.050	40.030	40.050
1 2 Dichlosoprogulage Total	HK/K HC/C	0.05	0.05	40.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	40.040	<0.040	<0.040	40.040	40.040	40.040	40.040	40.040	<0.040
Phulhanana	46/8 up/a	2	2	40.030	<0.010	<0.030	<0.030	<0.010	<0.010	<0.030	<0.010	<0.030	<0.010	<0.020(1)	0.14	0.01	0.14	<0.050	40.030	40.010	40.010	-0.030	<0.050
Ethylene Dihromide	110/0	0.05	0.05	<0.040	<0.040	<0.010	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	10.040	<0.04	<0.040	<0.010	+0.010	40.040	+0.040	10.040	<0.010
Hexane(n)	110/0	2.8	2.8	<0.040	<0.040	<0.040	<0.040	0.9	<0.040	<0.040	<0.040	0.14	<0.040	<0.040	0.26	<0.040	0.32	<0.040	40.040	<0.040	0.044	+0.040	<0.040
Methyl Fthyl Ketone	110/0	16	16	<0.40	<0.40	10.40	<0.40	<0.40	<0.40	<0.40	<0.40	(1.40	v0.40	+0.40	+0.40	40.40	<0.40	10.40	40.40	<0.40	<0.40	<0.40	+0.40
Methyl isobutyl Ketone	ue/e	1.7	1.7	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Methyl-t-Butyl Ether	ue/e	0.75	0.75	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Methylene Chloride	HR/R	0.1	0.1	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.58(1)	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049
Styrene	ue/e	0.7	0.7	<0.040	< 0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
1.1.1.2-Tetrachloroethane	ue/e	0.058	0.058	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
1,1,2,2-Tetrachloroethane	HR/R	0.05	0.05	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Tetrachloroethylene	HR/R	0.28	0.28	0.16	0.27	0.90	<0.040	<0.040	1.7	0.89	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Toluene	µg/g	2.3	2.3	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.063	<0.020	0.10	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
1,1,1-Trichloroethane	µg/g	0.38	0.38	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
1,1,2-Trichloroethane	HR/R	0.05	0.05	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Trichloroethylene	H8/8	0.061	0.061	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane	HR/R	4	4	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Vinyl Chloride	H8/8	0.02	0.02	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019
Xylene, m,p-	H8/8	NV	NV	<0.020	<0.020	<0.020	<0.020	0.099	<0.020	<0.020	<0.020	0.066	<0.020	<0.020	0.38	0.039	0.4	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Xylene, o-	HE/E	NV	NV	<0.020	<0.020	<0.020	<0.020	0.023	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.067	<0.020	0.12	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Total Xylenes	µg/g	3.1	3.1	<0.020	<0.020	<0.020	<0.020	0.12	<0.020	<0.020	<0.020	0.066	<0.020	<0.020	0.45	0.039	0.52	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
NOTES:																							

Ontario Ministry of Environment, Conservation and Parks (MECP). Soll, Groundwater and Sedment Standards for use under Part XV.1 of the Environmental Protection Act, April 2011, Table 7 Genetic Size Condition Standards (SC) for Shullow Solls in a Non-Potable Ground Water Condition and Partiant/Inducational Property is locarer teatured and (s) 1

Ontario Ministry of Environment, Conservation and Parks (MECP), Gol Groundheatre and Sedment Standards for use under Park XV. 1 of the Environmental Protection Act, April 2011, Table 3 Stie Condition Standards (SCS) in a Non-Netable Ground Water Condition and Parksing/Residential/Institutional Progeny Use Course Instituted Galaxy 2

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# Table 2 - Analytical Results in Soil - PAH 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-80

			Provincial										Sam	ples									
Sample ID	UNITS	MECP Table 3 Recidential ²	MECP Table 7 Residential ¹	BH/MW-1 SS2	DUP 2 (BH/MW-1 SS2)	BH/MW-1 SS3	BH/MW-2 SS1	BH/MW-2 AS3	BH/MW-3 SS-1	BH/MW-4 SS-2	BH-6 551	BH-6 552	BH/MW-7 SS2A	BH/MW-7 SS2B	BH/MW-8 AS3	BH/MW-9 AS1	BH/MW-9 SS2	BH/MW-10 AS1	BH/MW-10 552	DUP 1 (BH/MW-10 SS2	BH/MW-11 551	BH/MW-11 552	DUP 3 (BH/MW-11 SS2)
Lab ID		No and contraint	Reinbertran	BH-1 SS2	DUP 2	BH-1 SS3	BH-2 SS1	BH-2 AS3	BH-3 SS-1	BH-4 SS-2	BH-6 551	BH-6 SS2	BH-7 SS2A	BH-7 SS2B	BH-8 AS3	BH-9 AS1	BH-9 SS2	BH-10 AS1	BH-10 SS2	DUP 1	BH-11 SS1	BH-11 SS2	DUP 3
Sampling Date				26-Oct-23	26-Oct-23	26-Oct-23	30-Oct-23	30-Oct-23	14-Dec-23	14-Dec-23	27-Oct-23	27-Oct-23	27-Oct-23	27-Oct-23	27-Oct-23	26-Oct-23	26-Oct-23	26-Oct-23	26-Oct-23	26-Oct-23	30-Oct-23	30-Oct-23	30-Oct-23
Sample Depth (mbgs)				0.9 to 1.5	0.9 to 1.5	1.7 to 2.3	0.2 to 0.8	1.7 to 2.3	0.1 to 1.2	1.2 to 1.5	0.1 to 0.7	0.9 to 1.3	0.9 to 1.2	1.2 to 1.5	1.5 to 2.1	0.1 to 0.5	0.8 to 2.4	0.1 to 0.7	0.9 to 1.5	0.9 to 1.5	0.1 to 0.7	0.8 to 1.4	0.8 to 1.4
Polycyclic Aromatic Hydrocarbons																							
Acenaphthene	µg/g	7.9	7.9	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.18	<0.0050	0.012	0.069	40.050	<0.050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Acenaphthylene	µg/g	0.15	0.15	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0073	<0.0050	<0.0050	<0.0050	<0.050	<0.050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Anthracene	µg/g	0.67	0.67	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.64	<0.0050	0.16	0.22	0.091	<0.050	<0.0050	<0.050	<0.0050	<0.0050	0.016	<0.0050	<0.0050
Benzo(a)anthracene	µ8/8	0.5	0.5	<0.0050	<0.0050	<0.0050	<0.0050	0.0070	<0.0050	<0.0050	0.91	<0.0050	0.45	0.58	0.24	<0.050	<0.0050	<0.050	<0.0050	<0.0050	0.041	<0.0050	0.0082
Benzo(a)pyrene	µ8/8	0.3	0.3	<0.0050	<0.0050	<0.0050	<0.0050	0.0061	<0.0050	<0.0050	0.66	<0.0050	0.38	0.58	0.21	<0.050	<0.0050	<0.050	<0.0050	<0.0050	0.036	<0.0050	0.0070
Benzo(b)fluoranthene	HR/R	0.78	0.78	<0.0050	<0.0050	<0.0050	<0.0050	0.010	<0.0050	<0.0050	0.87	<0.0050	0.52	0.78	0.30	<0.050	<0.0050	<0.050	<0.0050	<0.0050	0.053	<0.0050	0.011
Benzo(g,h,i)perylene	µ8/8	6.6	6.6	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.24	<0.0050	0.17	0.27	0.10	<0.050	<0.0050	<0.050	<0.0050	<0.0050	0.016	<0.0050	<0.0050
Benzo(k)fluoranthene	HR/R	0.78	0.78	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.31	<0.0050	0.20	0.30	0.12	<0.050	<0.0050	<0.050	<0.0050	<0.0050	0.019	<0.0050	<0.0050
Chrysene	µ8/8	7	7	<0.0050	<0.0050	<0.0050	<0.0050	0.0064	<0.0050	<0.0050	0.73	<0.0050	0.37	0.46	0.19	<0.050	<0.0050	<0.050	<0.0050	<0.0050	0.038	<0.0050	0.0094
Dibenzo(a,h)anthracene	µg/g	0.1	0.1	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.099	<0.0050	0.061	0.093	<0.050	<0.050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Fluoranthene	HR/R	0.69	0.69	<0.0050	<0.0050	<0.0050	<0.0050	0.015	<0.0050	<0.0050	2.1	<0.0050	0.86	0.99	0.51	<0.050	<0.0050	<0.050	<0.0050	<0.0050	0.089	0.0055	0.018
Fluorene	µ8/8	62	62	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.29	<0.0050	0.024	0.048	<0.050	<0.050	<0.0050	<0.050	<0.0050	<0.0050	0.007	<0.0050	<0.0050
Indeno[1,2,3,-cd]pyrene	HR/R	0.38	0.38	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.29	<0.0050	0.19	0.31	0.12	<0.050	<0.0050	<0.050	<0.0050	<0.0050	0.015	<0.0050	<0.0050
Methylnaphthalene,1-	µ8/8	0.99	0.99	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.04	<0.0050	0.021	0.027	<0.050	<0.050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Methylnaphthalene,2-	µg/g	0.99	0.99	<0.0050	<0.0050	<0.0050	<0.010(1)	<0.0050	<0.0050	<0.0050	0.034	<0.0050	0.022	0.026	<0.050	<0.050	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Methylnaphthalene 2-(1-)	µg/g	0.99	0.99	<0.0071	<0.0071	<0.0071	<0.011	<0.0071	<0.0071	<0.0071	0.075	<0.0071	0.043	0.053	<0.071	<0.071	<0.0071	<0.071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071
Naphthalene	µ8/8	0.6	0.6	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.035	<0.0050	0.0078	0.016	<0.050	<0.050	0.0056	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Phenanthrene	HR/R	6.2	6.2	<0.0050	<0.0050	0.0069	0.0071	0.0065	<0.0050	<0.0050	2.1	0.011	0.47	0.40	0.36	<0.050	0.010	<0.050	<0.0050	<0.0050	0.068	<0.0050	0.018
Pyrene	ug/g	78	78	<0.0050	<0.0050	<0.0050	<0.0050	0.014	<0.0050	<0.0050	1.6	<0.0050	0.71	0.82	0.38	<0.050	<0.0050	<0.050	<0.0050	<0.0050	0.073	<0.0050	0.016

NOTES:

Ontario Ministry of Environment, Conservation and Parls, (MICP), Sol, Groundwater and Sedment Standards for use under Parlt XV. 10 the Environmental Potection 1 Arc, April 2011; Table 7 Generic State Condition Standards (SCS) for Shallow Solis in a Non-Petable Ground Water Condition and Parliand/Petablerdav/Institutional Property Varie (Same Technical Solis)

# Table 3 - Analytical Results in Soil - Inorganic Parameters 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-80

			Provincial										San	nples									
Sample ID	UNITS	MECP Table 3 Residential ²	MECP Table 7 Residential ¹	BH/MW-1 SS2	DUP 2 (BH/MW-1 SS2)	BH/MW-1 SS3	BH/MW-2 SS1	BH/MW-2 AS3	BH/MW-3 SS-1	BH/MW-4 SS-2	BH-6 SS1	BH-6 SS2	BH/MW-7 SS2A	BH/MW-7 SS2B	BH/MW-8 AS3	BH/MW-9 AS1	BH/MW-9 SS2	BH/MW-10 AS1	BH/MW-10 SS2	DUP 1 (BH/MW-10 SS2)	BH/MW-11 551	BH/MW-11 552	DUP 3 (BH/MW-11 SS2)
Lab ID				BH-1 SS2	DUP 2	BH-1 SS3	BH-2 SS1	BH-2 AS3	BH-3 SS-1	BH-4 SS-2	BH-6 SS1	BH-6 SS2	BH+7 SS2A	BH-7 SS2B	BH-8 AS3	BH-9 AS1	BH-9 SS2	BH-10 AS1	BH-10 SS2	DUP 1	BH-11 SS1	BH-11 SS2	DUP 3
Sampling Date				26-Oct-23	26-Oct-23	26-Oct-23	30-Oct-23	30-Oct-23	14-Dec-23	14-Dec-23	27-Oct-23	27-Oct-23	27-Oct-23	27-Oct-23	27-Oct-23	26-Oct-23	26-Oct-23	26-Oct-23	26-Oct-23	26-Oct-23	20-Oct-23	30-Oct-23	30-Oct-23
Sample Depth (mbgs)				0.9 to 1.5	0.9 to 1.5	1.7 to 2.3	0.2 to 0.8	1.7 to 2.3	0.1 to 1.2	1.2 to 1.5	0.1 to 0.7	0.9 to 1.3	0.9 to 1.2	1.2 to 1.5	1.5 to 2.1	0.1 to 0.5	0.8 to 2.4	0.1 to 0.7	0.9 to 1.5	0.9 to 1.5	0.1 to 0.7	0.8 to 1.4	0.8 to 1.4
Metals																							
Antimony	µg/g	7.5	7.5	<0.20	<0.20	0.20	0.28	0.23	<0.20	<0.20	0.21	0.35	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.22
Arsenic	H8/8	18	18	4,4	5.0	7.6	6.9	8.1	4,4	3.6	4.3	6.8	1.3	3.4	2.7	6.8	6.5	7.2	5.0	5.1	2.9	5.6	7.1
Barium	H8/8	390	390	66	71	100	170	110	64	50	73	290	31	140	290	6.7	140	27	45	55	32	51	65
Beryllium	H8/8	4	4	0.77	0.88	1.0	0.97	0.65	0.70	0.56	0.60	0.98	0.21	0.62	0.36	0.21	0.83	0.43	0.71	0.69	0.26	0.82	0.97
Boron (Total)	H8/8	120	120	<5.0	5.2	6.5	9.5	<5.0	6.7	7.6	5.6	7.6	<5.0	6.6	11	5.8	7.1	6.8	5.8	<5.0	5.4	5.6	8.3
Boron (Hot Water Soluble)	H8/8	1.5	1.5	0.092	0.11	0.16	0.45	0.096			0.20	0.21	0.14	0.26	0.56	0.23	0.14	0.19	0.16	0.11	0.10	0.11	0.21
Cadmium	H8/8	1.2	1.2	0.1	0.12	0.13	0.12	0.23	<0.10	<0.10	0.14	0.30	<0.10	0.12	<0.10	0.23	0.17	0.36	0.10	0.11	<0.10	<0.10	<0.10
Chromium (Total)	µg/g	160	160	25	28	32	32	23	23	23	21	30	11	24	18	8.7	28	14	24	24	12	26	30
Chromium (VI)	H8/8	8	8	0.22	0.23	<0.18	<0.18	<0.18			<0.18	<0.18	<0.18	<0.18	<0.18	0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	0.22
Cobalt	H8/8	22	22	10	11	23	18	11	11	12	14	20	4.9	15	8.5	5.6	19	7.7	13	15	5.7	16	18
Copper	H8/8	140	140	23	27	40	40	19	24	19	22	43	11	25	17	11	40	15	28	34	14	30	38
Lead	µg/g	120	120	11	13	18	20	19	12	12	23	26	5.6	21	18	49	16	35	16	14	7.5	18	25
Mercury	H8/8	0.27	0.27	<0.050	<0.050	0.067	<0.050	< 0.050	<0.050	<0.050	<0.050	<0.050	<0.050	< 0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Molybdenum	H8/8	6.9	6.9	<0.50	<0.50	1.0	1.2	1.6	0.51	<0.50	0.95	1.8	1.1	1.2	0.77	4.8	1.3	3.1	0.80	0.95	1.4	0.70	1.0
Nickel	H8/8	100	100	28	31	42	42	25	24	21	27	48	9.2	30	16	13	39	19	27	30	11	31	39
Selenium	H8/8	2.4	2.4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Silver	H8/8	20	20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Thallium	H8/8	1	1	0.14	0.16	0.19	0.16	0.16	0.15	0.12	0.17	0.20	0.12	0.14	0.18	0.15	0.16	0.22	0.12	0.12	0.18	0.16	0.20
Uranium	H8/8	23	23	0.61	0.77	0.74	0.98	0.66	0.61	0.77	0.6	0.74	0.49	1.1	0.41	0.57	0.68	0.61	0.83	0.71	0.58	0.66	0.65
Vanadium	H8/8	86	86	30	34	36	32	31	31	29	27	32	20	28	17	13	32	23	33	30	24	29	33
Zinc	H8/8	340	340	49	55	90	93	69	52	47	62	100	18	67	32	29	99	40	78	80	24	65	79
Inorganic Parameters																							
Sodium Adsorption Ratio	N/A	5	5	11	13	18	8.1	4.6			11	18	5.8	21	7.1	0.44	26	4.1	7.2	7.0	18	7.7	12
Cyanide	µg/g	0.051	0.051	<0.01	<0.01	<0.01	<0.01	<0.01	-		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Conductivity	mS/cm	0.7	0.7	1.1	0.65	0.51	0.42	0.27			0.38	0.53	0.22	0.61	0.55	0.15	0.68	0.24	0.24	0.31	0.60	0.26	0.22
pH	No units	5 to 9	5 to 9	6.45	4.99	6.63	7.37	7.49			7.56	7.57	7.71	8.78	7.65	8.01	7.58	7.76	7.39	7.22	7.42	7.43	7.65
NOTES:																							

 NOTE:
 Operation Multistry of Environment, Conservation and Parls (MECP), Sol, Groundwater and Sedimet Standards for use under Parls XN1 of the Environmental

 1
 Protection Act, April 2011, Table 7 Geners: Sile Condition Standards (LG) & Valueles Sols in a Non-Potable Ground Water Condition and Parlsdam(Reliated)Institutional appropriate (cancer statem conditions Standards (LG) & Valueles Sols in a Non-Potable Ground Water Condition and Parlsdam(Reliated)Institutional appropriate (cancer statem condition).

 4 (ED
 Non-detectable results are shown as ¹ (REL)¹ where REL reporting detection limit.

 7
 No values

 9
 Parameter out analyzed

 10
 Inclusions usin execution of MECP Table 7.55 inclusions usin executions of MECP Table 3.55.

#### Table 4 - Analytical Results in Groundwater - PHC and VOC 1822-1846 Bank Street, Ottawa, Ontario

OTT-23002538-80																									
				Provincial																Samples					
Sample II	D		MECP Table 3 All Types of Property	MECP Table 7		вн/л	/W-1		84/7	MW-2		вн/а	ww-3			BH/7	ew-4		BH/MW-7			BH/7	rw-8		
lah ID		0/11/3	Use ²	Commercia	RH.1	BH/MW.1	BH/MW-1	BH/MW-1	RH/MW-1	BH/MW-1	84.3	BH-3/MW	BH-3/MW	8H.3/MW	8H.4	RH_4/MW	BH-4/MW	BH-4/MW	84.7	84.8	RH.R/MW	DUP	BH.8/MW	DUP	BH-8/MW
Sampling Date	1				30.New.23	25.Mar.24	20.Jun.24	24.Sen.24	20.Jun.24	24.Sen.24	21-Der-23	15.Mar.24	20.Jun.24	24.Sen.24	21.Der.23	15.Mar.24	20.htm.24	24.5en.24	3_Dec.23	6.Der.23	15.Mar.24	15.Mar.24	20.hun.24	20.km.24	24.Sep.24
Screen Denth (mbas)					15104.6	151046	151046	151046	11.1 to 14.1	11.1 to 14.1	2.6105.6	261056	261056	261056	241054	24 to 54	2.610.5.6	261056	10 3 to 13 7	0.710.2.0	0.710.2.0	0.710.2.0	0.710.2.0	071020	071020
Detroioum Hudsocarbani																									
F1 PHC (C6,C10)	1	- Marc	420	420	- 25														-25	520	-25	-25	22		- 25
F2 RHC (C10, C16)		100	150	150	(100														(100	<100	<100	(100	(100	<u> </u>	(90
42 PHC (CLO-CLO)		98/5	100	100	<200		-	-											<100	<200	<100	<200	<100		<100
EA DIAC (CEAPCER)		98/5	500	500	-200		-	-											<100	<200	<200	<200	<200		<300
Malatila Organic Compounds		P6-																							
routile organic complement																									
Acetone		HR/L	130000	100000	<10	<10	<10	81	36	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<16 (1)				<u> </u>	
Senzene		HR/L	44	0.5	<0.17	<0.20	40.20	<0.20	4.6	1.6	<0.20	<0.20	<0.20	<0.20	0.34	<0.20	<0.20	<0.20	0.41	42	0.70	0.69	4.3	3.8	2.2
Gromodichloromethane		H8/L	85000	67000	40.50	<0.50	40.50	<0.50	40.50	<0.50	40.50	<0.50	40.50	<0.50	<0.50	<0.50	<0.50	<0.50	40.50	<0.50					
tromotom		HØ/L	380	5	41.0	K1.0	41.0	10	410	410	41.0	K1.0	410	10	<10 0.00	<10 810	410	41.0	<1.0 0.00	K1.0					
stomometrate		HØ/L	0.39	0.89	40.50	40.50	40.50	40.50	40.50	10.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50	40.50					
Caroline recently IDE		+8/L	630	3.2	-0.20	-0.19	-0.19	-0.19	-0.29	-0.19	-0.19	-0.19	-0.19	-0.19	-0.19	-0.19	-0.19	-0.19	-0.20	-0.20					<u>+</u>
/blanfam		+8/L	330		-0.20	-0.20		-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.00	-0.20		-0.20	-0.20	-0.20					<u>+</u>
Oberrechtererethere		98/5	9100	65010	-0.50	-0.54	40.60	10.20	-0.10	-0.10	4.6	10.10	-0.20	10.20	-0.50	-0.20	-0.54	-0.10	-0.50	10.20					-
Disklare diffusionentinen		98/5	4400	3500	-0.30	-10	-0.0	-10	-0.00	-0.00	-0.30	-10	-0.00	-10	-0.0		-10.20	-0.0	-0.30	-0.50					-
1.3 Dicklostheoree		98/5	4400	150	-0.50	-0.40	-0.00	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	-0.40	<1.0	10.40	-0.40	-0.40	-0.60	-0.60					-
1.2 Dicklostheoree		98/5	4000	100	-0.50	-0.40	-0.40	+0.40	-0.40	+0.40	-0.40	-0.40	-0.40	+0.40	10.40	-0.40	-0.40	+0.40	-0.50	+0.50					-
1.4 Dicklossbasses		98/5	3000	7000	-0.50	-0.40	-0.40	+0.40	-0.40	+0.40	-0.40	-0.40	-0.40	+0.40	10.40	-0.40	-0.40	+0.40	-0.50	+0.50					-
1.1 Dicklossethans		98/5	210	11	-0.30	<0.30	-0.40	+0.30	-0.30	-0.30	40.30	<0.10	-0.40	+0.30	-0.40	-0.30	-0.30	+0.30	-0.30	+0.30					-
1.3 Dicklosedhase		98/5	340	0.5	-0.50	-0.10	-0.10	10.40	-01.02	-0.10	-0.40	-0.10	-0.20	10.40	-0.40	-0.40	-0.40	-0.10	-0.50	10.20					-
1.1 Dicklosseth-loos		98/5	1.0	0.5	-0.30	<0.30	-0.30	10.30	-0.30	-0.30	-0.30	<0.10	-0.30	10.30	40.49	-0.30	-0.30	+0.30	-0.30	+0.30					-
Fig. 1.3 Disklassethelese		98/5	1.0	1.6	-0.50	-0.50	-0.20	10.20	-0.10	-0.10	-0.50	-0.10	-0.20	10.20	-0.10	-0.20	-0.50	-0.10	-0.50	10.20					-
From 1.3 Disblaceatholese		98/5	1.0	1.6	-0.50	-0.50	-0.50	10.50	-0.50	-0.50	-0.50	10.50	-0.50	10.50	-0.50	-0.50	-0.50	+0.50	-0.50	+0.50					-
12.Dirbloroormana		100	16	058	40.20	+0.20	+0.20	(0.30	40.00	(0.30	40.20	+0.20	+0.20	(0.30	<0.30	(0.30	+0.20	+0.20	(0.20	<0.30 ±0.20					-
Os 13 Dichloropordane		100	NV	NV	(0.30	(0.30)	40.90	<0.50	(0.30	(0.30	(0.30	(0.30)	40.90	<0.50	+0.30	(0.30	(0.30	(0.30)	(0.90	<0.50				<u> </u>	
Trans.1 3-Dichloronomelane		100	NV	NV	(0.40	(0.40	(0.40	(0.40	(0.40	(0.40	(0.40	(0.40	+0.40	(0.40	(0.40	(0.40	(0.40	(0.40	(0.40	(0.40				<u> </u>	
1 3 Dichloropromiana Total		100	5.2	05	(0.50	(0.50	(0.50	(0.50	(0.50	(0.50	(0.50	(0.50	+0.50	(0.50	+0.50	(0.50	(0.50	(0.50	(0.50	(0.50				<u> </u>	
fthylbennes		100	2300	54	(0.20	(0.20	(0.20)	<0.20	(0.20	(0.20	(0.20	(0.20	+0.20	<0.20	+0.20	0.26	(0.20	(0.20	(0.20	57	13	12	65	58	0.69
Fibulane Dibromida			0.25	0.2	r0.20	(0.19	r0 19	r0 19	rft 19	r0.19	r0 19	(0.19	ef0.19	r0 19	+0.19	r0.19	r0 19	(0.19	r0 20	×0.20					
Hexane(n)		ut/L	51	5	<1.0	<1.0	<1.0	<1.0	<1.0	4.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	21					
Methyl Ethyl Ketone		ust/L	470000	21000	<10	<10	<10	<10	72	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10			-		-
Methyl lipbytyl Ketone		unt/L	140000	5200	-5.0	-5.0	-5.0	<5.0	-2.0	<5.0	<5.0	-5.0	-5.0	<5.0	<5.0	<5.0	<5.0	5.0	5.0	-5.0					
Methyl-t-Butyl Ether		unt/L	190	15	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	40.50	<0.50					
Methylene Chloride		HR/L	610	26	<2.0	<2.0	<2.0	<2.0	<0.50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.4	<2.0	-		-	-	-
Styrene		F8/L	1300	43	<0.50	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.50	<0.50		-	-		-
1,1,1,2-Tetrachloroethane		HR/L	3.3	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-		-	-	-
1,1,2,2-Tetrachloroethane		F8/L	3.2	0.5	<0.50	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.50	<0.50	-	-	-		-
Tetrachloroethylene		F8/L	1.6	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	3	0.47	0.47	3.8	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-	-	-		-
Toluene		HR/L	18000	320	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	2.1	1.4	<0.20	<0.20	0.81	1.0	<0.20	<0.20	0.3	0.3	<0.20
1,1,1-Trichloroethane		F8/L	640	23	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20		-	-		-
1,1,2-Trichloroethane		F8/L	4.7	0.5	<0.50	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.50	<0.50		-	-		-
Trichloroethylene		F8/L	1.6	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20		-	-		-
Trichlorofluoromethane		F8/L	2500	2000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		-	-		-
Vinyl Chloride		F8/L	0.5	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20		-	-		-
Kylene, m.p.		Hg/L	NV	NV	<0.20	<0.20	<0.20	0.33	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.44	1.1	<0.20	<0.20	0.28	97	<0.20	<0.20	3.1	2.8	<0.20
Xylene, o-		F8/L	NV	NV	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.21	0.52	<0.20	<0.20	<0.20	2.2	2.5	2.3	<0.20	<0.20	<0.40
Total Xylenes		F8/L	4200	72	<0.20	<0.20	<0.20	0.33	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.66	1.7	<0.20	<0.20	0.28	90	2.5	2.3	3.1	2.8	<0.40
MOTES.		-																							

Ontario Ministry of Environment, Conservation and Parks (MECP), Soil, Groundwater and Sedment Standards for use under Part XVI of the Environmental Protection Act, April 2011, Table 7 Generic Site Condition Standards (SC) for Shallow Soils in a Non-Potable Ground Water Condition All Types of Property Use (coarse-tentured soils)

2 Ontario Minitary of Environment, Conservation and Parks (MECP), Soil, Groundwater and Sedment Standards for use under Part XVI of the Environmental Protection Act, April 2011, Table 3 Sate Condition Standards (SCS) in a Non-Potable Ground Water Condition All Types of Property Use (coarse textured solik)

ND (ROL)	Non-datestable results are shown as "ND IROLL" where RDL percessors the reporting datastics limit
NV	No Value
	Parameter not analyzed
m bgs	Metres below ground surface
	Indicates soil exceedance of MECP Table 7 SCS
	Indicates groundwater exceedance of MECP Table 3 SCS

## Table 4 - Analytical Results in Groundwater - PHC and VOC 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-80

			Provincial										
Sample ID		MECP Table 3 All Types of Property	MECP Table 7	BH/MW-9		BH/M	IW-10			BH/MW-12		Trip Blank	Field Blank
Lab ID	UNITS .	Use	Commercial	88-9	BH-10	DUP	BH/MW-10	BH/MW-10	BH-12	BH/MW-12	BH/MW-12	Trip Blank	Field Blank
Sampling Date				28.New.23	29.Nm.23	29.Nm.23	20.lun.24	24.Sen.24	6-Dec-23	25.Mar.24	21.len.24	29.Nev.23	30.Nov.23
Screen Darth (mbrs)				0.9 to 2.2	1.0 to 2.5	101025	101025	1.01025	11.0 to 14.0	11.0 to 14.0	11.0 to 14.0	N/A	N/A
Petroleum Hudsocarbani													
						-24							
F1 PHC (CB-C10)	HØ/L	420	420	43	625	625			645			825	\$25
P2 PHC (C10-C16)	HØ/L	150	150	4100	<100 -300	×100			<100			×100	<100
F3 PHC (C10-C34)	HØ/L	500	500	4200	×200	\$200			200			\$200	×200
P4 PHC (C34-C30)	HØ/L	500	500	1200	\$200	\$200			\$200		· · ·	\$200	<200
volatile organic compounds													
Acetone	HR/L	130000	100000	<10	<10	<10			87	30	1000	<10	<10
Benzene	HR/L	44	0.5	<0.17	0.54	0.51	<0.20	<0.20	0.91	12	3.3	<0.17	<0.17
Bromodichloromethane	HR/L	85000	67000	<0.50	<0.50	40.50			<0.50	<0.50	<0.50	40.50	<0.50
promotorm	HØ/L	380	5	41.0	<1.0 -0.10	41.0			<1.0 	<1.0 0.50	K1.0	<1.0 A 10	<10 <
promometrane	HØ/L	0.39	0.89	40.50	40.50	40.50			40.50	40.50	40.50	40.50	10.50
Cardon Tetrachionde	HØ/L	0.79	0.2	40.20	40.20	40.20			40.20	40.19	40.19	40.20	10.20
Chiorobenzene	HØ/L	630	140	40.20	40.20	40.20			80.20	40.20	40.20	40.20	10.20
Chiordiorm	HØ/L	2.4	1	40.20	40.20	40.20			1.6	40.20	40.20	40.20	10.20
Dibromochiceometriane	HØ/L	8200	65000	40.50	40.50	40.50			10.50	40.50	40.50	40.50	10.50
Dichlorophilocomethane	HØ/L	4400	3500	0.10	<1.0 -0.10	41.0			<1.0 	<1.0 0.10	K1.0	<1.0 A 10	<10 <
1,2-Dichlordbandana	HØ/L	4600	150	40.50	40.50	40.50			10.50	40.40	40.40	40.50	10.50
1,3-Cichiordoardana	HØ/L	9600	7600	40.50	40.50	40.50			10.50	40.40	40.40	40.50	10.50
1,4-Olchiordoardana	HØ/L	8	0.5	40.50	40.50	40.50			40.50	40.40	40.40	40.50	10.50
1,1-Dichlordethane	HØ/L	320	11	40.20	40.20	40.20			40.20	40.20	40.20	40.20	10.20
1,2-Dichlordethane	HØ/L	1.6	0.5	40.50	40.50	40.50			40.50	40.49	40.49	40.50	10.50
1,1-Dichlordetnyvene	HØ/L	1.6	0.5	40.20	40.20	40.20			40.20	40.20	40.20	40.20	10.20
CN-1,2-DICHIDFORTHYNHM	HØ/L	1.6	1.6	40.50	40.50	40.50			10.50	40.50	1.6	40.50	10.50
Inans-1,2-Dichibroetnysene	HØ/L	1.6	1.6	40.50	40.50	40.50			40.50	40.50	40.50	40.50	10.50
1,2-Cichioropropana	HØ/L	16	0.58	40.20	40.20	40.20			40.20	40.20	40.20	40.20	10.20
CIS-1,3-Dichioropropylene	HØ/L	NV	NV	40.50	40.30	40.50			20.30	40.50	40.30	40.50	×0.50
Irans-1,3-Dichioropropylene	HØ/L	NV	NV	40.40	40.40	40.40			40.40	40.40	40.40	40.40	10.40
1,3-Dichloropropylene, Iotal	HB/L	3.4	0.5	40.50	40.50	40.50		-0.00	40.50	40.50	40.50	40.50	<0.50
Elizano Dikensida	100	0.35	03	-0.20	-0.20	-0.20	10.20	10.10	40.20	-0.10	-0.50	-0.20	+0.20
Historial	100	61		-10	-10	-0.20			-10	5.0			<1.0
Mathed Ethel Katono	100	470000	31050	-10	<10	<10			21	6400	2200	<10	<10
Making Carp Mildre	100	140000	6200	4.0	4.0	4.0			40	45.0	120	40	45.0
Mathod, J.Bothel Filher	100/1	190	15	10.50	(0.50	(0.50			r0.50	r0.50	(5.0	(0.50	<0.50
Methylene Chloride	unt/L	610	26	-2.0	<2.0	-2.0			<2.0	<2.0	<0.50	<2.0	<2.0
Styrene	unt/L	1300	43	<0.50	<0.50	<0.50			<0.50	<0.40	<0.40	<0.50	<0.50
1.1.1.2-Tetrachloroethane	unt/L	3.3	1.1	<0.50	<0.50	<0.50			<0.50	<0.50	<0.50	<0.50	<0.50
1.1.2.2-Tetrachloroethane	unt/L	3.2	0.5	<0.50	<0.50	<0.50			<0.50	<0.40	<0.40	<0.50	<0.50
Tetrachloroethylene	unt/L	1.6	0.5	<0.20	<0.20	<0.20			0.73	5.3	42.0	<0.20	<0.20
Toluene	unt/L	18000	320	<0.20	<0.20	<0.20	<0.20	<0.20	1.5	19	5.1	<0.20	<0.20
1.1.1-Trichloroethane	ust/L	640	23	<0.20	<0.20	<0.20			<0.20	+0.20	<0.20	<0.20	<0.20
1.1.2-Trichloroethane	ust/L	4.7	0.5	<0.50	<0.50	<0.50			<0.50	<0.40	<0.40	<0.50	<0.50
Trichloroethylene	ust/L	1.6	0.5	<0.20	<0.20	<0.20			<0.20	0.48	1.9	<0.20	<0.20
Trichlorofluoromethane	ust/L	2500	2000	<0.50	<0.50	40.50			<0.50	10.50	<0.50	<0.50	<0.50
Vinvl Chloride	ust/L	0.5	0.5	<0.20	<0.20	<0.20			<0.20	-10.20	<0.20	<0.20	<0.20
Wiene, m.p.	ust/L	NV	NV	<0.20	<0.20	<0.20	<0.20	<0.20	0.65	2.8	5.6	<0.20	<0.20
Xylene, o-	HR/L	NV	NV	<0.20	<0.20	<0.20	<0.40	<0.40	0.31	3.3	1.7	<0.20	<0.20
fotal Xylenes	HR/L	4200	72	<0.20	<0.20	<0.20	<0.40	<0.40	0.96	13	7.3	<0.20	<0.20

1 Ontario Ministry of Environment, Conservation and Parks (MECP), Soil, Groundwater and S

2 Ontario Ministry of Environment, Conservation and Parks (MECP), Soil, Groundwater and S

Non-detectable results are shown as "ND (NDL)" where NDL represents the reporting detect No Volae Parameter not analyzed Avtents below ground surface Indicators commoder encodence of MECP Table 1 SCS ND (RDL) NV

NOTE

#### Table 5 - Analytical Results in Groundwater - PAH 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0

			Provincial					Samples				
Sample ID	UNITS	MECP Table 3 All Types of Property	MECP Table 7 Commercial ¹	BH/MW-1	BH/MW-7	BH/MW-8	BH/MW-9	BH/MW-10	DUP (BH/MW-10)	BH/MW-12	Trip Blank	Field Blank
Lab ID		Use ²		BH-1	BH-7	BH-8	BH-9	BH-10	DUP	BH-12	Trip Blank	Field Blank
Sampling Date				30-Nov-23	6-Dec-23	6-Dec-23	29-Nov-23	29-Nov-23	29-Nov-23	6-Dec-23	29-Nov-23	30-Nov-23
Screen Depth (mbgs)				1.5 to 4.6	10.3 to 13.7	0.7 to 2.0	0.9 to 2.2	1.0 to 2.5	1.0 to 2.5	11.0 to 14.0	N/A	N/A
Polycylic Aromatic Hydrocarbons												
Acenaphthene	μg/L	600	17	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	<0.050	<0.050	<0.050
Acenaphthylene	μg/L	1.8	1	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	<0.050	<0.050	<0.050	< 0.050
Anthracene	μg/L	2.4	1	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Benzo(a)anthracene	μg/L	4.7	1.8	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	<0.050	<0.050	<0.050
Benzo(a)pyrene	μg/L	0.81	0.81	<0.0090	0.026	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	< 0.0090
Benzo(b/j)fluoranthene	μg/L	0.75	0.75	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050
Benzo(g,h,i)perylene	μg/L	0.2	0.2	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	<0.050	<0.050	<0.050
Benzo(k)fluoranthene	μg/L	0.4	0.4	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	<0.050	<0.050	<0.050	< 0.050
Chrysene	μg/L	1	0.7	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050
Dibenzo(a,h)anthracene	μg/L	0.52	0.4	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050
Fluoranthene	μg/L	130	44	< 0.050	0.05	< 0.050	< 0.050	<0.050	<0.050	<0.050	<0.050	< 0.050
Fluorene	μg/L	400	290	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	<0.050	<0.050	<0.050	< 0.050
Indeno(1,2,3-cd)pyrene	μg/L	0.2	0.2	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050
1-Methylnaphthalene	μg/L	1800	1500	< 0.050	< 0.050	1.4	< 0.050	<0.050	< 0.050	<0.050	<0.050	< 0.050
2-Methylnaphthalene	μg/L	1800	1500	< 0.050	< 0.050	0.96	< 0.050	<0.050	< 0.050	< 0.050	< 0.050	< 0.050
Methylnaphthalene, 2-(1-)	μg/L	1800	1500	<0.071	<0.071	2.4	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071
Naphthalene	μg/L	1400	7	< 0.050	< 0.050	4.4	<0.050	<0.050	< 0.050	<0.050	<0.050	< 0.050
Phenanthrene	μg/L	580	380	< 0.030	0.053	0.045	< 0.030	< 0.030	< 0.030	0.11	<0.030	< 0.030
Pyrene	μg/L	68	5.7	< 0.050	< 0.050	< 0.050	< 0.050	<0.050	< 0.050	<0.050	<0.050	< 0.050

NOTES:

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 7 Generic Site Condition Standards (SCS) for Shallow Soils in a Non-Potable Ground Water Condition and Parkland/Residential/Institutional Property Use (coarse textured soils)

2 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 Site Condition Standards (SCS) in a Non-Potable Ground Water Condition and Parkland/Residential/Institutional Property Use (coarse textured soils)

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

NV No Value

Parameter not analyzed

m bgs Metres below ground surface

Indicates soil exceedance of MECP Table 7 SCS

Indicates groundwater exceedance of MECP Table 3 SCS

**exp.

#### Table 6 - Analytical Results in Groundwater - Metals 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0

			Provincial					Samples				
Sample ID	UNITS	MECP Table 3 All Types of Property	MECP Table 7	BH/MW-1	BH/MW-7	BH/MW-8	BH/MW-9	BH/MW-10	DUP (BH/MW-10)	BH/MW-12	Trip Blank	Field Blank
Lab ID		Use ²	connerent	BH-1	BH-7	BH-8	BH-9	BH-10	DUP	BH-12	Trip Blank	Field Blank
Sampling Date				30-Nov-23	6-Dec-23	6-Dec-23	29-Nov-23	29-Nov-23	29-Nov-23	6-Dec-23	29-Nov-23	30-Nov-23
Screen Depth (mbgs)				1.5 to 4.6	10.3 to 13.7	0.7 to 2.0	0.9 to 2.2	1.0 to 2.5	1.0 to 2.5	11.0 to 14.0	N/A	N/A
Metals												
Antimony	μg/L	20000	16000	1.4	1.7	<0.50	0.55	0.56	<0.50	1.5	<0.50	<0.50
Arsenic	μg/L	1900	1500	1.1	1.8	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	<1.0
Barium	μg/L	29000	23000	1800	1800	95	89	150	140	220	<2.0	<2.0
Beryllium	μg/L	67	53	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Boron	μg/L	45000	36000	520	380	76	50	37	36	180	<10	<10
Cadmium	μg/L	2.7	2.1	< 0.090	< 0.090	< 0.090	0.12	0.28	0.26	< 0.090	< 0.090	< 0.090
Chromium	μg/L	810	640	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Cobalt	μg/L	140	52	2.5	< 0.50	0.53	2.4	5.9	5.5	0.78	< 0.50	<0.50
Copper	μg/L	66	69	2.5	0.99	1.1	2.3	4.5	3.6	3.9	<0.90	<0.90
Lead	μg/L	87	20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.55	<0.50	<0.50
Molybdenum	μg/L	9200	7300	11	14	10	1.6	9.7	9.0	36	<0.50	<0.50
Nickel	μg/L	490	390	6.3	1.7	1.4	6.2	10	9.8	3.2	<1.0	<1.0
Selenium	μg/L	63	50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Silver	μg/L	1.5	1.2	< 0.090	< 0.090	<0.090	< 0.090	0.093	< 0.090	< 0.090	0.098	<0.090
Sodium	μg/L	2300000	1800000	820000	2300000	1300000	1100000	890000	880000	530000	<100	<100
Thallium	μg/L	510	400	0.059	< 0.050	<0.050	< 0.050	0.078	0.07	< 0.050	< 0.050	<0.050
Uranium	μg/L	420	330	2.9	2.4	1.7	1.8	3.4	3.3	1.9	<0.10	<0.10
Vanadium	μg/L	250	200	< 0.50	0.59	<0.50	0.53	0.86	0.58	0.88	< 0.50	<0.50
Zinc	μg/L	1100	890	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	15	<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 7 Generic Site Condition Standards (SCS) for Shallows

2 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 Site Condition Standards (SCS) in a Non-Potable Gr

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

NV No Value

Parameter not analyzed

m bgs Metres below ground surface

Indicates soil exceedance of MECP Table 7 SCS

Indicates groundwater exceedance of MECP Table 3 SCS

*ехр.

### Table 7 - Relative Percent Differences - PHC and VOC in Soil 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0

Parameter	Units	RDL	DUP 2	BH-1 SS2	RPD (%)	Alert Limit (%)
			26-Oct-2023	26-Oct-2023		
Petroleum Hydrocarbons						
F1 PHC (C6 - C10) - BTEX	ug/g dry	10	<10	<10	#REF!	60
F2 PHC (C10-C16)	ug/g dry	10	<10	<10	#REF!	60
F3 PHC (C16-C34)	ug/g dry	50	<50	<50	#REF!	60
F4 PHC (C34-C50)	ug/g dry	50	<50	<50	#REF!	60
Volatiles						
Acetone	ug/g dry	0.49	<0.49	<0.49	nc	100
Benzene	ug/g dry	0.0060	< 0.0060	< 0.0060	nc	100
Bromodichloromethane	ug/g dry	0.040	<0.040	<0.040	nc	100
Bromoform	ug/g dry	0.040	<0.040	< 0.040	nc	100
Bromomethane	ug/g dry	0.040	<0.040	<0.040	nc	100
Carbon Tetrachloride	ug/g dry	0.040	<0.040	<0.040	nc	100
Chlorobenzene	ug/g dry	0.040	<0.040	<0.040	nc	100
Chloroform	ug/g dry	0.040	<0.040	<0.040	nc	100
Dibromochloromethane	ug/g dry	0.040	<0.040	<0.040	nc	100
Dichlorodifluoromethane	ug/g dry	0.040	<0.040	< 0.040	nc	100
1,2-Dichlorobenzene	ug/g dry	0.040	<0.040	<0.040	nc	100
1,3-Dichlorobenzene	ug/g dry	0.040	<0.040	< 0.040	nc	100
1,4-Dichlorobenzene	ug/g dry	0.040	<0.040	<0.040	nc	100
1,1-Dichloroethane	ug/g dry	0.040	< 0.040	< 0.040	nc	100
1,2-Dichloroethane	ug/g dry	0.049	< 0.049	< 0.049	nc	100
1,1-Dichloroethylene	ug/g dry	0.040	<0.040	<0.040	nc	100
cis-1,2-Dichloroethylene	ug/g dry	0.040	<0.040	<0.040	nc	100
trans-1,2-Dichloroethylene	ug/g dry	0.040	<0.040	<0.040	nc	100
1,2-Dichloropropane	ug/g dry	0.040	<0.040	<0.040	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, total	ug/g dry	0.050	<0.050	<0.050	nc	100
Ethylbenzene	ug/g dry	0.010	<0.010	<0.010	nc	100
Ethylene dibromide (dibromoethane, 1,2-	ug/g dry	0.040	<0.040	<0.040	nc	100
Hexane	ug/g dry	0.040	<0.040	< 0.040	nc	100
Methyl Ethyl Ketone (2-Butanone)	ug/g dry	0.40	<0.40	<0.40	nc	100
Methyl Isobutyl Ketone	ug/g dry	0.40	<0.40	<0.40	nc	100
Methyl tert-butyl ether	ug/g dry	0.04	<0.040	<0.040	nc	100
Methylene Chloride	ug/g dry	0.049	< 0.049	< 0.049	nc	100
Styrene	ug/g dry	0.040	<0.040	<0.040	nc	100
1,1,1,2-Tetrachloroethane	ug/g dry	0.040	<0.040	<0.040	nc	100
1,1,2,2-Tetrachloroethane	ug/g dry	0.040	<0.040	< 0.040	nc	100
Tetrachloroethylene	ug/g dry	0.040	0.27	0.16	nc	100
Toluene	ug/g dry	0.020	<0.020	<0.020	nc	100
1,1,1-Trichloroethane	ug/g dry	0.040	<0.040	<0.040	nc	100
1,1,2-Trichloroethane	ug/g dry	0.040	< 0.040	< 0.040	nc	100
Trichloroethylene	ug/g dry	0.010	<0.010	<0.010	nc	100
Trichlorofluoromethane	ug/g dry	0.040	< 0.040	< 0.040	nc	100
Vinyl Chloride	ug/g dry	0.019	<0.019	<0.019	nc	100
Xylenes, total	ug/g dry	0.020	<0.020	<0.020	nc	100

## NOTES:

Analysis by Bureau Veritas Laboratories

All results on dry weight basis; Non-detectable results are shown as "< (RDL)" where RDL represents the reporting detection limit.

- 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 7 - Relative Percent Differences - PHC and VOC in Soil 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0

Parameter	Unite	PDI	DUP 1	BH-10 SS2	PPD (%)	Alart Limit (%)
Falameter	onits	NDL	26-Oct-2023	26-Oct-2022	NPD (70)	Alert Linit (70)
Potroloum Hudrosarbons			20-001-2023	20-001-2023		
	ug/g dov	10	<10	<10	#DECI	60
E2 PHC (C0-C10) - BTEX	ug/g dry	10	<10	<10	#REF	60
F2 PHC (C10-C10)	ug/g dry	10	<10	<10	#REF!	60
FA PHC (C10-C54)	ug/g diy	50	<50	<50	#REF:	60
Valatilas	ug/g ury	30	(30	<30	#REF:	00
Acotopo	ug/g dp/	0.40	<0.40	<0.40	20	100
Renzono	ug/g dry	0.0060	<0.45	<0.0060	nc	100
Denzenie Denzenie	ug/g ury	0.0000	0.0000	10.0000	IIC .	100
Bromodichioromethane	ug/g dry	0.040	<0.040	<0.040	nc	100
Bromorotha	ug/g dry	0.040	<0.040	<0.040	nc	100
Bromometnane	ug/g dry	0.040	<0.040	<0.040	nc	100
	ug/g dry	0.040	<0.040	<0.040	nc	100
Chlorobenzene	ug/g dry	0.040	<0.040	<0.040	nc	100
Chlorotorm	ug/g dry	0.040	<0.040	<0.040	nc	100
Dibromochloromethane	ug/g dry	0.040	<0.040	<0.040	nc	100
Dichlorodifluoromethane	ug/g dry	0.040	<0.040	<0.040	nc	100
1,2-Dichlorobenzene	ug/g dry	0.040	<0.040	<0.040	nc	100
1,3-Dichlorobenzene	ug/g dry	0.040	<0.040	<0.040	nc	100
1,4-Dichlorobenzene	ug/g dry	0.040	<0.040	<0.040	nc	100
1,1-Dichloroethane	ug/g dry	0.040	<0.040	<0.040	nc	100
1,2-Dichloroethane	ug/g dry	0.049	<0.049	<0.049	nc	100
1,1-Dichloroethylene	ug/g dry	0.040	<0.040	<0.040	nc	100
cis-1,2-Dichloroethylene	ug/g dry	0.040	<0.040	<0.040	nc	100
trans-1,2-Dichloroethylene	ug/g dry	0.040	<0.040	<0.040	nc	100
1,2-Dichloropropane	ug/g dry	0.040	<0.040	<0.040	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, total	ug/g dry	0.050	<0.050	<0.050	nc	100
Ethylbenzene	ug/g dry	0.010	<0.010	<0.010	nc	100
Ethylene dibromide (dibromoethane, 1,2-	ug/g dry	0.040	<0.040	<0.040	nc	100
Hexane	ug/g dry	0.040	<0.040	<0.040	nc	100
Methyl Ethyl Ketone (2-Butanone)	ug/g dry	0.40	<0.40	<0.40	nc	100
Methyl Isobutyl Ketone	ug/g dry	0.40	<0.40	<0.40	nc	100
Methyl tert-butyl ether	ug/g dry	0.04	<0.040	<0.040	nc	100
Methylene Chloride	ug/g dry	0.049	<0.049	<0.049	nc	100
Styrene	ug/g dry	0.040	<0.040	<0.040	nc	100
1,1,1,2-Tetrachloroethane	ug/g dry	0.040	<0.040	<0.040	nc	100
1,1,2,2-Tetrachloroethane	ug/g dry	0.040	<0.040	<0.040	nc	100
Tetrachloroethylene	ug/g dry	0.040	<0.040	<0.040	nc	100
Toluene	ug/g dry	0.020	<0.020	<0.020	nc	100
1,1,1-Trichloroethane	ug/g dry	0.040	<0.040	<0.040	nc	100
1,1,2-Trichloroethane	ug/g dry	0.040	<0.040	<0.040	nc	100
Trichloroethylene	ug/g dry	0.010	<0.010	<0.010	nc	100
Trichlorofluoromethane	ug/g dry	0.040	<0.040	<0.040	nc	100
Vinyl Chloride	ug/g dry	0.019	<0.019	<0.019	nc	100
Xylenes, total	ug/g dry	0.020	<0.020	<0.020	nc	100

## NOTES:

Analysis by Bureau Veritas Laboratories

All results on dry weight basis; Non-detectable results are shown as "< (RDL)" where RDL represents the reporting detection limit.

