PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

1258 REBECCA STREET, OAKVILLE, TORONTO, ONTARIO

REGIONAL MUNICIPALITY OF HALTON

VERSION 2

PROJECT NO.: 201-11808-00
DATE: OCTOBER 2021

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October 13, 2021

Mr. Zach Richards, P.Eng.

REGIONAL MUNICIPALITY OF HALTON
1151 Bronte Road
Oakville, Ontario
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Subject: Phase Two Environmental Site Assessment
1258 Rebecca Street, Oakville, Ontario
Project No.: 201-11808-00

WSP is pleased to present our Phase Two Environmental Site Assessment report for the above-noted property. This Phase Two Environmental Site Assessment was completed in accordance with Ontario Regulation 153/04, as amended. As such, this report may be used to support a Record of Site Condition application for the property. The report describes the interpreted environmental conditions at the property and provides conclusions for your consideration.

We trust that this information is sufficient for your current needs. If you have any questions or require further information, please contact us.

Yours truly,

Freesia Waxman, M.A.Sc., P.Eng., QP_{ESA}
Environmental Engineer

WSP ref.: 201-11808-00

QUALITY MANAGEMENT

ISSUE/REVISION	FIRST ISSUE	REVISION 1	REVISION 2	REVISION 3
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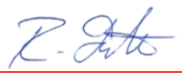
Prepared by	Randy Furtado	Randy Furtado		
Signature				
Checked by	Marty Barons	Freesia Waxman		
Signature				
Project number	201-11808-00	201-11808-00		
Report number	01	02		
File reference				

SIGNATURES

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The conclusions presented in this report are based on work performed by trained, professional and technical staff, in accordance with their reasonable interpretation of current and accepted engineering and scientific practices at the time the work was performed.

The content and opinions contained in the present report are based on the observations and/or information available to WSP at the time of preparation, using investigation techniques and engineering analysis methods consistent with those ordinarily exercised by WSP and other engineering/scientific practitioners working under similar conditions, and subject to the same time, financial and physical constraints applicable to this project.

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Overall conditions can only be extrapolated to an undefined limited area around these testing and sampling locations. The conditions that WSP interprets to exist between testing and sampling points may differ from those that actually exist. The accuracy of any extrapolation and interpretation beyond the sampling locations will depend on natural conditions, the history of Site development and changes through construction and other activities. In addition, analysis has been carried out for the identified chemical and physical parameters only, and it should not be inferred that other chemical species or physical conditions are not present. WSP cannot warrant against undiscovered environmental liabilities or adverse impacts off-Site.

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This limitations statement is considered an integral part of this report.

TABLE OF CONTENTS

TABLES *(WITHIN BODY OF REPORT)*

TABLES *(APPENDED TO REPORT)*

FIGURES *(APPENDED TO REPORT)*

APPENDICES

ACRONYMS AND ABBREVIATIONS

µm	micrometre(s)
APEC	area(s) of potential environmental concern as defined in O.Reg. 153/04, "the area on, in or under a phase one property where one or more contaminants are potentially present, as determined through the phase one environmental site assessment, including through (a) identification of past or present uses on, in or under the phase one property, and (b) identification of potentially contaminating activity"
As	arsenic
B-HWS	boron (hot water soluble)
BTEX	benzene, toluene, ethylbenzene, and xylenes
CALA	Canadian Association for Laboratory Accreditation
Cl-	chlorine
CN-	cyanide
COPC	contaminant(s) of potential concern
Cr (VI)	hexavalent chromium
CSM	conceptual site model
DNAPL	dense non-aqueous phase liquid(s)
EC	electrical conductivity
ESA	environmental site assessment
ha	hectare(s)
Hg	mercury
ICC	Industrial/Commercial/Community
km	kilometre(s)
L	litre(s)
LNAPL	light non-aqueous phase liquid(s)
m	metre(s)
masl	metres above sea level
mbgs	metres below ground surface
MDL	method detection limit
MNRF	Ministry of Natural Resources and Forestry
MECP	Ministry of the Environment, Conservation and Parks
N/S	Not Specified
Na	sodium
O.Reg. 153/04	Ontario Regulation 153/04, as amended

O.Reg. 347	Ontario Regulation 347, as amended
O.Reg. 903	Ontario Regulation 903, as amended
ORPs	other regulated parameters
PAH	polycyclic aromatic hydrocarbon
PCA	potentially contaminating activity as defined in O.Reg. 153/04, “a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a Phase One study area”
PCB	polychlorinated biphenyls
PHC	petroleum hydrocarbon
PID	photoionization detector
PIN	property identification number
ppm	parts per million
QA	quality assurance
QC	quality control
QPESA	Qualified Person for ESAs according to MECP O.Reg. 153/04
RA	Risk Assessment
RDL	reporting detection limit
RPI	Residential/Parkland/Institution
RPIICC	Residential/Parkland/Institution/Industrial/Commercial/Community
RSC	Record of Site Condition
SAP	Sampling and Analysis Plan
SAR	sodium adsorption ratio
Sb	antimony
Se	selenium
SOP	standard operating procedure(s)
SCS	Site Condition Standard
THM	trihalomethane
TOV	total organic vapours
UST	underground storage tank
VOC	volatile organic compound

1 EXECUTIVE SUMMARY

WSP Canada Inc. was retained by Mr. Zach Richards of The Regional Municipality of Halton to conduct a Phase Two Environmental Site Assessment (ESA) at 1258 Rebecca Street, Oakville, Ontario (hereafter referred to as the "Phase Two Property" or "Site"). It is our understanding that this Phase Two ESA was undertaken to assess the soil and groundwater conditions prior to a residential redevelopment.

The Site is located on the south side of Rebecca Street in a mixed residential, institutional and community area in the Town of Oakville, Ontario, immediately south of the intersection of Rebecca Street and Warminster Drive. The Phase Two Property is currently vacant land with no structures located on the Site, with a total area of approximately 0.66 hectares (1.64 acres).

Based on the information obtained as part of the Phase One ESA completed by WSP concurrently with this investigation, it was concluded that potentially contaminating activities (PCAs) on the Site resulted in the identification of areas of potential environmental concern (APECs) on the Site. The table of APECs presented in the form as approved by the Director is provided below:

Table 1.1 Areas of Potential Environmental Concern

AREA OF POTENTIAL ENVIRONMENTAL CONCERN	LOCATION OF POTENTIAL ENVIRONMENTAL CONCERN ON PHASE ONE PROPERTY	POTENTIALLY CONTAMINATING ACTIVITY	LOCATION OF PCA (ON-SITE OR OFF-SITE)	POTENTIAL CONTAMINANTS OF CONCERN	MEDIA POTENTIALLY IMPACTED (GROUND WATER, SOIL AND/OR SEDIMENT)
APEC-1	Northern portion of the Site	PCA No. 30 Importation of Fill Material of Unknown Quality	On-site	Metals, As, Sb, Se, B-HWS, CN-, electrical conductivity, Cr (VI), Hg, low or high pH, SAR, PAHs, PHCs, VOCs, BTEX	Soil
APEC-2	Asphalt Driveway	PCA B Application of De-icing Agents	On-site	Na, Cl-, EC, SAR	Soil & Groundwater

During the Phase Two ESA, a total of six (6) boreholes were advanced to a maximum depth of 3.28 metres below ground surface (mbgs), four (4) on January 4, 2021 and two (2) on September 23, 2021 under the supervision of WSP personnel. Four (4) of the boreholes were converted into monitoring wells for the purpose of groundwater monitoring and sampling, which took place on January 20, 2021. The borehole locations were selected based on the findings of the Phase One ESA (WSP, 2021). Soil samples were submitted for analysis of potential contaminants of concern (COPC) including: metals and other regulated parameters (ORPs), electrical conductivity / sodium adsorption ratio (EC/SAR), petroleum hydrocarbons (PHCs), volatile organic compounds (VOCs), and polycyclic aromatic hydrocarbons (PAHs). Groundwater samples were submitted for analysis of due diligence parameters including: metals and other regulated parameters (ORPs), electrical conductivity / sodium adsorption ratio (EC/SAR), petroleum hydrocarbons (PHCs), volatile organic compounds (VOCs), and polycyclic aromatic hydrocarbons (PAHs)

Based on the Phase Two ESA, WSP presents the following findings:

- Fill material ranging in depth from surface to 1.5 mbgs was encountered in all six (6) of the boreholes (BH21-1 through BH21-6) advanced as part of this investigation. The fill material consisted of silty clay with trace sand and gravel. Native silty clay was encountered below the fill materials and was in turn underlain by shale bedrock ranging in depths of 1.9 to 2.6 mbgs.

- The depth to groundwater was recorded in three (3) monitoring wells installed during the current investigation. The groundwater levels were found to range between 2.8 to 3.7 mbgs and the groundwater elevations ranged between 84.7 and 85.9 masl. Based on the levels recorded, the groundwater flow direction appears to be southeast across the Site. Groundwater flow direction can be influenced by seasonal fluctuation, utility services, and other subsurface features and can only be confirmed with long term monitoring.
- The soil and groundwater analytical results were compared to 2011 MECP Table 6 Full Depth Generic SCS in a Potable Groundwater Condition for RPI Use.
- On January 4, 2021, a total of nine (9) soil samples, and one (1) QA/QC sample were submitted to the laboratory and analysed for COPCs including: metals and ORPs, PAHs, PHCs, and VOCs. On September 23, 2021, a total of two (2) soil samples, and one (1) QA/QC sample were submitted to the laboratory and analysed for COPCs including: metals and ORPs, PAHs, PHCs, and VOCs. The results of the analyses indicated that the soil samples met the Table 6 SCS for all parameters analysed.
- On January 20, 2021, groundwater samples were obtained from three (3) monitoring wells for due diligence purposes on the Site and submitted for analysis of metals and ORPs, PHCs, and VOCs. The results of the analyses indicated that the groundwater sampled from the monitoring wells met the Table 6 SCS for all parameters analysed.

Based on the findings of this Phase Two ESA, WSP presents the following conclusions and recommendations:

- All soils analysed during this investigation met the applicable Table 6 SCS for all parameters analysed.
- All groundwater analysed for due diligence purposes met the applicable Table 6 SCS for all parameters analysed.
- As the development to a more stringent land use is not proposed, a RSC under O.Reg. 153/04 is not required for the proposed residential development.
- All monitoring wells should be decommissioned in accordance with O.Reg. 903 when no longer required. The potable water well on the Site should also be decommissioned prior to redevelopment, if not required.

2 INTRODUCTION

WSP was retained by Mr. Zach Richards of the Regional Municipality of Halton to conduct a Phase Two ESA of the property located at 1258 Rebecca Street, Oakville, Ontario. It is our understanding that this environmental assessment has been requested prior to residential redevelopment of the Site.

The Phase Two ESA was conducted in compliance with O.Reg. 153/04 to support the proposed residential redevelopment of the Site. It is our understanding that the proposed development for the Phase Two Property is considered a change to a more sensitive property use, and as such an RSC with the MECP will be required under O.Reg. 153/04.

2.1 SITE DESCRIPTION

The Site is located on the south side of Rebecca Street in a mixed residential, institutional and community area in the Town of Oakville, Ontario, immediately south of the intersection of Rebecca Street and Warminster Drive. The Site is irregular in shape with an approximately area of 0.66 ha (1.64 acres).

The Phase Two Property is currently vacant that is not occupied by any buildings or structures. The property was formerly used for institutional uses as a place of worship. The location of the former structure on the Phase Two Property, including the former basement, and the location of the Phase Two Property are depicted in Figure 1.

Property information for the Site is provided in the table below:

Table 2.1 Property Information

CRITERION	DESCRIPTION
Municipal Address	1258 Rebecca Street, Oakville, Ontario
Property Identification Numbers (PINs)	24773-0070 (LT)
Legal Description	Part of Lot 23, Concession 4 (Trafalgar), South of Dundas Street Except Part 3 on Plan 20-R21071 Town of Oakville, Regional Municipality of Halton

A Topographic Plan of Survey dated November 30, 2020, completed by Ontario Land Surveying Inc., was provided for the Site. The Plan of Survey is included as Appendix A**.**

2.2 PROPERTY OWNERSHIP

Property ownership information for the Site is provided in the table below:

Table 2.2 Property Ownership Information

CRITERION	DESCRIPTION
Current Site Owner	Regional Municipality of Halton

Owner's Representative	Mr. Zach Richards, P.Eng. The Regional Municipality of Halton 1075 North Service Road West, Unit 27, Oakville, Ontario L6M 2G2 Email: Zach.Richards@halton.ca

2.3 CURRENT AND PROPOSED FUTURE USES

The Phase Two Property is currently vacant lands not occupied by any buildings or structures. It was formerly used for institutional purposes as a place of worship. Redevelopment of the property for residential purposes has been proposed.

2.4 APPLICABLE SITE CONDITION STANDARD

Analytical results were compared to the 2011 MECP Table 6 Generic SCS for Shallow Soils in a Potable Groundwater Condition for RPI property uses set out in the MECP publication *Soil, Groundwater and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act* (April 15, 2011). This evaluation standard for the Phase Two Property was selected for comparison purposes based on the following:

- The Town of Oakville obtains its potable water from Lake Ontario and does not rely on groundwater as a potable water source. However, as written notification of non-objection to a non-potable request has not been given, the potable SCS have been used.
- The Phase Two Property is not considered an "environmentally sensitive" site, as defined by O.Reg. 153/04
- Residential land use is proposed for the Phase Two Property
- The Phase Two Property is not situated within 30 m of a water body
- The pH of the soil samples analysed during this investigation from the five (5) boreholes ranged from 7.46 to 7.84, which falls within the acceptable range stated in O.Reg. 153/04
- Bedrock was encountered within 2 m of the ground surface at the Site.

3 BACKGROUND INFORMATION

3.1 PHYSICAL SETTING

A summary of the Site's physical setting, determined through the Phase One ESA is included in table below:

Table 3.1 Summary of Physical Setting

CRITERIA	DESCRIPTION
i. Water Bodies and Areas of Natural Significance	The Fourteen Mile Creek is located approximately 240 m north of the Site. Lake Ontario is Located approximately 650 m southeast of the Site. The Natural Heritage Areas database lists areas of natural significance including provincial parks, conservation reserves, areas of natural and scientific interest, wetlands environmentally significant areas, habitats of a threatened or endangered species, and wilderness areas. A review of this database listed the Redside Dace, Northern Bobwhite, and American Eel as an endangered or threatened species within 1 km of the Site. The Phase One Property is located within a residential/commercial developed neighbourhood and is not likely to provide shelter for such species. According to the MNRF, the Redside Dace and American Eel are aquatic species that reside in water. As the nearest waterbody is located approximately 240 m from the Site and the site reconnaissance indicated no ponds or other surface water bodies were located within 30 m of the Site, it is not anticipated that this species would be found on the Site; The northern Bobwhite is a quail that lives in open pine forests, overgrown fields and shrubby areas and grasslands. There is a potential that the Phase One Property could provide a habitat for this species. At the time of the site reconnaissance, no indication of this species was noted. At this time, further assessment is not warranted; however, if required, an environmental specialist could be retained to undertake a site-specific ecological assessment.
ii. Topography, Hydrology, Geology	The Site topography is generally flat, with an elevation of 88-89 mASL. A slightly lower lying area which had culverts diverting water into a drainage ditch was located at the southern portion of the Site. The topography in the vicinity of the Phase One Property slopes to the south. Based on the local topography, the inferred shallow ground water flow direction of the Phase One Study Area is to the southeast towards Lake Ontario, which is located approximately 650 m southeast of the Site. The ground water flow direction on the Phase One Property can only be confirmed through long-term ground water monitoring. Surficial geology in the vicinity of the Site is described as "fine textured glaciolacustrine deposits consisting of silt and clay, minor sand and gravel". The underlying bedrock within the area is shale, limestone, dolostone, and siltstone of the Georgian Bay Formation. Based on the geotechnical investigation completed concurrently with this Phase One ESA, the depth of the bedrock of the Site ranges between 1.9 to 2.6 mbgs.

3.2 PAST ASSESSMENTS AND INVESTIGATIONS

Two (2) environmental reports were completed by WSP for the Region of Halton. The reports were reviewed, and the salient points are provided below.

Report Title:	Phase One Environmental Site Assessment – 1258 Rebecca Street, Oakville, Ontario
Date:	September 30, 2021
Author:	WSP Canada Inc.
Report/work completed for:	Regional Municipality of Halton
Relevant findings:	

The Phase One Property is currently vacant land with no structures located occupying the Site. The site was developed in the 1950s as a church. WSP identified two Areas of Potential Environmental Concern, as follows:

- Fill of unknown quality was observed at the during the concurrent geotechnical investigation. The fill extended to depths ranging from 0 to 1.5 mBGS. A former basement was also identified as a potential source of fill of unknown quality.
- It is anticipated that de-icing salts were applied to the paved parking areas and walkways on the Site during the winter months for safety purposes;

WSP recommended a Phase Two ESA be conducted at the property to investigate possible impacts to soil at the Site.

Report Title:	Preliminary Geotechnical Investigation – 1258 Rebecca Street, Oakville, Ontario
Date:	January, 2021
Author:	WSP Canada Inc.
Report/work completed for:	Regional Municipality of Halton
Relevant findings:	

The Preliminary Geotechnical Investigation for the Site included the advancement of four (4) boreholes across the Site to depths ranging from 3.2 to 3.3 mbgs and terminated in shale bedrock. Fill was identified at every borehole location at depths ranging from 0.8 to 1.5 mbgs. Bedrock was encountered at each of the borehole locations at depths ranging from 1.9 to 2.6 mbgs. The native overburden consisted of silty clay with trace sand. No staining or deleterious material was encountered., details of which are provided below:

4 SCOPE OF INVESTIGATION

4.1 OVERVIEW OF SITE INVESTIGATION

The Phase Two ESA involved intrusive investigation in the areas determined in the Phase One ESA to be APECs. The Phase Two ESA was carried out in accordance with O. Reg. 153/04. The Site investigation activities were limited to visible and accessible locations of the Site. Subsurface investigations, testing, sampling, and laboratory analyses were completed based on finding of Phase One ESA, accessibility to each APEC, and site observations.

The site investigation program included the following:

- Clearance of public and private underground utilities and services prior to commencement of intrusive investigation activities.
- Preparation of a Health and Safety Plan and safe execution of all proposed work.
- Advancement of four (4) boreholes on the Phase Two Property, to an approximate maximum depth of 3.28 mbgs using a track-mounted drill rig and advancement of two (2) boreholes on the Site, to an approximate maximum depth of 1.2 mbgs using a hand auger. The soil lithology from each borehole was logged in the field and samples were screened for TOV with a photoionization detector. The location of the boreholes was selected to investigate any APECs identified during the Phase One ESA.
- Based on field screening and visual/olfactory observations, worst-case/representative soil samples from the boreholes were submitted for laboratory testing of relevant COPC.
- Groundwater monitoring wells were installed within all four (4) of the boreholes as part of the preliminary geotechnical investigation and were sampled to assess groundwater quality below the Site for due diligence purposes. The monitoring wells were also used to determine the direction of groundwater flow.
- The groundwater levels in the wells were measured to determine the groundwater table elevation. The wells were surveyed to a geodetic benchmark to determine groundwater flow direction.
- The groundwater wells were purged to remove stagnant water and sampled for laboratory testing of parameters for due diligence purposes.
- Both soil and groundwater samples were submitted for chemical analysis by a CALA certified laboratory in accordance with the MECP standards and requirements of O.Reg. 153/04 under the Environmental Protection Act.

4.1.1 SAMPLING AND ANALYSIS PLAN

The sampling and analysis plan (SAP) is provided in Appendix B. Per O.Reg. 153/04 Schedule E. Condition 3(5), WSP developed the standard operating procedures (SOPs) used in the field investigation.

Fieldwork for this Phase Two ESA was undertaken following the SOPs. Deviations from the SAP and SOPs, if any, are detailed in Section 4.4. The list of SOPs is presented in the table below.

Table 4.1 List of Standard Operating Procedures Used in Field Investigation

CATEGORY	SOP
i. Drilling	Auger/Boring Rigs Monitoring Well Hollow Stem Auger Advancement Soil Sample Material Descriptions

CATEGORY		SOP
ii.	Soil Sampling	Continuous Sampling Field Soil Sampling for VOC and PHC Analysis
iii.	Soil Field Testing	Odour Identification Field Screening of Samples for Organic Vapours
iv.	Monitoring Well Construction	Monitoring Well Construction Monitoring Well Development
v.	Field Measurement of Water Quality Indicators	Temperature Measurement Conductivity Measurement pH Measurement Dissolved Oxygen Measurement
vi.	Groundwater Monitoring/Sampling	Water Level Monitoring Non-Aqueous Phase Liquid Level Monitoring Monitoring Well Purging Monitoring Well Sampling Volatile Organic Sampling
vii.	QA/QC Program	Quality Assurance Quality Control

4.2 MEDIA INVESTIGATION

A summary of the media investigated during the Phase Two ESA is provided in Table 2 and Table 3, attached.

4.3 PHASE ONE CONCEPTUAL SITE MODEL

A Phase One CSM was presented in the Phase One ESA report by WSP and is presented in this report as Figure 1. The Phase One CSM identified the PCAs and APECs for the Site, as described in Section 6.5.

4.4 DEVIATIONS FROM THE SAMPLING AND ANALYSIS PLAN

The Phase Two ESA was completed in general accordance with the SAP. The SAP was updated following receipt of comments from the MECP to include two (2) additional soil samples from the fill within the former basement.

4.5 IMPEDIMENTS

Impediments were not encountered during this investigation and, therefore, did not limit WSP's ability to carry out this Phase Two ESA in accordance with O.Reg. 153/04.

5 INVESTIGATION METHOD

5.1 GENERAL

This section provides a brief description of all methods employed in undertaking this Phase Two ESA. Where the method differs from the associated standard operating procedure, a detailed description of the method used and a rationale for the change in method is provided in the appropriate subsection below.

5.2 DRILLING

WSP staff inspected the Site and identified the preferred borehole locations based on the APECs identified in the most recent Phase One ESA by WSP, as shown on Figure 2. The borehole locations are shown on the Borehole Location Plan in Figure 3. The location of underground services and utilities within the Site were cleared prior to the commencement of the drilling program. WSP arranged for the service locates to be completed through Ontario One Call and MarkIt Locators. A summary of the drilling events is presented in the table below.

Table 5.1 Summary of Drilling

INFORMATION PARAMETER	DETAILS
Name of Drilling Contractor	Davis Drilling Ltd.
Drilling Equipment Used	Trac-mounted CME 55
Measures taken to minimize the potential for cross-contamination	A 50-mm stainless steel split spoon sampler was used to collect soil samples from the boreholes. The split spoon sampler was brushed clean of soil, washed in municipal water containing phosphate free detergent, rinsed in municipal water, and then rinsed with distilled water for each sampling interval in order to reduce the potential for cross contamination.
Frequency of sample collection	Every 0.6 m per 0.8 m to the termination of the borehole.

On January 4, 2021 four (4) boreholes (BH21-1 to BH21-4) were drilled on the Site using a track-mounted CME 55 drill rig provided by Davis Drilling Ltd. of Milton, Ontario. The boreholes were advanced to a maximum depth of 3.28 mbgs. Soil samples were collected from the fill material and native silty clay till using a 50-mm diameter, 0.61-m long stainless-steel split spoon sampler.

Table 5.2 Summary of Hand Auger Sampling

INFORMATION PARAMETER	DETAILS
Name of Technician	Dayne Kirkham
Equipment Used	Soil Hand Auger

Measures taken to minimize the potential for cross-contamination	A 102-mm stainless steel hand auger was used to collect soil samples from the boreholes. The hand auger was brushed clean of soil, washed in municipal water containing phosphate free detergent, rinsed in municipal water, and then rinsed with distilled water for each sampling interval in order to reduce the potential for cross contamination.
Frequency of sample collection	Every 0.8 m or 1.2 m to the termination of the borehole.

On September 23, 2021 two (2) boreholes (BH21-5 to BH21-6) were advanced on the Site using a hand auger. The boreholes were advanced to a maximum depth of 1.2 mbgs. Soil samples were collected from the fill material using a 102-mm diameter stainless-steel soil hand auger.

5.3 SOIL

5.3.1 SOIL SAMPLING

Disposable nitrile gloves were used during sample collection and changed between each sample to minimize the potential for cross-contamination. Soil samples were described in the field by WSP staff and observations were recorded in a dedicated field book. Soil samples were collected directly into laboratory-supplied 120-mL amber glass jars and 40-mL methanol-preserved vials and were stored at a temperature of less than 10°C. Samples selected for laboratory analysis were handled under standard chain of custody procedures until received at the laboratory. The soil samples selected for laboratory analysis were considered representative of worst-case conditions in the boreholes based on field screening results and visual and olfactory observations.

All soil samples were submitted to Bureau Veritas Laboratories in Mississauga, Ontario. The soil samples submitted for chemical analysis are summarized in Table 2, appended.

5.3.2 FIELD SCREENING MEASUREMENTS

Soil samples collected from the boreholes were field screened for TOV using a MiniRae 3000 PID. In addition to visual and olfactory observations, the results of field screening were used to determine worst-case samples in order to select those to submit to the laboratory for analysis of volatile parameters. Additional samples may have been analysed for delineation purposes, if required. A summary of field screening measurements is provided in the table below.

Table 5.3 Summary of Field Screening Information

CRITERIA		DESCRIPTION
i.	Make and Model of Field Screening Instrument	MiniRae 3000 PID, Serial Number 592-911305
ii.	Chemicals that Field Screening Instrument Detects and Respective Detection Limits	VOCs with dynamic range of 0.1 parts per million (ppm) to 5,000 ppm
iii.	Precision of the Measurements	3 significant figures
iv.	Accuracy of the Measurements	± 5% display reading ± one digit
v.	Calibration Reference Standards	Isobutylene
vi.	Calibration Procedures	The PID is factory-calibrated on an annual basis and the calibration was checked on a daily basis both prior to and after use in the field using 100 ppm isobutylene according to manufacturer procedures.

Field screening measurements (PID readings) are discussed in Section 6.3.1.2 and presented on the finalized borehole logs, included in Appendix C.

5.4 GROUNDWATER

5.4.1 GROUNDWATER MONITORING AND WELL INSTALLATION

Groundwater monitoring wells were installed at all four (4) borehole locations (BH21-1 to BH21-4) by Davis Drilling Ltd as part of the geotechnical investigation. A track-mounted drill rig was used for the installation of monitoring wells on January 4, 2021 upon completion of soil sampling activities. Nitrile gloves were used to handle the well casings and screens during installation to minimize the potential for cross contamination during installation.

Monitoring wells BH21-1 to BH21-4 were screened to intersect the suspected local groundwater table, based on observed conditions in the soil horizon (i.e. brown to grey colour change and/or observed change in moisture content) during the drilling and soil sampling activities. The wells were constructed using 50-millimetre (mm) Schedule 40 PVC riser and included a 3.1-m well screen (slot 10). A sand pack was placed in the borehole annulus around the well screen from the bottom of the well to approximately 0.6 m above the well screen. Bentonite holeplug seal was placed above the sand pack to surface. The wells were completed with flush mount casings. The monitoring well construction details are shown on the attached borehole logs included as Appendix C.

5.4.2 GROUNDWATER FIELD MEASUREMENT OF WATER QUALITY PARAMETERS

The monitoring wells were purged using 13 mm LDPE Waterra tubing and an inertial pump (foot valve). The wells were purged by removing three well volumes or by purging the well dry three times. Field measurements of water quality parameters were collected using a Hanna multi-meter as part of this assessment including field pH, EC, and temperature. Field groundwater quality measurements were obtained after the removal of each well volume and were recorded in a dedicated field book. This data has been archived and is available upon request.

5.4.3 GROUNDWATER SAMPLING

On January 20, 2021, following purging of the wells, groundwater samples were collected from the newly installed wells BH21-1, BH20-2, and BH20-4 for due diligence purposes. BH21-3 was dry and as such, groundwater samples were not collected from this well.

The samples were collected in laboratory-supplied bottles and stored in an ice-filled cooler. The groundwater samples were submitted under proper chain of custody procedures to Bureau Veritas Laboratories in Mississauga for analysis of metals and ORPs, PHCs, and VOCs.

5.5 SEDIMENT SAMPLING

Sediment sampling was not conducted as part of this Phase Two ESA.

5.6 ANALYTICAL TESTING

Soil and groundwater samples were submitted to Bureau Veritas Laboratories in Mississauga, Ontario, for chemical analysis for the above listed parameters. AGAT Laboratories is certified by CALA.

5.7 RESIDUE MANAGEMENT PROCEDURES

The management of residues such as soil cuttings, purge and development groundwater, and fluids from equipment cleaning was conducted as indicated in the table below.

Table 5.4 Summary of Residue Management Procedures

RESIDUE		MANAGEMENT PROCEDURE
i.	Soil cuttings from drilling and excavations	Soil cuttings were removed drummed and left on site for removal at a later date.
ii.	Water from well development and purging	Groundwater from the development and purging of the monitoring wells was emptied onto the ground downstream of the wells.
iii.	Fluids from equipment cleaning.	Equipment cleaning water was emptied onto the ground downstream of the wells.

5.8 ELEVATION SURVEY

The existing ground surface and top of pipe (well casing) elevations of the groundwater monitoring wells were surveyed with a reference to a local Benchmark (Station 277) with a known elevation of 88.94 masl in January 2021 and the new boreholes (BH21-5 and BH21-6) were surveyed on October 5, 2021. The ground surface elevations can be found on the borehole logs presented in Appendix C.

5.9 QUALITY ASSURANCE AND QUALITY CONTROL MEASURES

The project-specific QA/QC measures are described in the table below.

Table 5.5 Quality Assurance and Quality Control Measures

QA/QC MEASURE		DESCRIPTION
i.	Sample containers, preservation, labelling, handling, and custody for samples submitted for laboratory analysis, including any deviations from the SAP.	Soil samples from the boreholes were collected in 40 mL methanol-preserved vials for PHC F1/VOCs/BTEX analysis, and 120 mL glass jars without preservative for analysis of all other parameters at the sample locations. Groundwater samples from the monitoring wells were collected using the following laboratory supplied containers: VOCs – three (3) 40 mL glass vials preserved with a sodium bisulphate tablet PHC F1/BTEX – three (3) 40 mL glass vials preserved with a sodium bisulphate tablet PHC F2-F4 – two (2) 250 mL amber glass bottles preserved with a sodium bisulphate tablet Inorganics – one (1) 500 mL plastic 'general' bottle, no preservation Dissolved metals – one (1) 125 mL plastic bottle, HNO3 preservative Mercury – one (1) 100 mL clear glass bottle, HCl preservative Chromium VI – one (1) 125 mL plastic bottle, preserved with Ammonium Sulfate/Ammonium Hydroxide

QA/QC MEASURE		DESCRIPTION
		Cyanide – one (1) 125 mL plastic bottle, preserved with Sodium Hydroxide Groundwater samples were collected using dedicated sampling equipment for each well. Groundwater samples collected for dissolved metals, mercury, and chromium (VI) analysis were field filtered using a dedicated 0.45-micron filter. Groundwater containers used for PHC F1/BTEX and VOC analysis were filled to achieve zero headspace. Sample containers were labelled with unique sample identification, the project number, and the sampling date. A laboratory-supplied chain of custody was completed. A copy was sent with the samples to the laboratory, and one (1) copy was retained for the project file.
ii.	Equipment cleaning procedures during sampling	Nitrile gloves were replaced after each sample was collected to reduce the potential for cross-contamination of the samples. Field equipment was cleaned with soap and water then rinsed with distilled water between samples.
iii.	Field QC measures	Blind field duplicate samples of soil and groundwater were collected and submitted for laboratory analysis as part of this investigation. A laboratory-prepared VOC trip blank was brought to the Site during the groundwater sampling and was submitted to the laboratory for analysis.
iv.	Deviations from the procedures set out in the QA/QC program set out in the SAP.	None

Field duplicate samples were assessed as part of the QA/QC program through a comparison of the analytical results of the original samples to the field duplicate samples. Field duplicates measure the cumulative effects of both field and laboratory precision and hence provide an indication of overall precision. Therefore, field duplicates may have greater variability than laboratory duplicates which measure only laboratory precision. It is also expected that non-aqueous matrices will have a greater variance than aqueous matrices due to the heterogeneity of most non-aqueous samples (such as soil/sediment samples). Field duplicates were evaluated based on the relative percent difference (RPD) in parameter concentrations.

The RPD was calculated in accordance with the *Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act* (July 1, 2011). The calculated RPD was assessed against the recommended performance criteria outlined in the 2011 Protocol where the measured concentration was greater than 5 times the MDL.

Bureau Veritas Laboratories also performed QA/QC procedures as outlined in their CALA procedures. These procedures included analysis of lab duplicates and blanks as well as analysis of surrogate recovery as outlined in the Certificates of Analysis provided in Appendix D.

6 REVIEW AND EVALUATION

6.1 GEOLOGY/SOIL STRATIGRAPHY

A brief summary of the subsurface conditions encountered at the Site is presented below. Detailed borehole logs are included in Appendix C.

Five (5) of the boreholes were advanced through a layer of topsoil measuring 50 to 200 mm in thickness. Underlying the topsoil, fill material consisting of silty clay with trace sand and gravel was encountered in all boreholes with the exception of borehole BH21-6, in which the fill consisted of silty sand, and extended to depths ranging from approximately 0.8 to 1.5 mbgs. Below the fill material, native silty clay was encountered which was in turn underlain by inferred shale bedrock. Bedrock was encountered in all boreholes at depth ranging from 1.93 to 2.60 mbgs.

6.2 HYDROGEOLOGY

6.2.1 ELEVATIONS AND FLOW DIRECTION

The groundwater levels in the monitoring wells ranged from 2.8 to 3.7 mbgs on January 14, 2021 in three (3) of the monitoring wells installed during the current investigation. One of the monitoring wells (BH21-3) was found to be dry. The screens are 3.05 m in length and were installed in the native silty clay/shale interface.

A summary of the groundwater elevations is presented in Table 1 and groundwater elevations from January 14, 2021 and inferred groundwater flow direction are presented on Figure 4. The groundwater elevations in the monitoring wells screened in the native soils ranged from 84.7 to 85.9 masl. The inferred groundwater flow direction is to the south/southeast across the Site, towards Lake Ontario.

Neither LNAPL nor DNAPL were found to be present in any of the monitoring wells on the Site.

6.2.2 HYDRAULIC GRADIENTS

The hydraulic gradient was calculated based on the January 2021 groundwater elevations. The horizontal hydraulic gradient was calculated to be 0.056 based upon these measurements.

6.3 RESULTS OF ANALYSIS

The results of the laboratory analysis are discussed in the following sub-sections.

6.3.1 SOIL TEXTURE ANALYSIS

Results of the soil texture analysis are presented below.

Table 6.1 Soil Texture Analysis

CRITERIA	DESCRIPTION
i. rationale for the use of soil texture category,	From the results of the grain size analysis, it is the QP's opinion that less than 1/3 of the soil at the property, measured by volume, consists of coarse textured

	soils. Therefore, the fine-medium soil texture standards were applied at the property.
ii. a description of the results of the required grain size analysis	The results of the two (2) grain size analyses showed that all samples contained more than 50% by mass of particles that are 75 µm or smaller in mean diameter. BH21-02 SS3: 3% Sand, 63% Silt, 34% Clay BH21-03 SS2: 3% Sand, 56% Silt, 41% Clay
iii. a description and rationale for the number of samples collected and analysed	The grain size analyses were conducted as part of the geotechnical investigation conducted concurrently with this Phase Two ESA. A total of two (2) samples were analyzed in order to characterize the native soils across the Phase Two Property.

6.3.2 FIELD SCREENING

Twenty-two (22) soil samples were screened for TOV using a PID. TOV concentrations were 0 ppm. The TOV readings are included on the borehole logs included in Appendix C. The samples that were submitted for laboratory analysis of organic parameters (VOCs, PHCs, or PAHs) are indicated in the borehole logs provided in Appendix C.

6.3.3 SOIL CHEMICAL QUALITY

The soil analytical results from the present investigation are presented in Tables 4 through Table 7 and summarized on Figure 5.

The Laboratory Certificates of Analysis for the soil analysis completed during the present investigation are provided in Appendix D.

6.3.4 SOIL – METALS AND OTHER REGULATED PARAMETERS

Seven (7) soil samples, including two (2) duplicate samples for QAQC purposes were collected and submitted for analysis of metals and ORPs. The soil analytical results for metals and ORPs are provided in Table 4 and the results of the laboratory analyses indicated that all samples met the applicable Table 6 SCS.

6.3.5 SOIL – PETROLEUM HYDROCARBONS AND BTEX

Six (6) soil samples were collected and submitted for analysis of PHCs and BTEX. The soil analytical results for PHCs and BTEX are provided in Table 5 and the results of the laboratory analyses indicated that all samples analysed met the applicable Table 6 SCS.

6.3.6 SOIL – VOLATILE ORGANIC COMPOUNDS

Six (6) soil samples, were collected and submitted for analysis of VOCs. The soil analytical results for VOCs are provided in Table 6 and the results of the laboratory analyses indicated that all samples analysed met the applicable Table 6 SCS.

6.3.7 SOIL – POLYCYCLIC AROMATIC HYDROCARBONS

Four (4) soil samples, were collected and submitted for analysis of PAHs. The soil analytical results for PAHs are provided in Table 7 and the results of the laboratory analyses indicated that all samples analysed met the applicable Table 6 SCS.

6.3.8 GROUNDWATER CHEMICAL QUALITY

The groundwater analytical results from the January 2021 sampling event is presented in Tables 8 through 10 and are summarized on Figure 7.

The Laboratory Certificates of Analysis for the groundwater analysis completed during the present Phase Two ESA are provided in Appendix D.