- 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 7 - Relative Percent Differences - PHC and VOC in Soil 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0

Parameter	Units	RDI	DUP 3	BH-11 552	RPD (%)	Alert Limit (%)
i di difecci	Units	1.52	30-Oct-2023	30-Oct-2023	11 D (70)	Alere Linit (70)
Petroleum Hudrocarbons			50 000 2025	50 011 2025		
E1 PHC (C6 - C10) - RTEY	ug/g dry	10	<10	<10	#RFFI	60
F2 PHC (C10-C16)	ug/g dry	10	24	<10	#REF!	60
E2 PHC (C16-C34)	ug/g dry	50	57	<50	#REF	60
E4 PHC (C34-C50)	ug/g dry	50	<50	<50	#REF!	60
Volatiles	ug/g ury	50	·50	-50	#REF:	00
Acetone	ug/g dry	0.49	<0.49	<0.49	nc	100
Renzene	ug/g dry	0.45	<0.0060	<0.0060	nc	100
Bromodichloromothano	ug/g dry	0.0000	<0.0000	<0.0000	nc	100
Bromotorm	ug/g diy	0.040	<0.040	<0.040	nc	100
Bromomothano	ug/g dry	0.040	<0.040	<0.040	nc	100
Carbon Tetrachloride	ug/g dry	0.040	<0.040	<0.040	nc	100
Chlorobonzono	ug/g dry	0.040	<0.040	<0.040	nc	100
Chloroforenzene	ug/g ury	0.040	<0.040	<0.040	IIC	100
Diberrachieren	ug/g dry	0.040	<0.040	<0.040	nc	100
Dibromochioromethane	ug/g dry	0.040	<0.040	<0.040	nc	100
Dichlorodinuoromethane	ug/g dry	0.040	<0.040	<0.040	nc	100
1,2-Dichlorobenzene	ug/g dry	0.040	<0.040	<0.040	nc	100
1,3-Dichlorobenzene	ug/g dry	0.040	<0.040	<0.040	nc	100
1,4-Dichlorobenzene	ug/g dry	0.040	<0.040	<0.040	nc	100
1,1-Dichloroethane	ug/g dry	0.040	<0.040	<0.040	nc	100
1,2-Dichloroethane	ug/g dry	0.049	<0.049	<0.049	nc	100
1,1-Dichloroethylene	ug/g dry	0.040	<0.040	<0.040	nc	100
cis-1,2-Dichloroethylene	ug/g dry	0.040	<0.040	<0.040	nc	100
trans-1,2-Dichloroethylene	ug/g dry	0.040	<0.040	<0.040	nc	100
1,2-Dichloropropane	ug/g dry	0.040	<0.040	<0.040	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, total	ug/g dry	0.050	<0.050	<0.050	nc	100
Ethylbenzene	ug/g dry	0.010	<0.010	<0.010	nc	100
Ethylene dibromide (dibromoethane, 1,2-	ug/g dry	0.040	<0.040	<0.040	nc	100
Hexane	ug/g dry	0.040	<0.040	<0.040	nc	100
Metryl Ethyl Ketone (2-Butanone)	ug/g dry	0.40	<0.40	<0.40	nc	100
Metryi isobutyi ketone	ug/g dry	0.40	<0.40	<0.40	nc	100
Methyl tert-butyl ether	ug/g dry	0.04	<0.040	<0.040	nc	100
Methylene Chloride	ug/g dry	0.049	<0.049	<0.049	nc	100
Styrene	ug/g dry	0.040	<0.040	<0.040	nc	100
1,1,2-Tetrachioroethane	ug/g dry	0.040	<0.040	<0.040	nc	100
1,1,2,2-Tetrachioroethane	ug/g dry	0.040	<0.040	<0.040	nc	100
TetrachiorOethylene	ug/g ary	0.040	<0.040	<0.040	nc	100
Toluene	ug/g dry	0.020	<0.020	<0.020	nc	100
1,1,1-Trichlosoethane	ug/g dry	0.040	<0.040	<0.040	nc	100
1,1,2-irichloroethane	ug/g ary	0.040	<0.040	<0.040	nc	100
i richioroethylene	ug/g dry	0.010	<0.010	<0.010	nc	100
I richiorofluoromethane	ug/g dry	0.040	<0.040	<0.040	nc	100
Vinyi Chioride	ug/g dry	0.019	<0.019	<0.019	nc	100
xyienes, total	ug/g dry	0.020	<0.020	<0.020	nc	100

## NOTES:

Analysis by Bureau Veritas Laboratories

All results on dry weight basis; Non-detectable results are shown as "< (RDL)" where RDL represents the reporting detection limit.

- 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 - PAH in Soil 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0

Units	RDL	DUP 2	BH-1 SS2	RPD (%)	Alert Limit (%)
		26-Oct-2023	26-Oct-2023		
ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
ug/g dry	0.0071	<0.0071	<0.0071	#REF!	80
ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80
ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
Units	RDL	DUP 1	BH-10 SS2	RPD (%)	Alert Limit (%)
		26-Oct-2023	26-Oct-2023		
ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
	Units           ug/g dry           ug/g dry	Units         RDL           ug/g dry         0.0050           ug/g dry         0.	Units         DDL         DUP 2           26-Oct-2023         26-Oct-2023           ug/g dry         0.0050         <0.0050	$\begin{tabular}{ c c c c c c } \hline Url 2 & BH-1 SS2 \\ \hline 26 - Oct 2023 & Z6 - Oct 2023 \\ \hline 26 - Oct 2023 & Z6 - Oct 2023 \\ \hline 26 - Oct 2023 & Z6 - Oct 2023 \\ \hline 26 - Oct 2023 & Z6 - Oct 2023 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & Gry & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <0.0050 \\ \hline Url 2 & FOL & 0.0050 & <$	Units         DUP 2         BH-1.52 26-Oct-2023         RPD (%)           ug/g dry         0.0050         <0.0050

r olycyclic Arolliutic Hydrocarbolis						
Acenaphthene	ug/g dry	0.0050	< 0.0050	< 0.0050	#REF!	80
Acenaphthylene	ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80
Anthracene	ug/g dry	0.005	<0.0050	<0.0050	#REF!	80
Benzo(a)anthracene	ug/g dry	0.0050	< 0.0050	< 0.0050	#REF!	80
Benzo(a)pyrene	ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80
Benzo(b)fluoranthene	ug/g dry	0.0050	< 0.0050	< 0.0050	#REF!	80
Benzo(g,h,i)perylene	ug/g dry	0.0050	< 0.0050	< 0.0050	#REF!	80
Benzo(k)fluoranthene	ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
Chrysene	ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80
Dibenzo(a,h)anthracene	ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80
Fluoranthene	ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
Fluorene	ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80
Indeno(1,2,3,-cd)pyrene	ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
Methylnaphthalene,1-	ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80
Methylnaphthalene,2-	ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80
Methylnaphthalene 2-(1-)	ug/g dry	0.0071	< 0.0071	< 0.0071	#REF!	80
Naphthalene	ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80
Phenanthrene	ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80
Pyrene	ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80

NOTES:

Analysis by Bureau Veritas Laboratories

All results on dry weight basis; Non-detectable results are shown as "< (RDL)" where RDL represents the reporting detection limit.

- means "not analysed"

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

#### Table 8 - Relative Percent Differences - PAH in Soil 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0

Parameter	Units	RDL	DUP 3	BH-11 SS2	RPD (%)	Alert Limit (%)			
			30-Oct-2023	30-Oct-2023					
Polycyclic Aromatic Hydrocarbons									
Acenaphthene	ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80			
Acenaphthylene	ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80			
Anthracene	ug/g dry	0.005	<0.0050	<0.0050	#REF!	80			
Benzo(a)anthracene	ug/g dry	0.0050	0.0082	<0.0050	#REF!	80			
Benzo(a)pyrene	ug/g dry	0.0050	0.007	<0.0050	#REF!	80			
Benzo(b)fluoranthene	ug/g dry	0.0050	0.011	<0.0050	#REF!	80			
Benzo(g,h,i)perylene	ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80			
Benzo(k)fluoranthene	ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80			
Chrysene	ug/g dry	0.0050	0.0094	< 0.0050	#REF!	80			
Dibenzo(a,h)anthracene	ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80			
Fluoranthene	ug/g dry	0.0050	0.018	0.0055	#REF!	80			
Fluorene	ug/g dry	0.0050	<0.0050	< 0.0050	#REF!	80			
Indeno(1,2,3,-cd)pyrene	ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80			
Methylnaphthalene,1-	ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80			
Methylnaphthalene,2-	ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80			
Methylnaphthalene 2-(1-)	ug/g dry	0.0071	<0.0071	<0.0071	#REF!	80			
Naphthalene	ug/g dry	0.0050	<0.0050	<0.0050	#REF!	80			
Phenanthrene	ug/g dry	0.0050	0.018	<0.0050	#REF!	80			
Pyrene	ug/g dry	0.0050	0.016	<0.0050	#REF!	80			

## NOTES:

Analysis by Bureau Veritas Laboratories

All results on dry weight basis; Non-detectable results are shown as "< (RDL)" where RDL represents the reporting detection limit.

- means "not analysed"

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

#### Table 9 - Relative Percent Differences - Inorganics in Soil 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0

Parameter	Units	RDL	DUP 2	BH-1 SS2	RPD (%)	Alert Limit (%)
			26-Oct-2023	26-Oct-2023		
Inorganic Parameters						
Antimony	ug/g dry	0.5	<0.20	<0.20	#REF!	60
Arsenic	ug/g dry	0.5	5 4.4		#REF!	60
Barium	ug/g dry	1	71	66	#REF!	60
Beryllium	ug/g dry	0.2	0.88	0.77	#REF!	60
Boron	ug/g dry	0.5	5.2	<5.0	#REF!	60
Boron (HWS)	ug/g dry	0.02	0.11	0.092	#REF!	60
Cadmium	ug/g dry	0.5	0.12	0.1	#REF!	60
Chromium	ug/g dry	1	28	25	#REF!	60
Chromium (VI)	ug/g dry	0.2	0.23	0.22	#REF!	60
Cobalt	ug/g dry	1	11	10	#REF!	60
Copper	ug/g dry	1	27	23	#REF!	60
Lead	ug/g dry	5	13	11	#REF!	60
Mercury	ug/g dry	0.005	< 0.050	<0.050	#REF!	60
Molybdenum	ug/g dry	1	<0.50	< 0.50	#REF!	60
Nickel	ug/g dry	1	31	28	#REF!	60
Selenium	ug/g dry	0.5	<0.50	<0.50	#REF!	60
Silver	ug/g dry	0.2	<0.20	<0.20	#REF!	60
Thallium	ug/g dry	0.1	0.16	0.14	#REF!	60
Vanadium	ug/g dry	1	0.77	0.61	#REF!	60
Zinc	ug/g dry	3	34	30	#REF!	60
Uranium	ug/g dry	0.1	55	49	#REF!	60
-						
Parameter	Units	RDL	DUP 1	BH-10 SS2	RPD (%)	Alert Limit (%)
			26-Oct-2023	26-Oct-2023		
Inorganic Parameters						
Antimony	ug/g dry	0.5	<0.20	<0.20	#REF!	60
Arsenic	ug/g dry	0.5	5.1	5	#REF!	60
Barium	ug/g dry	1	55 45		#REF!	60
Beryllium	ug/g dry	0.2	0.69	0.69 0.71		60
Boron	ug/g dry	0.5	<5.0	5.8	#REF!	60
Boron (HWS)	ug/g dry	0.02	0.11	0.16	#REF!	60
Cadmium	ug/g dry	0.5	0.11	0.1	#REF!	60

beryillulli	ug/g uiy	0.2	0.09	0.71	#REF!	00
Boron	ug/g dry	0.5	<5.0	5.8	#REF!	60
Boron (HWS)	ug/g dry	0.02	0.11	0.16	#REF!	60
Cadmium	ug/g dry	0.5	0.11	0.1	#REF!	60
Chromium	ug/g dry	1	24	24	#REF!	60
Chromium (VI)	ug/g dry	0.2	<0.18	<0.18	#REF!	60
Cobalt	ug/g dry	1	15	13	#REF!	60
Copper	ug/g dry	1	34	28	#REF!	60
Lead	ug/g dry	5	14	16	#REF!	60
Mercury	ug/g dry	0.005	<0.050	<0.050	#REF!	60
Molybdenum	ug/g dry	1	0.95	0.8	#REF!	60
Nickel	ug/g dry	1	30	27	#REF!	60
Selenium	ug/g dry	0.5	<0.50	<0.50	#REF!	60
Silver	ug/g dry	0.2	<0.20	<0.20	#REF!	60
Thallium	ug/g dry	0.1	0.12	0.12	#REF!	60
Vanadium	ug/g dry	1	0.71	0.83	#REF!	60
Zinc	ug/g dry	3	30	33	#REF!	60
Uranium	ug/g dry	0.1	80	78	#REF!	60

NOTES:

Analysis by Bureau Veritas Laboratories

All results on dry weight basis; Non-detectable results are shown as "< (RDL)" where RDL represents the reporting detection limit.

- means "not analysed"

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

## Table 9 - Relative Percent Differences - Inorganics in Soil

#### 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0

Parameter	Units	RDL	DUP 3	BH-11 SS2	RPD (%)	Alert Limit (%)	
			30-Oct-2023	30-Oct-2023			
Inorganic Parameters							
Antimony	ug/g dry	0.5	0.22	<0.20	#REF!	60	
Arsenic	ug/g dry	0.5	7.1	5.6	#REF!	60	
Barium	ug/g dry	1	65	51	#REF!	60	
Beryllium	ug/g dry	0.2	0.97	0.82	#REF!	60	
Boron	ug/g dry	0.5	8.3	5.6	#REF!	60	
Boron (HWS)	ug/g dry	0.02	0.21	0.11	#REF!	60	
Cadmium	ug/g dry	0.5	<0.10	<0.10	#REF!	60	
Chromium	ug/g dry	1	30	26	#REF!	60	
Chromium (VI)	ug/g dry	0.2	0.22	<0.18	#REF!	60	
Cobalt	ug/g dry	1	18	16	#REF!	60	
Copper	ug/g dry	1	38	30	#REF!	60	
Lead	ug/g dry	5	25	18	#REF!	60	
Mercury	ug/g dry	0.005	<0.050	<0.050	#REF!	60	
Molybdenum	ug/g dry	1	1	0.7	#REF!	60	
Nickel	ug/g dry	1	39	31	#REF!	60	
Selenium	ug/g dry	0.5	<0.50	<0.50	#REF!	60	
Silver	ug/g dry	0.2	<0.20	<0.20	#REF!	60	
Thallium	ug/g dry	0.1	0.2	0.16	#REF!	60	
Vanadium	ug/g dry	1	0.65	0.66	#REF!	60	
Zinc	ug/g dry	3	33	29	#REF!	60	
Uranium	ug/g drv	0.1	79	65	#REF!	60	

## NOTES:

Analysis by Bureau Veritas Laboratories

All results on dry weight basis; Non-detectable results are shown as "< (RDL)" where RDL represents the reporting detection limit.

- means "not analysed"

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

#### Table 10 - Relative Percent Differences - PHC and VOC in Groundwater 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0

Parameter	Units RDL		DUP BH-10		RPD (%)	Alert Limit (%)	
			29-Nov-2023	29-Nov-2023			
Petroleum Hydrocarbons							
F1 PHC (C6 - C10) - BTEX	μg/L	25	<25	<25	#REF!	60	
F2 PHC (C10-C16)	μg/L	100	<100	<100	#REF!	60	
F3 PHC (C16-C34)	μg/L	200	<200	<200	#REF!	60	
F4 PHC (C34-C50)	μg/L	200	<200	<200	#REF!	60	
Volatiles					-		
Acetone	μg/L	10	<10	<10	nc	60	
Benzene	μg/L		0.51	0.54	nc	60	
Bromodichloromethane	μg/L	0.50	<0.50	<0.50	nc	60	
Bromoform	μg/L	1.0	<1.0	<1.0	nc	60	
Bromomethane	μg/L	0.50	<0.50	<0.50	nc	60	
Carbon Tetrachloride	μg/L	0.20	<0.20	<0.20	nc	60	
Chlorobenzene	μg/L	0.20	<0.20	<0.20	nc	60	
Chloroform	μg/L	0.20	<0.20	<0.20	nc	60	
Dibromochloromethane	μg/L	0.50	<0.50	<0.50	nc	60	
Dichlorodifluoromethane	μg/L	1.0	<1.0	<1.0	nc	60	
1,2-Dichlorobenzene	μg/L	0.50	<0.50	<0.50	nc	60	
1,3-Dichlorobenzene	μg/L	0.50	<0.50	<0.50	nc	60	
1,4-Dichlorobenzene	μg/L	0.50	<0.50	<0.50	nc	60	
1,1-Dichloroethane	μg/L	0.20	<0.20	<0.20	nc	60	
1,2-Dichloroethane	μg/L	0.50	<0.50	<0.50	nc	60	
1,1-Dichloroethylene	μg/L	0.20	<0.20	<0.20	nc	60	
cis-1,2-Dichloroethylene	μg/L	0.50	<0.50	<0.50	nc	60	
trans-1,2-Dichloroethylene	μg/L	0.50	<0.50	<0.50	nc	60	
1,2-Dichloropropane	μg/L	0.20	<0.20	<0.20	nc	60	
cis-1,3-Dichloropropylene	μg/L	0.30	<0.30	<0.30	nc	60	
trans-1,3-Dichloropropylene	μg/L	0.40	<0.40	<0.40	nc	60	
1,3-Dichloropropene, total	μg/L	0.50	<0.50	<0.50	nc	60	
Ethylbenzene	μg/L	0.20	<0.20	<0.20	nc	60	
Ethylene dibromide (dibromoethane, 1,2-)	μg/L	0.20	<0.20	<0.20	nc	60	
Hexane	μg/L	1.0	<1.0	<1.0	nc	60	
Methyl Ethyl Ketone (2-Butanone)	μg/L	10	<10	<10	nc	60	
Methyl Isobutyl Ketone	μg/L	5.0	<5.0	<5.0	nc	60	
Methyl tert-butyl ether	μg/L	0.50	<0.50	<0.50	nc	60	
Methylene Chloride	μg/L	2.0	<2.0	<2.0	nc	60	
Styrene	μg/L	0.50	<0.50	<0.50	nc	60	
1,1,1,2-Tetrachloroethane	μg/L	0.50	<0.50	<0.50	nc	60	
1,1,2,2-Tetrachloroethane	μg/L	0.50	<0.50	<0.50	nc	60	
Tetrachloroethylene	μg/L	0.20	<0.20	<0.20	nc	60	
Toluene	μg/L	0.20	<0.20	<0.20	nc	60	
1,1,1-Trichloroethane	μg/L	0.20	<0.20	<0.20	nc	60	
1,1,2-Trichloroethane	μg/L	0.50	<0.50	<0.50	nc	60	
Trichloroethylene	μg/L	0.20	<0.20	<0.20	nc	60	
Trichlorofluoromethane	μg/L	0.50	<0.50	<0.50	nc	60	
Vinyl Chloride	μg/L	0.20	<0.20	<0.20	nc	60	
Xylenes, total	μg/L	0.20	<0.20	<0.20	nc	60	

## NOTES:

Analysis by Bureau Veritas Laboratories

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

- means "not analysed"

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

Exceedances of alert limits are shown in bold

Parameter	Units	RDL	DUP BH-8/MW		RPD (%)	Alert Limit (%)		
			15-Mar-2024	15-Mar-2024				
Petroleum Hydrocarbons								
F1 PHC (C6 - C10) - BTEX	μg/L	25	<25	<25	#REF!	60		
F2 PHC (C10-C16)	μg/L	100	<100	<100	#REF!	60		
F3 PHC (C16-C34)	μg/L	200	<200	<200	#REF!	60		
F4 PHC (C34-C50)	μg/L	200	<200	<200	#REF!	60		
Volatiles								
Benzene	μg/L		0.69	0.70	nc	60		
Ethylbenzene	μg/L	0.20	1.2	1.3	nc	60		
Toluene	μg/L	0.20	<0.20	<0.20	nc	60		
Xylenes, total	μg/L	0.20	2.3	2.5	nc	60		

NOTES:

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#### Table 10 - Relative Percent Differences - PHC and VOC in Groundwater 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0

Analysis by Bureau Veritas Laboratories Non-detectable results are shown as "< (RDL)" where RDL represents the reporting detection limit. - means "not analysed" nc means "not calculable" - one (or both) of the results are <Sx RDL Exceedances of alert limits are shown in <u>bold</u>

### Table 11 - Relative Percent Differences - PAH in Groundwater 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-B0

Parameter	Units	RDL	DUP	BH-10	RPD (%)	Alert Limit (%)		
			29-Nov-2023	29-Nov-2023				
Polycyclic Aromatic Hydrocarbons								
Acenaphthene	μg/L	0.050	<0.050	<0.050	#REF!	60		
Acenaphthylene	μg/L	0.050	<0.050	<0.050	#REF!	60		
Anthracene	μg/L	0.050	<0.050	<0.050	#REF!	60		
Benzo(a)anthracene	μg/L	0.050	<0.050	<0.050	#REF!	60		
Benzo(a)pyrene	μg/L	0.0090	<0.0090	<0.0090	#REF!	60		
Benzo(b)fluoranthene	μg/L	0.050	<0.050	<0.050	#REF!	60		
Benzo(g,h,i)perylene	μg/L	0.050	<0.050	<0.050	#REF!	60		
Benzo(k)fluoranthene	μg/L	0.050	<0.050	<0.050	#REF!	60		
Chrysene	μg/L	0.050	<0.050	<0.050	#REF!	60		
Dibenzo(a,h)anthracene	μg/L	0.050	<0.050	<0.050	#REF!	60		
Fluoranthene	μg/L	0.050	<0.050	<0.050	#REF!	60		
Fluorene	μg/L	0.050	<0.050	<0.050	#REF!	60		
Indeno(1,2,3,-cd)pyrene	μg/L	0.050	<0.050	<0.050	#REF!	60		
Methylnaphthalene,1-	μg/L	0.050	<0.050	<0.050	#REF!	60		
Methylnaphthalene,2-	μg/L	0.050	<0.050	<0.050	#REF!	60		
Methylnaphthalene 2-(1-)	μg/L	0.071	<0.071	<0.071	#REF!	60		
Naphthalene	μg/L	0.050	<0.050	<0.050	#REF!	60		
Phenanthrene	μg/L	0.030	< 0.030	< 0.030	#REF!	60		
Pyrene	μg/L	0.050	< 0.050	< 0.050	#REF!	60		

## NOTES:

Analysis by Bureau Veritas Laboratories

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

- means "not analysed"

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

### Table 12 - Relative Percent Differences - Inorganics in Groundwater 1822-1846 Bank Street, Ottawa, Ontario OTT-23002538-80

Parameter	Parameter Units RDL DUP		BH-10	RPD (%)	Alert Limit (%)	
			29-Nov-2023	29-Nov-2023		
Inorganic Parameters						
Antimony	μg/L	0.50	<0.50	0.56	#REF!	40
Arsenic	μg/L	1.0	<1.0	<1.0	#REF!	40
Barium	μg/L	2.0	140	150	#REF!	40
Beryllium	μg/L	0.40	<0.40	<0.40	#REF!	40
Boron	μg/L	10	36	37	#REF!	40
Cadmium	μg/L	0.090	0.26	0.28	#REF!	40
Chromium	μg/L	5.0	<5.0	<5.0	#REF!	40
Cobalt	μg/L	0.50	5.5	5.9	#REF!	40
Copper	μg/L	0.90	3.6	4.5	#REF!	40
Lead	μg/L	0.50	<0.50	<0.50	#REF!	40
Molybdenum	μg/L	0.50	9	9.7	#REF!	40
Nickel	μg/L	1.0	9.8	10	#REF!	40
Selenium	μg/L	2.0	<2.0	<2.0	#REF!	40
Silver	μg/L	0.090	<0.090	0.093	#REF!	40
Sodium	μg/L	100	880000	890000	#REF!	40
Thallium	μg/L	0.050	0.07	0.07 0.078		40
Uranium	μg/L	0.10	3.3	3.4	#REF!	40
Vanadium	μg/L	0.50	0.58	0.86	#REF!	40
Zinc	μg/L	5.0	<5.0	<5.0	#REF!	40

## NOTES:

Analysis by Bureau Veritas Laboratories

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

- means "not analysed"

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

## **EXP** Services Inc.

Sun Life Assurance Company of Canda c/o BentallGreenOak (Canada) LP Phase Two Environmental Site Assessment 1820-1846 Bank Street, Ottawa, Ontario OTT-22002538-B0 September 30, 2024

**Appendix G: Laboratory Certificates of Analysis** 





Your Project #: OTT-23002538-B0 Site Location: 1822-1846 WALKELY Your C.O.C. #: 967688-01-01

## Attention: Leah Wells

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

> Report Date: 2023/12/14 Report #: R7955355 Version: 1 - Final

## **CERTIFICATE OF ANALYSIS**

## BUREAU VERITAS JOB #: C3AZ816

Received: 2023/12/07, 11:01

Sample Matrix: Water # Samples Received: 3

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum (1)	3	N/A	2023/12/12	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum (1)	3	N/A	2023/12/14		EPA 8260C m
Petroleum Hydrocarbons F2-F4 in Water (1, 2)	2	2023/12/11	2023/12/12	CAM SOP-00316	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (1, 2)	1	2023/12/11	2023/12/13	CAM SOP-00316	CCME PHC-CWS m
Dissolved Metals by ICPMS (1)	1	N/A	2023/12/12	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS (1)	2	N/A	2023/12/13	CAM SOP-00447	EPA 6020B m
PAH Compounds in Water by GC/MS (SIM) (1)	3	2023/12/11	2023/12/11	CAM SOP-00318	EPA 8270E
Volatile Organic Compounds and F1 PHCs (1)	3	N/A	2023/12/14	CAM SOP-00230	EPA 8260C m

## Remarks:

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

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

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

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

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

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

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

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

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

(2) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's

Page 1 of 18



Your Project #: OTT-23002538-B0 Site Location: 1822-1846 WALKELY Your C.O.C. #: 967688-01-01

## **Attention: Leah Wells**

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

> Report Date: 2023/12/14 Report #: R7955355 Version: 1 - Final

## **CERTIFICATE OF ANALYSIS**

## **BUREAU VERITAS JOB #: C3AZ816**

## Received: 2023/12/07, 11:01

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.



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

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exp Services Inc Client Project #: OTT-23002538-B0 Site Location: 1822-1846 WALKELY Sampler Initials: SA

## **O.REG 153 DISSOLVED ICPMS METALS (WATER)**

Bureau Veritas ID		XVI157	XVI158		XVI159		
Sampling Data		2023/12/06	2023/12/06		2023/12/06		
		14:15	15:15		13:15		
COC Number		967688-01-01	967688-01-01		967688-01-01		
	UNITS	BH-8	BH-7	RDL	BH-12	RDL	QC Batch
Metals							
Dissolved Antimony (Sb)	ug/L	<0.50	1.7	0.50	1.5	0.50	9106197
Dissolved Arsenic (As)	ug/L	<1.0	1.8	1.0	1.5	1.0	9106197
Dissolved Barium (Ba)	ug/L	95	1800	2.0	220	2.0	9106197
Dissolved Beryllium (Be)	ug/L	<0.40	<0.40	0.40	<0.40	0.40	9106197
Dissolved Boron (B)	ug/L	76	380	10	180	10	9106197
Dissolved Cadmium (Cd)	ug/L	<0.090	<0.090	0.090	<0.090	0.090	9106197
Dissolved Chromium (Cr)	ug/L	<5.0	<5.0	5.0	<5.0	5.0	9106197
Dissolved Cobalt (Co)	ug/L	0.53	<0.50	0.50	0.78	0.50	9106197
Dissolved Copper (Cu)	ug/L	1.1	0.99	0.90	3.9	0.90	9106197
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	0.50	0.55	0.50	9106197
Dissolved Molybdenum (Mo)	ug/L	10	14	0.50	36	0.50	9106197
Dissolved Nickel (Ni)	ug/L	1.4	1.7	1.0	3.2	1.0	9106197
Dissolved Selenium (Se)	ug/L	<2.0	<2.0	2.0	<2.0	2.0	9106197
Dissolved Silver (Ag)	ug/L	<0.090	<0.090	0.090	<0.090	0.090	9106197
Dissolved Sodium (Na)	ug/L	1300000	2300000	500	530000	100	9106197
Dissolved Thallium (Tl)	ug/L	<0.050	<0.050	0.050	<0.050	0.050	9106197
Dissolved Uranium (U)	ug/L	1.7	2.4	0.10	1.9	0.10	9106197
Dissolved Vanadium (V)	ug/L	<0.50	0.59	0.50	0.88	0.50	9106197
Dissolved Zinc (Zn)	ug/L	<5.0	<5.0	5.0	15	5.0	9106197
RDL = Reportable Detection Li	mit						

QC Batch = Quality Control Batch



exp Services Inc Client Project #: OTT-23002538-B0 Site Location: 1822-1846 WALKELY Sampler Initials: SA

## **O.REG 153 PAHS (WATER)**

Bureau Veritas ID		XVI157	XVI158	XVI159		
Sampling Data		2023/12/06	2023/12/06	2023/12/06		
		14:15	15:15	13:15		
COC Number		967688-01-01	967688-01-01	967688-01-01		
	UNITS	BH-8	BH-7	BH-12	RDL	QC Batch
Calculated Parameters						
Methylnaphthalene, 2-(1-)	ug/L	2.4	<0.071	<0.071	0.071	9103410
Polyaromatic Hydrocarbons						
Acenaphthene	ug/L	<0.050	<0.050	<0.050	0.050	9104367
Acenaphthylene	ug/L	<0.050	<0.050	<0.050	0.050	9104367
Anthracene	ug/L	<0.050	<0.050	<0.050	0.050	9104367
Benzo(a)anthracene	ug/L	<0.050	<0.050	<0.050	0.050	9104367
Benzo(a)pyrene	ug/L	<0.0090	0.026	<0.0090	0.0090	9104367
Benzo(b/j)fluoranthene	ug/L	<0.050	<0.050	<0.050	0.050	9104367
Benzo(g,h,i)perylene	ug/L	<0.050	<0.050	<0.050	0.050	9104367
Benzo(k)fluoranthene	ug/L	<0.050	<0.050	<0.050	0.050	9104367
Chrysene	ug/L	<0.050	<0.050	<0.050	0.050	9104367
Dibenzo(a,h)anthracene	ug/L	<0.050	<0.050	<0.050	0.050	9104367
Fluoranthene	ug/L	<0.050	0.050	<0.050	0.050	9104367
Fluorene	ug/L	<0.050	<0.050	<0.050	0.050	9104367
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	<0.050	<0.050	0.050	9104367
1-Methylnaphthalene	ug/L	1.4	<0.050	<0.050	0.050	9104367
2-Methylnaphthalene	ug/L	0.96	<0.050	<0.050	0.050	9104367
Naphthalene	ug/L	4.4	<0.050	<0.050	0.050	9104367
Phenanthrene	ug/L	0.045	0.053	0.11	0.030	9104367
Pyrene	ug/L	<0.050	<0.050	<0.050	0.050	9104367
Surrogate Recovery (%)						
D10-Anthracene	%	99	90	94		9104367
D14-Terphenyl (FS)	%	83	42 (1)	48 (1)		9104367
D8-Acenaphthylene	%	94	94	93		9104367
RDL = Reportable Detection Limit						

QC Batch = Quality Control Batch

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


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

Bureau Veritas ID		XVI157		XVI158	XVI159		
Sampling Date		2023/12/06		2023/12/06	2023/12/06		
Sampling Date		14:15		15:15	13:15		
COC Number		967688-01-01		967688-01-01	967688-01-01		
	UNITS	BH-8	RDL	BH-7	BH-12	RDL	QC Batch
Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9103411
Volatile Organics	·		·			·	. <u> </u>
Acetone (2-Propanone)	ug/L	<16 (1)	16	<10	87	10	9106499
Benzene	ug/L	42	0.17	0.41	0.91	0.17	9106499
Bromodichloromethane	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9106499
Bromoform	ug/L	<1.0	1.0	<1.0	<1.0	1.0	9106499
Bromomethane	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9106499
Carbon Tetrachloride	ug/L	<0.20	0.20	<0.20	<0.20	0.20	9106499
Chlorobenzene	ug/L	<0.20	0.20	<0.20	<0.20	0.20	9106499
Chloroform	ug/L	<0.20	0.20	2.3	1.6	0.20	9106499
Dibromochloromethane	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9106499
1,2-Dichlorobenzene	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9106499
1,3-Dichlorobenzene	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9106499
1,4-Dichlorobenzene	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9106499
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	<1.0	<1.0	1.0	9106499
1,1-Dichloroethane	ug/L	<0.20	0.20	<0.20	<0.20	0.20	9106499
1,2-Dichloroethane	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9106499
1,1-Dichloroethylene	ug/L	<0.20	0.20	<0.20	<0.20	0.20	9106499
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9106499
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9106499
1,2-Dichloropropane	ug/L	<0.20	0.20	<0.20	<0.20	0.20	9106499
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	<0.30	<0.30	0.30	9106499
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	<0.40	<0.40	0.40	9106499
Ethylbenzene	ug/L	57	0.20	<0.20	<0.20	0.20	9106499
Ethylene Dibromide	ug/L	<0.20	0.20	<0.20	<0.20	0.20	9106499
Hexane	ug/L	21	1.0	<1.0	<1.0	1.0	9106499
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	2.4	<2.0	2.0	9106499
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	10	<10	31	10	9106499
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	<5.0	<5.0	5.0	9106499
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9106499
Styrene	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9106499
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9106499
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9106499
RDL = Reportable Detection Limit							

QC Batch = Quality Control Batch

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



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

Bureau Veritas ID		XVI157		XVI158	XVI159		
Samaling Data	1	2023/12/06		2023/12/06	2023/12/06		
		14:15		15:15	13:15		
COC Number	T	967688-01-01		967688-01-01	967688-01-01		
	UNITS	BH-8	RDL	BH-7	BH-12	RDL	QC Batch
Tetrachloroethylene	ug/L	<0.20	0.20	<0.20	0.73	0.20	9106499
Toluene	ug/L	1.0	0.20	0.81	1.5	0.20	9106499
1,1,1-Trichloroethane	ug/L	<0.20	0.20	<0.20	<0.20	0.20	9106499
1,1,2-Trichloroethane	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9106499
Trichloroethylene	ug/L	<0.20	0.20	<0.20	<0.20	0.20	9106499
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	<0.50	<0.50	0.50	9106499
Vinyl Chloride	ug/L	<0.20	0.20	<0.20	<0.20	0.20	9106499
p+m-Xylene	ug/L	97	0.20	0.28	0.65	0.20	9106499
o-Xylene	ug/L	2.2	0.20	<0.20	0.31	0.20	9106499
Total Xylenes	ug/L	99	0.20	0.28	0.96	0.20	9106499
F1 (C6-C10)	ug/L	720	25	<25	<25	25	9106499
F1 (C6-C10) - BTEX	ug/L	520	25	<25	<25	25	9106499
F2-F4 Hydrocarbons		·		·			
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	<100	<100	100	9104370
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	<200	<200	200	9104370
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	<200	<200	200	9104370
Reached Baseline at C50	ug/L	Yes		Yes	Yes		9104370
Surrogate Recovery (%)							
o-Terphenyl	%	84		103	90		9104370
4-Bromofluorobenzene	%	98		97	96		9106499
D4-1,2-Dichloroethane	%	98		99	98		9106499
D8-Toluene	%	100		98	97		9106499
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							



### **TEST SUMMARY**

Bureau Veritas ID:	XVI157
Sample ID:	BH-8
Matrix:	Water

Sample ID: BH-8 Matrix: Water					Shipped: Received: 2023/12/07
Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9103410	N/A	2023/12/12	Automated Statchk
1,3-Dichloropropene Sum	CALC	9103411	N/A	2023/12/14	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9104370	2023/12/11	2023/12/12	(Kent) Maolin Li
Dissolved Metals by ICPMS	ICP/MS	9106197	N/A	2023/12/13	Nan Raykha
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9104367	2023/12/11	2023/12/11	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9106499	N/A	2023/12/14	Anna Gabrielyan

Bureau Veritas ID: XVI158 Sample ID: BH-7 Matrix: Water

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9103410	N/A	2023/12/12	Automated Statchk
1,3-Dichloropropene Sum	CALC	9103411	N/A	2023/12/14	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9104370	2023/12/11	2023/12/12	(Kent) Maolin Li
Dissolved Metals by ICPMS	ICP/MS	9106197	N/A	2023/12/13	Nan Raykha
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9104367	2023/12/11	2023/12/11	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9106499	N/A	2023/12/14	Anna Gabrielyan

Bureau Veritas ID:	XVI159
Sample ID:	BH-12
Matrix:	Water

Collected:	2023/12/06
Shipped:	
Received:	2023/12/07

Collected: 2023/12/06 Shipped: Received: 2023/12/07

Collected: 2023/12/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9103410	N/A	2023/12/12	Automated Statchk
1,3-Dichloropropene Sum	CALC	9103411	N/A	2023/12/14	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9104370	2023/12/11	2023/12/13	(Kent) Maolin Li
Dissolved Metals by ICPMS	ICP/MS	9106197	N/A	2023/12/12	Nan Raykha
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9104367	2023/12/11	2023/12/11	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9106499	N/A	2023/12/14	Anna Gabrielyan



### **GENERAL COMMENTS**

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

Package 1	1.7°C
Package 2	1.3°C

Results relate only to the items tested.



## QUALITY ASSURANCE REPORT

exp Services Inc Client Project #: OTT-23002538-B0 Site Location: 1822-1846 WALKELY Sampler Initials: SA

			Matrix Spike		SPIKED BLANK		Method Blank		RPI	)
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9104367	D10-Anthracene	2023/12/11	104	50 - 130	97	50 - 130	98	%		
9104367	D14-Terphenyl (FS)	2023/12/11	100	50 - 130	98	50 - 130	94	%		
9104367	D8-Acenaphthylene	2023/12/11	99	50 - 130	94	50 - 130	91	%		
9104370	o-Terphenyl	2023/12/12	91	60 - 130	105	60 - 130	89	%		
9106499	4-Bromofluorobenzene	2023/12/14	97	70 - 130	98	70 - 130	95	%		
9106499	D4-1,2-Dichloroethane	2023/12/14	100	70 - 130	98	70 - 130	98	%		
9106499	D8-Toluene	2023/12/14	101	70 - 130	102	70 - 130	99	%		
9104367	1-Methylnaphthalene	2023/12/11	101	50 - 130	96	50 - 130	<0.050	ug/L	4.7	30
9104367	2-Methylnaphthalene	2023/12/11	95	50 - 130	90	50 - 130	<0.050	ug/L	4.6	30
9104367	Acenaphthene	2023/12/11	100	50 - 130	93	50 - 130	<0.050	ug/L	4.9	30
9104367	Acenaphthylene	2023/12/11	100	50 - 130	92	50 - 130	<0.050	ug/L	4.3	30
9104367	Anthracene	2023/12/11	104	50 - 130	94	50 - 130	<0.050	ug/L	8.0	30
9104367	Benzo(a)anthracene	2023/12/11	105	50 - 130	95	50 - 130	<0.050	ug/L	NC	30
9104367	Benzo(a)pyrene	2023/12/11	98	50 - 130	89	50 - 130	<0.0090	ug/L	NC	30
9104367	Benzo(b/j)fluoranthene	2023/12/11	102	50 - 130	91	50 - 130	<0.050	ug/L	NC	30
9104367	Benzo(g,h,i)perylene	2023/12/11	103	50 - 130	93	50 - 130	<0.050	ug/L	NC	30
9104367	Benzo(k)fluoranthene	2023/12/11	96	50 - 130	93	50 - 130	<0.050	ug/L	NC	30
9104367	Chrysene	2023/12/11	101	50 - 130	93	50 - 130	<0.050	ug/L	NC	30
9104367	Dibenzo(a,h)anthracene	2023/12/11	94	50 - 130	84	50 - 130	<0.050	ug/L	NC	30
9104367	Fluoranthene	2023/12/11	104	50 - 130	96	50 - 130	<0.050	ug/L	4.4	30
9104367	Fluorene	2023/12/11	99	50 - 130	90	50 - 130	<0.050	ug/L	4.4	30
9104367	Indeno(1,2,3-cd)pyrene	2023/12/11	101	50 - 130	91	50 - 130	<0.050	ug/L	NC	30
9104367	Naphthalene	2023/12/11	95	50 - 130	90	50 - 130	<0.050	ug/L	3.4	30
9104367	Phenanthrene	2023/12/11	99	50 - 130	91	50 - 130	<0.030	ug/L	3.1	30
9104367	Pyrene	2023/12/11	106	50 - 130	97	50 - 130	<0.050	ug/L	5.2	30
9104370	F2 (C10-C16 Hydrocarbons)	2023/12/13	90	60 - 130	101	60 - 130	<100	ug/L	6.3	30
9104370	F3 (C16-C34 Hydrocarbons)	2023/12/13	91	60 - 130	106	60 - 130	<200	ug/L	NC	30
9104370	F4 (C34-C50 Hydrocarbons)	2023/12/13	90	60 - 130	104	60 - 130	<200	ug/L	NC	30
9106197	Dissolved Antimony (Sb)	2023/12/12	114	80 - 120	108	80 - 120	<0.50	ug/L	NC	20
9106197	Dissolved Arsenic (As)	2023/12/12	99	80 - 120	100	80 - 120	<1.0	ug/L	NC	20
9106197	Dissolved Barium (Ba)	2023/12/12	99	80 - 120	104	80 - 120	<2.0	ug/L	0.67	20
9106197	Dissolved Beryllium (Be)	2023/12/12	103	80 - 120	101	80 - 120	<0.40	ug/L	NC	20



exp Services Inc Client Project #: OTT-23002538-B0 Site Location: 1822-1846 WALKELY Sampler Initials: SA

			Matrix Spike		SPIKED BLANK		Method Blank		RPI	2
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9106197	Dissolved Boron (B)	2023/12/12	91	80 - 120	97	80 - 120	<10	ug/L	2.8	20
9106197	Dissolved Cadmium (Cd)	2023/12/12	103	80 - 120	104	80 - 120	<0.090	ug/L	2.2	20
9106197	Dissolved Chromium (Cr)	2023/12/12	100	80 - 120	98	80 - 120	<5.0	ug/L	NC	20
9106197	Dissolved Cobalt (Co)	2023/12/12	96	80 - 120	100	80 - 120	<0.50	ug/L	NC	20
9106197	Dissolved Copper (Cu)	2023/12/12	101	80 - 120	102	80 - 120	<0.90	ug/L	3.5	20
9106197	Dissolved Lead (Pb)	2023/12/12	91	80 - 120	101	80 - 120	<0.50	ug/L	NC	20
9106197	Dissolved Molybdenum (Mo)	2023/12/12	112	80 - 120	109	80 - 120	<0.50	ug/L	NC	20
9106197	Dissolved Nickel (Ni)	2023/12/12	90	80 - 120	96	80 - 120	<1.0	ug/L	NC	20
9106197	Dissolved Selenium (Se)	2023/12/12	96	80 - 120	99	80 - 120	<2.0	ug/L	NC	20
9106197	Dissolved Silver (Ag)	2023/12/12	99	80 - 120	105	80 - 120	<0.090	ug/L	NC	20
9106197	Dissolved Sodium (Na)	2023/12/12	NC	80 - 120	98	80 - 120	<100	ug/L	4.5	20
9106197	Dissolved Thallium (TI)	2023/12/12	93	80 - 120	104	80 - 120	<0.050	ug/L	NC	20
9106197	Dissolved Uranium (U)	2023/12/12	92	80 - 120	100	80 - 120	<0.10	ug/L	3.8	20
9106197	Dissolved Vanadium (V)	2023/12/12	102	80 - 120	101	80 - 120	<0.50	ug/L	3.8	20
9106197	Dissolved Zinc (Zn)	2023/12/12	93	80 - 120	101	80 - 120	<5.0	ug/L	2.3	20
9106499	1,1,1,2-Tetrachloroethane	2023/12/14	98	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
9106499	1,1,1-Trichloroethane	2023/12/14	99	70 - 130	99	70 - 130	<0.20	ug/L	NC	30
9106499	1,1,2,2-Tetrachloroethane	2023/12/14	105	70 - 130	103	70 - 130	<0.50	ug/L	NC	30
9106499	1,1,2-Trichloroethane	2023/12/14	91	70 - 130	90	70 - 130	<0.50	ug/L	NC	30
9106499	1,1-Dichloroethane	2023/12/14	107	70 - 130	105	70 - 130	<0.20	ug/L	NC	30
9106499	1,1-Dichloroethylene	2023/12/14	102	70 - 130	102	70 - 130	<0.20	ug/L	NC	30
9106499	1,2-Dichlorobenzene	2023/12/14	96	70 - 130	93	70 - 130	<0.50	ug/L	NC	30
9106499	1,2-Dichloroethane	2023/12/14	93	70 - 130	92	70 - 130	<0.50	ug/L	NC	30
9106499	1,2-Dichloropropane	2023/12/14	104	70 - 130	103	70 - 130	<0.20	ug/L	NC	30
9106499	1,3-Dichlorobenzene	2023/12/14	99	70 - 130	96	70 - 130	<0.50	ug/L	NC	30
9106499	1,4-Dichlorobenzene	2023/12/14	107	70 - 130	105	70 - 130	<0.50	ug/L	NC	30
9106499	Acetone (2-Propanone)	2023/12/14	102	60 - 140	103	60 - 140	<10	ug/L	NC (1)	30
9106499	Benzene	2023/12/14	95	70 - 130	95	70 - 130	<0.17	ug/L	4.6	30
9106499	Bromodichloromethane	2023/12/14	103	70 - 130	103	70 - 130	<0.50	ug/L	NC	30
9106499	Bromoform	2023/12/14	86	70 - 130	85	70 - 130	<1.0	ug/L	NC	30
9106499	Bromomethane	2023/12/14	96	60 - 140	105	60 - 140	<0.50	ug/L	NC	30
9106499	Carbon Tetrachloride	2023/12/14	95	70 - 130	94	70 - 130	<0.20	ug/L	NC	30



exp Services Inc Client Project #: OTT-23002538-B0 Site Location: 1822-1846 WALKELY Sampler Initials: SA

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9106499	Chlorobenzene	2023/12/14	99	70 - 130	98	70 - 130	<0.20	ug/L	NC	30
9106499	Chloroform	2023/12/14	101	70 - 130	102	70 - 130	<0.20	ug/L	2.9	30
9106499	cis-1,2-Dichloroethylene	2023/12/14	105	70 - 130	104	70 - 130	<0.50	ug/L	4.7	30
9106499	cis-1,3-Dichloropropene	2023/12/14	82	70 - 130	83	70 - 130	<0.30	ug/L	NC	30
9106499	Dibromochloromethane	2023/12/14	96	70 - 130	96	70 - 130	<0.50	ug/L	NC	30
9106499	Dichlorodifluoromethane (FREON 12)	2023/12/14	110	60 - 140	104	60 - 140	<1.0	ug/L	NC	30
9106499	Ethylbenzene	2023/12/14	90	70 - 130	91	70 - 130	<0.20	ug/L	0.48	30
9106499	Ethylene Dibromide	2023/12/14	101	70 - 130	101	70 - 130	<0.20	ug/L	NC	30
9106499	F1 (C6-C10) - BTEX	2023/12/14					<25	ug/L	9.9	30
9106499	F1 (C6-C10)	2023/12/14	96	60 - 140	97	60 - 140	<25	ug/L	6.2	30
9106499	Hexane	2023/12/14	99	70 - 130	97	70 - 130	<1.0	ug/L	NC	30
9106499	Methyl Ethyl Ketone (2-Butanone)	2023/12/14	103	60 - 140	101	60 - 140	<10	ug/L	NC	30
9106499	Methyl Isobutyl Ketone	2023/12/14	92	70 - 130	91	70 - 130	<5.0	ug/L	NC	30
9106499	Methyl t-butyl ether (MTBE)	2023/12/14	101	70 - 130	100	70 - 130	<0.50	ug/L	NC	30
9106499	Methylene Chloride(Dichloromethane)	2023/12/14	107	70 - 130	107	70 - 130	<2.0	ug/L	NC	30
9106499	o-Xylene	2023/12/14	82	70 - 130	82	70 - 130	<0.20	ug/L	3.3	30
9106499	p+m-Xylene	2023/12/14	93	70 - 130	92	70 - 130	<0.20	ug/L	1.4	30
9106499	Styrene	2023/12/14	98	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
9106499	Tetrachloroethylene	2023/12/14	99	70 - 130	98	70 - 130	<0.20	ug/L	NC	30
9106499	Toluene	2023/12/14	91	70 - 130	92	70 - 130	<0.20	ug/L	0	30
9106499	Total Xylenes	2023/12/14					<0.20	ug/L	1.9	30
9106499	trans-1,2-Dichloroethylene	2023/12/14	100	70 - 130	99	70 - 130	<0.50	ug/L	NC	30
9106499	trans-1,3-Dichloropropene	2023/12/14	87	70 - 130	90	70 - 130	<0.40	ug/L	NC	30
9106499	Trichloroethylene	2023/12/14	100	70 - 130	100	70 - 130	<0.20	ug/L	NC	30
9106499	Trichlorofluoromethane (FREON 11)	2023/12/14	106	70 - 130	105	70 - 130	<0.50	ug/L	NC	30



exp Services Inc Client Project #: OTT-23002538-B0 Site Location: 1822-1846 WALKELY Sampler Initials: SA

			Matrix	Spike	SPIKED	BLANK	Method B	Blank	RPD		
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	
9106499	Vinyl Chloride	2023/12/14	114	70 - 130	111	70 - 130	<0.20	ug/L	15	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 detection limit was raised due to matrix interference.