6.3.9 GROUNDWATER – METALS AND OTHER REGULATED PARAMETERS

Two (2) groundwater samples were collected and submitted for analysis of metals and ORPs. The groundwater analytical results for metals and ORPs are provided in Table 8 and the results of the laboratory analyses indicated that all samples analysed met the applicable Table 6 SCS.

6.3.10 GROUNDWATER - PETROLEUM HYDROCARBONS AND BTEX

Four (4) groundwater samples, including one (1) blind field duplicate for QA/QC purposes, were collected and submitted for the analysis of PHCs and BTEX. The groundwater analytical results for PHCs and BTEX are provided in Table 9 and the results of the laboratory analyses indicated that all samples analysed met the applicable Table 6 SCS.

6.3.11 GROUNDWATER– VOLATILE ORGANIC COMPOUNDS

Five (5) groundwater samples, including one (1) blind field duplicate and one (1) trip blank for QA/QC purposes, were collected and submitted for the analysis of VOCs. The groundwater analytical results for VOCs are provided in Table 10 and the results of the laboratory analyses indicated that all samples met the applicable Table 6 SCS.

6.3.12 SEDIMENT QUALITY

Sediment testing was not a part of this scope of work.

6.4 QUALITY ASSURANCE AND QUALITY CONTROL RESULTS

Proper field protocols for sample collection and handling were followed by all WSP personnel in general accordance with the MECP *Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario*. All field equipment was decontaminated before and between sample collection and clean nitrile gloves were used for each sample to eliminate the potential for cross contamination of samples. All soil and groundwater samples were collected directly into laboratory-supplied containers, preserved as required, and stored and shipped in ice-filled coolers. Proper chain-of-custody procedures were followed by WSP and the laboratory during sample transfer.

The RPDs for the analyzed parameters in duplicate samples (where the RPD could be calculated) were within the 2011 Protocol performance criteria. As such, it is WSP's opinion that the laboratory analytical data is reliable and reproducible.

A summary of the field duplicate soil and groundwater samples, and the results of the QA/QC comparisons of the duplicate samples indicating that the results can be interpreted with confidence.

Table 6.2 Summary of QA/QC Results

DATE	MEDIA	SAMPLE ID	FIELD DUPLICATE ID	PARAMETERS	QA/QC RESULTS
2021-01-04	Soil	BH21-2 SS1	QA/QC	Metals and ORPs	All results were within the 2011 Protocol criteria for RPD
2021-09-23	Soil	BH21-5	DUP01	Metals and ORPs, PHCs, VOCs, PAHs	All results were within the 2011 Protocol criteria for RPD
2021-01-20	Groundwater	BH21-2	QA/QC-1	PHCs, VOCs	All results were within the 2011 Protocol criteria for RPD

A laboratory prepared trip blank travelled along with the January 2021 groundwater samples and was analysed by the laboratory for VOCs. All concentrations were below the RDL, indicating no contamination from the sample containers, preservatives, transportation, and storage conditions. The results also indicate that the laboratory instrument was not detecting false interference.

Bureau Veritas carried out internal QA/QC measures including process recoveries, blanks, and replicate samples. The laboratory QA/QC results are provided on the Certificates of Analysis in Appendix D. The results were acceptable and therefore suitable for interpretation.

With respect to subsection 47 (3) of O.Reg. 153/04, all certificates of analysis of analytical reports received pursuant to clause 47 (2) (b) of the regulation comply with subsection 47(3), a certificate of analysis of analytical report has been received for each sample submitted for analysis, and all certificates of analysis or analytical reports received have been included in full in Appendix D to the Phase Two ESA report.

6.5 PHASE TWO CONCEPTUAL SITE MODEL

Through analysis and interpretation of the Phase One ESA, Phase One CSM, and field data gathered during this Phase Two ESA, a Phase Two CSM was developed.

Based on information obtained as part of the Phase One ESA, PCAs that occurred on the Site or within the Phase One Study Area are summarized in the table below. All PCAs including the number and location (if known) of USTs are illustrated on the Phase One CSM provided as Figure 1 and Figure 2.

Table 6.3 Summary of PCAs Identified in the Phase One ESA

PCAs	DESCRIPTION
PCA No. 30 Importation of Fill Material of Unknown Quality	**Phase One Property** – Based on a concurrent geotechnical investigation completed at the Site, fill material of unknown environmental quality was identified across the northern portion of the Site at depths ranging from surface to approximately 1.5 mbgs. There is also the potential for fill material of unknown quality within the footprint of the former basement **(APEC 1).**
PCA B (N/S) Application of De-icing Agents	**Phase One Property** – Seasonal application of de-icing salts is anticipated on the paved surfaces of the Phase One Property for vehicle and pedestrian safety **(APEC 2).**

Based on a review of the above-noted PCAs, the following APECs were identified on the Site. The table of APECs presented in the form as approved by the Director is provided below. The table was prepared in accordance with clause 16(2) (a), Schedule D, O.Reg. 153/04.

Table 6.4 Summary of APECs Identified in Phase One ESA

AREA OF POTENTIAL ENVIRONMENTAL CONCERN	LOCATION OF POTENTIAL ENVIRONMENTAL CONCERN ON PHASE ONE PROPERTY	POTENTIALLY CONTAMINATING ACTIVITY	LOCATION OF PCA (ON-SITE OR OFF-SITE)	POTENTIAL CONTAMINANTS OF CONCERN	MEDIA POTENTIALLY IMPACTED (GROUND WATER, SOIL AND/OR SEDIMENT)
APEC-1	Northern portion of the Site	PCA No. 30 Importation of Fill Material of Unknown Quality	On-Site	Metals, As, Sb, Se, B-HWS, CN-, Cr (VI), Hg, low or high pH, electrical conductivity, SAR, VOCs, PHCs, BTEX, PAHs	Soil
APEC-2	Asphalt Driveway	PCA B Application of De-icing Agents	On-Site	Na, Cl-, EC, SAR	Soil & Groundwater

The Phase One CSM (Figure 1 and Figure 2) and the Phase Two CSM (Figure 3 through Figure 8) prepared for the Site incorporates the information and data collected as part of the Phase One and Phase Two ESAs. The following table provides a summary discussion of the interpreted field data that is incorporated into the CSM.

Table 6.5 Summary of Phase Two CSM

CRITERIA	DISCUSSION
i. a narrative description and assessment of, a. areas where a PCA have occurred, b. APECs, and c. any subsurface structures and utilities on, in or under the phase two property that may affect contaminant distribution and transport.	a. The Phase One ESA completed by WSP concurrently with this Phase Two ESA identified PCAs on the Site and within the Phase One Study Area, as outlined in the PCA Table above, and depicted on Figure 1 and Figure 2. b. The PCAs that were identified as contributing to on-site APECs are discussed in the PCA Table above. The table of APECs presented in the form as approved by the Director is provided in the APEC Table above. c. Underground utilities can affect contaminant distribution and transport. Trenches excavated to install utility services, and the associated granular backfill may provide preferential pathways for horizontal contaminant migration in the shallow subsurface.
ii. a description of and, as appropriate, figures illustrating, the physical setting of the phase two property and any areas under it including,	a. The Site stratigraphy consists of approximately 50 to 200 mm of topsoil. Underlying the topsoil, fill material consisting of silty clay and trace sand and gravel was encountered at all of the boreholes, with the exception of borehole BH21-6 where the fill material consisted of silty sand and extended to depths ranging

CRITERIA	DISCUSSION
a. stratigraphy from ground surface to the deepest aquifer or aquitard investigated, b. hydrogeological characteristics, including aquifers, aquitards and, in each hydrostratigraphic unit where one or more contaminants is present at concentrations above the applicable site condition standards, lateral and vertical gradients, c. approximate depth to bedrock, d. approximate depth to water table, e. any respect in which section 35, 41 or 43.1 of the regulation applies to the property, f. areas where soil has been brought from another property and placed on, in or under the phase two property, and g. approximate locations, if known, of any proposed buildings and other structures	from surface to 1.5 mbgs. Below the fill material, native silty clay was encountered which was in turn underlain by shale bedrock at depths ranging from 1.9 to 2.5 mbgs. b. The silty clay/shale interface is considered an unconfined overburden aquifer, and the underlying bedrock is considered an aquitard. No exceedances of soil or groundwater were noted in the samples collected and analyzed. The horizontal hydraulic gradient was calculated to be 0.056, the vertical hydraulic gradient could not be determined as nested wells are not present on the Site. c. The depth to bedrock ranges between 1.9 to 2.6 mbgs based on the concurrent geotechnical investigation completed at the Site. Of the four (4) borehole locations advanced to bedrock during the investigation two (2) locations were 2.0 mbgs or less to bedrock. Therefore, the shallow soil standards were applied. d. The depth to shallow groundwater in the overburden was approximately 2.8 to 3.7 mbgs, based on the January 2021 groundwater sampling event. Though not a media potentially impacted, groundwater samples were analyzed for future construction dewatering at the Site and due diligence purposes. e. Section 41 does not apply to the Site as, – No areas of natural significance were present on the Site, or within 30 m of the Site; – No water bodies were located on the Site, or within 30 m of the Site, and the soil at the property has a pH value between 5 and 9. Section 43.1 applies to the Site and it is considered a shallow soil site. Section 35 does not apply to the property, as written approval to apply non-potable site condition standards was not issued by the lower and upper tiers of the municipality. – The property, and all other properties located in whole or in part, within 250 metres of the boundaries of the property are supplied by a municipal drinking water system as defined in the Safe Drinking Water Act, 2002. – The proposed property use is residential (i.e., not agricultural or other). – The property is not located in an area designated in the municipal official plan as a well-head protection area or other designation identified by the municipality for the protection of ground water. – The property or one of the properties in the phase one study area does not have a well used or intended for use as a source of water for human consumption or agriculture.

CRITERIA	DISCUSSION
	f. Soil was not brought from another property and placed on, in, or under the Site, as part of this Phase Two ESA. However, fill materials were encountered at depths ranging from surface to 1.5 mbgs. g. The Site is proposed for redevelopment as a residential redevelopment. The location of the buildings proposed for the Site are unknown at this time.
iii. where a contaminant is present on, in or under the phase two property at a concentration greater than the applicable site condition standard, identification of, a. each area where a contaminant is present on, in or under the phase two property at a concentration greater than the applicable site condition standard, b. the contaminants associated with each of the areas referred to in subparagraph A, c. each medium in which a contaminant associated with an area referred to in subparagraph is present, d. a description and assessment of what is known about each of the areas referred to in subparagraph A, e. the distribution, in each of the areas referred to in subparagraph A, of each contaminant present in the area at a concentration greater than the applicable site condition standard, for each medium in which the contaminant is present, together with figures showing the distribution, f. anything known about the reason for the discharge of the contaminants present on, in or under the phase two property at a concentration greater than the applicable site condition standard into the natural environment,	Not applicable as all soil and groundwater met the applicable Table 6 SCS.

CRITERIA	DISCUSSION
g. anything known about migration of the contaminants present on, in or under the phase two property at a concentration greater than the applicable site condition standard away from any APEC, including the identification of any preferential pathways, h. climatic or meteorological conditions that may have influenced distribution and migration of the contaminants, such as temporal fluctuations in groundwater levels, and i. if applicable, information concerning soil vapour intrusion of the contaminants into buildings including, 1. relevant construction features of a building, such as a basement or crawl space, 2. building heating, ventilating and air conditioning design and operation, and 3. subsurface utilities,	
iv. where contaminants on, in or under the phase two property are present at concentrations greater than the applicable site condition standard, one or more cross-sections showing, a. the lateral and vertical distribution of a contaminant in each area where the contaminants is present at concentrations greater than the applicable site condition standard in soil, groundwater and sediment, b. approximate depth to water table in each area referred to in subparagraph A,	Not applicable as all soil and groundwater met the applicable Table 6 SCS.

CRITERIA	DISCUSSION
c. stratigraphy from ground surface to the deepest aquifer or aquitard investigated, and d. any subsurface structures and utilities that may affect contaminant distribution and transport in each area referred to in subparagraph A	
v. for each area where a contaminant is present on, in or under the property at a concentration greater than the applicable site condition standard for the contaminant, a diagram identifying, with narrative explanatory notes, a. the release mechanisms, b. contaminant transport pathway, c. the human and ecological receptors located on, in or under the phase two property, d. receptor exposure points, and routes of exposure.	Not applicable as all soil and groundwater met the applicable Table 6 SCS.
vi. If a non-standard delineation was conducted in accordance with section 7.1 of this Schedule as part of preparing the phase two environmental site assessment report, provide a narrative description of how the non-standard delineation satisfies the requirements in that section	Not applicable
vii. If the exemption set out in paragraph 1, 1.1 or 2 of section 49.1 of the regulation is being relied upon, provide a statement as to the reliance upon the exemption and a narrative description of the rationale for relying upon the exemption, which may be based on information gathered during the site investigation	The QP is relying upon the exemption set out in paragraph 1 of section 49.1 of the regulation. Areas of the Phase One Property have been identified where a substance has been historically applied to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both. For this reason, the exemption is being relied upon for APEC 2.
viii. If the exemption set out in paragraph 3 of section 49.1 of the	Not applicable

CRITERIA	DISCUSSION
regulation is being relied upon, provide, a. a statement as to the reliance upon the exemption, b. a narrative description of the rationale for relying upon the exemption, which may be based on information gathered during the site investigation, and c. one or more cross-sections and one or more figures in plan view of the phase two property that demonstrate, through identification of sample locations, sample depths and contaminant concentrations, the distribution of the contaminant in question laterally and vertically and the range of concentrations of that contaminant on, in or under the phase two property.	

7 CONCLUSIONS

Based on the Phase Two ESA, WSP presents the following findings:

- Fill material ranging in depth from surface to 1.5 mbgs was encountered in all six (6) of the boreholes (BH21-1 through BH21-6) advanced as part of this investigation. The fill material consisted of silty clay with trace sand and gravel, as well as silty sand. Native silty clay was encountered below the fill materials and was in turn underlain by shale bedrock ranging in depths of 1.9 to 2.6 mbgs.
- The depth to groundwater was recorded in three (3) monitoring wells installed during the current investigation. The groundwater levels were found to range between 2.8 to 3.7 mbgs and the groundwater elevations ranged between 84.7 and 85.9 masl. Based on the levels recorded, the groundwater flow direction appears to be southeast across the Site. Groundwater flow direction can be influenced by seasonal fluctuation, utility services, and other subsurface features and can only be confirmed with long term monitoring.
- The soil and groundwater analytical results were compared to 2011 MECP Table 6 Generic SCS for Shallow Soils in a Potable Groundwater Condition with a medium/fine texture for RPI Use.
- On January 4, 2021, a total of fourteen (14) soil samples, and one (1) QA/QC sample, were submitted to the laboratory and analysed for COPC including: metals and ORPs, PAHs, PHCs, and VOCs. On September 23, 2021, a total of two (2) soil samples and one (1) QA/QC sample were submitted to the laboratory and analysed for COPC including: metals and ORPs, PAHs, PHCs, and VOCs. The results of the analyses indicated that the soil samples met the Table 6 SCS for all parameters analysed.
- On January 20, 2021, groundwater samples were obtained from three (3) monitoring wells on the Site and submitted for analysis of metals and ORPs, PHCs, and VOCs. The results of the analyses indicated that the groundwater sampled from the monitoring wells met the Table 6 SCS for all parameters analysed.

Based on the findings of this Phase Two ESA, WSP presents the following conclusions and recommendations:

- All soils analysed during this investigation met the applicable Table 6 SCS for all parameters analysed.
- All groundwater analysed during this investigation met the applicable Table 2 SCS for all parameters analysed.
- As the development to a more stringent land use is not proposed, a RSC under O.Reg. 153/04 is not required for the proposed residential development.
- All monitoring wells should be decommissioned in accordance with O.Reg. 903 when no longer required. The potable water well on the Site should also be decommissioned prior to redevelopment, if not required.

7.1 QUALIFIER

WSP Canada Inc. (“WSP”) prepared this report solely for the use of the intended recipient, Regional Municipality of Halton, in accordance with the professional services agreement between the parties. In the event a contract has not been executed, the parties agree that the WSP General Terms for Consultant shall govern their business relationship which was provided to you prior to the preparation of this report.

The report is intended to be used in its entirety. No excerpts may be taken to be representative of the findings in the assessment.

The conclusions presented in this report are based on work performed by trained, professional and technical staff, in accordance with their reasonable interpretation of current and accepted engineering and scientific practices at the time the work was performed.

The content and opinions contained in the present report are based on the observations and/or information available to WSP at the time of preparation, using investigation techniques and engineering analysis methods consistent with those ordinarily

exercised by WSP and other engineering/scientific practitioners working under similar conditions, and subject to the same time, financial and physical constraints applicable to this project.

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WSP makes no other representations whatsoever concerning the legal significance of its findings.

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In preparing this report, WSP has relied in good faith on information provided by others, as noted in the report. WSP has reasonably assumed that the information provided is correct and WSP is not responsible for the accuracy or completeness of such information.

Benchmark and elevations used in this report are primarily to establish relative elevation differences between the specific testing and/or sampling locations and should not be used for other purposes, such as grading, excavating, construction, planning, development, etc.

WSP disclaims any responsibility for consequential financial effects on transactions or property values, or requirements for follow-up actions /or costs.

Overall conditions can only be extrapolated to an undefined limited area around these testing and sampling locations. The conditions that WSP interprets to exist between testing and sampling points may differ from those that actually exist. The accuracy of any extrapolation and interpretation beyond the sampling locations will depend on natural conditions, the history of Site development and changes through construction and other activities. In addition, analysis has been carried out for the identified chemical and physical parameters only, and it should not be inferred that other chemical species or physical conditions are not present. WSP cannot warrant against undiscovered environmental liabilities or adverse impacts off-Site.

The original of this digital file will be kept by WSP for a period of not less than 10 years. As the digital file transmitted to the intended recipient is no longer under the control of WSP, its integrity cannot be assured. As such, WSP does not guarantee any modifications made to this digital file subsequent to its transmission to the intended recipient.

This limitations statement is considered an integral part of this report.

7.2 QUALIFICATIONS OF THE ASSESSORS

This report was prepared by Mr. Randy Furtado, B.E.S., who is currently an Environmental Project Manager in the Toronto, Ontario office of WSP Canada Inc. Mr. Furtado has experience in conducting Phase One and Two ESAs on numerous residential, commercial, and industrial properties.

This report was reviewed by Ms. Freesia Waxman, M.A.Sc., P.Eng., QP_{ESA} who is an Environmental Engineer with 11 years of experience in Environmental Management. She has extensive project management, coordination, technical, and field experience in a variety of environmental services including: Phase One and Two Environmental Site Assessments, Risk Assessments, Excess Soil, soil and groundwater sampling and remediation programs, underground storage tank removals, health and safety as it relates to contaminated sites, baseline environmental studies, and environmental approvals process. She is responsible for external peer review and internal QA/QC of environmental reports and review of construction specifications as they relate to compliance with the various environmental regulations/standards and is a Qualified Person (QP_{ESA}) with the Ministry of the Environment, Conservation and Parks under Ontario Regulation 153/04.

8 REFERENCES

- Ontario Ministry of the Environment, Conservation and Parks (MECP). 1996. Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario. December 1996.
- Ontario Ministry of the Environment, Conservation and Parks (MECP). 2011a. Ontario Regulation 153/04, as amended, made under the Environmental Protection Act. July 1, 2011.
- Ontario Ministry of the Environment, Conservation and Parks (MECP). 2011b. Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act. July 1, 2011.
- Ontario Ministry of the Environment, Conservation and Parks (MECP). 2011c. Protocol for Analytical Methods Used in the Assessment of Properties under Past XV.1 of the Environmental Protection Act. July 1, 2011.
- Ontario Ministry of the Environment, Conservation and Parks (MECP). 2013. Ontario Regulation 903: "Wells." R.R.O. 1990, under the Ontario Water Resources Act, as amended by O.Reg. 331/13.
- WSP Canada Inc. (WSP). 2021. Preliminary Geotechnical Investigation 1258 Rebecca Street, Oakville, ON. January 2021.
- WSP Canada Inc. (WSP). 2021. Phase One Environmental Site Assessment 1258 Rebecca Street, Oakville, ON. September 2021.

TABLES

Table 1 Monitoring Well Installation and Groundwater Levels

Monitoring Well ID			BH21-1	BH21-2	BH21-3	BH21-4
Installed By			WSP	WSP	WSP	WSP
Installation Date			4-Jan-21	4-Jan-21	4-Jan-21	4-Jan-21
Well Status			Active	Active	Active	Active
Well Inner Diameter		(mm)	50	50	50	50
Casing Type (Flushmount / Monument)			Monument	Monument	Monument	Monument
Top of Pipe Elevation		(masl)	89.360	89.640	89.370	89.250
Ground Surface Elevation		(masl)	88.390	88.680	88.320	88.290
Bottom of Concrete Seal/Top of Bentonite Seal		(mbgs)	0.3	0.3	0.3	0.3
		(masl)	88.09	88.38	88.02	87.99
Bottom of Bentonite Seal/Top of Sand Pack		(mbgs)	0.0	0.0	0.0	0.0
		(masl)	88.4	88.7	88.3	88.3
Top of Well Screen		(mbgs)	1.5	1.5	1.5	1.5
		(masl)	86.9	87.2	86.8	86.8
Screen Length		(m)	1.5	1.5	1.5	1.5
Bottom of Screen		(mbgs)	3.0	3.0	3.0	3.0
		(masl)	85.4	85.7	85.3	85.3
20-Jan-21	Depth of GW	(mbgs)	3.7	2.8	Dry	3.3
	GW Elevation	(masl)	84.7	85.9	Dry	85.0

See "Notes for Soil and Groundwater Summary

Table 2 Summary of Soil Samples Submitted for Chemical Analysis

Borehole	Sample	Depth	Date	Parameters				APEC #
				M&ORP	PHCs	VOCs	PAHs	
BH21-1	SS1	0 - 0.6	4-Jan-21	-	✓	✓	✓	1
	SS2	0.8 - 1.5		✓	-	-	-	
BH21-2	SS1	0 - 0.6	4-Jan-21	✓	-	-	-	
	QAQC			✓	-	-	-	1
	SS2	0.8 - 1.5		-	✓	✓	-	
BH21-3	SS2	0.8 - 1.5	4-Jan-21	✓	✓	✓	-	1
	SS3	1.6 - 2.1		-	-	-	✓	
BH21-4	SS1	0 - 0.6	4-Jan-21	✓	-	-	-	1
	SS2	0.8 - 1.5		-	✓	✓	-	
BH21-5	S1	0.2 - 0.8	23-Sep-21	✓	✓	✓	✓	1
	DUP01			✓	✓	✓	✓	
BH21-6	S1	0.8 - 1.2	23-Sep-21	✓	✓	✓	✓	1

See "Notes for Soil and Groundwater Summary Tables" included at the beginning of this Section

Table 3: Summary of Groundwater Samples Submitted for Chemical Analysis

Monitoring Well ID	Screened Interval (mbgs)	Date	Parameters			APEC #
			M&ORP	PHCs	VOCs	
BH21-1	1.5 - 3.0	20-Apr-21	-	✓	✓	
BH21-2	1.5 - 3.0		✓	✓	✓	
BH21-4	1.5 - 3.0		✓	✓	✓	

See "Notes for Soil and Groundwater Summary Tables" included at the beginning of this Section

Table 4 Soil Analytical Results - Metals & ORPs

Parameter	Table 6 RPI MET	BH21-1 SS2	BH21-2 SS1	QAQC	BH21-3 SS2	BH21-4 SS1	DUP01	BH21-5	BH21-6
Date of Collection		Jan 04, 2021	Jan 04, 2021	Jan 04, 2021	Jan 04, 2021	Jan 04, 2021	-September-20	-September-20	-September-2021
Date Reported		Jan 14, 2021	Jan 14, 2021	Jan 14, 2021	Jan 14, 2021	Jan 14, 2021	-September-20	-September-20	-September-2021
Sampling Depth (mbgs)		0.8 - 1.5	0 - 0.6	0 - 0.6	0.8 - 1.5	0 - 0.6	0.1 - 0.8	0.1 - 0.8	0.2 - 1.2
Analytical Report Reference No.		C103800	C103800	C103800	C103800	C103800	C1R5678	C1R5678	C1R5678
Antimony	7.5	0.42	0.26	0.29	0.24	0.28	0.22	<0.20	<0.20
Arsenic	18	10	6	6.8	4	8	2.2	2.6	1.3
Barium	390	82	79	84	100	51	28	30	14
Beryllium	5	1.2	0.71	0.75	0.96	0.54	0.24	0.28	<0.20
Boron	120	26	17	15	23	13	<5.0	5.1	<5.0
Boron (Hot Water Extractable)	1.5	0.32	0.21	0.24	0.33	0.28	0.11	0.11	0.082
Cadmium	1.2	<0.10	0.58	0.1	<0.10	0.35	<0.10	<0.10	<0.10
Chromium	160	27	20	21	23	15	8.1	8.8	6
Cobalt	22	16.0	9.8	11.0	14.0	6.0	3.8	4.4	2.8
Copper	180	17	27	31	9.6	12	15	16	9.4
Lead	120	8.6	16	14	6	21	5.3	6.2	3.9
Molybdenum	6.9	1.8	1.2	1.3	0.83	1.3	<0.50	<0.50	<0.50
Nickel	130	37	22	24	32	14	7.7	8.3	5.6
Selenium	2.4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Silver	25	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Thallium	1	0.11	0.1	0.099	0.097	0.1	0.053	0.064	<0.050
Uranium	23	1.6	0.81	0.78	0.89	0.9	0.36	0.4	0.34
Vanadium	86	40	31	31	32	24	16	17	13
Zinc	340	66	140	65	59	130	25	28	15
Chromium, Hexavalent	10	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
Cyanide, Free	0.051	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury	1.8	<0.05	<0.05	<0.05	<0.05	<0.05	<0.050	<0.050	<0.050
Electrical Conductivity (2:1)	0.7	0.220	0.240	0.230	0.260	0.470	0.12	0.13	0.091
Sodium Adsorption Ratio	5	1.200	0.360	0.400	1.300	2.200	0.3	0.29	0.34
pH, 2:1 CaCl2 Extraction	*	7.73	7.75	7.72	7.84	7.46	7.5	7.45	7.67

See "Notes for Soil and

Table 5 Soil Analytical Results - PHCs & BTEX

Parameter		BH21-1 SS1	BH21-2 SS2	BH21-3 SS1	BH21-4 SS2	DUP01	BH21-5	BH21-6
Date of Collection	Table 6 RPI MFT	Jan 04, 2021	Jan 04, 2021	Jan 04, 2021	Jan 04, 2021	23-September-2021	23-September-2021	23-September-2021
Date Reported		Jan 14, 2021	Jan 14, 2021	Jan 14, 2021	Jan 14, 2021	29-September-2021	29-September-2021	29-September-2021
Sampling Depth (mbgs)		0 - 0.6	0.8 - 1.5	0 - 0.6	0.8 - 1.5	0.1 - 0.8	0.1 - 0.8	0.2 - 1.2
Analytical Report Reference No.		C103800	C103800	C103800	C103800	C1R5678	C1R5678	C1R5678
Benzene	0.17	<0.020	<0.020	<0.020	<0.020	<0.0060	<0.0060	<0.0060
Toluene	6	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Ethylbenzene	1.6	<0.020	<0.020	<0.020	<0.020	<0.010	<0.010	<0.010
Total Xylenes	25	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
F1 (C6 to C10) minus BTEX	65	<10	<10	<10	<10	<10	<10	<10
F2 (C10 to C16)	150	<10	<10	<10	<10	<10	<10	<10
F3 (C16 to C34)	1300	<50	<50	<50	<50	<50	<50	<50
F4 (C34 to C50)	5600	<50	<50	<50	<50	<50	<50	<50

See "Notes for Soil and Groundwater Summary

Table 6 Soil Analytical Results - VOCs

Parameter		BH21-1 SS1	BH21-2 SS2	BH21-3 SS1	BH21-4 SS2	DUP01	BH21-5	BH21-6
Date of Collection	Table 6 RPI MFT	Jan 04, 2021	Jan 04, 2021	Jan 04, 2021	Jan 04, 2021	23-September-2021	23-September-2021	23-September-2021
Date Reported		Jan 14, 2021	Jan 14, 2021	Jan 14, 2021	Jan 14, 2021	29-September-2021	29-September-2021	29-September-2021
Sampling Depth (mbgs)		0 - 0.6	0.8 - 1.5	0 - 0.6	0.8 - 1.5	0.1 - 0.8	0.1 - 0.8	0.2 - 1.2
Analytical Report Reference No.		C103800	C103800	C103800	C103800	C1R5678	C1R5678	C1R5678
Acetone	28	<0.05	<0.05	<0.05	<0.05	<0.49	<0.49	<0.49
Benzene	0.17	<0.020	<0.020	<0.020	<0.020	<0.0060	<0.0060	<0.0060
Bromodichloromethane	1.9	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Bromoform	0.26	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Bromomethane	0.05	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Carbon Tetrachloride	0.12	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Chlorobenzene	2.7	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Chloroform	0.18	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Dibromochloromethane	2.9	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Dichlorobenzene, 1,2-	1.7	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Dichlorobenzene, 1,3-	6	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Dichlorobenzene, 1,4-	0.097	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Dichlorodifluoromethane	25	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Dichloroethane, 1,1-	0.6	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Dichloroethane, 1,2-	0.05	<0.050	<0.050	<0.050	<0.050	<0.049	<0.049	<0.049
Dichloroethylene, 1,1-	0.05	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Dichloroethylene, Cis- 1,2-	2.5	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Dichloroethylene, Trans- 1,2-	0.75	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Dichloropropane, 1,2-	0.085	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
1,3-Dichloropropene (Cis + Trans)	0.081	<0.050	<0.050	<0.050	<0.050	<0.030	<0.030	<0.030
Ethylbenzene	1.6	<0.020	<0.020	<0.020	<0.020	<0.010	<0.010	<0.010
Ethylene Dibromide	0.05	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Hexane, n-	34	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Methyl Ethyl Ketone	44	<0.50	<0.50	<0.50	<0.50	<0.40	<0.40	<0.40
Methyl Isobutyl Ketone	4.3	<0.50	<0.50	<0.50	<0.50	<0.40	<0.40	<0.40
Methyl tert-butyl Ether	1.4	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Methylene Chloride	0.96	<0.050	<0.050	<0.050	<0.050	<0.049	<0.049	<0.049
Styrene	2.2	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Tetrachloroethane, 1,1,1,2-	0.05	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Tetrachloroethane, 1,1,2,2-	0.05	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Tetrachloroethylene	2.3	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Toluene	6	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Trichloroethane, 1,1,1-	3.4	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Trichloroethane, 1,1,2-	0.05	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Trichloroethylene	0.52	<0.050	<0.050	<0.050	<0.050	<0.010	<0.010	<0.010
Trichlorofluoromethane	5.8	<0.050	<0.050	<0.050	<0.050	<0.040	<0.040	<0.040
Vinyl Chloride	0.022	<0.020	<0.020	<0.020	<0.020	<0.019	<0.019	<0.019
Xylene mixture	25	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020

See "Notes for Soil and Groundwater Summary

Table 7 Soil Analytical Results - PAHs

Parameter		BH21-1 SS1	BH21-3 SS3	DUP01	BH21-5	BH21-6
Date of Collection	Table 6 RPI MFT	Jan 04, 2021	Jan 04, 2021	23-September-2021	23-September-2021	23-September-2021
Date Reported		Jan 14, 2021	Jan 14, 2021	29-September-2021	29-September-2021	29-September-2021
Sampling Depth (mbgs)		0 - 0.6	1.6 - 2.3	0.1 - 0.8	0.1 - 0.8	0.2 - 1.2
Analytical Report Reference No.		C103800	C103800	C1R5678	C1R5678	C1R5678
Naphthalene	0.75	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Acenaphthylene	0.17	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Acenaphthene	29	<0.0050	<0.0050	0.011	0.013	0.016
Fluorene	69	<0.0050	<0.0050	0.0094	0.011	0.015
Phenanthrene	7.8	0.012	<0.0050	0.14	0.17	0.18
Anthracene	0.74	<0.0050	<0.0050	0.028	0.037	0.049
Fluoranthene	0.69	0.022	<0.0050	0.28	0.35	0.28
Pyrene	78	0.017	<0.0050	0.21	0.26	0.2
Benz(a)anthracene	0.63	0.0089	<0.0050	0.1	0.13	0.1
Chrysene	7.8	0.0085	<0.0050	0.096	0.12	0.087
Benzo(b)fluoranthene	0.78	0.013	<0.0050	0.16	0.19	0.12
Benzo(k)fluoranthene	0.78	<0.0050	<0.0050	0.059	0.065	0.046
Benzo(a)pyrene	0.3	0.0088	<0.0050	0.11	0.13	0.085
Indeno(1,2,3-cd)pyrene	0.48	0.0065	<0.0050	0.073	0.084	0.048
Dibenz(a,h)anthracene	0.1	<0.0050	<0.0050	0.014	0.017	0.012
Benzo(g,h,i)perylene	7.8	0.0067	<0.0050	0.07	0.077	0.043
Methylnaphthalene, 2-(1-)	3.4	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071

See "Notes for Soil and Groundwater Summary

Table 8 Groundwater Analytical Results - Metals & ORPs

Parameter		BH21-2	BH21-4
Date of Collection	Table 6 Potable GW	Jan 20, 2021	Jan 20, 2021
Date Reported		Jan 28, 2021	Jan 28, 2021
Screened Depth (mbgs)		1.5 - 3.0	1.5 - 3.0
Analytical Report Reference No.		C116347	C116347
Antimony	6	<0.50	<0.50
Arsenic	25	<1.0	<1.0
Barium	1000	84	69
Beryllium	4	<0.40	<0.40
Boron	5000	250	270
Cadmium	2.1	<0.090	<0.090
Chromium	50	<5.0	<5.0
Chromium VI	25	0.55	0.65
Cobalt	3.8	<0.50	<0.50
Copper	69	3.1	4.1
Cyanide	52	<1	<1
Lead	10	<0.50	<0.50
Mercury	0.1	<0.10	<0.10
Molybdenum	70	7	10
Nickel	100	<1.0	<1.0
Selenium	10	<2.0	<2.0
Silver	1.2	<0.090	<0.090
Thallium	2	<0.050	<0.050
Uranium	20	5.8	9.1
Vanadium	6.2	1	0.72
Zinc	890	<5.0	<5.0
Sodium	490000	38000	45000
Chloride	790000	21000	29000

See "Notes for Soil and Groundwater Summary

Table 9 Groundwater Analytical Results - PHCs&BTEX

Parameter		BH21-1	BH21-2	QAQC-1	BH21-4
Date of Collection	Table 6 Potable GW	Jan 20, 2021	Jan 20, 2021	Jan 20, 2021	Jan 20, 2021
Date Reported		Jan 28, 2021	Jan 28, 2021	Jan 28, 2021	Jan 28, 2021
Screened Depth (mbgs)		1.5 - 3.0	1.5 - 3.0	1.5 - 3.0	1.5 - 3.0
Analytical Report Reference No.		C116347	C116347	C116347	C116347
Benzene	0.5	<0.20	<0.20	<0.20	<0.20
Toluene	24	<0.20	<0.20	<0.20	<0.20
Ethylbenzene	2.4	<0.20	<0.20	<0.20	<0.20
Xylene Mixture	72	<0.20	<0.20	<0.20	<0.20
F1 (C6 to C10) minus BTEX	420	<25	<25	<25	<25
F2 (C10 to C16)	150	<100	<100	<100	<100
F3 (C16 to C34)	500	<200	<200	<200	<200
F4 (C34 to C50)	500	<200	<200	<200	<200

See "Notes for Soil and Groundwater Summary

Table 10 Groundwater Analytical Results - VOCs

Parameter		BH21-1	BH21-2	QAQC-1	BH21-4
Date of Collection	Table 6 Potable GW	Jan 20, 2021	Jan 20, 2021	Jan 20, 2021	Jan 20, 2021
Date Reported		Jan 28, 2021	Jan 28, 2021	Jan 28, 2021	Jan 28, 2021
Screened Depth (mbgs)		1.5 - 3.0	1.5 - 3.0	1.5 - 3.0	1.5 - 3.0
Analytical Report Reference No.		C116347	C116347	C116347	C116347
Acetone	2700	<10	<10	<10	<10
Benzene	0.5	<0.20	<0.20	<0.20	<0.20
Bromodichloromethane	16	<0.50	<0.50	<0.50	<0.50
Bromoform	5	<1.0	<1.0	<1.0	<1.0
Bromomethane	0.89	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	0.2	<0.20	<0.20	<0.20	<0.20
Chlorobenzene	30	<0.20	<0.20	<0.20	<0.20
Chloroform	2	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane	25	<0.50	<0.50	<0.50	<0.50
Dichlorobenzene, 1,2-	3	<0.50	<0.50	<0.50	<0.50
Dichlorobenzene, 1,3-	59	<0.50	<0.50	<0.50	<0.50
Dichlorobenzene, 1,4-	0.5	<0.50	<0.50	<0.50	<0.50
Dichlorodifluoromethane	590	<1.0	<1.0	<1.0	<1.0
Dichloroethane, 1,1-	5	<0.20	<0.20	<0.20	<0.20
Dichloroethane, 1,2-	0.5	<0.50	<0.50	<0.50	<0.50
Dichloroethylene, 1,1-	0.5	<0.20	<0.20	<0.20	<0.20
Dichloroethylene, cis- 1,2-	1.6	<0.50	<0.50	<0.50	<0.50
Dichloroethylene, trans- 1,2-	1.6	<0.50	<0.50	<0.50	<0.50
Dichloropropane, 1,2-	0.58	<0.20	<0.20	<0.20	<0.20
Dichloropropene, 1,3-	0.5	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	2.4	<0.20	<0.20	<0.20	<0.20
Ethylene Dibromide	0.2	<0.20	<0.20	<0.20	<0.20
Hexane, n-	5	<1.0	<1.0	<1.0	<1.0
Methyl Ethyl Ketone	1800	<10	<10	<10	<10
Methyl Isobutyl Ketone	640	<5.0	<5.0	<5.0	<5.0
Methyl tert-butyl ether	15	<0.50	<0.50	<0.50	<0.50
Methylene Chloride	26	<2.0	<2.0	<2.0	<2.0
Styrene	5.4	<0.50	<0.50	<0.50	<0.50
Tetrachloroethane, 1,1,1,2-	1.1	<0.50	<0.50	<0.50	<0.50
Tetrachloroethane, 1,1,2,2-	0.5	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	0.5	<0.20	<0.20	<0.20	<0.20
Toluene	24	<0.20	<0.20	<0.20	<0.20
Trichloroethane, 1,1,1-	23	<0.20	<0.20	<0.20	<0.20
Trichloroethane, 1,1,2-	0.5	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	0.5	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	150	<0.50	<0.50	<0.50	<0.50
Vinyl Chloride	0.5	<0.20	<0.20	<0.20	<0.20
Xylene Mixture	72	<0.20	<0.20	<0.20	<0.20