#### VALIDATION SIGNATURE PAGE

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

Anastassia Hamanov, Scientific Specialist

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

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Email:	AP@exp.com; Kare	n.Burke@exp.con	m	Email:	leah.we	ells@exp.com					Sampled E	By:	shall	minar 1	ble	1 Auto		C#967688-01-01		Ratieri	6 32020a
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Bureau Veritas Canada (2018) Inc.

exp Services Inc Client Project #: OTT-23002538-B0 Project name: 1822-1846 WALKELY Client ID: BH-8

#### Petroleum Hydrocarbons F2-F4 in Water Chromatogram



exp Services Inc Client Project #: OTT-23002538-B0 Project name: 1822-1846 WALKELY Client ID: BH-7

#### Petroleum Hydrocarbons F2-F4 in Water Chromatogram



exp Services Inc Client Project #: OTT-23002538-B0 Project name: 1822-1846 WALKELY Client ID: BH-12

#### Petroleum Hydrocarbons F2-F4 in Water Chromatogram





Your Project #: OTT-23002538-B0 Your C.O.C. #: 968694-01-01

#### Attention: Leah Wells

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

> Report Date: 2023/12/22 Report #: R7966463 Version: 1 - Final

### **CERTIFICATE OF ANALYSIS**

### BUREAU VERITAS JOB #: C3BJ388

Received: 2023/12/15, 08:42

Sample Matrix: Soil # Samples Received: 2

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum (1)	2	N/A	2023/12/20	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum (1)	2	N/A	2023/12/20		EPA 8260C m
Petroleum Hydrocarbons F2-F4 in Soil (1, 2)	2	2023/12/20	2023/12/20	CAM SOP-00316	CCME CWS m
Acid Extractable Metals by ICPMS (1)	2	2023/12/21	2023/12/21	CAM SOP-00447	EPA 6020B m
Moisture (1)	2	N/A	2023/12/19	CAM SOP-00445	Carter 2nd ed 70.2 m
PAH Compounds in Soil by GC/MS (SIM) (1)	2	2023/12/19	2023/12/20	CAM SOP-00318	EPA 8270E
Volatile Organic Compounds and F1 PHCs (1)	2	N/A	2023/12/20	CAM SOP-00230	EPA 8260C m

#### Remarks:

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

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

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

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

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

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

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

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

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

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

Page 1 of 17



Your Project #: OTT-23002538-B0 Your C.O.C. #: 968694-01-01

#### Attention: Leah Wells

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

> Report Date: 2023/12/22 Report #: R7966463 Version: 1 - Final

## **CERTIFICATE OF ANALYSIS**

#### **BUREAU VERITAS JOB #: C3BJ388**

Received: 2023/12/15, 08:42

reported using validated cold solvent extraction instead of Soxhlet extraction.



22 Dec 2023 10:08:31

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

This report has been generated and distributed using a secure automated process.

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

## O.REG 153 PAHS (SOIL)

Bureau Veritas ID			XXI341	XXI342						
Sampling Date			2023/12/14	2023/12/14						
			10:15	14:27						
COC Number			968694-01-01	968694-01-01						
	UNITS	Criteria	BH4-SS2	BH3-SS1	RDL	QC Batch				
Calculated Parameters										
Methylnaphthalene, 2-(1-)	ug/g	76	<0.0071	<0.0071	0.0071	9117401				
Polyaromatic Hydrocarbons										
Acenaphthene	ug/g	96	<0.0050	<0.0050	0.0050	9121354				
Acenaphthylene	ug/g	0.15	<0.0050	<0.0050	0.0050	9121354				
Anthracene	ug/g	0.67	<0.0050	<0.0050	0.0050	9121354				
Benzo(a)anthracene	ug/g	0.96	<0.0050	<0.0050	0.0050	9121354				
Benzo(a)pyrene	ug/g	0.3	<0.0050	<0.0050	0.0050	9121354				
Benzo(b/j)fluoranthene	ug/g	0.96	<0.0050	<0.0050	0.0050	9121354				
Benzo(g,h,i)perylene	ug/g	9.6	<0.0050	<0.0050	0.0050	9121354				
Benzo(k)fluoranthene	ug/g	0.96	<0.0050	<0.0050	0.0050	9121354				
Chrysene	ug/g	9.6	<0.0050	<0.0050	0.0050	9121354				
Dibenzo(a,h)anthracene	ug/g	0.1	<0.0050	<0.0050	0.0050	9121354				
Fluoranthene	ug/g	9.6	<0.0050	<0.0050	0.0050	9121354				
Fluorene	ug/g	62	<0.0050	<0.0050	0.0050	9121354				
Indeno(1,2,3-cd)pyrene	ug/g	0.76	<0.0050	<0.0050	0.0050	9121354				
1-Methylnaphthalene	ug/g	76	<0.0050	<0.0050	0.0050	9121354				
2-Methylnaphthalene	ug/g	76	<0.0050	<0.0050	0.0050	9121354				
Naphthalene	ug/g	9.6	<0.0050	<0.0050	0.0050	9121354				
Phenanthrene	ug/g	12	<0.0050	<0.0050	0.0050	9121354				
Pyrene	ug/g	96	<0.0050	<0.0050	0.0050	9121354				
Surrogate Recovery (%)		-								
D10-Anthracene	%	-	113	107		9121354				
D14-Terphenyl (FS)	%	-	110	104		9121354				
D8-Acenaphthylene	%	-	102	97		9121354				
RDL = Reportable Detection L	imit									
QC Batch = Quality Control Ba	atch									
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 - Industrial/Commercial/Community - Coarse Textured Soil



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

Bureau Veritas ID			XXI341	XXI342		
Sampling Date			2023/12/14	2023/12/14		
			10:15	14:27		
COC Number			968694-01-01	968694-01-01		
	UNITS	Criteria	BH4-SS2	BH3-SS1	RDL	QC Batch
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/g	0.18	<0.050	<0.050	0.050	9117399
Volatile Organics						
Acetone (2-Propanone)	ug/g	16	<0.49	<0.49	0.49	9120188
Benzene	ug/g	0.32	<0.0060	<0.0060	0.0060	9120188
Bromodichloromethane	ug/g	18	<0.040	<0.040	0.040	9120188
Bromoform	ug/g	0.61	<0.040	<0.040	0.040	9120188
Bromomethane	ug/g	0.05	<0.040	<0.040	0.040	9120188
Carbon Tetrachloride	ug/g	0.21	<0.040	<0.040	0.040	9120188
Chlorobenzene	ug/g	2.4	<0.040	<0.040	0.040	9120188
Chloroform	ug/g	0.47	<0.040	<0.040	0.040	9120188
Dibromochloromethane	ug/g	13	<0.040	<0.040	0.040	9120188
1,2-Dichlorobenzene	ug/g	6.8	<0.040	<0.040	0.040	9120188
1,3-Dichlorobenzene	ug/g	9.6	<0.040	<0.040	0.040	9120188
1,4-Dichlorobenzene	ug/g	0.2	<0.040	<0.040	0.040	9120188
Dichlorodifluoromethane (FREON 12)	ug/g	16	<0.040	<0.040	0.040	9120188
1,1-Dichloroethane	ug/g	17	<0.040	<0.040	0.040	9120188
1,2-Dichloroethane	ug/g	0.05	<0.049	<0.049	0.049	9120188
1,1-Dichloroethylene	ug/g	0.064	<0.040	<0.040	0.040	9120188
cis-1,2-Dichloroethylene	ug/g	55	<0.040	<0.040	0.040	9120188
trans-1,2-Dichloroethylene	ug/g	1.3	<0.040	<0.040	0.040	9120188
1,2-Dichloropropane	ug/g	0.16	<0.040	<0.040	0.040	9120188
cis-1,3-Dichloropropene	ug/g	0.18	<0.030	<0.030	0.030	9120188
trans-1,3-Dichloropropene	ug/g	0.18	<0.040	<0.040	0.040	9120188
Ethylbenzene	ug/g	9.5	<0.010	<0.010	0.010	9120188
Ethylene Dibromide	ug/g	0.05	<0.040	<0.040	0.040	9120188
Hexane	ug/g	46	<0.040	<0.040	0.040	9120188
Methylene Chloride(Dichloromethane)	ug/g	1.6	<0.049	<0.049	0.049	9120188
Methyl Ethyl Ketone (2-Butanone)	ug/g	70	<0.40	<0.40	0.40	9120188
Methyl Isobutyl Ketone	ug/g	31	<0.40	<0.40	0.40	9120188
Methyl t-butyl ether (MTBE)	ug/g	11	<0.040	<0.040	0.040	9120188
Styrene	ug/g	34	<0.040	<0.040	0.040	9120188

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 ConditionSoil - Industrial/Commercial/Community - Coarse Textured Soil



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

Bureau Veritas ID			XXI341	XXI342		
Sampling Date			2023/12/14	2023/12/14		
			10:15	14:27		
COC Number			968694-01-01	968694-01-01		
	UNITS	Criteria	BH4-SS2	BH3-SS1	RDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/g	0.087	<0.040	<0.040	0.040	9120188
1,1,2,2-Tetrachloroethane	ug/g	0.05	<0.040	<0.040	0.040	9120188
Tetrachloroethylene	ug/g	4.5	0.89	1.7	0.040	9120188
Toluene	ug/g	68	<0.020	<0.020	0.020	9120188
1,1,1-Trichloroethane	ug/g	6.1	<0.040	<0.040	0.040	9120188
1,1,2-Trichloroethane	ug/g	0.05	<0.040	<0.040	0.040	9120188
Trichloroethylene	ug/g	0.91	<0.010	<0.010	0.010	9120188
Trichlorofluoromethane (FREON 11)	ug/g	4	<0.040	<0.040	0.040	9120188
Vinyl Chloride	ug/g	0.032	<0.019	<0.019	0.019	9120188
p+m-Xylene	ug/g	-	<0.020	<0.020	0.020	9120188
o-Xylene	ug/g	-	<0.020	<0.020	0.020	9120188
Total Xylenes	ug/g	26	<0.020	<0.020	0.020	9120188
F1 (C6-C10)	ug/g	55	<10	<10	10	9120188
F1 (C6-C10) - BTEX	ug/g	55	<10	<10	10	9120188
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/g	230	<10	<10	10	9122763
F3 (C16-C34 Hydrocarbons)	ug/g	1700	<50	<50	50	9122763
F4 (C34-C50 Hydrocarbons)	ug/g	3300	<50	<50	50	9122763
Reached Baseline at C50	ug/g	-	Yes	Yes		9122763
Surrogate Recovery (%)						
o-Terphenyl	%	-	94	105		9122763
4-Bromofluorobenzene	%	-	98	99		9120188
D10-o-Xylene	%		99	89		9120188
D4-1,2-Dichloroethane	%	-	91	90		9120188
D8-Toluene	%	-	94	94		9120188
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	n Standa	ards in a l	Non-Potable Gro	ound Water Con	dition	
Soil - Industrial/Commercial/Community	- Coarse	e Texture	d Soil			



## **RESULTS OF ANALYSES OF SOIL**

Bureau Veritas ID		XXI341	XXI342								
Sampling Date		2023/12/14	2023/12/14								
		10:15	14:27								
COC Number		968694-01-01	968694-01-01								
	UNITS	BH4-SS2	BH3-SS1	RDL	QC Batch						
Inorganics											
Moisture	Moisture % 9.6 14 1.0 9121327										
RDL = Reportable Detection Limit QC Batch = Quality Control Batch											
QC Batch = Quality Control Ba	atch										



### **ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)**

Bureau Veritas ID			XXI341	XXI342						
Sampling Data			2023/12/14	2023/12/14						
			10:15	14:27						
COC Number			968694-01-01	968694-01-01						
	UNITS	Criteria	BH4-SS2	BH3-SS1	RDL	QC Batch				
Metals										
Acid Extractable Aluminum (Al)	ug/g	-	12000	15000	50	9125513				
Acid Extractable Antimony (Sb)	ug/g	40	<0.20	<0.20	0.20	9125513				
Acid Extractable Arsenic (As)	ug/g	18	3.6	4.4	1.0	9125513				
Acid Extractable Barium (Ba)	ug/g	670	50	64	0.50	9125513				
Acid Extractable Beryllium (Be)	ug/g	8	0.56	0.70	0.20	9125513				
Acid Extractable Bismuth (Bi)	ug/g	-	<1.0	<1.0	1.0	9125513				
Acid Extractable Boron (B)	ug/g	120	7.6	6.7	5.0	9125513				
Acid Extractable Cadmium (Cd)	ug/g	1.9	<0.10	<0.10	0.10	9125513				
Acid Extractable Calcium (Ca)	ug/g	-	27000	8400	50	9125513				
Acid Extractable Chromium (Cr)	ug/g	160	23	23	1.0	9125513				
Acid Extractable Cobalt (Co)	ug/g	80	12	11	0.10	9125513				
Acid Extractable Copper (Cu)	ug/g	230	19	24	0.50	9125513				
Acid Extractable Iron (Fe)	ug/g	-	23000	26000	50	9125513				
Acid Extractable Lead (Pb)	ug/g	120	12	12	1.0	9125513				
Acid Extractable Magnesium (Mg)	ug/g	-	6200	6100	50	9125513				
Acid Extractable Manganese (Mn)	ug/g	-	460	480	1.0	9125513				
Acid Extractable Molybdenum (Mo)	ug/g	40	<0.50	0.51	0.50	9125513				
Acid Extractable Nickel (Ni)	ug/g	270	21	24	0.50	9125513				
Acid Extractable Phosphorus (P)	ug/g	-	850	710	50	9125513				
Acid Extractable Potassium (K)	ug/g	-	1600	1700	200	9125513				
Acid Extractable Selenium (Se)	ug/g	5.5	<0.50	<0.50	0.50	9125513				
Acid Extractable Silver (Ag)	ug/g	40	<0.20	<0.20	0.20	9125513				
Acid Extractable Sodium (Na)	ug/g	-	920	190	50	9125513				
Acid Extractable Strontium (Sr)	ug/g	-	70	28	1.0	9125513				
Acid Extractable Thallium (Tl)	ug/g	3.3	0.12	0.15	0.050	9125513				
Acid Extractable Tin (Sn)	ug/g	-	<1.0	1.3	1.0	9125513				
Acid Extractable Uranium (U)	ug/g	33	0.77	0.61	0.050	9125513				
Acid Extractable Vanadium (V)	ug/g	86	29	31	5.0	9125513				
Acid Extractable Zinc (Zn)	ug/g	340	47	52	5.0	9125513				
Acid Extractable Mercury (Hg)	ug/g	3.9	<0.050	<0.050	0.050	9125513				
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 - Industrial/Commercial/Community - Coarse Textured Soil



### **TEST SUMMARY**

Bureau Veritas ID: Sample ID: Matrix:	XXI341 BH4-SS2 Soil				(	Collected: 2023/12/14 Shipped: Received: 2023/12/15
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum		CALC	9117401	N/A	2023/12/20	Automated Statchk
1,3-Dichloropropene Sum		CALC	9117399	N/A	2023/12/20	Automated Statchk
Petroleum Hydrocarbons	F2-F4 in Soil	GC/FID	9122763	2023/12/20	2023/12/20	Anna Stuglik-Rolland

Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9122763	2023/12/20	2023/12/20	Anna Stuglik-Rolland
Acid Extractable Metals by ICPMS	ICP/MS	9125513	2023/12/21	2023/12/21	Thuy Linh Nguyen
Moisture	BAL	9121327	N/A	2023/12/19	Ibadat Preet
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9121354	2023/12/19	2023/12/20	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9120188	N/A	2023/12/20	Cheng-Yu Sha

Bureau Veritas ID:XXI342Sample ID:BH3-SS1Matrix:Soil

Collected: 2023/12/14 Shipped: Received: 2023/12/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9117401	N/A	2023/12/20	Automated Statchk
1,3-Dichloropropene Sum	CALC	9117399	N/A	2023/12/20	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9122763	2023/12/20	2023/12/20	Anna Stuglik-Rolland
Acid Extractable Metals by ICPMS	ICP/MS	9125513	2023/12/21	2023/12/21	Thuy Linh Nguyen
Moisture	BAL	9121327	N/A	2023/12/19	Ibadat Preet
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9121354	2023/12/19	2023/12/20	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9120188	N/A	2023/12/20	Cheng-Yu Sha



## **GENERAL COMMENTS**

Each t	emperature is the	average of up to t	hree cooler temperatures taken at receipt
	Package 1	14.7°C	
	•		-
Result	s relate only to the	e items tested.	



## QUALITY ASSURANCE REPORT

exp Services Inc Client Project #: OTT-23002538-B0 Sampler Initials: MR

			Matrix	Spike	SPIKED	SPIKED BLANK		Method Blank		D
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9120188	4-Bromofluorobenzene	2023/12/20	100	60 - 140	98	60 - 140	98	%		
9120188	D10-o-Xylene	2023/12/20	97	60 - 130	98	60 - 130	87	%		
9120188	D4-1,2-Dichloroethane	2023/12/20	86	60 - 140	83	60 - 140	89	%		
9120188	D8-Toluene	2023/12/20	99	60 - 140	101	60 - 140	95	%		
9121354	D10-Anthracene	2023/12/20	102	50 - 130	108	50 - 130	112	%		
9121354	D14-Terphenyl (FS)	2023/12/20	99	50 - 130	105	50 - 130	105	%		
9121354	D8-Acenaphthylene	2023/12/20	93	50 - 130	104	50 - 130	100	%		
9122763	o-Terphenyl	2023/12/20	101	60 - 130	93	60 - 130	99	%		
9120188	1,1,1,2-Tetrachloroethane	2023/12/20	98	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
9120188	1,1,1-Trichloroethane	2023/12/20	90	60 - 140	94	60 - 130	<0.040	ug/g	NC	50
9120188	1,1,2,2-Tetrachloroethane	2023/12/20	98	60 - 140	96	60 - 130	<0.040	ug/g	NC	50
9120188	1,1,2-Trichloroethane	2023/12/20	83	60 - 140	82	60 - 130	<0.040	ug/g	NC	50
9120188	1,1-Dichloroethane	2023/12/20	101	60 - 140	94	60 - 130	<0.040	ug/g	NC	50
9120188	1,1-Dichloroethylene	2023/12/20	92	60 - 140	89	60 - 130	<0.040	ug/g	NC	50
9120188	1,2-Dichlorobenzene	2023/12/20	94	60 - 140	98	60 - 130	<0.040	ug/g	NC	50
9120188	1,2-Dichloroethane	2023/12/20	79	60 - 140	79	60 - 130	<0.049	ug/g	NC	50
9120188	1,2-Dichloropropane	2023/12/20	94	60 - 140	103	60 - 130	<0.040	ug/g	NC	50
9120188	1,3-Dichlorobenzene	2023/12/20	98	60 - 140	103	60 - 130	<0.040	ug/g	NC	50
9120188	1,4-Dichlorobenzene	2023/12/20	105	60 - 140	110	60 - 130	<0.040	ug/g	NC	50
9120188	Acetone (2-Propanone)	2023/12/20	89	60 - 140	77	60 - 140	<0.49	ug/g	NC	50
9120188	Benzene	2023/12/20	91	60 - 140	94	60 - 130	<0.0060	ug/g	NC	50
9120188	Bromodichloromethane	2023/12/20	97	60 - 140	105	60 - 130	<0.040	ug/g	NC	50
9120188	Bromoform	2023/12/20	91	60 - 140	89	60 - 130	<0.040	ug/g	NC	50
9120188	Bromomethane	2023/12/20	100	60 - 140	97	60 - 140	<0.040	ug/g	NC	50
9120188	Carbon Tetrachloride	2023/12/20	89	60 - 140	93	60 - 130	<0.040	ug/g	NC	50
9120188	Chlorobenzene	2023/12/20	97	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
9120188	Chloroform	2023/12/20	95	60 - 140	97	60 - 130	<0.040	ug/g	NC	50
9120188	cis-1,2-Dichloroethylene	2023/12/20	99	60 - 140	101	60 - 130	<0.040	ug/g	NC	50
9120188	cis-1,3-Dichloropropene	2023/12/20	98	60 - 140	96	60 - 130	<0.030	ug/g	NC	50
9120188	Dibromochloromethane	2023/12/20	95	60 - 140	95	60 - 130	<0.040	ug/g	NC	50
9120188	Dichlorodifluoromethane (FREON 12)	2023/12/20	88	60 - 140	96	60 - 140	<0.040	ug/g	NC	50
9120188	Ethylbenzene	2023/12/20	84	60 - 140	88	60 - 130	<0.010	ug/g	NC	50



exp Services Inc Client Project #: OTT-23002538-B0 Sampler Initials: MR

			Matrix	Spike	SPIKED BLANK		Method Blank		RPE	)
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9120188	Ethylene Dibromide	2023/12/20	97	60 - 140	96	60 - 130	<0.040	ug/g	NC	50
9120188	F1 (C6-C10) - BTEX	2023/12/20					<10	ug/g	NC	30
9120188	F1 (C6-C10)	2023/12/20	92	60 - 140	97	80 - 120	<10	ug/g	NC	30
9120188	Hexane	2023/12/20	96	60 - 140	92	60 - 130	<0.040	ug/g	NC	50
9120188	Methyl Ethyl Ketone (2-Butanone)	2023/12/20	87	60 - 140	79	60 - 140	<0.40	ug/g	NC	50
9120188	Methyl Isobutyl Ketone	2023/12/20	89	60 - 140	89	60 - 130	<0.40	ug/g	NC	50
9120188	Methyl t-butyl ether (MTBE)	2023/12/20	103	60 - 140	95	60 - 130	<0.040	ug/g	NC	50
9120188	Methylene Chloride(Dichloromethane)	2023/12/20	102	60 - 140	97	60 - 130	<0.049	ug/g	NC	50
9120188	o-Xylene	2023/12/20	78	60 - 140	81	60 - 130	<0.020	ug/g	NC	50
9120188	p+m-Xylene	2023/12/20	86	60 - 140	90	60 - 130	<0.020	ug/g	NC	50
9120188	Styrene	2023/12/20	102	60 - 140	105	60 - 130	<0.040	ug/g	NC	50
9120188	Tetrachloroethylene	2023/12/20	95	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
9120188	Toluene	2023/12/20	82	60 - 140	88	60 - 130	<0.020	ug/g	NC	50
9120188	Total Xylenes	2023/12/20					<0.020	ug/g	NC	50
9120188	trans-1,2-Dichloroethylene	2023/12/20	101	60 - 140	99	60 - 130	<0.040	ug/g	NC	50
9120188	trans-1,3-Dichloropropene	2023/12/20	96	60 - 140	90	60 - 130	<0.040	ug/g	NC	50
9120188	Trichloroethylene	2023/12/20	101	60 - 140	110	60 - 130	<0.010	ug/g	NC	50
9120188	Trichlorofluoromethane (FREON 11)	2023/12/20	90	60 - 140	89	60 - 130	<0.040	ug/g	NC	50
9120188	Vinyl Chloride	2023/12/20	93	60 - 140	97	60 - 130	<0.019	ug/g	NC	50
9121327	Moisture	2023/12/19							0.63	20
9121354	1-Methylnaphthalene	2023/12/20	99	50 - 130	108	50 - 130	<0.0050	ug/g	NC	40
9121354	2-Methylnaphthalene	2023/12/20	94	50 - 130	102	50 - 130	<0.0050	ug/g	NC	40
9121354	Acenaphthene	2023/12/20	97	50 - 130	105	50 - 130	<0.0050	ug/g	NC	40
9121354	Acenaphthylene	2023/12/20	94	50 - 130	103	50 - 130	<0.0050	ug/g	NC	40
9121354	Anthracene	2023/12/20	97	50 - 130	105	50 - 130	<0.0050	ug/g	NC	40
9121354	Benzo(a)anthracene	2023/12/20	100	50 - 130	108	50 - 130	<0.0050	ug/g	NC	40
9121354	Benzo(a)pyrene	2023/12/20	92	50 - 130	99	50 - 130	<0.0050	ug/g	NC	40
9121354	Benzo(b/j)fluoranthene	2023/12/20	95	50 - 130	103	50 - 130	<0.0050	ug/g	NC	40
9121354	Benzo(g,h,i)perylene	2023/12/20	98	50 - 130	103	50 - 130	<0.0050	ug/g	NC	40
9121354	Benzo(k)fluoranthene	2023/12/20	86	50 - 130	101	50 - 130	<0.0050	ug/g	NC	40
9121354	Chrysene	2023/12/20	98	50 - 130	103	50 - 130	<0.0050	ug/g	NC	40
9121354	Dibenzo(a,h)anthracene	2023/12/20	90	50 - 130	87	50 - 130	<0.0050	ug/g	NC	40



exp Services Inc Client Project #: OTT-23002538-B0 Sampler Initials: MR

			Matrix	Spike	SPIKED	BLANK	Method B	Blank	RPI	)
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9121354	Fluoranthene	2023/12/20	98	50 - 130	107	50 - 130	<0.0050	ug/g	NC	40
9121354	Fluorene	2023/12/20	93	50 - 130	100	50 - 130	<0.0050	ug/g	NC	40
9121354	Indeno(1,2,3-cd)pyrene	2023/12/20	94	50 - 130	100	50 - 130	<0.0050	ug/g	NC	40
9121354	Naphthalene	2023/12/20	91	50 - 130	101	50 - 130	<0.0050	ug/g	NC	40
9121354	Phenanthrene	2023/12/20	95	50 - 130	102	50 - 130	<0.0050	ug/g	NC	40
9121354	Pyrene	2023/12/20	100	50 - 130	108	50 - 130	<0.0050	ug/g	NC	40
9122763	F2 (C10-C16 Hydrocarbons)	2023/12/20	110	60 - 130	102	80 - 120	<10	ug/g	NC	30
9122763	F3 (C16-C34 Hydrocarbons)	2023/12/20	109	60 - 130	101	80 - 120	<50	ug/g	NC	30
9122763	F4 (C34-C50 Hydrocarbons)	2023/12/20	107	60 - 130	100	80 - 120	<50	ug/g	NC	30
9125513	Acid Extractable Aluminum (Al)	2023/12/21	NC	75 - 125	105	80 - 120	<50	ug/g		
9125513	Acid Extractable Antimony (Sb)	2023/12/21	86	75 - 125	94	80 - 120	<0.20	ug/g	NC	30
9125513	Acid Extractable Arsenic (As)	2023/12/21	87	75 - 125	96	80 - 120	<1.0	ug/g	9.2	30
9125513	Acid Extractable Barium (Ba)	2023/12/21	NC	75 - 125	96	80 - 120	<0.50	ug/g	1.3	30
9125513	Acid Extractable Beryllium (Be)	2023/12/21	89	75 - 125	93	80 - 120	<0.20	ug/g	NC	30
9125513	Acid Extractable Bismuth (Bi)	2023/12/21	90	75 - 125	99	80 - 120	<1.0	ug/g		
9125513	Acid Extractable Boron (B)	2023/12/21	84	75 - 125	90	80 - 120	<5.0	ug/g	NC	30
9125513	Acid Extractable Cadmium (Cd)	2023/12/21	88	75 - 125	93	80 - 120	<0.10	ug/g	NC	30
9125513	Acid Extractable Calcium (Ca)	2023/12/21	NC	75 - 125	116	80 - 120	<50	ug/g		
9125513	Acid Extractable Chromium (Cr)	2023/12/21	87	75 - 125	95	80 - 120	<1.0	ug/g	5.2	30
9125513	Acid Extractable Cobalt (Co)	2023/12/21	85	75 - 125	95	80 - 120	<0.10	ug/g	4.8	30
9125513	Acid Extractable Copper (Cu)	2023/12/21	86	75 - 125	95	80 - 120	<0.50	ug/g	6.6	30
9125513	Acid Extractable Iron (Fe)	2023/12/21	NC	75 - 125	99	80 - 120	<50	ug/g		
9125513	Acid Extractable Lead (Pb)	2023/12/21	92	75 - 125	100	80 - 120	<1.0	ug/g	5.3	30
9125513	Acid Extractable Magnesium (Mg)	2023/12/21	NC	75 - 125	100	80 - 120	<50	ug/g		
9125513	Acid Extractable Manganese (Mn)	2023/12/21	NC	75 - 125	99	80 - 120	<1.0	ug/g		
9125513	Acid Extractable Mercury (Hg)	2023/12/21	99	75 - 125	106	80 - 120	<0.050	ug/g		
9125513	Acid Extractable Molybdenum (Mo)	2023/12/21	86	75 - 125	90	80 - 120	<0.50	ug/g	NC	30
9125513	Acid Extractable Nickel (Ni)	2023/12/21	87	75 - 125	99	80 - 120	<0.50	ug/g	2.1	30
9125513	Acid Extractable Phosphorus (P)	2023/12/21	NC	75 - 125	104	80 - 120	<50	ug/g		
9125513	Acid Extractable Potassium (K)	2023/12/21	NC	75 - 125	102	80 - 120	<200	ug/g		
9125513	Acid Extractable Selenium (Se)	2023/12/21	91	75 - 125	99	80 - 120	<0.50	ug/g	NC	30
9125513	Acid Extractable Silver (Ag)	2023/12/21	88	75 - 125	94	80 - 120	<0.20	ug/g	NC	30



exp Services Inc Client Project #: OTT-23002538-B0 Sampler Initials: MR

			Matrix Spike		SPIKED BLANK		Method Blank		RPE	D
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9125513	Acid Extractable Sodium (Na)	2023/12/21	NC	75 - 125	103	80 - 120	<50	ug/g		
9125513	Acid Extractable Strontium (Sr)	2023/12/21	NC	75 - 125	95	80 - 120	<1.0	ug/g		
9125513	Acid Extractable Thallium (Tl)	2023/12/21	89	75 - 125	98	80 - 120	<0.050	ug/g	10	30
9125513	Acid Extractable Tin (Sn)	2023/12/21	88	75 - 125	94	80 - 120	<1.0	ug/g		
9125513	Acid Extractable Uranium (U)	2023/12/21	95	75 - 125	103	80 - 120	<0.050	ug/g	25	30
9125513	Acid Extractable Vanadium (V)	2023/12/21	88	75 - 125	98	80 - 120	<5.0	ug/g	2.5	30
9125513	Acid Extractable Zinc (Zn)	2023/12/21	93	75 - 125	127 (1)	80 - 120	<5.0	ug/g	5.1	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) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.



### VALIDATION SIGNATURE PAGE

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

Anastassia Hamanov, Scientific Specialist

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

		INVOICE TO:					RE	PORT TO:						PROJEC	T INFORMATION:			1.01.5	Laboratory		
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ail	AP@exp.co	m: Karen Burket	Dexp com	20-1331	Tel:	leah.w	ells@exp.c	Fax	c			Site #	Due	Ma	claure	P.,	nell			Kathe	arine Szozda
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exp Services Inc Client Project #: OTT-23002538-B0 Client ID: BH4-SS2

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



exp Services Inc Client Project #: OTT-23002538-B0 Client ID: BH3-SS1

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





Your Project #: OTT-23002538-B0 Your C.O.C. #: 968693-01-01

#### Attention: Leah Wells

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

> Report Date: 2023/12/29 Report #: R7972653 Version: 1 - Final

### **CERTIFICATE OF ANALYSIS**

#### BUREAU VERITAS JOB #: C3BQ489 Received: 2023/12/21, 11:11

Sample Matrix: Water # Samples Received: 2

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
1,3-Dichloropropene Sum (1)	2	N/A	2023/12/29	1	EPA 8260C m
Volatile Organic Compounds in Water (1)	2	N/A	2023/12/28	CAM SOP-00228	EPA 8260D

#### Remarks:

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

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

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

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

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

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

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

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

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



Your Project #: OTT-23002538-B0 Your C.O.C. #: 968693-01-01

#### Attention: Leah Wells

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

> Report Date: 2023/12/29 Report #: R7972653 Version: 1 - Final

## **CERTIFICATE OF ANALYSIS**

## BUREAU VERITAS JOB #: C3BQ489

Received: 2023/12/21, 11:11



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

This report has been generated and distributed using a secure automated process.

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



# O.REG 153 VOCS BY HS (WATER)

Bureau Veritas ID		XYW153	XYW154		
Sampling Date		2023/12/21 09:40	2023/12/21 10:44		
COC Number		968693-01-01	968693-01-01		
	UNITS	BH3	BH4	RDL	QC Batch
Calculated Parameters					
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	0.50	9129824
Volatile Organics	0,			1	
Acetone (2-Propanone)	ug/L	<10	<10	10	9132256
Benzene	ug/L	<0.20	0.34	0.20	9132256
Bromodichloromethane	ug/L	<0.50	<0.50	0.50	9132256
Bromoform	ug/L	<1.0	<1.0	1.0	9132256
Bromomethane	ug/L	<0.50	<0.50	0.50	9132256
Carbon Tetrachloride	ug/L	<0.19	<0.19	0.19	9132256
Chlorobenzene	ug/L	<0.20	<0.20	0.20	9132256
Chloroform	ug/L	4.6	1.1	0.20	9132256
Dibromochloromethane	ug/L	<0.50	<0.50	0.50	9132256
1,2-Dichlorobenzene	ug/L	<0.40	<0.40	0.40	9132256
1,3-Dichlorobenzene	ug/L	<0.40	<0.40	0.40	9132256
1,4-Dichlorobenzene	ug/L	<0.40	<0.40	0.40	9132256
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	1.0	9132256
1,1-Dichloroethane	ug/L	<0.20	<0.20	0.20	9132256
1,2-Dichloroethane	ug/L	<0.49	<0.49	0.49	9132256
1,1-Dichloroethylene	ug/L	<0.20	<0.20	0.20	9132256
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	9132256
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	9132256
1,2-Dichloropropane	ug/L	<0.20	<0.20	0.20	9132256
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	0.30	9132256
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	0.40	9132256
Ethylbenzene	ug/L	<0.20	<0.20	0.20	9132256
Ethylene Dibromide	ug/L	<0.19	<0.19	0.19	9132256
Hexane	ug/L	<1.0	<1.0	1.0	9132256
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	2.0	9132256
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	10	9132256
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	5.0	9132256
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	0.50	9132256
Styrene	ug/L	<0.40	<0.40	0.40	9132256
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	9132256
1,1,2,2-Tetrachloroethane	ug/L	<0.40	<0.40	0.40	9132256
Tetrachloroethylene	ug/L	3.0	<0.20	0.20	9132256
Toluene	ug/L	<0.20	2.1	0.20	9132256
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					



# O.REG 153 VOCS BY HS (WATER)

Bureau Veritas ID		XYW153	XYW154		
Sampling Date		2023/12/21 09:40	2023/12/21 10:44		
COC Number		968693-01-01	968693-01-01		
	UNITS	BH3	BH4	RDL	QC Batch
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	0.20	9132256
1,1,2-Trichloroethane	ug/L	<0.40	<0.40	0.40	9132256
Trichloroethylene	ug/L	<0.20	<0.20	0.20	9132256
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	0.50	9132256
Vinyl Chloride	ug/L	<0.20	<0.20	0.20	9132256
p+m-Xylene	ug/L	<0.20	0.44	0.20	9132256
o-Xylene	ug/L	<0.20	0.21	0.20	9132256
Total Xylenes	ug/L	<0.20	0.66	0.20	9132256
Surrogate Recovery (%)	•				
4-Bromofluorobenzene	%	101	101		9132256
D4-1,2-Dichloroethane	%	105	106		9132256
D8-Toluene	%	89	89		9132256
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					



### **TEST SUMMARY**

Bureau Veritas ID: Sample ID:	XYW153 BH3					Collected: Shipped:	2023/12/21
Matrix:	Water					Received:	2023/12/21
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
1,3-Dichloropropene Sum		CALC	9129824	N/A	2023/12/29	Automated	l Statchk
Volatile Organic Compoun	ids in Water	GC/MS	9132256	N/A	2023/12/28	Gabriella N	lorrone
Bureau Veritas ID: Sample ID: Matrix:	XYW154 BH4 Water					Collected: Shipped: Received:	2023/12/21 2023/12/21
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
1,3-Dichloropropene Sum		CALC	9129824	N/A	2023/12/29	Automated	l Statchk
Volatile Organic Compoun	ids in Water	GC/MS	9132256	N/A	2023/12/28	Gabriella N	lorrone


### **GENERAL COMMENTS**

Each te	emperature is the a	verage of up to th	ree cooler temperatures taken at receipt
	Package 1	10.3°C	
Results	s relate only to the	items tested.	



### QUALITY ASSURANCE REPORT

exp Services Inc Client Project #: OTT-23002538-B0 Sampler Initials: MR

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RPI	D
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9132256	4-Bromofluorobenzene	2023/12/28	103	70 - 130	103	70 - 130	105	%		
9132256	D4-1,2-Dichloroethane	2023/12/28	100	70 - 130	97	70 - 130	103	%		
9132256	D8-Toluene	2023/12/28	105	70 - 130	104	70 - 130	89	%		
9132256	1,1,1,2-Tetrachloroethane	2023/12/28	105	70 - 130	96	70 - 130	<0.50	ug/L		
9132256	1,1,1-Trichloroethane	2023/12/28	103	70 - 130	95	70 - 130	<0.20	ug/L		
9132256	1,1,2,2-Tetrachloroethane	2023/12/28	110	70 - 130	99	70 - 130	<0.40	ug/L	NC	30
9132256	1,1,2-Trichloroethane	2023/12/28	104	70 - 130	93	70 - 130	<0.40	ug/L		
9132256	1,1-Dichloroethane	2023/12/28	103	70 - 130	94	70 - 130	<0.20	ug/L		
9132256	1,1-Dichloroethylene	2023/12/28	99	70 - 130	91	70 - 130	<0.20	ug/L		
9132256	1,2-Dichlorobenzene	2023/12/28	99	70 - 130	93	70 - 130	<0.40	ug/L	NC	30
9132256	1,2-Dichloroethane	2023/12/28	95	70 - 130	85	70 - 130	<0.49	ug/L		
9132256	1,2-Dichloropropane	2023/12/28	103	70 - 130	93	70 - 130	<0.20	ug/L		
9132256	1,3-Dichlorobenzene	2023/12/28	99	70 - 130	94	70 - 130	<0.40	ug/L		
9132256	1,4-Dichlorobenzene	2023/12/28	110	70 - 130	103	70 - 130	<0.40	ug/L	NC	30
9132256	Acetone (2-Propanone)	2023/12/28	102	60 - 140	89	60 - 140	<10	ug/L		
9132256	Benzene	2023/12/28	95	70 - 130	87	70 - 130	<0.20	ug/L	NC	30
9132256	Bromodichloromethane	2023/12/28	109	70 - 130	98	70 - 130	<0.50	ug/L		
9132256	Bromoform	2023/12/28	98	70 - 130	88	70 - 130	<1.0	ug/L		
9132256	Bromomethane	2023/12/28	98	60 - 140	86	60 - 140	<0.50	ug/L		
9132256	Carbon Tetrachloride	2023/12/28	99	70 - 130	91	70 - 130	<0.19	ug/L		
9132256	Chlorobenzene	2023/12/28	106	70 - 130	99	70 - 130	<0.20	ug/L		
9132256	Chloroform	2023/12/28	106	70 - 130	97	70 - 130	<0.20	ug/L		
9132256	cis-1,2-Dichloroethylene	2023/12/28	105	70 - 130	95	70 - 130	<0.50	ug/L		
9132256	cis-1,3-Dichloropropene	2023/12/28	97	70 - 130	88	70 - 130	<0.30	ug/L		
9132256	Dibromochloromethane	2023/12/28	102	70 - 130	92	70 - 130	<0.50	ug/L		
9132256	Dichlorodifluoromethane (FREON 12)	2023/12/28	104	60 - 140	78	60 - 140	<1.0	ug/L		
9132256	Ethylbenzene	2023/12/28	92	70 - 130	86	70 - 130	<0.20	ug/L	NC	30
9132256	Ethylene Dibromide	2023/12/28	106	70 - 130	95	70 - 130	<0.19	ug/L		
9132256	Hexane	2023/12/28	97	70 - 130	88	70 - 130	<1.0	ug/L		
9132256	Methyl Ethyl Ketone (2-Butanone)	2023/12/28	110	60 - 140	97	60 - 140	<10	ug/L		
9132256	Methyl Isobutyl Ketone	2023/12/28	109	70 - 130	97	70 - 130	<5.0	ug/L		
9132256	Methyl t-butyl ether (MTBE)	2023/12/28	106	70 - 130	96	70 - 130	<0.50	ug/L		



### QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc Client Project #: OTT-23002538-B0 Sampler Initials: MR

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RPI	5
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9132256	Methylene Chloride(Dichloromethane)	2023/12/28	105	70 - 130	95	70 - 130	<2.0	ug/L	NC	30
9132256	o-Xylene	2023/12/28	83	70 - 130	82	70 - 130	<0.20	ug/L	NC	30
9132256	p+m-Xylene	2023/12/28	99	70 - 130	93	70 - 130	<0.20	ug/L	NC	30
9132256	Styrene	2023/12/28	108	70 - 130	104	70 - 130	<0.40	ug/L		
9132256	Tetrachloroethylene	2023/12/28	100	70 - 130	94	70 - 130	<0.20	ug/L	NC	30
9132256	Toluene	2023/12/28	97	70 - 130	91	70 - 130	<0.20	ug/L	NC	30
9132256	Total Xylenes	2023/12/28					<0.20	ug/L	NC	30
9132256	trans-1,2-Dichloroethylene	2023/12/28	103	70 - 130	95	70 - 130	<0.50	ug/L		
9132256	trans-1,3-Dichloropropene	2023/12/28	100	70 - 130	90	70 - 130	<0.40	ug/L		
9132256	Trichloroethylene	2023/12/28	102	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
9132256	Trichlorofluoromethane (FREON 11)	2023/12/28	97	70 - 130	88	70 - 130	<0.50	ug/L		
9132256	Vinyl Chloride	2023/12/28	99	70 - 130	87	70 - 130	<0.20	ug/L		
Duplicate: Pa	ired analysis of a separate portion of the same sample.	Used to evaluate t	he variance in t	he measurem	ent.					

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



#### VALIDATION SIGNATURE PAGE

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

Anastassia Hamanov, Scientific Specialist

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

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

		Bureau Veritas 6740 Campobello Road,	Mississauga, Ontario (	Receiv Canada L5N 2L8	<b>ved in (</b> Tel:(905) 817-5	Ottawa 5700 Toll-free:800-	563-6266 Fax:	(905) 817-5	777 www.	.bvna.com								Į		_	Page	of
		INVOICE TO:				REPO	RT TO:						PROJECT	INFORMATION:				4		_		
Comp	any Name: #17498 exp Se	ervices Inc		Company N	lame:						Quotation #	ŧ	C20328	3		TION	11-2023-12-	-1806		ott	le Order #	#:
Attent	ion: Accounts Payat	ble		Attention:	Leah V	Vells					P.O. #:					_						I
Addre	100-2650 Quee	nsview Drive		Address:							Project:		OTT-23	8002538-B0						1 1111	68693	11
	Ottawa ON K2E	8H6									Project Nan	ne:						COC #:		Proje	ct Manag	er:
Tel:	(613) 688-1899	Fax: (6	13) 225-7337	Tel:			Fax				Site #:									14.11		
Email:	AP@exp.com; H	Karen.Burke@exp.cor	n	Email:	leah.w	ells@exp.com					Sampled By	y:	Mai	thereit	Res	cll		C#968693-01-01		Kathe	erine Szoz	da
N	OE REGULATED DRINKIN	IG WATER OR WATER	R INTENDED FOR	HUMAN CON	NSUMPTION	MUST BE				AN	ALYSIS REC	UESTED	(PLEASE BE	SPECIFIC)				Turnaround	Time (TAT) R	equired:		
and the	SUBMITTED ON	THE BUREAU VERITA	S DRINKING WAT	ER CHAIN O	F CUSTODY													Please provide ad	vance notice fo	r rush projec	ts	a faith
	Regulation 153 (2011)	(	Other Regulations		Special l	structions	cle)	/4									Regular (S	tandard) TAT:				
Tat	cle 1 Res/Park Mediu	m/Fine CCME	Sanitary Sewer Byla	w	-1		<u>ح ق</u>	1 Z									(will be applied	d if Rush TAT is not spe	cified):			V
Tat	ole 2 Ind/Comm Coars	e Reg 558.	Storm Sewer Bylaw				Cr	2		SMG							Standard TAT	= 5-7 working days for	most tests			
Tat	bie : Agri/Other For R		Aunicipality				hd) b	oy H		y ICI						a 11	days - contact	your Project Manager f	or details.	JD and Dioxir	is/Furans a	16 > 5
Tat	$re \frac{7}{1}$	PWQ0	Reg 406 Table				s / F	Cst	r F	als b							Job Specific	Rush TAT (if applies	to entire subm	ission)		
		Ü Other					Filte	N N	8 PA	Met							Date Required	t:	Tim	e Required		-
	Include Criter	ia on Certificate of Anal	lysis (Y/N)?				≥ ^{eld}	15:	15	ved		-					Rush Confirm	ation Number	10	ll lab for #)		
T	Sample Barcode Label	Sample (Location) Ide	entification Dat	te Sampled	Time Sampled	Matrix	ιĒ	Rec	Reg	sso							# of Bottles		Comme	ents		
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1	BHS		121	121/2023	9:40	GW		$\checkmark$									2					
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11	RELINQUISHED BY: (SI	gnature/Print)	Date: (YY/MM/DD	) Time	6.6	RECEIVED B	Y: (Signature/F	rint)		Date: (YY/M	MM/DD)	Ti	me	# jars used and not submitted	ICe	pad	Laborat	tory Use Only	Custodi P	acko	nly)	No
Mon	in c/Machin	175C VILLI	13/12/21	11-10	2 OSI	- USP	ini t	ever	9 2	2023	12/21	().	1		Time Se	ensitive	Temperatu	ure (°C) on Recei	Present	ai	105	NO
1					Kasne	et RHUNE	ET KAU	K BR	AR	02023	12/22	08	140	E State of State			10,1	0,11	Intact			
ACKNOW	S OTHERWISE AGREED TO IN WR VLEDGMENT AND ACCEPTANCE (	OF OUR TERMS WHICH ARE	AVAILABLE FOR VIEW	ING AT WWW.B	CT TO BUREAU	VERITAS'S STAND	ARD TERMS A	ND CONDI	OC-TERM	IGNING OF T	HIS CHAIN C	OF CUSTO	DY DOCUME	NTIS					White: E	Bureau Verit	as Yello	w: Client
· IT IS TH	E RESPONSIBILITY OF THE RELI	NOUISHER TO ENSURE THE	ACCURACY OF THE C	HAIN OF CUSTO	DDY RECORD. A	N INCOMPLETE C	HAIN OF CUST	DDY MAY R	ESULT IN	ANALYTIC	AL TAT DELA	AYS.		SAMPLES	S MUST BE	KEPT COO	DL ( < 10° C ) F	ROM TIME OF SAMPI	ING	519	17	
** SAMPL	E CONTAINER, PRESERVATION.	HOLD TIME AND PACKAGE	INFORMATION CAN BE		WW BVNA COM			S/RESOU	CES/CHA	AIN-CUSTOR	Y-FORMS C	005		(Contraction)	CIAIT		CO DOMEN			10	110	
		- THE THE THOMAGE				L. WINCOMMENTAL	LIBORATORI	-5/1123001	SES/GHA			000.			all - Part	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	in the second second	and the state of the second	1.00			

Bureau Veritas Canada (2019) Inc.



Your Project #: OTT-23002538-A0 Your C.O.C. #: 961363-03-01

#### Attention: Leah Wells

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

> Report Date: 2023/11/09 Report #: R7904008 Version: 1 - Final

#### **CERTIFICATE OF ANALYSIS**

#### BUREAU VERITAS JOB #: C3Y3431

#### Received: 2023/11/01, 15:49

Sample Matrix: Soil # Samples Received: 18

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum (1)	18	N/A	2023/11/07	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron (1)	13	2023/11/03	2023/11/06	CAM SOP-00408	R153 Ana. Prot. 2011
Hot Water Extractable Boron (1)	5	2023/11/06	2023/11/06	CAM SOP-00408	R153 Ana. Prot. 2011
1,3-Dichloropropene Sum (1)	8	N/A	2023/11/06		EPA 8260C m
1,3-Dichloropropene Sum (1)	10	N/A	2023/11/07		EPA 8260C m
Free (WAD) Cyanide (1)	17	2023/11/06	2023/11/06	CAM SOP-00457	OMOE E3015 m
Free (WAD) Cyanide (1)	1	2023/11/07	2023/11/07	CAM SOP-00457	OMOE E3015 m
Conductivity (1)	18	2023/11/06	2023/11/06	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1, 2)	18	2023/11/06	2023/11/07	CAM SOP-00436	EPA 3060A/7199 m
Petroleum Hydrocarbons F2-F4 in Soil (1, 3)	6	2023/11/06	2023/11/06	CAM SOP-00316	CCME CWS m
Petroleum Hydrocarbons F2-F4 in Soil (1, 3)	12	2023/11/06	2023/11/07	CAM SOP-00316	CCME CWS m
F4G (CCME Hydrocarbons Gravimetric) (1)	3	2023/11/09	2023/11/09	CAM SOP-00316	CCME PHC-CWS m
Acid Extractable Metals by ICPMS (1)	5	2023/11/03	2023/11/07	CAM SOP-00447	EPA 6020B m
Acid Extractable Metals by ICPMS (1)	3	2023/11/04	2023/11/06	CAM SOP-00447	EPA 6020B m
Acid Extractable Metals by ICPMS (1)	10	2023/11/04	2023/11/07	CAM SOP-00447	EPA 6020B m
Moisture (1)	18	N/A	2023/11/03	CAM SOP-00445	Carter 2nd ed 51.2 m
PAH Compounds in Soil by GC/MS (SIM) (1)	18	2023/11/05	2023/11/05	CAM SOP-00318	EPA 8270E
pH CaCl2 EXTRACT (1)	18	2023/11/06	2023/11/06	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR) (1)	18	N/A	2023/11/07	CAM SOP-00102	EPA 6010C
Volatile Organic Compounds and F1 PHCs (1)	8	N/A	2023/11/04	CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds and F1 PHCs (1)	6	N/A	2023/11/06	CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds and F1 PHCs (1)	4	N/A	2023/11/07	CAM SOP-00230	EPA 8260C m

#### Remarks:

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

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



Your Project #: OTT-23002538-A0 Your C.O.C. #: 961363-03-01

#### Attention: Leah Wells

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

> Report Date: 2023/11/09 Report #: R7904008 Version: 1 - Final

#### **CERTIFICATE OF ANALYSIS**

#### BUREAU VERITAS JOB #: C3Y3431 Received: 2023/11/01, 15:49

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

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

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

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

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

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

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

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

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

**Encryption Key** 



Bureau Veritas 09 Nov 2023 15:55:14

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

This report has been generated and distributed using a secure automated process.