See "Notes for Soil and Groundwater Summary

Table 11 Summary of Maximum Concentrations in Soil

Group	Parameter	Table 6 RPI MFT	Maximum Concentration	Location
BTEX	Benzene	0.17	<0.060	BH21-5 and BH21-6
	Ethylbenzene	1.6	<0.020	all samples
	Toluene	6	<0.020	all samples
	Total Xylenes	25	<0.020	all samples
Metals	Barium	390	100	BH21-3 SS2
	Beryllium	5	1.2	BH21-1 SS2
	Boron	120	26	BH21-1 SS2
	Cadmium	1.2	0.58	BH21-2 SS1
	Chromium	160	27	BH21-1 SS2
	Cobalt	22	16	BH21-1 SS2
	Copper	180	31	QAQC
	Lead	120	21	BH21-4 SS1
	Molybdenum	6.9	1.8	BH21-1 SS2
	Nickel	130	37	BH21-1 SS2
	Silver	25	<0.20	all samples
	Thallium	1	0.11	BH21-1 SS2
	Uranium	23	1.6	BH21-1 SS2
	Vanadium	86	40	BH21-1 SS2
	Zinc	340	140	BH21-2 SS1
As, Se, Sb	Antimony	7.5	0.42	BH21-1 SS2
	Arsenic	18	10	BH21-1 SS2
	Selenium	2.4	<0.50	all samples
PAHs	Acenaphthene	29	0.016	BH21-6
	Acenaphthylene	0.17	<0.0050	all samples
	Anthracene	0.74	0.049	BH21-6
	Benz(a)anthracene	0.63	0.13	BH21-5
	Benzo(a)pyrene	0.3	0.13	BH21-5
	Benzo(b)fluoranthene	0.78	0.19	BH21-5
	Benzo(g,h,i)perylene	7.8	0.077	BH21-5
	Benzo(k)fluoranthene	0.78	0.065	BH21-5
	Chrysene	7.8	0.12	BH21-5
	Dibenz(a,h)anthracene	0.1	0.017	BH21-5
	Fluoranthene	0.69	0.35	BH21-5
	Fluorene	69	0.015	BH21-6
	Indeno(1,2,3-cd)pyrene	0.48	0.084	BH21-5
	Methylnaphthalene, 2-(1-)	3.4	<0.0071	all samples
	Naphthalene	0.75	<0.0050	all samples
	Phenanthrene	7.8	0.18	BH21-6
	Pyrene	78	0.26	BH21-5
PHCs	F1 (C6 to C10) minus BTEX	65	<10	all samples
	F2 (C10 to C16)	150	<10	all samples
	F3 (C16 to C34)	1300	<50	all samples
	F4 (C34 to C50)	5600	<50	all samples
	Acetone	28	<0.05	all samples
	Bromomethane	0.05	<0.050	all samples
	Carbon Tetrachloride	0.12	<0.050	all samples
	Chlorobenzene	2.7	<0.050	all samples
	Chloroform	0.18	<0.050	all samples
	Dichlorobenzene, 1,2-	1.7	<0.050	all samples

Table 11 Summary of Maximum Concentrations in Soil

Group	Parameter	Table 6 RPI MFT	Maximum Concentration	Location
VOCs	Dichlorobenzene, 1,3-	6	<0.050	all samples
	Dichlorobenzene, 1,4-	0.097	<0.050	all samples
	Dichlorodifluoromethane	25	<0.050	all samples
	Dichloroethane, 1,1-	0.6	<0.050	all samples
	Dichloroethane, 1,2-	0.05	<0.050	all samples
	Dichloroethylene, 1,1-	0.05	<0.050	all samples
	Dichloroethylene, Cis- 1,2-	2.5	<0.050	all samples
	Dichloroethylene, Trans- 1,2-	0.75	<0.050	all samples
	Dichloropropane, 1,2-	0.085	<0.050	all samples
	1,3-Dichloropropene (Cis + Trans)	0.081	<0.050	all samples
	Ethylene Dibromide	0.05	<0.050	all samples
	Hexane, n-	34	<0.050	all samples
	Methyl Ethyl Ketone	44	<0.50	all samples
	Methyl Isobutyl Ketone	4.3	<0.50	all samples
	Methyl tert-butyl Ether	1.4	<0.050	all samples
	Methylene Chloride	0.96	<0.050	all samples
	Styrene	2.2	<0.050	all samples
	Tetrachloroethane, 1,1,1,2-	0.05	<0.050	all samples
	Tetrachloroethane, 1,1,2,2-	0.05	<0.050	all samples
	Tetrachloroethylene	2.3	<0.050	all samples
	Trichloroethane, 1,1,1-	3.4	<0.050	all samples
	Trichloroethane, 1,1,2-	0.05	<0.050	all samples
	Trichloroethylene	0.52	<0.050	all samples
	Trichlorofluoromethane	5.8	<0.050	all samples
	Vinyl Chloride	0.022	<0.020	all samples
ORPs	Chromium, Hexavalent	10	<0.18	all samples
	Cyanide, Free	0.051	<0.01	all samples
	Electrical Conductivity (2:1)	0.7	0.47	BH21-4 SS1
	Mercury	1.8	<0.05	all samples
	Sodium Adsorption Ratio	5	2.2	BH21-4 SS1
	pH, 2:1 CaCl2 Extraction	*	7.84	BH21-3 SS2

See "Notes for Soil and Groundwater Summary Tables" included at the beginning of this Section

Table 12 Summary of Maximum Concentrations in Groundwater

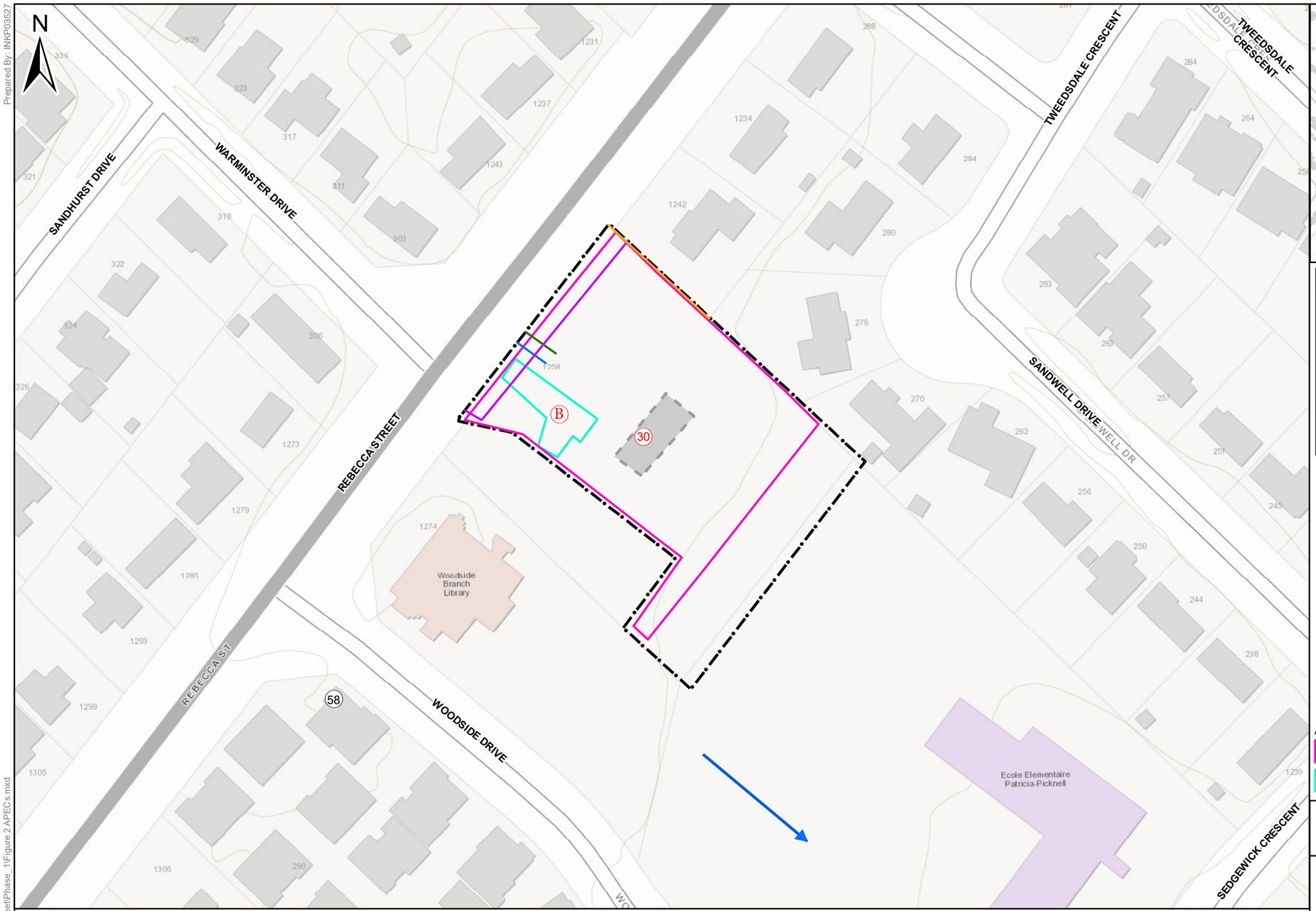
Group	Parameter	Table 6 Potable GW	Maximum Concentration	Location
BTEX	Benzene	0.5	<0.20	all samples
	Ethylbenzene	2.4	<0.20	all samples
	Toluene	24	<0.20	all samples
	Xylene Mixture	72	<0.20	all samples
Metals	Barium	1000	84	BH21-2
	Beryllium	4	<0.40	all samples
	Boron	5000	270	BH21-4
	Cadmium	2.1	<0.090	all samples
	Chromium	50	<5.0	all samples
	Cobalt	3.8	<0.50	all samples
	Copper	69	4.1	BH21-4
	Lead	10	<0.50	all samples
	Molybdenum	70	10	BH21-4
	Nickel	100	<1.0	all samples
	Silver	1.2	<0.090	all samples
	Thallium	2	<0.050	all samples
	Uranium	20	9.1	BH21-4
	Vanadium	6.2	1	BH21-2
	Zinc	890	<5.0	all samples
As, Se, Sb	Antimony	6	<0.50	all samples
	Arsenic	25	<1.0	all samples
	Selenium	10	<2.0	all samples
Na	Sodium	490000	45000	BH21-4
PHCs	F1 (C6 to C10) minus BTEX	420	<25	all samples
	F2 (C10 to C16)	150	<100	all samples
	F3 (C16 to C34)	500	<200	all samples
	F4 (C34 to C50)	500	<200	all samples
VOCs	Acetone	2700	<10	all samples
	Bromomethane	0.89	<0.50	all samples
	Carbon Tetrachloride	0.2	<0.20	all samples
	Chlorobenzene	30	<0.20	all samples
	Chloroform	2	<0.20	all samples
	Dichlorobenzene, 1,2-	3	<0.50	all samples
	Dichlorobenzene, 1,3-	59	<0.50	all samples
	Dichlorobenzene, 1,4-	0.5	<0.50	all samples
	Dichlorodifluoromethane	590	<1.0	all samples
	Dichloroethane, 1,1-	5	<0.20	all samples
	Dichloroethane, 1,2-	0.5	<0.50	all samples
	Dichloroethylene, 1,1-	0.5	<0.20	all samples
	Dichloroethylene, cis- 1,2-	1.6	<0.50	all samples
	Dichloroethylene, trans- 1,2-	1.6	<0.50	all samples
	Dichloropropane, 1,2-	0.58	<0.20	all samples
	Dichloropropene, 1,3-	0.5	<0.50	all samples
	Ethylene Dibromide	0.2	<0.20	all samples
	Hexane, n-	5	<1.0	all samples
	Methyl Ethyl Ketone	1800	<10	all samples
	Methyl Isobutyl Ketone	640	<5.0	all samples
	Methyl tert-butyl ether	15	<0.50	all samples

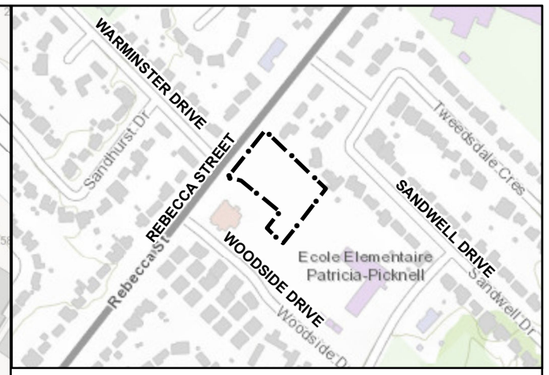
Table 12 Summary of Maximum Concentrations in Groundwater

Group	Parameter	Table 6 Potable GW	Maximum Concentration	Location
	Methylene Chloride	26	<2.0	all samples
	Styrene	5.4	<0.50	all samples
	Tetrachloroethane, 1,1,1,2-	1.1	<0.50	all samples
	Tetrachloroethane, 1,1,2,2-	0.5	<0.50	all samples
	Tetrachloroethylene	0.5	<0.20	all samples
	Trichloroethane, 1,1,1-	23	<0.20	all samples
	Trichloroethane, 1,1,2-	0.5	<0.50	all samples
	Trichloroethylene	0.5	<0.20	all samples
	Trichlorofluoromethane	150	<0.50	all samples
	Vinyl Chloride	0.5	<0.20	all samples
ORPs	Chloride	790000	29000	BH21-4
	Chromium VI	25	0.65	BH21-4
	Cyanide	52	<1	all samples
	Mercury	0.1	<0.10	all samples

See "Notes for Soil and Groundwater Summary Tables" included at the beginning of this Section

FIGURES





APEC	PCA	COPC	MEDIA
1	30	Metals, As, Sb, Se, B-HWS, CN-, electrical conductivity, Cr (VI), Hg, low or high pH, SAR, PAHs	Soil
2	B	EC, SAR, sodium chloride	Soil and Groundwater

LEGEND:

- SITE BOUNDARY
- WATER LINE
- SANITARY LINE
- WATERMAIN
- COMMUNICATION LINE
- INFERRED GROUNDWATER FLOW DIRECTION
- FORMER BASEMENT AREA OF BUILDING
- (#) PCA CONTRIBUTING TO APEC
- (#) PCA NOT CONTRIBUTING TO APEC

AREAS OF POTENTIAL ENVIRONMENTAL CONCERN (APECs):

- APEC 1
- APEC 2

TITLE:

AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

PROJECT:

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1258 REBECCA STREET
OAKVILLE, ONTARIO

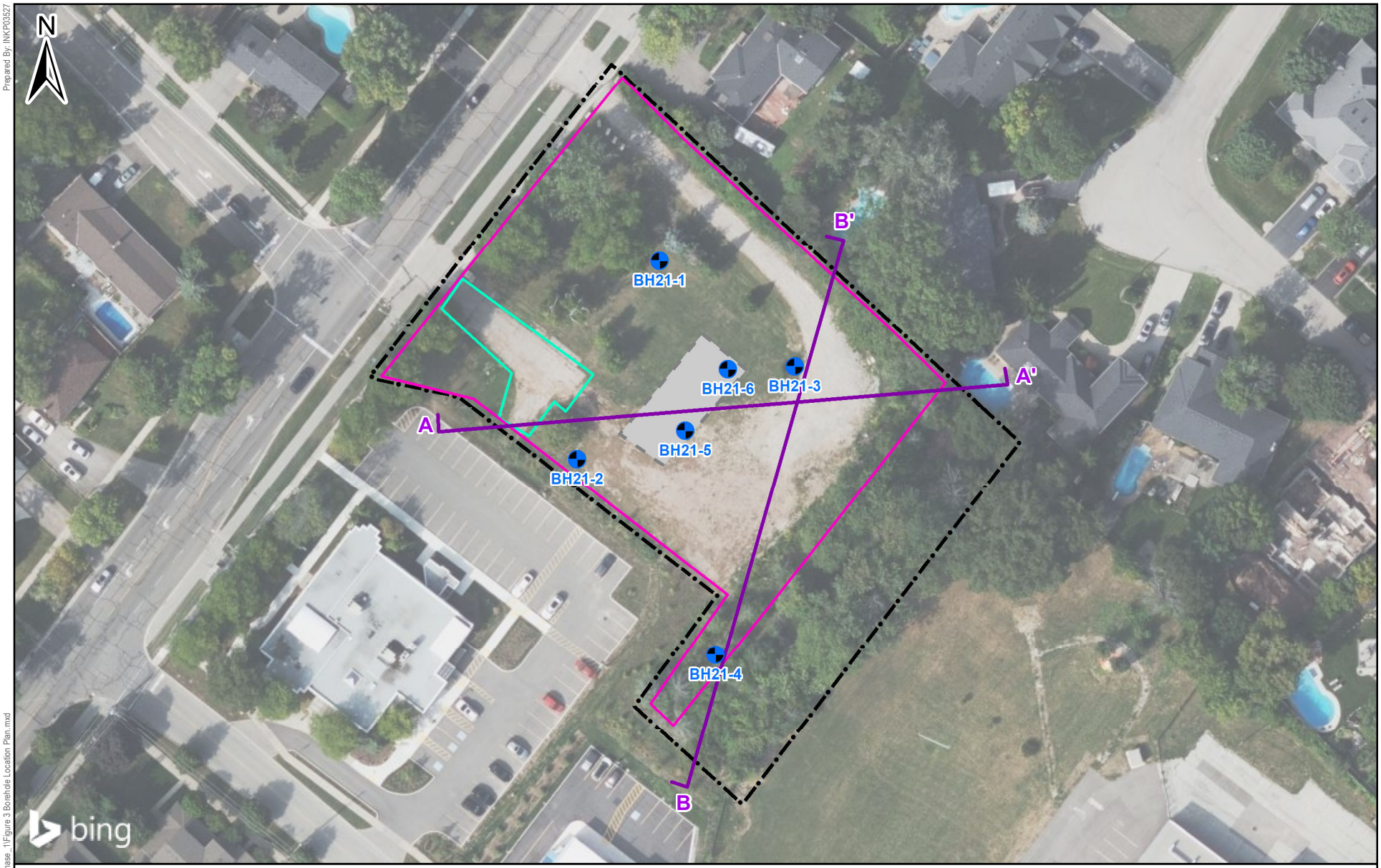
CLIENT:

REGIONAL MUNICIPALITY OF HALTON

PROJECT NO.:	REVIEWED BY:
201-11808-00	FW
DATE: OCTOBER 2021	FIGURE: 2

Prepared By: INKP03527

C:\Work\201-11808-00 - 1248 Rebecca Street\Phase_1\Figure 2 APECs.mxd



IMAGERY SOURCE: BING MAPS

0 5 10 20 30 40 50 Metres

LEGEND:

- BOREHOLE LOCATION
- CROSS SECTION LINE
- SITE BOUNDARY
- FORMER BASEMENT AREA OF BUILDING
- APEC 1
- APEC 2

TITLE:	**BOREHOLE LOCATION PLAN**	PROJECT NO.:	201-11808-00
PROJECT:	PHASE TWO ENVIRONMENTAL SITE ASSESSMENT 1258 REBECCA STREET OAKVILLE, ONTARIO	REVIEWED BY:	FW
		DATE:	OCTOBER 2021
CLIENT:	REGIONAL MUNICIPALITY OF HALTON	FIGURE NO:	3

Prepared By: INKP03527

C:\Work\201-11808-00 - 1248 Rebecca Street\Phase_1\Figure 3 Borehole Location Plan.mxd

IMAGERY SOURCE: BING MAPS

0 5 10 20 30 40 50 Metres

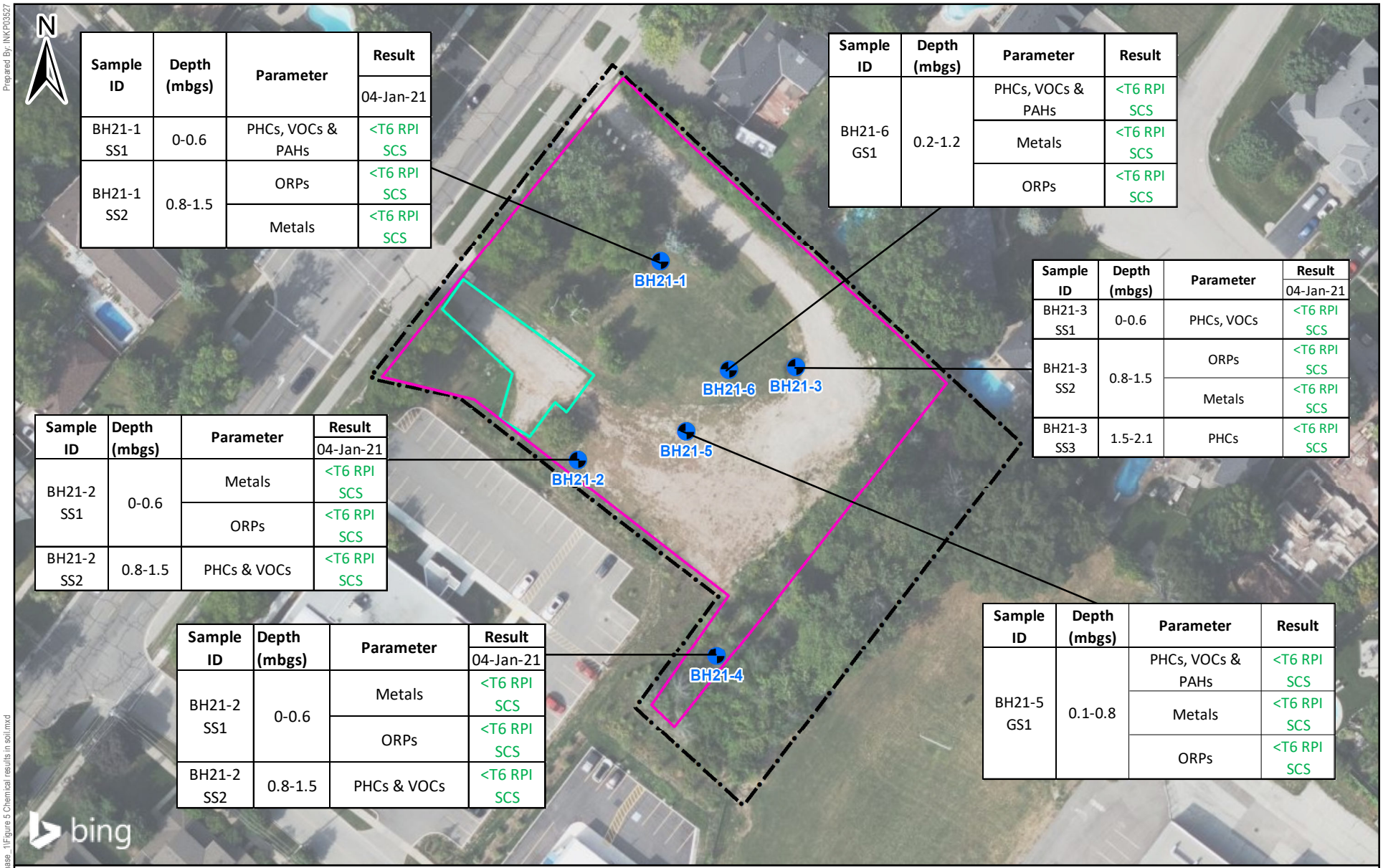
LEGEND:

- MONITORING WELL (WSP, 2021)
- SITE BOUNDARY
- GROUNDWATER FLOW DIRECTION
- CONTOUR LINE
- (85.9) GROUND ELEVATION (m, 2021)

TITLE:	**INFERRED GROUNDWATER FLOW DIRECTION**	PROJECT NO.:	201-11808-00
PROJECT:	PHASE TWO ENVIRONMENTAL SITE ASSESSMENT 1258 REBECCA STREET OAKVILLE, ONTARIO	REVIEWED BY:	FW
		DATE:	OCTOBER 2021
CLIENT:	REGIONAL MUNICIPALITY OF HALTON	FIGURE NO:	4

Prepared By: INKP03527

C:\Work\201-11808-00 - 1248 Rebecca Street\Phase...\1Figure 4 Inferred groundwater flow direction.mxd



Sample ID	Depth (mbgs)	Parameter	Result
			04-Jan-21
BH21-1 SS1	0-0.6	PHCs, VOCs & PAHs	<T6 RPI SCS
BH21-1 SS2	0.8-1.5	ORPs	<T6 RPI SCS
		Metals	<T6 RPI SCS

Sample ID	Depth (mbgs)	Parameter	Result
BH21-6 GS1	0.2-1.2	PHCs, VOCs & PAHs	<T6 RPI SCS
		Metals	<T6 RPI SCS
		ORPs	<T6 RPI SCS

Sample ID	Depth (mbgs)	Parameter	Result
			04-Jan-21
BH21-3 SS1	0-0.6	PHCs, VOCs	<T6 RPI SCS
BH21-3 SS2	0.8-1.5	ORPs	<T6 RPI SCS
		Metals	<T6 RPI SCS
BH21-3 SS3	1.5-2.1	PHCs	<T6 RPI SCS

Sample ID	Depth (mbgs)	Parameter	Result
			04-Jan-21
BH21-2 SS1	0-0.6	Metals	<T6 RPI SCS
		ORPs	<T6 RPI SCS
BH21-2 SS2	0.8-1.5	PHCs & VOCs	<T6 RPI SCS

Sample ID	Depth (mbgs)	Parameter	Result
			04-Jan-21
BH21-2 SS1	0-0.6	Metals	<T6 RPI SCS
		ORPs	<T6 RPI SCS
BH21-2 SS2	0.8-1.5	PHCs & VOCs	<T6 RPI SCS

Sample ID	Depth (mbgs)	Parameter	Result
BH21-5 GS1	0.1-0.8	PHCs, VOCs & PAHs	<T6 RPI SCS
		Metals	<T6 RPI SCS
		ORPs	<T6 RPI SCS

IMAGERY SOURCE: BING MAPS

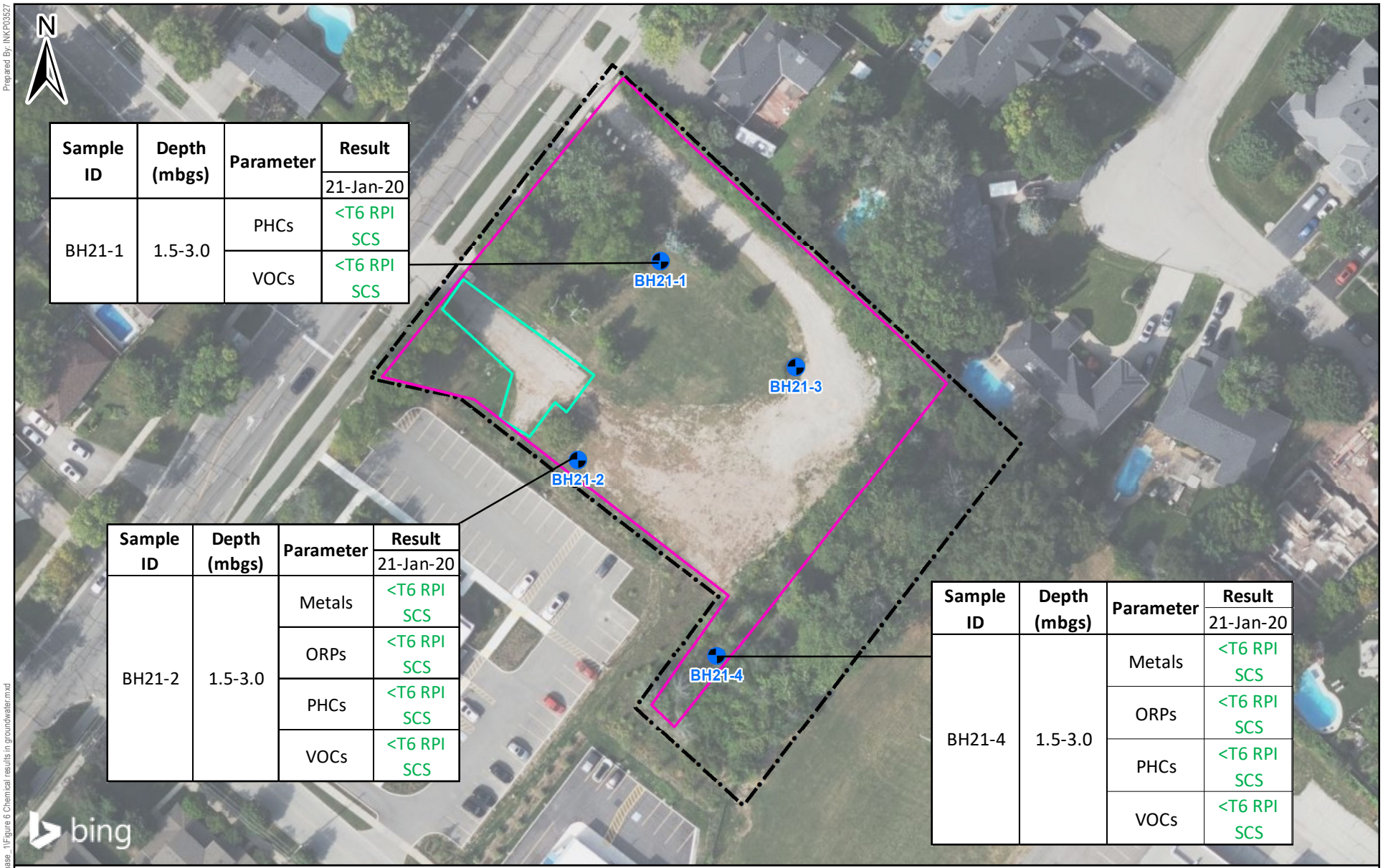
0 5 10 20 30 40 50 Metres

LEGEND:
- BOREHOLE LOCATION
- SITE BOUNDARY
- APEC 1
- APEC 2

TITLE:	CHEMICAL RESULTS IN SOIL	PROJECT NO.:	201-11808-00
PROJECT:	PHASE TWO ENVIRONMENTAL SITE ASSESSMENT 1258 REBECCA STREET OAKVILLE, ONTARIO	REVIEWED BY:	FW
		DATE:	OCTOBER 2021
CLIENT:	REGIONAL MUNICIPALITY OF HALTON	FIGURE NO:	5

Prepared By: INKP03527

C:\Work\201-11808-00 - 1248 Rebecca Street\Phase...\Figure 5 Chemical results in soil.mxd



Sample ID	Depth (mbgs)	Parameter	Result
			21-Jan-20
BH21-1	1.5-3.0	PHCs	<T6 RPI SCS
		VOCs	<T6 RPI SCS

Sample ID	Depth (mbgs)	Parameter	Result
			21-Jan-20
BH21-2	1.5-3.0	Metals	<T6 RPI SCS
		ORPs	<T6 RPI SCS
		PHCs	<T6 RPI SCS
		VOCs	<T6 RPI SCS

Sample ID	Depth (mbgs)	Parameter	Result
			21-Jan-20
BH21-4	1.5-3.0	Metals	<T6 RPI SCS
		ORPs	<T6 RPI SCS
		PHCs	<T6 RPI SCS
		VOCs	<T6 RPI SCS

IMAGERY SOURCE: BING MAPS

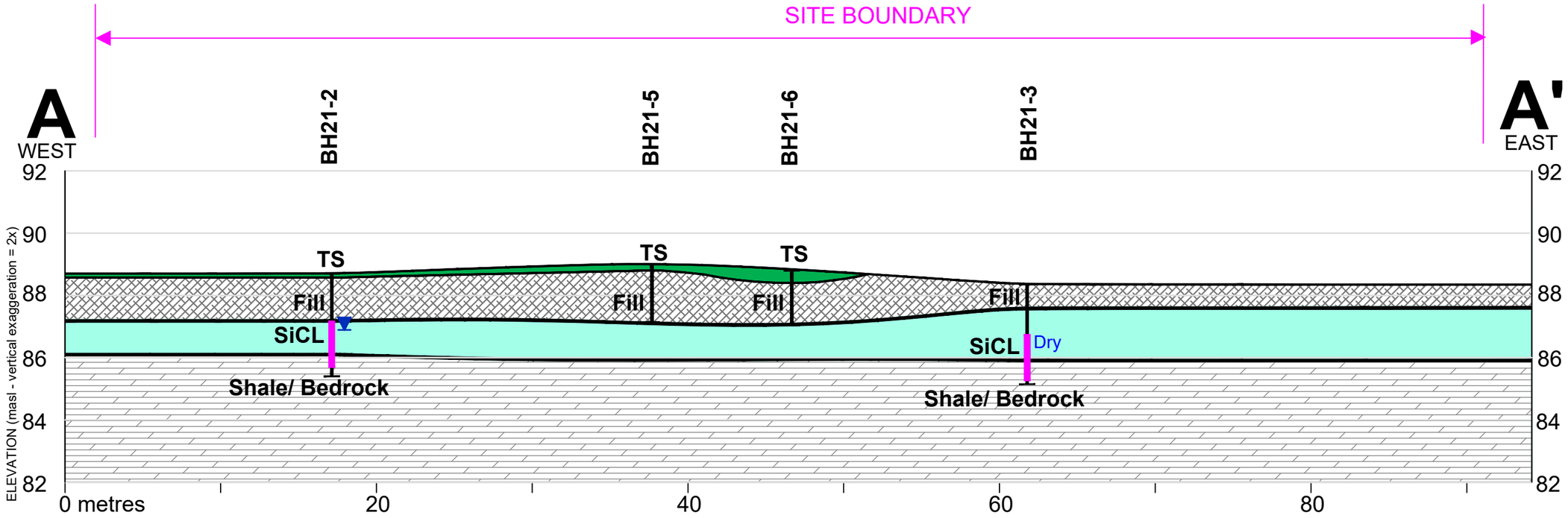
0 5 10 20 30 40 50 Metres

LEGEND:
- BOREHOLE LOCATION
- SITE BOUNDARY
- APEC 1
- APEC 2

TITLE:	CHEMICAL RESULTS IN GROUNDWATER	PROJECT NO.:	201-11808-00
PROJECT:	PHASE TWO ENVIRONMENTAL SITE ASSESSMENT 1258 REBECCA STREET OAKVILLE, ONTARIO	REVIEWED BY:	FW
		DATE:	OCTOBER 2021
CLIENT:	REGIONAL MUNICIPALITY OF HALTON	FIGURE NO:	6

Prepared By: INKP03527

C:\Work\201-11808-00 - 1248 Rebecca Street\Phase...\Figure 6 Chemical results in groundwater.mxd



2 INTERNATIONAL BLVD., SUITE 201
TORONTO, ONTARIO CANADA M9W 1A2
TEL.: 416-798-0065 | FAX: 416-798-0518 | WWW.WSP.COM

LEGEND:

BH20-1 — Monitoring Well No:

Water Level (Jan.14, 2021)

Well

Screen

- Top Soil
- Fill
- Silty Clay
- Shale / Bedrock

CLIENT: REGIONAL MUNICIPALITY OF HALTON

CLIENT REF. #:

PROJECT: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1258 REBECCA STREET
OAKVILLE, ONTARIO

PROJECT NO: 201-11808-00	DATE: Oct 2021
DESIGNED BY:	
DRAWN BY: CN	
CHECKED BY: FW	
FIGURE NO: 7	SCALE: As Shown

TITLE: **CROSS SECTION A-A'**

DISCIPLINE: **ENVIRONMENT**

ISSUE: DATE OF:

RV. # 1

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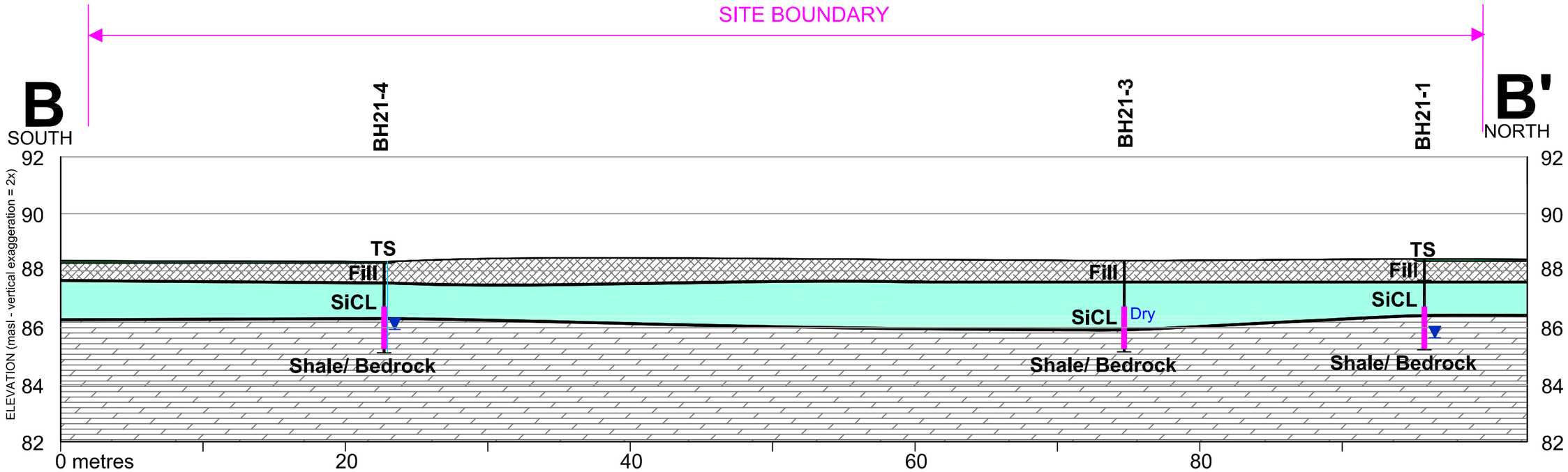

wsp

2 INTERNATIONAL BLVD., SUITE 201
TORONTO, ONTARIO CANADA M9W 1A2
TEL.: 416-798-0065 | FAX: 416-798-0518 | WWW.WSP.COM

LEGEND:

- Monitoring Well No: BH20-1
- Water Level (Jan.14, 2021)
- Well
- Screen
- Top Soil
- Fill
- Silty Clay
- Shale / Bedrock

CLIENT: REGIONAL MUNICIPALITY OF HALTON

CLIENT REF. #:

PROJECT: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1258 REBECCA STREET
OAKVILLE, ONTARIO

PROJECT NO: 201-11808-00	DATE: Oct 2021
DESIGNED BY:	
DRAWN BY: CN	
CHECKED BY: FW	
FIGURE NO: 8	SCALE: As Shown

TITLE: **CROSS SECTION B-B'**

DISCIPLINE: **ENVIRONMENT**

ISSUE:

DATE OF:

RV. # **0**

APPENDIX

A LEGAL SURVEY


NOTE
1. THIS PLAN MUST BE READ IN CONJUNCTION WITH SURVEY REPORT DATED NOVEMBER 30TH, 2020.
2. THIS PLAN AND REPORT WERE PREPARED FOR TYHE REGIONAL MUNICIPALITY OF HALTON AND THE UNDERSIGNED ACCEPTS NO RESPONSIBILITY FOR USE BY OTHER PARTIES.
BEARING NOTE:
BEARINGS ARE GRID AND ARE REFERRED TO THE SOUTHERLY LIMIT OF REBECCA STREET HAVING A BEARING OF N 37° 40' 40" E AS SHOWN ON PLAN 20R–21071.
ELEVATION NOTE
ELEVATIONS ARE GEODETIC AND ARE REFERRED TO TOWN OF OAKVILLE BENCH MARK N° 277 WITH A PUBLISHED ELEVATION OF 88.967 METRES.
REBECCA STREET
ORIGINAL ROAD ALLOWANCE BETWEEN CONCESSIONS 3 AND 4, SOUTH OF DUNDAS STREET (TRAFALGAR)
PIN 24839–0295
5.18 m. ROAD WIDENING BY DEPOSITED PLAN 1118
5.18 m. ROAD WIDENING BY DEPOSITED PLAN 486
5.18 m. ROAD WIDENING BY REGISTERED PLAN 709
N 37° 40' 40" E (REFERENCE BEARING)
PROJECT NORTH
Phase One, Phase Two and RSC Property
PIN 24773–0070 (LT)
PART OF LOT 23 CONCESSION 4 SOUTH OF DUNDAS STREET (TRAFALGAR)
PART 1
PART 2
PART 3
PIN 24773–0069
WOODSIDE DRIVE
LOT 6
20R – 21071
PLAN
LOT 26 709
PIN 24773–0053
No. 1242 1 STOREY STUCCO DWELLING
LOT 23
PIN 24773–0058
LOT 22
PIN 24773–0072
LOT 5
PIN 24773–0049
REGISTERED PLAN 1118
PART 2, PLAN 20R – 21600
72.53 (MEAS) 72.51 (CALC PER P1)
N 78° 43' 00" W (MEAS) 15.12
57.38 (MEAS)
N 52° 20' 50" W (MEAS)
N 37° 38' 50" E (MEAS) 25.54 (P1 & MEAS)
N 46° 02' 50" W (MEAS) 26.16
N 37° 34' 50" E (MEAS) 83.46 (MEAS) 83.52 (RP1)
N 46° 00' 10" W (MEAS)
97.38 (P2 & SET) 97.50 (KHM)
SURVEYOR'S REAL PROPERTY REPORT AND PLAN OF TOPOGRAPHY OF
PART OF LOT 23, CONCESSION 4
SOUTH OF DUNDAS STREET
GEOGRAPHIC TOWNSHIP OF TRAFALGAR
TOWN OF OAKVILLE
REGIONAL MUNICIPALITY OF HALTON
SCALE 1 : 250
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METRIC NOTE
DISTANCES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.
ASSOCIATION OF ONTARIO LAND SURVEYORS PLAN SUBMISSION FORM 2147866
THIS PLAN IS NOT VALID UNLESS IT IS AN EMBOSSED ORIGINAL COPY ISSUED BY THE SURVEYOR In accordance with Regulation 1026, Section 29(3)
AMAR LOAI 1991
LEGEND
■ DENOTES SURVEY MONUMENT FOUND
□ DENOTES SURVEY MONUMENT PLANTED
WIT DENOTES WITNESS
IB DENOTES IRON BAR
SIB DENOTES STANDARD IRON BAR
SSIB DENOTES SHORT STANDARD IRON BAR
NI DENOTES NOT IDENTIFIED
RP1 DENOTES REGISTERED PLAN 1118
RP2 DENOTES REGISTERED PLAN 709
TO DENOTES TOWN OF OAKVILLE
P1 DENOTES PLAN 20R–21071
P2 DENOTES PLAN 20R–21600
760 DENOTES K. H. McCONNELL LTYD., O.L.S.
CM/950 DENOTES CUNNINGHAM McCONNEL LTD., O.L.S.
KHM DENOTES PLAN OF SURVEY BY K. H. McCONNELL O.L.S., DATED JUNE 5, 1957
PIN DENOTES PROPERTY IDENTIFIER NUMBER
N.S.E.W. DENOTES NORTH, SOUTH, EAST, WEST
MEAS. DENOTES MEASURED
CALC. DENOTES CALCULATED
INV./OBV. DENOTES INVERT/OBVERT
HP DENOTES HYDO POLE
O.H.W. DENOTES OVERHEAD UTILITY CABLES
GW DENOTES GUY WIRES
LS DENOTES LIGHT STANDARD
TS DENOTES TRAFFIC SIGN
MH DENOTES MANHOLE
CB DENOTES CATCH BASIN
DS DENOTES DOOR SILL ELEVATION
TC/BC DENOTES TOP/BOTTOM OF CURB
T.O.S. DENOTES TOP OF SLOPE
GM DENOTES GAS METER
WV DENOTES WATER VALVE
ø DENOTES DIAMETER
SURVEYOR'S CERTIFICATE
I CERTIFY THAT :
1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON NOVEMBER 16TH, 2020.
NOV. 30TH, 2020
DATE
AMAR LOAI
Ontario Land Surveyor
GENESIS Land Surveying Inc.
10 FOUR SEASONS PLACE, 10TH FLOOR
TORONTO, M9B 6H7
T 905–499–2956 T 1800–262–9784
WWW.GENESISLANDSURVEY.COM
DRAFTED BY: G.S.R
CHECKED BY: A.L.
PROJECT No. GLS–0729

Land Surveying Inc.

SURVEYORS REAL PROPERTY REPORT
SURVEY REPORT

DATE:	November 30th 2020
PROJECT NO.:	GLS-0729
CLIENT:	The Regional Municipality of Halton
ADDRESS:	1258 Rebecca Street, Oakville
LEGAL DESCRIPTION:	Part of Lot 23, Concession 4, South of Dundas Street, Geographic Township Trafalgar, Town of Oakville
PIN:	24773-0070 (LT)

NOTE: THIS REPORT MUST BE READ WITH REFERENCE TO THE SURVEY PLAN ATTACHED HERETO

With respect to the survey plan presented herewith, you will notice the following items:

EXTENT OF TITLE:

- The limits of the parcel as re-established are in general agreement with the dimensions expressed on Plan 20R-21071, 20R-21600, and Registered Plan 1118.

- We believe you should consult with your Solicitor regarding the current legal description of the Parcel as it does not appear to reflect a more accurate description since the last severance on the parcel by deposited plan 20R-21071. We believe that the description should reflect the previous instrument (67303) except Part 3 on Plan 20R-21071.

REGISTERED EASEMENTS /RIGHTS-OF-WAY:

- We have found easements or Rights-of-Way registered on tile.
- We have observed overhead utility cables along the front portions of the property.

MONUMENTATION:

- Survey monuments are marking/witnessing all the property corners.

ADDITIONAL REMARKS:

- No investigation with respect to Municipal zoning requirements has been made in connection herewith.
- Note the location of the fences in relation to the boundary lines as re-established.

Regards,

November 30th, 2020

Amar Loai, O.L.S, O.L.I.P
Ontario Land Surveyor

APPENDIX

B SAMPLING AND ANALYSIS PLAN

SAMPLING AND ANALYSIS PLAN

WSP was retained by the Regional Municipality of Halton to conduct a Phase Two ESA for the land municipally identified as 1258 Rebecca Street, Oakville, Ontario (the Site). The purpose of the proposed Phase Two ESA program is to assess the current subsurface environmental conditions in support of the redevelopment of the Site.

The Phase Two ESA will involve intrusive investigation in the areas determined through the Phase One ESA to be APECs, and will be completed in general accordance with O.Reg. 153/04. Based on the findings of the field and laboratory analyses, a Phase Two ESA report will be prepared.

The Site Investigation Program will be completed as follows:

Public and private underground utilities and services will be cleared prior to commencement of intrusive investigation activities

A Health and Safety Plan will be prepared, and all work will be executed safely

Four (4) boreholes will be advanced on the Phase Two Property, to an approximate maximum depth of 3.28 mbgs using a track-mounted drill rig. Two (2) supplemental borehole will be advanced within the former basement footprint using a hand auger. The soil profile from each borehole will be logged in the field and samples will be screened for TOV with a PID. The location of the boreholes will be selected to investigate any APECs identified during the Site visit, as well as to delineate the horizontal and vertical extents of relevant parameters of concern.

Based on field screening and visual/olfactory observations, worst-case/representative soil samples from the boreholes will be submitted for laboratory testing of relevant parameters of concern.

Three (3) groundwater monitoring wells will be installed within three (3) of the four (4) boreholes to assess groundwater quality below the Site for due diligence purposes and to determine the direction of groundwater flow;

The groundwater levels in the wells will be measured at least 24 hours after well development has been completed, to determine the groundwater table elevation. The wells will be surveyed to a geodetic benchmark to determine groundwater flow direction.

The groundwater wells will be purged to remove stagnant water and sampled for laboratory testing of relevant parameters of concern.

Both soil and groundwater samples will be submitted for chemical analysis by a CALA laboratory in accordance with the Ontario MECP standards and requirements of O.Reg. 153/04 under the Environmental Protection Act.

The proposed analytical program is outlined below (proposed program subject to change as a result of site observations/findings). All soil and groundwater sampling will be carried out in accordance with WSP's Standard Operating Procedures (SOPs).

<u>Soils:</u>

Six (6) soil samples for Metals and ORPs, PHCs, and VOCs

Four (4) soil samples for PAHs

10% duplicate soil samples for QA/QC purposes (duplicates)

<u>Groundwater:</u>

Three (3) groundwater samples for Metals and ORPs, PHCs, and VOCs

10% groundwater samples for QA/QC purposes (duplicate, trip blank)

Following receipt of all of the results, a report in accordance with O.Reg. 153/04 will be prepared.

It is noted that if the Phase Two ESA reveals parameter concentrations greater than the applicable standards set out in *Ontario Regulation 153/04,* then additional work (i.e., supplemental delineation, additional drilling, sampling, analysis, and/or site remediation activities) will be deemed necessary prior to RSC filing, should an RSC be required. The costs for any additional work, if necessary, are beyond the current scope of work.

Finalized Sampling & Analysis Plan

The finalized SAP was created based on the request to complete a Phase Two ESA for due diligence purposes. The SAP was compiled to collect data to provide information on soil and/or groundwater quality in each APEC.

Figure 3 outlines the borehole/monitoring well investigation locations. Table 4-1 provides the proposed and implemented SAP, which includes the specific requirements for sampling and analysis for the areas to be investigated.

Additional delineation may be required following the implementation of this SAP to meet the requirements of O.Reg. 153/04 which requires delineation of all areas where concentrations are above the applicable SCS such as in the following conditions:

- Unexpected contamination not previously discovered, or not related to identified APECs, will need to be further delineated to identify source(s); and

Requirement for a minimum of three monitoring wells per stratigraphic unit would have to extend to underlying units if there is evidence of contamination extending into it; the SAP assumes contamination is limited to the upper stratigraphic unit (confirmed with clean sample), in which case the underlying units do not necessarily have to be characterized. The SAP has been developed using the available data and may require additional delineation if sampling results come out suggesting impacts are deeper than initially expected.

APPENDIX

C BOREHOLE LOGS

LOG OF BOREHOLE BH21-1

PROJECT: Preliminary Geotechnical Investigation
REF. NO.: 201-11808-00
CLIENT: Region of Halton
Method: Solid Stem Auger
ENCL NO.: 1
PROJECT LOCATION: 1258 Rebecca Street
Diameter:
ORIGINATED BY LG
DATUM: Geodetic
Date: Jan/04/2021 to Jan/04/2021
BH LOCATION: N 4808044.462 E 605443.165

SOIL PROFILE			SAMPLES											
(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	BLOWS 0.3 m "N"	GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100) / SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L / WATER CONTENT (%) (10 20 30)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
88.42	Ground Surface											
88.34 0.08	76mm TOPSOIL											
	Reddish brown, moist, firm, SILTY CLAY, trace sand, trace gravel; FILL		1	SS	5		88		43			
87.66 0.76	Reddish brown, moist, very stiff to hard, SILTY CLAY, trace sand; (CL)		2	SS	13							
			3	SS	68		87					
86.49 1.93	INFERRED SHALE BEDROCK		4	SS	100/ 230mm		86					
			5	SS	55							
85.22 3.20	**END OF BOREHOLE** Notes: 1) Borehole terminated at proposed depth 2) Borehole was open and dry upon completion of drilling											

W. L. 85.65 m Jan 14, 2021

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES
+ 3, × 3: Numbers refer to Sensitivity
○ 8 ε=3% Strain at Failure

WSP-SOIL-ROCK-MAY-29-2017.GLB
WSP SOIL LOG 2IN GW WITH PID 201-11808-00 DRAFT.GPJ 1/20/21

LOG OF BOREHOLE BH21-2

PROJECT: Preliminary Geotechnical Investigation
REF. NO.: 201-11808-00
CLIENT: Region of Halton
Method: Solid Stem Auger
ENCL NO.: 2
PROJECT LOCATION: 1258 Rebecca Street
Diameter:
ORIGINATED BY LG
DATUM: Geodetic
Date: Jan/04/2021 to Jan/04/2021
BH LOCATION: N 4808009.416 E 605416.745

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	BLOWS 0.3 m "N"	GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100) / SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L WATER CONTENT (%) (10 20 30)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
88.71	Ground Surface											
0.00 / 88.58	127mm TOPSOIL											
0.13	Reddish brown, moist, firm, SILTY CLAY, trace sand, trace gravel; FILL		1	SS	6							
			2	SS	6		88					
1 / 87.19												
1.52	Reddish brown, moist, very stiff to hard, SILTY CLAY, trace sand; (CL)		3	SS	23	▽	87					0 3 63 34
								W. L. 86.89 m Jan 14, 2021				
2 / 86.11			4	SS	86/ 250mm							
2.60	INFERRED SHALE BEDROCK						86					
3 / 85.43			5	SS	84/ 230mm							
3.28	**END OF BOREHOLE** Notes: 1) Borehole terminated at proposed depth 2) Borehole was open and dry upon completion of drilling											

GROUNDWATER ELEVATIONS
Measurement 1st ▽ 2nd ▼ 3rd ▼ 4th ▼

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

LOG OF BOREHOLE BH21-3

PROJECT: Preliminary Geotechnical Investigation
REF. NO.: 201-11808-00
CLIENT: Region of Halton
Method: Solid Stem Auger
ENCL NO.: 3
PROJECT LOCATION: 1258 Rebecca Street
Diameter:
ORIGINATED BY LG
DATUM: Geodetic
Date: Jan/04/2021 to Jan/04/2021
BH LOCATION: N 4808020.833 E 605456.283

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	BLOWS 0.3 m "N"	GROUND WATER CONDITIONS	ELEVATION	DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100) / SHEAR STRENGTH (kPa) ○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE & Sensitivity × LAB VANE (20 40 60 80 100)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L WATER CONTENT (%) (10 20 30)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
88.35	Ground Surface											
0.00	Reddish brown, moist, very stiff, SILTY CLAY, trace sand, trace gravel; FILL 100mm sand and gravel layer		1	SS	17		88					
87.59												
0.76	Reddish brown, moist, very stiff, SILTY CLAY, trace sand; (CL)		2	SS	17							0 3 56 41
1							87					
			3	SS	29							
2												
85.91			4	SS	68		86					
2.44	INFERRED SHALE BEDROCK											
3												
85.17			5	SS	52							
3.18	**END OF BOREHOLE** Notes: 1) Borehole terminated at proposed depth 2) Borehole was open and dry upon completion of drilling											

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES + 3, × 3: Numbers refer to Sensitivity ○ ε=3% Strain at Failure

LOG OF BOREHOLE BH21-4

PROJECT: Preliminary Geotechnical Investigation
REF. NO.: 201-11808-00
CLIENT: Region of Halton
Method: Solid Stem Auger
ENCL NO.: 4
PROJECT LOCATION: 1258 Rebecca Street
Diameter:
ORIGINATED BY LG
DATUM: Geodetic
Date: Jan/04/2021 to Jan/04/2021
BH LOCATION: N 4807972.716 E 605433.078

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	BLOWS 0.3 m "N"	GROUND WATER CONDITIONS	ELEVATION
88.32	Ground Surface						
88.27 / 0.05	50mm TOPSOIL						
	Reddish brown, moist, firm, SILTY CLAY, trace sand, trace gravel; FILL 175mm sand and gravel layer		1	SS	7		88
87.56 / 0.76	Reddish brown, moist, stiff to hard, SILTY CLAY, trace sand; (CL)		2	SS	10		87
			3	SS	45		
86.32 / 2.00	INFERRED SHALE BEDROCK		4	SS	52	W. L. 85.94 m Jan 14, 2021	86
85.14			5	SS	51		
3.18	**END OF BOREHOLE** Notes: 1) Borehole terminated at proposed depth 2) Borehole was open and dry upon completion of drilling						

DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100)

SHEAR STRENGTH (kPa) (20 40 60 80 100)
○ UNCONFINED + FIELD VANE & Sensitivity
● QUICK TRIAXIAL × LAB VANE

PLASTIC LIMIT w_P | NATURAL MOISTURE CONTENT w | LIQUID LIMIT w_L
WATER CONTENT (%) (10 20 30)

POCKET PEN. (Cu) (kPa)
NATURAL UNIT WT (kN/m³)
REMARKS AND GRAIN SIZE DISTRIBUTION (%)
GR SA SI CL

GROUNDWATER ELEVATIONS
Measurement 1st ▽ 2nd ▼ 3rd ▼ 4th ▼

GRAPH NOTES
+ 3, × 3: Numbers refer to Sensitivity
○ ε=3% Strain at Failure

LOG OF BOREHOLE BH21-5

PROJECT: 1258 Rebecca Street
CLIENT: Regional Municipality of Halton
PROJECT LOCATION: 1258 Rebecca Street
DATUM: UTM NAD 83 Zone 17
BH LOCATION: N 4808012 E 605435

Method: Hand Auger
Diameter: 101.6 mm
Date: Sep-23-2021
Equipment: Soil Hand Auger

REF. NO.: 201-11808-00
ENCL NO.:
ORIGINATED BY DK
COMPILED BY KP
CHECKED BY

SOIL PROFILE			SAMPLES			MONITORING WELL CONSTRUCTION	CHEMICAL ANALYSIS	Soil Head Space Vapours			POCKET PEN. (kPa)	REMARKS AND GRAIN SIZE DISTRIBUTION (%)
(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	BLOWS / 0.3 m "N"			PID (ppm)	CGD (% LEL)	PLASTIC LIMIT / NATURAL MOISTURE CONTENT / LIQUID LIMIT; w_P w w_L; WATER CONTENT (%)		GR SA SI CL
88.5	Ground Surface							20 40 60 80	20 40 60 80	10 20 30		
88.4	**TOPSOIL:**											
0.1	**FILL:** brown, sandy clay, moist		1	GS			Metals, Inorganics, VOCs, PAHs	0		○		
87.7												
0.8	END OF BOREHOLE AT 0.8 mbgs											

GROUNDWATER ELEVATIONS

Measurement 1st 2nd 3rd 4th

LOG OF BOREHOLE BH21-6

PROJECT: 1258 Rebecca Street
CLIENT: Regional Municipality of Halton
PROJECT LOCATION: 1258 Rebecca Street
DATUM: UTM NAD 83 Zone 17
BH LOCATION: N 4808023 E 605443

Method: Hand Auger
Diameter: 101.6 mm
Date: Sep-23-2021
Equipment: Soil Hand Auger

REF. NO.: 201-11808-00
ENCL NO.:
ORIGINATED BY DK
COMPILED BY KP
CHECKED BY

SOIL PROFILE			SAMPLES			MONITORING WELL CONSTRUCTION	CHEMICAL ANALYSIS	Soil Head Space Vapours		PLASTIC LIMIT / NATURAL MOISTURE CONTENT / LIQUID LIMIT	POCKET PEN. (kPa)	REMARKS AND GRAIN SIZE DISTRIBUTION (%)
(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	BLOWS / 0.3 m "N"			PID (ppm)	CGD (% LEL)	w_P w w_L WATER CONTENT (%)		GR SA SI CL
88.4	Ground Surface											
88.2	**TOPSOIL:**											
0.2	**FILL:** brown, silty sand, moist		1	GS			Metals, Inorganics, VOCs, PAHs	0		o		
1												
87.2												
1.2	END OF BOREHOLE AT 1.2 mbgs											

GROUNDWATER ELEVATIONS

Measurement 1st 2nd 3rd 4th

APPENDIX

D CERTIFICATES OF ANALYSIS

APPENDIX

D-1 *SOIL*

Your Project #: 201-11808-00-101-02
Your C.O.C. #: 847337-01-01

Attention: Freesia Waxman

WSP Canada Inc
4 Hughson Street South
Suite 300
Hamilton, ON
CANADA L8N 3Z1

Report Date: 2021/09/29
Report #: R6833104
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1R5678
Received: 2021/09/23, 13:07

Sample Matrix: Soil
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum	3	N/A	2021/09/28	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron	3	2021/09/27	2021/09/28	CAM SOP-00408	R153 Ana. Prot. 2011
Free (WAD) Cyanide	3	2021/09/27	2021/09/29	CAM SOP-00457	OMOE E3015 m
Conductivity	3	2021/09/28	2021/09/28	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1)	3	2021/09/27	2021/09/28	CAM SOP-00436	EPA 3060/7199 m
Petroleum Hydrocarbons F2-F4 in Soil (2)	3	2021/09/27	2021/09/27	CAM SOP-00316	CCME CWS m
Acid Extractable Metals by ICPMS	3	2021/09/27	2021/09/29	CAM SOP-00447	EPA 6020B m
Moisture	3	N/A	2021/09/24	CAM SOP-00445	Carter 2nd ed 51.2 m
PAH Compounds in Soil by GC/MS (SIM)	3	2021/09/27	2021/09/28	CAM SOP-00318	EPA 8270D m
pH CaCl2 EXTRACT	3	2021/09/28	2021/09/28	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR)	3	N/A	2021/09/29	CAM SOP-00102	EPA 6010C
Volatile Organic Compounds and F1 PHCs	3	N/A	2021/09/28	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, MELCC, 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.

Your Project #: 201-11808-00-101-02
Your C.O.C. #: 847337-01-01

Attention: Freesia Waxman

WSP Canada Inc
4 Hughson Street South
Suite 300
Hamilton, ON
CANADA L8N 3Z1

Report Date: 2021/09/29
Report #: R6833104
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1R5678
Received: 2021/09/23, 13:07

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

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

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

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

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Ashton Gibson, Project Manager
Email: Ashton.Gibson@bureauveritas.com
Phone# (905)817-5765

==========

This report has been generated and distributed using a secure automated process.
BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

BV Labs Job #: C1R5678
Report Date: 2021/09/29

WSP Canada Inc
Client Project #: 201-11808-00-101-02
Sampler Initials: JD

RESULTS OF ANALYSES OF SOIL

BV Labs ID			QSW673		QSW674		QSW675		
Sampling Date			2021/09/23		2021/09/23		2021/09/23		
COC Number			847337-01-01		847337-01-01		847337-01-01		
	UNITS	Criteria	DUP01	QC Batch	BH21-5	QC Batch	BH21-6	RDL	QC Batch
Calculated Parameters									
Sodium Adsorption Ratio	N/A	**5.0**	0.30 (1)	7596382	0.29 (1)	7596382	0.34 (1)		7596382
Inorganics									
Conductivity	mS/cm	**0.7**	0.12	7604087	0.13	7604087	0.091	0.002	7604087
Moisture	%	-	8.9	7598640	11	7598640	12	1.0	7598547
Available (CaCl2) pH	pH	-	7.50	7604141	7.45	7604145	7.67		7604141
WAD Cyanide (Free)	ug/g	**0.051**	<0.01	7602587	<0.01	7602587	<0.01	0.01	7602587

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soil
(1) Sodium was not detected. To report SAR the sodium detection limit was used in the calculation. This value represents a maximum ratio.

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

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

BV Labs ID			QSW673		QSW674		QSW675		
Sampling Date			2021/09/23		2021/09/23		2021/09/23		
COC Number			847337-01-01		847337-01-01		847337-01-01		
	UNITS	Criteria	DUP01	QC Batch	BH21-5	QC Batch	BH21-6	RDL	QC Batch
Inorganics									
Chromium (VI)	ug/g	**10**	<0.18	7602133	<0.18	7602133	<0.18	0.18	7602133
Metals									
Hot Water Ext. Boron (B)	ug/g	**1.5**	0.11	7602690	0.11	7602690	0.082	0.050	7602690
Acid Extractable Antimony (Sb)	ug/g	**7.5**	0.22	7602563	<0.20	7602695	<0.20	0.20	7602563
Acid Extractable Arsenic (As)	ug/g	**18**	2.2	7602563	2.6	7602695	1.3	1.0	7602563
Acid Extractable Barium (Ba)	ug/g	**390**	28	7602563	30	7602695	14	0.50	7602563
Acid Extractable Beryllium (Be)	ug/g	**5**	0.24	7602563	0.28	7602695	<0.20	0.20	7602563
Acid Extractable Boron (B)	ug/g	**120**	<5.0	7602563	5.1	7602695	<5.0	5.0	7602563
Acid Extractable Cadmium (Cd)	ug/g	**1.2**	<0.10	7602563	<0.10	7602695	<0.10	0.10	7602563
Acid Extractable Chromium (Cr)	ug/g	**160**	8.1	7602563	8.8	7602695	6.0	1.0	7602563
Acid Extractable Cobalt (Co)	ug/g	**22**	3.8	7602563	4.4	7602695	2.8	0.10	7602563
Acid Extractable Copper (Cu)	ug/g	**180**	15	7602563	16	7602695	9.4	0.50	7602563
Acid Extractable Lead (Pb)	ug/g	**120**	5.3	7602563	6.2	7602695	3.9	1.0	7602563
Acid Extractable Molybdenum (Mo)	ug/g	**6.9**	<0.50	7602563	<0.50	7602695	<0.50	0.50	7602563
Acid Extractable Nickel (Ni)	ug/g	**130**	7.7	7602563	8.3	7602695	5.6	0.50	7602563
Acid Extractable Selenium (Se)	ug/g	**2.4**	<0.50	7602563	<0.50	7602695	<0.50	0.50	7602563
Acid Extractable Silver (Ag)	ug/g	**25**	<0.20	7602563	<0.20	7602695	<0.20	0.20	7602563
Acid Extractable Thallium (Tl)	ug/g	**1**	0.053	7602563	0.064	7602695	<0.050	0.050	7602563
Acid Extractable Uranium (U)	ug/g	**23**	0.36	7602563	0.40	7602695	0.34	0.050	7602563
Acid Extractable Vanadium (V)	ug/g	**86**	16	7602563	17	7602695	13	5.0	7602563
Acid Extractable Zinc (Zn)	ug/g	**340**	25	7602563	28	7602695	15	5.0	7602563
Acid Extractable Mercury (Hg)	ug/g	**1.8**	<0.050	7602563	<0.050	7602695	<0.050	0.050	7602563

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soil

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SEMI-VOLATILE ORGANICS BY GC-MS (SOIL)

BV Labs ID			QSW673	QSW674	QSW675		
Sampling Date			2021/09/23	2021/09/23	2021/09/23		
COC Number			847337-01-01	847337-01-01	847337-01-01		
	UNITS	Criteria	DUP01	BH21-5	BH21-6	RDL	QC Batch
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/g	-	<0.0071	<0.0071	<0.0071	0.0071	7595950
Polyaromatic Hydrocarbons							
Acenaphthene	ug/g	**29**	0.011	0.013	0.016	0.0050	7602916
Acenaphthylene	ug/g	**0.17**	<0.0050	<0.0050	<0.0050	0.0050	7602916
Anthracene	ug/g	**0.74**	0.028	0.037	0.049	0.0050	7602916
Benzo(a)anthracene	ug/g	**0.63**	0.10	0.13	0.10	0.0050	7602916
Benzo(a)pyrene	ug/g	**0.3**	0.11	0.13	0.085	0.0050	7602916
Benzo(b/j)fluoranthene	ug/g	**0.78**	0.16	0.19	0.12	0.0050	7602916
Benzo(g,h,i)perylene	ug/g	**7.8**	0.070	0.077	0.043	0.0050	7602916
Benzo(k)fluoranthene	ug/g	**0.78**	0.059	0.065	0.046	0.0050	7602916
Chrysene	ug/g	**7.8**	0.096	0.12	0.087	0.0050	7602916
Dibenzo(a,h)anthracene	ug/g	**0.1**	0.014	0.017	0.012	0.0050	7602916
Fluoranthene	ug/g	**0.69**	0.28	0.35	0.28	0.0050	7602916
Fluorene	ug/g	**69**	0.0094	0.011	0.015	0.0050	7602916
Indeno(1,2,3-cd)pyrene	ug/g	**0.48**	0.073	0.084	0.048	0.0050	7602916
1-Methylnaphthalene	ug/g	**3.4**	<0.0050	<0.0050	<0.0050	0.0050	7602916
2-Methylnaphthalene	ug/g	**3.4**	<0.0050	<0.0050	<0.0050	0.0050	7602916
Naphthalene	ug/g	**0.75**	<0.0050	<0.0050	<0.0050	0.0050	7602916
Phenanthrene	ug/g	**7.8**	0.14	0.17	0.18	0.0050	7602916
Pyrene	ug/g	**78**	0.21	0.26	0.20	0.0050	7602916
Surrogate Recovery (%)							
D10-Anthracene	%	-	90	89	87		7602916
D14-Terphenyl (FS)	%	-	92	88	90		7602916
D8-Acenaphthylene	%	-	75	73	74		7602916

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QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soil

VOLATILE ORGANICS BY GC/MS (SOIL)

BV Labs ID			QSW673	QSW674	QSW675		
Sampling Date			2021/09/23	2021/09/23	2021/09/23		
COC Number			847337-01-01	847337-01-01	847337-01-01		
	UNITS	Criteria	DUP01	BH21-5	BH21-6	RDL	QC Batch
Volatile Organics							
Acetone (2-Propanone)	ug/g	**28**	<0.49	<0.49	<0.49	0.49	7601674
Benzene	ug/g	**0.17**	<0.0060	<0.0060	<0.0060	0.0060	7601674
Bromodichloromethane	ug/g	**1.9**	<0.040	<0.040	<0.040	0.040	7601674
Bromoform	ug/g	**0.26**	<0.040	<0.040	<0.040	0.040	7601674
Bromomethane	ug/g	**0.05**	<0.040	<0.040	<0.040	0.040	7601674
Carbon Tetrachloride	ug/g	**0.12**	<0.040	<0.040	<0.040	0.040	7601674
Chlorobenzene	ug/g	**2.7**	<0.040	<0.040	<0.040	0.040	7601674
Chloroform	ug/g	**0.17**	<0.040	<0.040	<0.040	0.040	7601674
Dibromochloromethane	ug/g	**2.9**	<0.040	<0.040	<0.040	0.040	7601674
1,2-Dichlorobenzene	ug/g	**1.7**	<0.040	<0.040	<0.040	0.040	7601674
1,3-Dichlorobenzene	ug/g	**6**	<0.040	<0.040	<0.040	0.040	7601674
1,4-Dichlorobenzene	ug/g	**0.097**	<0.040	<0.040	<0.040	0.040	7601674
Dichlorodifluoromethane (FREON 12)	ug/g	**25**	<0.040	<0.040	<0.040	0.040	7601674
1,1-Dichloroethane	ug/g	**0.6**	<0.040	<0.040	<0.040	0.040	7601674
1,2-Dichloroethane	ug/g	**0.05**	<0.049	<0.049	<0.049	0.049	7601674
1,1-Dichloroethylene	ug/g	**0.05**	<0.040	<0.040	<0.040	0.040	7601674
cis-1,2-Dichloroethylene	ug/g	**2.5**	<0.040	<0.040	<0.040	0.040	7601674
trans-1,2-Dichloroethylene	ug/g	**0.75**	<0.040	<0.040	<0.040	0.040	7601674
1,2-Dichloropropane	ug/g	**0.085**	<0.040	<0.040	<0.040	0.040	7601674
cis-1,3-Dichloropropene	ug/g	**0.081**	<0.030	<0.030	<0.030	0.030	7601674
trans-1,3-Dichloropropene	ug/g	**0.081**	<0.040	<0.040	<0.040	0.040	7601674
Ethylbenzene	ug/g	**1.6**	<0.010	<0.010	<0.010	0.010	7601674
Ethylene Dibromide	ug/g	**0.05**	<0.040	<0.040	<0.040	0.040	7601674
Hexane	ug/g	**34**	<0.040	<0.040	<0.040	0.040	7601674
Methylene Chloride(Dichloromethane)	ug/g	**0.96**	<0.049	<0.049	<0.049	0.049	7601674
Methyl Ethyl Ketone (2-Butanone)	ug/g	**44**	<0.40	<0.40	<0.40	0.40	7601674
Methyl Isobutyl Ketone	ug/g	**4.3**	<0.40	<0.40	<0.40	0.40	7601674
Methyl t-butyl ether (MTBE)	ug/g	**1.4**	<0.040	<0.040	<0.040	0.040	7601674
Styrene	ug/g	**2.2**	<0.040	<0.040	<0.040	0.040	7601674
1,1,1,2-Tetrachloroethane	ug/g	**0.05**	<0.040	<0.040	<0.040	0.040	7601674
1,1,2,2-Tetrachloroethane	ug/g	**0.05**	<0.040	<0.040	<0.040	0.040	7601674
Tetrachloroethylene	ug/g	**2.3**	<0.040	<0.040	<0.040	0.040	7601674
Toluene	ug/g	**6**	<0.020	<0.020	<0.020	0.020	7601674

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soil

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VOLATILE ORGANICS BY GC/MS (SOIL)

BV Labs ID			QSW673	QSW674	QSW675		
Sampling Date			2021/09/23	2021/09/23	2021/09/23		
COC Number			847337-01-01	847337-01-01	847337-01-01		
	UNITS	Criteria	DUP01	BH21-5	BH21-6	RDL	QC Batch
1,1,1-Trichloroethane	ug/g	**3.4**	<0.040	<0.040	<0.040	0.040	7601674
1,1,2-Trichloroethane	ug/g	**0.05**	<0.040	<0.040	<0.040	0.040	7601674
Trichloroethylene	ug/g	**0.52**	<0.010	<0.010	<0.010	0.010	7601674
Trichlorofluoromethane (FREON 11)	ug/g	**5.8**	<0.040	<0.040	<0.040	0.040	7601674
Vinyl Chloride	ug/g	**0.022**	<0.019	<0.019	<0.019	0.019	7601674
p+m-Xylene	ug/g	-	<0.020	<0.020	<0.020	0.020	7601674
o-Xylene	ug/g	-	<0.020	<0.020	<0.020	0.020	7601674
Total Xylenes	ug/g	**25**	<0.020	<0.020	<0.020	0.020	7601674
F1 (C6-C10)	ug/g	**65**	<10	<10	<10	10	7601674
F1 (C6-C10) - BTEX	ug/g	**65**	<10	<10	<10	10	7601674
Surrogate Recovery (%)							
4-Bromofluorobenzene	%	-	85	85	84		7601674
D10-o-Xylene	%	-	102	100	95		7601674
D4-1,2-Dichloroethane	%	-	108	105	106		7601674
D8-Toluene	%	-	96	97	95		7601674

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soil

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PETROLEUM HYDROCARBONS (CCME)

BV Labs ID			QSW673	QSW674	QSW675		
Sampling Date			2021/09/23	2021/09/23	2021/09/23		
COC Number			847337-01-01	847337-01-01	847337-01-01		
	UNITS	Criteria	DUP01	BH21-5	BH21-6	RDL	QC Batch
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/g	**150**	<10	<10	<10	10	7601697
F3 (C16-C34 Hydrocarbons)	ug/g	**1300**	<50	<50	<50	50	7601697
F4 (C34-C50 Hydrocarbons)	ug/g	**5600**	<50	<50	<50	50	7601697
Reached Baseline at C50	ug/g	-	Yes	Yes	Yes		7601697
Surrogate Recovery (%)							
o-Terphenyl	%	-	91	92	92		7601697

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Soil - Residential/Parkland/Institutional Property Use - Medium and Fine Textured Soil

GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7598547	MUC	RPD	Moisture	2021/09/24	3.7		%	20
7598640	MUC	RPD	Moisture	2021/09/24	2.1		%	20
7601674	YY	Matrix Spike	4-Bromofluorobenzene	2021/09/28		98	%	60 - 140
			D10-o-Xylene	2021/09/28		117	%	60 - 130
			D4-1,2-Dichloroethane	2021/09/28		98	%	60 - 140
			D8-Toluene	2021/09/28		106	%	60 - 140
			Acetone (2-Propanone)	2021/09/28		107	%	60 - 140
			Benzene	2021/09/28		98	%	60 - 140
			Bromodichloromethane	2021/09/28		111	%	60 - 140
			Bromoform	2021/09/28		109	%	60 - 140
			Bromomethane	2021/09/28		116	%	60 - 140
			Carbon Tetrachloride	2021/09/28		112	%	60 - 140
			Chlorobenzene	2021/09/28		107	%	60 - 140
			Chloroform	2021/09/28		108	%	60 - 140
			Dibromochloromethane	2021/09/28		110	%	60 - 140
			1,2-Dichlorobenzene	2021/09/28		107	%	60 - 140
			1,3-Dichlorobenzene	2021/09/28		109	%	60 - 140
			1,4-Dichlorobenzene	2021/09/28		126	%	60 - 140
			Dichlorodifluoromethane (FREON 12)	2021/09/28		130	%	60 - 140
			1,1-Dichloroethane	2021/09/28		106	%	60 - 140
			1,2-Dichloroethane	2021/09/28		100	%	60 - 140
			1,1-Dichloroethylene	2021/09/28		110	%	60 - 140
			cis-1,2-Dichloroethylene	2021/09/28		111	%	60 - 140
			trans-1,2-Dichloroethylene	2021/09/28		112	%	60 - 140
			1,2-Dichloropropane	2021/09/28		105	%	60 - 140
			cis-1,3-Dichloropropene	2021/09/28		94	%	60 - 140
			trans-1,3-Dichloropropene	2021/09/28		107	%	60 - 140
			Ethylbenzene	2021/09/28		97	%	60 - 140
			Ethylene Dibromide	2021/09/28		105	%	60 - 140
			Hexane	2021/09/28		110	%	60 - 140
			Methylene Chloride(Dichloromethane)	2021/09/28		119	%	60 - 140
			Methyl Ethyl Ketone (2-Butanone)	2021/09/28		94	%	60 - 140
			Methyl Isobutyl Ketone	2021/09/28		84	%	60 - 140
			Methyl t-butyl ether (MTBE)	2021/09/28		85	%	60 - 140
			Styrene	2021/09/28		108	%	60 - 140
			1,1,1,2-Tetrachloroethane	2021/09/28		114	%	60 - 140
			1,1,2,2-Tetrachloroethane	2021/09/28		109	%	60 - 140
			Tetrachloroethylene	2021/09/28		110	%	60 - 140
			Toluene	2021/09/28		113	%	60 - 140
			1,1,1-Trichloroethane	2021/09/28		109	%	60 - 140
			1,1,2-Trichloroethane	2021/09/28		115	%	60 - 140
			Trichloroethylene	2021/09/28		113	%	60 - 140
			Trichlorofluoromethane (FREON 11)	2021/09/28		117	%	60 - 140
			Vinyl Chloride	2021/09/28		122	%	60 - 140
			p+m-Xylene	2021/09/28		98	%	60 - 140
			o-Xylene	2021/09/28		96	%	60 - 140
			F1 (C6-C10)	2021/09/28		115	%	60 - 140
7601674	YY	Spiked Blank	4-Bromofluorobenzene	2021/09/28		100	%	60 - 140
			D10-o-Xylene	2021/09/28		99	%	60 - 130
			D4-1,2-Dichloroethane	2021/09/28		105	%	60 - 140
			D8-Toluene	2021/09/28		103	%	60 - 140
			Acetone (2-Propanone)	2021/09/28		104	%	60 - 140

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Benzene	2021/09/28		86	%	60 - 130
			Bromodichloromethane	2021/09/28		99	%	60 - 130
			Bromoform	2021/09/28		100	%	60 - 130
			Bromomethane	2021/09/28		101	%	60 - 140
			Carbon Tetrachloride	2021/09/28		93	%	60 - 130
			Chlorobenzene	2021/09/28		92	%	60 - 130
			Chloroform	2021/09/28		93	%	60 - 130
			Dibromochloromethane	2021/09/28		97	%	60 - 130
			1,2-Dichlorobenzene	2021/09/28		92	%	60 - 130
			1,3-Dichlorobenzene	2021/09/28		92	%	60 - 130
			1,4-Dichlorobenzene	2021/09/28		107	%	60 - 130
			Dichlorodifluoromethane (FREON 12)	2021/09/28		107	%	60 - 140
			1,1-Dichloroethane	2021/09/28		92	%	60 - 130
			1,2-Dichloroethane	2021/09/28		91	%	60 - 130
			1,1-Dichloroethylene	2021/09/28		92	%	60 - 130
			cis-1,2-Dichloroethylene	2021/09/28		97	%	60 - 130
			trans-1,2-Dichloroethylene	2021/09/28		95	%	60 - 130
			1,2-Dichloropropane	2021/09/28		93	%	60 - 130
			cis-1,3-Dichloropropene	2021/09/28		88	%	60 - 130
			trans-1,3-Dichloropropene	2021/09/28		101	%	60 - 130
			Ethylbenzene	2021/09/28		81	%	60 - 130
			Ethylene Dibromide	2021/09/28		95	%	60 - 130
			Hexane	2021/09/28		91	%	60 - 130
			Methylene Chloride(Dichloromethane)	2021/09/28		104	%	60 - 130
			Methyl Ethyl Ketone (2-Butanone)	2021/09/28		94	%	60 - 140
			Methyl Isobutyl Ketone	2021/09/28		84	%	60 - 130
			Methyl t-butyl ether (MTBE)	2021/09/28		76	%	60 - 130
			Styrene	2021/09/28		93	%	60 - 130
			1,1,1,2-Tetrachloroethane	2021/09/28		97	%	60 - 130
			1,1,2,2-Tetrachloroethane	2021/09/28		101	%	60 - 130
			Tetrachloroethylene	2021/09/28		90	%	60 - 130
			Toluene	2021/09/28		94	%	60 - 130
			1,1,1-Trichloroethane	2021/09/28		92	%	60 - 130
			1,1,2-Trichloroethane	2021/09/28		103	%	60 - 130
			Trichloroethylene	2021/09/28		96	%	60 - 130
			Trichlorofluoromethane (FREON 11)	2021/09/28		96	%	60 - 130
			Vinyl Chloride	2021/09/28		102	%	60 - 130
			p+m-Xylene	2021/09/28		82	%	60 - 130
			o-Xylene	2021/09/28		81	%	60 - 130
			F1 (C6-C10)	2021/09/28		102	%	80 - 120
7601674	YY	Method Blank	4-Bromofluorobenzene	2021/09/28		88	%	60 - 140
			D10-o-Xylene	2021/09/28		106	%	60 - 130
			D4-1,2-Dichloroethane	2021/09/28		102	%	60 - 140
			D8-Toluene	2021/09/28		96	%	60 - 140
			Acetone (2-Propanone)	2021/09/28	<0.49		ug/g	
			Benzene	2021/09/28	<0.0060		ug/g	
			Bromodichloromethane	2021/09/28	<0.040		ug/g	
			Bromoform	2021/09/28	<0.040		ug/g	
			Bromomethane	2021/09/28	<0.040		ug/g	
			Carbon Tetrachloride	2021/09/28	<0.040		ug/g	
			Chlorobenzene	2021/09/28	<0.040		ug/g	
			Chloroform	2021/09/28	<0.040		ug/g	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dibromochloromethane	2021/09/28	<0.040		ug/g	
			1,2-Dichlorobenzene	2021/09/28	<0.040		ug/g	
			1,3-Dichlorobenzene	2021/09/28	<0.040		ug/g	
			1,4-Dichlorobenzene	2021/09/28	<0.040		ug/g	
			Dichlorodifluoromethane (FREON 12)	2021/09/28	<0.040		ug/g	
			1,1-Dichloroethane	2021/09/28	<0.040		ug/g	
			1,2-Dichloroethane	2021/09/28	<0.049		ug/g	
			1,1-Dichloroethylene	2021/09/28	<0.040		ug/g	
			cis-1,2-Dichloroethylene	2021/09/28	<0.040		ug/g	
			trans-1,2-Dichloroethylene	2021/09/28	<0.040		ug/g	
			1,2-Dichloropropane	2021/09/28	<0.040		ug/g	
			cis-1,3-Dichloropropene	2021/09/28	<0.030		ug/g	
			trans-1,3-Dichloropropene	2021/09/28	<0.040		ug/g	
			Ethylbenzene	2021/09/28	<0.010		ug/g	
			Ethylene Dibromide	2021/09/28	<0.040		ug/g	
			Hexane	2021/09/28	<0.040		ug/g	
			Methylene Chloride(Dichloromethane)	2021/09/28	<0.049		ug/g	
			Methyl Ethyl Ketone (2-Butanone)	2021/09/28	<0.40		ug/g	
			Methyl Isobutyl Ketone	2021/09/28	<0.40		ug/g	
			Methyl t-butyl ether (MTBE)	2021/09/28	<0.040		ug/g	
			Styrene	2021/09/28	<0.040		ug/g	
			1,1,1,2-Tetrachloroethane	2021/09/28	<0.040		ug/g	
			1,1,2,2-Tetrachloroethane	2021/09/28	<0.040		ug/g	
			Tetrachloroethylene	2021/09/28	<0.040		ug/g	
			Toluene	2021/09/28	<0.020		ug/g	
			1,1,1-Trichloroethane	2021/09/28	<0.040		ug/g	
			1,1,2-Trichloroethane	2021/09/28	<0.040		ug/g	
			Trichloroethylene	2021/09/28	<0.010		ug/g	
			Trichlorofluoromethane (FREON 11)	2021/09/28	<0.040		ug/g	
			Vinyl Chloride	2021/09/28	<0.019		ug/g	
			p+m-Xylene	2021/09/28	<0.020		ug/g	
			o-Xylene	2021/09/28	<0.020		ug/g	
			Total Xylenes	2021/09/28	<0.020		ug/g	
			F1 (C6-C10)	2021/09/28	<10		ug/g	
			F1 (C6-C10) - BTEX	2021/09/28	<10		ug/g	
7601674	YY	RPD	Acetone (2-Propanone)	2021/09/28	NC		%	50
			Benzene	2021/09/28	NC		%	50
			Bromodichloromethane	2021/09/28	NC		%	50
			Bromoform	2021/09/28	NC		%	50
			Bromomethane	2021/09/28	NC		%	50
			Carbon Tetrachloride	2021/09/28	NC		%	50
			Chlorobenzene	2021/09/28	NC		%	50
			Chloroform	2021/09/28	NC		%	50
			Dibromochloromethane	2021/09/28	NC		%	50
			1,2-Dichlorobenzene	2021/09/28	NC		%	50
			1,3-Dichlorobenzene	2021/09/28	NC		%	50
			1,4-Dichlorobenzene	2021/09/28	NC		%	50
			Dichlorodifluoromethane (FREON 12)	2021/09/28	NC		%	50
			1,1-Dichloroethane	2021/09/28	NC		%	50
			1,2-Dichloroethane	2021/09/28	NC		%	50
			1,1-Dichloroethylene	2021/09/28	NC		%	50
			cis-1,2-Dichloroethylene	2021/09/28	NC		%	50

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			trans-1,2-Dichloroethylene	2021/09/28	NC		%	50
			1,2-Dichloropropane	2021/09/28	NC		%	50
			cis-1,3-Dichloropropene	2021/09/28	NC		%	50
			trans-1,3-Dichloropropene	2021/09/28	NC		%	50
			Ethylbenzene	2021/09/28	NC		%	50
			Ethylene Dibromide	2021/09/28	NC		%	50
			Hexane	2021/09/28	NC		%	50
			Methylene Chloride(Dichloromethane)	2021/09/28	NC		%	50
			Methyl Ethyl Ketone (2-Butanone)	2021/09/28	NC		%	50
			Methyl Isobutyl Ketone	2021/09/28	NC		%	50
			Methyl t-butyl ether (MTBE)	2021/09/28	NC		%	50
			Styrene	2021/09/28	NC		%	50
			1,1,1,2-Tetrachloroethane	2021/09/28	NC		%	50
			1,1,2,2-Tetrachloroethane	2021/09/28	NC		%	50
			Tetrachloroethylene	2021/09/28	NC		%	50
			Toluene	2021/09/28	NC		%	50
			1,1,1-Trichloroethane	2021/09/28	NC		%	50
			1,1,2-Trichloroethane	2021/09/28	NC		%	50
			Trichloroethylene	2021/09/28	NC		%	50
			Trichlorofluoromethane (FREON 11)	2021/09/28	NC		%	50
			Vinyl Chloride	2021/09/28	NC		%	50
			p+m-Xylene	2021/09/28	NC		%	50
			o-Xylene	2021/09/28	NC		%	50
			Total Xylenes	2021/09/28	NC		%	50
			F1 (C6-C10)	2021/09/28	NC		%	30
			F1 (C6-C10) - BTEX	2021/09/28	NC		%	30
7601697	JJE	Matrix Spike	o-Terphenyl	2021/09/27		86	%	60 - 130
			F2 (C10-C16 Hydrocarbons)	2021/09/27		89	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2021/09/27		89	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2021/09/27		91	%	50 - 130
7601697	JJE	Spiked Blank	o-Terphenyl	2021/09/27		83	%	60 - 130
			F2 (C10-C16 Hydrocarbons)	2021/09/27		89	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2021/09/27		90	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2021/09/27		92	%	80 - 120
7601697	JJE	Method Blank	o-Terphenyl	2021/09/27		91	%	60 - 130
			F2 (C10-C16 Hydrocarbons)	2021/09/27	<10		ug/g	
			F3 (C16-C34 Hydrocarbons)	2021/09/27	<50		ug/g	
			F4 (C34-C50 Hydrocarbons)	2021/09/27	<50		ug/g	
7601697	JJE	RPD	F2 (C10-C16 Hydrocarbons)	2021/09/27	NC		%	30
			F3 (C16-C34 Hydrocarbons)	2021/09/27	NC		%	30
			F4 (C34-C50 Hydrocarbons)	2021/09/27	NC		%	30
7602133	RSU	Matrix Spike	Chromium (VI)	2021/09/28		83	%	70 - 130
7602133	RSU	Spiked Blank	Chromium (VI)	2021/09/28		82	%	80 - 120
7602133	RSU	Method Blank	Chromium (VI)	2021/09/28	<0.18		ug/g	
7602133	RSU	RPD	Chromium (VI)	2021/09/28	NC		%	35
7602563	DT1	Matrix Spike	Acid Extractable Antimony (Sb)	2021/09/29		86	%	75 - 125
			Acid Extractable Arsenic (As)	2021/09/29		87	%	75 - 125
			Acid Extractable Barium (Ba)	2021/09/29		NC	%	75 - 125
			Acid Extractable Beryllium (Be)	2021/09/29		92	%	75 - 125
			Acid Extractable Boron (B)	2021/09/29		81	%	75 - 125
			Acid Extractable Cadmium (Cd)	2021/09/29		93	%	75 - 125
			Acid Extractable Chromium (Cr)	2021/09/29		92	%	75 - 125

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acid Extractable Cobalt (Co)	2021/09/29		90	%	75 - 125
			Acid Extractable Copper (Cu)	2021/09/29		86	%	75 - 125
			Acid Extractable Lead (Pb)	2021/09/29		90	%	75 - 125
			Acid Extractable Molybdenum (Mo)	2021/09/29		92	%	75 - 125
			Acid Extractable Nickel (Ni)	2021/09/29		86	%	75 - 125
			Acid Extractable Selenium (Se)	2021/09/29		92	%	75 - 125
			Acid Extractable Silver (Ag)	2021/09/29		91	%	75 - 125
			Acid Extractable Thallium (Tl)	2021/09/29		90	%	75 - 125
			Acid Extractable Uranium (U)	2021/09/29		92	%	75 - 125
			Acid Extractable Vanadium (V)	2021/09/29		89	%	75 - 125
			Acid Extractable Zinc (Zn)	2021/09/29		NC	%	75 - 125
			Acid Extractable Mercury (Hg)	2021/09/29		80	%	75 - 125
7602563	DT1	Spiked Blank	Acid Extractable Antimony (Sb)	2021/09/29		98	%	80 - 120
			Acid Extractable Arsenic (As)	2021/09/29		98	%	80 - 120
			Acid Extractable Barium (Ba)	2021/09/29		96	%	80 - 120
			Acid Extractable Beryllium (Be)	2021/09/29		96	%	80 - 120
			Acid Extractable Boron (B)	2021/09/29		92	%	80 - 120
			Acid Extractable Cadmium (Cd)	2021/09/29		96	%	80 - 120
			Acid Extractable Chromium (Cr)	2021/09/29		100	%	80 - 120
			Acid Extractable Cobalt (Co)	2021/09/29		98	%	80 - 120
			Acid Extractable Copper (Cu)	2021/09/29		97	%	80 - 120
			Acid Extractable Lead (Pb)	2021/09/29		99	%	80 - 120
			Acid Extractable Molybdenum (Mo)	2021/09/29		97	%	80 - 120
			Acid Extractable Nickel (Ni)	2021/09/29		99	%	80 - 120
			Acid Extractable Selenium (Se)	2021/09/29		99	%	80 - 120
			Acid Extractable Silver (Ag)	2021/09/29		97	%	80 - 120
			Acid Extractable Thallium (Tl)	2021/09/29		99	%	80 - 120
			Acid Extractable Uranium (U)	2021/09/29		98	%	80 - 120
			Acid Extractable Vanadium (V)	2021/09/29		99	%	80 - 120
			Acid Extractable Zinc (Zn)	2021/09/29		97	%	80 - 120
			Acid Extractable Mercury (Hg)	2021/09/29		90	%	80 - 120
7602563	DT1	Method Blank	Acid Extractable Antimony (Sb)	2021/09/29	<0.20		ug/g	
			Acid Extractable Arsenic (As)	2021/09/29	<1.0		ug/g	
			Acid Extractable Barium (Ba)	2021/09/29	<0.50		ug/g	
			Acid Extractable Beryllium (Be)	2021/09/29	<0.20		ug/g	
			Acid Extractable Boron (B)	2021/09/29	<5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2021/09/29	<0.10		ug/g	
			Acid Extractable Chromium (Cr)	2021/09/29	<1.0		ug/g	
			Acid Extractable Cobalt (Co)	2021/09/29	<0.10		ug/g	
			Acid Extractable Copper (Cu)	2021/09/29	<0.50		ug/g	
			Acid Extractable Lead (Pb)	2021/09/29	<1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2021/09/29	<0.50		ug/g	
			Acid Extractable Nickel (Ni)	2021/09/29	<0.50		ug/g	
			Acid Extractable Selenium (Se)	2021/09/29	<0.50		ug/g	
			Acid Extractable Silver (Ag)	2021/09/29	<0.20		ug/g	
			Acid Extractable Thallium (Tl)	2021/09/29	<0.050		ug/g	
			Acid Extractable Uranium (U)	2021/09/29	<0.050		ug/g	
			Acid Extractable Vanadium (V)	2021/09/29	<5.0		ug/g	
			Acid Extractable Zinc (Zn)	2021/09/29	<5.0		ug/g	
			Acid Extractable Mercury (Hg)	2021/09/29	<0.050		ug/g	
7602563	DT1	RPD	Acid Extractable Antimony (Sb)	2021/09/29	NC		%	30
			Acid Extractable Arsenic (As)	2021/09/29	5.1		%	30

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acid Extractable Barium (Ba)	2021/09/29	0.77		%	30
			Acid Extractable Beryllium (Be)	2021/09/29	5.4		%	30
			Acid Extractable Boron (B)	2021/09/29	0.69		%	30
			Acid Extractable Cadmium (Cd)	2021/09/29	5.8		%	30
			Acid Extractable Chromium (Cr)	2021/09/29	1.6		%	30
			Acid Extractable Cobalt (Co)	2021/09/29	3.3		%	30
			Acid Extractable Copper (Cu)	2021/09/29	2.0		%	30
			Acid Extractable Lead (Pb)	2021/09/29	1.1		%	30
			Acid Extractable Molybdenum (Mo)	2021/09/29	NC		%	30
			Acid Extractable Nickel (Ni)	2021/09/29	0.60		%	30
			Acid Extractable Selenium (Se)	2021/09/29	NC		%	30
			Acid Extractable Silver (Ag)	2021/09/29	NC		%	30
			Acid Extractable Thallium (Tl)	2021/09/29	4.7		%	30
			Acid Extractable Uranium (U)	2021/09/29	2.1		%	30
			Acid Extractable Vanadium (V)	2021/09/29	2.5		%	30
			Acid Extractable Zinc (Zn)	2021/09/29	0.13		%	30
7602587	LHA	Matrix Spike	WAD Cyanide (Free)	2021/09/29		94	%	75 - 125
7602587	LHA	Spiked Blank	WAD Cyanide (Free)	2021/09/29		88	%	80 - 120
7602587	LHA	Method Blank	WAD Cyanide (Free)	2021/09/29	<0.01		ug/g	
7602587	LHA	RPD	WAD Cyanide (Free)	2021/09/29	NC		%	35
7602690	APT	Matrix Spike [QSW675-01]	Hot Water Ext. Boron (B)	2021/09/28		97	%	75 - 125
7602690	APT	Spiked Blank	Hot Water Ext. Boron (B)	2021/09/28		98	%	75 - 125
7602690	APT	Method Blank	Hot Water Ext. Boron (B)	2021/09/28	<0.050		ug/g	
7602690	APT	RPD [QSW675-01]	Hot Water Ext. Boron (B)	2021/09/28	6.8		%	40
7602695	DT1	Matrix Spike	Acid Extractable Antimony (Sb)	2021/09/29		90	%	75 - 125
			Acid Extractable Arsenic (As)	2021/09/29		97	%	75 - 125
			Acid Extractable Barium (Ba)	2021/09/29		NC	%	75 - 125
			Acid Extractable Beryllium (Be)	2021/09/29		97	%	75 - 125
			Acid Extractable Boron (B)	2021/09/29		91	%	75 - 125
			Acid Extractable Cadmium (Cd)	2021/09/29		97	%	75 - 125
			Acid Extractable Chromium (Cr)	2021/09/29		97	%	75 - 125
			Acid Extractable Cobalt (Co)	2021/09/29		95	%	75 - 125
			Acid Extractable Copper (Cu)	2021/09/29		89	%	75 - 125
			Acid Extractable Lead (Pb)	2021/09/29		97	%	75 - 125
			Acid Extractable Molybdenum (Mo)	2021/09/29		99	%	75 - 125
			Acid Extractable Nickel (Ni)	2021/09/29		94	%	75 - 125
			Acid Extractable Selenium (Se)	2021/09/29		100	%	75 - 125
			Acid Extractable Silver (Ag)	2021/09/29		97	%	75 - 125
			Acid Extractable Thallium (Tl)	2021/09/29		97	%	75 - 125
			Acid Extractable Uranium (U)	2021/09/29		97	%	75 - 125
			Acid Extractable Vanadium (V)	2021/09/29		103	%	75 - 125
			Acid Extractable Zinc (Zn)	2021/09/29		94	%	75 - 125
			Acid Extractable Mercury (Hg)	2021/09/29		88	%	75 - 125
7602695	DT1	Spiked Blank	Acid Extractable Antimony (Sb)	2021/09/29		99	%	80 - 120
			Acid Extractable Arsenic (As)	2021/09/29		102	%	80 - 120
			Acid Extractable Barium (Ba)	2021/09/29		102	%	80 - 120
			Acid Extractable Beryllium (Be)	2021/09/29		97	%	80 - 120
			Acid Extractable Boron (B)	2021/09/29		92	%	80 - 120
			Acid Extractable Cadmium (Cd)	2021/09/29		98	%	80 - 120
			Acid Extractable Chromium (Cr)	2021/09/29		99	%	80 - 120
			Acid Extractable Cobalt (Co)	2021/09/29		99	%	80 - 120

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acid Extractable Copper (Cu)	2021/09/29		97	%	80 - 120
			Acid Extractable Lead (Pb)	2021/09/29		99	%	80 - 120
			Acid Extractable Molybdenum (Mo)	2021/09/29		100	%	80 - 120
			Acid Extractable Nickel (Ni)	2021/09/29		99	%	80 - 120
			Acid Extractable Selenium (Se)	2021/09/29		98	%	80 - 120
			Acid Extractable Silver (Ag)	2021/09/29		98	%	80 - 120
			Acid Extractable Thallium (Tl)	2021/09/29		99	%	80 - 120
			Acid Extractable Uranium (U)	2021/09/29		99	%	80 - 120
			Acid Extractable Vanadium (V)	2021/09/29		100	%	80 - 120
			Acid Extractable Zinc (Zn)	2021/09/29		99	%	80 - 120
			Acid Extractable Mercury (Hg)	2021/09/29		90	%	80 - 120
7602695	DT1	Method Blank	Acid Extractable Antimony (Sb)	2021/09/29	<0.20		ug/g	
			Acid Extractable Arsenic (As)	2021/09/29	<1.0		ug/g	
			Acid Extractable Barium (Ba)	2021/09/29	<0.50		ug/g	
			Acid Extractable Beryllium (Be)	2021/09/29	<0.20		ug/g	
			Acid Extractable Boron (B)	2021/09/29	<5.0		ug/g	
			Acid Extractable Cadmium (Cd)	2021/09/29	<0.10		ug/g	
			Acid Extractable Chromium (Cr)	2021/09/29	<1.0		ug/g	
			Acid Extractable Cobalt (Co)	2021/09/29	<0.10		ug/g	
			Acid Extractable Copper (Cu)	2021/09/29	<0.50		ug/g	
			Acid Extractable Lead (Pb)	2021/09/29	<1.0		ug/g	
			Acid Extractable Molybdenum (Mo)	2021/09/29	<0.50		ug/g	
			Acid Extractable Nickel (Ni)	2021/09/29	<0.50		ug/g	
			Acid Extractable Selenium (Se)	2021/09/29	<0.50		ug/g	
			Acid Extractable Silver (Ag)	2021/09/29	<0.20		ug/g	
			Acid Extractable Thallium (Tl)	2021/09/29	<0.050		ug/g	
			Acid Extractable Uranium (U)	2021/09/29	<0.050		ug/g	
			Acid Extractable Vanadium (V)	2021/09/29	<5.0		ug/g	
			Acid Extractable Zinc (Zn)	2021/09/29	<5.0		ug/g	
			Acid Extractable Mercury (Hg)	2021/09/29	<0.050		ug/g	
7602695	DT1	RPD	Acid Extractable Antimony (Sb)	2021/09/29	NC		%	30
			Acid Extractable Arsenic (As)	2021/09/29	11		%	30
			Acid Extractable Barium (Ba)	2021/09/29	3.7		%	30
			Acid Extractable Beryllium (Be)	2021/09/29	2.0		%	30
			Acid Extractable Boron (B)	2021/09/29	NC		%	30
			Acid Extractable Cadmium (Cd)	2021/09/29	NC		%	30
			Acid Extractable Chromium (Cr)	2021/09/29	1.1		%	30
			Acid Extractable Cobalt (Co)	2021/09/29	3.9		%	30
			Acid Extractable Copper (Cu)	2021/09/29	8.3		%	30
			Acid Extractable Lead (Pb)	2021/09/29	0.96		%	30
			Acid Extractable Molybdenum (Mo)	2021/09/29	NC		%	30
			Acid Extractable Nickel (Ni)	2021/09/29	3.8		%	30
			Acid Extractable Selenium (Se)	2021/09/29	NC		%	30
			Acid Extractable Silver (Ag)	2021/09/29	NC		%	30
			Acid Extractable Thallium (Tl)	2021/09/29	2.2		%	30
			Acid Extractable Uranium (U)	2021/09/29	7.1		%	30
			Acid Extractable Vanadium (V)	2021/09/29	3.7		%	30
			Acid Extractable Zinc (Zn)	2021/09/29	2.2		%	30
			Acid Extractable Mercury (Hg)	2021/09/29	NC		%	30
7602916	RAJ	Matrix Spike	D10-Anthracene	2021/09/28		83	%	50 - 130
			D14-Terphenyl (FS)	2021/09/28		87	%	50 - 130
			D8-Acenaphthylene	2021/09/28		71	%	50 - 130

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Acenaphthene	2021/09/28		84	%	50 - 130
			Acenaphthylene	2021/09/28		75	%	50 - 130
			Anthracene	2021/09/28		85	%	50 - 130
			Benzo(a)anthracene	2021/09/28		90	%	50 - 130
			Benzo(a)pyrene	2021/09/28		75	%	50 - 130
			Benzo(b/j)fluoranthene	2021/09/28		84	%	50 - 130
			Benzo(g,h,i)perylene	2021/09/28		78	%	50 - 130
			Benzo(k)fluoranthene	2021/09/28		91	%	50 - 130
			Chrysene	2021/09/28		88	%	50 - 130
			Dibenzo(a,h)anthracene	2021/09/28		81	%	50 - 130
			Fluoranthene	2021/09/28		96	%	50 - 130
			Fluorene	2021/09/28		88	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2021/09/28		82	%	50 - 130
			1-Methylnaphthalene	2021/09/28		82	%	50 - 130
			2-Methylnaphthalene	2021/09/28		78	%	50 - 130
			Naphthalene	2021/09/28		78	%	50 - 130
			Phenanthrene	2021/09/28		86	%	50 - 130
			Pyrene	2021/09/28		92	%	50 - 130
7602916	RAJ	Spiked Blank	D10-Anthracene	2021/09/28		96	%	50 - 130
			D14-Terphenyl (FS)	2021/09/28		92	%	50 - 130
			D8-Acenaphthylene	2021/09/28		80	%	50 - 130
			Acenaphthene	2021/09/28		89	%	50 - 130
			Acenaphthylene	2021/09/28		81	%	50 - 130
			Anthracene	2021/09/28		97	%	50 - 130
			Benzo(a)anthracene	2021/09/28		94	%	50 - 130
			Benzo(a)pyrene	2021/09/28		78	%	50 - 130
			Benzo(b/j)fluoranthene	2021/09/28		95	%	50 - 130
			Benzo(g,h,i)perylene	2021/09/28		82	%	50 - 130
			Benzo(k)fluoranthene	2021/09/28		82	%	50 - 130
			Chrysene	2021/09/28		97	%	50 - 130
			Dibenzo(a,h)anthracene	2021/09/28		71	%	50 - 130
			Fluoranthene	2021/09/28		104	%	50 - 130
			Fluorene	2021/09/28		93	%	50 - 130
			Indeno(1,2,3-cd)pyrene	2021/09/28		88	%	50 - 130
			1-Methylnaphthalene	2021/09/28		87	%	50 - 130
			2-Methylnaphthalene	2021/09/28		80	%	50 - 130
			Naphthalene	2021/09/28		85	%	50 - 130
			Phenanthrene	2021/09/28		91	%	50 - 130
			Pyrene	2021/09/28		103	%	50 - 130
7602916	RAJ	Method Blank	D10-Anthracene	2021/09/28		108	%	50 - 130
			D14-Terphenyl (FS)	2021/09/28		96	%	50 - 130
			D8-Acenaphthylene	2021/09/28		75	%	50 - 130
			Acenaphthene	2021/09/28	<0.0050		ug/g	
			Acenaphthylene	2021/09/28	<0.0050		ug/g	
			Anthracene	2021/09/28	<0.0050		ug/g	
			Benzo(a)anthracene	2021/09/28	<0.0050		ug/g	
			Benzo(a)pyrene	2021/09/28	<0.0050		ug/g	
			Benzo(b/j)fluoranthene	2021/09/28	<0.0050		ug/g	
			Benzo(g,h,i)perylene	2021/09/28	<0.0050		ug/g	
			Benzo(k)fluoranthene	2021/09/28	<0.0050		ug/g	
			Chrysene	2021/09/28	<0.0050		ug/g	
			Dibenzo(a,h)anthracene	2021/09/28	<0.0050		ug/g	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Fluoranthene	2021/09/28	<0.0050		ug/g	
			Fluorene	2021/09/28	<0.0050		ug/g	
			Indeno(1,2,3-cd)pyrene	2021/09/28	<0.0050		ug/g	
			1-Methylnaphthalene	2021/09/28	<0.0050		ug/g	
			2-Methylnaphthalene	2021/09/28	<0.0050		ug/g	
			Naphthalene	2021/09/28	<0.0050		ug/g	
			Phenanthrene	2021/09/28	<0.0050		ug/g	
			Pyrene	2021/09/28	<0.0050		ug/g	
7602916	RAJ	RPD	Acenaphthene	2021/09/28	NC		%	40
			Acenaphthylene	2021/09/28	NC		%	40
			Anthracene	2021/09/28	NC		%	40
			Benzo(a)anthracene	2021/09/28	NC		%	40
			Benzo(a)pyrene	2021/09/28	NC		%	40
			Benzo(b/j)fluoranthene	2021/09/28	6.5		%	40
			Benzo(g,h,i)perylene	2021/09/28	3.3		%	40
			Benzo(k)fluoranthene	2021/09/28	NC		%	40
			Chrysene	2021/09/28	NC		%	40
			Dibenzo(a,h)anthracene	2021/09/28	NC		%	40
			Fluoranthene	2021/09/28	19		%	40
			Fluorene	2021/09/28	NC		%	40
			Indeno(1,2,3-cd)pyrene	2021/09/28	NC		%	40
			1-Methylnaphthalene	2021/09/28	NC		%	40
			2-Methylnaphthalene	2021/09/28	NC		%	40
			Naphthalene	2021/09/28	NC		%	40
			Phenanthrene	2021/09/28	NC		%	40
			Pyrene	2021/09/28	17		%	40
7604087	MJ1	Spiked Blank	Conductivity	2021/09/28		101	%	90 - 110
7604087	MJ1	Method Blank	Conductivity	2021/09/28	<0.002		mS/cm	
7604087	MJ1	RPD	Conductivity	2021/09/28	2.5		%	10
7604141	TAK	Spiked Blank	Available (CaCl2) pH	2021/09/28		99	%	97 - 103
7604141	TAK	RPD	Available (CaCl2) pH	2021/09/28	0.55		%	N/A
7604145	TAK	Spiked Blank	Available (CaCl2) pH	2021/09/28		99	%	97 - 103
7604145	TAK	RPD	Available (CaCl2) pH	2021/09/28	0.22		%	N/A

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.

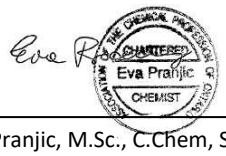
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

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).

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

VALIDATION SIGNATURE PAGE

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



Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

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

23-Sep-21 13:07
Ashton Gibson
C1R5678

Page of

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Only:
Company Name:	#29907 WSP Canada Inc	Company Name:	WSP	Quotation #:		Bottle Order #: 847337
Attention:	Accounts Payable	Attention:	Freesia Waxman	P.O. #:		
Address:	4 Hughson Street South Suite 300 Hamilton ON L8N 3Z1	Address:	Freesia.Waxman@wsp.com	Project:	201-11808-00-101-02	COC #: C#847337-01-01
Tel:	(289) 239-0100 Fax:	Tel:	289-678-033 Fax:	Project Name:		Project Manager: Ashton Gibson
Email:	payables.ontario@wsp.com	Email:		Site #:		
				Sampled By:	JP/DK	

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

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

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

Special Instructions

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

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

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

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

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

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

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	O.Reg 153 Metals & Inorganics Pkg (Soil)	O.Reg 153 VOCs by HS & F1-F4 (Soil)	O.Reg 153 PAHs (Soil)	# of Bottles	Comments
1		~~DUP01~~	2021/09/13	AM		X	X	X		
2		BH21-5	↓	↓		X	X	X		
3		BH21-6	↓	↓		X	X	X		
4										
5										
6										
7										
8										
9										
10										

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
Jake Dunlop	21/09/23		[illegible], WDHI BRAMPTON	2021/09/23	13:07	

Laboratory Use Only

Time Sensitive	Temperature (°C) on Recei	Custody Seal	Yes	No
	18 20 22	Present / Intact	✓	

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

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

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

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

White: BV Labs Yellow: Client

Bureau Veritas Canada (2019) Inc.