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



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

Bureau Veritas ID		XMH375		XMH376		XMH377		
Sampling Date		2023/10/26		2023/10/26		2023/10/26		
		14:00		14:00		14:00		
COC Number		961363-03-01		961363-03-01		961363-03-01		
	UNITS	BH-1 SS2	QC Batch	DUP 2	QC Batch	BH-1 SS3	RDL	QC Batch
Calculated Parameters								
Sodium Adsorption Ratio	N/A	11	9024979	13	9024979	18		9024979
Inorganics								
Conductivity	mS/cm	1.1	9031089	0.65	9031062	0.51	0.002	9031089
Available (CaCl2) pH	рН	6.45	9030865	4.99	9030865	6.63		9030865
WAD Cyanide (Free)	ug/g	<0.01	9032757	<0.01	9030462	<0.01	0.01	9030462
Chromium (VI)	ug/g	0.22	9031125	0.23	9031125	<0.18	0.18	9031125
Metals				•			<u> </u>	
Hot Water Ext. Boron (B)	ug/g	0.092	9027882	0.11	9027893	0.16	0.050	9027882
Acid Extractable Antimony (Sb)	ug/g	<0.20	9027668	<0.20	9029430	0.20	0.20	9027668
Acid Extractable Arsenic (As)	ug/g	4.4	9027668	5.0	9029430	7.6	1.0	9027668
Acid Extractable Barium (Ba)	ug/g	66	9027668	71	9029430	100	0.50	9027668
Acid Extractable Beryllium (Be)	ug/g	0.77	9027668	0.88	9029430	1.0	0.20	9027668
Acid Extractable Boron (B)	ug/g	<5.0	9027668	5.2	9029430	6.5	5.0	9027668
Acid Extractable Cadmium (Cd)	ug/g	0.10	9027668	0.12	9029430	0.13	0.10	9027668
Acid Extractable Chromium (Cr)	ug/g	25	9027668	28	9029430	32	1.0	9027668
Acid Extractable Cobalt (Co)	ug/g	10	9027668	11	9029430	23	0.10	9027668
Acid Extractable Copper (Cu)	ug/g	23	9027668	27	9029430	40	0.50	9027668
Acid Extractable Lead (Pb)	ug/g	11	9027668	13	9029430	18	1.0	9027668
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	9027668	<0.50	9029430	1.0	0.50	9027668
Acid Extractable Nickel (Ni)	ug/g	28	9027668	31	9029430	42	0.50	9027668
Acid Extractable Selenium (Se)	ug/g	<0.50	9027668	<0.50	9029430	<0.50	0.50	9027668
Acid Extractable Silver (Ag)	ug/g	<0.20	9027668	<0.20	9029430	<0.20	0.20	9027668
Acid Extractable Thallium (Tl)	ug/g	0.14	9027668	0.16	9029430	0.19	0.050	9027668
Acid Extractable Uranium (U)	ug/g	0.61	9027668	0.77	9029430	0.74	0.050	9027668
Acid Extractable Vanadium (V)	ug/g	30	9027668	34	9029430	36	5.0	9027668
Acid Extractable Zinc (Zn)	ug/g	49	9027668	55	9029430	90	5.0	9027668
Acid Extractable Mercury (Hg)	ug/g	<0.050	9027668	<0.050	9029430	0.067	0.050	9027668
RDL = Reportable Detection Limit QC Batch = Quality Control Batch								



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

Bureau Veritas ID		XMH378		XMH379	XMH380			XMH380		
Sampling Date		2023/10/30 10:00		2023/10/30 10:00	2023/10/27 15:00			2023/10/27 15:00		
COC Number		961363-03-01		961363-03-01	961363-03-01			961363-03-01		
	UNITS	BH-2 AS3	QC Batch	BH-2 SS1	BH-6 SS1	RDL	QC Batch	BH-6 SS1 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Sodium Adsorption Ratio	N/A	8.1	9024979	4.6	11		9024979			
Inorganics	•		•	•		,				
Conductivity	mS/cm	0.42	9031270	0.27	0.38	0.002	9031062			
Available (CaCl2) pH	рН	7.37	9030312	7.49	7.56		9030312			
WAD Cyanide (Free)	ug/g	<0.01	9030480	<0.01	<0.01	0.01	9030480	<0.01	0.01	9030480
Chromium (VI)	ug/g	<0.18	9030577	<0.18	<0.18	0.18	9030577	<0.18	0.18	9030577
Metals	•	•		•	•	•		•		
Hot Water Ext. Boron (B)	ug/g	0.45	9027893	0.096	0.20	0.050	9027893			
Acid Extractable Antimony (Sb)	ug/g	0.28	9029430	0.23	0.21	0.20	9029430			
Acid Extractable Arsenic (As)	ug/g	6.9	9029430	8.1	4.3	1.0	9029430			
Acid Extractable Barium (Ba)	ug/g	170	9029430	110	73	0.50	9029430			
Acid Extractable Beryllium (Be)	ug/g	0.97	9029430	0.65	0.60	0.20	9029430			
Acid Extractable Boron (B)	ug/g	9.5	9029430	<5.0	5.6	5.0	9029430			
Acid Extractable Cadmium (Cd)	ug/g	0.12	9029430	0.23	0.14	0.10	9029430			
Acid Extractable Chromium (Cr)	ug/g	32	9029430	23	21	1.0	9029430			
Acid Extractable Cobalt (Co)	ug/g	18	9029430	11	14	0.10	9029430			
Acid Extractable Copper (Cu)	ug/g	40	9029430	19	22	0.50	9029430			
Acid Extractable Lead (Pb)	ug/g	20	9029430	19	23	1.0	9029430			
Acid Extractable Molybdenum (Mo)	ug/g	1.2	9029430	1.6	0.95	0.50	9029430			
Acid Extractable Nickel (Ni)	ug/g	42	9029430	25	27	0.50	9029430			
Acid Extractable Selenium (Se)	ug/g	<0.50	9029430	<0.50	<0.50	0.50	9029430			
Acid Extractable Silver (Ag)	ug/g	<0.20	9029430	<0.20	<0.20	0.20	9029430			
Acid Extractable Thallium (Tl)	ug/g	0.16	9029430	0.16	0.17	0.050	9029430			
Acid Extractable Uranium (U)	ug/g	0.98	9029430	0.66	0.60	0.050	9029430			
Acid Extractable Vanadium (V)	ug/g	32	9029430	31	27	5.0	9029430			
Acid Extractable Zinc (Zn)	ug/g	93	9029430	69	62	5.0	9029430			
Acid Extractable Mercury (Hg)	ug/g	<0.050	9029430	<0.050	<0.050	0.050	9029430			
RDL = Reportable Detection Limit										
OC Batch = Quality Control Batch										

Lab-Dup = Laboratory Initiated Duplicate



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

Bureau Veritas ID		XMH381		XMH382	XMH383		XMH384		
Sampling Date		2023/10/27 15:00		2023/10/27 09:30	2023/10/27 09:30		2023/10/27 09:00		
COC Number		961363-03-01		961363-03-01	961363-03-01		961363-03-01		
	UNITS	BH-6 SS2	QC Batch	BH-7 SS2A	BH-7 SS2B	QC Batch	BH-8 AS3	RDL	QC Batch
Calculated Parameters									
Sodium Adsorption Ratio	N/A	18	9024979	5.8	21	9024979	7.1		9024979
Inorganics	•								
Conductivity	mS/cm	0.53	9031089	0.22	0.61	9031062	0.55	0.002	9031062
Available (CaCl2) pH	рН	7.57	9030865	7.71	8.78	9030312	7.65		9030312
WAD Cyanide (Free)	ug/g	<0.01	9030462	<0.01	<0.01	9030480	<0.01	0.01	9030480
Chromium (VI)	ug/g	<0.18	9031125	<0.18	<0.18	9030577	<0.18	0.18	9030577
Metals									
Hot Water Ext. Boron (B)	ug/g	0.21	9027882	0.14	0.26	9027893	0.56	0.050	9030355
Acid Extractable Antimony (Sb)	ug/g	0.35	9027668	<0.20	<0.20	9029430	<0.20	0.20	9029430
Acid Extractable Arsenic (As)	ug/g	6.8	9027668	1.3	3.4	9029430	2.7	1.0	9029430
Acid Extractable Barium (Ba)	ug/g	290	9027668	31	140	9029430	290	0.50	9029430
Acid Extractable Beryllium (Be)	ug/g	0.98	9027668	0.21	0.62	9029430	0.36	0.20	9029430
Acid Extractable Boron (B)	ug/g	7.6	9027668	<5.0	6.6	9029430	11	5.0	9029430
Acid Extractable Cadmium (Cd)	ug/g	0.30	9027668	<0.10	0.12	9029430	<0.10	0.10	9029430
Acid Extractable Chromium (Cr)	ug/g	30	9027668	11	24	9029430	18	1.0	9029430
Acid Extractable Cobalt (Co)	ug/g	20	9027668	4.9	15	9029430	8.5	0.10	9029430
Acid Extractable Copper (Cu)	ug/g	43	9027668	11	25	9029430	17	0.50	9029430
Acid Extractable Lead (Pb)	ug/g	26	9027668	5.6	21	9029430	18	1.0	9029430
Acid Extractable Molybdenum (Mo)	ug/g	1.8	9027668	1.1	1.2	9029430	0.77	0.50	9029430
Acid Extractable Nickel (Ni)	ug/g	48	9027668	9.2	30	9029430	16	0.50	9029430
Acid Extractable Selenium (Se)	ug/g	<0.50	9027668	<0.50	<0.50	9029430	<0.50	0.50	9029430
Acid Extractable Silver (Ag)	ug/g	<0.20	9027668	<0.20	<0.20	9029430	<0.20	0.20	9029430
Acid Extractable Thallium (Tl)	ug/g	0.20	9027668	0.12	0.14	9029430	0.18	0.050	9029430
Acid Extractable Uranium (U)	ug/g	0.74	9027668	0.49	1.1	9029430	0.41	0.050	9029430
Acid Extractable Vanadium (V)	ug/g	32	9027668	20	28	9029430	17	5.0	9029430
Acid Extractable Zinc (Zn)	ug/g	100	9027668	18	67	9029430	32	5.0	9029430
Acid Extractable Mercury (Hg)	ug/g	<0.050	9027668	<0.050	<0.050	9029430	<0.050	0.050	9029430
RDL = Reportable Detection Limit QC Batch = Quality Control Batch									



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

Bureau Veritas ID		XMH385		XMH386		XMH387		
Sampling Date		2023/10/26 11:00		2023/10/26 11:00		2023/10/26 12:00		
COC Number		961363-03-01		961363-03-01		961363-03-01		
	UNITS	BH-9 AS1	QC Batch	BH-9 SS2	QC Batch	BH-10 AS1	RDL	QC Batch
Calculated Parameters								
Sodium Adsorption Ratio	N/A	0.44	9024979	26	9024979	4.1		9024979
Inorganics	•						•	
Conductivity	mS/cm	0.15	9031089	0.68	9031062	0.24	0.002	9031270
Available (CaCl2) pH	рН	8.01	9030865	7.58	9030312	7.76		9030901
WAD Cyanide (Free)	ug/g	<0.01	9030462	<0.01	9030480	<0.01	0.01	9030480
Chromium (VI)	ug/g	0.18	9031125	<0.18	9030577	<0.18	0.18	9030577
Metals								
Hot Water Ext. Boron (B)	ug/g	0.23	9030355	0.14	9027893	0.19	0.050	9030355
Acid Extractable Antimony (Sb)	ug/g	<0.20	9027668	<0.20	9029430	<0.20	0.20	9029438
Acid Extractable Arsenic (As)	ug/g	6.8	9027668	6.5	9029430	7.2	1.0	9029438
Acid Extractable Barium (Ba)	ug/g	6.7	9027668	140	9029430	27	0.50	9029438
Acid Extractable Beryllium (Be)	ug/g	0.21	9027668	0.83	9029430	0.43	0.20	9029438
Acid Extractable Boron (B)	ug/g	5.8	9027668	7.1	9029430	6.8	5.0	9029438
Acid Extractable Cadmium (Cd)	ug/g	0.23	9027668	0.17	9029430	0.36	0.10	9029438
Acid Extractable Chromium (Cr)	ug/g	8.7	9027668	28	9029430	14	1.0	9029438
Acid Extractable Cobalt (Co)	ug/g	5.6	9027668	19	9029430	7.7	0.10	9029438
Acid Extractable Copper (Cu)	ug/g	11	9027668	40	9029430	15	0.50	9029438
Acid Extractable Lead (Pb)	ug/g	49	9027668	16	9029430	35	1.0	9029438
Acid Extractable Molybdenum (Mo)	ug/g	4.8	9027668	1.3	9029430	3.1	0.50	9029438
Acid Extractable Nickel (Ni)	ug/g	13	9027668	39	9029430	19	0.50	9029438
Acid Extractable Selenium (Se)	ug/g	<0.50	9027668	<0.50	9029430	<0.50	0.50	9029438
Acid Extractable Silver (Ag)	ug/g	<0.20	9027668	<0.20	9029430	<0.20	0.20	9029438
Acid Extractable Thallium (Tl)	ug/g	0.15	9027668	0.16	9029430	0.22	0.050	9029438
Acid Extractable Uranium (U)	ug/g	0.57	9027668	0.68	9029430	0.61	0.050	9029438
Acid Extractable Vanadium (V)	ug/g	13	9027668	32	9029430	23	5.0	9029438
Acid Extractable Zinc (Zn)	ug/g	29	9027668	99	9029430	40	5.0	9029438
Acid Extractable Mercury (Hg)	ug/g	<0.050	9027668	<0.050	9029430	<0.050	0.050	9029438
RDL = Reportable Detection Limit QC Batch = Quality Control Batch								



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

Bureau Veritas ID		XMH388			XMH388			XMH389		
Sampling Date		2023/10/26 12:00			2023/10/26 12:00			2023/10/30 14:00		
COC Number		961363-03-01			961363-03-01			961363-03-01		
	UNITS	BH-10 SS2	RDL	QC Batch	BH-10 SS2 Lab-Dup	RDL	QC Batch	BH-11 SS1	RDL	QC Batch
Calculated Parameters										
Sodium Adsorption Ratio	N/A	7.2		9024979				18		9024979
Inorganics		•	•		•	•		•		
Conductivity	mS/cm	0.24	0.002	9031270				0.60	0.002	9031062
Available (CaCl2) pH	рН	7.39		9030901				7.42		9030312
WAD Cyanide (Free)	ug/g	<0.01	0.01	9030480				<0.01	0.01	9030480
Chromium (VI)	ug/g	<0.18	0.18	9030577				<0.18	0.18	9030577
Metals	•									
Hot Water Ext. Boron (B)	ug/g	0.16	0.050	9030369	0.15	0.050	9030369	0.10	0.050	9027893
Acid Extractable Antimony (Sb)	ug/g	<0.20	0.20	9029438				<0.20	0.20	9029430
Acid Extractable Arsenic (As)	ug/g	5.0	1.0	9029438				2.9	1.0	9029430
Acid Extractable Barium (Ba)	ug/g	45	0.50	9029438				32	0.50	9029430
Acid Extractable Beryllium (Be)	ug/g	0.71	0.20	9029438				0.26	0.20	9029430
Acid Extractable Boron (B)	ug/g	5.8	5.0	9029438				5.4	5.0	9029430
Acid Extractable Cadmium (Cd)	ug/g	0.10	0.10	9029438				<0.10	0.10	9029430
Acid Extractable Chromium (Cr)	ug/g	24	1.0	9029438				12	1.0	9029430
Acid Extractable Cobalt (Co)	ug/g	13	0.10	9029438				5.7	0.10	9029430
Acid Extractable Copper (Cu)	ug/g	28	0.50	9029438				14	0.50	9029430
Acid Extractable Lead (Pb)	ug/g	16	1.0	9029438				7.5	1.0	9029430
Acid Extractable Molybdenum (Mo)	ug/g	0.80	0.50	9029438				1.4	0.50	9029430
Acid Extractable Nickel (Ni)	ug/g	27	0.50	9029438				11	0.50	9029430
Acid Extractable Selenium (Se)	ug/g	<0.50	0.50	9029438				<0.50	0.50	9029430
Acid Extractable Silver (Ag)	ug/g	<0.20	0.20	9029438				<0.20	0.20	9029430
Acid Extractable Thallium (Tl)	ug/g	0.12	0.050	9029438				0.18	0.050	9029430
Acid Extractable Uranium (U)	ug/g	0.83	0.050	9029438				0.58	0.050	9029430
Acid Extractable Vanadium (V)	ug/g	33	5.0	9029438				24	5.0	9029430
Acid Extractable Zinc (Zn)	ug/g	78	5.0	9029438				24	5.0	9029430
Acid Extractable Mercury (Hg)	ug/g	<0.050	0.050	9029438				<0.050	0.050	9029430
RDL = Reportable Detection Limit QC Batch = Quality Control Batch										

Lab-Dup = Laboratory Initiated Duplicate



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

Bureau Veritas ID		XMH390		XMH391		XMH392		
Sampling Date		2023/10/30 14:00		2023/10/26 12:00		2023/10/30 14:00		
COC Number		961363-03-01		961363-03-01		961363-03-01		
	UNITS	BH-11 SS2	QC Batch	DUP 1	QC Batch	DUP 3	RDL	QC Batch
Calculated Parameters								
Sodium Adsorption Ratio	N/A	7.7	9024979	7.0	9024979	12		9024979
Inorganics	•							
Conductivity	mS/cm	0.26	9031062	0.31	9031089	0.33	0.002	9031270
Available (CaCl2) pH	рН	7.43	9030312	7.22	9030865	7.65		9030901
WAD Cyanide (Free)	ug/g	<0.01	9030480	<0.01	9030462	<0.01	0.01	9030480
Chromium (VI)	ug/g	<0.18	9030577	<0.18	9031125	0.22	0.18	9030577
Metals	•	•	•	•				
Hot Water Ext. Boron (B)	ug/g	0.11	9027893	0.11	9027882	0.21	0.050	9030355
Acid Extractable Antimony (Sb)	ug/g	<0.20	9029430	<0.20	9027668	0.22	0.20	9029438
Acid Extractable Arsenic (As)	ug/g	5.6	9029430	5.1	9027668	7.1	1.0	9029438
Acid Extractable Barium (Ba)	ug/g	51	9029430	55	9027668	65	0.50	9029438
Acid Extractable Beryllium (Be)	ug/g	0.82	9029430	0.69	9027668	0.97	0.20	9029438
Acid Extractable Boron (B)	ug/g	5.6	9029430	<5.0	9027668	8.3	5.0	9029438
Acid Extractable Cadmium (Cd)	ug/g	<0.10	9029430	0.11	9027668	<0.10	0.10	9029438
Acid Extractable Chromium (Cr)	ug/g	26	9029430	24	9027668	30	1.0	9029438
Acid Extractable Cobalt (Co)	ug/g	16	9029430	15	9027668	18	0.10	9029438
Acid Extractable Copper (Cu)	ug/g	30	9029430	34	9027668	38	0.50	9029438
Acid Extractable Lead (Pb)	ug/g	18	9029430	14	9027668	25	1.0	9029438
Acid Extractable Molybdenum (Mo)	ug/g	0.70	9029430	0.95	9027668	1.0	0.50	9029438
Acid Extractable Nickel (Ni)	ug/g	31	9029430	30	9027668	39	0.50	9029438
Acid Extractable Selenium (Se)	ug/g	<0.50	9029430	<0.50	9027668	<0.50	0.50	9029438
Acid Extractable Silver (Ag)	ug/g	<0.20	9029430	<0.20	9027668	<0.20	0.20	9029438
Acid Extractable Thallium (Tl)	ug/g	0.16	9029430	0.12	9027668	0.20	0.050	9029438
Acid Extractable Uranium (U)	ug/g	0.66	9029430	0.71	9027668	0.65	0.050	9029438
Acid Extractable Vanadium (V)	ug/g	29	9029430	30	9027668	33	5.0	9029438
Acid Extractable Zinc (Zn)	ug/g	65	9029430	80	9027668	79	5.0	9029438
Acid Extractable Mercury (Hg)	ug/g	<0.050	9029430	<0.050	9027668	<0.050	0.050	9029438
RDL = Reportable Detection Limit QC Batch = Quality Control Batch								



# O.REG 153 PAHS (SOIL)

Bureau Veritas ID		XMH375			XMH375			XMH376		
Sampling Date		2023/10/26 14:00			2023/10/26 14:00			2023/10/26 14:00		
COC Number		961363-03-01			961363-03-01			961363-03-01		
	UNITS	BH-1 SS2	RDL	QC Batch	BH-1 SS2 Lab-Dup	RDL	QC Batch	DUP 2	RDL	QC Batch
Calculated Parameters	<u> </u>		<u>·</u>			<u>·</u>	<u>.</u>		<u> </u>	
Methylnaphthalene, 2-(1-)	ug/g	<0.0071	0.0071	9024160				<0.0071	0.0071	9024160
Polyaromatic Hydrocarbons										
Acenaphthene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Acenaphthylene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Anthracene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Benzo(a)anthracene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Benzo(a)pyrene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Benzo(b/j)fluoranthene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Benzo(g,h,i)perylene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Benzo(k)fluoranthene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Chrysene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Dibenzo(a,h)anthracene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Fluoranthene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Fluorene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Indeno(1,2,3-cd)pyrene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
1-Methylnaphthalene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
2-Methylnaphthalene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Naphthalene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Phenanthrene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Pyrene	ug/g	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886	<0.0050	0.0050	9029886
Surrogate Recovery (%)										
D10-Anthracene	%	118		9029886	107		9029886	84		9029886
D14-Terphenyl (FS)	%	105		9029886	100		9029886	66		9029886
D8-Acenaphthylene	%	86		9029886	84		9029886	54		9029886
RDL = Reportable Detection I	Limit									
QC Batch = Quality Control B	atch									

Lab-Dup = Laboratory Initiated Duplicate



# O.REG 153 PAHS (SOIL)

Bureau Veritas ID		XMH377		XMH378		XMH379	XMH380	XMH381		
Sampling Date		2023/10/26 14:00		2023/10/30 10:00		2023/10/30 10:00	2023/10/27 15:00	2023/10/27 15:00		
COC Number		961363-03-01		961363-03-01		961363-03-01	961363-03-01	961363-03-01		
	UNITS	BH-1 SS3	RDL	BH-2 AS3	RDL	BH-2 SS1	BH-6 SS1	BH-6 SS2	RDL	QC Batch
Calculated Parameters										
Methylnaphthalene, 2-(1-)	ug/g	<0.0071	0.0071	<0.011	0.011	<0.0071	0.075	<0.0071	0.0071	9024160
Polyaromatic Hydrocarbons	•	÷		•	•	•	•	•	•	
Acenaphthene	ug/g	<0.0050	0.0050	<0.0050	0.0050	<0.0050	0.18	<0.0050	0.0050	9029886
Acenaphthylene	ug/g	<0.0050	0.0050	<0.0050	0.0050	<0.0050	0.0073	<0.0050	0.0050	9029886
Anthracene	ug/g	<0.0050	0.0050	<0.0050	0.0050	<0.0050	0.64	<0.0050	0.0050	9029886
Benzo(a)anthracene	ug/g	<0.0050	0.0050	<0.0050	0.0050	0.0070	0.91	<0.0050	0.0050	9029886
Benzo(a)pyrene	ug/g	<0.0050	0.0050	<0.0050	0.0050	0.0061	0.66	<0.0050	0.0050	9029886
Benzo(b/j)fluoranthene	ug/g	<0.0050	0.0050	<0.0050	0.0050	0.010	0.87	<0.0050	0.0050	9029886
Benzo(g,h,i)perylene	ug/g	<0.0050	0.0050	<0.0050	0.0050	<0.0050	0.24	<0.0050	0.0050	9029886
Benzo(k)fluoranthene	ug/g	<0.0050	0.0050	<0.0050	0.0050	<0.0050	0.31	<0.0050	0.0050	9029886
Chrysene	ug/g	<0.0050	0.0050	<0.0050	0.0050	0.0064	0.73	<0.0050	0.0050	9029886
Dibenzo(a,h)anthracene	ug/g	<0.0050	0.0050	<0.0050	0.0050	<0.0050	0.099	<0.0050	0.0050	9029886
Fluoranthene	ug/g	<0.0050	0.0050	<0.0050	0.0050	0.015	2.1	<0.0050	0.0050	9029886
Fluorene	ug/g	<0.0050	0.0050	<0.0050	0.0050	<0.0050	0.29	<0.0050	0.0050	9029886
Indeno(1,2,3-cd)pyrene	ug/g	<0.0050	0.0050	<0.0050	0.0050	<0.0050	0.29	<0.0050	0.0050	9029886
1-Methylnaphthalene	ug/g	<0.0050	0.0050	<0.0050	0.0050	<0.0050	0.040	<0.0050	0.0050	9029886
2-Methylnaphthalene	ug/g	<0.0050	0.0050	<0.010 (1)	0.010	<0.0050	0.034	<0.0050	0.0050	9029886
Naphthalene	ug/g	<0.0050	0.0050	<0.0050	0.0050	<0.0050	0.035	<0.0050	0.0050	9029886
Phenanthrene	ug/g	0.0069	0.0050	0.0071	0.0050	0.0065	2.1	0.011	0.0050	9029886
Pyrene	ug/g	<0.0050	0.0050	<0.0050	0.0050	0.014	1.6	<0.0050	0.0050	9029886
Surrogate Recovery (%)										
D10-Anthracene	%	99		101		109	92	96		9029886
D14-Terphenyl (FS)	%	95		102		100	102	94		9029886
D8-Acenaphthylene	%	89		93		85	90	82		9029886
RDL = Reportable Detection I QC Batch = Quality Control B	Limit atch		_		_				_	

(1) Detection Limit was raised due to matrix interferences.



# O.REG 153 PAHS (SOIL)

Bureau Veritas ID		XMH382	XMH383		XMH384	XMH385		XMH386		
Sampling Date		2023/10/27 09:30	2023/10/27 09:30		2023/10/27 09:00	2023/10/26 11:00		2023/10/26 11:00		
COC Number		961363-03-01	961363-03-01		961363-03-01	961363-03-01		961363-03-01		
	UNITS	BH-7 SS2A	BH-7 SS2B	RDL	BH-8 AS3	BH-9 AS1	RDL	BH-9 SS2	RDL	QC Batch
Calculated Parameters										
Methylnaphthalene, 2-(1-)	ug/g	0.043	0.053	0.0071	<0.071	<0.071	0.071	<0.0071	0.0071	9024160
Polyaromatic Hydrocarbons										
Acenaphthene	ug/g	0.012	0.069	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9029886
Acenaphthylene	ug/g	<0.0050	<0.0050	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9029886
Anthracene	ug/g	0.16	0.22	0.0050	0.091	<0.050	0.050	<0.0050	0.0050	9029886
Benzo(a)anthracene	ug/g	0.45	0.58	0.0050	0.24	<0.050	0.050	<0.0050	0.0050	9029886
Benzo(a)pyrene	ug/g	0.38	0.58	0.0050	0.21	<0.050	0.050	<0.0050	0.0050	9029886
Benzo(b/j)fluoranthene	ug/g	0.52	0.78	0.0050	0.30	<0.050	0.050	<0.0050	0.0050	9029886
Benzo(g,h,i)perylene	ug/g	0.17	0.27	0.0050	0.10	<0.050	0.050	<0.0050	0.0050	9029886
Benzo(k)fluoranthene	ug/g	0.20	0.30	0.0050	0.12	<0.050	0.050	<0.0050	0.0050	9029886
Chrysene	ug/g	0.37	0.46	0.0050	0.19	<0.050	0.050	<0.0050	0.0050	9029886
Dibenzo(a,h)anthracene	ug/g	0.061	0.093	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9029886
Fluoranthene	ug/g	0.86	0.99	0.0050	0.51	<0.050	0.050	<0.0050	0.0050	9029886
Fluorene	ug/g	0.024	0.048	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9029886
Indeno(1,2,3-cd)pyrene	ug/g	0.19	0.31	0.0050	0.12	<0.050	0.050	<0.0050	0.0050	9029886
1-Methylnaphthalene	ug/g	0.021	0.027	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9029886
2-Methylnaphthalene	ug/g	0.022	0.026	0.0050	<0.050	<0.050	0.050	<0.0050	0.0050	9029886
Naphthalene	ug/g	0.0078	0.016	0.0050	<0.050	<0.050	0.050	0.0056	0.0050	9029886
Phenanthrene	ug/g	0.47	0.40	0.0050	0.36	<0.050	0.050	0.010	0.0050	9029886
Pyrene	ug/g	0.71	0.82	0.0050	0.38	<0.050	0.050	<0.0050	0.0050	9029886
Surrogate Recovery (%)										
D10-Anthracene	%	95	95		99	106		100		9029886
D14-Terphenyl (FS)	%	111	102		102	98		105		9029886
D8-Acenaphthylene	%	81	85		88	85		89		9029886
RDL = Reportable Detection L	.imit									
QC Batch = Quality Control Ba	atch									



# O.REG 153 PAHS (SOIL)

Bureau Veritas ID		XMH387			XMH388	XMH389	XMH390	XMH391		
Sampling Date		2023/10/26 12:00			2023/10/26 12:00	2023/10/30 14:00	2023/10/30 14:00	2023/10/26 12:00		
COC Number		961363-03-01			961363-03-01	961363-03-01	961363-03-01	961363-03-01		
	UNITS	BH-10 AS1	RDL	QC Batch	BH-10 SS2	BH-11 SS1	BH-11 SS2	DUP 1	RDL	QC Batch
Calculated Parameters										
Methylnaphthalene, 2-(1-)	ug/g	<0.071	0.071	9024160	<0.0071	<0.0071	<0.0071	<0.0071	0.0071	9025209
Polyaromatic Hydrocarbons										
Acenaphthene	ug/g	<0.050	0.050	9029886	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	9029886
Acenaphthylene	ug/g	<0.050	0.050	9029886	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	9029886
Anthracene	ug/g	<0.050	0.050	9029886	<0.0050	0.016	<0.0050	<0.0050	0.0050	9029886
Benzo(a)anthracene	ug/g	<0.050	0.050	9029886	<0.0050	0.041	<0.0050	<0.0050	0.0050	9029886
Benzo(a)pyrene	ug/g	<0.050	0.050	9029886	<0.0050	0.036	<0.0050	<0.0050	0.0050	9029886
Benzo(b/j)fluoranthene	ug/g	<0.050	0.050	9029886	<0.0050	0.053	<0.0050	<0.0050	0.0050	9029886
Benzo(g,h,i)perylene	ug/g	<0.050	0.050	9029886	<0.0050	0.016	<0.0050	<0.0050	0.0050	9029886
Benzo(k)fluoranthene	ug/g	<0.050	0.050	9029886	<0.0050	0.019	<0.0050	<0.0050	0.0050	9029886
Chrysene	ug/g	<0.050	0.050	9029886	<0.0050	0.038	<0.0050	<0.0050	0.0050	9029886
Dibenzo(a,h)anthracene	ug/g	<0.050	0.050	9029886	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	9029886
Fluoranthene	ug/g	<0.050	0.050	9029886	<0.0050	0.089	0.0055	<0.0050	0.0050	9029886
Fluorene	ug/g	<0.050	0.050	9029886	<0.0050	0.0070	<0.0050	<0.0050	0.0050	9029886
Indeno(1,2,3-cd)pyrene	ug/g	<0.050	0.050	9029886	<0.0050	0.015	<0.0050	<0.0050	0.0050	9029886
1-Methylnaphthalene	ug/g	<0.050	0.050	9029886	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	9029886
2-Methylnaphthalene	ug/g	<0.050	0.050	9029886	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	9029886
Naphthalene	ug/g	<0.050	0.050	9029886	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	9029886
Phenanthrene	ug/g	<0.050	0.050	9029886	<0.0050	0.068	<0.0050	<0.0050	0.0050	9029886
Pyrene	ug/g	<0.050	0.050	9029886	<0.0050	0.073	<0.0050	<0.0050	0.0050	9029886
Surrogate Recovery (%)										
D10-Anthracene	%	118		9029886	97	102	98	91		9029886
D14-Terphenyl (FS)	%	97		9029886	100	104	103	91		9029886
D8-Acenaphthylene	%	84		9029886	82	91	84	74		9029886
RDL = Reportable Detection L	imit									
QC Batch = Quality Control Ba	atch									



# O.REG 153 PAHS (SOIL)

Bureau Veritas ID		XMH392		
Sampling Date		2023/10/30 14:00		
COC Number		961363-03-01		
	UNITS	DUP 3	RDL	QC Batch
Calculated Parameters				
Methylnaphthalene, 2-(1-)	ug/g	<0.0071	0.0071	9025209
Polyaromatic Hydrocarbons				
Acenaphthene	ug/g	<0.0050	0.0050	9029886
Acenaphthylene	ug/g	<0.0050	0.0050	9029886
Anthracene	ug/g	<0.0050	0.0050	9029886
Benzo(a)anthracene	ug/g	0.0082	0.0050	9029886
Benzo(a)pyrene	ug/g	0.0070	0.0050	9029886
Benzo(b/j)fluoranthene	ug/g	0.011	0.0050	9029886
Benzo(g,h,i)perylene	ug/g	<0.0050	0.0050	9029886
Benzo(k)fluoranthene	ug/g	<0.0050	0.0050	9029886
Chrysene	ug/g	0.0094	0.0050	9029886
Dibenzo(a,h)anthracene	ug/g	<0.0050	0.0050	9029886
Fluoranthene	ug/g	0.018	0.0050	9029886
Fluorene	ug/g	<0.0050	0.0050	9029886
Indeno(1,2,3-cd)pyrene	ug/g	<0.0050	0.0050	9029886
1-Methylnaphthalene	ug/g	<0.0050	0.0050	9029886
2-Methylnaphthalene	ug/g	<0.0050	0.0050	9029886
Naphthalene	ug/g	<0.0050	0.0050	9029886
Phenanthrene	ug/g	0.018	0.0050	9029886
Pyrene	ug/g	0.016	0.0050	9029886
Surrogate Recovery (%)				
D10-Anthracene	%	99		9029886
D14-Terphenyl (FS)	%	104		9029886
D8-Acenaphthylene	%	86		9029886
RDL = Reportable Detection I	imit			
QC Batch = Quality Control B	atch			



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

Bureau Veritas ID		XMH375			XMH375			XMH376		
Sampling Data		2023/10/26			2023/10/26			2023/10/26		
		14:00			14:00			14:00		
COC Number		961363-03-01			961363-03-01			961363-03-01		
	UNITS	BH-1 SS2	RDL	QC Batch	BH-1 SS2 Lab-Dup	RDL	QC Batch	DUP 2	RDL	QC Batch
Calculated Parameters										
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	0.050	9023519				<0.050	0.050	9023519
Volatile Organics										
Acetone (2-Propanone)	ug/g	<0.49	0.49	9029936				<0.49	0.49	9029936
Benzene	ug/g	<0.0060	0.0060	9029936				<0.0060	0.0060	9029936
Bromodichloromethane	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
Bromoform	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
Bromomethane	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
Carbon Tetrachloride	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
Chlorobenzene	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
Chloroform	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
Dibromochloromethane	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
1,2-Dichlorobenzene	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
1,3-Dichlorobenzene	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
1,4-Dichlorobenzene	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
1,1-Dichloroethane	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
1,2-Dichloroethane	ug/g	<0.049	0.049	9029936				<0.049	0.049	9029936
1,1-Dichloroethylene	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
cis-1,2-Dichloroethylene	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
trans-1,2-Dichloroethylene	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
1,2-Dichloropropane	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
cis-1,3-Dichloropropene	ug/g	<0.030	0.030	9029936				<0.030	0.030	9029936
trans-1,3-Dichloropropene	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
Ethylbenzene	ug/g	<0.010	0.010	9029936				<0.010	0.010	9029936
Ethylene Dibromide	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
Hexane	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
Methylene Chloride(Dichloromethane)	ug/g	<0.049	0.049	9029936				<0.049	0.049	9029936
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	0.40	9029936				<0.40	0.40	9029936
Methyl Isobutyl Ketone	ug/g	<0.40	0.40	9029936				<0.40	0.40	9029936
Methyl t-butyl ether (MTBE)	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
Styrene	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
1,1,1,2-Tetrachloroethane	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
1,1,2,2-Tetrachloroethane	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
RDL = Reportable Detection Limit										

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate



Bureau Veritas ID		XMH375			XMH375			XMH376		
Sampling Date		2023/10/26 14:00			2023/10/26 14:00			2023/10/26 14:00		
COC Number		961363-03-01			961363-03-01			961363-03-01		
	UNITS	BH-1 SS2	RDL	QC Batch	BH-1 SS2 Lab-Dup	RDL	QC Batch	DUP 2	RDL	QC Batch
Tetrachloroethylene	ug/g	0.16	0.040	9029936				0.27	0.040	9029936
Toluene	ug/g	<0.020	0.020	9029936				<0.020	0.020	9029936
1,1,1-Trichloroethane	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
1,1,2-Trichloroethane	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
Trichloroethylene	ug/g	<0.010	0.010	9029936				<0.010	0.010	9029936
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	0.040	9029936				<0.040	0.040	9029936
Vinyl Chloride	ug/g	<0.019	0.019	9029936				<0.019	0.019	9029936
p+m-Xylene	ug/g	<0.020	0.020	9029936				<0.020	0.020	9029936
o-Xylene	ug/g	<0.020	0.020	9029936				<0.020	0.020	9029936
Total Xylenes	ug/g	<0.020	0.020	9029936				<0.020	0.020	9029936
F1 (C6-C10)	ug/g	<10	10	9029936				<10	10	9029936
F1 (C6-C10) - BTEX	ug/g	<10	10	9029936				<10	10	9029936
F2-F4 Hydrocarbons										
F2 (C10-C16 Hydrocarbons)	ug/g	<10	10	9030166	<10	10	9030166	<10	10	9030166
F3 (C16-C34 Hydrocarbons)	ug/g	<50	50	9030166	<50	50	9030166	<50	50	9030166
F4 (C34-C50 Hydrocarbons)	ug/g	<50	50	9030166	<50	50	9030166	<50	50	9030166
Reached Baseline at C50	ug/g	Yes		9030166	Yes		9030166	Yes		9030166
Surrogate Recovery (%)	•			•	•	•	•	•		
o-Terphenyl	%	93		9030166	95		9030166	91		9030166
4-Bromofluorobenzene	%	99		9029936				99		9029936
D10-o-Xylene	%	108		9029936				112		9029936
D4-1,2-Dichloroethane	%	88		9029936				89		9029936
D8-Toluene	%	102		9029936				101		9029936
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicat	e									



	1		i	>/A 41:0 TO	N/A 41-0 TO	1	
Bureau Veritas ID		XMH377		XMH378	XMH379		
Sampling Date		2023/10/26		2023/10/30	2023/10/30		
COC Number		961363-03-01		961363-03-01	961363-03-01		
		901303-03-01		901303-03-01	901303-03-01		
	UNITS	BH-1 SS3	QC Batch	BH-2 AS3	BH-2 SS1	RDL	QC Batch
Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	9023519	<0.050	<0.050	0.050	9025211
Volatile Organics		•	•	•			•
Acetone (2-Propanone)	ug/g	<0.49	9029936	<0.49	<0.49	0.49	9029936
Benzene	ug/g	<0.0060	9029936	<0.0060	<0.0060	0.0060	9029936
Bromodichloromethane	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
Bromoform	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
Bromomethane	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
Carbon Tetrachloride	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
Chlorobenzene	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
Chloroform	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
Dibromochloromethane	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
1,2-Dichlorobenzene	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
1,3-Dichlorobenzene	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
1,4-Dichlorobenzene	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
1,1-Dichloroethane	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
1,2-Dichloroethane	ug/g	<0.049	9029936	<0.049	<0.049	0.049	9029936
1,1-Dichloroethylene	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
cis-1,2-Dichloroethylene	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
trans-1,2-Dichloroethylene	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
1,2-Dichloropropane	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
cis-1,3-Dichloropropene	ug/g	<0.030	9029936	<0.030	<0.030	0.030	9029936
trans-1,3-Dichloropropene	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
Ethylbenzene	ug/g	<0.010	9029936	<0.010	<0.010	0.010	9029936
Ethylene Dibromide	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
Hexane	ug/g	<0.040	9029936	0.90	<0.040	0.040	9029936
Methylene Chloride(Dichloromethane)	ug/g	<0.049	9029936	<0.049	<0.049	0.049	9029936
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	9029936	<0.40	<0.40	0.40	9029936
Methyl Isobutyl Ketone	ug/g	<0.40	9029936	<0.40	<0.40	0.40	9029936
Methyl t-butyl ether (MTBE)	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
Styrene	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
1,1,1,2-Tetrachloroethane	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
1,1,2,2-Tetrachloroethane	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
Tetrachloroethylene	ug/g	0.90	9029936	<0.040	<0.040	0.040	9029936
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							



Bureau Veritas ID		XMH377		XMH378	XMH379		
Sampling Date		2023/10/26 14:00		2023/10/30 10:00	2023/10/30 10:00		
COC Number		961363-03-01		961363-03-01	961363-03-01		
	UNITS	BH-1 SS3	QC Batch	BH-2 AS3	BH-2 SS1	RDL	QC Batch
Toluene	ug/g	<0.020	9029936	<0.020	<0.020	0.020	9029936
1,1,1-Trichloroethane	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
1,1,2-Trichloroethane	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
Trichloroethylene	ug/g	<0.010	9029936	<0.010	<0.010	0.010	9029936
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	9029936	<0.040	<0.040	0.040	9029936
Vinyl Chloride	ug/g	<0.019	9029936	<0.019	<0.019	0.019	9029936
p+m-Xylene	ug/g	<0.020	9029936	0.099	<0.020	0.020	9029936
o-Xylene	ug/g	<0.020	9029936	0.023	<0.020	0.020	9029936
Total Xylenes	ug/g	<0.020	9029936	0.12	<0.020	0.020	9029936
F1 (C6-C10)	ug/g	<10	9029936	50	<10	10	9029936
F1 (C6-C10) - BTEX	ug/g	<10	9029936	50	<10	10	9029936
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/g	19	9030166	44	<10	10	9030166
F3 (C16-C34 Hydrocarbons)	ug/g	<50	9030166	<50	<50	50	9030166
F4 (C34-C50 Hydrocarbons)	ug/g	<50	9030166	<50	<50	50	9030166
Reached Baseline at C50	ug/g	Yes	9030166	Yes	Yes		9030166
Surrogate Recovery (%)							
o-Terphenyl	%	92	9030166	94	93		9030166
4-Bromofluorobenzene	%	100	9029936	96	100		9029936
D10-o-Xylene	%	105	9029936	108	103		9029936
D4-1,2-Dichloroethane	%	90	9029936	93	98		9029936
D8-Toluene	%	101	9029936	101	98		9029936
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							



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

Bureau Veritas ID		XMH380		XMH381		XMH382		XMH383		
Sampling Date		2023/10/27		2023/10/27		2023/10/27		2023/10/27		
		15:00		15:00		09:30		09:30		
COC Number		961363-03-01		961363-03-01		961363-03-01		961363-03-01		
	UNITS	BH-6 SS1	RDL	BH-6 SS2	RDL	BH-7 SS2A	RDL	BH-7 SS2B	RDL	QC Batch
Calculated Parameters										
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	0.050	<0.050	0.050	<0.050	0.050	<0.050	0.050	9025211
Volatile Organics			-		-		-		-	
Acetone (2-Propanone)	ug/g	<0.49	0.49	<0.49	0.49	<0.49	0.49	<0.49	0.49	9029156
Benzene	ug/g	<0.0060	0.0060	<0.0060	0.0060	<0.0060	0.0060	<0.0060	0.0060	9029156
Bromodichloromethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
Bromoform	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
Bromomethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
Carbon Tetrachloride	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
Chlorobenzene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
Chloroform	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
Dibromochloromethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
1,2-Dichlorobenzene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
1,3-Dichlorobenzene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
1,4-Dichlorobenzene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
1,1-Dichloroethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
1,2-Dichloroethane	ug/g	<0.049	0.049	<0.049	0.049	<0.049	0.049	<0.049	0.049	9029156
1,1-Dichloroethylene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
cis-1,2-Dichloroethylene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
trans-1,2-Dichloroethylene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
1,2-Dichloropropane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
cis-1,3-Dichloropropene	ug/g	<0.030	0.030	<0.030	0.030	<0.030	0.030	<0.030	0.030	9029156
trans-1,3-Dichloropropene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
Ethylbenzene	ug/g	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.020 (1)	0.020	9029156
Ethylene Dibromide	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
Hexane	ug/g	<0.040	0.040	0.14	0.040	<0.040	0.040	<0.040	0.040	9029156
Methylene Chloride(Dichloromethane)	ug/g	<0.049	0.049	<0.58 (1)	0.58	<0.049	0.049	<0.049	0.049	9029156
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	9029156
Methyl Isobutyl Ketone	ug/g	<0.40	0.40	<0.40	0.40	<0.40	0.40	<0.40	0.40	9029156
Methyl t-butyl ether (MTBE)	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
Styrene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
1,1,1,2-Tetrachloroethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
1,1,2,2-Tetrachloroethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

(1) The detection limit was raised due to matrix interference.