Your Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Your C.O.C. #: n/a

Attention: Randy Furtado

WSP Canada Inc
51 Constellation Court
Toronto, ON
CANADA M9W 1K4

Report Date: 2021/01/14
Report #: R6480743
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C103800
Received: 2021/01/07, 13:02

Sample Matrix: Soil
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum	2	N/A	2021/01/11	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron	5	2021/01/11	2021/01/11	CAM SOP-00408	R153 Ana. Prot. 2011
1,3-Dichloropropene Sum	4	N/A	2021/01/10		EPA 8260C m
Free (WAD) Cyanide	5	2021/01/11	2021/01/12	CAM SOP-00457	OMOE E3015 m
Conductivity	5	2021/01/12	2021/01/12	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1)	5	2021/01/11	2021/01/12	CAM SOP-00436	EPA 3060/7199 m
Petroleum Hydrocarbons F2-F4 in Soil (2)	4	2021/01/09	2021/01/11	CAM SOP-00316	CCME CWS m
Strong Acid Leachable Metals by ICPMS	5	2021/01/11	2021/01/11	CAM SOP-00447	EPA 6020B m
Moisture	5	N/A	2021/01/07	CAM SOP-00445	Carter 2nd ed 51.2 m
Moisture	5	N/A	2021/01/08	CAM SOP-00445	Carter 2nd ed 51.2 m
PAH Compounds in Soil by GC/MS (SIM)	2	2021/01/09	2021/01/09	CAM SOP-00318	EPA 8270D m
pH CaCl2 EXTRACT	5	2021/01/11	2021/01/11	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR)	5	N/A	2021/01/13	CAM SOP-00102	EPA 6010C
Volatile Organic Compounds and F1 PHCs	4	N/A	2021/01/09	CAM SOP-00230	EPA 8260C m

Remarks:

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

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

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

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

Your Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Your C.O.C. #: n/a

Attention: Randy Furtado

WSP Canada Inc
51 Constellation Court
Toronto, ON
CANADA M9W 1K4

Report Date: 2021/01/14
Report #: R6480743
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C103800
Received: 2021/01/07, 13:02

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

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

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

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

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Ashton Gibson, Project Manager
Email: Ashton.Gibson@bureauveritas.com
Phone# (905)817-5765

==========

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BV Labs Job #: C103800
Report Date: 2021/01/14

WSP Canada Inc
Client Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Sampler Initials: RF

O.REG 153 METALS & INORGANICS PKG (SOIL)

BV Labs ID			OOB036	OOB037	OOB040			OOB040		
Sampling Date			2021/01/04	2021/01/04	2021/01/04			2021/01/04		
COC Number			n/a	n/a	n/a			n/a		
	UNITS	Criteria	BH21-1 SS2	BH21-2 SS1	BH21-3 SS2	RDL	QC Batch	BH21-3 SS2 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Sodium Adsorption Ratio	N/A	5.0	1.2	0.36	1.3		7139393			
Inorganics										
Conductivity	mS/cm	0.7	0.22	0.24	0.26	0.002	7145554			
Moisture	%	-	15	14	13	1.0	7142244			
Available (CaCl2) pH	pH	-	7.73	7.75	7.84		7143986	7.83		7143986
WAD Cyanide (Free)	ug/g	0.051	<0.01	<0.01	<0.01	0.01	7145282			
Chromium (VI)	ug/g	8	<0.18	<0.18	<0.18	0.18	7145158	<0.18	0.18	7145158
Metals										
Hot Water Ext. Boron (B)	ug/g	1.5	0.32	0.21	0.33	0.050	7144096			
Acid Extractable Antimony (Sb)	ug/g	7.5	0.42	0.26	0.24	0.20	7143902			
Acid Extractable Arsenic (As)	ug/g	18	10	6.0	4.0	1.0	7143902			
Acid Extractable Barium (Ba)	ug/g	390	82	79	100	0.50	7143902			
Acid Extractable Beryllium (Be)	ug/g	4	1.2	0.71	0.96	0.20	7143902			
Acid Extractable Boron (B)	ug/g	120	26	17	23	5.0	7143902			
Acid Extractable Cadmium (Cd)	ug/g	1.2	<0.10	0.58	<0.10	0.10	7143902			
Acid Extractable Chromium (Cr)	ug/g	160	27	20	23	1.0	7143902			
Acid Extractable Cobalt (Co)	ug/g	22	16	9.8	14	0.10	7143902			
Acid Extractable Copper (Cu)	ug/g	140	17	27	9.6	0.50	7143902			
Acid Extractable Lead (Pb)	ug/g	120	8.6	16	6.0	1.0	7143902			
Acid Extractable Molybdenum (Mo)	ug/g	6.9	1.8	1.2	0.83	0.50	7143902			
Acid Extractable Nickel (Ni)	ug/g	100	37	22	32	0.50	7143902			
Acid Extractable Selenium (Se)	ug/g	2.4	<0.50	<0.50	<0.50	0.50	7143902			
Acid Extractable Silver (Ag)	ug/g	20	<0.20	<0.20	<0.20	0.20	7143902			
Acid Extractable Thallium (Tl)	ug/g	1	0.11	0.10	0.097	0.050	7143902			
Acid Extractable Uranium (U)	ug/g	23	1.6	0.81	0.89	0.050	7143902			
Acid Extractable Vanadium (V)	ug/g	86	40	31	32	5.0	7143902			

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soil

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BV Labs Job #: C103800
Report Date: 2021/01/14

WSP Canada Inc
Client Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Sampler Initials: RF

O.REG 153 METALS & INORGANICS PKG (SOIL)

BV Labs ID			OOB036	OOB037	OOB040			OOB040		
Sampling Date			2021/01/04	2021/01/04	2021/01/04			2021/01/04		
COC Number			n/a	n/a	n/a			n/a		
	UNITS	Criteria	BH21-1 SS2	BH21-2 SS1	BH21-3 SS2	RDL	QC Batch	BH21-3 SS2 Lab-Dup	RDL	QC Batch
Acid Extractable Zinc (Zn)	ug/g	340	66	140	59	5.0	7143902			
Acid Extractable Mercury (Hg)	ug/g	0.27	<0.050	<0.050	<0.050	0.050	7143902			

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soil

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BV Labs Job #: C103800
Report Date: 2021/01/14

WSP Canada Inc
Client Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Sampler Initials: RF

O.REG 153 METALS & INORGANICS PKG (SOIL)

BV Labs ID			OOB042			OOB042			OOB044		
Sampling Date			2021/01/04			2021/01/04			2021/01/04		
COC Number			n/a			n/a			n/a		
	UNITS	Criteria	BH21-4 SS1	RDL	QC Batch	BH21-4 SS1 Lab-Dup	RDL	QC Batch	QAQC	RDL	QC Batch
Calculated Parameters											
Sodium Adsorption Ratio	N/A	5.0	2.2		7139393				0.40		7139393
Inorganics											
Conductivity	mS/cm	0.7	0.47	0.002	7145554	0.49	0.002	7145554	0.23	0.002	7145554
Moisture	%	-	24	1.0	7142244				16	1.0	7142244
Available (CaCl2) pH	pH	-	7.46		7143986				7.72		7143986
WAD Cyanide (Free)	ug/g	0.051	0.01	0.01	7145282				<0.01	0.01	7145282
Chromium (VI)	ug/g	8	<0.18	0.18	7145158				<0.18	0.18	7145158
Metals											
Hot Water Ext. Boron (B)	ug/g	1.5	0.28	0.050	7144096				0.24	0.050	7144096
Acid Extractable Antimony (Sb)	ug/g	7.5	0.28	0.20	7143902				0.29	0.20	7143902
Acid Extractable Arsenic (As)	ug/g	18	8.0	1.0	7143902				6.8	1.0	7143902
Acid Extractable Barium (Ba)	ug/g	390	51	0.50	7143902				84	0.50	7143902
Acid Extractable Beryllium (Be)	ug/g	4	0.54	0.20	7143902				0.75	0.20	7143902
Acid Extractable Boron (B)	ug/g	120	13	5.0	7143902				15	5.0	7143902
Acid Extractable Cadmium (Cd)	ug/g	1.2	0.35	0.10	7143902				0.14	0.10	7143902
Acid Extractable Chromium (Cr)	ug/g	160	15	1.0	7143902				21	1.0	7143902
Acid Extractable Cobalt (Co)	ug/g	22	6.0	0.10	7143902				11	0.10	7143902
Acid Extractable Copper (Cu)	ug/g	140	12	0.50	7143902				31	0.50	7143902
Acid Extractable Lead (Pb)	ug/g	120	21	1.0	7143902				14	1.0	7143902
Acid Extractable Molybdenum (Mo)	ug/g	6.9	1.3	0.50	7143902				1.3	0.50	7143902
Acid Extractable Nickel (Ni)	ug/g	100	14	0.50	7143902				24	0.50	7143902
Acid Extractable Selenium (Se)	ug/g	2.4	<0.50	0.50	7143902				<0.50	0.50	7143902
Acid Extractable Silver (Ag)	ug/g	20	<0.20	0.20	7143902				<0.20	0.20	7143902
Acid Extractable Thallium (Tl)	ug/g	1	0.10	0.050	7143902				0.099	0.050	7143902
Acid Extractable Uranium (U)	ug/g	23	0.91	0.050	7143902				0.78	0.050	7143902
Acid Extractable Vanadium (V)	ug/g	86	24	5.0	7143902				31	5.0	7143902

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soil

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

BV Labs Job #: C103800
Report Date: 2021/01/14

WSP Canada Inc
Client Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Sampler Initials: RF

O.REG 153 METALS & INORGANICS PKG (SOIL)

BV Labs ID			OOB042			OOB042			OOB044		
Sampling Date			2021/01/04			2021/01/04			2021/01/04		
COC Number			n/a			n/a			n/a		
	UNITS	Criteria	BH21-4 SS1	RDL	QC Batch	BH21-4 SS1 Lab-Dup	RDL	QC Batch	QAQC	RDL	QC Batch
Acid Extractable Zinc (Zn)	ug/g	340	130	5.0	7143902				65	5.0	7143902
Acid Extractable Mercury (Hg)	ug/g	0.27	<0.050	0.050	7143902				<0.050	0.050	7143902

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

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BV Labs Job #: C103800
Report Date: 2021/01/14

WSP Canada Inc
Client Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Sampler Initials: RF

O.REG 153 PAHS (SOIL)

BV Labs ID			OOB035			OOB041		
Sampling Date			2021/01/04			2021/01/04		
COC Number			n/a			n/a		
	UNITS	Criteria	BH21-1 SS1	RDL	QC Batch	BH21-3 SS3	RDL	QC Batch
Inorganics								
Moisture	%	-				11	1.0	7140717
Calculated Parameters								
Methylnaphthalene, 2-(1-)	ug/g	-	<0.0071	0.0071	7139546	<0.0071	0.0071	7139546
Polyaromatic Hydrocarbons								
Acenaphthene	ug/g	7.9	<0.0050	0.0050	7143157	<0.0050	0.0050	7143157
Acenaphthylene	ug/g	0.15	<0.0050	0.0050	7143157	<0.0050	0.0050	7143157
Anthracene	ug/g	0.67	<0.0050	0.0050	7143157	<0.0050	0.0050	7143157
Benzo(a)anthracene	ug/g	0.5	0.0089	0.0050	7143157	<0.0050	0.0050	7143157
Benzo(a)pyrene	ug/g	0.3	0.0088	0.0050	7143157	<0.0050	0.0050	7143157
Benzo(b/j)fluoranthene	ug/g	0.78	0.013	0.0050	7143157	<0.0050	0.0050	7143157
Benzo(g,h,i)perylene	ug/g	6.6	0.0067	0.0050	7143157	<0.0050	0.0050	7143157
Benzo(k)fluoranthene	ug/g	0.78	<0.0050	0.0050	7143157	<0.0050	0.0050	7143157
Chrysene	ug/g	7	0.0085	0.0050	7143157	<0.0050	0.0050	7143157
Dibenzo(a,h)anthracene	ug/g	0.1	<0.0050	0.0050	7143157	<0.0050	0.0050	7143157
Fluoranthene	ug/g	0.69	0.022	0.0050	7143157	<0.0050	0.0050	7143157
Fluorene	ug/g	62	<0.0050	0.0050	7143157	<0.0050	0.0050	7143157
Indeno(1,2,3-cd)pyrene	ug/g	0.38	0.0065	0.0050	7143157	<0.0050	0.0050	7143157
1-Methylnaphthalene	ug/g	0.99	<0.0050	0.0050	7143157	<0.0050	0.0050	7143157
2-Methylnaphthalene	ug/g	0.99	<0.0050	0.0050	7143157	<0.0050	0.0050	7143157
Naphthalene	ug/g	0.6	<0.0050	0.0050	7143157	<0.0050	0.0050	7143157
Phenanthrene	ug/g	6.2	0.012	0.0050	7143157	<0.0050	0.0050	7143157
Pyrene	ug/g	78	0.017	0.0050	7143157	<0.0050	0.0050	7143157
Surrogate Recovery (%)								
D10-Anthracene	%	-	114		7143157	114		7143157
D14-Terphenyl (FS)	%	-	112		7143157	107		7143157
D8-Acenaphthylene	%	-	103		7143157	100		7143157

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
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Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soil

BV Labs Job #: C103800
Report Date: 2021/01/14

WSP Canada Inc
Client Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Sampler Initials: RF

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

BV Labs ID			OOB035			OOB035			OOB038		
Sampling Date			2021/01/04			2021/01/04			2021/01/04		
COC Number			n/a			n/a			n/a		
	UNITS	Criteria	BH21-1 SS1	RDL	QC Batch	BH21-1 SS1 Lab-Dup	RDL	QC Batch	BH21-2 SS2	RDL	QC Batch
Inorganics											
Moisture	%	-	18	1.0	7140717				17	1.0	7140717
Calculated Parameters											
1,3-Dichloropropene (cis+trans)	ug/g	0.05	<0.050	0.050	7139684				<0.050	0.050	7139684
Volatile Organics											
Acetone (2-Propanone)	ug/g	16	<0.50	0.50	7141159	<0.50	0.50	7141159	<0.50	0.50	7141159
Benzene	ug/g	0.21	<0.020	0.020	7141159	<0.020	0.020	7141159	<0.020	0.020	7141159
Bromodichloromethane	ug/g	1.5	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Bromoform	ug/g	0.27	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Bromomethane	ug/g	0.05	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Carbon Tetrachloride	ug/g	0.05	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Chlorobenzene	ug/g	2.4	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Chloroform	ug/g	0.05	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Dibromochloromethane	ug/g	2.3	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
1,2-Dichlorobenzene	ug/g	1.2	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
1,3-Dichlorobenzene	ug/g	4.8	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
1,4-Dichlorobenzene	ug/g	0.083	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Dichlorodifluoromethane (FREON 12)	ug/g	16	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
1,1-Dichloroethane	ug/g	0.47	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
1,2-Dichloroethane	ug/g	0.05	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
1,1-Dichloroethylene	ug/g	0.05	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
cis-1,2-Dichloroethylene	ug/g	1.9	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
trans-1,2-Dichloroethylene	ug/g	0.084	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
1,2-Dichloropropane	ug/g	0.05	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
cis-1,3-Dichloropropene	ug/g	0.05	<0.030	0.030	7141159	<0.030	0.030	7141159	<0.030	0.030	7141159
trans-1,3-Dichloropropene	ug/g	0.05	<0.040	0.040	7141159	<0.040	0.040	7141159	<0.040	0.040	7141159
Ethylbenzene	ug/g	1.1	<0.020	0.020	7141159	<0.020	0.020	7141159	<0.020	0.020	7141159

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soil

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BV Labs Job #: C103800
Report Date: 2021/01/14

WSP Canada Inc
Client Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Sampler Initials: RF

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

BV Labs ID			OOB035			OOB035			OOB038		
Sampling Date			2021/01/04			2021/01/04			2021/01/04		
COC Number			n/a			n/a			n/a		
	UNITS	Criteria	BH21-1 SS1	RDL	QC Batch	BH21-1 SS1 Lab-Dup	RDL	QC Batch	BH21-2 SS2	RDL	QC Batch
Ethylene Dibromide	ug/g	0.05	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Hexane	ug/g	2.8	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Methylene Chloride(Dichloromethane)	ug/g	0.1	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Methyl Ethyl Ketone (2-Butanone)	ug/g	16	<0.50	0.50	7141159	<0.50	0.50	7141159	<0.50	0.50	7141159
Methyl Isobutyl Ketone	ug/g	1.7	<0.50	0.50	7141159	<0.50	0.50	7141159	<0.50	0.50	7141159
Methyl t-butyl ether (MTBE)	ug/g	0.75	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Styrene	ug/g	0.7	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
1,1,1,2-Tetrachloroethane	ug/g	0.058	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
1,1,2,2-Tetrachloroethane	ug/g	0.05	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Tetrachloroethylene	ug/g	0.28	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Toluene	ug/g	2.3	<0.020	0.020	7141159	<0.020	0.020	7141159	<0.020	0.020	7141159
1,1,1-Trichloroethane	ug/g	0.38	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
1,1,2-Trichloroethane	ug/g	0.05	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Trichloroethylene	ug/g	0.061	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Trichlorofluoromethane (FREON 11)	ug/g	4	<0.050	0.050	7141159	<0.050	0.050	7141159	<0.050	0.050	7141159
Vinyl Chloride	ug/g	0.02	<0.020	0.020	7141159	<0.020	0.020	7141159	<0.020	0.020	7141159
p+m-Xylene	ug/g	-	<0.020	0.020	7141159	<0.020	0.020	7141159	<0.020	0.020	7141159
o-Xylene	ug/g	-	<0.020	0.020	7141159	<0.020	0.020	7141159	<0.020	0.020	7141159
Total Xylenes	ug/g	3.1	<0.020	0.020	7141159	<0.020	0.020	7141159	<0.020	0.020	7141159
F1 (C6-C10)	ug/g	55	<10	10	7141159	<10	10	7141159	<10	10	7141159
F1 (C6-C10) - BTEX	ug/g	55	<10	10	7141159	<10	10	7141159	<10	10	7141159
F2-F4 Hydrocarbons											
F2 (C10-C16 Hydrocarbons)	ug/g	98	<10	10	7143155				<10	10	7143155
F3 (C16-C34 Hydrocarbons)	ug/g	300	<50	50	7143155				<50	50	7143155
F4 (C34-C50 Hydrocarbons)	ug/g	2800	<50	50	7143155				<50	50	7143155
Reached Baseline at C50	ug/g	-	Yes		7143155				Yes		7143155

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
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Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
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BV Labs Job #: C103800
Report Date: 2021/01/14

WSP Canada Inc
Client Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Sampler Initials: RF

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

BV Labs ID			OOB035			OOB035			OOB038		
Sampling Date			2021/01/04			2021/01/04			2021/01/04		
COC Number			n/a			n/a			n/a		
	UNITS	Criteria	BH21-1 SS1	RDL	QC Batch	BH21-1 SS1 Lab-Dup	RDL	QC Batch	BH21-2 SS2	RDL	QC Batch
Surrogate Recovery (%)											
o-Terphenyl	%	-	85		7143155				88		7143155
4-Bromofluorobenzene	%	-	99		7141159	99		7141159	98		7141159
D10-o-Xylene	%	-	105		7141159	104		7141159	105		7141159
D4-1,2-Dichloroethane	%	-	96		7141159	99		7141159	98		7141159
D8-Toluene	%	-	99		7141159	98		7141159	100		7141159

No Fill	No Exceedance
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Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
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BV Labs Job #: C103800
Report Date: 2021/01/14

WSP Canada Inc
Client Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Sampler Initials: RF

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

BV Labs ID			OOB039			OOB039			OOB043		
Sampling Date			2021/01/04			2021/01/04			2021/01/04		
COC Number			n/a			n/a			n/a		
	UNITS	Criteria	BH21-3 SS1	RDL	QC Batch	BH21-3 SS1 Lab-Dup	RDL	QC Batch	BH21-4 SS2	RDL	QC Batch
Inorganics											
Moisture	%	-	14	1.0	7140717	14	1.0	7140717	15	1.0	7140717
Calculated Parameters											
1,3-Dichloropropene (cis+trans)	ug/g	0.05	<0.050	0.050	7139684				<0.050	0.050	7139684
Volatile Organics											
Acetone (2-Propanone)	ug/g	16	<0.50	0.50	7141159				<0.50	0.50	7141159
Benzene	ug/g	0.21	<0.020	0.020	7141159				<0.020	0.020	7141159
Bromodichloromethane	ug/g	1.5	<0.050	0.050	7141159				<0.050	0.050	7141159
Bromoform	ug/g	0.27	<0.050	0.050	7141159				<0.050	0.050	7141159
Bromomethane	ug/g	0.05	<0.050	0.050	7141159				<0.050	0.050	7141159
Carbon Tetrachloride	ug/g	0.05	<0.050	0.050	7141159				<0.050	0.050	7141159
Chlorobenzene	ug/g	2.4	<0.050	0.050	7141159				<0.050	0.050	7141159
Chloroform	ug/g	0.05	<0.050	0.050	7141159				<0.050	0.050	7141159
Dibromochloromethane	ug/g	2.3	<0.050	0.050	7141159				<0.050	0.050	7141159
1,2-Dichlorobenzene	ug/g	1.2	<0.050	0.050	7141159				<0.050	0.050	7141159
1,3-Dichlorobenzene	ug/g	4.8	<0.050	0.050	7141159				<0.050	0.050	7141159
1,4-Dichlorobenzene	ug/g	0.083	<0.050	0.050	7141159				<0.050	0.050	7141159
Dichlorodifluoromethane (FREON 12)	ug/g	16	<0.050	0.050	7141159				<0.050	0.050	7141159
1,1-Dichloroethane	ug/g	0.47	<0.050	0.050	7141159				<0.050	0.050	7141159
1,2-Dichloroethane	ug/g	0.05	<0.050	0.050	7141159				<0.050	0.050	7141159
1,1-Dichloroethylene	ug/g	0.05	<0.050	0.050	7141159				<0.050	0.050	7141159
cis-1,2-Dichloroethylene	ug/g	1.9	<0.050	0.050	7141159				<0.050	0.050	7141159
trans-1,2-Dichloroethylene	ug/g	0.084	<0.050	0.050	7141159				<0.050	0.050	7141159
1,2-Dichloropropane	ug/g	0.05	<0.050	0.050	7141159				<0.050	0.050	7141159
cis-1,3-Dichloropropene	ug/g	0.05	<0.030	0.030	7141159				<0.030	0.030	7141159
trans-1,3-Dichloropropene	ug/g	0.05	<0.040	0.040	7141159				<0.040	0.040	7141159
Ethylbenzene	ug/g	1.1	<0.020	0.020	7141159				<0.020	0.020	7141159

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

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Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
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O.REG 153 VOCS BY HS & F1-F4 (SOIL)

BV Labs ID			OOB039			OOB039			OOB043		
Sampling Date			2021/01/04			2021/01/04			2021/01/04		
COC Number			n/a			n/a			n/a		
	UNITS	Criteria	BH21-3 SS1	RDL	QC Batch	BH21-3 SS1 Lab-Dup	RDL	QC Batch	BH21-4 SS2	RDL	QC Batch
Ethylene Dibromide	ug/g	0.05	<0.050	0.050	7141159				<0.050	0.050	7141159
Hexane	ug/g	2.8	<0.050	0.050	7141159				<0.050	0.050	7141159
Methylene Chloride(Dichloromethane)	ug/g	0.1	<0.050	0.050	7141159				<0.050	0.050	7141159
Methyl Ethyl Ketone (2-Butanone)	ug/g	16	<0.50	0.50	7141159				<0.50	0.50	7141159
Methyl Isobutyl Ketone	ug/g	1.7	<0.50	0.50	7141159				<0.50	0.50	7141159
Methyl t-butyl ether (MTBE)	ug/g	0.75	<0.050	0.050	7141159				<0.050	0.050	7141159
Styrene	ug/g	0.7	<0.050	0.050	7141159				<0.050	0.050	7141159
1,1,1,2-Tetrachloroethane	ug/g	0.058	<0.050	0.050	7141159				<0.050	0.050	7141159
1,1,2,2-Tetrachloroethane	ug/g	0.05	<0.050	0.050	7141159				<0.050	0.050	7141159
Tetrachloroethylene	ug/g	0.28	<0.050	0.050	7141159				<0.050	0.050	7141159
Toluene	ug/g	2.3	<0.020	0.020	7141159				<0.020	0.020	7141159
1,1,1-Trichloroethane	ug/g	0.38	<0.050	0.050	7141159				<0.050	0.050	7141159
1,1,2-Trichloroethane	ug/g	0.05	<0.050	0.050	7141159				<0.050	0.050	7141159
Trichloroethylene	ug/g	0.061	<0.050	0.050	7141159				<0.050	0.050	7141159
Trichlorofluoromethane (FREON 11)	ug/g	4	<0.050	0.050	7141159				<0.050	0.050	7141159
Vinyl Chloride	ug/g	0.02	<0.020	0.020	7141159				<0.020	0.020	7141159
p+m-Xylene	ug/g	-	<0.020	0.020	7141159				<0.020	0.020	7141159
o-Xylene	ug/g	-	<0.020	0.020	7141159				<0.020	0.020	7141159
Total Xylenes	ug/g	3.1	<0.020	0.020	7141159				<0.020	0.020	7141159
F1 (C6-C10)	ug/g	55	<10	10	7141159				<10	10	7141159
F1 (C6-C10) - BTEX	ug/g	55	<10	10	7141159				<10	10	7141159
F2-F4 Hydrocarbons											
F2 (C10-C16 Hydrocarbons)	ug/g	98	<10	10	7143155				<10	10	7143155
F3 (C16-C34 Hydrocarbons)	ug/g	300	<50	50	7143155				<50	50	7143155
F4 (C34-C50 Hydrocarbons)	ug/g	2800	<50	50	7143155				<50	50	7143155
Reached Baseline at C50	ug/g	-	Yes		7143155				Yes		7143155

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soil

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BV Labs Job #: C103800
Report Date: 2021/01/14

WSP Canada Inc
Client Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Sampler Initials: RF

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

BV Labs ID			OOB039			OOB039			OOB043		
Sampling Date			2021/01/04			2021/01/04			2021/01/04		
COC Number			n/a			n/a			n/a		
	UNITS	Criteria	BH21-3 SS1	RDL	QC Batch	BH21-3 SS1 Lab-Dup	RDL	QC Batch	BH21-4 SS2	RDL	QC Batch
Surrogate Recovery (%)											
o-Terphenyl	%	-	87		7143155				84		7143155
4-Bromofluorobenzene	%	-	99		7141159				99		7141159
D10-o-Xylene	%	-	99		7141159				126		7141159
D4-1,2-Dichloroethane	%	-	98		7141159				98		7141159
D8-Toluene	%	-	99		7141159				99		7141159

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soil

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BV Labs Job #: C103800
Report Date: 2021/01/14

WSP Canada Inc
Client Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Sampler Initials: RF

TEST SUMMARY

BV Labs ID: OOB035
Sample ID: BH21-1 SS1
Matrix: Soil

Collected: 2021/01/04
Shipped:
Received: 2021/01/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	7139546	N/A	2021/01/11	Automated Statchk
1,3-Dichloropropene Sum	CALC	7139684	N/A	2021/01/10	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7143155	2021/01/09	2021/01/11	Jeevaraj Jeevaratrnam
Moisture	BAL	7140717	N/A	2021/01/07	Gurpreet Kaur (ONT)
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	7143157	2021/01/09	2021/01/09	Jett Wu
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7141159	N/A	2021/01/09	Denis Reid

BV Labs ID: OOB035 Dup
Sample ID: BH21-1 SS1
Matrix: Soil

Collected: 2021/01/04
Shipped:
Received: 2021/01/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7141159	N/A	2021/01/09	Denis Reid

BV Labs ID: OOB036
Sample ID: BH21-1 SS2
Matrix: Soil

Collected: 2021/01/04
Shipped:
Received: 2021/01/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7144096	2021/01/11	2021/01/11	Suban Kanapathippllai
Free (WAD) Cyanide	TECH	7145282	2021/01/11	2021/01/12	Gnana Thomas
Conductivity	AT	7145554	2021/01/12	2021/01/12	Tarunpreet Kaur
Hexavalent Chromium in Soil by IC	IC/SPEC	7145158	2021/01/11	2021/01/12	Rupinder Sihota
Strong Acid Leachable Metals by ICPMS	ICP/MS	7143902	2021/01/11	2021/01/11	Viviana Canzonieri
Moisture	BAL	7142244	N/A	2021/01/08	Min Yang
pH CaCl2 EXTRACT	AT	7143986	2021/01/11	2021/01/11	Neil Dassanayake
Sodium Adsorption Ratio (SAR)	CALC/MET	7139393	N/A	2021/01/13	Automated Statchk

BV Labs ID: OOB037
Sample ID: BH21-2 SS1
Matrix: Soil

Collected: 2021/01/04
Shipped:
Received: 2021/01/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7144096	2021/01/11	2021/01/11	Suban Kanapathippllai
Free (WAD) Cyanide	TECH	7145282	2021/01/11	2021/01/12	Gnana Thomas
Conductivity	AT	7145554	2021/01/12	2021/01/12	Tarunpreet Kaur
Hexavalent Chromium in Soil by IC	IC/SPEC	7145158	2021/01/11	2021/01/12	Rupinder Sihota
Strong Acid Leachable Metals by ICPMS	ICP/MS	7143902	2021/01/11	2021/01/11	Viviana Canzonieri
Moisture	BAL	7142244	N/A	2021/01/08	Min Yang
pH CaCl2 EXTRACT	AT	7143986	2021/01/11	2021/01/11	Neil Dassanayake
Sodium Adsorption Ratio (SAR)	CALC/MET	7139393	N/A	2021/01/13	Automated Statchk

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BV Labs Job #: C103800
Report Date: 2021/01/14

WSP Canada Inc
Client Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Sampler Initials: RF

TEST SUMMARY

BV Labs ID: OOB038
Sample ID: BH21-2 SS2
Matrix: Soil

Collected: 2021/01/04
Shipped:
Received: 2021/01/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7139684	N/A	2021/01/10	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7143155	2021/01/09	2021/01/11	Jeevaraj Jeevaratrnam
Moisture	BAL	7140717	N/A	2021/01/07	Gurpreet Kaur (ONT)
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7141159	N/A	2021/01/09	Denis Reid

BV Labs ID: OOB039
Sample ID: BH21-3 SS1
Matrix: Soil

Collected: 2021/01/04
Shipped:
Received: 2021/01/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7139684	N/A	2021/01/10	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7143155	2021/01/09	2021/01/11	Jeevaraj Jeevaratrnam
Moisture	BAL	7140717	N/A	2021/01/07	Gurpreet Kaur (ONT)
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7141159	N/A	2021/01/09	Denis Reid

BV Labs ID: OOB039 Dup
Sample ID: BH21-3 SS1
Matrix: Soil

Collected: 2021/01/04
Shipped:
Received: 2021/01/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	7140717	N/A	2021/01/07	Gurpreet Kaur (ONT)

BV Labs ID: OOB040
Sample ID: BH21-3 SS2
Matrix: Soil

Collected: 2021/01/04
Shipped:
Received: 2021/01/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7144096	2021/01/11	2021/01/11	Suban Kanapathippllai
Free (WAD) Cyanide	TECH	7145282	2021/01/11	2021/01/12	Gnana Thomas
Conductivity	AT	7145554	2021/01/12	2021/01/12	Tarunpreet Kaur
Hexavalent Chromium in Soil by IC	IC/SPEC	7145158	2021/01/11	2021/01/12	Rupinder Sihota
Strong Acid Leachable Metals by ICPMS	ICP/MS	7143902	2021/01/11	2021/01/11	Viviana Canzonieri
Moisture	BAL	7142244	N/A	2021/01/08	Min Yang
pH CaCl2 EXTRACT	AT	7143986	2021/01/11	2021/01/11	Neil Dassanayake
Sodium Adsorption Ratio (SAR)	CALC/MET	7139393	N/A	2021/01/13	Automated Statchk

BV Labs ID: OOB040 Dup
Sample ID: BH21-3 SS2
Matrix: Soil

Collected: 2021/01/04
Shipped:
Received: 2021/01/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hexavalent Chromium in Soil by IC	IC/SPEC	7145158	2021/01/11	2021/01/12	Rupinder Sihota
pH CaCl2 EXTRACT	AT	7143986	2021/01/11	2021/01/11	Neil Dassanayake

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TEST SUMMARY

BV Labs ID: OOB041
Sample ID: BH21-3 SS3
Matrix: Soil

Collected: 2021/01/04
Shipped:
Received: 2021/01/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	7139546	N/A	2021/01/11	Automated Statchk
Moisture	BAL	7140717	N/A	2021/01/07	Gurpreet Kaur (ONT)
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	7143157	2021/01/09	2021/01/09	Jett Wu

BV Labs ID: OOB042
Sample ID: BH21-4 SS1
Matrix: Soil

Collected: 2021/01/04
Shipped:
Received: 2021/01/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7144096	2021/01/11	2021/01/11	Suban Kanapathippllai
Free (WAD) Cyanide	TECH	7145282	2021/01/11	2021/01/12	Gnana Thomas
Conductivity	AT	7145554	2021/01/12	2021/01/12	Tarunpreet Kaur
Hexavalent Chromium in Soil by IC	IC/SPEC	7145158	2021/01/11	2021/01/12	Rupinder Sihota
Strong Acid Leachable Metals by ICPMS	ICP/MS	7143902	2021/01/11	2021/01/11	Viviana Canzonieri
Moisture	BAL	7142244	N/A	2021/01/08	Min Yang
pH CaCl2 EXTRACT	AT	7143986	2021/01/11	2021/01/11	Neil Dassanayake
Sodium Adsorption Ratio (SAR)	CALC/MET	7139393	N/A	2021/01/13	Automated Statchk

BV Labs ID: OOB042 Dup
Sample ID: BH21-4 SS1
Matrix: Soil

Collected: 2021/01/04
Shipped:
Received: 2021/01/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	7145554	2021/01/12	2021/01/12	Tarunpreet Kaur

BV Labs ID: OOB043
Sample ID: BH21-4 SS2
Matrix: Soil

Collected: 2021/01/04
Shipped:
Received: 2021/01/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7139684	N/A	2021/01/10	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7143155	2021/01/09	2021/01/11	Jeevaraj Jeevaratrnam
Moisture	BAL	7140717	N/A	2021/01/07	Gurpreet Kaur (ONT)
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7141159	N/A	2021/01/09	Denis Reid

BV Labs ID: OOB044
Sample ID: QAQC
Matrix: Soil

Collected: 2021/01/04
Shipped:
Received: 2021/01/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7144096	2021/01/11	2021/01/11	Suban Kanapathippllai
Free (WAD) Cyanide	TECH	7145282	2021/01/11	2021/01/12	Gnana Thomas
Conductivity	AT	7145554	2021/01/12	2021/01/12	Tarunpreet Kaur
Hexavalent Chromium in Soil by IC	IC/SPEC	7145158	2021/01/11	2021/01/12	Rupinder Sihota
Strong Acid Leachable Metals by ICPMS	ICP/MS	7143902	2021/01/11	2021/01/11	Viviana Canzonieri

BV Labs Job #: C103800
Report Date: 2021/01/14

WSP Canada Inc
Client Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Sampler Initials: RF

TEST SUMMARY

BV Labs ID: OOB044
Sample ID: QAQC
Matrix: Soil

Collected: 2021/01/04
Shipped:
Received: 2021/01/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	7142244	N/A	2021/01/08	Min Yang
pH CaCl2 EXTRACT	AT	7143986	2021/01/11	2021/01/11	Neil Dassanayake
Sodium Adsorption Ratio (SAR)	CALC/MET	7139393	N/A	2021/01/13	Automated Statchk

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GENERAL COMMENTS

Sample OOB043 [BH21-4 SS2] : VOCF1 Analysis: Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7141159	4-Bromofluorobenzene	2021/01/08	102	60 - 140	101	60 - 140	96	%		
7141159	D10-o-Xylene	2021/01/08	104	60 - 130	98	60 - 130	91	%		
7141159	D4-1,2-Dichloroethane	2021/01/08	99	60 - 140	102	60 - 140	96	%		
7141159	D8-Toluene	2021/01/08	101	60 - 140	99	60 - 140	99	%		
7143155	o-Terphenyl	2021/01/10	81	60 - 130	86	60 - 130	91	%		
7143157	D10-Anthracene	2021/01/09	109	50 - 130	120	50 - 130	124	%		
7143157	D14-Terphenyl (FS)	2021/01/09	105	50 - 130	106	50 - 130	114	%		
7143157	D8-Acenaphthylene	2021/01/09	98	50 - 130	102	50 - 130	102	%		
7140717	Moisture	2021/01/07							0.72	20
7141159	1,1,1,2-Tetrachloroethane	2021/01/09	105	60 - 140	105	60 - 130	<0.050	ug/g	NC	50
7141159	1,1,1-Trichloroethane	2021/01/09	94	60 - 140	93	60 - 130	<0.050	ug/g	NC	50
7141159	1,1,2,2-Tetrachloroethane	2021/01/09	103	60 - 140	111	60 - 130	<0.050	ug/g	NC	50
7141159	1,1,2-Trichloroethane	2021/01/09	97	60 - 140	102	60 - 130	<0.050	ug/g	NC	50
7141159	1,1-Dichloroethane	2021/01/09	88	60 - 140	88	60 - 130	<0.050	ug/g	NC	50
7141159	1,1-Dichloroethylene	2021/01/09	95	60 - 140	93	60 - 130	<0.050	ug/g	NC	50
7141159	1,2-Dichlorobenzene	2021/01/09	102	60 - 140	102	60 - 130	<0.050	ug/g	NC	50
7141159	1,2-Dichloroethane	2021/01/09	88	60 - 140	91	60 - 130	<0.050	ug/g	NC	50
7141159	1,2-Dichloropropane	2021/01/09	93	60 - 140	94	60 - 130	<0.050	ug/g	NC	50
7141159	1,3-Dichlorobenzene	2021/01/09	101	60 - 140	99	60 - 130	<0.050	ug/g	NC	50
7141159	1,4-Dichlorobenzene	2021/01/09	124	60 - 140	121	60 - 130	<0.050	ug/g	NC	50
7141159	Acetone (2-Propanone)	2021/01/09	94	60 - 140	115	60 - 140	<0.50	ug/g	NC	50
7141159	Benzene	2021/01/09	86	60 - 140	86	60 - 130	<0.020	ug/g	NC	50
7141159	Bromodichloromethane	2021/01/09	97	60 - 140	99	60 - 130	<0.050	ug/g	NC	50
7141159	Bromoform	2021/01/09	106	60 - 140	112	60 - 130	<0.050	ug/g	NC	50
7141159	Bromomethane	2021/01/09	97	60 - 140	97	60 - 140	<0.050	ug/g	NC	50
7141159	Carbon Tetrachloride	2021/01/09	94	60 - 140	92	60 - 130	<0.050	ug/g	NC	50
7141159	Chlorobenzene	2021/01/09	98	60 - 140	97	60 - 130	<0.050	ug/g	NC	50
7141159	Chloroform	2021/01/09	94	60 - 140	93	60 - 130	<0.050	ug/g	NC	50
7141159	cis-1,2-Dichloroethylene	2021/01/09	97	60 - 140	96	60 - 130	<0.050	ug/g	NC	50
7141159	cis-1,3-Dichloropropene	2021/01/09	88	60 - 140	88	60 - 130	<0.030	ug/g	NC	50
7141159	Dibromochloromethane	2021/01/09	103	60 - 140	107	60 - 130	<0.050	ug/g	NC	50