Bureau Veritas ID		XMH380		XMH381		XMH382		XMH383		
Sampling Date		2023/10/27 15:00		2023/10/27 15:00		2023/10/27 09:30		2023/10/27 09:30		
COC Number		961363-03-01		961363-03-01		961363-03-01		961363-03-01		
	UNITS	BH-6 SS1	RDL	BH-6 SS2	RDL	BH-7 SS2A	RDL	BH-7 SS2B	RDL	QC Batch
Tetrachloroethylene	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
Toluene	ug/g	<0.020	0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	9029156
1,1,1-Trichloroethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
1,1,2-Trichloroethane	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
Trichloroethylene	ug/g	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	9029156
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	0.040	<0.040	0.040	<0.040	0.040	<0.040	0.040	9029156
Vinyl Chloride	ug/g	< 0.019	0.019	< 0.019	0.019	< 0.019	0.019	< 0.019	0.019	9029156
p+m-Xylene	ug/g	<0.020	0.020	0.066	0.020	<0.020	0.020	<0.020	0.020	9029156
o-Xylene	ug/g	<0.020	0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	9029156
Total Xylenes	ug/g	<0.020	0.020	0.066	0.020	<0.020	0.020	<0.020	0.020	9029156
F1 (C6-C10)	ug/g	<10	10	26	10	<10	10	32	10	9029156
F1 (C6-C10) - BTEX	ug/g	<10	10	26	10	<10	10	32	10	9029156
F2-F4 Hydrocarbons										
F2 (C10-C16 Hydrocarbons)	ug/g	<15	15	34	10	<10	10	<20	20	9030166
F3 (C16-C34 Hydrocarbons)	ug/g	<60	60	<50	50	<50	50	<95	95	9030166
F4 (C34-C50 Hydrocarbons)	ug/g	<50	50	<50	50	<50	50	<50	50	9030166
Reached Baseline at C50	ug/g	Yes		Yes		Yes		Yes		9030166
Surrogate Recovery (%)		•						•		
o-Terphenyl	%	93		92		94	[	97		9030166
4-Bromofluorobenzene	%	121		101		96		94		9029156
D10-o-Xylene	%	99		108		89		98		9029156
D4-1,2-Dichloroethane	%	93		99		93		95		9029156
D8-Toluene	%	89		93		98		99		9029156
RDL = Reportable Detection Limit QC Batch = Quality Control Batch										



Bureau Veritas ID		XMH384	XMH385	XMH386	XMH387	XMH388		
Sampling Data		2023/10/27	2023/10/26	2023/10/26	2023/10/26	2023/10/26		
		09:00	11:00	11:00	12:00	12:00		
COC Number		961363-03-01	961363-03-01	961363-03-01	961363-03-01	961363-03-01		
	UNITS	BH-8 AS3	BH-9 AS1	BH-9 SS2	BH-10 AS1	BH-10 SS2	RDL	QC Batch
Calculated Parameters								
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9025211
Volatile Organics				•	•	•		
Acetone (2-Propanone)	ug/g	<0.49	<0.49	<0.49	<0.49	<0.49	0.49	9029156
Benzene	ug/g	0.092	<0.0060	0.029	<0.0060	<0.0060	0.0060	9029156
Bromodichloromethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Bromoform	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Bromomethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Carbon Tetrachloride	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Chlorobenzene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Chloroform	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Dibromochloromethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,2-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,3-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,4-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,1-Dichloroethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,2-Dichloroethane	ug/g	<0.049	<0.049	<0.049	<0.049	<0.049	0.049	9029156
1,1-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
cis-1,2-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
trans-1,2-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,2-Dichloropropane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
cis-1,3-Dichloropropene	ug/g	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	9029156
trans-1,3-Dichloropropene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Ethylbenzene	ug/g	0.14	0.010	0.14	<0.010	<0.010	0.010	9029156
Ethylene Dibromide	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Hexane	ug/g	0.26	<0.040	0.32	<0.040	<0.040	0.040	9029156
Methylene Chloride(Dichloromethane)	ug/g	<0.049	<0.049	<0.049	<0.049	<0.049	0.049	9029156
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	9029156
Methyl Isobutyl Ketone	ug/g	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	9029156
Methyl t-butyl ether (MTBE)	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Styrene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,1,1,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,1,2,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Tetrachloroethylene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								



Bureau Veritas ID		XMH384	XMH385	XMH386	XMH387	XMH388		
Sampling Date		2023/10/27	2023/10/26	2023/10/26	2023/10/26	2023/10/26		
		09:00	11:00	11:00	12:00	12:00		
COC Number		961363-03-01	961363-03-01	961363-03-01	961363-03-01	961363-03-01		
	UNITS	BH-8 AS3	BH-9 AS1	BH-9 SS2	BH-10 AS1	BH-10 SS2	RDL	QC Batch
Toluene	ug/g	0.063	<0.020	0.10	<0.020	<0.020	0.020	9029156
1,1,1-Trichloroethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,1,2-Trichloroethane	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Trichloroethylene	ug/g	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	9029156
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Vinyl Chloride	ug/g	<0.019	<0.019	<0.019	<0.019	<0.019	0.019	9029156
p+m-Xylene	ug/g	0.38	0.039	0.40	<0.020	<0.020	0.020	9029156
o-Xylene	ug/g	0.067	<0.020	0.12	<0.020	<0.020	0.020	9029156
Total Xylenes	ug/g	0.45	0.039	0.52	<0.020	<0.020	0.020	9029156
F1 (C6-C10)	ug/g	<10	<10	14	<10	<10	10	9029156
F1 (C6-C10) - BTEX	ug/g	<10	<10	13	<10	<10	10	9029156
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/g	<10	<10	26	<10	<10	10	9030166
F3 (C16-C34 Hydrocarbons)	ug/g	170	150	<50	110	<50	50	9030166
F4 (C34-C50 Hydrocarbons)	ug/g	510	450	<50	430	<50	50	9030166
Reached Baseline at C50	ug/g	No	No	Yes	No	Yes		9030166
Surrogate Recovery (%)		•	•					
o-Terphenyl	%	89	94	91	90	89		9030166
4-Bromofluorobenzene	%	94	92	126	95	94		9029156
D10-o-Xylene	%	91	81	117	90	86		9029156
D4-1,2-Dichloroethane	%	104	92	100	94	92		9029156
D8-Toluene	%	98	97	97	97	96		9029156
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								



Bureau Veritas ID	1	XMH389	XMH390	XMH391	XMH392		
Complian Data	1	2023/10/30	2023/10/30	2023/10/26	2023/10/30		
		14:00	14:00	12:00	14:00		
COC Number		961363-03-01	961363-03-01	961363-03-01	961363-03-01		
	UNITS	BH-11 SS1	BH-11 SS2	DUP 1	DUP 3	RDL	QC Batch
Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	<0.050	<0.050	<0.050	0.050	9025211
Volatile Organics							
Acetone (2-Propanone)	ug/g	<0.49	<0.49	<0.49	<0.49	0.49	9029156
Benzene	ug/g	<0.0060	<0.0060	<0.0060	<0.0060	0.0060	9029156
Bromodichloromethane	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Bromoform	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Bromomethane	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Carbon Tetrachloride	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Chlorobenzene	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Chloroform	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Dibromochloromethane	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,2-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,3-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,4-Dichlorobenzene	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,1-Dichloroethane	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,2-Dichloroethane	ug/g	<0.049	<0.049	<0.049	<0.049	0.049	9029156
1,1-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
cis-1,2-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
trans-1,2-Dichloroethylene	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,2-Dichloropropane	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
cis-1,3-Dichloropropene	ug/g	<0.030	<0.030	<0.030	< 0.030	0.030	9029156
trans-1,3-Dichloropropene	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Ethylbenzene	ug/g	<0.010	<0.010	<0.010	<0.010	0.010	9029156
Ethylene Dibromide	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Hexane	ug/g	0.044	<0.040	<0.040	<0.040	0.040	9029156
Methylene Chloride(Dichloromethane)	ug/g	<0.049	<0.049	<0.049	<0.049	0.049	9029156
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	<0.40	<0.40	<0.40	0.40	9029156
Methyl Isobutyl Ketone	ug/g	<0.40	<0.40	<0.40	<0.40	0.40	9029156
Methyl t-butyl ether (MTBE)	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Styrene	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,1,1,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,1,2,2-Tetrachloroethane	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Tetrachloroethylene	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							



Bureau Veritas ID		XMH389	XMH390	XMH391	XMH392		
Sampling Date		2023/10/30	2023/10/30	2023/10/26	2023/10/30		
		14:00	14:00	12:00	14:00		
COC Number		961363-03-01	961363-03-01	961363-03-01	961363-03-01		
	UNITS	BH-11 SS1	BH-11 SS2	DUP 1	DUP 3	RDL	QC Batch
Toluene	ug/g	<0.020	<0.020	<0.020	<0.020	0.020	9029156
1,1,1-Trichloroethane	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
1,1,2-Trichloroethane	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Trichloroethylene	ug/g	<0.010	<0.010	<0.010	<0.010	0.010	9029156
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	9029156
Vinyl Chloride	ug/g	<0.019	<0.019	<0.019	<0.019	0.019	9029156
p+m-Xylene	ug/g	<0.020	<0.020	<0.020	<0.020	0.020	9029156
o-Xylene	ug/g	<0.020	<0.020	<0.020	<0.020	0.020	9029156
Total Xylenes	ug/g	<0.020	<0.020	<0.020	<0.020	0.020	9029156
F1 (C6-C10)	ug/g	<10	<10	<10	<10	10	9029156
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	<10	10	9029156
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/g	<10	<10	<10	24	10	9030166
F3 (C16-C34 Hydrocarbons)	ug/g	69	<50	<50	57	50	9030166
F4 (C34-C50 Hydrocarbons)	ug/g	88	<50	<50	<50	50	9030166
Reached Baseline at C50	ug/g	Yes	Yes	Yes	Yes		9030166
Surrogate Recovery (%)							
o-Terphenyl	%	80	95	96	97		9030166
4-Bromofluorobenzene	%	129	95	95	94		9029156
D10-o-Xylene	%	115	84	83	83		9029156
D4-1,2-Dichloroethane	%	101	91	91	94		9029156
D8-Toluene	%	92	95	95	96		9029156
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							



### **RESULTS OF ANALYSES OF SOIL**

Bureau	u Veritas ID		XMH3	375	XN	/H376	Х	MH377			Х	MH378	XN	/H37	9			
Sampli	ing Date		2023/1 14:0	0/26 00	2023 1	3/10/26 L4:00	202	23/10/2 14:00	26		202	23/10/30 10:00	2023 1	3/10/ L0:00	/30			
COC N	umber		961363-	03-01	9613	63-03-01	9613	363-03-	·01		9613	363-03-01	9613	63-03	3-01			
		UNI	TS BH-1	SS2	D	UP 2	В	H-1 SS3	Q	Batch	BI	1-2 AS3	BH	-2 SS	51	RDL	QC E	Batch
Inorga	inics	•	·															
Moistu	ure	%	9.5			19		8.0	90	26404		4.1		9.8		1.0	902	5369
RDL = I OC Bat	Reportable Detect tch = Ouality Cont	tion Limit rol Batch											+					
Duropu Vori			VM11200	1		VIALL	001	1	1	VMU2	0.7	VMU2	0.2	V		0.4		]
buleau veli			AIVIE 500			2022/1	0/27				02 1/27	2022/10	05 1/27	202	2/10	04 1/27		
Sampling Da	ate		15:00			2023/1	0/2/			023/10	0	09:3	0	202	.5/10 09:00	0		
COC Numbe	er	9	51363-03-01			961363-	03-01		96	51363-0	)3-01	961363-0	)3-01	9613	363-0	3-01		
		UNITS	BH-6 SS1	QC B	atch	BH-6	SS2	QC Ba	tch	BH-7 SS	52A	BH-7 SS	52B	BH	I-8 A	<b>S</b> 3	RDL	QC Bat
Inorganics				•				•	•			ł						
Moisture		%	8.6	9026	5369	20		90264	104	12		11			3.6		1.0	90263
RDL = Repor	rtable Detection Li	imit		1				I				1						
QC Batch = (	Quality Control Ba	atch																
·				- [							1				_			
Bureau	u Veritas ID		XMH3	85			XMH3	86	XMH	1387	X	MH388	XN	/H38	9			
Sampli	ing Date		2023/1	0/26		20	)23/10 11.0	0/26	2023/	10/26	202	23/10/26	2023	3/10/ 1/100	/30			
	umber		961363-	03-01		96	1363-0	13-01 0	961363	-03-01	9613	12.00	9613	63-03	, 2-01			
COCIN	umber	UNI	TS BH-9/	AS1	OC Ba	atch	BH-9 S	S2	BH-1(	) AS1	BH	I-10 SS2	BH-	-11 5	5 0 1 5 1	RDI	OC F	atch
Inorga	nics	0.11		.01	40.54		5.1. 5 6		511 10	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		. 10 001	BII					aten
Moist	incs	0/	1.2		0026	404	70		7	7	1	16				1.0	002	2260
	Roportable Dotod	tion Limit	4.5		9020	404	7.0		7.	/		10		5.5		1.0	9020	5509
	tch = Quality Cont	rol Batch																
QC Dat	ten – Quanty cont	TOT Datem																
	Bureau Verita	s ID		XN	VH390	C		XM	H391			XMH3	92				]	
	Sampling Date	2		202	3/10/	30		2023	/10/26	i		2023/10	)/30				1	
	Sampling Date	-		:	14:00			17	2:00	_		14:0	0				4	
	COC Number			9613	863-03	-01		96136	53-03-0	1		961363-0	03-01				4	
			UNITS	BH	-11 SS	2 QC	Batch	DL	UP 1	QC E	Batch	DUP	3	RDL	QC	Batch	]	
	Inorganics																	
	Moisture		%		11	902	26369	:	18	902	6404	8.6		1.0	902	6369		
	RDL = Reporta	able Detec	ion Limit	_		_				_			-	-				
	QC Batch = QL	uality Cont	I DI Batch														]	



# PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		XMH384	XMH385	XMH387		
Sampling Data		2023/10/27	2023/10/26	2023/10/26		
		09:00	11:00	12:00		
COC Number		961363-03-01	961363-03-01	961363-03-01		
	UNITS	BH-8 AS3	BH-9 AS1	BH-10 AS1	RDL	QC Batch
F2-F4 Hydrocarbons						
F4G-sg (Grav. Heavy Hydrocarbons)	ug/g	2500	3100	2400	100	9038445
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						



#### **TEST SUMMARY**

Bureau Veritas ID: Sample ID: Matrix:	XMH375 BH-1 SS2 Soil					Collected: Shipped: Received:	2023/10/26 2023/11/01
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	

				2410/1141/204	
Methylnaphthalene Sum	CALC	9024160	N/A	2023/11/07	Automated Statchk
Hot Water Extractable Boron	ICP	9027882	2023/11/03	2023/11/06	Jaswinder Kaur
1,3-Dichloropropene Sum	CALC	9023519	N/A	2023/11/07	Automated Statchk
Free (WAD) Cyanide	TECH	9032757	2023/11/07	2023/11/07	Prgya Panchal
Conductivity	AT	9031089	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9031125	2023/11/06	2023/11/07	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/06	Agnieszka Brzuzy-Snopko
Acid Extractable Metals by ICPMS	ICP/MS	9027668	2023/11/03	2023/11/07	Daniel Teclu
Moisture	BAL	9026404	N/A	2023/11/03	Ibadat Preet
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT	AT	9030865	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio (SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9029936	N/A	2023/11/06	Blair Gannon

Bureau Veritas ID: XMH375 Dup Sample ID: BH-1 SS2 Matrix: Soil

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/06	Agnieszka Brzuzy-Snopko
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin

Bureau Veritas ID:	XMH376
Sample ID:	DUP 2
Matrix:	Soil

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9024160	N/A	2023/11/07	Automated Statchk
Hot Water Extractable Boron	ICP	9027893	2023/11/03	2023/11/06	Jaswinder Kaur
1,3-Dichloropropene Sum	CALC	9023519	N/A	2023/11/07	Automated Statchk
Free (WAD) Cyanide	TECH	9030462	2023/11/06	2023/11/06	Jency Sara Johnson
Conductivity	AT	9031062	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9031125	2023/11/06	2023/11/07	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/06	Agnieszka Brzuzy-Snopko
Acid Extractable Metals by ICPMS	ICP/MS	9029430	2023/11/04	2023/11/07	Daniel Teclu
Moisture	BAL	9026404	N/A	2023/11/03	Ibadat Preet
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT	AT	9030865	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio (SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9029936	N/A	2023/11/07	Blair Gannon

**Shipped: Received:** 2023/11/01

Collected: 2023/10/26

Collected: 2023/10/26

**Received:** 2023/11/01

Shipped:



#### **TEST SUMMARY**

Bureau Veritas ID: Sample ID:	XMH377 BH-1 SS3					Collected: Shipped:	2023/10/26
Matrix:	Soil					Received:	2023/11/01
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	

•					
Methylnaphthalene Sum	CALC	9024160	N/A	2023/11/07	Automated Statchk
Hot Water Extractable Boron	ICP	9027882	2023/11/03	2023/11/06	Jaswinder Kaur
1,3-Dichloropropene Sum	CALC	9023519	N/A	2023/11/07	Automated Statchk
Free (WAD) Cyanide	TECH	9030462	2023/11/06	2023/11/06	Jency Sara Johnson
Conductivity	AT	9031089	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9031125	2023/11/06	2023/11/07	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/07	Agnieszka Brzuzy-Snopko
Acid Extractable Metals by ICPMS	ICP/MS	9027668	2023/11/03	2023/11/07	Daniel Teclu
Moisture	BAL	9026404	N/A	2023/11/03	Ibadat Preet
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT	AT	9030865	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio (SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9029936	N/A	2023/11/07	Blair Gannon

Bureau Veritas ID: XMH378 Sample ID: BH-2 AS3 Matrix: Soil Collected: 2023/10/30 Shipped: Received: 2023/11/01

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9024160	N/A	2023/11/07	Automated Statchk
Hot Water Extractable Boron	ICP	9027893	2023/11/03	2023/11/06	Jaswinder Kaur
1,3-Dichloropropene Sum	CALC	9025211	N/A	2023/11/07	Automated Statchk
Free (WAD) Cyanide	TECH	9030480	2023/11/06	2023/11/06	Jency Sara Johnson
Conductivity	AT	9031270	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9030577	2023/11/06	2023/11/07	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/07	Agnieszka Brzuzy-Snopko
Acid Extractable Metals by ICPMS	ICP/MS	9029430	2023/11/04	2023/11/07	Daniel Teclu
Moisture	BAL	9026369	N/A	2023/11/03	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT	AT	9030312	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio (SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9029936	N/A	2023/11/07	Blair Gannon

Bureau Veritas ID:	XMH379
Sample ID:	BH-2 SS1
Matrix:	Soil

Collected: 2023/10/30 Shipped: **Received:** 2023/11/01

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9024160	N/A	2023/11/07	Automated Statchk
Hot Water Extractable Boron	ICP	9027893	2023/11/03	2023/11/06	Jaswinder Kaur
1,3-Dichloropropene Sum	CALC	9025211	N/A	2023/11/07	Automated Statchk
Free (WAD) Cyanide	TECH	9030480	2023/11/06	2023/11/06	Jency Sara Johnson
Conductivity	AT	9031062	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9030577	2023/11/06	2023/11/07	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/06	Agnieszka Brzuzy-Snopko
Acid Extractable Metals by ICPMS	ICP/MS	9029430	2023/11/04	2023/11/07	Daniel Teclu



Collected: 2023/10/27

Received: 2023/11/01

Collected: 2023/10/27

Received: 2023/11/01

Collected: 2023/10/27

**Received:** 2023/11/01

Shipped:

Shipped:

Shipped:

#### **TEST SUMMARY**

Test Description		la stance substitue	Detah	Future at a d	Data Analyzad	Ameliat		
Matrix:	Soil					Received:	2023/11/01	
Sample ID:	BH-2 SS1					Shipped:	2023/10/30	
Bureau Verites ID.	VM11270					Collected	2022/10/20	

lest Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	9026369	N/A	2023/11/03	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT	AT	9030312	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio (SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9029936	N/A	2023/11/07	Blair Gannon

Bureau Veritas ID:	XMH380
Sample ID:	BH-6 SS1
Matrix:	Soil

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9024160	N/A	2023/11/07	Automated Statchk
Hot Water Extractable Boron	ICP	9027893	2023/11/03	2023/11/06	Jaswinder Kaur
1,3-Dichloropropene Sum	CALC	9025211	N/A	2023/11/06	Automated Statchk
Free (WAD) Cyanide	TECH	9030480	2023/11/06	2023/11/06	Jency Sara Johnson
Conductivity	AT	9031062	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9030577	2023/11/06	2023/11/07	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/07	Agnieszka Brzuzy-Snopko
Acid Extractable Metals by ICPMS	ICP/MS	9029430	2023/11/04	2023/11/07	Daniel Teclu
Moisture	BAL	9026369	N/A	2023/11/03	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT	AT	9030312	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio (SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9029156	N/A	2023/11/04	Anna Gabrielyan

Bureau Veritas ID:	XMH380 Dup
Sample ID:	BH-6 SS1
Matrix:	Soil

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	TECH	9030480	2023/11/06	2023/11/06	Jency Sara Johnson
Hexavalent Chromium in Soil by IC	IC/SPEC	9030577	2023/11/06	2023/11/07	Lusine Khachatryan

Bureau Veritas ID: XMH381 Sample ID: BH-6 SS2 Matrix: Soil

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9024160	N/A	2023/11/07	Automated Statchk
Hot Water Extractable Boron	ICP	9027882	2023/11/03	2023/11/06	Jaswinder Kaur
1,3-Dichloropropene Sum	CALC	9025211	N/A	2023/11/06	Automated Statchk
Free (WAD) Cyanide	TECH	9030462	2023/11/06	2023/11/06	Jency Sara Johnson
Conductivity	AT	9031089	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9031125	2023/11/06	2023/11/07	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/07	Agnieszka Brzuzy-Snopko
Acid Extractable Metals by ICPMS	ICP/MS	9027668	2023/11/03	2023/11/07	Daniel Teclu



#### **TEST SUMMARY**

Bureau Veritas ID: Sample ID:	XMH381 BH-6 SS2			Collected: Shipped:	2023/10/27
Matrix:	Soil			Received:	2023/11/01

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	9026404	N/A	2023/11/03	Ibadat Preet
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT	AT	9030865	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio (SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9029156	N/A	2023/11/04	Anna Gabrielyan

Bureau Veritas ID:	XMH382
Sample ID:	BH-7 SS2A
Matrix:	Soil

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9024160	N/A	2023/11/07	Automated Statchk
Hot Water Extractable Boron	ICP	9027893	2023/11/03	2023/11/06	Jaswinder Kaur
1,3-Dichloropropene Sum	CALC	9025211	N/A	2023/11/06	Automated Statchk
Free (WAD) Cyanide	TECH	9030480	2023/11/06	2023/11/06	Jency Sara Johnson
Conductivity	AT	9031062	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9030577	2023/11/06	2023/11/07	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/06	Agnieszka Brzuzy-Snopko
Acid Extractable Metals by ICPMS	ICP/MS	9029430	2023/11/04	2023/11/07	Daniel Teclu
Moisture	BAL	9026369	N/A	2023/11/03	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT	AT	9030312	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio (SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9029156	N/A	2023/11/04	Anna Gabrielyan

Bureau Veritas ID:	XMH383
Sample ID:	BH-7 SS2B
Matrix:	Soil

Collected: 2023/10/27 Shipped: Received: 2023/11/01

 Collected:
 2023/10/27

 Shipped:
 2023/11/01

 Received:
 2023/11/01

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9024160	N/A	2023/11/07	Automated Statchk
Hot Water Extractable Boron	ICP	9027893	2023/11/03	2023/11/06	Jaswinder Kaur
1,3-Dichloropropene Sum	CALC	9025211	N/A	2023/11/06	Automated Statchk
Free (WAD) Cyanide	TECH	9030480	2023/11/06	2023/11/06	Jency Sara Johnson
Conductivity	AT	9031062	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9030577	2023/11/06	2023/11/07	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/07	Agnieszka Brzuzy-Snopko
Acid Extractable Metals by ICPMS	ICP/MS	9029430	2023/11/04	2023/11/07	Daniel Teclu
Moisture	BAL	9026369	N/A	2023/11/03	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT	AT	9030312	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio (SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9029156	N/A	2023/11/04	Anna Gabrielyan



#### **TEST SUMMARY**

Bureau Veritas ID: Sample ID:	XMH384 BH-8 AS3					Collected: Shipped:	2023/10/27
Matrix:	Soil					Received:	2023/11/01
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	

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Methylnaphthalene Sum	CALC	9024160	N/A	2023/11/07	Automated Statchk
Hot Water Extractable Boron	ICP	9030355	2023/11/06	2023/11/06	Jaswinder Kaur
1,3-Dichloropropene Sum	CALC	9025211	N/A	2023/11/06	Automated Statchk
Free (WAD) Cyanide	TECH	9030480	2023/11/06	2023/11/06	Jency Sara Johnson
Conductivity	AT	9031062	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9030577	2023/11/06	2023/11/07	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/07	Agnieszka Brzuzy-Snopko
F4G (CCME Hydrocarbons Gravimetric)	BAL	9038445	2023/11/09	2023/11/09	Rashmi Dubey
Acid Extractable Metals by ICPMS	ICP/MS	9029430	2023/11/04	2023/11/07	Daniel Teclu
Moisture	BAL	9026369	N/A	2023/11/03	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT	AT	9030312	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio (SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9029156	N/A	2023/11/04	Anna Gabrielyan

Bureau Veritas ID: XMH385 Sample ID: BH-9 AS1 Matrix: Soil 
 Collected:
 2023/10/26

 Shipped:
 2023/11/01

 Received:
 2023/11/01

**Collected:** 2023/10/26

**Received:** 2023/11/01

Shipped:

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9024160	N/A	2023/11/07	Automated Statchk
Hot Water Extractable Boron	ICP	9030355	2023/11/06	2023/11/06	Jaswinder Kaur
1,3-Dichloropropene Sum	CALC	9025211	N/A	2023/11/07	Automated Statchk
Free (WAD) Cyanide	TECH	9030462	2023/11/06	2023/11/06	Jency Sara Johnson
Conductivity	AT	9031089	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9031125	2023/11/06	2023/11/07	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/06	Agnieszka Brzuzy-Snopko
F4G (CCME Hydrocarbons Gravimetric)	BAL	9038445	2023/11/09	2023/11/09	Rashmi Dubey
Acid Extractable Metals by ICPMS	ICP/MS	9027668	2023/11/03	2023/11/07	Daniel Teclu
Moisture	BAL	9026404	N/A	2023/11/03	Ibadat Preet
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT	AT	9030865	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio (SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9029156	N/A	2023/11/06	Anna Gabrielyan

Bureau Veritas ID:	XMH386
Sample ID:	BH-9 SS2
Matrix:	Soil

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9024160	N/A	2023/11/07	Automated Statchk
Hot Water Extractable Boron	ICP	9027893	2023/11/03	2023/11/06	Jaswinder Kaur
1,3-Dichloropropene Sum	CALC	9025211	N/A	2023/11/06	Automated Statchk
Free (WAD) Cyanide	TECH	9030480	2023/11/06	2023/11/06	Jency Sara Johnson
Conductivity	AT	9031062	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9030577	2023/11/06	2023/11/07	Lusine Khachatryan


## **TEST SUMMARY**

Bureau Veritas ID: Sample ID:	XMH386 BH-9 SS2					Collected: 2023/10/26 Shipped:
Matrix:	Soil					<b>Received:</b> 2023/11/01
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons	F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/06	Agnieszka Brzuzy-Snopko
Acid Extractable Metals b	y ICPMS	ICP/MS	9029430	2023/11/04	2023/11/07	Daniel Teclu
Moisture		BAL	9026369	N/A	2023/11/03	Joe Thomas
PAH Compounds in Soil by	y GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT		AT	9030312	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio	(SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compour	nds and F1 PHCs	GC/MSFD	9029156	N/A	2023/11/04	Anna Gabrielyan

Bureau Veritas ID: XMH387 Sample ID: BH-10 AS1 Matrix: Soil

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9024160	N/A	2023/11/07	Automated Statchk
Hot Water Extractable Boron	ICP	9030355	2023/11/06	2023/11/06	Jaswinder Kaur
1,3-Dichloropropene Sum	CALC	9025211	N/A	2023/11/06	Automated Statchk
Free (WAD) Cyanide	TECH	9030480	2023/11/06	2023/11/06	Jency Sara Johnson
Conductivity	AT	9031270	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9030577	2023/11/06	2023/11/07	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/07	Agnieszka Brzuzy-Snopko
F4G (CCME Hydrocarbons Gravimetric)	BAL	9038445	2023/11/09	2023/11/09	Rashmi Dubey
Acid Extractable Metals by ICPMS	ICP/MS	9029438	2023/11/04	2023/11/06	Japneet Gill
Moisture	BAL	9026369	N/A	2023/11/03	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT	AT	9030901	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio (SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9029156	N/A	2023/11/04	Anna Gabrielyan

Bureau Veritas ID: XMH388 Sample ID: BH-10 SS2 Matrix: Soil Collected: 2023/10/26 Shipped: Received: 2023/11/01

**Collected:** 2023/10/26

Received: 2023/11/01

Shipped:

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9025209	N/A	2023/11/07	Automated Statchk
Hot Water Extractable Boron	ICP	9030369	2023/11/06	2023/11/06	Medhat Nasr
1,3-Dichloropropene Sum	CALC	9025211	N/A	2023/11/07	Automated Statchk
Free (WAD) Cyanide	TECH	9030480	2023/11/06	2023/11/06	Jency Sara Johnson
Conductivity	AT	9031270	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9030577	2023/11/06	2023/11/07	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/07	Agnieszka Brzuzy-Snopko
Acid Extractable Metals by ICPMS	ICP/MS	9029438	2023/11/04	2023/11/06	Japneet Gill
Moisture	BAL	9026369	N/A	2023/11/03	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT	AT	9030901	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio (SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9029156	N/A	2023/11/06	Anna Gabrielyan



## **TEST SUMMARY**

Bureau Veritas ID: Sample ID: Matrix:	XMH388 Dup BH-10 SS2 Soil					Collected: 2023/10/26 Shipped: Received: 2023/11/01	
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Hot Water Extractable Bord	on	ICP	9030369	2023/11/06	2023/11/06	Medhat Nasr	
Bureau Veritas ID: Sample ID: Matrix:	XMH389 BH-11 SS1 Soil					Collected: 2023/10/30 Shipped: Received: 2023/11/01	
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Methylnaphthalene Sum		CALC	9025209	N/A	2023/11/07	Automated Statchk	
Hot Water Extractable Bord	วท	ICP	9027893	2023/11/03	2023/11/06	Jaswinder Kaur	
1,3-Dichloropropene Sum		CALC	9025211	N/A	2023/11/06	Automated Statchk	
Free (WAD) Cyanide		TECH	9030480	2023/11/06	2023/11/06	Jency Sara Johnson	
Conductivity		AT	9031062	2023/11/06	2023/11/06	Kien Tran	
Hexavalent Chromium in So	oil by IC	IC/SPEC	9030577	2023/11/06	2023/11/07	Lusine Khachatryan	
Petroleum Hydrocarbons F	2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/07	Agnieszka Brzuzy-Snopko	
Acid Extractable Metals by	ICPMS	ICP/MS	9029430	2023/11/04	2023/11/07	Daniel Teclu	
Moisture		BAL	9026369	N/A	2023/11/03	Joe Thomas	
PAH Compounds in Soil by	GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin	
pH CaCl2 EXTRACT		AT	9030312	2023/11/06	2023/11/06	Gurparteek KAUR	
Sodium Adsorption Ratio (S	SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk	
Volatile Organic Compound	ds and F1 PHCs	GC/MSFD	9029156	N/A	2023/11/04	Anna Gabrielyan	
Bureau Veritas ID: Sample ID: Matrix: Test Description	XMH390 BH-11 SS2 Soil	Instrumentation	Batch	Extracted	Date Analvzed	Collected: 2023/10/30 Shipped: Received: 2023/11/01	
Methylnaphthalene Sum		CALC	9025209	N/A	2023/11/07	Automated Statchk	
Hot Water Extractable Bord	on	ICP	9027893	2023/11/03	2023/11/06	Jaswinder Kaur	
1,3-Dichloropropene Sum	#	CALC	9025211	N/A	2023/11/07	Automated Statchk	
Free (WAD) Cyanide		TECH	9030480	2023/11/06	2023/11/06	Jency Sara Johnson	
Conductivity		AT	9031062	2023/11/06	2023/11/06	Kien Tran	
Hexavalent Chromium in So	oil by IC	IC/SPEC	9030577	2023/11/06	2023/11/07	Lusine Khachatryan	
Petroleum Hydrocarbons F	2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/07	Agnieszka Brzuzy-Snopko	
Acid Extractable Metals by	ICPMS	ICP/MS	9029430	2023/11/04	2023/11/07	Daniel Teclu	
Moisture		BAL	9026369	N/A	2023/11/03	Joe Thomas	
PAH Compounds in Soil by	GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin	
pH CaCl2 EXTRACT	, , ,	AT	9030312	2023/11/06	2023/11/06	Gurparteek KAUR	
Sodium Adsorption Ratio (S	SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk	
Volatile Organic Compound	ds and F1 PHCs	GC/MSFD	9029156	N/A	2023/11/06	Anna Gabrielyan	
Bureau Veritas ID: Sample ID: Matrix:	XMH391 DUP 1 Soil					Collected: 2023/10/26 Shipped: Received: 2023/11/01	

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9025209	N/A	2023/11/07	Automated Statchk



## **TEST SUMMARY**

Bureau Veritas ID: Sample ID: Matrix:	XMH391 DUP 1 Soil					Collected: 2023/10/26 Shipped: Received: 2023/11/01	
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Hot Water Extractable Bo	ron	ICP	9027882	2023/11/03	2023/11/06	Jaswinder Kaur	
1,3-Dichloropropene Sum		CALC	9025211	N/A	2023/11/07	Automated Statchk	

Free (WAD) Cyanide	TECH	9030462	2023/11/06	2023/11/06	Jency Sara Johnson
Conductivity	AT	9031089	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9031125	2023/11/06	2023/11/07	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/07	Agnieszka Brzuzy-Snopko
Acid Extractable Metals by ICPMS	ICP/MS	9027668	2023/11/03	2023/11/07	Daniel Teclu
Moisture	BAL	9026404	N/A	2023/11/03	Ibadat Preet
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT	AT	9030865	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio (SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9029156	N/A	2023/11/06	Anna Gabrielvan

Bureau Veritas ID: XMH392 Sample ID: DUP 3 Matrix: Soil Collected: 2023/10/30 Shipped: Received: 2023/11/01

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9025209	N/A	2023/11/07	Automated Statchk
Hot Water Extractable Boron	ICP	9030355	2023/11/06	2023/11/06	Jaswinder Kaur
1,3-Dichloropropene Sum	CALC	9025211	N/A	2023/11/07	Automated Statchk
Free (WAD) Cyanide	TECH	9030480	2023/11/06	2023/11/06	Jency Sara Johnson
Conductivity	AT	9031270	2023/11/06	2023/11/06	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	9030577	2023/11/06	2023/11/07	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	9030166	2023/11/06	2023/11/07	Agnieszka Brzuzy-Snopko
Acid Extractable Metals by ICPMS	ICP/MS	9029438	2023/11/04	2023/11/06	Japneet Gill
Moisture	BAL	9026369	N/A	2023/11/03	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	9029886	2023/11/05	2023/11/05	Joan Jin
pH CaCl2 EXTRACT	AT	9030901	2023/11/06	2023/11/06	Gurparteek KAUR
Sodium Adsorption Ratio (SAR)	CALC/MET	9024979	N/A	2023/11/07	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9029156	N/A	2023/11/06	Anna Gabrielyan



## **GENERAL COMMENTS**

Each te	mperature is the ave	rage of up to thr	ee cooler temperatures taken at receipt
[	Package 1	14.0°C	
	Package 2	10.0°C	
Sample	XMH380 [BH-6 SS1]	: F2-F4 Analysis:	Detection limit was raised due to background interference.
Sample	XMH383 [BH-7 SS2B	] : F2-F4 Analysi	s: Detection limit was raised due to background interference.
Sample	XMH384 [BH-8 AS3]	: PAH Anaylsis:	Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
Sample	XMH385 [BH-9 AS1]	: PAH Anaylsis:	Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
Sample	XMH387 [BH-10 AS1	] : PAH Anaylsis:	Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
Results	relate only to the ite	ems tested.	



# QUALITY ASSURANCE REPORT

exp Services Inc Client Project #: OTT-23002538-A0 Sampler Initials: LW

			Matrix Spike		SPIKED BLANK		Method Blank		RPI	þ
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9029156	4-Bromofluorobenzene	2023/11/04	95	60 - 140	71	60 - 140	131	%		
9029156	D10-o-Xylene	2023/11/04	96	60 - 130	91	60 - 130	121	%		
9029156	D4-1,2-Dichloroethane	2023/11/04	100	60 - 140	98	60 - 140	99	%		
9029156	D8-Toluene	2023/11/04	101	60 - 140	103	60 - 140	97	%		
9029886	D10-Anthracene	2023/11/05	98	50 - 130	101	50 - 130	122	%		
9029886	D14-Terphenyl (FS)	2023/11/05	97	50 - 130	100	50 - 130	106	%		
9029886	D8-Acenaphthylene	2023/11/05	89	50 - 130	89	50 - 130	86	%		
9029936	4-Bromofluorobenzene	2023/11/06	100	60 - 140	100	60 - 140	99	%		
9029936	D10-o-Xylene	2023/11/06	95	60 - 130	99	60 - 130	103	%		
9029936	D4-1,2-Dichloroethane	2023/11/06	94	60 - 140	96	60 - 140	97	%		
9029936	D8-Toluene	2023/11/06	101	60 - 140	100	60 - 140	99	%		
9030166	o-Terphenyl	2023/11/06	89	60 - 130	93	60 - 130	98	%		
9026369	Moisture	2023/11/03							1.8	20
9026404	Moisture	2023/11/03							1.1	20
9027668	Acid Extractable Antimony (Sb)	2023/11/07	94	75 - 125	101	80 - 120	<0.20	ug/g	8.3	30
9027668	Acid Extractable Arsenic (As)	2023/11/07	96	75 - 125	99	80 - 120	<1.0	ug/g	1.2	30
9027668	Acid Extractable Barium (Ba)	2023/11/07	NC	75 - 125	95	80 - 120	<0.50	ug/g	1.8	30
9027668	Acid Extractable Beryllium (Be)	2023/11/07	93	75 - 125	96	80 - 120	<0.20	ug/g	15	30
9027668	Acid Extractable Boron (B)	2023/11/07	88	75 - 125	94	80 - 120	<5.0	ug/g	NC	30
9027668	Acid Extractable Cadmium (Cd)	2023/11/07	96	75 - 125	99	80 - 120	<0.10	ug/g	7.0	30
9027668	Acid Extractable Chromium (Cr)	2023/11/07	98	75 - 125	97	80 - 120	<1.0	ug/g	4.9	30
9027668	Acid Extractable Cobalt (Co)	2023/11/07	94	75 - 125	99	80 - 120	<0.10	ug/g	4.7	30
9027668	Acid Extractable Copper (Cu)	2023/11/07	92	75 - 125	97	80 - 120	<0.50	ug/g	4.5	30
9027668	Acid Extractable Lead (Pb)	2023/11/07	NC	75 - 125	99	80 - 120	<1.0	ug/g	1.0	30
9027668	Acid Extractable Mercury (Hg)	2023/11/07	96	75 - 125	100	80 - 120	<0.050	ug/g	12	30
9027668	Acid Extractable Molybdenum (Mo)	2023/11/07	94	75 - 125	98	80 - 120	<0.50	ug/g	2.3	30
9027668	Acid Extractable Nickel (Ni)	2023/11/07	97	75 - 125	99	80 - 120	<0.50	ug/g	4.1	30
9027668	Acid Extractable Selenium (Se)	2023/11/07	96	75 - 125	101	80 - 120	<0.50	ug/g	NC	30
9027668	Acid Extractable Silver (Ag)	2023/11/07	97	75 - 125	101	80 - 120	<0.20	ug/g	0.42	30
9027668	Acid Extractable Thallium (TI)	2023/11/07	96	75 - 125	101	80 - 120	<0.050	ug/g	0.34	30
9027668	Acid Extractable Uranium (U)	2023/11/07	99	75 - 125	102	80 - 120	< 0.050	ug/g	0.0027	30
9027668	Acid Extractable Vanadium (V)	2023/11/07	96	75 - 125	95	80 - 120	<5.0	ug/g	4.1	30

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



exp Services Inc Client Project #: OTT-23002538-A0 Sampler Initials: LW

			Matrix Spike		SPIKED BLANK		Method Blank		RPI	)
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9027668	Acid Extractable Zinc (Zn)	2023/11/07	NC	75 - 125	99	80 - 120	<5.0	ug/g	4.3	30
9027882	Hot Water Ext. Boron (B)	2023/11/06	118	75 - 125	101	75 - 125	<0.050	ug/g	3.1	40
9027893	Hot Water Ext. Boron (B)	2023/11/06	112	75 - 125	104	75 - 125	<0.050	ug/g	30	40
9029156	1,1,1,2-Tetrachloroethane	2023/11/04	99	60 - 140	89	60 - 130	<0.040	ug/g	NC	50
9029156	1,1,1-Trichloroethane	2023/11/04	103	60 - 140	102	60 - 130	<0.040	ug/g	NC	50
9029156	1,1,2,2-Tetrachloroethane	2023/11/04	96	60 - 140	71	60 - 130	<0.040	ug/g	NC	50
9029156	1,1,2-Trichloroethane	2023/11/04	98	60 - 140	93	60 - 130	<0.040	ug/g	NC	50
9029156	1,1-Dichloroethane	2023/11/04	105	60 - 140	106	60 - 130	<0.040	ug/g	NC	50
9029156	1,1-Dichloroethylene	2023/11/04	110	60 - 140	114	60 - 130	<0.040	ug/g	NC	50
9029156	1,2-Dichlorobenzene	2023/11/04	100	60 - 140	98	60 - 130	<0.040	ug/g	NC	50
9029156	1,2-Dichloroethane	2023/11/04	92	60 - 140	89	60 - 130	<0.049	ug/g	NC	50
9029156	1,2-Dichloropropane	2023/11/04	98	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
9029156	1,3-Dichlorobenzene	2023/11/04	105	60 - 140	103	60 - 130	<0.040	ug/g	NC	50
9029156	1,4-Dichlorobenzene	2023/11/04	111	60 - 140	109	60 - 130	<0.040	ug/g	NC	50
9029156	Acetone (2-Propanone)	2023/11/04	95	60 - 140	98	60 - 140	<0.49	ug/g	NC	50
9029156	Benzene	2023/11/04	93	60 - 140	92	60 - 130	<0.0060	ug/g	NC	50
9029156	Bromodichloromethane	2023/11/04	103	60 - 140	118	60 - 130	<0.040	ug/g	NC	50
9029156	Bromoform	2023/11/04	82	60 - 140	60	60 - 130	<0.040	ug/g	NC	50
9029156	Bromomethane	2023/11/04	105	60 - 140	102	60 - 140	<0.040	ug/g	NC	50
9029156	Carbon Tetrachloride	2023/11/04	101	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
9029156	Chlorobenzene	2023/11/04	99	60 - 140	97	60 - 130	<0.040	ug/g	NC	50
9029156	Chloroform	2023/11/04	105	60 - 140	102	60 - 130	<0.040	ug/g	NC	50
9029156	cis-1,2-Dichloroethylene	2023/11/04	101	60 - 140	98	60 - 130	<0.040	ug/g	NC	50
9029156	cis-1,3-Dichloropropene	2023/11/04	93	60 - 140	109	60 - 130	<0.030	ug/g	NC	50
9029156	Dibromochloromethane	2023/11/04	93	60 - 140	84	60 - 130	<0.040	ug/g	NC	50
9029156	Dichlorodifluoromethane (FREON 12)	2023/11/04	116	60 - 140	114	60 - 140	<0.040	ug/g	NC	50
9029156	Ethylbenzene	2023/11/04	92	60 - 140	84	60 - 130	<0.010	ug/g	NC	50
9029156	Ethylene Dibromide	2023/11/04	94	60 - 140	88	60 - 130	<0.040	ug/g	NC	50
9029156	F1 (C6-C10) - BTEX	2023/11/04					<10	ug/g	NC	30
9029156	F1 (C6-C10)	2023/11/04	95	60 - 140	95	80 - 120	<10	ug/g	NC	30
9029156	Hexane	2023/11/04	101	60 - 140	108	60 - 130	<0.040	ug/g	NC	50
9029156	Methyl Ethyl Ketone (2-Butanone)	2023/11/04	92	60 - 140	90	60 - 140	<0.40	ug/g	NC	50



exp Services Inc Client Project #: OTT-23002538-A0 Sampler Initials: LW

			Matrix	Spike	SPIKED BLANK		ANK Method Blank		RPE	)
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9029156	Methyl Isobutyl Ketone	2023/11/04	88	60 - 140	109	60 - 130	<0.40	ug/g	NC	50
9029156	Methyl t-butyl ether (MTBE)	2023/11/04	96	60 - 140	110	60 - 130	<0.040	ug/g	NC	50
9029156	Methylene Chloride(Dichloromethane)	2023/11/04	103	60 - 140	112	60 - 130	<0.049	ug/g	NC	50
9029156	o-Xylene	2023/11/04	86	60 - 140	70	60 - 130	<0.020	ug/g	NC	50
9029156	p+m-Xylene	2023/11/04	97	60 - 140	89	60 - 130	<0.020	ug/g	NC	50
9029156	Styrene	2023/11/04	99	60 - 140	80	60 - 130	<0.040	ug/g	NC	50
9029156	Tetrachloroethylene	2023/11/04	99	60 - 140	101	60 - 130	<0.040	ug/g	NC	50
9029156	Toluene	2023/11/04	94	60 - 140	86	60 - 130	<0.020	ug/g	NC	50
9029156	Total Xylenes	2023/11/04					<0.020	ug/g	NC	50
9029156	trans-1,2-Dichloroethylene	2023/11/04	102	60 - 140	114	60 - 130	<0.040	ug/g	NC	50
9029156	trans-1,3-Dichloropropene	2023/11/04	94	60 - 140	89	60 - 130	<0.040	ug/g	NC	50
9029156	Trichloroethylene	2023/11/04	100	60 - 140	100	60 - 130	<0.010	ug/g	NC	50
9029156	Trichlorofluoromethane (FREON 11)	2023/11/04	109	60 - 140	109	60 - 130	<0.040	ug/g	NC	50
9029156	Vinyl Chloride	2023/11/04	110	60 - 140	109	60 - 130	<0.019	ug/g	NC	50
9029430	Acid Extractable Antimony (Sb)	2023/11/07	88	75 - 125	100	80 - 120	<0.20	ug/g	3.9	30
9029430	Acid Extractable Arsenic (As)	2023/11/07	92	75 - 125	97	80 - 120	<1.0	ug/g	0.16	30
9029430	Acid Extractable Barium (Ba)	2023/11/07	NC	75 - 125	101	80 - 120	<0.50	ug/g	2.9	30
9029430	Acid Extractable Beryllium (Be)	2023/11/07	88	75 - 125	94	80 - 120	<0.20	ug/g	3.6	30
9029430	Acid Extractable Boron (B)	2023/11/07	80	75 - 125	90	80 - 120	<5.0	ug/g	0.59	30
9029430	Acid Extractable Cadmium (Cd)	2023/11/07	94	75 - 125	97	80 - 120	<0.10	ug/g	6.2	30
9029430	Acid Extractable Chromium (Cr)	2023/11/07	NC	75 - 125	97	80 - 120	<1.0	ug/g	0.13	30
9029430	Acid Extractable Cobalt (Co)	2023/11/07	88	75 - 125	97	80 - 120	<0.10	ug/g	2.4	30
9029430	Acid Extractable Copper (Cu)	2023/11/07	NC	75 - 125	96	80 - 120	<0.50	ug/g	6.5	30
9029430	Acid Extractable Lead (Pb)	2023/11/07	NC	75 - 125	98	80 - 120	<1.0	ug/g	0.73	30
9029430	Acid Extractable Mercury (Hg)	2023/11/07	90	75 - 125	99	80 - 120	<0.050	ug/g	5.6	30
9029430	Acid Extractable Molybdenum (Mo)	2023/11/07	93	75 - 125	96	80 - 120	<0.50	ug/g	2.4	30
9029430	Acid Extractable Nickel (Ni)	2023/11/07	87	75 - 125	98	80 - 120	<0.50	ug/g	5.8	30
9029430	Acid Extractable Selenium (Se)	2023/11/07	90	75 - 125	99	80 - 120	<0.50	ug/g	NC	30
9029430	Acid Extractable Silver (Ag)	2023/11/07	94	75 - 125	101	80 - 120	<0.20	ug/g	1.0	30
9029430	Acid Extractable Thallium (TI)	2023/11/07	90	75 - 125	99	80 - 120	<0.050	ug/g	3.3	30
9029430	Acid Extractable Uranium (U)	2023/11/07	93	75 - 125	100	80 - 120	<0.050	ug/g	0.21	30
9029430	Acid Extractable Vanadium (V)	2023/11/07	NC	75 - 125	96	80 - 120	<5.0	ug/g	1.5	30



exp Services Inc Client Project #: OTT-23002538-A0 Sampler Initials: LW

		Matrix Spike		SPIKED	BLANK	Method Blank		RPI	2	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9029430	Acid Extractable Zinc (Zn)	2023/11/07	NC	75 - 125	99	80 - 120	<5.0	ug/g	1.3	30
9029438	Acid Extractable Antimony (Sb)	2023/11/06	102	75 - 125	99	80 - 120	<0.20	ug/g	NC	30
9029438	Acid Extractable Arsenic (As)	2023/11/06	103	75 - 125	100	80 - 120	<1.0	ug/g	0.75	30
9029438	Acid Extractable Barium (Ba)	2023/11/06	102	75 - 125	102	80 - 120	<0.50	ug/g	1.6	30
9029438	Acid Extractable Beryllium (Be)	2023/11/06	106	75 - 125	103	80 - 120	<0.20	ug/g	NC	30
9029438	Acid Extractable Boron (B)	2023/11/06	104	75 - 125	106	80 - 120	<5.0	ug/g	13	30
9029438	Acid Extractable Cadmium (Cd)	2023/11/06	102	75 - 125	98	80 - 120	<0.10	ug/g	NC	30
9029438	Acid Extractable Chromium (Cr)	2023/11/06	95	75 - 125	95	80 - 120	<1.0	ug/g	4.5	30
9029438	Acid Extractable Cobalt (Co)	2023/11/06	96	75 - 125	94	80 - 120	<0.10	ug/g	3.4	30
9029438	Acid Extractable Copper (Cu)	2023/11/06	99	75 - 125	99	80 - 120	<0.50	ug/g	3.1	30
9029438	Acid Extractable Lead (Pb)	2023/11/06	97	75 - 125	97	80 - 120	<1.0	ug/g	3.3	30
9029438	Acid Extractable Mercury (Hg)	2023/11/06	98	75 - 125	99	80 - 120	<0.050	ug/g	NC	30
9029438	Acid Extractable Molybdenum (Mo)	2023/11/06	99	75 - 125	94	80 - 120	<0.50	ug/g	NC	30
9029438	Acid Extractable Nickel (Ni)	2023/11/06	100	75 - 125	99	80 - 120	<0.50	ug/g	5.4	30
9029438	Acid Extractable Selenium (Se)	2023/11/06	104	75 - 125	100	80 - 120	<0.50	ug/g	NC	30
9029438	Acid Extractable Silver (Ag)	2023/11/06	99	75 - 125	96	80 - 120	<0.20	ug/g	NC	30
9029438	Acid Extractable Thallium (TI)	2023/11/06	101	75 - 125	100	80 - 120	<0.050	ug/g	18	30
9029438	Acid Extractable Uranium (U)	2023/11/06	97	75 - 125	95	80 - 120	<0.050	ug/g	1.5	30
9029438	Acid Extractable Vanadium (V)	2023/11/06	97	75 - 125	95	80 - 120	<5.0	ug/g	3.9	30
9029438	Acid Extractable Zinc (Zn)	2023/11/06	98	75 - 125	98	80 - 120	<5.0	ug/g	4.2	30
9029886	1-Methylnaphthalene	2023/11/05	101	50 - 130	102	50 - 130	<0.0050	ug/g	NC	40
9029886	2-Methylnaphthalene	2023/11/05	87	50 - 130	84	50 - 130	<0.0050	ug/g	NC	40
9029886	Acenaphthene	2023/11/05	101	50 - 130	101	50 - 130	<0.0050	ug/g	NC	40
9029886	Acenaphthylene	2023/11/05	96	50 - 130	95	50 - 130	<0.0050	ug/g	NC	40
9029886	Anthracene	2023/11/05	107	50 - 130	103	50 - 130	<0.0050	ug/g	NC	40
9029886	Benzo(a)anthracene	2023/11/05	100	50 - 130	99	50 - 130	<0.0050	ug/g	NC	40
9029886	Benzo(a)pyrene	2023/11/05	87	50 - 130	90	50 - 130	<0.0050	ug/g	NC	40
9029886	Benzo(b/j)fluoranthene	2023/11/05	104	50 - 130	106	50 - 130	<0.0050	ug/g	NC	40
9029886	Benzo(g,h,i)perylene	2023/11/05	80	50 - 130	87	50 - 130	<0.0050	ug/g	NC	40
9029886	Benzo(k)fluoranthene	2023/11/05	105	50 - 130	109	50 - 130	<0.0050	ug/g	NC	40
9029886	Chrysene	2023/11/05	101	50 - 130	101	50 - 130	<0.0050	ug/g	NC	40
9029886	Dibenzo(a,h)anthracene	2023/11/05	83	50 - 130	93	50 - 130	<0.0050	ug/g	NC	40

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



exp Services Inc Client Project #: OTT-23002538-A0 Sampler Initials: LW

			Matrix	Spike	SPIKED BLANK		Method Blank		RPI	2
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9029886	Fluoranthene	2023/11/05	104	50 - 130	107	50 - 130	<0.0050	ug/g	NC	40
9029886	Fluorene	2023/11/05	102	50 - 130	102	50 - 130	<0.0050	ug/g	NC	40
9029886	Indeno(1,2,3-cd)pyrene	2023/11/05	83	50 - 130	91	50 - 130	<0.0050	ug/g	NC	40
9029886	Naphthalene	2023/11/05	92	50 - 130	94	50 - 130	<0.0050	ug/g	NC	40
9029886	Phenanthrene	2023/11/05	96	50 - 130	101	50 - 130	<0.0050	ug/g	NC	40
9029886	Pyrene	2023/11/05	110	50 - 130	113	50 - 130	<0.0050	ug/g	NC	40
9029936	1,1,1,2-Tetrachloroethane	2023/11/06	97	60 - 140	99	60 - 130	<0.040	ug/g	NC	50
9029936	1,1,1-Trichloroethane	2023/11/06	96	60 - 140	99	60 - 130	<0.040	ug/g	NC	50
9029936	1,1,2,2-Tetrachloroethane	2023/11/06	97	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
9029936	1,1,2-Trichloroethane	2023/11/06	92	60 - 140	94	60 - 130	<0.040	ug/g	NC	50
9029936	1,1-Dichloroethane	2023/11/06	97	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
9029936	1,1-Dichloroethylene	2023/11/06	96	60 - 140	98	60 - 130	<0.040	ug/g	NC	50
9029936	1,2-Dichlorobenzene	2023/11/06	94	60 - 140	94	60 - 130	<0.040	ug/g	NC	50
9029936	1,2-Dichloroethane	2023/11/06	87	60 - 140	90	60 - 130	<0.049	ug/g	NC	50
9029936	1,2-Dichloropropane	2023/11/06	92	60 - 140	96	60 - 130	<0.040	ug/g	NC	50
9029936	1,3-Dichlorobenzene	2023/11/06	99	60 - 140	96	60 - 130	<0.040	ug/g	NC	50
9029936	1,4-Dichlorobenzene	2023/11/06	106	60 - 140	103	60 - 130	<0.040	ug/g	NC	50
9029936	Acetone (2-Propanone)	2023/11/06	85	60 - 140	88	60 - 140	<0.49	ug/g	NC	50
9029936	Benzene	2023/11/06	88	60 - 140	92	60 - 130	<0.0060	ug/g	NC	50
9029936	Bromodichloromethane	2023/11/06	99	60 - 140	102	60 - 130	<0.040	ug/g	NC	50
9029936	Bromoform	2023/11/06	82	60 - 140	85	60 - 130	<0.040	ug/g	NC	50
9029936	Bromomethane	2023/11/06	91	60 - 140	95	60 - 140	<0.040	ug/g	NC	50
9029936	Carbon Tetrachloride	2023/11/06	93	60 - 140	95	60 - 130	<0.040	ug/g	NC	50
9029936	Chlorobenzene	2023/11/06	98	60 - 140	99	60 - 130	<0.040	ug/g	NC	50
9029936	Chloroform	2023/11/06	99	60 - 140	102	60 - 130	<0.040	ug/g	NC	50
9029936	cis-1,2-Dichloroethylene	2023/11/06	96	60 - 140	98	60 - 130	<0.040	ug/g	NC	50
9029936	cis-1,3-Dichloropropene	2023/11/06	78	60 - 140	83	60 - 130	<0.030	ug/g	NC	50
9029936	Dibromochloromethane	2023/11/06	92	60 - 140	95	60 - 130	<0.040	ug/g	NC	50
9029936	Dichlorodifluoromethane (FREON 12)	2023/11/06	82	60 - 140	86	60 - 140	<0.040	ug/g	NC	50
9029936	Ethylbenzene	2023/11/06	90	60 - 140	90	60 - 130	<0.010	ug/g	NC	50
9029936	Ethylene Dibromide	2023/11/06	93	60 - 140	97	60 - 130	<0.040	ug/g	NC	50
9029936	F1 (C6-C10) - BTEX	2023/11/06					<10	ug/g	NC	30



exp Services Inc Client Project #: OTT-23002538-A0 Sampler Initials: LW

			Matrix	Spike	SPIKED BLANK		Method Blank		RPE	)
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9029936	F1 (C6-C10)	2023/11/06	96	60 - 140	93	80 - 120	<10	ug/g	NC	30
9029936	Hexane	2023/11/06	84	60 - 140	92	60 - 130	<0.040	ug/g	NC	50
9029936	Methyl Ethyl Ketone (2-Butanone)	2023/11/06	87	60 - 140	90	60 - 140	<0.40	ug/g	NC	50
9029936	Methyl Isobutyl Ketone	2023/11/06	82	60 - 140	85	60 - 130	<0.40	ug/g	NC	50
9029936	Methyl t-butyl ether (MTBE)	2023/11/06	92	60 - 140	95	60 - 130	<0.040	ug/g	NC	50
9029936	Methylene Chloride(Dichloromethane)	2023/11/06	93	60 - 140	97	60 - 130	<0.049	ug/g	NC	50
9029936	o-Xylene	2023/11/06	80	60 - 140	81	60 - 130	<0.020	ug/g	NC	50
9029936	p+m-Xylene	2023/11/06	91	60 - 140	90	60 - 130	<0.020	ug/g	NC	50
9029936	Styrene	2023/11/06	96	60 - 140	97	60 - 130	<0.040	ug/g	NC	50
9029936	Tetrachloroethylene	2023/11/06	99	60 - 140	97	60 - 130	<0.040	ug/g	NC	50
9029936	Toluene	2023/11/06	90	60 - 140	92	60 - 130	<0.020	ug/g	NC	50
9029936	Total Xylenes	2023/11/06					<0.020	ug/g	NC	50
9029936	trans-1,2-Dichloroethylene	2023/11/06	96	60 - 140	96	60 - 130	<0.040	ug/g	NC	50
9029936	trans-1,3-Dichloropropene	2023/11/06	80	60 - 140	83	60 - 130	<0.040	ug/g	NC	50
9029936	Trichloroethylene	2023/11/06	97	60 - 140	98	60 - 130	<0.010	ug/g	NC	50
9029936	Trichlorofluoromethane (FREON 11)	2023/11/06	96	60 - 140	99	60 - 130	<0.040	ug/g	NC	50
9029936	Vinyl Chloride	2023/11/06	93	60 - 140	95	60 - 130	<0.019	ug/g	NC	50
9030166	F2 (C10-C16 Hydrocarbons)	2023/11/06	92	60 - 130	95	80 - 120	<10	ug/g	NC	30
9030166	F3 (C16-C34 Hydrocarbons)	2023/11/06	92	60 - 130	96	80 - 120	<50	ug/g	NC	30
9030166	F4 (C34-C50 Hydrocarbons)	2023/11/06	94	60 - 130	98	80 - 120	<50	ug/g	NC	30
9030312	Available (CaCl2) pH	2023/11/06			100	97 - 103			0.24	N/A
9030355	Hot Water Ext. Boron (B)	2023/11/06	112	75 - 125	101	75 - 125	<0.050	ug/g	19	40
9030369	Hot Water Ext. Boron (B)	2023/11/06	104	75 - 125	102	75 - 125	<0.050	ug/g	6.2	40
9030462	WAD Cyanide (Free)	2023/11/06	100	75 - 125	101	80 - 120	<0.01	ug/g	NC	35
9030480	WAD Cyanide (Free)	2023/11/06	99	75 - 125	104	80 - 120	<0.01	ug/g	NC	35
9030577	Chromium (VI)	2023/11/07	91	70 - 130	94	80 - 120	<0.18	ug/g	NC	35
9030865	Available (CaCl2) pH	2023/11/06			101	97 - 103			1.4	N/A
9030901	Available (CaCl2) pH	2023/11/06			100	97 - 103			0.96	N/A
9031062	Conductivity	2023/11/06			104	90 - 110	<0.002	mS/cm	2.5	10
9031089	Conductivity	2023/11/06			103	90 - 110	<0.002	mS/cm	1.1	10
9031125	Chromium (VI)	2023/11/07	92	70 - 130	92	80 - 120	<0.18	ug/g	NC	35
9031270	Conductivity	2023/11/06			103	90 - 110	<0.002	mS/cm	0.39	10



exp Services Inc Client Project #: OTT-23002538-A0 Sampler Initials: LW

			Matrix Spike SPIKED BLANK		BLANK	Method B	Blank	RPE	)	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9032757	WAD Cyanide (Free)	2023/11/07	91	75 - 125	102	80 - 120	<0.01	ug/g	NC	35
9038445	F4G-sg (Grav. Heavy Hydrocarbons)	2023/11/09	95	65 - 135	102	65 - 135	<100	ug/g	11	50