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7141159	Dichlorodifluoromethane (FREON 12)	2021/01/09	90	60 - 140	90	60 - 140	<0.050	ug/g	NC	50
7141159	Ethylbenzene	2021/01/09	93	60 - 140	91	60 - 130	<0.020	ug/g	NC	50
7141159	Ethylene Dibromide	2021/01/09	97	60 - 140	101	60 - 130	<0.050	ug/g	NC	50
7141159	F1 (C6-C10) - BTEX	2021/01/09					<10	ug/g	NC	30
7141159	F1 (C6-C10)	2021/01/09	98	60 - 140	88	80 - 120	<10	ug/g	NC	30
7141159	Hexane	2021/01/09	92	60 - 140	89	60 - 130	<0.050	ug/g	NC	50
7141159	Methyl Ethyl Ketone (2-Butanone)	2021/01/09	98	60 - 140	117	60 - 140	<0.50	ug/g	NC	50
7141159	Methyl Isobutyl Ketone	2021/01/09	95	60 - 140	107	60 - 130	<0.50	ug/g	NC	50
7141159	Methyl t-butyl ether (MTBE)	2021/01/09	86	60 - 140	90	60 - 130	<0.050	ug/g	NC	50
7141159	Methylene Chloride(Dichloromethane)	2021/01/09	93	60 - 140	95	60 - 130	<0.050	ug/g	NC	50
7141159	o-Xylene	2021/01/09	91	60 - 140	90	60 - 130	<0.020	ug/g	NC	50
7141159	p+m-Xylene	2021/01/09	94	60 - 140	92	60 - 130	<0.020	ug/g	NC	50
7141159	Styrene	2021/01/09	105	60 - 140	105	60 - 130	<0.050	ug/g	NC	50
7141159	Tetrachloroethylene	2021/01/09	90	60 - 140	88	60 - 130	<0.050	ug/g	NC	50
7141159	Toluene	2021/01/09	91	60 - 140	89	60 - 130	<0.020	ug/g	NC	50
7141159	Total Xylenes	2021/01/09					<0.020	ug/g	NC	50
7141159	trans-1,2-Dichloroethylene	2021/01/09	97	60 - 140	95	60 - 130	<0.050	ug/g	NC	50
7141159	trans-1,3-Dichloropropene	2021/01/09	93	60 - 140	91	60 - 130	<0.040	ug/g	NC	50
7141159	Trichloroethylene	2021/01/09	101	60 - 140	99	60 - 130	<0.050	ug/g	NC	50
7141159	Trichlorofluoromethane (FREON 11)	2021/01/09	101	60 - 140	99	60 - 130	<0.050	ug/g	NC	50
7141159	Vinyl Chloride	2021/01/09	99	60 - 140	97	60 - 130	<0.020	ug/g	NC	50
7142244	Moisture	2021/01/08							2.8	20
7143155	F2 (C10-C16 Hydrocarbons)	2021/01/11	93	50 - 130	97	80 - 120	<10	ug/g	NC	30
7143155	F3 (C16-C34 Hydrocarbons)	2021/01/11	95	50 - 130	98	80 - 120	<50	ug/g	NC	30
7143155	F4 (C34-C50 Hydrocarbons)	2021/01/11	98	50 - 130	102	80 - 120	<50	ug/g	NC	30
7143157	1-Methylnaphthalene	2021/01/09	113	50 - 130	114	50 - 130	<0.0050	ug/g	NC	40
7143157	2-Methylnaphthalene	2021/01/09	99	50 - 130	108	50 - 130	<0.0050	ug/g	NC	40
7143157	Acenaphthene	2021/01/09	103	50 - 130	109	50 - 130	<0.0050	ug/g	16	40
7143157	Acenaphthylene	2021/01/09	85	50 - 130	99	50 - 130	<0.0050	ug/g	6.9	40
7143157	Anthracene	2021/01/09	95	50 - 130	110	50 - 130	<0.0050	ug/g	13	40
7143157	Benzo(a)anthracene	2021/01/09	88	50 - 130	110	50 - 130	<0.0050	ug/g	11	40

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7143157	Benzo(a)pyrene	2021/01/09	70	50 - 130	99	50 - 130	<0.0050	ug/g	22	40
7143157	Benzo(b/j)fluoranthene	2021/01/09	101	50 - 130	115	50 - 130	<0.0050	ug/g	16	40
7143157	Benzo(g,h,i)perylene	2021/01/09	99	50 - 130	129	50 - 130	<0.0050	ug/g	25	40
7143157	Benzo(k)fluoranthene	2021/01/09	88	50 - 130	114	50 - 130	<0.0050	ug/g	19	40
7143157	Chrysene	2021/01/09	92	50 - 130	116	50 - 130	<0.0050	ug/g	11	40
7143157	Dibenzo(a,h)anthracene	2021/01/09	116	50 - 130	125	50 - 130	<0.0050	ug/g	NC	40
7143157	Fluoranthene	2021/01/09	91	50 - 130	123	50 - 130	<0.0050	ug/g	15	40
7143157	Fluorene	2021/01/09	119	50 - 130	109	50 - 130	<0.0050	ug/g	NC	40
7143157	Indeno(1,2,3-cd)pyrene	2021/01/09	103	50 - 130	130	50 - 130	<0.0050	ug/g	21	40
7143157	Naphthalene	2021/01/09	103	50 - 130	106	50 - 130	<0.0050	ug/g	NC	40
7143157	Phenanthrene	2021/01/09	95	50 - 130	113	50 - 130	<0.0050	ug/g	14	40
7143157	Pyrene	2021/01/09	73	50 - 130	120	50 - 130	<0.0050	ug/g	11	40
7143902	Acid Extractable Antimony (Sb)	2021/01/11	97	75 - 125	97	80 - 120	<0.20	ug/g	30	30
7143902	Acid Extractable Arsenic (As)	2021/01/11	101	75 - 125	101	80 - 120	<1.0	ug/g	0.53	30
7143902	Acid Extractable Barium (Ba)	2021/01/11	NC	75 - 125	100	80 - 120	<0.50	ug/g	2.8	30
7143902	Acid Extractable Beryllium (Be)	2021/01/11	109	75 - 125	106	80 - 120	<0.20	ug/g	4.2	30
7143902	Acid Extractable Boron (B)	2021/01/11	99	75 - 125	106	80 - 120	<5.0	ug/g	0.99	30
7143902	Acid Extractable Cadmium (Cd)	2021/01/11	100	75 - 125	98	80 - 120	<0.10	ug/g	2.9	30
7143902	Acid Extractable Chromium (Cr)	2021/01/11	101	75 - 125	99	80 - 120	<1.0	ug/g	1.5	30
7143902	Acid Extractable Cobalt (Co)	2021/01/11	100	75 - 125	101	80 - 120	<0.10	ug/g	2.4	30
7143902	Acid Extractable Copper (Cu)	2021/01/11	100	75 - 125	100	80 - 120	<0.50	ug/g	2.9	30
7143902	Acid Extractable Lead (Pb)	2021/01/11	NC	75 - 125	95	80 - 120	<1.0	ug/g	0.64	30
7143902	Acid Extractable Mercury (Hg)	2021/01/11	86	75 - 125	87	80 - 120	<0.050	ug/g	NC	30
7143902	Acid Extractable Molybdenum (Mo)	2021/01/11	102	75 - 125	99	80 - 120	<0.50	ug/g	NC	30
7143902	Acid Extractable Nickel (Ni)	2021/01/11	101	75 - 125	102	80 - 120	<0.50	ug/g	0.31	30
7143902	Acid Extractable Selenium (Se)	2021/01/11	102	75 - 125	104	80 - 120	<0.50	ug/g	NC	30
7143902	Acid Extractable Silver (Ag)	2021/01/11	99	75 - 125	98	80 - 120	<0.20	ug/g	NC	30
7143902	Acid Extractable Thallium (Tl)	2021/01/11	95	75 - 125	97	80 - 120	<0.050	ug/g	7.2	30
7143902	Acid Extractable Uranium (U)	2021/01/11	95	75 - 125	94	80 - 120	<0.050	ug/g	0.57	30
7143902	Acid Extractable Vanadium (V)	2021/01/11	104	75 - 125	99	80 - 120	<5.0	ug/g	0.36	30
7143902	Acid Extractable Zinc (Zn)	2021/01/11	NC	75 - 125	103	80 - 120	<5.0	ug/g	0.98	30

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7143986	Available (CaCl2) pH	2021/01/11			101	97 - 103			0.071	N/A
7144096	Hot Water Ext. Boron (B)	2021/01/11	99	75 - 125	96	75 - 125	<0.050	ug/g	NC	40
7145158	Chromium (VI)	2021/01/12	83	70 - 130	84	80 - 120	<0.18	ug/g	NC	35
7145282	WAD Cyanide (Free)	2021/01/12	100	75 - 125	101	80 - 120	<0.01	ug/g	NC	35
7145554	Conductivity	2021/01/12			103	90 - 110	<0.002	mS/cm	4.1	10

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).

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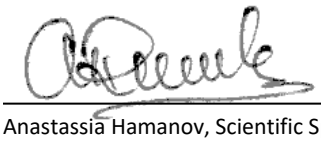
BV Labs Job #: C103800
Report Date: 2021/01/14

WSP Canada Inc
Client Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Sampler Initials: RF

VALIDATION SIGNATURE PAGE

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



Anastassia Hamanov, Scientific Specialist

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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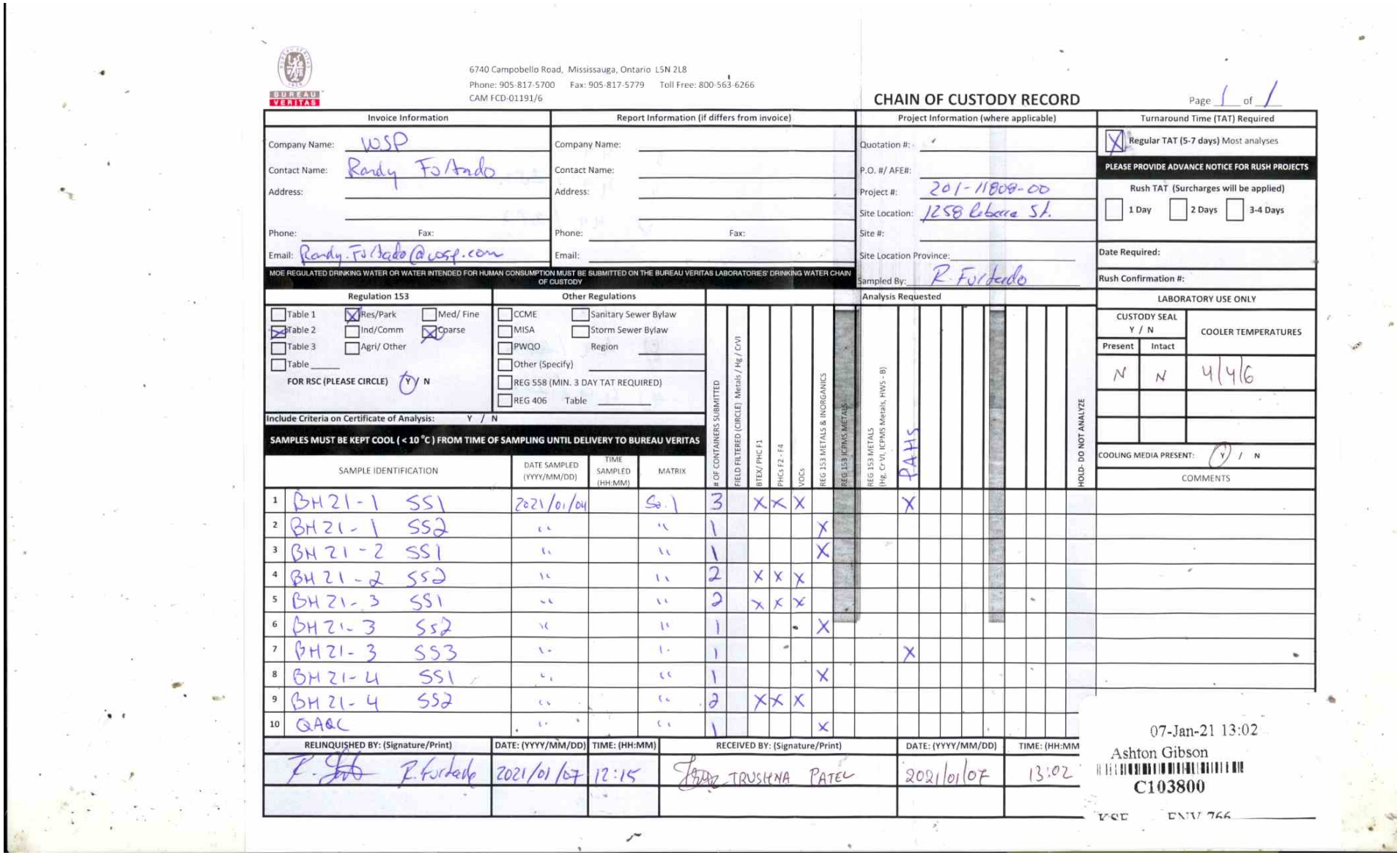


BUREAU VERITAS

6740 Campobello Road, Mississauga, Ontario L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5779 Toll Free: 800-563-6266
CAM FCD-01191/6

CHAIN OF CUSTODY RECORD

Page 1 of 1

Invoice Information
Company Name: WSP
Contact Name: Randy Furtado
Address:
Phone: Fax:
Email: Randy.Furtado@wsp.com

Report Information (if differs from invoice)
Company Name:
Contact Name:
Address:
Phone: Fax:
Email:

Project Information (where applicable)
Quotation #:
P.O. #/ AFE#:
Project #: 201-11808-00
Site Location: 1258 Cabana St.
Site #:
Site Location Province:
Sampled By: R. Furtado

Turnaround Time (TAT) Required
[X] Regular TAT (5-7 days) Most analyses
PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS
Rush TAT (Surcharges will be applied)
[ ] 1 Day [ ] 2 Days [ ] 3-4 Days
Date Required:
Rush Confirmation #:

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

Regulation 153
[ ] Table 1 [X] Res/Park [ ] Med/ Fine
[X] Table 2 [ ] Ind/Comm [X] Coarse
[ ] Table 3 [ ] Agri/ Other
[ ] Table ____
FOR RSC (PLEASE CIRCLE) (Y) / N

Other Regulations
[ ] CCME [ ] Sanitary Sewer Bylaw
[ ] MISA [ ] Storm Sewer Bylaw
[ ] PWQO Region
[ ] Other (Specify)
[ ] REG 558 (MIN. 3 DAY TAT REQUIRED)
[ ] REG 406 Table

Include Criteria on Certificate of Analysis: Y / N

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

Analysis Requested

LABORATORY USE ONLY
CUSTODY SEAL Y / N (Present / Intact)
COOLER TEMPERATURES: 4|4|6
COOLING MEDIA PRESENT: (Y) / N
COMMENTS

	SAMPLE IDENTIFICATION	DATE SAMPLED (YYYY/MM/DD)	TIME SAMPLED (HH:MM)	MATRIX	# OF CONTAINERS SUBMITTED	FIELD FILTERED (CIRCLE): Metals / Hg / CrVI	BTEX/ PHC F1	PHCs F2 - F4	VOCs	REG 153 METALS & INORGANICS	REG 153 ICPMS METALS	REG 153 METALS (Hg, Cr VI, ICPMS Metals, HWS - B)	PAHs	HOLD- DO NOT ANALYZE
1	BH21-1 SS1	2021/01/04		Soil	3		X	X	X				X	
2	BH21-1 SS2	"		"	1					X				
3	BH21-2 SS1	"		"	1					X				
4	BH21-2 SS2	"		"	2		X	X	X					
5	BH21-3 SS1	"		"	2		X	X	X					
6	BH21-3 SS2	"		"	1					X				
7	BH21-3 SS3	"		"	1								X	
8	BH21-4 SS1	"		"	1					X				
9	BH21-4 SS2	"		"	2		X	X	X					
10	QA&C	"		"	1					X				

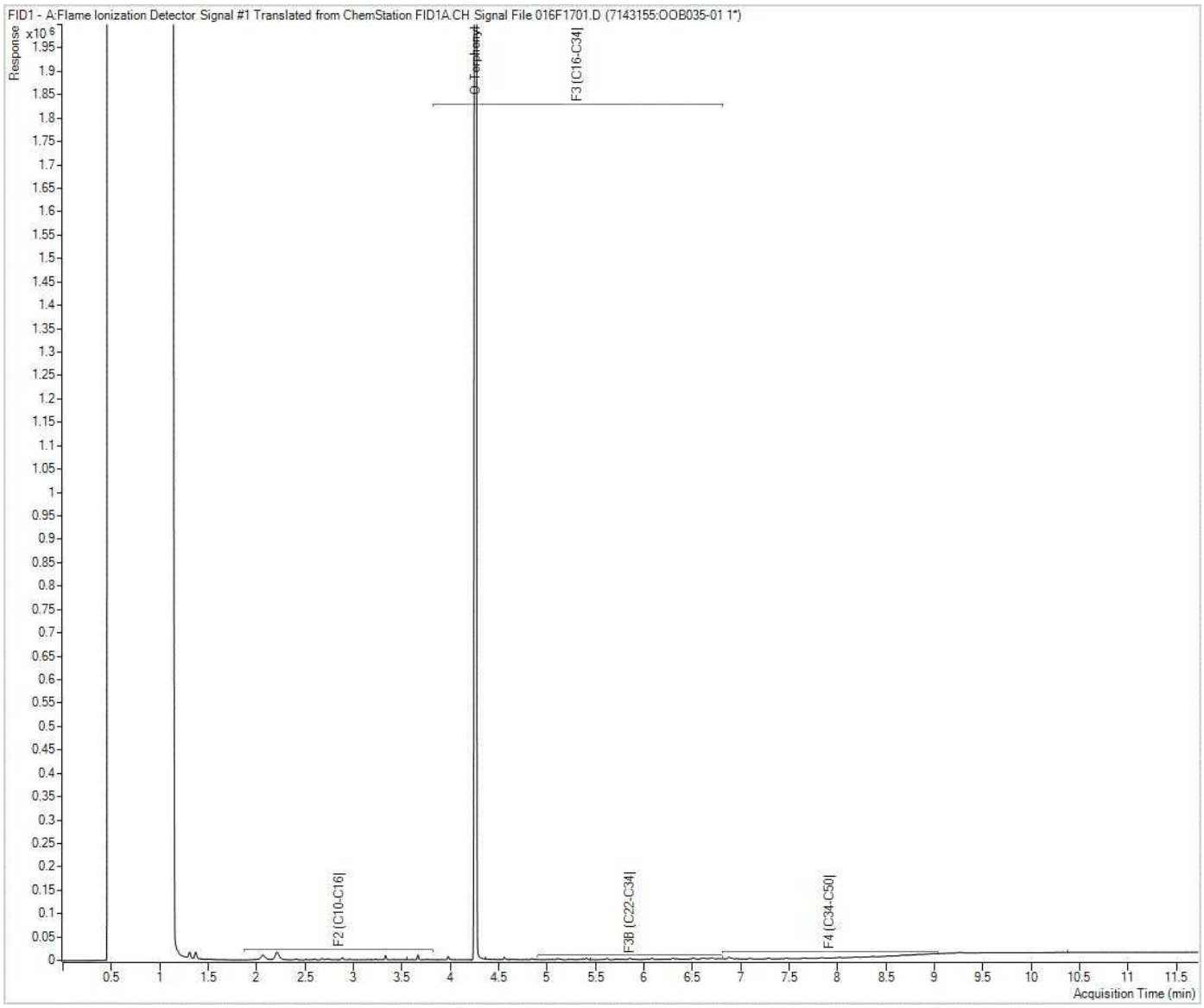
RELINQUISHED BY: (Signature/Print)	DATE: (YYYY/MM/DD)	TIME: (HH:MM)	RECEIVED BY: (Signature/Print)	DATE: (YYYY/MM/DD)	TIME: (HH:MM
R. Furtado	2021/01/07	12:15	TRUSHNA PATEL	2021/01/07	13:02

07-Jan-21 13:02
Ashton Gibson
C103800

BV Labs Job #: C103800
Report Date: 2021/01/14
BV Labs Sample: OOB035

WSP Canada Inc
Client Project #: 201-11808-00
Project name: 1258 REBECCA ST.
Client ID: BH21-1 SS1

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

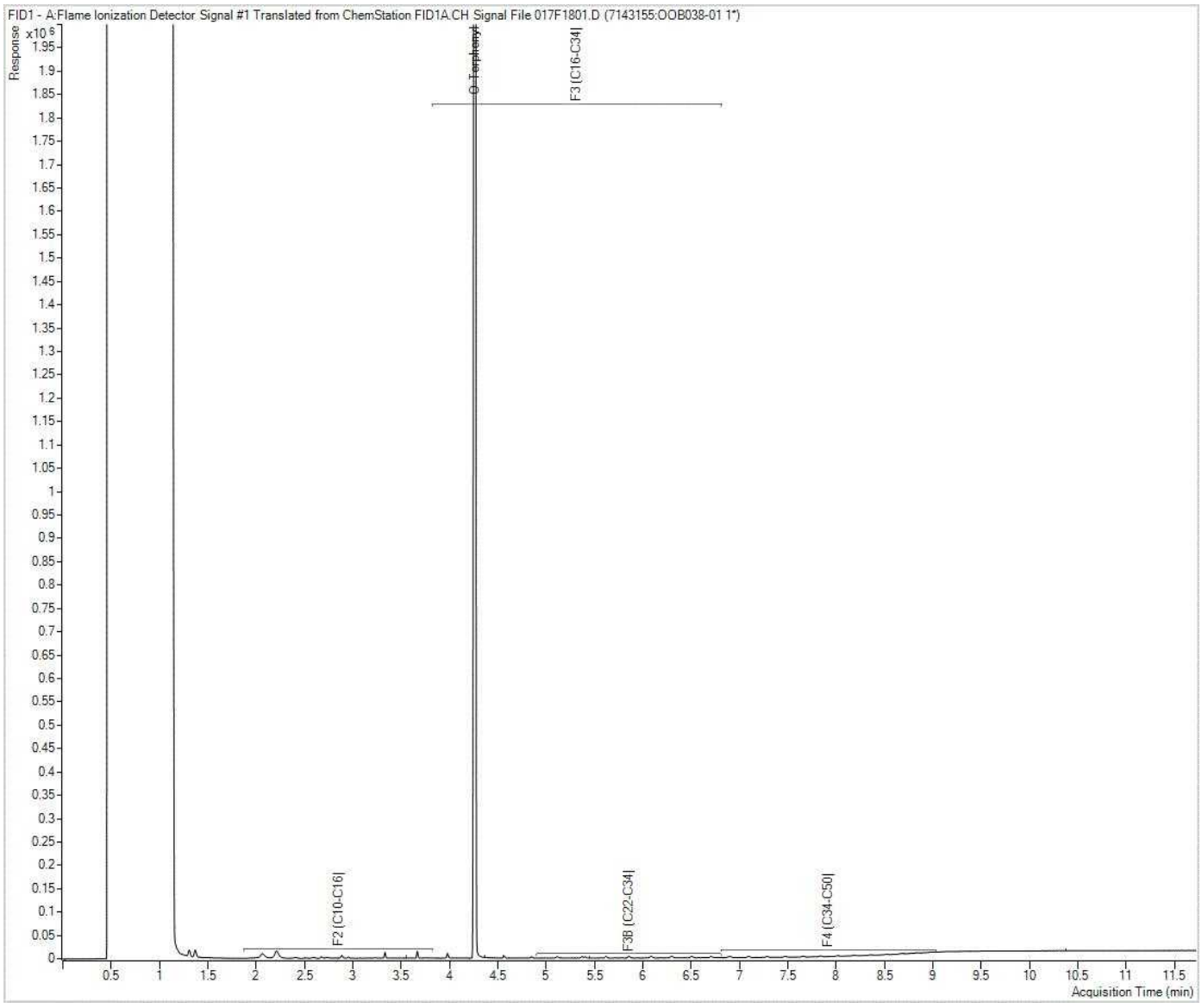


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C103800
Report Date: 2021/01/14
BV Labs Sample: OOB038

WSP Canada Inc
Client Project #: 201-11808-00
Project name: 1258 REBECCA ST.
Client ID: BH21-2 SS2

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

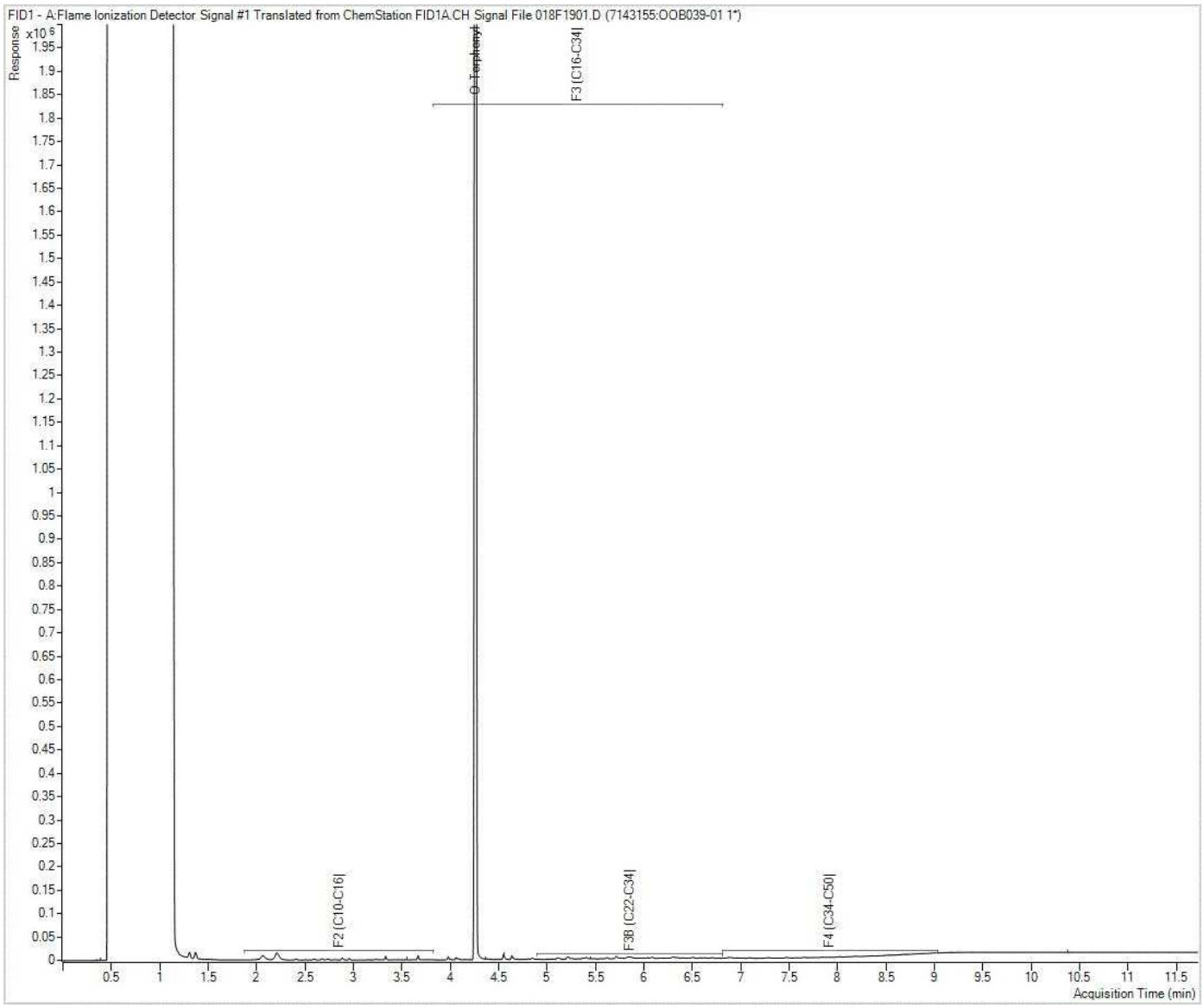


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C103800
Report Date: 2021/01/14
BV Labs Sample: OOB039

WSP Canada Inc
Client Project #: 201-11808-00
Project name: 1258 REBECCA ST.
Client ID: BH21-3 SS1

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

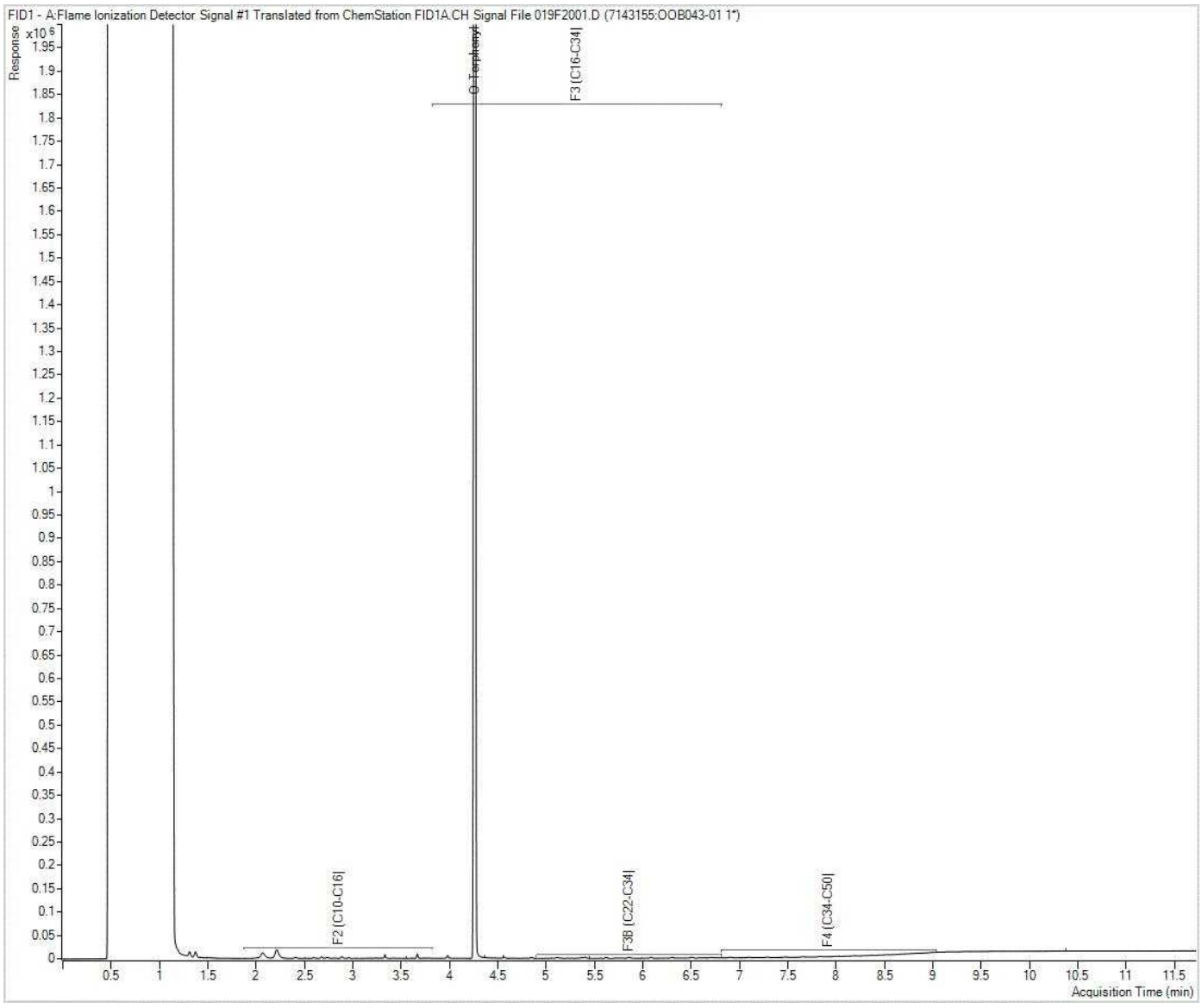


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C103800
Report Date: 2021/01/14
BV Labs Sample: OOB043

WSP Canada Inc
Client Project #: 201-11808-00
Project name: 1258 REBECCA ST.
Client ID: BH21-4 SS2

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



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

BV Labs Job #: C103800
Report Date: 2021/01/14

WSP Canada Inc
Client Project #: 201-11808-00
Site Location: 1258 REBECCA ST.
Sampler Initials: RF

Exceedance Summary Table – Reg153/04 T2-Soil/Res-C

Result Exceedances

Sample ID	BV Labs ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						

The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to applicable regulatory guidelines.