N/A = Not Applicable

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

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

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

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

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

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

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



### VALIDATION SIGNATURE PAGE

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

Anastassia Hamanov, Scientific Specialist

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

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MOE REG	ULATED DRINKING	WATER OR WA	TER INTENDED	FOR HUMAN C	ONSUMPTION	MUST DE	pilom	_			Sampled By						C#794485-11-01		Katherin
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g Table	_лановыя рдногкае	PWQO	Reg 406 Tabl	e			ered ts / H	S Col								Job Specifi	c Rush TAT (if applie	for details.	mission	
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1110	the Wells		1.1			See	191-	,								see.	Pil	Present		

exp Services Inc Client Project #: OTT-23002538-A0 Client ID: BH-1 SS2 Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

#### FID2 - B:Flame Ionization Detector Signal #2 Translated from ChemStation FID2B.CH Signal File 062B1501.D (9030166:XIMH375-01 1*) esuods 9.5-9.25-F3 (C16-C34) 9.25-9-8.75-8.5 8.25 8. 7.75 7.5 7.25 7.25 6.75 6.5 6.25-6-5.75-5.5-5.25-5-4.75-4.5 4.25-4-3.75-3.5-3.25-3-2.75-2.5-2.25 2-1.75-1.5-F3B (C22-C34) 1.25 F4 (C34-C50) F2 (C10-C16) 1 0.75 0.5 0.25 0+ 1 1.5 2 2.5 3 3.5 4 4.5 7.5 10 5 5.5 6.5 7 8.5 9 9.5 11 11.5 0.5 6 8 10.5 Acquisition Time (min)

exp Services Inc Client Project #: OTT-23002538-A0 Client ID: BH-1 SS2

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



exp Services Inc Client Project #: OTT-23002538-A0 Client ID: DUP 2 Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

#### FID2 - B:Flame Ionization Detector Signal #2 Translated from ChemStation FID2B.CH Signal File 064B1701.D (9030166:XIMH376-01 1*) esuods 9.5-9.25-F3 (C16-C34) 9-8.75-8.5 8.25 8. 7.75-7.25-7.25-7.25-6.75-6.75-6.25-6.25-5.75-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.25-5.55-5.55-5.55-5.55-5.55-5.55-5.55-4.25-4-3.75-3.5-3.25-3-2.75-2.5-2.25 2-1.75-1.5-1.25 F3B (C22-C34) F4 (C34-C50) F2 (C10-C16) 1 0.75 0.5 0.25 0-1 1.5 2.5 3 3.5 4 4.5 5.5 6.5 7 7.5 9.5 10 2 5 8.5 9 11 11.5 0.5 10.5 6 8 Acquisition Time (min)

exp Services Inc Client Project #: OTT-23002538-A0 Client ID: BH-1 SS3

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



exp Services Inc Client Project #: OTT-23002538-A0 Client ID: BH-2 AS3

### Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



exp Services Inc Client Project #: OTT-23002538-A0 Client ID: BH-2 SS1

### Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



exp Services Inc Client Project #: OTT-23002538-A0 Client ID: BH-6 SS1

### Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



exp Services Inc Client Project #: OTT-23002538-A0 Client ID: BH-6 SS2

### Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



exp Services Inc Client Project #: OTT-23002538-A0 Client ID: BH-7 SS2A

### Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



exp Services Inc Client Project #: OTT-23002538-A0 Client ID: BH-7 SS2B

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



exp Services Inc Client Project #: OTT-23002538-A0 Client ID: BH-8 AS3

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



exp Services Inc Client Project #: OTT-23002538-A0 Client ID: BH-10 AS1

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



exp Services Inc Client Project #: OTT-23002538-A0 Client ID: BH-10 SS2

### Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



exp Services Inc Client Project #: OTT-23002538-A0 Client ID: BH-11 SS1

### Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



exp Services Inc Client Project #: OTT-23002538-A0 Client ID: BH-11 SS2

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



exp Services Inc Client Project #: OTT-23002538-A0 Client ID: DUP 1 Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

#### FID2 - B:Flame Ionization Detector Signal #2 Translated from ChemStation FID2B.CH Signal File 079B4201.D (9030166:XIMH391-01 1*) esuods 9.5-9.25-F3 (C16-C34) 9.25-9-8.75-8.5 8.25 8. 7.75 7.5 7.25 7.25 6.75 6.5 6.25-6-5.75-5.5-5.25-5-4.75-4.5 4.25-4-3.75-3.5-3.25-3-2.75-2.5-2.25 2-1.75-1.5-F3B (C22-C34) F4 [C34-C50] 1.25 F2 (C10-C16) 1 0.75 0.5 0.25 0-1 1.5 2.5 3 4 4.5 5 7.5 2 3.5 5.5 6 6.5 + 8 8.5 9 9.5 10 11 11.5 0.5 10.5 Acquisition Time (min)

exp Services Inc Client Project #: OTT-23002538-A0 Client ID: DUP 3

### Petroleum Hydrocarbons F2-F4 in Soil Chromatogram





Your Project #: OTT-23002538-A0 Your C.O.C. #: 997614-01-01

#### **Attention: Chris Kimmerly**

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

> Report Date: 2024/06/27 Report #: R8211731 Version: 1 - Final

### **CERTIFICATE OF ANALYSIS**

### BUREAU VERITAS JOB #: C4I9095

Received: 2024/06/20, 16:40

Sample Matrix: Water # Samples Received: 6

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
1,3-Dichloropropene Sum (1)	4	N/A	2024/06/26		EPA 8260C m
Petroleum Hydro. CCME F1 & BTEX in Water (1)	2	N/A	2024/06/24	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (1, 2)	1	2024/06/24	2024/06/24	CAM SOP-00316	CCME PHC-CWS m
Volatile Organic Compounds in Water (1)	4	N/A	2024/06/25	CAM SOP-00228	EPA 8260D

#### Remarks:

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

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

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

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

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

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

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

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

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

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



Your Project #: OTT-23002538-A0 Your C.O.C. #: 997614-01-01

#### **Attention: Chris Kimmerly**

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

> Report Date: 2024/06/27 Report #: R8211731 Version: 1 - Final

## **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C419095 Received: 2024/06/20, 16:40

Encryption Key

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

This report has been generated and distributed using a secure automated process.

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



# PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		ZNG101		
Sampling Data		2024/06/20		
		13:30		
COC Number		997614-01-01		
	UNITS	BH/MW-10	RDL	QC Batch
BTEX & F1 Hydrocarbons				
Benzene	ug/L	<0.20	0.20	9474999
Toluene	ug/L	<0.20	0.20	9474999
Ethylbenzene	ug/L	<0.20	0.20	9474999
o-Xylene	ug/L	<0.20	0.20	9474999
p+m-Xylene	ug/L	<0.40	0.40	9474999
Total Xylenes	ug/L	<0.40	0.40	9474999
Surrogate Recovery (%)				
1,4-Difluorobenzene	%	106		9474999
4-Bromofluorobenzene	%	88		9474999
D10-o-Xylene	%	110		9474999
D4-1,2-Dichloroethane	%	104		9474999
RDL = Reportable Detection L	imit			
QC Batch = Quality Control Ba	atch			


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

		-			-		
Bureau Veritas ID		ZNG098			ZNG098		
Sampling Date		2024/06/20			2024/06/20		
		14:20			14:20		
COC Number		997614-01-01			997614-01-01		
	UNITS	BH/MW-8	RDL	QC Batch	BH/MW-8 Lab-Dup	RDL	QC Batch
BTEX & F1 Hydrocarbons							
Benzene	ug/L	4.3	0.20	9474999	3.8	0.20	9474999
Toluene	ug/L	0.33	0.20	9474999	0.32	0.20	9474999
Ethylbenzene	ug/L	6.5	0.20	9474999	5.8	0.20	9474999
o-Xylene	ug/L	<0.20	0.20	9474999	<0.20	0.20	9474999
p+m-Xylene	ug/L	3.1	0.40	9474999	2.8	0.40	9474999
Total Xylenes	ug/L	3.1	0.40	9474999	2.8	0.40	9474999
F1 (C6-C10)	ug/L	72	25	9474999	56	25	9474999
F1 (C6-C10) - BTEX	ug/L	58	25	9474999	44	25	9474999
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	9475096			
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	9475096			
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	9475096			
Reached Baseline at C50	ug/L	Yes		9475096			
Surrogate Recovery (%)							
1,4-Difluorobenzene	%	103		9474999	104		9474999
4-Bromofluorobenzene	%	96		9474999	93		9474999
D10-o-Xylene	%	126		9474999	114		9474999
D4-1,2-Dichloroethane	%	108		9474999	108		9474999
o-Terphenyl	%	103		9475096			
RDL = Reportable Detection I	imit						
QC Batch = Quality Control B	atch						
Lab-Dup = Laboratory Initiate	ed Duplic	cate					



# **O.REG 153 VOCS BY HS (WATER)**

Bureau Veritas ID		ZNG097	ZNG099	ZNG100	ZNG102		
Sampling Date		2024/06/20	2024/06/20	2024/06/20	2024/06/20		
		11:45	15:20	11:45	15:40		
COC Number		997614-01-01	997614-01-01	997614-01-01	997614-01-01		
	UNITS	BH/MW-2	BH/MW-3	BH/MW-1	BH/MW-4	RDL	QC Batch
Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9472840
Volatile Organics							
Acetone (2-Propanone)	ug/L	36	<10	<10	<10	10	9475248
Benzene	ug/L	4.6	0.32	<0.20	<0.20	0.20	9475248
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9475248
Bromoform	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	9475248
Bromomethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9475248
Carbon Tetrachloride	ug/L	<0.19	<0.19	<0.19	<0.19	0.19	9475248
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9475248
Chloroform	ug/L	<0.20	<0.20	0.32	<0.20	0.20	9475248
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9475248
1,2-Dichlorobenzene	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	9475248
1,3-Dichlorobenzene	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	9475248
1,4-Dichlorobenzene	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	9475248
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	9475248
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9475248
1,2-Dichloroethane	ug/L	<0.49	<0.49	<0.49	<0.49	0.49	9475248
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9475248
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9475248
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9475248
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9475248
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	<0.30	0.30	9475248
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	9475248
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9475248
Ethylene Dibromide	ug/L	<0.19	<0.19	<0.19	<0.19	0.19	9475248
Hexane	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	9475248
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	9475248
Methyl Ethyl Ketone (2-Butanone)	ug/L	72	<10	<10	<10	10	9475248
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	9475248
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9475248
Styrene	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	9475248
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9475248
1,1,2,2-Tetrachloroethane	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	9475248
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9475248
Toluene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9475248
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							



# **O.REG 153 VOCS BY HS (WATER)**

Bureau Veritas ID		ZNG097	ZNG099	ZNG100	ZNG102		
Sampling Date		2024/06/20 11:45	2024/06/20 15:20	2024/06/20 11:45	2024/06/20 15:40		
COC Number		997614-01-01	997614-01-01	997614-01-01	997614-01-01		
	UNITS	BH/MW-2	BH/MW-3	BH/MW-1	BH/MW-4	RDL	QC Batch
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9475248
1,1,2-Trichloroethane	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	9475248
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9475248
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9475248
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9475248
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9475248
o-Xylene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9475248
Total Xylenes	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9475248
Surrogate Recovery (%)			•				
4-Bromofluorobenzene	%	96	97	95	96		9475248
D4-1,2-Dichloroethane	%	113	112	100	116		9475248
D8-Toluene	%	91	91	93	90		9475248
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							



## **TEST SUMMARY**

Bureau Veritas ID:	ZNG097					Collected:	2024/06/20
Sample ID: Matrix:	Water					Received:	2024/06/20
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
1,3-Dichloropropene Sum	ı	CALC	9472840	N/A	2024/06/26	Automate	d Statchk
Volatile Organic Compour	nds in Water	GC/MS	9475248	N/A	2024/06/25	Narayan G	himire
Bureau Veritas ID: Sample ID: Matrix:	ZNG098 BH/MW-8 Water					Collected: Shipped: Received:	2024/06/20 2024/06/20
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Petroleum Hydro. CCME I	F1 & BTEX in Water	HSGC/MSFD	9474999	N/A	2024/06/24	Georgeta I	Rusu
Petroleum Hydrocarbons	F2-F4 in Water	GC/FID	9475096	2024/06/24	2024/06/24	Mohamme	ed Abdul Nafay Shoeb
,		,		- ,,			
Bureau Veritas ID: Sample ID: Matrix:	ZNG098 Dup BH/MW-8 Water					Collected: Shipped: Received:	2024/06/20 2024/06/20
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Petroleum Hydro, CCME I	F1 & BTEX in Water	HSGC/MSFD	9474999	N/A	2024/06/24	Georgeta	Rusu
Bureau Veritas ID: Sample ID: Matrix:	ZNG099 BH/MW-3 Water					Collected: Shipped: Received:	2024/06/20 2024/06/20
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Test Description 1,3-Dichloropropene Sum	1	Instrumentation CALC	Batch 9472840	Extracted N/A	Date Analyzed 2024/06/26	Analyst Automate	d Statchk
Test Description 1,3-Dichloropropene Sum Volatile Organic Compound	າ nds in Water	Instrumentation CALC GC/MS	Batch 9472840 9475248	Extracted N/A N/A	Date Analyzed           2024/06/26           2024/06/25	Analyst Automate Narayan G	d Statchk himire
Test Description 1,3-Dichloropropene Sum Volatile Organic Compoun Bureau Veritas ID: Sample ID: Matrix:	nds in Water ZNG100 BH/MW-1 Water	Instrumentation CALC GC/MS	Batch 9472840 9475248	Extracted N/A N/A	Date Analyzed           2024/06/26           2024/06/25	Analyst Automated Narayan G Collected: Shipped: Received:	d Statchk himire 2024/06/20 2024/06/20
Test Description 1,3-Dichloropropene Sum Volatile Organic Compoun Bureau Veritas ID: Sample ID: Matrix: Test Description	nds in Water ZNG100 BH/MW-1 Water	Instrumentation CALC GC/MS Instrumentation	Batch 9472840 9475248 Batch	Extracted N/A N/A Extracted	Date Analyzed 2024/06/26 2024/06/25 Date Analyzed	Analyst Automated Narayan G Collected: Shipped: Received: Analyst	d Statchk himire 2024/06/20 2024/06/20
Test Description          1,3-Dichloropropene Sum         Volatile Organic Compound         Bureau Veritas ID:         Sample ID:         Matrix:         Test Description         1,3-Dichloropropene Sum	nds in Water ZNG100 BH/MW-1 Water	Instrumentation CALC GC/MS Instrumentation CALC	Batch 9472840 9475248 9475248 Batch 9472840	Extracted N/A N/A Extracted	Date Analyzed           2024/06/26           2024/06/25           Date Analyzed           2024/06/26	Analyst Automater Narayan G Collected: Shipped: Received: Analyst Automater	d Statchk himire 2024/06/20 2024/06/20 d Statchk
Test Description          1,3-Dichloropropene Sum         Volatile Organic Compound         Bureau Veritas ID:         Sample ID:         Matrix:         Test Description         1,3-Dichloropropene Sum         Volatile Organic Compound	nds in Water ZNG100 BH/MW-1 Water	Instrumentation CALC GC/MS Instrumentation CALC GC/MS	Batch 9472840 9475248 Batch 9472840 9475248	Extracted N/A N/A Extracted N/A N/A	Date Analyzed           2024/06/26           2024/06/25           Date Analyzed           2024/06/26           2024/06/25	Analyst Automater Narayan G Collected: Shipped: Received: Analyst Automater Narayan G	d Statchk himire 2024/06/20 2024/06/20 d Statchk himire
Test Description          1,3-Dichloropropene Sum         Volatile Organic Compound         Bureau Veritas ID:         Sample ID:         Matrix:         Test Description         1,3-Dichloropropene Sum         Volatile Organic Compound         Bureau Veritas ID:         Sample ID:         Matrix:         Bureau Veritas ID:         Sample ID:         Matrix:	ZNG100 BH/MW-1 Water nds in Water ZNG101 BH/MW-10 Water	Instrumentation CALC GC/MS Instrumentation CALC GC/MS	Batch 9472840 9475248 Batch 9472840 9475248	Extracted N/A N/A N/A Extracted N/A N/A	Date Analyzed           2024/06/26           2024/06/25           Date Analyzed           2024/06/26           2024/06/25	Analyst Automated Narayan G Collected: Shipped: Received: Analyst Automated Narayan G Collected: Shipped: Received:	d Statchk himire 2024/06/20 2024/06/20 d Statchk himire 2024/06/20 2024/06/20
Test Description          1,3-Dichloropropene Sum         Volatile Organic Compound         Bureau Veritas ID:         Sample ID:         Matrix:         Test Description         1,3-Dichloropropene Sum         Volatile Organic Compound         Bureau Veritas ID:         Sample ID:         Matrix:         Test Description         1,3-Dichloropropene Sum         Volatile Organic Compound         Bureau Veritas ID:         Sample ID:         Matrix:         Test Description	ZNG100 BH/MW-1 Water nds in Water ZNG101 BH/MW-10 Water	Instrumentation CALC GC/MS Instrumentation CALC GC/MS	Batch 9472840 9475248 Batch 9472840 9475248 Batch	Extracted N/A N/A N/A Extracted N/A N/A	Date Analyzed           2024/06/26           2024/06/25           Date Analyzed           2024/06/26           2024/06/25	Analyst Automated Narayan G Collected: Shipped: Received: Analyst Automated Narayan G Collected: Shipped: Received: Analyst	d Statchk himire 2024/06/20 2024/06/20 d Statchk himire 2024/06/20 2024/06/20
Test Description          1,3-Dichloropropene Sum         Volatile Organic Compound         Bureau Veritas ID:         Sample ID:         Matrix:         Test Description         1,3-Dichloropropene Sum         Volatile Organic Compound         Bureau Veritas ID:         Sample ID:         Matrix:         Test Description         Bureau Veritas ID:         Sample ID:         Matrix:         Test Description         Petroleum Hydro. CCME I	nds in Water ZNG100 BH/MW-1 Water nds in Water ZNG101 BH/MW-10 Water F1 & BTEX in Water	Instrumentation CALC GC/MS Instrumentation CALC GC/MS Instrumentation HSGC/MSFD	Batch 9472840 9475248 Batch 9472840 9475248 9475248 Batch 9474999	Extracted N/A N/A Extracted N/A N/A N/A N/A N/A	Date Analyzed           2024/06/26           2024/06/25           Date Analyzed           2024/06/26           2024/06/25           Date Analyzed           2024/06/25           Date Analyzed           2024/06/25	Analyst Automater Narayan G Collected: Shipped: Received: Analyst Automater Narayan G Collected: Shipped: Received: Analyst Georgeta	d Statchk himire 2024/06/20 2024/06/20 d Statchk himire 2024/06/20 2024/06/20 Rusu
Test Description         1,3-Dichloropropene Sum         Volatile Organic Compound         Bureau Veritas ID: Sample ID: Matrix:         Test Description         1,3-Dichloropropene Sum         Volatile Organic Compound         Bureau Veritas ID: Sample ID: Matrix:         Test Description         Bureau Veritas ID: Sample ID: Matrix:         Test Description         Petroleum Hydro. CCME I         Bureau Veritas ID: Sample ID: Matrix:	ZNG100 BH/MW-1 Water nds in Water ZNG101 BH/MW-10 Water F1 & BTEX in Water ZNG102 BH/MW-4 Water	Instrumentation CALC GC/MS Instrumentation CALC GC/MS Instrumentation HSGC/MSFD	Batch 9472840 9475248 Batch 9472840 9475248 9475248 947599	Extracted N/A N/A Extracted N/A N/A N/A N/A N/A	Date Analyzed           2024/06/26           2024/06/25           Date Analyzed           2024/06/26           2024/06/25           Date Analyzed           2024/06/25	Analyst Automated Narayan G Collected: Shipped: Received: Analyst Automated Narayan G Collected: Shipped: Received: Analyst Georgeta I Collected: Shipped: Received:	d Statchk himire 2024/06/20 2024/06/20 d Statchk himire 2024/06/20 2024/06/20 Rusu 2024/06/20 2024/06/20 2024/06/20
Test Description         1,3-Dichloropropene Sum         Volatile Organic Compound         Bureau Veritas ID: Sample ID: Matrix:         Test Description         1,3-Dichloropropene Sum         Volatile Organic Compound         Bureau Veritas ID: Sample ID: Matrix:         Test Description         Petroleum Hydro. CCME ID: Sample ID: Matrix:         Bureau Veritas ID: Sample ID: Matrix:         Test Description         Petroleum Hydro. CCME ID: Matrix:	ZNG100 BH/MW-1 Water nds in Water ZNG101 BH/MW-10 Water F1 & BTEX in Water ZNG102 BH/MW-4 Water	Instrumentation CALC GC/MS Instrumentation CALC GC/MS Instrumentation HSGC/MSFD	Batch 9472840 9475248 Batch 9472840 9475248 9475248 9474999 Batch	Extracted N/A N/A Extracted N/A N/A N/A N/A Extracted N/A	Date Analyzed           2024/06/26           2024/06/25           Date Analyzed           2024/06/26           2024/06/25           Date Analyzed           2024/06/25           Date Analyzed           2024/06/24	Analyst Automated Narayan G Collected: Shipped: Received: Analyst Automated Narayan G Collected: Shipped: Received: Analyst Collected: Shipped: Received: Analyst	d Statchk himire 2024/06/20 2024/06/20 d Statchk himire 2024/06/20 2024/06/20 Rusu 2024/06/20 2024/06/20

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



## **TEST SUMMARY**

Bureau Veritas ID: Sample ID: Matrix:	ZNG102 BH/MW-4 Water					Collected: Shipped: Received:	2024/06/20 2024/06/20
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Volatile Organic Compour	nds in Water	GC/MS	9475248	N/A	2024/06/25	Narayan Ghi	mire



## **GENERAL COMMENTS**

Each te	emperature is the ave	erage of up to th	ree cooler temperatures taken at receipt
	Package 1	11.7°C	
	-	-	
Result	s relate only to the it	ems tested.	



## QUALITY ASSURANCE REPORT

exp Services Inc Client Project #: OTT-23002538-A0 Sampler Initials: PD

			Matrix	Spike	SPIKED	BLANK	Method I	Blank	RPI	כ
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9474999	1,4-Difluorobenzene	2024/06/24	96	70 - 130	97	70 - 130	103	%		
9474999	4-Bromofluorobenzene	2024/06/24	99	70 - 130	100	70 - 130	94	%		
9474999	D10-o-Xylene	2024/06/24	105	70 - 130	106	70 - 130	104	%		
9474999	D4-1,2-Dichloroethane	2024/06/24	97	70 - 130	97	70 - 130	104	%		
9475096	o-Terphenyl	2024/06/24	103	60 - 140	104	60 - 140	105	%		
9475248	4-Bromofluorobenzene	2024/06/25	100	70 - 130	99	70 - 130	98	%		
9475248	D4-1,2-Dichloroethane	2024/06/25	106	70 - 130	98	70 - 130	98	%		
9475248	D8-Toluene	2024/06/25	98	70 - 130	103	70 - 130	94	%		
9474999	Benzene	2024/06/24	85	50 - 140	92	50 - 140	<0.20	ug/L	12	30
9474999	Ethylbenzene	2024/06/24	92	50 - 140	95	50 - 140	<0.20	ug/L	12	30
9474999	F1 (C6-C10) - BTEX	2024/06/24					<25	ug/L	28	30
9474999	F1 (C6-C10)	2024/06/24	104	60 - 140	104	60 - 140	<25	ug/L	25	30
9474999	o-Xylene	2024/06/24	96	50 - 140	95	50 - 140	<0.20	ug/L	NC	30
9474999	p+m-Xylene	2024/06/24	93	50 - 140	92	50 - 140	<0.40	ug/L	10	30
9474999	Toluene	2024/06/24	88	50 - 140	87	50 - 140	<0.20	ug/L	2.2	30
9474999	Total Xylenes	2024/06/24					<0.40	ug/L	10	30
9475096	F2 (C10-C16 Hydrocarbons)	2024/06/25	96	60 - 140	95	60 - 140	<100	ug/L	NC	30
9475096	F3 (C16-C34 Hydrocarbons)	2024/06/24	108	60 - 140	108	60 - 140	<200	ug/L		
9475096	F4 (C34-C50 Hydrocarbons)	2024/06/24	100	60 - 140	100	60 - 140	<200	ug/L		
9475248	1,1,1,2-Tetrachloroethane	2024/06/25	90	70 - 130	92	70 - 130	<0.50	ug/L	NC	30
9475248	1,1,1-Trichloroethane	2024/06/25	90	70 - 130	94	70 - 130	<0.20	ug/L	NC	30
9475248	1,1,2,2-Tetrachloroethane	2024/06/25	97	70 - 130	88	70 - 130	<0.40	ug/L	NC	30
9475248	1,1,2-Trichloroethane	2024/06/25	95	70 - 130	89	70 - 130	<0.40	ug/L	NC	30
9475248	1,1-Dichloroethane	2024/06/25	94	70 - 130	93	70 - 130	<0.20	ug/L	NC	30
9475248	1,1-Dichloroethylene	2024/06/25	92	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
9475248	1,2-Dichlorobenzene	2024/06/25	89	70 - 130	91	70 - 130	<0.40	ug/L	NC	30
9475248	1,2-Dichloroethane	2024/06/25	100	70 - 130	91	70 - 130	<0.49	ug/L	NC	30
9475248	1,2-Dichloropropane	2024/06/25	95	70 - 130	91	70 - 130	<0.20	ug/L	NC	30
9475248	1,3-Dichlorobenzene	2024/06/25	89	70 - 130	94	70 - 130	<0.40	ug/L	NC	30
9475248	1,4-Dichlorobenzene	2024/06/25	87	70 - 130	92	70 - 130	<0.40	ug/L	NC	30
9475248	Acetone (2-Propanone)	2024/06/25	117	60 - 140	101	60 - 140	<10	ug/L	NC	30
9475248	Benzene	2024/06/25	92	70 - 130	91	70 - 130	<0.20	ug/L	NC	30

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## QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc Client Project #: OTT-23002538-A0 Sampler Initials: PD

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RPI	)
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9475248	Bromodichloromethane	2024/06/25	95	70 - 130	90	70 - 130	<0.50	ug/L	NC	30
9475248	Bromoform	2024/06/25	92	70 - 130	86	70 - 130	<1.0	ug/L	NC	30
9475248	Bromomethane	2024/06/25	81	60 - 140	80	60 - 140	<0.50	ug/L	NC	30
9475248	Carbon Tetrachloride	2024/06/25	89	70 - 130	94	70 - 130	<0.19	ug/L	NC	30
9475248	Chlorobenzene	2024/06/25	91	70 - 130	94	70 - 130	<0.20	ug/L	NC	30
9475248	Chloroform	2024/06/25	95	70 - 130	92	70 - 130	<0.20	ug/L	NC	30
9475248	cis-1,2-Dichloroethylene	2024/06/25	97	70 - 130	94	70 - 130	<0.50	ug/L	NC	30
9475248	cis-1,3-Dichloropropene	2024/06/25	94	70 - 130	90	70 - 130	<0.30	ug/L	NC	30
9475248	Dibromochloromethane	2024/06/25	93	70 - 130	89	70 - 130	<0.50	ug/L	NC	30
9475248	Dichlorodifluoromethane (FREON 12)	2024/06/25	71	60 - 140	73	60 - 140	<1.0	ug/L	NC	30
9475248	Ethylbenzene	2024/06/25	86	70 - 130	93	70 - 130	<0.20	ug/L	NC	30
9475248	Ethylene Dibromide	2024/06/25	97	70 - 130	90	70 - 130	<0.19	ug/L	NC	30
9475248	Hexane	2024/06/25	94	70 - 130	98	70 - 130	<1.0	ug/L	NC	30
9475248	Methyl Ethyl Ketone (2-Butanone)	2024/06/25	118	60 - 140	99	60 - 140	<10	ug/L	NC	30
9475248	Methyl Isobutyl Ketone	2024/06/25	111	70 - 130	92	70 - 130	<5.0	ug/L	NC	30
9475248	Methyl t-butyl ether (MTBE)	2024/06/25	95	70 - 130	89	70 - 130	<0.50	ug/L	NC	30
9475248	Methylene Chloride(Dichloromethane)	2024/06/25	93	70 - 130	88	70 - 130	<2.0	ug/L	NC	30
9475248	o-Xylene	2024/06/25	88	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
9475248	p+m-Xylene	2024/06/25	87	70 - 130	94	70 - 130	<0.20	ug/L	NC	30
9475248	Styrene	2024/06/25	91	70 - 130	89	70 - 130	<0.40	ug/L	NC	30
9475248	Tetrachloroethylene	2024/06/25	86	70 - 130	93	70 - 130	<0.20	ug/L	NC	30
9475248	Toluene	2024/06/25	89	70 - 130	94	70 - 130	<0.20	ug/L	NC	30
9475248	Total Xylenes	2024/06/25					<0.20	ug/L	NC	30
9475248	trans-1,2-Dichloroethylene	2024/06/25	92	70 - 130	93	70 - 130	<0.50	ug/L	NC	30
9475248	trans-1,3-Dichloropropene	2024/06/25	94	70 - 130	92	70 - 130	<0.40	ug/L	NC	30
9475248	Trichloroethylene	2024/06/25	90	70 - 130	93	70 - 130	<0.20	ug/L	2.1	30
9475248	Trichlorofluoromethane (FREON 11)	2024/06/25	91	70 - 130	95	70 - 130	<0.50	ug/L	NC	30



## QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc Client Project #: OTT-23002538-A0 Sampler Initials: PD

		_	Matrix	Spike	SPIKED	BLANK	Method B	lank	RPE	)			
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits			
9475248	Vinyl Chloride	2024/06/25	88	70 - 130	90	70 - 130	<0.20	ug/L	NC	30			
Duplicate: Pai	ired analysis of a separate portion of the same sample.	Jsed to evaluate t	he variance in t	he measurem	ent.								
Matrix Spike:	A sample to which a known amount of the analyte of in	terest has been a	dded. Used to e	valuate samp	e matrix interfe	erence.							
Spiked Blank:	A blank matrix sample to which a known amount of the	analyte, usually fr	rom a second so	ource, has bee	n added. Used t	to evaluate me	ethod accuracy.						
Method Blank	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 (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).



### VALIDATION SIGNATURE PAGE

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

austin Camere

Cristina Carriere, Senior Scientific Specialist

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

	20-Jun-24 16:40	
	Katherine Szozda	
1		

# 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

TT	The second se

C4I9095

Rottle Types

| ENV-1283                       |                                                                                        | _                                                                                                                       | _                                                                                                               | _          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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|                                | ENV-1283<br>Sample ID<br>$\frac{ 3H /MW-2}{ i }$<br>i<br>i<br>i<br>V<br>4<br>Comments: | ENV-1283<br>Sample ID AII<br>$\frac{3}{1}/MW - 2$ TS<br>$\frac{3}{1}$<br>i<br>i<br>V<br>V<br>V<br>V<br>V<br>V<br>V<br>V | ENV-1283<br>Sample ID All crvi<br>BM/MW - 2 TS<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i<br>i | ENV-1283   | ENV-1283<br>Inorgan<br>Sample ID All Crvi CN General<br>ISH/MW - 2 TS General<br>I I I I I I I<br>I I I I I I I I<br>I I I I I I I<br>I I I I I I I I<br>I I I I I I I I<br>I I I I I I I I I I I<br>I I I I I I I I I I I I I I I I I I I | ENV-1283<br>Sample ID All CrVI CN General Hg<br> 3H/MW-2 TS A A A A A A A A A A A A A A A A A A | Inorganics         Sample ID       All       Crvi       CN       General       Hg       Metals         IBH/MW-Z       TS       I       I       I       I       I       I         I       I       I       I       I       I       I       I       I         I       I       I       I       I       I 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     Interstell         Volaties         V |

EULIEAU Veritas	Bureau Veritas 6740 Campobello Road, I	Mississauga, Ontario Car	nada LSN 2L	.8 Tel:(905) 817-5	700 Toll-free:800	-563-6266 Fax(	905) 817-5	777 www.	bvna.com					¢ II	Katherin	e Szozda 1111111111111111 9095	Page of
#17408 eve S	INVOICE IU:				REPO	RT TO:						PROJECT	INFORMATION:				
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100-2650 Que	ensview Drive		Attention:	Chrisk	Immeriy					P.O. #.		OTTO		- <u>k</u>	_		
Ottawa ON K2	B 8H6		Address:				-			Project:		011-2	3002538-A0				997614
(613) 688-1899	) East (61	3) 225-7337		-	_	100				Project Na	më;	14	_		-	COC #:	Project Manager:
ail: AP@exp.com;	Karen.Burke@exp.com	n	Email	Chris K	immerly@ex	Fax:	-			Site #:		- Oh:	10 Alura	N Inco			Katherine Szozda
MOE REGULATED DRINKI	NG WATER OR WATER		LIMAN CC		MULET DE		1		ANI	Sampled B	Y:		SPECIEICI	110	-	C#997614-01-01	
SUBMITTED ON	THE BUREAU VERITAS	S DRINKING WATE	R CHAIN	OF CUSTODY	MUSTBE			<b></b>		LTSIS NEU	2063160	(FLEASE BI	E-SPECIFIC)		STREET.	Please provide advance notic	) Required: e for rush projects
Regulation 153 (2011)	0	ther Regulations		Special In	structions	cle):									Regular (S	Standard) TAT:	
able 1 Res/Park Medi	um/Fine CCME	Sanitary Sewer Bylaw	-	operation	audenona	< a	(ater)	14 14							(will be applied	id if Rush TAT is not specified):	
able 2 Ind/Comm Coar	se Reg 558.	Storm Sewer Bylaw	1.1			Cr	N S	XIF1							Standard TA	T = 5-7 Working days for most tests.	
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	PWQ0	Reg 406 Table				erec Is /	Ccs	ç							Job Specifi	ic Rush TAT (if applies to entire s	ubmission)
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Include Crite	ria on Certificate of Anal	ysis (Y/N)?	- 1			Pield A	91 15	91 te	, X						Rush Confirm	nation Number:	(call lab for #)
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SS OTHERWISE AGREED TO IN W	RITING, WORK SUBMITTED C	ON THIS CHAIN OF CUST	ODY IS SUB	JECT TO BUREAU	VERITAS'S STAN	DARD TERMS	ND CONDI	TIONS, SI	GNING OF T	HIS CHAIN	OF CUST	ODY DOCUM	ENTIS	CALL COLUMN	0,19	Inta Inta	
HE RESPONSIBILITY OF THE	OF OUR TERMS WHICH ARE	AVAILABLE FOR VIEWIN	NG AT WWW.	BVNA.COM/ENVIR	ONMENTAL-LAB	ORATORIES/RE	SOURCES	COC-TERM	MS-AND-CO	NDITIONS.	3	141	4			Whit	e: Bureau Veritas Yellow:
THE REP	LINQUISHER TO ENSURE THE	ACCURACY OF THE CH	AIN OF CUS	TODY RECORD. A	N INCOMPLETE	CHAIN OF CUST	ODY MAY F	RESULT IN	ANALYTIC	AL TAT DE	AYS.	5 ° °	SAMPLE	S MUST BE KEPT	COOL ( < 10° C )	FROM TIME OF SAMPLING	

Bureau Veritas Canada (2019) Inc.

exp Services Inc Client Project #: OTT-23002538-A0 Client ID: BH/MW-8

#### 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.



Your Project #: OTT-23002538-A0 Your C.O.C. #: C#997614-02-01

#### **Attention: Chris Kimmerly**

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

> Report Date: 2024/06/24 Report #: R8206084 Version: 1 - Final

### **CERTIFICATE OF ANALYSIS**

## BUREAU VERITAS JOB #: C4J0198

Received: 2024/06/21, 09:31

Sample Matrix: Water # Samples Received: 1

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
1,3-Dichloropropene Sum (1)	1	N/A	2024/06/24		EPA 8260C m
Volatile Organic Compounds in Water (1)	1	N/A	2024/06/24	CAM SOP-00228	EPA 8260D

#### Remarks:

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

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

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

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

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

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

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

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

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



Your Project #: OTT-23002538-A0 Your C.O.C. #: C#997614-02-01

#### **Attention: Chris Kimmerly**

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

> Report Date: 2024/06/24 Report #: R8206084 Version: 1 - Final

### **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C4J0198 Received: 2024/06/21, 09:31

Encryption Key

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

This report has been generated and distributed using a secure automated process.

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



# O.REG 153 VOCS BY HS (WATER)

Bureau Veritas ID		ZNM359		
Sampling Date		2024/06/21		
		08:45		
COC Number		C#997614-02-01		
	UNITS	BH/MW-12	RDL	QC Batch
Calculated Parameters				
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	9472840
Volatile Organics				
Acetone (2-Propanone)	ug/L	1000	10	9473354
Benzene	ug/L	3.3	0.20	9473354
Bromodichloromethane	ug/L	<0.50	0.50	9473354
Bromoform	ug/L	<1.0	1.0	9473354
Bromomethane	ug/L	<0.50	0.50	9473354
Carbon Tetrachloride	ug/L	<0.19	0.19	9473354
Chlorobenzene	ug/L	<0.20	0.20	9473354
Chloroform	ug/L	<0.20	0.20	9473354
Dibromochloromethane	ug/L	<0.50	0.50	9473354
1,2-Dichlorobenzene	ug/L	<0.40	0.40	9473354
1,3-Dichlorobenzene	ug/L	<0.40	0.40	9473354
1,4-Dichlorobenzene	ug/L	<0.40	0.40	9473354
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	9473354
1,1-Dichloroethane	ug/L	<0.20	0.20	9473354
1,2-Dichloroethane	ug/L	<0.49	0.49	9473354
1,1-Dichloroethylene	ug/L	<0.20	0.20	9473354
cis-1,2-Dichloroethylene	ug/L	1.6	0.50	9473354
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	9473354
1,2-Dichloropropane	ug/L	<0.20	0.20	9473354
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	9473354
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	9473354
Ethylbenzene	ug/L	0.56	0.20	9473354
Ethylene Dibromide	ug/L	<0.19	0.19	9473354
Hexane	ug/L	5.9	1.0	9473354
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	9473354
Methyl Ethyl Ketone (2-Butanone)	ug/L	3300	10	9473354
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	9473354
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	9473354
Styrene	ug/L	<0.40	0.40	9473354
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	9473354
1,1,2,2-Tetrachloroethane	ug/L	<0.40	0.40	9473354
Tetrachloroethylene	ug/L	<0.20	0.20	9473354
Toluene	ug/L	5.1	0.20	9473354
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



# **O.REG 153 VOCS BY HS (WATER)**

Bureau Veritas ID		ZNM359		
Sampling Date		2024/06/21 08:45		
COC Number		C#997614-02-01		
	UNITS	BH/MW-12	RDL	QC Batch
1,1,1-Trichloroethane	ug/L	<0.20	0.20	9473354
1,1,2-Trichloroethane	ug/L	<0.40	0.40	9473354
Trichloroethylene	ug/L	1.9	0.20	9473354
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	9473354
Vinyl Chloride	ug/L	<0.20	0.20	9473354
p+m-Xylene	ug/L	5.6	0.20	9473354
o-Xylene	ug/L	1.7	0.20	9473354
Total Xylenes	ug/L	7.3	0.20	9473354
Surrogate Recovery (%)				
4-Bromofluorobenzene	%	95		9473354
D4-1,2-Dichloroethane	%	106		9473354
D8-Toluene	%	88		9473354
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



## **TEST SUMMARY**

Bureau Veritas ID: Sample ID: Matrix:	ZNM359 BH/MW-12 Water					Collected: 2024/06/21 Shipped: Received: 2024/06/21
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	I	CALC	9472840	N/A	2024/06/24	Automated Statchk
Volatile Organic Compour	nds in Water	GC/MS	9473354	N/A	2024/06/24	Mariia Biliaieva



## **GENERAL COMMENTS**

Each te	emperature is the	average of up to t	hree cooler temperatures taken at receipt
	Package 1	14.0°C	
Result	s relate only to the	e items tested.	



## QUALITY ASSURANCE REPORT

exp Services Inc Client Project #: OTT-23002538-A0 Sampler Initials: PO

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RPE	)
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9473354	4-Bromofluorobenzene	2024/06/24	101	70 - 130	103	70 - 130	101	%		
9473354	D4-1,2-Dichloroethane	2024/06/24	102	70 - 130	102	70 - 130	108	%		
9473354	D8-Toluene	2024/06/24	104	70 - 130	104	70 - 130	87	%		
9473354	1,1,1,2-Tetrachloroethane	2024/06/24	100	70 - 130	97	70 - 130	<0.50	ug/L	NC	30
9473354	1,1,1-Trichloroethane	2024/06/24	100	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
9473354	1,1,2,2-Tetrachloroethane	2024/06/24	101	70 - 130	100	70 - 130	<0.40	ug/L	NC	30
9473354	1,1,2-Trichloroethane	2024/06/24	104	70 - 130	102	70 - 130	<0.40	ug/L	NC	30
9473354	1,1-Dichloroethane	2024/06/24	100	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
9473354	1,1-Dichloroethylene	2024/06/24	99	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
9473354	1,2-Dichlorobenzene	2024/06/24	98	70 - 130	95	70 - 130	<0.40	ug/L	NC	30
9473354	1,2-Dichloroethane	2024/06/24	100	70 - 130	98	70 - 130	<0.49	ug/L	NC	30
9473354	1,2-Dichloropropane	2024/06/24	100	70 - 130	98	70 - 130	<0.20	ug/L	NC	30
9473354	1,3-Dichlorobenzene	2024/06/24	97	70 - 130	94	70 - 130	<0.40	ug/L	NC	30
9473354	1,4-Dichlorobenzene	2024/06/24	97	70 - 130	94	70 - 130	<0.40	ug/L	NC	30
9473354	Acetone (2-Propanone)	2024/06/24	101	60 - 140	101	60 - 140	<10	ug/L	NC	30
9473354	Benzene	2024/06/24	95	70 - 130	93	70 - 130	<0.20	ug/L	NC	30
9473354	Bromodichloromethane	2024/06/24	100	70 - 130	97	70 - 130	<0.50	ug/L	NC	30
9473354	Bromoform	2024/06/24	98	70 - 130	99	70 - 130	<1.0	ug/L	NC	30
9473354	Bromomethane	2024/06/24	91	60 - 140	84	60 - 140	<0.50	ug/L	NC	30
9473354	Carbon Tetrachloride	2024/06/24	100	70 - 130	95	70 - 130	<0.19	ug/L	NC	30
9473354	Chlorobenzene	2024/06/24	97	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
9473354	Chloroform	2024/06/24	98	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
9473354	cis-1,2-Dichloroethylene	2024/06/24	101	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
9473354	cis-1,3-Dichloropropene	2024/06/24	103	70 - 130	97	70 - 130	<0.30	ug/L	NC	30
9473354	Dibromochloromethane	2024/06/24	99	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
9473354	Dichlorodifluoromethane (FREON 12)	2024/06/24	85	60 - 140	79	60 - 140	<1.0	ug/L	NC	30
9473354	Ethylbenzene	2024/06/24	93	70 - 130	93	70 - 130	<0.20	ug/L	NC	30
9473354	Ethylene Dibromide	2024/06/24	100	70 - 130	100	70 - 130	<0.19	ug/L	NC	30
9473354	Hexane	2024/06/24	106	70 - 130	101	70 - 130	<1.0	ug/L	NC	30
9473354	Methyl Ethyl Ketone (2-Butanone)	2024/06/24	107	60 - 140	109	60 - 140	<10	ug/L	NC	30
9473354	Methyl Isobutyl Ketone	2024/06/24	110	70 - 130	114	70 - 130	<5.0	ug/L	NC	30
9473354	Methyl t-butyl ether (MTBE)	2024/06/24	97	70 - 130	97	70 - 130	<0.50	ug/L	NC	30



## QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc Client Project #: OTT-23002538-A0 Sampler Initials: PO

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RPD		
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	
9473354	Methylene Chloride(Dichloromethane)	2024/06/24	99	70 - 130	95	70 - 130	<2.0	ug/L	NC	30	
9473354	o-Xylene	2024/06/24	91	70 - 130	95	70 - 130	<0.20	ug/L	NC	30	
9473354	p+m-Xylene	2024/06/24	94	70 - 130	94	70 - 130	<0.20	ug/L	NC	30	
9473354	Styrene	2024/06/24	74	70 - 130	82	70 - 130	<0.40	ug/L	NC	30	
9473354	Tetrachloroethylene	2024/06/24	101	70 - 130	96	70 - 130	<0.20	ug/L	NC	30	
9473354	Toluene	2024/06/24	100	70 - 130	98	70 - 130	<0.20	ug/L	NC	30	
9473354	Total Xylenes	2024/06/24					<0.20	ug/L	NC	30	
9473354	trans-1,2-Dichloroethylene	2024/06/24	101	70 - 130	97	70 - 130	<0.50	ug/L	NC	30	
9473354	trans-1,3-Dichloropropene	2024/06/24	113	70 - 130	105	70 - 130	<0.40	ug/L	NC	30	
9473354	Trichloroethylene	2024/06/24	99	70 - 130	95	70 - 130	<0.20	ug/L	NC	30	
9473354	Trichlorofluoromethane (FREON 11)	2024/06/24	102	70 - 130	96	70 - 130	<0.50	ug/L	NC	30	
9473354	Vinyl Chloride	2024/06/24	97	70 - 130	92	70 - 130	<0.20	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 (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).



### VALIDATION SIGNATURE PAGE

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

austin Camere

Cristina Carriere, Senior Scientific Specialist

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

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Email:	AP@exp.com	Karen.Burke@exp.cor	m	Email:	Chris.K	immerly@exp	.com				Site #:	hr	4	Chilip of	Villeron		C#997614_02_01		Katherine S	zozda
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Your Project #: OTT-23002538-B0 Site Location: 1822, 1846 BANK & WALKLEY Your C.O.C. #: C#1014063-01-01

#### **Attention: Chris Kimmerly**

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

> Report Date: 2024/09/30 Report #: R8342360 Version: 1 - Final

### **CERTIFICATE OF ANALYSIS**

### BUREAU VERITAS JOB #: C4T9910

Received: 2024/09/24, 15:35

Sample Matrix: Water # Samples Received: 6

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
1,3-Dichloropropene Sum (1)	4	N/A	2024/09/30		EPA 8260C m
Petroleum Hydro. CCME F1 & BTEX in Water (1)	2	N/A	2024/09/30	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (1, 2)	1	2024/09/29	2024/09/29	CAM SOP-00316	CCME PHC-CWS m
Volatile Organic Compounds in Water (1)	4	N/A	2024/09/29	CAM SOP-00228	EPA 8260D

#### Remarks:

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

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

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

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

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

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

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

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

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

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



Your Project #: OTT-23002538-B0 Site Location: 1822, 1846 BANK & WALKLEY Your C.O.C. #: C#1014063-01-01

#### **Attention: Chris Kimmerly**

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

> Report Date: 2024/09/30 Report #: R8342360 Version: 1 - Final

### **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C4T9910 Received: 2024/09/24, 15:35

Encryption Key

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

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# PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID		ADWW18		
Sampling Data		2024/09/24		
Sampling Date		11:40		
COC Number		C#1014063-01-01		
	UNITS	MW/BH-10	RDL	QC Batch
BTEX & F1 Hydrocarbons				
Benzene	ug/L	<0.20	0.20	9670442
Toluene	ug/L	<0.20	0.20	9670442
Ethylbenzene	ug/L	<0.20	0.20	9670442
o-Xylene	ug/L	<0.20	0.20	9670442
p+m-Xylene	ug/L	<0.40	0.40	9670442
Total Xylenes	ug/L	<0.40	0.40	9670442
Surrogate Recovery (%)				
1,4-Difluorobenzene	%	98		9670442
4-Bromofluorobenzene	%	96		9670442
D10-o-Xylene	%	97		9670442
D4-1,2-Dichloroethane	%	100		9670442
RDL = Reportable Detection L	imit			
QC Batch = Quality Control Ba	atch			



		, ,	'	
Bureau Veritas ID		ADWW17		
Sampling Data		2024/09/24		
Sampling Date		12:25		
COC Number		C#1014063-01-01		
	UNITS	MW/BH-8	RDL	QC Batch
BTEX & F1 Hydrocarbons				
Benzene	ug/L	2.2	0.20	9670442
Toluene	ug/L	<0.20	0.20	9670442
Ethylbenzene	ug/L	0.69	0.20	9670442
o-Xylene	ug/L	<0.20	0.20	9670442
p+m-Xylene	ug/L	<0.40	0.40	9670442
Total Xylenes	ug/L	<0.40	0.40	9670442
F1 (C6-C10)	ug/L	<25	25	9670442
F1 (C6-C10) - BTEX	ug/L	<25	25	9670442
F2-F4 Hydrocarbons	•		•	
F2 (C10-C16 Hydrocarbons)	ug/L	<90	90	9670370
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	9670370
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	9670370
Reached Baseline at C50	ug/L	Yes		9670370
Surrogate Recovery (%)				
1,4-Difluorobenzene	%	102		9670442
4-Bromofluorobenzene	%	103		9670442
D10-o-Xylene	%	109		9670442
D4-1,2-Dichloroethane	%	102		9670442
o-Terphenyl	%	97		9670370
RDL = Reportable Detection I	Limit			
QC Batch = Quality Control B	atch			

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



## **O.REG 153 VOCS BY HS (WATER)**

Bureau Veritas ID		ADWW13	ADWW14	ADWW15	ADWW16		
Sampling Date		2024/09/24	2024/09/24	2024/09/24	2024/09/24		
		10:20	09:55	12:30	13:45		
COC Number		C#1014063-01-01	C#1014063-01-01	C#1014063-01-01	C#1014063-01-01		
	UNITS	MW/BH-1	MW/BH-2	MW/BH-3	MW/BH-4	RDL	QC Batch
Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9663211
Volatile Organics	·				·	·	
Acetone (2-Propanone)	ug/L	81	<10	<10	<10	10	9665960
Benzene	ug/L	<0.20	1.6	<0.20	<0.20	0.20	9665960
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9665960
Bromoform	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	9665960
Bromomethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9665960
Carbon Tetrachloride	ug/L	<0.19	<0.19	<0.19	<0.19	0.19	9665960
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9665960
Chloroform	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9665960
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9665960
1,2-Dichlorobenzene	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	9665960
1,3-Dichlorobenzene	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	9665960
1,4-Dichlorobenzene	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	9665960
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	9665960
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9665960
1,2-Dichloroethane	ug/L	<0.49	<0.49	<0.49	<0.49	0.49	9665960
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9665960
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9665960
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9665960
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9665960
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	<0.30	0.30	9665960
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	9665960
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9665960
Ethylene Dibromide	ug/L	<0.19	<0.19	<0.19	<0.19	0.19	9665960
Hexane	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	9665960
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	<2.0	2.0	9665960
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	<10	10	9665960
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	<5.0	5.0	9665960
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9665960
Styrene	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	9665960
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9665960
1,1,2,2-Tetrachloroethane	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	9665960
RDL = Reportable Detection Limit	-4						
QC Batch = Quality Control Batch							



## **O.REG 153 VOCS BY HS (WATER)**

Bureau Veritas ID		ADWW13	ADWW14	ADWW15	ADWW16		
Sampling Data		2024/09/24	2024/09/24	2024/09/24	2024/09/24		
		10:20	09:55	12:30	13:45		
COC Number		C#1014063-01-01	C#1014063-01-01	C#1014063-01-01	C#1014063-01-01		
	UNITS	MW/BH-1	MW/BH-2	MW/BH-3	MW/BH-4	RDL	QC Batch
Tetrachloroethylene	ug/L	<0.20	<0.20	3.8	<0.20	0.20	9665960
Toluene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9665960
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9665960
1,1,2-Trichloroethane	ug/L	<0.40	<0.40	<0.40	<0.40	0.40	9665960
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9665960
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	<0.50	0.50	9665960
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9665960
p+m-Xylene	ug/L	0.33	<0.20	<0.20	<0.20	0.20	9665960
o-Xylene	ug/L	<0.20	<0.20	<0.20	<0.20	0.20	9665960
Total Xylenes	ug/L	0.33	<0.20	<0.20	<0.20	0.20	9665960
Surrogate Recovery (%)							
4-Bromofluorobenzene	%	95	95	98	94		9665960
D4-1,2-Dichloroethane	%	110	112	112	113		9665960
D8-Toluene	%	91	92	91	92		9665960
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							



### **TEST SUMMARY**

Bureau Veritas ID:	ADWW13					Collected:	2024/09/24
Matrix:	Water					Received:	2024/09/24
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Δnalvst	
1.3-Dichloropropene Sum	1	CALC	9663211	N/A	2024/09/30	Automate	d Statchk
Volatile Organic Compou	nds in Water	GC/MS	9665960	N/A	2024/09/29	Noel Ramo	25
					,		-
Bureau Veritas ID: Sample ID:	ADWW14 MW/BH-2					Collected: Shipped:	2024/09/24
Matrix:	Water					Received:	2024/09/24
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
1,3-Dichloropropene Sum	1	CALC	9663211	N/A	2024/09/30	Automate	d Statchk
Volatile Organic Compour	nds in Water	GC/MS	9665960	N/A	2024/09/29	Noel Ramo	DS
Bureau Veritas ID: Sample ID: Matrix:	ADWW15 MW/BH-3 Water					Collected: Shipped: Received:	2024/09/24 2024/09/24
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
1,3-Dichloropropene Sum	ı	CALC	9663211	N/A	2024/09/30	Automate	d Statchk
Volatile Organic Compour	nds in Water	GC/MS	9665960	N/A	2024/09/29	Noel Ramo	S
Bureau Veritas ID: Sample ID: Matrix:	ADWW16 MW/BH-4 Water					Collected: Shipped: Received:	2024/09/24 2024/09/24
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
1,3-Dichloropropene Sum	1	CALC	9663211	N/A	2024/09/30	Automate	d Statchk
Volatile Organic Compour	nds in Water	GC/MS	9665960	N/A	2024/09/29	Noel Ramo	DS
Bureau Veritas ID: Sample ID: Matrix:	ADWW17 MW/BH-8 Water					Collected: Shipped: Received:	2024/09/24 2024/09/24
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Petroleum Hydro. CCME	F1 & BTEX in Water	HSGC/MSFD	9670442	N/A	2024/09/30	Lincoln Ra	mdahin
Petroleum Hydrocarbons	F2-F4 in Water	GC/FID	9670370	2024/09/29	2024/09/29	Suleeqa N	urr
Bureau Veritas ID: Sample ID: Matrix:	ADWW18 MW/BH-10 Water					Collected: Shipped: Received:	2024/09/24 2024/09/24
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Petroleum Hydro. CCME	F1 & BTEX in Water	HSGC/MSFD	9670442	N/A	2024/09/30	Lincoln Ra	mdahin



### **GENERAL COMMENTS**

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

Package 1 22.3°C

Results relate only to the items tested.



## QUALITY ASSURANCE REPORT

exp Services Inc Client Project #: OTT-23002538-B0 Site Location: 1822, 1846 BANK & WALKLEY Sampler Initials: SA

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9665960	4-Bromofluorobenzene	2024/09/28	96	70 - 130	97	70 - 130	98	%		
9665960	D4-1,2-Dichloroethane	2024/09/28	106	70 - 130	103	70 - 130	107	%		
9665960	D8-Toluene	2024/09/28	103	70 - 130	105	70 - 130	93	%		
9670370	o-Terphenyl	2024/09/29	99	60 - 140	100	60 - 140	100	%		
9670442	1,4-Difluorobenzene	2024/09/29	103	70 - 130	100	70 - 130	97	%		
9670442	4-Bromofluorobenzene	2024/09/29	94	70 - 130	96	70 - 130	98	%		
9670442	D10-o-Xylene	2024/09/29	98	70 - 130	100	70 - 130	100	%		
9670442	D4-1,2-Dichloroethane	2024/09/29	104	70 - 130	100	70 - 130	96	%		
9665960	1,1,1,2-Tetrachloroethane	2024/09/28	112	70 - 130	110	70 - 130	<0.50	ug/L	NC	30
9665960	1,1,1-Trichloroethane	2024/09/28	99	70 - 130	97	70 - 130	<0.20	ug/L	NC	30
9665960	1,1,2,2-Tetrachloroethane	2024/09/28	107	70 - 130	102	70 - 130	<0.40	ug/L	NC	30
9665960	1,1,2-Trichloroethane	2024/09/28	110	70 - 130	105	70 - 130	<0.40	ug/L	NC	30
9665960	1,1-Dichloroethane	2024/09/28	104	70 - 130	100	70 - 130	<0.20	ug/L	NC	30
9665960	1,1-Dichloroethylene	2024/09/28	99	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
9665960	1,2-Dichlorobenzene	2024/09/28	104	70 - 130	102	70 - 130	<0.40	ug/L	NC	30
9665960	1,2-Dichloroethane	2024/09/28	112	70 - 130	107	70 - 130	<0.49	ug/L	NC	30
9665960	1,2-Dichloropropane	2024/09/28	110	70 - 130	106	70 - 130	<0.20	ug/L	NC	30
9665960	1,3-Dichlorobenzene	2024/09/28	100	70 - 130	98	70 - 130	<0.40	ug/L	NC	30
9665960	1,4-Dichlorobenzene	2024/09/28	102	70 - 130	101	70 - 130	<0.40	ug/L	NC	30
9665960	Acetone (2-Propanone)	2024/09/28	111	60 - 140	112	60 - 140	<10	ug/L	NC	30
9665960	Benzene	2024/09/28	105	70 - 130	102	70 - 130	<0.20	ug/L	NC	30
9665960	Bromodichloromethane	2024/09/28	105	70 - 130	101	70 - 130	<0.50	ug/L	NC	30
9665960	Bromoform	2024/09/28	105	70 - 130	107	70 - 130	<1.0	ug/L	NC	30
9665960	Bromomethane	2024/09/28	85	60 - 140	85	60 - 140	<0.50	ug/L	NC	30
9665960	Carbon Tetrachloride	2024/09/28	105	70 - 130	103	70 - 130	<0.19	ug/L	NC	30
9665960	Chlorobenzene	2024/09/28	97	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
9665960	Chloroform	2024/09/28	106	70 - 130	101	70 - 130	<0.20	ug/L	NC	30
9665960	cis-1,2-Dichloroethylene	2024/09/28	111	70 - 130	106	70 - 130	<0.50	ug/L	NC	30
9665960	cis-1,3-Dichloropropene	2024/09/28	92	70 - 130	95	70 - 130	<0.30	ug/L	NC	30
9665960	Dibromochloromethane	2024/09/28	110	70 - 130	107	70 - 130	<0.50	ug/L	NC	30
9665960	Dichlorodifluoromethane (FREON 12)	2024/09/28	80	60 - 140	73	60 - 140	<1.0	ug/L	NC	30
9665960	Ethylbenzene	2024/09/28	94	70 - 130	96	70 - 130	<0.20	ug/L	NC	30



## QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc Client Project #: OTT-23002538-B0 Site Location: 1822, 1846 BANK & WALKLEY Sampler Initials: SA

			Matrix Spike		SPIKED BLANK		Method Blank		RPI	)
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9665960	Ethylene Dibromide	2024/09/28	108	70 - 130	105	70 - 130	<0.19	ug/L	NC	30
9665960	Hexane	2024/09/28	114	70 - 130	115	70 - 130	<1.0	ug/L	NC	30
9665960	Methyl Ethyl Ketone (2-Butanone)	2024/09/28	124	60 - 140	121	60 - 140	<10	ug/L	NC	30
9665960	Methyl Isobutyl Ketone	2024/09/28	117	70 - 130	115	70 - 130	<5.0	ug/L	NC	30
9665960	Methyl t-butyl ether (MTBE)	2024/09/28	100	70 - 130	99	70 - 130	<0.50	ug/L	NC	30
9665960	Methylene Chloride(Dichloromethane)	2024/09/28	108	70 - 130	102	70 - 130	<2.0	ug/L	NC	30
9665960	o-Xylene	2024/09/28	98	70 - 130	105	70 - 130	<0.20	ug/L	NC	30
9665960	p+m-Xylene	2024/09/28	95	70 - 130	99	70 - 130	<0.20	ug/L	NC	30
9665960	Styrene	2024/09/28	95	70 - 130	105	70 - 130	<0.40	ug/L	NC	30
9665960	Tetrachloroethylene	2024/09/28	98	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
9665960	Toluene	2024/09/28	103	70 - 130	104	70 - 130	<0.20	ug/L	NC	30
9665960	Total Xylenes	2024/09/28					<0.20	ug/L	NC	30
9665960	trans-1,2-Dichloroethylene	2024/09/28	109	70 - 130	104	70 - 130	<0.50	ug/L	NC	30
9665960	trans-1,3-Dichloropropene	2024/09/28	106	70 - 130	111	70 - 130	<0.40	ug/L	NC	30
9665960	Trichloroethylene	2024/09/28	101	70 - 130	97	70 - 130	<0.20	ug/L	NC	30
9665960	Trichlorofluoromethane (FREON 11)	2024/09/28	98	70 - 130	95	70 - 130	<0.50	ug/L	NC	30
9665960	Vinyl Chloride	2024/09/28	99	70 - 130	93	70 - 130	<0.20	ug/L	NC	30
9670370	F2 (C10-C16 Hydrocarbons)	2024/09/29	103	60 - 140	100	60 - 140	<90	ug/L	NC	30
9670370	F3 (C16-C34 Hydrocarbons)	2024/09/29	105	60 - 140	102	60 - 140	<200	ug/L	NC	30
9670370	F4 (C34-C50 Hydrocarbons)	2024/09/29	98	60 - 140	95	60 - 140	<200	ug/L	NC	30
9670442	Benzene	2024/09/29	103	50 - 140	104	50 - 140	<0.20	ug/L	NC	30
9670442	Ethylbenzene	2024/09/29	101	50 - 140	96	50 - 140	<0.20	ug/L	NC	30
9670442	F1 (C6-C10) - BTEX	2024/09/29					<25	ug/L	NC	30
9670442	F1 (C6-C10)	2024/09/29	109	60 - 140	111	60 - 140	<25	ug/L	NC	30
9670442	o-Xylene	2024/09/29	98	50 - 140	102	50 - 140	<0.20	ug/L	NC	30
9670442	p+m-Xylene	2024/09/29	95	50 - 140	99	50 - 140	<0.40	ug/L	NC	30
9670442	Toluene	2024/09/29	94	50 - 140	95	50 - 140	<0.20	ug/L	3.4	30



## QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc Client Project #: OTT-23002538-B0 Site Location: 1822, 1846 BANK & WALKLEY Sampler Initials: SA

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9670442	Total Xylenes	2024/09/29					<0.40	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 p	urrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.									

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



#### VALIDATION SIGNATURE PAGE

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

Lowie A Harding

Louise Harding, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.
C4T9910																		-				
2024/09/24	15:35	Bure 6740	eau Veritas ) Campobello R	oad, Mississauga, O	ntario Can	ada L5N 2L	-8 Tel:(905) 817-	5700 Toll-free:80	0-563-6266 Fax	(905) 817-5	5777 www.	.bvna.com						ា្រះទ			Page of	
BUREAU VERITAS								25.										<b>1</b>				
	#17409	INVOICE	TO:					REP	ORT TO:						PROJEC	TINFORMA	TION:		NC NC	DNT-2024-09-5076	e Only:	
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MOE REC	SUBMITTED	ON THE BI	UREAU VER	ITAS DRINKING	WATER	CHAIN	OF CUSTODY	MUSTBE						QUEUTED			,			Please provide advance not	ce for rush projects	
Regulati	on 153 (2011)			Other Regulation	ons		Special I	nstructions	ircle)										Regular (	Standard) TAT:		7
Table 1	Res/Park	/ledium/Fine	CCME	Sanitary Sew	er Bylaw				ase c		1-1-1								Standard TA	T = 5-7 Working days for most tests		
Table 2	Agri/Other	For RSC	MISA	Storm Sewer	Bylaw				(plea	y HS	BTEX								Please note: days - contac	Standard TAT for certain tests such ct your Project Manager for details.	as BOD and Dioxins/Furans are > 5	
Table			PWQ0	Reg 406 Ta	ble				ered als / H	OCsb	HCs, I								Job Specif	ic Rush TAT (if applies to entire :	submission)	-
			Other _						d Filt Meta	53 V(	53 PI							1 e	Date Require Rush Confir	ed:	Time Required:	
- Camel	Include C	riteria on C	ertificate of A	Analysis (Y/N)?	1		Time Compled	Martin	Fiel	Reg '	Reg 1	EX							# of Bottles		(call lab for #)	_
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* UNLESS OTHERW	VISE AGREED TO	IN WRITING, N	WORK SUBMIT	TED ON THIS CHAIN		DY IS SUB	JECT TO BUREAN	J VERITAS'S STA	NDARD TERMS A	ND CONDI	TIONS. SI	GNING OF T	HIS CHAIN	OF CUSTO	DY DOCUM	ENT IS			Inder I de	Whi	te: Bureau Veritas Yellow: Clie	ent
* IT IS THE RESPON	NSIBILITY OF THE	RELINQUISH	ER TO ENSURE	E THE ACCURACY O	F THE CHA	IN OF CUS	TODY RECORD.	AN INCOMPLETE	CHAIN OF CUST	ODY MAY F	RESULT IN	ANALYTIC	AL TAT DEL	AYS.	015	/ 8 s	AMPLES	MUST BE KEPT CO	OL ( < 10° C ) RY TO BUREA	FROM TIME OF SAMPLING	tation for	1
** SAMPLE CONTA	INER, PRESERVA	TION, HOLD 1	TIME AND PACK	AGE INFORMATION	CAN BE V	IEWED AT	WWW.BVNA.CON	ENVIRONMENT	L-LABORATORI	ES/RESOU	RCES/CHA	AIN-CUSTOR	Y-FORMS-	COCS.				OWNEDEELVE			oling Media Yes No	tact
	Bureau Vertias Canada (2019) Inc																					

exp Services Inc Client Project #: OTT-23002538-B0 Project name: 1822, 1846 BANK & WALKLEY Client ID: MW/BH-8

#### 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.



#### **Attention: Chris Kimmerly**

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

> Report Date: 2024/03/21 Report #: R8075057 Version: 1 - Final

### **CERTIFICATE OF ANALYSIS**

#### BUREAU VERITAS JOB #: C479565

#### Received: 2024/03/15, 14:31

Sample Matrix: Ground Water # Samples Received: 5

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
1,3-Dichloropropene Sum (1)	2	N/A	2024/03/21		EPA 8260C m
Petroleum Hydro. CCME F1 & BTEX in Water (1)	3	N/A	2024/03/19	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (1, 2)	2	2024/03/19	2024/03/19	CAM SOP-00316	CCME PHC-CWS m
Volatile Organic Compounds in Water (1)	2	N/A	2024/03/20	CAM SOP-00228	EPA 8260D

#### Remarks:

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

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

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

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

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

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

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

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

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

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



#### **Attention: Chris Kimmerly**

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

> Report Date: 2024/03/21 Report #: R8075057 Version: 1 - Final

## **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C479565 Received: 2024/03/15, 14:31

Encryption Key

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

This report has been generated and distributed using a secure automated process.

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



	-		-					
Bureau Veritas ID		YQN538						
Sampling Data		2024/03/15						
		12:40						
	UNITS	BH-10/MW	RDL	QC Batch				
BTEX & F1 Hydrocarbons								
Benzene	ug/L	<0.20	0.20	9282182				
Toluene	ug/L	<0.20	0.20	9282182				
Ethylbenzene	ug/L	<0.20	0.20	9282182				
o-Xylene	ug/L	<0.20	0.20	9282182				
p+m-Xylene	ug/L	<0.40	0.40	9282182				
Total Xylenes	ug/L	<0.40	0.40	9282182				
Surrogate Recovery (%)								
1,4-Difluorobenzene	%	100		9282182				
4-Bromofluorobenzene	%	96		9282182				
D10-o-Xylene	%	99		9282182				
D4-1,2-Dichloroethane	%	121		9282182				
RDL = Reportable Detection L	imit							
QC Batch = Quality Control Batch								

# PETROLEUM HYDROCARBONS (CCME)



Bureau Veritas ID		YQN539	YQN540					
Compling Date		2024/03/15	2024/03/15					
		13:15	13:15					
	UNITS	BH-8/MW	DUP	RDL	QC Batch			
BTEX & F1 Hydrocarbons								
Benzene	ug/L	0.70	0.69	0.20	9282067			
Toluene	ug/L	<0.20	<0.20	0.20	9282067			
Ethylbenzene	ug/L	1.3	1.2	0.20	9282067			
o-Xylene	ug/L	<0.20	<0.20	0.20	9282067			
p+m-Xylene	ug/L	2.5	2.3	0.40	9282067			
Total Xylenes	ug/L	2.5	2.3	0.40	9282067			
F1 (C6-C10)	ug/L	<25	<25	25	9282067			
F1 (C6-C10) - BTEX	ug/L	<25	<25	25	9282067			
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	100	9282174			
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	200	9282174			
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	200	9282174			
Reached Baseline at C50	ug/L	Yes	Yes		9282174			
Surrogate Recovery (%)								
1,4-Difluorobenzene	%	98	100		9282067			
4-Bromofluorobenzene	%	96	96		9282067			
D10-o-Xylene	%	96	97		9282067			
D4-1,2-Dichloroethane	%	111	114		9282067			
o-Terphenyl	%	101	98		9282174			
RDL = Reportable Detection L	imit							
QC Batch = Quality Control Batch								

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



# **O.REG 153 VOCS BY HS (WATER)**

Bureau Veritas ID		YQN536	YQN537		
Sampling Date		2024/03/15	2024/03/15		
		11:25	10:25		
	UNITS	BH-3/MW	BH-4/MW	RDL	QC Batch
Calculated Parameters					
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	0.50	9280294
Volatile Organics					
Acetone (2-Propanone)	ug/L	<10	<10	10	9283131
Benzene	ug/L	<0.20	<0.20	0.20	9283131
Bromodichloromethane	ug/L	<0.50	<0.50	0.50	9283131
Bromoform	ug/L	<1.0	<1.0	1.0	9283131
Bromomethane	ug/L	<0.50	<0.50	0.50	9283131
Carbon Tetrachloride	ug/L	<0.19	<0.19	0.19	9283131
Chlorobenzene	ug/L	<0.20	<0.20	0.20	9283131
Chloroform	ug/L	<0.20	<0.20	0.20	9283131
Dibromochloromethane	ug/L	<0.50	<0.50	0.50	9283131
1,2-Dichlorobenzene	ug/L	<0.40	<0.40	0.40	9283131
1,3-Dichlorobenzene	ug/L	<0.40	<0.40	0.40	9283131
1,4-Dichlorobenzene	ug/L	<0.40	<0.40	0.40	9283131
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	1.0	9283131
1,1-Dichloroethane	ug/L	<0.20	<0.20	0.20	9283131
1,2-Dichloroethane	ug/L	<0.49	<0.49	0.49	9283131
1,1-Dichloroethylene	ug/L	<0.20	<0.20	0.20	9283131
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	9283131
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	9283131
1,2-Dichloropropane	ug/L	<0.20	<0.20	0.20	9283131
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	0.30	9283131
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	0.40	9283131
Ethylbenzene	ug/L	<0.20	0.26	0.20	9283131
Ethylene Dibromide	ug/L	<0.19	<0.19	0.19	9283131
Hexane	ug/L	<1.0	<1.0	1.0	9283131
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	2.0	9283131
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	10	9283131
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	5.0	9283131
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	0.50	9283131
Styrene	ug/L	<0.40	<0.40	0.40	9283131
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	9283131
1,1,2,2-Tetrachloroethane	ug/L	<0.40	<0.40	0.40	9283131
Tetrachloroethylene	ug/L	0.47	<0.20	0.20	9283131
Toluene	ug/L	<0.20	1.4	0.20	9283131
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	0.20	9283131
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					



Bureau Veritas ID		YQN536	YQN537		
Sampling Data		2024/03/15	2024/03/15		
		11:25	10:25		
	UNITS	BH-3/MW	BH-4/MW	RDL	QC Batch
1,1,2-Trichloroethane	ug/L	<0.40	<0.40	0.40	9283131
Trichloroethylene	ug/L	<0.20	<0.20	0.20	9283131
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	0.50	9283131
Vinyl Chloride	ug/L	<0.20	<0.20	0.20	9283131
p+m-Xylene	ug/L	<0.20	1.1	0.20	9283131
o-Xylene	ug/L	<0.20	0.52	0.20	9283131
Total Xylenes	ug/L	<0.20	1.7	0.20	9283131
Surrogate Recovery (%)					
4-Bromofluorobenzene	%	100	100		9283131
D4-1,2-Dichloroethane	%	117	120		9283131
D8-Toluene	%	85	84		9283131
RDL = Reportable Detection Limit	-				
QC Batch = Quality Control Batch					

# **O.REG 153 VOCS BY HS (WATER)**



Petroleum Hydrocarbons F2-F4 in Water

exp Services Inc Sampler Initials: SHA

## **TEST SUMMARY**

Bureau Veritas ID: Sample ID:	YQN536 BH-3/MW					Collected: Shipped:	2024/03/15
Matrix:	Ground Water					Received:	2024/03/15
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
1,3-Dichloropropene Sum	ı	CALC	9280294	N/A	2024/03/21	Automate	d Statchk
Volatile Organic Compou	nds in Water	GC/MS	9283131	N/A	2024/03/20	Mariia Bili	aieva
Bureau Veritas ID: Sample ID: Matrix:	YQN537 BH-4/MW Ground Water					Collected: Shipped: Received:	2024/03/15 2024/03/15
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
1,3-Dichloropropene Sum	ı	CALC	9280294	N/A	2024/03/21	Automate	d Statchk
Volatile Organic Compou	nds in Water	GC/MS	9283131	N/A	2024/03/20	Mariia Bili	aieva
Bureau Veritas ID: Sample ID: Matrix:	YQN538 BH-10/MW Ground Water					Collected: Shipped: Received:	2024/03/15 2024/03/15
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Petroleum Hydro. CCME	F1 & BTEX in Water	HSGC/MSFD	9282182	N/A	2024/03/19	Georgeta	Rusu
Bureau Veritas ID: Sample ID: Matrix:	YQN539 BH-8/MW Ground Water					Collected: Shipped: Received:	2024/03/15 2024/03/15
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Petroleum Hydro. CCME	F1 & BTEX in Water	HSGC/MSFD	9282067	N/A	2024/03/19	Abdikarim	Ali
Petroleum Hydrocarbons	F2-F4 in Water	GC/FID	9282174	2024/03/19	2024/03/19	Jeevaraj Je	eevaratrnam
Bureau Veritas ID: Sample ID: Matrix:	YQN540 DUP Ground Water					Collected: Shipped: Received:	2024/03/15 2024/03/15
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Petroleum Hydro. CCME	F1 & BTEX in Water	HSGC/MSFD	9282067	N/A	2024/03/19	Abdikarim	Ali

9282174

GC/FID

2024/03/19

2024/03/19

Jeevaraj Jeevaratrnam



## **GENERAL COMMENTS**

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

Package 1 8.3°C

Results relate only to the items tested.



## QUALITY ASSURANCE REPORT

exp Services Inc Sampler Initials: SHA

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RPI	)
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9282067	1,4-Difluorobenzene	2024/03/19	98	70 - 130	97	70 - 130	99	%		
9282067	4-Bromofluorobenzene	2024/03/19	104	70 - 130	102	70 - 130	97	%		
9282067	D10-o-Xylene	2024/03/19	106	70 - 130	106	70 - 130	95	%		
9282067	D4-1,2-Dichloroethane	2024/03/19	109	70 - 130	109	70 - 130	107	%		
9282174	o-Terphenyl	2024/03/19	100	60 - 130	102	60 - 130	100	%		
9282182	1,4-Difluorobenzene	2024/03/19	98	70 - 130	96	70 - 130	102	%		
9282182	4-Bromofluorobenzene	2024/03/19	102	70 - 130	103	70 - 130	100	%		
9282182	D10-o-Xylene	2024/03/19	104	70 - 130	104	70 - 130	95	%		
9282182	D4-1,2-Dichloroethane	2024/03/19	115	70 - 130	113	70 - 130	122	%		
9283131	4-Bromofluorobenzene	2024/03/20	109	70 - 130	109	70 - 130	104	%		
9283131	D4-1,2-Dichloroethane	2024/03/20	102	70 - 130	99	70 - 130	113	%		
9283131	D8-Toluene	2024/03/20	104	70 - 130	105	70 - 130	85	%		
9282067	Benzene	2024/03/19	98	50 - 140	96	50 - 140	<0.20	ug/L	NC	30
9282067	Ethylbenzene	2024/03/19	98	50 - 140	101	50 - 140	<0.20	ug/L	NC	30
9282067	F1 (C6-C10) - BTEX	2024/03/19					<25	ug/L	NC	30
9282067	F1 (C6-C10)	2024/03/19	102	60 - 140	102	60 - 140	<25	ug/L	NC	30
9282067	o-Xylene	2024/03/19	100	50 - 140	100	50 - 140	<0.20	ug/L	NC	30
9282067	p+m-Xylene	2024/03/19	95	50 - 140	95	50 - 140	<0.40	ug/L	NC	30
9282067	Toluene	2024/03/19	93	50 - 140	92	50 - 140	<0.20	ug/L	NC	30
9282067	Total Xylenes	2024/03/19					<0.40	ug/L	NC	30
9282174	F2 (C10-C16 Hydrocarbons)	2024/03/19	96	60 - 130	103	60 - 130	<100	ug/L	NC	30
9282174	F3 (C16-C34 Hydrocarbons)	2024/03/19	105	60 - 130	107	60 - 130	<200	ug/L	NC	30
9282174	F4 (C34-C50 Hydrocarbons)	2024/03/19	97	60 - 130	99	60 - 130	<200	ug/L	NC	30
9282182	Benzene	2024/03/19	107	50 - 140	106	50 - 140	<0.20	ug/L	NC	30
9282182	Ethylbenzene	2024/03/19	104	50 - 140	104	50 - 140	<0.20	ug/L	NC	30
9282182	o-Xylene	2024/03/19	102	50 - 140	101	50 - 140	<0.20	ug/L	NC	30
9282182	p+m-Xylene	2024/03/19	98	50 - 140	97	50 - 140	<0.40	ug/L	NC	30
9282182	Toluene	2024/03/19	99	50 - 140	97	50 - 140	<0.20	ug/L	NC	30
9282182	Total Xylenes	2024/03/19					<0.40	ug/L	NC	30
9283131	1,1,1,2-Tetrachloroethane	2024/03/20	99	70 - 130	99	70 - 130	<0.50	ug/L	NC	30
9283131	1,1,1-Trichloroethane	2024/03/20	99	70 - 130	98	70 - 130	<0.20	ug/L	NC	30
9283131	1,1,2,2-Tetrachloroethane	2024/03/20	99	70 - 130	95	70 - 130	<0.40	ug/L	NC	30
9283131	1,1,2-Trichloroethane	2024/03/20	92	70 - 130	89	70 - 130	<0.40	ug/L	NC	30



## QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc Sampler Initials: SHA

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RPI	)
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9283131	1,1-Dichloroethane	2024/03/20	96	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
9283131	1,1-Dichloroethylene	2024/03/20	94	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
9283131	1,2-Dichlorobenzene	2024/03/20	97	70 - 130	93	70 - 130	<0.40	ug/L	NC	30
9283131	1,2-Dichloroethane	2024/03/20	94	70 - 130	90	70 - 130	<0.49	ug/L	NC	30
9283131	1,2-Dichloropropane	2024/03/20	92	70 - 130	90	70 - 130	<0.20	ug/L	NC	30
9283131	1,3-Dichlorobenzene	2024/03/20	98	70 - 130	96	70 - 130	<0.40	ug/L	NC	30
9283131	1,4-Dichlorobenzene	2024/03/20	112	70 - 130	109	70 - 130	<0.40	ug/L	NC	30
9283131	Acetone (2-Propanone)	2024/03/20	91	60 - 140	87	60 - 140	<10	ug/L	NC	30
9283131	Benzene	2024/03/20	88	70 - 130	87	70 - 130	<0.20	ug/L	NC	30
9283131	Bromodichloromethane	2024/03/20	103	70 - 130	101	70 - 130	<0.50	ug/L	NC	30
9283131	Bromoform	2024/03/20	91	70 - 130	87	70 - 130	<1.0	ug/L	NC	30
9283131	Bromomethane	2024/03/20	89	60 - 140	88	60 - 140	<0.50	ug/L	NC	30
9283131	Carbon Tetrachloride	2024/03/20	98	70 - 130	98	70 - 130	<0.19	ug/L	NC	30
9283131	Chlorobenzene	2024/03/20	100	70 - 130	100	70 - 130	<0.20	ug/L	NC	30
9283131	Chloroform	2024/03/20	101	70 - 130	100	70 - 130	<0.20	ug/L	NC	30
9283131	cis-1,2-Dichloroethylene	2024/03/20	102	70 - 130	100	70 - 130	<0.50	ug/L	NC	30
9283131	cis-1,3-Dichloropropene	2024/03/20	92	70 - 130	89	70 - 130	<0.30	ug/L	NC	30
9283131	Dibromochloromethane	2024/03/20	102	70 - 130	89	70 - 130	<0.50	ug/L	NC	30
9283131	Dichlorodifluoromethane (FREON 12)	2024/03/20	86	60 - 140	87	60 - 140	<1.0	ug/L	NC	30
9283131	Ethylbenzene	2024/03/20	87	70 - 130	86	70 - 130	<0.20	ug/L	NC	30
9283131	Ethylene Dibromide	2024/03/20	97	70 - 130	93	70 - 130	<0.19	ug/L	NC	30
9283131	Hexane	2024/03/20	96	70 - 130	96	70 - 130	<1.0	ug/L	NC	30
9283131	Methyl Ethyl Ketone (2-Butanone)	2024/03/20	100	60 - 140	93	60 - 140	<10	ug/L	NC	30
9283131	Methyl Isobutyl Ketone	2024/03/20	100	70 - 130	92	70 - 130	<5.0	ug/L	NC	30
9283131	Methyl t-butyl ether (MTBE)	2024/03/20	94	70 - 130	92	70 - 130	<0.50	ug/L	NC	30
9283131	Methylene Chloride(Dichloromethane)	2024/03/20	98	70 - 130	95	70 - 130	<2.0	ug/L	NC	30
9283131	o-Xylene	2024/03/20	78	70 - 130	83	70 - 130	<0.20	ug/L	NC	30
9283131	p+m-Xylene	2024/03/20	77	70 - 130	76	70 - 130	<0.20	ug/L	NC	30
9283131	Styrene	2024/03/20	88	70 - 130	88	70 - 130	<0.40	ug/L	NC	30
9283131	Tetrachloroethylene	2024/03/20	100	70 - 130	101	70 - 130	<0.20	ug/L	NC	30
9283131	Toluene	2024/03/20	93	70 - 130	92	70 - 130	<0.20	ug/L	NC	30
9283131	Total Xylenes	2024/03/20					<0.20	ug/L	NC	30
9283131	trans-1,2-Dichloroethylene	2024/03/20	99	70 - 130	98	70 - 130	<0.50	ug/L	NC	30

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## QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc Sampler Initials: SHA

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RPE	2
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9283131	trans-1,3-Dichloropropene	2024/03/20	100	70 - 130	98	70 - 130	<0.40	ug/L	NC	30
9283131	Trichloroethylene	2024/03/20	101	70 - 130	100	70 - 130	<0.20	ug/L	NC	30
9283131	Trichlorofluoromethane (FREON 11)	2024/03/20	103	70 - 130	104	70 - 130	<0.50	ug/L	NC	30
9283131	Vinyl Chloride	2024/03/20	90	70 - 130	91	70 - 130	<0.20	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 (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).



### VALIDATION SIGNATURE PAGE

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

Anastassia Hamanov, Scientific Specialist

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



Page 13 of 15

### 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.



Your Project #: OTT-23002538-B0 Your C.O.C. #: C#924624-03-01

#### **Attention: Chris Kimmerly**

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

> Report Date: 2024/04/02 Report #: R8090277 Version: 1 - Final

#### **CERTIFICATE OF ANALYSIS**

## BUREAU VERITAS JOB #: C489646

Received: 2024/03/25, 16:46

Sample Matrix: Water # Samples Received: 2

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
1,3-Dichloropropene Sum (1)	2	N/A	2024/04/01		EPA 8260C m
Volatile Organic Compounds in Water (1)	2	N/A	2024/03/28	CAM SOP-00228	EPA 8260D

#### Remarks:

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

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

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

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

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

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

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

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

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



Your Project #: OTT-23002538-B0 Your C.O.C. #: C#924624-03-01

#### **Attention: Chris Kimmerly**

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

> Report Date: 2024/04/02 Report #: R8090277 Version: 1 - Final

### **CERTIFICATE OF ANALYSIS**

BUREAU VERITAS JOB #: C489646 Received: 2024/03/25, 16:46

Encryption Key

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

This report has been generated and distributed using a secure automated process.

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



# O.REG 153 VOCS BY HS (WATER)

Bureau Veritas ID		YSR117		YSR118		
Sampling Date		2024/03/25 15:30		2024/03/25 16:05		
COC Number		C#924624-03-01		C#924624-03-01		
	UNITS	BH/MW-12	RDL	BH/MW-1	RDL	QC Batch
Calculated Parameters				-		
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	<0.50	0.50	9297203
Volatile Organics	-0,					•
Acetone (2-Propanone)	ug/L	30	10	<10	10	9300150
Benzene	ug/L	12	0.20	<0.20	0.20	9300150
Bromodichloromethane	ug/L	<0.50	0.50	<0.50	0.50	9300150
Bromoform	ug/L	<1.0	1.0	<1.0	1.0	9300150
Bromomethane	ug/L	<0.50	0.50	<0.50	0.50	9300150
Carbon Tetrachloride	ug/L	<0.19	0.19	<0.19	0.19	9300150
Chlorobenzene	ug/L	<0.20	0.20	<0.20	0.20	9300150
Chloroform	ug/L	<0.20	0.20	0.34	0.20	9300150
Dibromochloromethane	ug/L	<0.50	0.50	<0.50	0.50	9300150
1,2-Dichlorobenzene	ug/L	<0.40	0.40	<0.40	0.40	9300150
1,3-Dichlorobenzene	ug/L	<0.40	0.40	<0.40	0.40	9300150
1,4-Dichlorobenzene	ug/L	<0.40	0.40	<0.40	0.40	9300150
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	<1.0	1.0	9300150
1,1-Dichloroethane	ug/L	<0.20	0.20	<0.20	0.20	9300150
1,2-Dichloroethane	ug/L	<0.49	0.49	<0.49	0.49	9300150
1,1-Dichloroethylene	ug/L	<0.20	0.20	<0.20	0.20	9300150
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	<0.50	0.50	9300150
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	<0.50	0.50	9300150
1,2-Dichloropropane	ug/L	<0.20	0.20	<0.20	0.20	9300150
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	<0.30	0.30	9300150
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	<0.40	0.40	9300150
Ethylbenzene	ug/L	0.94	0.20	<0.20	0.20	9300150
Ethylene Dibromide	ug/L	<0.19	0.19	<0.19	0.19	9300150
Hexane	ug/L	5.0	1.0	<1.0	1.0	9300150
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	<2.0	2.0	9300150
Methyl Ethyl Ketone (2-Butanone)	ug/L	6400	50	<10	10	9300150
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	<5.0	5.0	9300150
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	<0.50	0.50	9300150
Styrene	ug/L	<0.40	0.40	<0.40	0.40	9300150
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	<0.50	0.50	9300150
1,1,2,2-Tetrachloroethane	ug/L	<0.40	0.40	<0.40	0.40	9300150
Tetrachloroethylene	ug/L	5.3	0.20	<0.20	0.20	9300150
Toluene	ug/L	19	0.20	<0.20	0.20	9300150
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						



# O.REG 153 VOCS BY HS (WATER)

Bureau Veritas ID		YSR117		YSR118		
Sampling Date		2024/03/25 15:30		2024/03/25 16:05		
COC Number		C#924624-03-01		C#924624-03-01		
	UNITS	BH/MW-12	RDL	BH/MW-1	RDL	QC Batch
1,1,1-Trichloroethane	ug/L	<0.20	0.20	<0.20	0.20	9300150
1,1,2-Trichloroethane	ug/L	<0.40	0.40	<0.40	0.40	9300150
Trichloroethylene	ug/L	0.48	0.20	<0.20	0.20	9300150
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	<0.50	0.50	9300150
Vinyl Chloride	ug/L	<0.20	0.20	<0.20	0.20	9300150
p+m-Xylene	ug/L	9.8	0.20	<0.20	0.20	9300150
o-Xylene	ug/L	3.3	0.20	<0.20	0.20	9300150
Total Xylenes	ug/L	13	0.20	<0.20	0.20	9300150
Surrogate Recovery (%)						
4-Bromofluorobenzene	%	97		99		9300150
D4-1,2-Dichloroethane	%	105		116		9300150
D8-Toluene	%	97		93		9300150
RDL = Reportable Detection Limit		·				
QC Batch = Quality Control Batch						



## **TEST SUMMARY**

Bureau Veritas ID: Sample ID:	YSR117 BH/MW-12					Collected: Shipped:	2024/03/25
Matrix:	Water					Received:	2024/03/25
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
1,3-Dichloropropene Sum	ı	CALC	9297203	N/A	2024/04/01	Automated	d Statchk
Volatile Organic Compour	nds in Water	GC/MS	9300150	N/A	2024/03/28	Gabriella N	Norrone
Bureau Veritas ID: Sample ID: Matrix:	YSR118 BH/MW-1 Water					Collected: Shipped: Received:	2024/03/25 2024/03/25
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
1,3-Dichloropropene Sum	ı	CALC	9297203	N/A	2024/04/01	Automated	d Statchk
Volatile Organic Compour	nds in Water	GC/MS	9300150	N/A	2024/03/28	Gabriella N	Norrone



## **GENERAL COMMENTS**

Each t	emperature is the	average of up to	three cooler temperatures taken at receipt
	Package 1	8.7°C	
Sample accord analysi	YSR117 [BH/MW ingly. In order to n s using an approp	V-12] : VOC Analy neet required reg riate low dilution	rsis: Due to high concentrations of target analytes, sample required dilution. Detection limits were adjusted ulatory criteria or to achieve lower reporting limits, results for selected compounds (obtained by a separate ) are included in the report.
Result	s relate only to th	e items tested.	



## QUALITY ASSURANCE REPORT

exp Services Inc Client Project #: OTT-23002538-B0 Sampler Initials: JE

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RPI	D
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9300150	4-Bromofluorobenzene	2024/03/28	99	70 - 130	100	70 - 130	102	%		
9300150	D4-1,2-Dichloroethane	2024/03/28	108	70 - 130	104	70 - 130	110	%		
9300150	D8-Toluene	2024/03/28	104	70 - 130	104	70 - 130	94	%		
9300150	1,1,1,2-Tetrachloroethane	2024/03/28	98	70 - 130	102	70 - 130	<0.50	ug/L		
9300150	1,1,1-Trichloroethane	2024/03/28	94	70 - 130	98	70 - 130	<0.20	ug/L		
9300150	1,1,2,2-Tetrachloroethane	2024/03/28	99	70 - 130	101	70 - 130	<0.40	ug/L	NC	30
9300150	1,1,2-Trichloroethane	2024/03/28	99	70 - 130	101	70 - 130	<0.40	ug/L		
9300150	1,1-Dichloroethane	2024/03/28	96	70 - 130	99	70 - 130	<0.20	ug/L		
9300150	1,1-Dichloroethylene	2024/03/28	89	70 - 130	93	70 - 130	<0.20	ug/L		
9300150	1,2-Dichlorobenzene	2024/03/28	89	70 - 130	93	70 - 130	<0.40	ug/L	NC	30
9300150	1,2-Dichloroethane	2024/03/28	96	70 - 130	98	70 - 130	<0.49	ug/L		
9300150	1,2-Dichloropropane	2024/03/28	95	70 - 130	98	70 - 130	<0.20	ug/L		
9300150	1,3-Dichlorobenzene	2024/03/28	91	70 - 130	95	70 - 130	<0.40	ug/L		
9300150	1,4-Dichlorobenzene	2024/03/28	99	70 - 130	104	70 - 130	<0.40	ug/L	NC	30
9300150	Acetone (2-Propanone)	2024/03/28	114	60 - 140	115	60 - 140	<10	ug/L		
9300150	Benzene	2024/03/28	87	70 - 130	90	70 - 130	<0.20	ug/L	NC	30
9300150	Bromodichloromethane	2024/03/28	102	70 - 130	105	70 - 130	<0.50	ug/L		
9300150	Bromoform	2024/03/28	90	70 - 130	92	70 - 130	<1.0	ug/L		
9300150	Bromomethane	2024/03/28	79	60 - 140	79	60 - 140	<0.50	ug/L		
9300150	Carbon Tetrachloride	2024/03/28	92	70 - 130	96	70 - 130	<0.19	ug/L		
9300150	Chlorobenzene	2024/03/28	99	70 - 130	103	70 - 130	<0.20	ug/L		
9300150	Chloroform	2024/03/28	99	70 - 130	102	70 - 130	<0.20	ug/L	NC	30
9300150	cis-1,2-Dichloroethylene	2024/03/28	95	70 - 130	97	70 - 130	<0.50	ug/L		
9300150	cis-1,3-Dichloropropene	2024/03/28	94	70 - 130	95	70 - 130	<0.30	ug/L		
9300150	Dibromochloromethane	2024/03/28	96	70 - 130	98	70 - 130	<0.50	ug/L		
9300150	Dichlorodifluoromethane (FREON 12)	2024/03/28	60	60 - 140	63	60 - 140	<1.0	ug/L		
9300150	Ethylbenzene	2024/03/28	87	70 - 130	93	70 - 130	<0.20	ug/L	NC	30
9300150	Ethylene Dibromide	2024/03/28	99	70 - 130	100	70 - 130	<0.19	ug/L		
9300150	Hexane	2024/03/28	84	70 - 130	89	70 - 130	<1.0	ug/L		
9300150	Methyl Ethyl Ketone (2-Butanone)	2024/03/28	107	60 - 140	108	60 - 140	<10	ug/L		
9300150	Methyl Isobutyl Ketone	2024/03/28	108	70 - 130	111	70 - 130	<5.0	ug/L		
9300150	Methyl t-butyl ether (MTBE)	2024/03/28	97	70 - 130	102	70 - 130	<0.50	ug/L		



## QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc Client Project #: OTT-23002538-B0 Sampler Initials: JE

			Matrix	Spike	SPIKED	BLANK	Method I	Blank	RPI	D
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9300150	Methylene Chloride(Dichloromethane)	2024/03/28	92	70 - 130	94	70 - 130	<2.0	ug/L	NC	30
9300150	o-Xylene	2024/03/28	78	70 - 130	87	70 - 130	<0.20	ug/L	NC	30
9300150	p+m-Xylene	2024/03/28	95	70 - 130	101	70 - 130	<0.20	ug/L	NC	30
9300150	Styrene	2024/03/28	100	70 - 130	108	70 - 130	<0.40	ug/L		
9300150	Tetrachloroethylene	2024/03/28	92	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
9300150	Toluene	2024/03/28	90	70 - 130	94	70 - 130	<0.20	ug/L	NC	30
9300150	Total Xylenes	2024/03/28					<0.20	ug/L	NC	30
9300150	trans-1,2-Dichloroethylene	2024/03/28	90	70 - 130	94	70 - 130	<0.50	ug/L		
9300150	trans-1,3-Dichloropropene	2024/03/28	103	70 - 130	101	70 - 130	<0.40	ug/L		
9300150	Trichloroethylene	2024/03/28	92	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
9300150	Trichlorofluoromethane (FREON 11)	2024/03/28	91	70 - 130	95	70 - 130	<0.50	ug/L		
9300150	Vinyl Chloride	2024/03/28	79	70 - 130	82	70 - 130	<0.20	ug/L		
Duplicate: Pa Matrix Spike:	Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.									

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



### VALIDATION SIGNATURE PAGE

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

Anastassia Hamanov, Scientific Specialist

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				h	norgan	ics						0	rganio	cs							Hyd	rocar	bons				Vola	tiles		Other
	Sample ID	All	CrVI	CN	General	Hg	Metals (Diss.)	Organic 1 of 2	Organic 2 of 2	PCB 1 of 2	PCB 2 of 2	Pest/ Herb 1 of 2	Pest/ Herb 2 of 2	SVOC/ ABN 1 of 2	SVOC/ ABN 2 of 2	PAH 1 of 2	PAH 2 of 2	Dioxin /Furan	F1 Vial 1	F1 Vial 2	F1 Vial 3	F1 Vial 4	F2-F4 1 of 2	F2-F4 2 of 2	F4G	VOC Vial 1	VOC Vial 2	VOC Vial 3	VOC Vial 4	
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Company Name:	#17498 exp Ser	vices Inc		Co	npany Name	11 i						Quotation	#	Ø19981	8			Bureau Veritas Jol	o #:	Bottle Or	der #:
Attention: Address:	Accounts Payabl 100-2650 Queen	e sview Drive		Atte	ention: dress:		Ch	ris Kin	nmerl	4		P.O. #:	<i>n</i> .	OTT-	-230025	38-BO	_			92463	
	Ottawa ON K2B	8H6										Project Na	ame:					COC #:		Project Ma	anager:
Tel: Email:	(613) 688-1899 AP@exp.com; Ka	Fax (6 aren.Burke@exp.co	513) 225-7337 om	7 Tel Em	ail:	-	and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s	Fax:	s-K-im	merty	a	Site #:	Bv:	Jen	my Ecker	rt		C#924624-03-01		Katherine	Szozda
MOE REC	GULATED DRINKING	G WATER OR WATE	R INTENDED	FOR HUMA	N CONSU	IMPTION	MUST BE		1	PXI	0-COMM	ALYSIS RE	QUESTED	PLEASE B	E SPECIFIC)			Turnarou	nd Time (TAT) R	equired:	and the production of the second
Regulati	SUBMITTED ON T tion 153 (2011) Res/Park Medium Ind/Comm Coarse Agri/Other For RS	HE BUREAU VERITA	AS DRINKING Other Regulatio Sanitary Sewe Storm Sewer Municipality Reg 406 Tat	WATER CH ns er Bylaw Bylaw ble		Special In	structions	Filtered (please circle): letals / Hg / Cr VI	3 PHCs. BTEX/F1-F4	- <u>-</u>							Regular ( (will be app Star Jard T. Please note days - conta Job Speci Date Requi	Please provide: Standard) TAT: ied if Rush TAT is not s AT = 5-7 Working days I Standard TAT for certra text your Project Manage fic Rush TAT (if appli- red:	advance notice for pecified): for most lests ain tests such as B r for details. es to entire subn 	r rush projects OD and Dioxins/Fur iission) ie Required:	ans are > 5
	Include Criteria	on Certificate of Ana	alysis (Y/N)?					biei ∧	g 15	Dies	12						Rush Confi	mation Number.		all lab for #)	1
Sample	le Barcode Label	Sample (Location) Id	dentification	Date Samp	led Time	e Sampied	Matrix		O.Re	GasA	-						# of Bottles	1	Comm	ents	
1		BH/MW.	- 12	24/03/2	25 15	530	Gw			1	X						2				
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1	my Jere	umy Eclert	24/0	3/25	1630	Soin	mel Di Sure	AR	Stry	AND	2024/0	163/25 3/26	08	27	not submitted	Time Sensitive	e Tempera	iture (°C) on Recei	Custody Se Present	al Yes	No
JNLESS OTHERW CKNOWLEDGMEI IT IS THE RESPON	WISE AGREED TO IN WRI ENT AND ACCEPTANCE O DNSIBILITY OF THE RELIN AINER, PRESERVATION, H	TING, WORK SUBMITTED FOUR TERMS WHICH AR IQUISHER TO ENSURE TH HOLD TIME AND PACKAG	ON THIS CHAIN O E AVAILABLE FO HE ACCURACY OF E INFORMATION	OF CUSTODY I R VIEWING AT F THE CHAIN O CAN BE VIEWE	S SUBJECT T WWW.BVNA. F CUSTODY D AT WWW.F	TO BUREAU COM/ENVIR RECORD. A BVNA.COM/	VERITAS'S STANI ONMENTAL-LABC N INCOMPLETE C ENVIRONMENTAL	DARD TERMS / DRATORIES/RE HAIN OF CUST	AND COND SOURCES/ ODY MAY IES/RESOU	ITIONS. SI ICOC-TERI RESULT IN	IGNING OF T MS-AND-COI N ANALYTICA AIN-CUSTOE	THIS CHAIN NDITIONS. AL TAT DEL	OF CUSTO AYS. COCS.	DOCUME	SAMPLES	MUST BE KEPT UNTIL DELI	COOL ( < 10° C VERY TO BURE	I FROM TIME OF SAM AU VERITAS	White: E PLING Cus	tody Seal Pi	resent Int



Your P.O. #: 1824-1826 BANK ST Your Project #: OTT-23002538-A0 Site Location: 1824-1826 BANK ST, OTTAWA, ON Your C.O.C. #: n/a

#### Attention: Leah Wells

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

> Report Date: 2023/12/06 Report #: R7943814 Version: 1 - Final

### **CERTIFICATE OF ANALYSIS**

## BUREAU VERITAS JOB #: C3AR834

Received: 2023/11/30, 11:39

Sample Matrix: Water # Samples Received: 6

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum (1)	6	N/A	2023/12/06	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum (1)	6	N/A	2023/12/06		EPA 8260C m
Petroleum Hydrocarbons F2-F4 in Water (1, 2)	6	2023/12/05	2023/12/06	CAM SOP-00316	CCME PHC-CWS m
Dissolved Metals by ICPMS (1)	6	N/A	2023/12/05	CAM SOP-00447	EPA 6020B m
PAH Compounds in Water by GC/MS (SIM) (1)	6	2023/12/05	2023/12/06	CAM SOP-00318	EPA 8270E
Volatile Organic Compounds and F1 PHCs (1)	6	N/A	2023/12/06	CAM SOP-00230	EPA 8260C m

#### Remarks:

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

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

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

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

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

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

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

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

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

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



Your P.O. #: 1824-1826 BANK ST Your Project #: OTT-23002538-A0 Site Location: 1824-1826 BANK ST, OTTAWA, ON Your C.O.C. #: n/a

#### Attention: Leah Wells

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

> Report Date: 2023/12/06 Report #: R7943814 Version: 1 - Final

## **CERTIFICATE OF ANALYSIS**

# BUREAU VERITAS JOB #: C3AR834



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

This report has been generated and distributed using a secure automated process.

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



## **O.REG 153 DISSOLVED ICPMS METALS (WATER)**

Bureau Veritas ID		XTP032	XTP032	XTP033	XTP034	XTP035		XTP036		
Sampling Date		2023/11/30 10:20	2023/11/30 10:20	2023/11/29 13:30	2023/11/29 13:30	2023/11/29 14:15		2023/11/29		
COC Number		n/a	n/a	n/a	n/a	n/a		n/a		
	UNITS	BH-1	BH-1 Lab-Dup	BH-10	DUP.	BH-9	RDL	TRIP BLANK	RDL	QC Batch
Metals										
Dissolved Antimony (Sb)	ug/L	1.4	1.3	0.56	<0.50	0.55	0.50	<0.50	0.50	9091340
Dissolved Arsenic (As)	ug/L	1.1	1.1	<1.0	<1.0	<1.0	1.0	<1.0	1.0	9091340
Dissolved Barium (Ba)	ug/L	1800	1800	150	140	89	2.0	<2.0	2.0	9091340
Dissolved Beryllium (Be)	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	<0.40	0.40	9091340
Dissolved Boron (B)	ug/L	520	520	37	36	50	10	<10	10	9091340
Dissolved Cadmium (Cd)	ug/L	<0.090	<0.090	0.28	0.26	0.12	0.090	<0.090	0.090	9091340
Dissolved Chromium (Cr)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	<5.0	5.0	9091340
Dissolved Cobalt (Co)	ug/L	2.5	2.5	5.9	5.5	2.4	0.50	<0.50	0.50	9091340
Dissolved Copper (Cu)	ug/L	2.5	2.4	4.5	3.6	2.3	0.90	<0.90	0.90	9091340
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	<0.50	0.50	9091340
Dissolved Molybdenum (Mo)	ug/L	11	11	9.7	9.0	1.6	0.50	<0.50	0.50	9091340
Dissolved Nickel (Ni)	ug/L	6.3	6.2	10	9.8	6.2	1.0	<1.0	1.0	9091340
Dissolved Selenium (Se)	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	<2.0	2.0	9091340
Dissolved Silver (Ag)	ug/L	<0.090	<0.090	0.093	<0.090	<0.090	0.090	0.098	0.090	9091340
Dissolved Sodium (Na)	ug/L	820000	860000	890000	880000	1100000	500	<100	100	9091340
Dissolved Thallium (Tl)	ug/L	0.059	0.061	0.078	0.070	<0.050	0.050	<0.050	0.050	9091340
Dissolved Uranium (U)	ug/L	2.9	2.8	3.4	3.3	1.8	0.10	<0.10	0.10	9091340
Dissolved Vanadium (V)	ug/L	<0.50	<0.50	0.86	0.58	0.53	0.50	<0.50	0.50	9091340
Dissolved Zinc (Zn)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	<5.0	5.0	9091340
RDL = Reportable Detection Li	mit									
QC Batch = Quality Control Ba	tch									

Lab-Dup = Laboratory Initiated Duplicate



Bureau Veritas ID		XTP037		
Sampling Date		2023/11/30 10:30		
COC Number		n/a		
	UNITS	FIELD BLANK	RDL	QC Batch
Metals				
Dissolved Antimony (Sb)	ug/L	<0.50	0.50	9091340
Dissolved Arsenic (As)	ug/L	<1.0	1.0	9091340
Dissolved Barium (Ba)	ug/L	<2.0	2.0	9091340
Dissolved Beryllium (Be)	ug/L	<0.40	0.40	9091340
Dissolved Boron (B)	ug/L	<10	10	9091340
Dissolved Cadmium (Cd)	ug/L	<0.090	0.090	9091340
Dissolved Chromium (Cr)	ug/L	<5.0	5.0	9091340
Dissolved Cobalt (Co)	ug/L	<0.50	0.50	9091340
Dissolved Copper (Cu)	ug/L	<0.90	0.90	9091340
Dissolved Lead (Pb)	ug/L	<0.50	0.50	9091340
Dissolved Molybdenum (Mo)	ug/L	<0.50	0.50	9091340
Dissolved Nickel (Ni)	ug/L	<1.0	1.0	9091340
Dissolved Selenium (Se)	ug/L	<2.0	2.0	9091340
Dissolved Silver (Ag)	ug/L	<0.090	0.090	9091340
Dissolved Sodium (Na)	ug/L	<100	100	9091340
Dissolved Thallium (Tl)	ug/L	<0.050	0.050	9091340
Dissolved Uranium (U)	ug/L	<0.10	0.10	9091340
Dissolved Vanadium (V)	ug/L	<0.50	0.50	9091340
Dissolved Zinc (Zn)	ug/L	<5.0	5.0	9091340
RDL = Reportable Detection Li	mit			
QC Batch = Quality Control Ba	tch			

## **O.REG 153 DISSOLVED ICPMS METALS (WATER)**



# **O.REG 153 PAHS (WATER)**

Bureau Veritas ID		XTP032	XTP033	XTP034	XTP035	XTP036	XTP037		
Sampling Date		2023/11/30 10:20	2023/11/29 13:30	2023/11/29 13:30	2023/11/29 14:15	2023/11/29	2023/11/30 10:30		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	BH-1	BH-10	DUP.	BH-9	TRIP BLANK	FIELD BLANK	RDL	QC Batch
Calculated Parameters									
Methylnaphthalene, 2-(1-)	ug/L	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	0.071	9089164
Polyaromatic Hydrocarbons					•				
Acenaphthene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
Acenaphthylene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
Anthracene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
Benzo(a)anthracene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
Benzo(a)pyrene	ug/L	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	<0.0090	0.0090	9091558
Benzo(b/j)fluoranthene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
Benzo(g,h,i)perylene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
Benzo(k)fluoranthene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
Chrysene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
Dibenzo(a,h)anthracene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
Fluoranthene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
Fluorene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
1-Methylnaphthalene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
2-Methylnaphthalene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
Naphthalene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
Phenanthrene	ug/L	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	9091558
Pyrene	ug/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9091558
Surrogate Recovery (%)				-		-			
D10-Anthracene	%	111	109	105	107	106	109		9091558
D14-Terphenyl (FS)	%	94	102	99	103	101	103		9091558
D8-Acenaphthylene	%	95	92	90	92	90	94		9091558
RDL = Reportable Detection L QC Batch = Quality Control Ba	.imit atch								



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

Bureau Veritas ID		XTP032			XTP032			XTP033	XTP034		
Comulia o Doto		2023/11/30			2023/11/30			2023/11/29	2023/11/29		
Sampling Date		10:20			10:20			13:30	13:30		
COC Number		n/a			n/a			n/a	n/a		
	UNITS	BH-1	RDL	QC Batch	BH-1 Lab-Dup	RDL	QC Batch	BH-10	DUP.	RDL	QC Batch
Calculated Parameters											
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	9088503				<0.50	<0.50	0.50	9088503
Volatile Organics											
Acetone (2-Propanone)	ug/L	<10	10	9090847	<10	10	9090847	<10	<10	10	9090847
Benzene	ug/L	<0.17	0.17	9090847	<0.17	0.17	9090847	0.54	0.51	0.17	9090847
Bromodichloromethane	ug/L	<0.50	0.50	9090847	<0.50	0.50	9090847	<0.50	<0.50	0.50	9090847
Bromoform	ug/L	<1.0	1.0	9090847	<1.0	1.0	9090847	<1.0	<1.0	1.0	9090847
Bromomethane	ug/L	<0.50	0.50	9090847	<0.50	0.50	9090847	<0.50	<0.50	0.50	9090847
Carbon Tetrachloride	ug/L	<0.20	0.20	9090847	<0.20	0.20	9090847	<0.20	<0.20	0.20	9090847
Chlorobenzene	ug/L	<0.20	0.20	9090847	<0.20	0.20	9090847	<0.20	<0.20	0.20	9090847
Chloroform	ug/L	1.7	0.20	9090847	1.6	0.20	9090847	<0.20	<0.20	0.20	9090847
Dibromochloromethane	ug/L	<0.50	0.50	9090847	<0.50	0.50	9090847	<0.50	<0.50	0.50	9090847
1,2-Dichlorobenzene	ug/L	<0.50	0.50	9090847	<0.50	0.50	9090847	<0.50	<0.50	0.50	9090847
1,3-Dichlorobenzene	ug/L	<0.50	0.50	9090847	<0.50	0.50	9090847	<0.50	<0.50	0.50	9090847
1,4-Dichlorobenzene	ug/L	<0.50	0.50	9090847	<0.50	0.50	9090847	<0.50	<0.50	0.50	9090847
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	9090847	<1.0	1.0	9090847	<1.0	<1.0	1.0	9090847
1,1-Dichloroethane	ug/L	<0.20	0.20	9090847	<0.20	0.20	9090847	<0.20	<0.20	0.20	9090847
1,2-Dichloroethane	ug/L	<0.50	0.50	9090847	<0.50	0.50	9090847	<0.50	<0.50	0.50	9090847
1,1-Dichloroethylene	ug/L	<0.20	0.20	9090847	<0.20	0.20	9090847	<0.20	<0.20	0.20	9090847
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	9090847	<0.50	0.50	9090847	<0.50	<0.50	0.50	9090847
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	9090847	<0.50	0.50	9090847	<0.50	<0.50	0.50	9090847
1,2-Dichloropropane	ug/L	<0.20	0.20	9090847	<0.20	0.20	9090847	<0.20	<0.20	0.20	9090847
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	9090847	<0.30	0.30	9090847	<0.30	<0.30	0.30	9090847
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	9090847	<0.40	0.40	9090847	<0.40	<0.40	0.40	9090847
Ethylbenzene	ug/L	<0.20	0.20	9090847	<0.20	0.20	9090847	<0.20	<0.20	0.20	9090847
Ethylene Dibromide	ug/L	<0.20	0.20	9090847	<0.20	0.20	9090847	<0.20	<0.20	0.20	9090847
Hexane	ug/L	<1.0	1.0	9090847	<1.0	1.0	9090847	<1.0	<1.0	1.0	9090847
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	9090847	<2.0	2.0	9090847	<2.0	<2.0	2.0	9090847
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	10	9090847	<10	10	9090847	<10	<10	10	9090847
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	9090847	<5.0	5.0	9090847	<5.0	<5.0	5.0	9090847
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	9090847	<0.50	0.50	9090847	<0.50	<0.50	0.50	9090847
Styrene	ug/L	<0.50	0.50	9090847	<0.50	0.50	9090847	<0.50	<0.50	0.50	9090847
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	9090847	<0.50	0.50	9090847	<0.50	<0.50	0.50	9090847
RDL = Reportable Detection Limit											

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate



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

Bureau Veritas ID		XTP032			XTP032			XTP033	XTP034		
Sampling Date		2023/11/30			2023/11/30			2023/11/29	2023/11/29		
		10:20			10:20			13:30	13:30		
COC Number		n/a			n/a			n/a	n/a		
	UNITS	BH-1	RDL	QC Batch	BH-1 Lab-Dup	RDL	QC Batch	BH-10	DUP.	RDL	QC Batch
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	9090847	<0.50	0.50	9090847	<0.50	<0.50	0.50	9090847
Tetrachloroethylene	ug/L	<0.20	0.20	9090847	<0.20	0.20	9090847	<0.20	<0.20	0.20	9090847
Toluene	ug/L	<0.20	0.20	9090847	<0.20	0.20	9090847	<0.20	<0.20	0.20	9090847
1,1,1-Trichloroethane	ug/L	<0.20	0.20	9090847	<0.20	0.20	9090847	<0.20	<0.20	0.20	9090847
1,1,2-Trichloroethane	ug/L	<0.50	0.50	9090847	<0.50	0.50	9090847	<0.50	<0.50	0.50	9090847
Trichloroethylene	ug/L	<0.20	0.20	9090847	<0.20	0.20	9090847	<0.20	<0.20	0.20	9090847
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	9090847	<0.50	0.50	9090847	<0.50	<0.50	0.50	9090847
Vinyl Chloride	ug/L	<0.20	0.20	9090847	<0.20	0.20	9090847	<0.20	<0.20	0.20	9090847
p+m-Xylene	ug/L	<0.20	0.20	9090847	<0.20	0.20	9090847	<0.20	<0.20	0.20	9090847
o-Xylene	ug/L	<0.20	0.20	9090847	<0.20	0.20	9090847	<0.20	<0.20	0.20	9090847
Total Xylenes	ug/L	<0.20	0.20	9090847	<0.20	0.20	9090847	<0.20	<0.20	0.20	9090847
F1 (C6-C10)	ug/L	<25	25	9090847	<25	25	9090847	<25	<25	25	9090847
F1 (C6-C10) - BTEX	ug/L	<25	25	9090847	<25	25	9090847	<25	<25	25	9090847
F2-F4 Hydrocarbons											
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	9091562				<100	<100	100	9091562
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	9091562				<200	<200	200	9091562
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	9091562				<200	<200	200	9091562
Reached Baseline at C50	ug/L	Yes		9091562				Yes	Yes		9091562
Surrogate Recovery (%)			-								
o-Terphenyl	%	91		9091562				95	95		9091562
4-Bromofluorobenzene	%	97		9090847	97		9090847	96	96		9090847
D4-1,2-Dichloroethane	%	98		9090847	97		9090847	95	94		9090847
D8-Toluene	%	94		9090847	95		9090847	95	95		9090847
RDL = Reportable Detection Limit											
QC Batch = Quality Control Batch											

Lab-Dup = Laboratory Initiated Duplicate



				-								
Bureau Veritas ID		XTP035	XTP036	XTP037								
Sampling Date		2023/11/29 14:15	2023/11/29	2023/11/30 10:30								
COC Number		n/a	n/a	n/a								
	UNITS	BH-9	TRIP BLANK	FIELD BLANK	RDL	QC Batch						
Calculated Parameters												
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	<0.50	0.50	9088503						
Volatile Organics	0,											
Acetone (2-Propanone)	ug/L	<10	<10	<10	10	9090847						
Benzene	ug/L	<0.17	<0.17	<0.17	0.17	9090847						
Bromodichloromethane	ug/L	<0.50	<0.50	<0.50	0.50	9090847						
Bromoform	ug/L	<1.0	<1.0	<1.0	1.0	9090847						
Bromomethane	ug/L	<0.50	<0.50	<0.50	0.50	9090847						
Carbon Tetrachloride	ug/L	<0.20	<0.20	<0.20	0.20	9090847						
Chlorobenzene	ug/L	<0.20	<0.20	<0.20	0.20	9090847						
Chloroform	ug/L	<0.20	<0.20	<0.20	0.20	9090847						
Dibromochloromethane	ug/L	<0.50	<0.50	<0.50	0.50	9090847						
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	9090847						
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	9090847						
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	<0.50	0.50	9090847						
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	<1.0	1.0	9090847						
1,1-Dichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	9090847						
1,2-Dichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	9090847						
1,1-Dichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	9090847						
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	9090847						
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	<0.50	0.50	9090847						
1,2-Dichloropropane	ug/L	<0.20	<0.20	<0.20	0.20	9090847						
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	<0.30	0.30	9090847						
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	<0.40	0.40	9090847						
Ethylbenzene	ug/L	<0.20	<0.20	<0.20	0.20	9090847						
Ethylene Dibromide	ug/L	<0.20	<0.20	<0.20	0.20	9090847						
Hexane	ug/L	<1.0	<1.0	<1.0	1.0	9090847						
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	<2.0	2.0	9090847						
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	<10	10	9090847						
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	<5.0	5.0	9090847						
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	<0.50	0.50	9090847						
Styrene	ug/L	<0.50	<0.50	<0.50	0.50	9090847						
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	9090847						
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	<0.50	0.50	9090847						
RDL = Reportable Detection Limit	•	•	•	•	•							
QC Batch = Quality Control Batch												

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


	1					
Bureau Veritas ID		XTP035	XTP036	XTP037		
Sampling Date		2023/11/29 14:15	2023/11/29	2023/11/30 10:30		
COC Number		n/a	n/a	n/a		
	UNITS	BH-9	TRIP BLANK	FIELD BLANK	RDL	QC Batch
Tetrachloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	9090847
Toluene	ug/L	<0.20	<0.20	<0.20	0.20	9090847
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	<0.20	0.20	9090847
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	<0.50	0.50	9090847
Trichloroethylene	ug/L	<0.20	<0.20	<0.20	0.20	9090847
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	<0.50	0.50	9090847
Vinyl Chloride	ug/L	<0.20	<0.20	<0.20	0.20	9090847
p+m-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	9090847
o-Xylene	ug/L	<0.20	<0.20	<0.20	0.20	9090847
Total Xylenes	ug/L	<0.20	<0.20	<0.20	0.20	9090847
F1 (C6-C10)	ug/L	<25	<25	<25	25	9090847
F1 (C6-C10) - BTEX	ug/L	<25	<25	<25	25	9090847
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	<100	100	9091562
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	<200	200	9091562
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	<200	200	9091562
Reached Baseline at C50	ug/L	Yes	Yes	Yes		9091562
Surrogate Recovery (%)						
o-Terphenyl	%	91	91	95		9091562
4-Bromofluorobenzene	%	96	96	96		9090847
D4-1,2-Dichloroethane	%	93	93	93		9090847
D8-Toluene	%	96	95	96		9090847
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						

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



## **TEST SUMMARY**

Bureau Veritas ID: Sample ID: Matrix:	XTP032 BH-1 Water					Collected: 2 Shipped: Received: 2	2023/11/30 2023/11/30
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Methylnaphthalene Sum		CALC	9089164	N/A	2023/12/06	Automated S	Statchk
1,3-Dichloropropene Sum	ı	CALC	9088503	N/A	2023/12/06	Automated S	Statchk
Petroleum Hydrocarbons	F2-F4 in Water	GC/FID	9091562	2023/12/05	2023/12/06	Dennis Ngon	du
Dissolved Metals by ICPN	1S	ICP/MS	9091340	N/A	2023/12/05	Prempal Bha	tti
PAH Compounds in Wate	r by GC/MS (SIM)	GC/MS	9091558	2023/12/05	2023/12/06	Jonghan Yoo	n
Volatile Organic Compou	nds and F1 PHCs	GC/MSFD	9090847	N/A	2023/12/06	Cheng-Yu Sh	a
Bureau Veritas ID: Sample ID: Matrix:	XTP032 Dup BH-1 Water					Collected: 2 Shipped: Received: 2	2023/11/30 2023/11/30
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Dissolved Metals by ICPN	1S	ICP/MS	9091340	N/A	2023/12/05	Prempal Bha	tti
Volatile Organic Compou	nds and F1 PHCs	GC/MSFD	9090847	N/A	2023/12/06	Cheng-Yu Sh	а
Bureau Veritas ID: Sample ID: Matrix:	XTP033 BH-10 Water					Collected: 2 Shipped: Received: 2	2023/11/29 2023/11/30
<b>T</b>			Batal	Extracted	Data Analyzard	A	
Test Description		Instrumentation	Batch	LAHACIEU	Date Analyzed	Analyst	
Methylnaphthalene Sum		CALC	9089164	N/A	2023/12/06	Analyst Automated S	Statchk
Methylnaphthalene Sum 1,3-Dichloropropene Sum	1	CALC CALC	9089164 9088503	N/A N/A	2023/12/06 2023/12/06	Automated S Automated S	Statchk Statchk
Methylnaphthalene Sum 1,3-Dichloropropene Sum Petroleum Hydrocarbons	ו F2-F4 in Water	CALC CALC GC/FID	9089164 9088503 9091562	N/A N/A 2023/12/05	Date Analyzed           2023/12/06           2023/12/06           2023/12/06	Automated S Automated S Automated S Dennis Ngon	Statchk Statchk du
Methylnaphthalene Sum 1,3-Dichloropropene Sum Petroleum Hydrocarbons Dissolved Metals by ICPM	n F2-F4 in Water IS	CALC CALC CALC GC/FID ICP/MS	9089164 9088503 9091562 9091340	N/A N/A 2023/12/05 N/A	2023/12/06 2023/12/06 2023/12/06 2023/12/06 2023/12/05	Automated S Automated S Dennis Ngon Prempal Bha	Statchk Statchk du tti
Methylnaphthalene Sum 1,3-Dichloropropene Sum Petroleum Hydrocarbons Dissolved Metals by ICPM PAH Compounds in Wate	n F2-F4 in Water IS r by GC/MS (SIM)	CALC CALC GC/FID ICP/MS GC/MS	Batch           9089164           9088503           9091562           9091340           9091558	N/A N/A 2023/12/05 N/A 2023/12/05	Date Analyzed           2023/12/06           2023/12/06           2023/12/06           2023/12/05           2023/12/06	Automated S Automated S Dennis Ngon Prempal Bha Jonghan Yoo	Statchk Statchk du tti n
Methylnaphthalene Sum 1,3-Dichloropropene Sum Petroleum Hydrocarbons Dissolved Metals by ICPM PAH Compounds in Wate Volatile Organic Compou	n F2-F4 in Water IS r by GC/MS (SIM) nds and F1 PHCs	CALC CALC CALC GC/FID ICP/MS GC/MS GC/MSFD	Batch           9089164           9088503           9091562           9091340           9091558           9090847	N/A N/A 2023/12/05 N/A 2023/12/05 N/A	Date Analyzed           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06	Automated S Automated S Dennis Ngon Prempal Bha Jonghan Yoo Cheng-Yu Sh	Statchk Statchk du tti n a
Methylnaphthalene Sum 1,3-Dichloropropene Sum Petroleum Hydrocarbons Dissolved Metals by ICPM PAH Compounds in Wate Volatile Organic Compou Bureau Veritas ID: Sample ID: Matrix:	r by GC/MS (SIM) nds and F1 PHCs XTP034 DUP. Water	Instrumentation         CALC         CALC         GC/FID         ICP/MS         GC/MS         GC/MSFD	Batch 9089164 9088503 9091562 9091340 9091558 9090847	N/A N/A 2023/12/05 N/A 2023/12/05 N/A	2023/12/06 2023/12/06 2023/12/06 2023/12/06 2023/12/06 2023/12/06	Analyst Automated S Automated S Dennis Ngon Prempal Bha Jonghan Yoo Cheng-Yu Sh Collected: 2 Shipped: Received: 2	Statchk Statchk du tti n a 2023/11/29 2023/11/30
Test Description         Methylnaphthalene Sum         1,3-Dichloropropene Sum         Petroleum Hydrocarbons         Dissolved Metals by ICPN         PAH Compounds in Wate         Volatile Organic Compounds         Bureau Veritas ID:         Sample ID:         Matrix:	r by GC/MS (SIM) nds and F1 PHCs XTP034 DUP. Water	Instrumentation CALC CALC GC/FID ICP/MS GC/MS GC/MSFD	Batch 9089164 9088503 9091562 9091340 9091558 9090847 Batch	N/A           N/A           2023/12/05           N/A           2023/12/05           N/A           Extracted	Date Analyzed           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           Date Analyzed	Analyst Automated S Automated S Dennis Ngon Prempal Bha Jonghan Yoo Cheng-Yu Sha Collected: 2 Shipped: Received: 2 Analyst	Statchk Statchk du tti n a 2023/11/29 2023/11/30
Test Description         Methylnaphthalene Sum         1,3-Dichloropropene Sum         Petroleum Hydrocarbons         Dissolved Metals by ICPM         PAH Compounds in Wate         Volatile Organic Compounds         Bureau Veritas ID:         Sample ID:         Matrix:         Test Description         Methylnaphthalene Sum	1 F2-F4 in Water 15 r by GC/MS (SIM) nds and F1 PHCs XTP034 DUP. Water	Instrumentation CALC CALC GC/FID ICP/MS GC/MS GC/MSFD Instrumentation CALC	Batch 9089164 9088503 9091562 9091340 9091558 9090847 Batch 9089164	N/A           N/A           2023/12/05           N/A           2023/12/05           N/A           Extracted           N/A	Date Analyzed           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06	Analyst Automated S Automated S Dennis Ngon Prempal Bha Jonghan Yoo Cheng-Yu Sha Collected: 2 Shipped: Received: 2 Analyst Automated S	Statchk Statchk du tti n a 2023/11/29 2023/11/30 Statchk
Test Description         Methylnaphthalene Sum         1,3-Dichloropropene Sum         Petroleum Hydrocarbons         Dissolved Metals by ICPM         PAH Compounds in Wate         Volatile Organic Compounds         Bureau Veritas ID:         Sample ID:         Matrix:         Test Description         Methylnaphthalene Sum         1,3-Dichloropropene Sum	F2-F4 in Water IS r by GC/MS (SIM) nds and F1 PHCs XTP034 DUP. Water	Instrumentation CALC CALC GC/FID ICP/MS GC/MS GC/MSFD Instrumentation CALC CALC	Batch 9089164 9088503 9091562 9091340 9091558 9090847 Batch 9089164 9088503	Extracted N/A N/A 2023/12/05 N/A 2023/12/05 N/A Extracted N/A N/A	Date Analyzed           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06	Analyst Automated S Automated S Dennis Ngon Prempal Bha Jonghan Yoo Cheng-Yu Sh Collected: 2 Shipped: Received: 2 Analyst Automated S Automated S	Statchk Statchk du tti n a 2023/11/29 2023/11/30 Statchk Statchk
Test Description         Methylnaphthalene Sum         1,3-Dichloropropene Sum         Petroleum Hydrocarbons         Dissolved Metals by ICPM         PAH Compounds in Wate         Volatile Organic Compounds         Bureau Veritas ID:         Sample ID:         Matrix:         Test Description         Methylnaphthalene Sum         1,3-Dichloropropene Sum         Petroleum Hydrocarbons	1 F2-F4 in Water 1S r by GC/MS (SIM) nds and F1 PHCs XTP034 DUP. Water Water	Instrumentation CALC CALC GC/FID ICP/MS GC/MS GC/MSFD Instrumentation CALC CALC CALC GC/FID	Batch 9089164 9088503 9091562 9091340 9091558 9090847 Batch 9089164 9088503 9091562	Extracted N/A N/A 2023/12/05 N/A 2023/12/05 N/A Extracted N/A N/A 2023/12/05	Date Analyzed           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06	Analyst Automated S Automated S Dennis Ngon Prempal Bha Jonghan Yoo Cheng-Yu Sh Collected: 2 Shipped: Received: 2 Analyst Automated S Automated S Dennis Ngon	Statchk Statchk du tti n a 2023/11/29 2023/11/30 Statchk Statchk du
Test Description         Methylnaphthalene Sum         1,3-Dichloropropene Sum         Petroleum Hydrocarbons         Dissolved Metals by ICPM         PAH Compounds in Wate         Volatile Organic Compou         Bureau Veritas ID:         Sample ID:         Matrix:         Test Description         Methylnaphthalene Sum         1,3-Dichloropropene Sum         Petroleum Hydrocarbons         Dissolved Metals by ICPM	n F2-F4 in Water 15 r by GC/MS (SIM) nds and F1 PHCs XTP034 DUP. Water Water	Instrumentation CALC CALC GC/FID ICP/MS GC/MS GC/MSFD Instrumentation CALC CALC CALC GC/FID ICP/MS	Batch 9089164 908503 9091562 9091340 9091558 9090847 9090847 9089164 9089164 9088503 9091562 9091340	Extracted N/A N/A 2023/12/05 N/A 2023/12/05 N/A Extracted N/A N/A 2023/12/05 N/A	Date Analyzed           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/05	Analyst Automated S Automated S Dennis Ngon Prempal Bha Jonghan Yoo Cheng-Yu Shi Collected: 2 Shipped: Received: 2 Analyst Automated S Dennis Ngon Prempal Bha	Statchk Statchk du tti n a 2023/11/29 2023/11/30 Statchk Statchk Statchk du tti
Test Description         Methylnaphthalene Sum         1,3-Dichloropropene Sum         Petroleum Hydrocarbons         Dissolved Metals by ICPM         PAH Compounds in Wate         Volatile Organic Compounds         Bureau Veritas ID:         Sample ID:         Matrix:         Test Description         Methylnaphthalene Sum         1,3-Dichloropropene Sum         Petroleum Hydrocarbons         Dissolved Metals by ICPM         PAH Compounds in Wate	1 F2-F4 in Water IS r by GC/MS (SIM) nds and F1 PHCs XTP034 DUP. Water N F2-F4 in Water IS r by GC/MS (SIM)	Instrumentation CALC CALC GC/FID ICP/MS GC/MS GC/MSFD Instrumentation CALC CALC CALC CALC GC/FID ICP/MS GC/MS	Batch 9089164 908503 9091562 9091340 9091558 9090847 Batch 9089164 9089164 9088503 9091562 9091340 9091558	Extracted N/A N/A 2023/12/05 N/A 2023/12/05 N/A Extracted N/A N/A 2023/12/05 N/A 2023/12/05	Date Analyzed           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06	Analyst Automated S Automated S Dennis Ngon Prempal Bha Jonghan Yoo Cheng-Yu Sha Collected: 2 Shipped: Received: 2 Analyst Automated S Dennis Ngon Prempal Bha Jonghan Yoo	Statchk Statchk du tti n a 2023/11/29 2023/11/30 Statchk Statchk Statchk du tti n
Test Description         Methylnaphthalene Sum         1,3-Dichloropropene Sum         Petroleum Hydrocarbons         Dissolved Metals by ICPM         PAH Compounds in Wate         Volatile Organic Compounds         Bureau Veritas ID:         Sample ID:         Matrix:         Test Description         Methylnaphthalene Sum         1,3-Dichloropropene Sum         Petroleum Hydrocarbons         Dissolved Metals by ICPM         PAH Compounds in Wate         Volatile Organic Compounds	F2-F4 in Water IS r by GC/MS (SIM) nds and F1 PHCs XTP034 DUP. Water F2-F4 in Water IS r by GC/MS (SIM) nds and F1 PHCs	Instrumentation CALC CALC GC/FID ICP/MS GC/MS GC/MSFD Instrumentation CALC CALC CALC CALC GC/FID ICP/MS GC/MSFD	Batch 9089164 9088503 9091562 9091340 9091558 9090847 Batch 9089164 9088503 9091562 9091340 9091558 9090847	Extracted N/A N/A 2023/12/05 N/A 2023/12/05 N/A Extracted N/A N/A 2023/12/05 N/A 2023/12/05 N/A	Date Analyzed           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06           2023/12/06	Analyst Automated S Automated S Dennis Ngon Prempal Bha Jonghan Yoo Cheng-Yu Sh Collected: 2 Shipped: Received: 2 Analyst Automated S Automated S Dennis Ngon Prempal Bha Jonghan Yoo Cheng-Yu Sh	Statchk Statchk du tti n a 2023/11/29 2023/11/30 Statchk Statchk du tti n a

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9089164	N/A	2023/12/06	Automated Statchk

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



### **TEST SUMMARY**

Bureau Veritas ID: Sample ID: Matrix:	XTP035 BH-9 Water					Collected: Shipped: Received:	2023/11/29 2023/11/30
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
1,3-Dichloropropene Sum	ı	CALC	9088503	N/A	2023/12/06	Automate	d Statchk
Petroleum Hydrocarbons	F2-F4 in Water	GC/FID	9091562	2023/12/05	2023/12/06	Dennis Ng	ondu
Dissolved Metals by ICPN	1S	ICP/MS	9091340	N/A	2023/12/05	Prempal B	hatti
PAH Compounds in Wate	r by GC/MS (SIM)	GC/MS	9091558	2023/12/05	2023/12/06	Jonghan Y	oon

9090847

N/A

2023/12/06

GC/MSFD

Bureau Veritas ID: XTP036 Sample ID: TRIP BLANK Matrix: Water

Volatile Organic Compounds and F1 PHCs

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9089164	N/A	2023/12/06	Automated Statchk
1,3-Dichloropropene Sum	CALC	9088503	N/A	2023/12/06	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9091562	2023/12/05	2023/12/06	Dennis Ngondu
Dissolved Metals by ICPMS	ICP/MS	9091340	N/A	2023/12/05	Prempal Bhatti
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9091558	2023/12/05	2023/12/06	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9090847	N/A	2023/12/06	Cheng-Yu Sha

Bureau Veritas ID: XTP037 Sample ID: FIELD BLANK Matrix: Water

Collected:	2023/11/30
Shipped:	
Received:	2023/11/30

Cheng-Yu Sha

Shipped:

Collected: 2023/11/29

Received: 2023/11/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	9089164	N/A	2023/12/06	Automated Statchk
1,3-Dichloropropene Sum	CALC	9088503	N/A	2023/12/06	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	9091562	2023/12/05	2023/12/06	Dennis Ngondu
Dissolved Metals by ICPMS	ICP/MS	9091340	N/A	2023/12/05	Prempal Bhatti
PAH Compounds in Water by GC/MS (SIM)	GC/MS	9091558	2023/12/05	2023/12/06	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	9090847	N/A	2023/12/06	Cheng-Yu Sha



## **GENERAL COMMENTS**

Each temperature is the average of up to three cooler temperatures taken at receipt							
•	Package 1	10.0°C					
			-				
Results	s relate only to th	e items tested.					



## QUALITY ASSURANCE REPORT

exp Services Inc Client Project #: OTT-23002538-A0 Site Location: 1824-1826 BANK ST, OTTAWA, ON Your P.O. #: 1824-1826 BANK ST Sampler Initials: SZA

			Matrix	Spike	SPIKED	BLANK	Method B	Blank	RPI	2
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9090847	4-Bromofluorobenzene	2023/12/06	97	70 - 130	97	70 - 130	96	%		
9090847	D4-1,2-Dichloroethane	2023/12/06	96	70 - 130	91	70 - 130	92	%		
9090847	D8-Toluene	2023/12/06	100	70 - 130	102	70 - 130	95	%		
9091558	D10-Anthracene	2023/12/06	106	50 - 130	106	50 - 130	111	%		
9091558	D14-Terphenyl (FS)	2023/12/06	105	50 - 130	109	50 - 130	110	%		
9091558	D8-Acenaphthylene	2023/12/06	95	50 - 130	95	50 - 130	95	%		
9091562	o-Terphenyl	2023/12/06	95	60 - 130	89	60 - 130	91	%		
9090847	1,1,1,2-Tetrachloroethane	2023/12/06	98	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
9090847	1,1,1-Trichloroethane	2023/12/06	92	70 - 130	94	70 - 130	<0.20	ug/L	NC	30
9090847	1,1,2,2-Tetrachloroethane	2023/12/06	102	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
9090847	1,1,2-Trichloroethane	2023/12/06	89	70 - 130	87	70 - 130	<0.50	ug/L	NC	30
9090847	1,1-Dichloroethane	2023/12/06	98	70 - 130	98	70 - 130	<0.20	ug/L	NC	30
9090847	1,1-Dichloroethylene	2023/12/06	91	70 - 130	93	70 - 130	<0.20	ug/L	NC	30
9090847	1,2-Dichlorobenzene	2023/12/06	94	70 - 130	95	70 - 130	<0.50	ug/L	NC	30
9090847	1,2-Dichloroethane	2023/12/06	88	70 - 130	85	70 - 130	<0.50	ug/L	NC	30
9090847	1,2-Dichloropropane	2023/12/06	100	70 - 130	99	70 - 130	<0.20	ug/L	NC	30
9090847	1,3-Dichlorobenzene	2023/12/06	97	70 - 130	100	70 - 130	<0.50	ug/L	NC	30
9090847	1,4-Dichlorobenzene	2023/12/06	105	70 - 130	108	70 - 130	<0.50	ug/L	NC	30
9090847	Acetone (2-Propanone)	2023/12/06	98	60 - 140	92	60 - 140	<10	ug/L	NC	30
9090847	Benzene	2023/12/06	93	70 - 130	93	70 - 130	<0.17	ug/L	NC	30
9090847	Bromodichloromethane	2023/12/06	101	70 - 130	100	70 - 130	<0.50	ug/L	NC	30
9090847	Bromoform	2023/12/06	90	70 - 130	87	70 - 130	<1.0	ug/L	NC	30
9090847	Bromomethane	2023/12/06	97	60 - 140	96	60 - 140	<0.50	ug/L	NC	30
9090847	Carbon Tetrachloride	2023/12/06	88	70 - 130	90	70 - 130	<0.20	ug/L	NC	30
9090847	Chlorobenzene	2023/12/06	98	70 - 130	99	70 - 130	<0.20	ug/L	NC	30
9090847	Chloroform	2023/12/06	99	70 - 130	98	70 - 130	<0.20	ug/L	3.1	30
9090847	cis-1,2-Dichloroethylene	2023/12/06	100	70 - 130	99	70 - 130	<0.50	ug/L	NC	30
9090847	cis-1,3-Dichloropropene	2023/12/06	99	70 - 130	97	70 - 130	<0.30	ug/L	NC	30
9090847	Dibromochloromethane	2023/12/06	96	70 - 130	93	70 - 130	<0.50	ug/L	NC	30
9090847	Dichlorodifluoromethane (FREON 12)	2023/12/06	91	60 - 140	94	60 - 140	<1.0	ug/L	NC	30
9090847	Ethylbenzene	2023/12/06	86	70 - 130	89	70 - 130	<0.20	ug/L	NC	30



## QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc Client Project #: OTT-23002538-A0 Site Location: 1824-1826 BANK ST, OTTAWA, ON Your P.O. #: 1824-1826 BANK ST Sampler Initials: SZA

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RPI	2
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9090847	Ethylene Dibromide	2023/12/06	100	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
9090847	F1 (C6-C10) - BTEX	2023/12/06					<25	ug/L	NC	30
9090847	F1 (C6-C10)	2023/12/06	97	60 - 140	96	60 - 140	<25	ug/L	NC	30
9090847	Hexane	2023/12/06	91	70 - 130	94	70 - 130	<1.0	ug/L	NC	30
9090847	Methyl Ethyl Ketone (2-Butanone)	2023/12/06	101	60 - 140	95	60 - 140	<10	ug/L	NC	30
9090847	Methyl Isobutyl Ketone	2023/12/06	100	70 - 130	96	70 - 130	<5.0	ug/L	NC	30
9090847	Methyl t-butyl ether (MTBE)	2023/12/06	100	70 - 130	99	70 - 130	<0.50	ug/L	NC	30
9090847	Methylene Chloride(Dichloromethane)	2023/12/06	99	70 - 130	96	70 - 130	<2.0	ug/L	NC	30
9090847	o-Xylene	2023/12/06	79	70 - 130	82	70 - 130	<0.20	ug/L	NC	30
9090847	p+m-Xylene	2023/12/06	87	70 - 130	91	70 - 130	<0.20	ug/L	NC	30
9090847	Styrene	2023/12/06	102	70 - 130	103	70 - 130	<0.50	ug/L	NC	30
9090847	Tetrachloroethylene	2023/12/06	92	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
9090847	Toluene	2023/12/06	86	70 - 130	88	70 - 130	<0.20	ug/L	NC	30
9090847	Total Xylenes	2023/12/06					<0.20	ug/L	NC	30
9090847	trans-1,2-Dichloroethylene	2023/12/06	95	70 - 130	96	70 - 130	<0.50	ug/L	NC	30
9090847	trans-1,3-Dichloropropene	2023/12/06	100	70 - 130	98	70 - 130	<0.40	ug/L	NC	30
9090847	Trichloroethylene	2023/12/06	98	70 - 130	99	70 - 130	<0.20	ug/L	NC	30
9090847	Trichlorofluoromethane (FREON 11)	2023/12/06	89	70 - 130	91	70 - 130	<0.50	ug/L	NC	30
9090847	Vinyl Chloride	2023/12/06	94	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
9091340	Dissolved Antimony (Sb)	2023/12/05	112	80 - 120	102	80 - 120	<0.50	ug/L	5.3	20
9091340	Dissolved Arsenic (As)	2023/12/05	106	80 - 120	101	80 - 120	<1.0	ug/L	0.37	20
9091340	Dissolved Barium (Ba)	2023/12/05	NC	80 - 120	103	80 - 120	<2.0	ug/L	1.1	20
9091340	Dissolved Beryllium (Be)	2023/12/05	101	80 - 120	98	80 - 120	<0.40	ug/L	NC	20
9091340	Dissolved Boron (B)	2023/12/05	NC	80 - 120	97	80 - 120	<10	ug/L	0.10	20
9091340	Dissolved Cadmium (Cd)	2023/12/05	103	80 - 120	99	80 - 120	<0.090	ug/L	NC	20
9091340	Dissolved Chromium (Cr)	2023/12/05	107	80 - 120	102	80 - 120	<5.0	ug/L	NC	20
9091340	Dissolved Cobalt (Co)	2023/12/05	102	80 - 120	101	80 - 120	<0.50	ug/L	2.1	20
9091340	Dissolved Copper (Cu)	2023/12/05	107	80 - 120	103	80 - 120	<0.90	ug/L	3.9	20
9091340	Dissolved Lead (Pb)	2023/12/05	98	80 - 120	98	80 - 120	<0.50	ug/L	NC	20
9091340	Dissolved Molybdenum (Mo)	2023/12/05	114	80 - 120	101	80 - 120	<0.50	ug/L	0.67	20
9091340	Dissolved Nickel (Ni)	2023/12/05	97	80 - 120	98	80 - 120	<1.0	ug/L	1.7	20



## QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc Client Project #: OTT-23002538-A0 Site Location: 1824-1826 BANK ST, OTTAWA, ON Your P.O. #: 1824-1826 BANK ST Sampler Initials: SZA

			Matrix	Spike	SPIKED	BLANK	Method I	Blank	RP	D
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9091340	Dissolved Selenium (Se)	2023/12/05	101	80 - 120	99	80 - 120	<2.0	ug/L	NC	20
9091340	Dissolved Silver (Ag)	2023/12/05	85	80 - 120	99	80 - 120	<0.090	ug/L	NC	20
9091340	Dissolved Sodium (Na)	2023/12/05	NC	80 - 120	105	80 - 120	<100	ug/L	3.8	20
9091340	Dissolved Thallium (TI)	2023/12/05	98	80 - 120	100	80 - 120	<0.050	ug/L	3.3	20
9091340	Dissolved Uranium (U)	2023/12/05	104	80 - 120	97	80 - 120	<0.10	ug/L	2.2	20
9091340	Dissolved Vanadium (V)	2023/12/05	111	80 - 120	103	80 - 120	<0.50	ug/L	NC	20
9091340	Dissolved Zinc (Zn)	2023/12/05	98	80 - 120	99	80 - 120	<5.0	ug/L	NC	20
9091558	1-Methylnaphthalene	2023/12/06	116	50 - 130	120	50 - 130	<0.050	ug/L		
9091558	2-Methylnaphthalene	2023/12/06	105	50 - 130	109	50 - 130	<0.050	ug/L		
9091558	Acenaphthene	2023/12/06	109	50 - 130	111	50 - 130	<0.050	ug/L		
9091558	Acenaphthylene	2023/12/06	106	50 - 130	108	50 - 130	<0.050	ug/L		
9091558	Anthracene	2023/12/06	107	50 - 130	112	50 - 130	<0.050	ug/L		
9091558	Benzo(a)anthracene	2023/12/06	108	50 - 130	114	50 - 130	<0.050	ug/L		
9091558	Benzo(a)pyrene	2023/12/06	103	50 - 130	108	50 - 130	<0.0090	ug/L		
9091558	Benzo(b/j)fluoranthene	2023/12/06	110	50 - 130	115	50 - 130	<0.050	ug/L		
9091558	Benzo(g,h,i)perylene	2023/12/06	114	50 - 130	118	50 - 130	<0.050	ug/L		
9091558	Benzo(k)fluoranthene	2023/12/06	106	50 - 130	112	50 - 130	<0.050	ug/L		
9091558	Chrysene	2023/12/06	105	50 - 130	111	50 - 130	<0.050	ug/L		
9091558	Dibenzo(a,h)anthracene	2023/12/06	101	50 - 130	109	50 - 130	<0.050	ug/L		
9091558	Fluoranthene	2023/12/06	118	50 - 130	123	50 - 130	<0.050	ug/L		
9091558	Fluorene	2023/12/06	108	50 - 130	111	50 - 130	<0.050	ug/L		
9091558	Indeno(1,2,3-cd)pyrene	2023/12/06	111	50 - 130	114	50 - 130	<0.050	ug/L		
9091558	Naphthalene	2023/12/06	101	50 - 130	107	50 - 130	<0.050	ug/L		
9091558	Phenanthrene	2023/12/06	107	50 - 130	110	50 - 130	<0.030	ug/L	NC	30
9091558	Pyrene	2023/12/06	116	50 - 130	122	50 - 130	<0.050	ug/L		
9091562	F2 (C10-C16 Hydrocarbons)	2023/12/06	89	60 - 130	83	60 - 130	<100	ug/L	NC	30
9091562	F3 (C16-C34 Hydrocarbons)	2023/12/06	89	60 - 130	85	60 - 130	<200	ug/L	NC	30



## QUALITY ASSURANCE REPORT(CONT'D)

exp Services Inc Client Project #: OTT-23002538-A0 Site Location: 1824-1826 BANK ST, OTTAWA, ON Your P.O. #: 1824-1826 BANK ST Sampler Initials: SZA

				Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	
9091562	F4 (C34-C50 Hydrocarbons)	2023/12/06	83	60 - 130	76	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 <= 2x RDL).



## VALIDATION SIGNATURE PAGE

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

avisting Carriere

Cristina Carriere, Senior Scientific Specialist

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

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exp Services Inc Client Project #: OTT-23002538-A0 Project name: 1824-1826 BANK ST, OTTAWA, ON Client ID: BH-1

### Petroleum Hydrocarbons F2-F4 in Water Chromatogram



exp Services Inc Client Project #: OTT-23002538-A0 Project name: 1824-1826 BANK ST, OTTAWA, ON Client ID: BH-10

### Petroleum Hydrocarbons F2-F4 in Water Chromatogram



exp Services Inc Client Project #: OTT-23002538-A0 Project name: 1824-1826 BANK ST, OTTAWA, ON Client ID: DUP.

### Petroleum Hydrocarbons F2-F4 in Water Chromatogram



exp Services Inc Client Project #: OTT-23002538-A0 Project name: 1824-1826 BANK ST, OTTAWA, ON Client ID: BH-9

### Petroleum Hydrocarbons F2-F4 in Water Chromatogram



exp Services Inc Client Project #: OTT-23002538-A0 Project name: 1824-1826 BANK ST, OTTAWA, ON Client ID: TRIP BLANK

### Petroleum Hydrocarbons F2-F4 in Water Chromatogram



exp Services Inc Client Project #: OTT-23002538-A0 Project name: 1824-1826 BANK ST, OTTAWA, ON Client ID: FIELD BLANK

### Petroleum Hydrocarbons F2-F4 in Water Chromatogram