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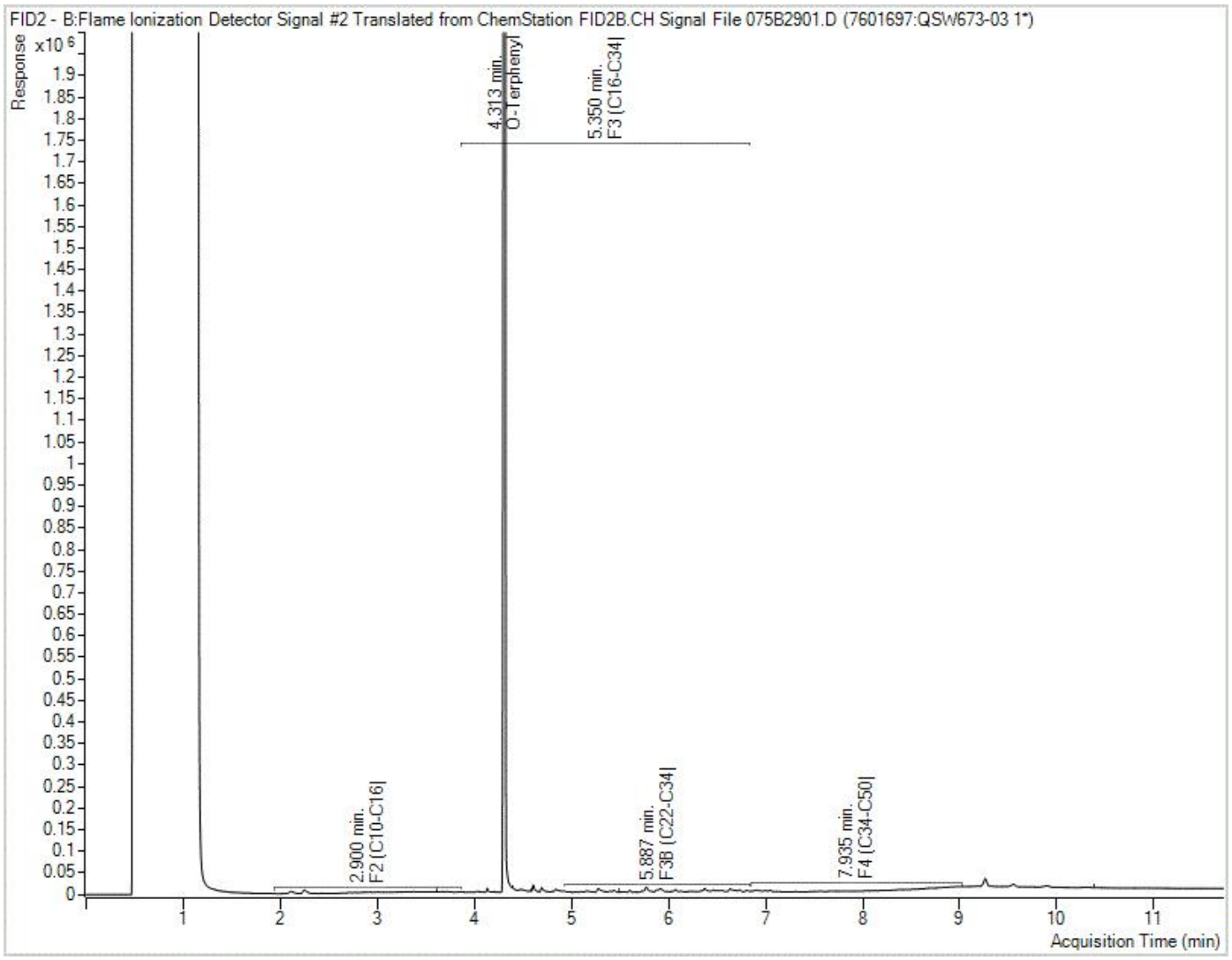
BV Labs Job #: C1R5678
Report Date: 2021/09/29
BV Labs Sample: QSW673

WSP Canada Inc
Client Project #: 201-11808-00-101-02
Client ID: DUP01

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

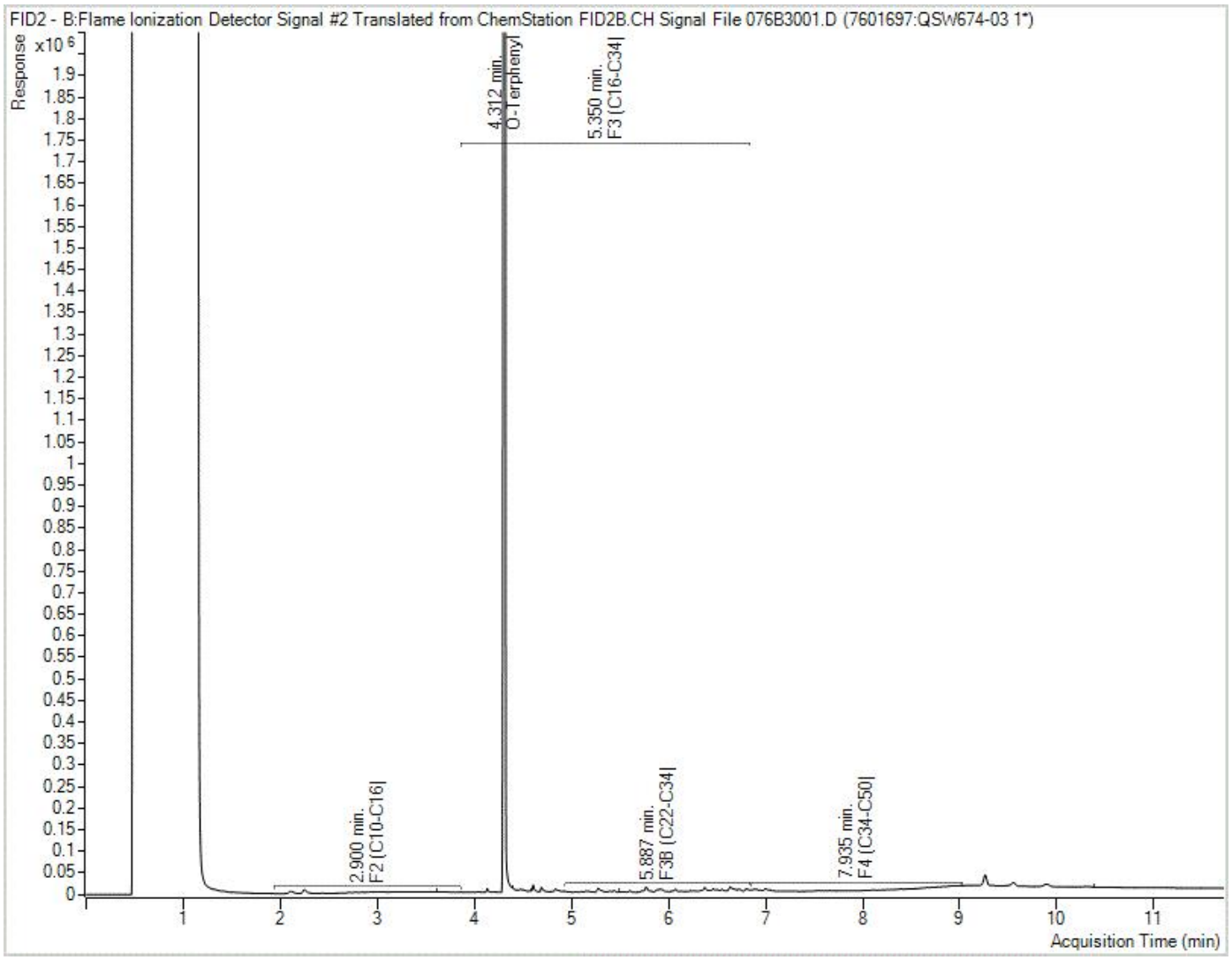


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1R5678
Report Date: 2021/09/29
BV Labs Sample: QSW674

WSP Canada Inc
Client Project #: 201-11808-00-101-02
Client ID: BH21-5

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

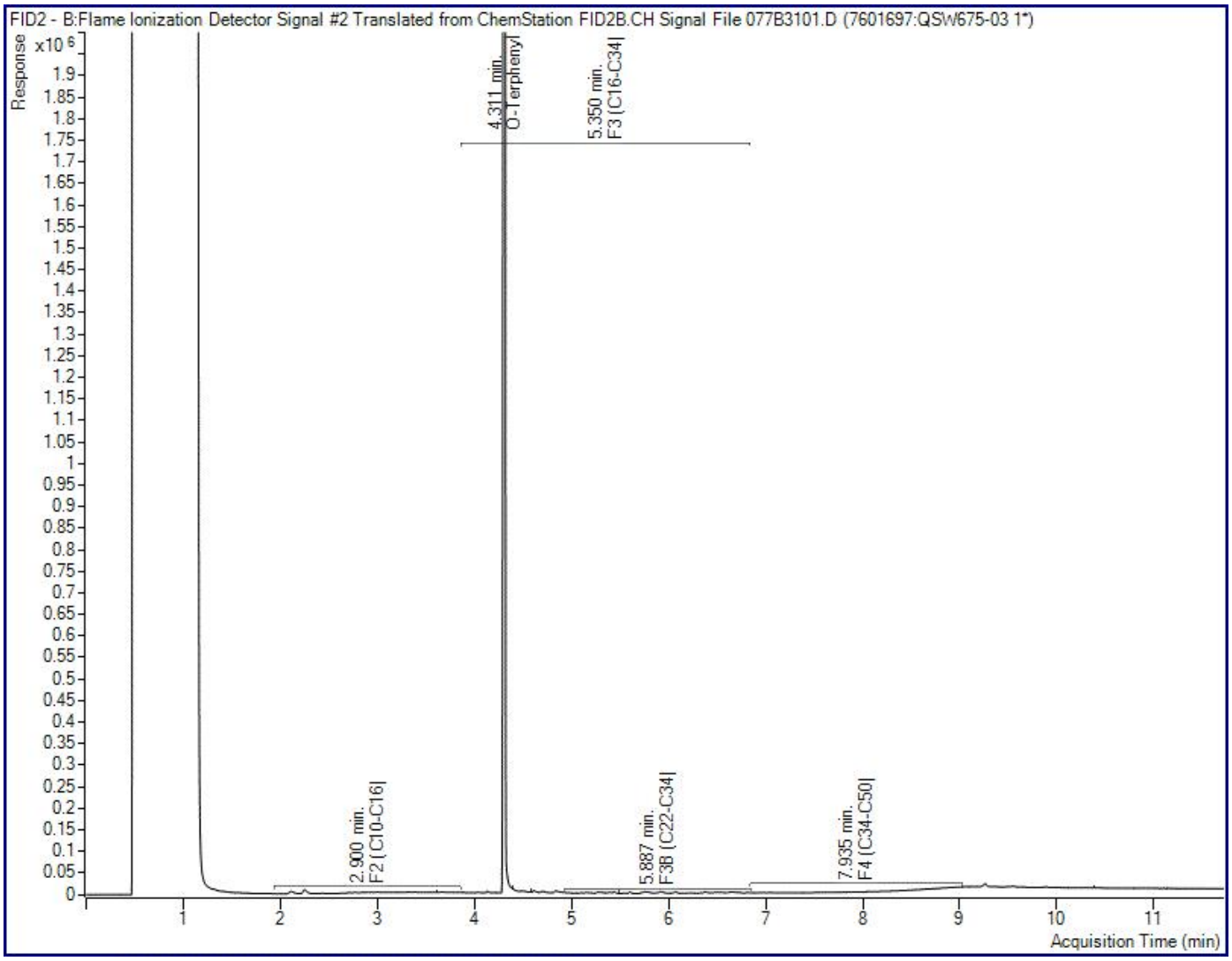


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1R5678
Report Date: 2021/09/29
BV Labs Sample: QSW675

WSP Canada Inc
Client Project #: 201-11808-00-101-02
Client ID: BH21-6

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



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

APPENDIX

D-2 *GROUNDWATER*

Your Project #: 201-11808-01
Site Location: REBECCA ST., OAKVILLE
Your C.O.C. #: 809079-01-01

Attention: Randy Furtado

WSP Canada Inc
51 Constellation Court
Toronto, ON
CANADA M9W 1K4

Report Date: 2021/02/03
Report #: R6504274
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C116347
Received: 2021/01/20, 16:00

Sample Matrix: Water
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
1,3-Dichloropropene Sum	4	N/A	2021/01/23		EPA 8260C m
Chloride by Automated Colourimetry	2	N/A	2021/01/22	CAM SOP-00463	SM 23 4500-Cl E m
Chromium (VI) in Water	2	N/A	2021/01/27	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	2	N/A	2021/01/21	CAM SOP-00457	OMOE E3015 m
Petroleum Hydrocarbons F2-F4 in Water (1)	4	2021/01/25	2021/01/26	CAM SOP-00316	CCME PHC-CWS m
Mercury	2	2021/01/22	2021/01/22	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	2	N/A	2021/01/22	CAM SOP-00447	EPA 6020B m
Volatile Organic Compounds and F1 PHCs	4	N/A	2021/01/22	CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds in Water	1	N/A	2021/01/26	CAM SOP-00228	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, MELCC, 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.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following “Alberta

Your Project #: 201-11808-01
Site Location: REBECCA ST., OAKVILLE
Your C.O.C. #: 809079-01-01

Attention: Randy Furtado

WSP Canada Inc
51 Constellation Court
Toronto, ON
CANADA M9W 1K4

Report Date: 2021/02/03
Report #: R6504274
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C116347
Received: 2021/01/20, 16:00

Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Ashton Gibson, Project Manager
Email: Ashton.Gibson@bureauveritas.com
Phone# (905)817-5765

==========

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

BV Labs Job #: C116347
Report Date: 2021/02/03

WSP Canada Inc
Client Project #: 201-11808-01
Site Location: REBECCA ST., OAKVILLE
Sampler Initials: DW

VOLATILE ORGANICS BY GC/MS (WATER)

BV Labs ID			OQQ196		
Sampling Date			2021/01/20		
COC Number			809079-01-01		
	UNITS	Criteria	TRIP BLANK LOT # 3686	RDL	QC Batch
Volatile Organics					
Acetone (2-Propanone)	ug/L	2700	<10	10	7166181
Benzene	ug/L	5.0	<0.20	0.20	7166181
Bromodichloromethane	ug/L	16.0	<0.50	0.50	7166181
Bromoform	ug/L	25.0	<1.0	1.0	7166181
Bromomethane	ug/L	0.89	<0.50	0.50	7166181
Carbon Tetrachloride	ug/L	0.79	<0.19	0.19	7166181
Chlorobenzene	ug/L	30	<0.20	0.20	7166181
Chloroform	ug/L	2.4	<0.20	0.20	7166181
Dibromochloromethane	ug/L	25.0	<0.50	0.50	7166181
1,2-Dichlorobenzene	ug/L	3.0	<0.40	0.40	7166181
1,3-Dichlorobenzene	ug/L	59	<0.40	0.40	7166181
1,4-Dichlorobenzene	ug/L	1.0	<0.40	0.40	7166181
Dichlorodifluoromethane (FREON 12)	ug/L	590	<1.0	1.0	7166181
1,1-Dichloroethane	ug/L	5	<0.20	0.20	7166181
1,2-Dichloroethane	ug/L	1.6	<0.49	0.49	7166181
1,1-Dichloroethylene	ug/L	1.6	<0.20	0.20	7166181
cis-1,2-Dichloroethylene	ug/L	1.6	<0.50	0.50	7166181
trans-1,2-Dichloroethylene	ug/L	1.6	<0.50	0.50	7166181
1,2-Dichloropropane	ug/L	5.0	<0.20	0.20	7166181
cis-1,3-Dichloropropene	ug/L	0.5	<0.30	0.30	7166181
trans-1,3-Dichloropropene	ug/L	0.5	<0.40	0.40	7166181
Ethylbenzene	ug/L	2.4	<0.20	0.20	7166181
Ethylene Dibromide	ug/L	0.2	<0.19	0.19	7166181
Hexane	ug/L	51	<1.0	1.0	7166181
Methylene Chloride(Dichloromethane)	ug/L	50	<2.0	2.0	7166181
Methyl Ethyl Ketone (2-Butanone)	ug/L	1800	<10	10	7166181
Methyl Isobutyl Ketone	ug/L	640	<5.0	5.0	7166181

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil

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

BV Labs Job #: C116347
Report Date: 2021/02/03

WSP Canada Inc
Client Project #: 201-11808-01
Site Location: REBECCA ST., OAKVILLE
Sampler Initials: DW

VOLATILE ORGANICS BY GC/MS (WATER)

BV Labs ID			OQQ196		
Sampling Date			2021/01/20		
COC Number			809079-01-01		
	UNITS	Criteria	TRIP BLANK LOT # 3686	RDL	QC Batch
Methyl t-butyl ether (MTBE)	ug/L	15	<0.50	0.50	7166181
Styrene	ug/L	5.4	<0.40	0.40	7166181
1,1,1,2-Tetrachloroethane	ug/L	1.1	<0.50	0.50	7166181
1,1,2,2-Tetrachloroethane	ug/L	1.0	<0.40	0.40	7166181
Tetrachloroethylene	ug/L	1.6	<0.20	0.20	7166181
Toluene	ug/L	24	<0.20	0.20	7166181
1,1,1-Trichloroethane	ug/L	200	<0.20	0.20	7166181
1,1,2-Trichloroethane	ug/L	4.7	<0.40	0.40	7166181
Trichloroethylene	ug/L	1.6	<0.20	0.20	7166181
Trichlorofluoromethane (FREON 11)	ug/L	150	<0.50	0.50	7166181
Vinyl Chloride	ug/L	0.5	<0.20	0.20	7166181
p+m-Xylene	ug/L	-	<0.20	0.20	7166181
o-Xylene	ug/L	-	<0.20	0.20	7166181
Total Xylenes	ug/L	300	<0.20	0.20	7166181
Surrogate Recovery (%)					
4-Bromofluorobenzene	%	-	93		7166181
D4-1,2-Dichloroethane	%	-	106		7166181
D8-Toluene	%	-	95		7166181

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
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BV Labs Job #: C116347
Report Date: 2021/02/03

WSP Canada Inc
Client Project #: 201-11808-01
Site Location: REBECCA ST., OAKVILLE
Sampler Initials: DW

O.REG 153 METALS & INORGANICS PKG (WTR)

BV Labs ID			OQQ193		OQQ194		
Sampling Date			2021/01/20		2021/01/20		
COC Number			809079-01-01		809079-01-01		
	UNITS	Criteria	BH21-2	QC Batch	BH21-4	RDL	QC Batch
Inorganics							
WAD Cyanide (Free)	ug/L	66	<1	7162716	<1	1	7162716
Dissolved Chloride (Cl-)	mg/L	790	21	7162074	29	1.0	7162272
Metals							
Chromium (VI)	ug/L	25	0.55	7164757	0.65	0.50	7164757
Mercury (Hg)	ug/L	0.29	<0.10	7163655	<0.10	0.10	7163655
Dissolved Antimony (Sb)	ug/L	6.0	<0.50	7160046	<0.50	0.50	7160046
Dissolved Arsenic (As)	ug/L	25	<1.0	7160046	<1.0	1.0	7160046
Dissolved Barium (Ba)	ug/L	1000	84	7160046	69	2.0	7160046
Dissolved Beryllium (Be)	ug/L	4.0	<0.40	7160046	<0.40	0.40	7160046
Dissolved Boron (B)	ug/L	5000	250	7160046	270	10	7160046
Dissolved Cadmium (Cd)	ug/L	2.7	<0.090	7160046	<0.090	0.090	7160046
Dissolved Chromium (Cr)	ug/L	50	<5.0	7160046	<5.0	5.0	7160046
Dissolved Cobalt (Co)	ug/L	3.8	<0.50	7160046	<0.50	0.50	7160046
Dissolved Copper (Cu)	ug/L	87	3.1	7160046	4.1	0.90	7160046
Dissolved Lead (Pb)	ug/L	10	<0.50	7160046	<0.50	0.50	7160046
Dissolved Molybdenum (Mo)	ug/L	70	7.0	7160046	10	0.50	7160046
Dissolved Nickel (Ni)	ug/L	100	<1.0	7160046	<1.0	1.0	7160046
Dissolved Selenium (Se)	ug/L	10	<2.0	7160046	<2.0	2.0	7160046
Dissolved Silver (Ag)	ug/L	1.5	<0.090	7160046	<0.090	0.090	7160046
Dissolved Sodium (Na)	ug/L	490000	38000	7160046	45000	100	7160046
Dissolved Thallium (Tl)	ug/L	2.0	<0.050	7160046	<0.050	0.050	7160046
Dissolved Uranium (U)	ug/L	20	5.8	7160046	9.1	0.10	7160046
Dissolved Vanadium (V)	ug/L	6.2	1.0	7160046	0.72	0.50	7160046
Dissolved Zinc (Zn)	ug/L	1100	<5.0	7160046	<5.0	5.0	7160046

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
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BV Labs Job #: C116347
Report Date: 2021/02/03

WSP Canada Inc
Client Project #: 201-11808-01
Site Location: REBECCA ST., OAKVILLE
Sampler Initials: DW

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

BV Labs ID			OQQ192	OQQ193	OQQ194	OQQ195		
Sampling Date			2021/01/20	2021/01/20	2021/01/20	2021/01/20		
COC Number			809079-01-01	809079-01-01	809079-01-01	809079-01-01		
	UNITS	Criteria	BH21-1	BH21-2	BH21-4	QAQC-1	RDL	QC Batch
Calculated Parameters								
1,3-Dichloropropene (cis+trans)	ug/L	0.5	<0.50	<0.50	<0.50	<0.50	0.50	7159700
Volatile Organics								
Acetone (2-Propanone)	ug/L	2700	<10	<10	<10	<10	10	7160084
Benzene	ug/L	5.0	<0.20	<0.20	<0.20	<0.20	0.20	7160084
Bromodichloromethane	ug/L	16.0	<0.50	<0.50	<0.50	<0.50	0.50	7160084
Bromoform	ug/L	25.0	<1.0	<1.0	<1.0	<1.0	1.0	7160084
Bromomethane	ug/L	0.89	<0.50	<0.50	<0.50	<0.50	0.50	7160084
Carbon Tetrachloride	ug/L	0.79	<0.20	<0.20	<0.20	<0.20	0.20	7160084
Chlorobenzene	ug/L	30	<0.20	<0.20	<0.20	<0.20	0.20	7160084
Chloroform	ug/L	2.4	<0.20	<0.20	<0.20	<0.20	0.20	7160084
Dibromochloromethane	ug/L	25.0	<0.50	<0.50	<0.50	<0.50	0.50	7160084
1,2-Dichlorobenzene	ug/L	3.0	<0.50	<0.50	<0.50	<0.50	0.50	7160084
1,3-Dichlorobenzene	ug/L	59	<0.50	<0.50	<0.50	<0.50	0.50	7160084
1,4-Dichlorobenzene	ug/L	1.0	<0.50	<0.50	<0.50	<0.50	0.50	7160084
Dichlorodifluoromethane (FREON 12)	ug/L	590	<1.0	<1.0	<1.0	<1.0	1.0	7160084
1,1-Dichloroethane	ug/L	5	<0.20	<0.20	<0.20	<0.20	0.20	7160084
1,2-Dichloroethane	ug/L	1.6	<0.50	<0.50	<0.50	<0.50	0.50	7160084
1,1-Dichloroethylene	ug/L	1.6	<0.20	<0.20	<0.20	<0.20	0.20	7160084
cis-1,2-Dichloroethylene	ug/L	1.6	<0.50	<0.50	<0.50	<0.50	0.50	7160084
trans-1,2-Dichloroethylene	ug/L	1.6	<0.50	<0.50	<0.50	<0.50	0.50	7160084
1,2-Dichloropropane	ug/L	5.0	<0.20	<0.20	<0.20	<0.20	0.20	7160084
cis-1,3-Dichloropropene	ug/L	0.5	<0.30	<0.30	<0.30	<0.30	0.30	7160084
trans-1,3-Dichloropropene	ug/L	0.5	<0.40	<0.40	<0.40	<0.40	0.40	7160084
Ethylbenzene	ug/L	2.4	<0.20	<0.20	<0.20	<0.20	0.20	7160084
Ethylene Dibromide	ug/L	0.2	<0.20	<0.20	<0.20	<0.20	0.20	7160084
Hexane	ug/L	51	<1.0	<1.0	<1.0	<1.0	1.0	7160084
Methylene Chloride(Dichloromethane)	ug/L	50	<2.0	<2.0	<2.0	<2.0	2.0	7160084
Methyl Ethyl Ketone (2-Butanone)	ug/L	1800	<10	<10	<10	<10	10	7160084
Methyl Isobutyl Ketone	ug/L	640	<5.0	<5.0	<5.0	<5.0	5.0	7160084

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
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BV Labs Job #: C116347
Report Date: 2021/02/03

WSP Canada Inc
Client Project #: 201-11808-01
Site Location: REBECCA ST., OAKVILLE
Sampler Initials: DW

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

BV Labs ID			OQQ192	OQQ193	OQQ194	OQQ195		
Sampling Date			2021/01/20	2021/01/20	2021/01/20	2021/01/20		
COC Number			809079-01-01	809079-01-01	809079-01-01	809079-01-01		
	UNITS	Criteria	BH21-1	BH21-2	BH21-4	QAQC-1	RDL	QC Batch
Methyl t-butyl ether (MTBE)	ug/L	15	<0.50	<0.50	<0.50	<0.50	0.50	7160084
Styrene	ug/L	5.4	<0.50	<0.50	<0.50	<0.50	0.50	7160084
1,1,1,2-Tetrachloroethane	ug/L	1.1	<0.50	<0.50	<0.50	<0.50	0.50	7160084
1,1,2,2-Tetrachloroethane	ug/L	1.0	<0.50	<0.50	<0.50	<0.50	0.50	7160084
Tetrachloroethylene	ug/L	1.6	<0.20	<0.20	<0.20	<0.20	0.20	7160084
Toluene	ug/L	24	<0.20	<0.20	<0.20	<0.20	0.20	7160084
1,1,1-Trichloroethane	ug/L	200	<0.20	<0.20	<0.20	<0.20	0.20	7160084
1,1,2-Trichloroethane	ug/L	4.7	<0.50	<0.50	<0.50	<0.50	0.50	7160084
Trichloroethylene	ug/L	1.6	<0.20	<0.20	<0.20	<0.20	0.20	7160084
Trichlorofluoromethane (FREON 11)	ug/L	150	<0.50	<0.50	<0.50	<0.50	0.50	7160084
Vinyl Chloride	ug/L	0.5	<0.20	<0.20	<0.20	<0.20	0.20	7160084
p+m-Xylene	ug/L	-	<0.20	<0.20	<0.20	<0.20	0.20	7160084
o-Xylene	ug/L	-	<0.20	<0.20	<0.20	<0.20	0.20	7160084
Total Xylenes	ug/L	300	<0.20	<0.20	<0.20	<0.20	0.20	7160084
F1 (C6-C10)	ug/L	750	<25	<25	<25	<25	25	7160084
F1 (C6-C10) - BTEX	ug/L	750	<25	<25	<25	<25	25	7160084
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/L	150	<100	<100	<100	<100	100	7167399
F3 (C16-C34 Hydrocarbons)	ug/L	500	<200	<200	<200	<200	200	7167399
F4 (C34-C50 Hydrocarbons)	ug/L	500	<200	<200	<200	<200	200	7167399
Reached Baseline at C50	ug/L	-	Yes	Yes	Yes	Yes		7167399
Surrogate Recovery (%)								
o-Terphenyl	%	-	98	90	98	97		7167399
4-Bromofluorobenzene	%	-	88	86	86	86		7160084
D4-1,2-Dichloroethane	%	-	105	103	104	107		7160084
D8-Toluene	%	-	94	93	94	94		7160084

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

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QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
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TEST SUMMARY

BV Labs ID: OQQ192
Sample ID: BH21-1
Matrix: Water

Collected: 2021/01/20
Shipped:
Received: 2021/01/20

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7159700	N/A	2021/01/23	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	7167399	2021/01/25	2021/01/26	Prabhjot Gulati
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7160084	N/A	2021/01/22	Yang (Philip) Yu

BV Labs ID: OQQ193
Sample ID: BH21-2
Matrix: Water

Collected: 2021/01/20
Shipped:
Received: 2021/01/20

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7159700	N/A	2021/01/23	Automated Statchk
Chloride by Automated Colourimetry	KONE	7162074	N/A	2021/01/22	Deonarine Ramnarine
Chromium (VI) in Water	IC	7164757	N/A	2021/01/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	7162716	N/A	2021/01/21	Aditiben Patel
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	7167399	2021/01/25	2021/01/26	Prabhjot Gulati
Mercury	CV/AA	7163655	2021/01/22	2021/01/22	Gagandeep Rai
Dissolved Metals by ICPMS	ICP/MS	7160046	N/A	2021/01/22	Nan Raykha
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7160084	N/A	2021/01/22	Yang (Philip) Yu

BV Labs ID: OQQ194
Sample ID: BH21-4
Matrix: Water

Collected: 2021/01/20
Shipped:
Received: 2021/01/20

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7159700	N/A	2021/01/23	Automated Statchk
Chloride by Automated Colourimetry	KONE	7162272	N/A	2021/01/22	Deonarine Ramnarine
Chromium (VI) in Water	IC	7164757	N/A	2021/01/27	Lang Le
Free (WAD) Cyanide	SKAL/CN	7162716	N/A	2021/01/21	Aditiben Patel
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	7167399	2021/01/25	2021/01/26	Prabhjot Gulati
Mercury	CV/AA	7163655	2021/01/22	2021/01/22	Gagandeep Rai
Dissolved Metals by ICPMS	ICP/MS	7160046	N/A	2021/01/22	Nan Raykha
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7160084	N/A	2021/01/22	Yang (Philip) Yu

BV Labs ID: OQQ195
Sample ID: QAQC-1
Matrix: Water

Collected: 2021/01/20
Shipped:
Received: 2021/01/20

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7159700	N/A	2021/01/23	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	7167399	2021/01/25	2021/01/26	Prabhjot Gulati
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7160084	N/A	2021/01/22	Yang (Philip) Yu

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BV Labs Job #: C116347
Report Date: 2021/02/03

WSP Canada Inc
Client Project #: 201-11808-01
Site Location: REBECCA ST., OAKVILLE
Sampler Initials: DW

TEST SUMMARY

BV Labs ID: OQQ196
Sample ID: TRIP BLANK LOT # 3686
Matrix: Water

Collected: 2021/01/20
Shipped:
Received: 2021/01/20

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organic Compounds in Water	GC/MS	7166181	N/A	2021/01/26	Juan Pangilinan

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GENERAL COMMENTS

Revised Report[2021/02/03] Sample IDs revised per client request.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7160084	4-Bromofluorobenzene	2021/01/22	103	70 - 130	102	70 - 130	91	%		
7160084	D4-1,2-Dichloroethane	2021/01/22	103	70 - 130	98	70 - 130	106	%		
7160084	D8-Toluene	2021/01/22	107	70 - 130	108	70 - 130	93	%		
7166181	4-Bromofluorobenzene	2021/01/26	95	70 - 130	95	70 - 130	93	%		
7166181	D4-1,2-Dichloroethane	2021/01/26	103	70 - 130	101	70 - 130	104	%		
7166181	D8-Toluene	2021/01/26	98	70 - 130	98	70 - 130	96	%		
7167399	o-Terphenyl	2021/01/25	101	60 - 130	102	60 - 130	99	%		
7160046	Dissolved Antimony (Sb)	2021/01/22	114	80 - 120	103	80 - 120	<0.50	ug/L	NC	20
7160046	Dissolved Arsenic (As)	2021/01/22	99	80 - 120	99	80 - 120	<1.0	ug/L	NC	20
7160046	Dissolved Barium (Ba)	2021/01/22	102	80 - 120	98	80 - 120	<2.0	ug/L		
7160046	Dissolved Beryllium (Be)	2021/01/22	93	80 - 120	101	80 - 120	<0.40	ug/L		
7160046	Dissolved Boron (B)	2021/01/22	84	80 - 120	95	80 - 120	<10	ug/L		
7160046	Dissolved Cadmium (Cd)	2021/01/22	100	80 - 120	101	80 - 120	<0.090	ug/L	NC	20
7160046	Dissolved Chromium (Cr)	2021/01/22	98	80 - 120	100	80 - 120	<5.0	ug/L	NC	20
7160046	Dissolved Cobalt (Co)	2021/01/22	91	80 - 120	98	80 - 120	<0.50	ug/L	0.76	20
7160046	Dissolved Copper (Cu)	2021/01/22	102	80 - 120	103	80 - 120	<0.90	ug/L	1.8	20
7160046	Dissolved Lead (Pb)	2021/01/22	87	80 - 120	101	80 - 120	<0.50	ug/L	NC	20
7160046	Dissolved Molybdenum (Mo)	2021/01/22	116	80 - 120	104	80 - 120	<0.50	ug/L	5.9	20
7160046	Dissolved Nickel (Ni)	2021/01/22	87	80 - 120	97	80 - 120	<1.0	ug/L	13	20
7160046	Dissolved Selenium (Se)	2021/01/22	98	80 - 120	103	80 - 120	<2.0	ug/L	NC	20
7160046	Dissolved Silver (Ag)	2021/01/22	92	80 - 120	101	80 - 120	<0.090	ug/L	NC	20
7160046	Dissolved Sodium (Na)	2021/01/22	NC	80 - 120	99	80 - 120	<100	ug/L		
7160046	Dissolved Thallium (Tl)	2021/01/22	85	80 - 120	99	80 - 120	<0.050	ug/L		
7160046	Dissolved Uranium (U)	2021/01/22	90	80 - 120	99	80 - 120	<0.10	ug/L		
7160046	Dissolved Vanadium (V)	2021/01/22	102	80 - 120	99	80 - 120	<0.50	ug/L		
7160046	Dissolved Zinc (Zn)	2021/01/22	87	80 - 120	98	80 - 120	<5.0	ug/L	4.4	20
7160084	1,1,1,2-Tetrachloroethane	2021/01/22	96	70 - 130	86	70 - 130	<0.50	ug/L	NC	30
7160084	1,1,1-Trichloroethane	2021/01/22	96	70 - 130	89	70 - 130	<0.20	ug/L	NC	30
7160084	1,1,2,2-Tetrachloroethane	2021/01/22	98	70 - 130	83	70 - 130	<0.50	ug/L	NC	30
7160084	1,1,2-Trichloroethane	2021/01/22	106	70 - 130	91	70 - 130	<0.50	ug/L	NC	30
7160084	1,1-Dichloroethane	2021/01/22	94	70 - 130	85	70 - 130	<0.20	ug/L	NC	30

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7160084	1,1-Dichloroethylene	2021/01/22	91	70 - 130	87	70 - 130	<0.20	ug/L	NC	30
7160084	1,2-Dichlorobenzene	2021/01/22	97	70 - 130	87	70 - 130	<0.50	ug/L	NC	30
7160084	1,2-Dichloroethane	2021/01/22	103	70 - 130	87	70 - 130	<0.50	ug/L	NC	30
7160084	1,2-Dichloropropane	2021/01/22	100	70 - 130	88	70 - 130	<0.20	ug/L	NC	30
7160084	1,3-Dichlorobenzene	2021/01/22	97	70 - 130	88	70 - 130	<0.50	ug/L	NC	30
7160084	1,4-Dichlorobenzene	2021/01/22	121	70 - 130	109	70 - 130	<0.50	ug/L	NC	30
7160084	Acetone (2-Propanone)	2021/01/22	129	60 - 140	104	60 - 140	<10	ug/L	NC	30
7160084	Benzene	2021/01/22	92	70 - 130	83	70 - 130	<0.20	ug/L	NC	30
7160084	Bromodichloromethane	2021/01/22	101	70 - 130	89	70 - 130	<0.50	ug/L	NC	30
7160084	Bromoform	2021/01/22	98	70 - 130	84	70 - 130	<1.0	ug/L	NC	30
7160084	Bromomethane	2021/01/22	90	60 - 140	84	60 - 140	<0.50	ug/L	NC	30
7160084	Carbon Tetrachloride	2021/01/22	92	70 - 130	86	70 - 130	<0.20	ug/L	NC	30
7160084	Chlorobenzene	2021/01/22	97	70 - 130	87	70 - 130	<0.20	ug/L	NC	30
7160084	Chloroform	2021/01/22	98	70 - 130	87	70 - 130	<0.20	ug/L	NC	30
7160084	cis-1,2-Dichloroethylene	2021/01/22	101	70 - 130	90	70 - 130	<0.50	ug/L	NC	30
7160084	cis-1,3-Dichloropropene	2021/01/22	100	70 - 130	88	70 - 130	<0.30	ug/L	NC	30
7160084	Dibromochloromethane	2021/01/22	98	70 - 130	85	70 - 130	<0.50	ug/L	NC	30
7160084	Dichlorodifluoromethane (FREON 12)	2021/01/22	65	60 - 140	72	60 - 140	<1.0	ug/L	NC	30
7160084	Ethylbenzene	2021/01/22	91	70 - 130	85	70 - 130	<0.20	ug/L	NC	30
7160084	Ethylene Dibromide	2021/01/22	101	70 - 130	87	70 - 130	<0.20	ug/L	NC	30
7160084	F1 (C6-C10) - BTEX	2021/01/22					<25	ug/L	NC	30
7160084	F1 (C6-C10)	2021/01/22	93	60 - 140	90	60 - 140	<25	ug/L	NC	30
7160084	Hexane	2021/01/22	93	70 - 130	90	70 - 130	<1.0	ug/L	NC	30
7160084	Methyl Ethyl Ketone (2-Butanone)	2021/01/22	119	60 - 140	95	60 - 140	<10	ug/L	NC	30
7160084	Methyl Isobutyl Ketone	2021/01/22	110	70 - 130	90	70 - 130	<5.0	ug/L	NC	30
7160084	Methyl t-butyl ether (MTBE)	2021/01/22	99	70 - 130	89	70 - 130	<0.50	ug/L	NC	30
7160084	Methylene Chloride(Dichloromethane)	2021/01/22	115	70 - 130	101	70 - 130	<2.0	ug/L	NC	30
7160084	o-Xylene	2021/01/22	93	70 - 130	85	70 - 130	<0.20	ug/L	NC	30
7160084	p+m-Xylene	2021/01/22	96	70 - 130	89	70 - 130	<0.20	ug/L	NC	30
7160084	Styrene	2021/01/22	86	70 - 130	78	70 - 130	<0.50	ug/L	NC	30
7160084	Tetrachloroethylene	2021/01/22	87	70 - 130	82	70 - 130	<0.20	ug/L	NC	30

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7160084	Toluene	2021/01/22	97	70 - 130	90	70 - 130	<0.20	ug/L	NC	30
7160084	Total Xylenes	2021/01/22					<0.20	ug/L	NC	30
7160084	trans-1,2-Dichloroethylene	2021/01/22	97	70 - 130	89	70 - 130	<0.50	ug/L	NC	30
7160084	trans-1,3-Dichloropropene	2021/01/22	108	70 - 130	92	70 - 130	<0.40	ug/L	NC	30
7160084	Trichloroethylene	2021/01/22	100	70 - 130	91	70 - 130	<0.20	ug/L	NC	30
7160084	Trichlorofluoromethane (FREON 11)	2021/01/22	89	70 - 130	86	70 - 130	<0.50	ug/L	NC	30
7160084	Vinyl Chloride	2021/01/22	85	70 - 130	83	70 - 130	<0.20	ug/L	NC	30
7162074	Dissolved Chloride (Cl-)	2021/01/22	NC	80 - 120	103	80 - 120	<1.0	mg/L	2.9	20
7162272	Dissolved Chloride (Cl-)	2021/01/22	90	80 - 120	104	80 - 120	<1.0	mg/L	0.49	20
7162716	WAD Cyanide (Free)	2021/01/21	99	80 - 120	100	80 - 120	<1	ug/L	NC	20
7163655	Mercury (Hg)	2021/01/22	94	75 - 125	93	80 - 120	<0.10	ug/L	NC	20
7164757	Chromium (VI)	2021/01/27	101	80 - 120	99	80 - 120	<0.50	ug/L	1.6	20
7166181	1,1,1,2-Tetrachloroethane	2021/01/26	102	70 - 130	101	70 - 130	<0.50	ug/L		
7166181	1,1,1-Trichloroethane	2021/01/26	97	70 - 130	98	70 - 130	<0.20	ug/L		
7166181	1,1,2,2-Tetrachloroethane	2021/01/26	106	70 - 130	104	70 - 130	<0.40	ug/L		
7166181	1,1,2-Trichloroethane	2021/01/26	108	70 - 130	106	70 - 130	<0.40	ug/L		
7166181	1,1-Dichloroethane	2021/01/26	97	70 - 130	98	70 - 130	<0.20	ug/L		
7166181	1,1-Dichloroethylene	2021/01/26	99	70 - 130	99	70 - 130	<0.20	ug/L	NC	30
7166181	1,2-Dichlorobenzene	2021/01/26	100	70 - 130	100	70 - 130	<0.40	ug/L		
7166181	1,2-Dichloroethane	2021/01/26	99	70 - 130	97	70 - 130	<0.49	ug/L		
7166181	1,2-Dichloropropane	2021/01/26	104	70 - 130	103	70 - 130	<0.20	ug/L		
7166181	1,3-Dichlorobenzene	2021/01/26	100	70 - 130	101	70 - 130	<0.40	ug/L		
7166181	1,4-Dichlorobenzene	2021/01/26	115	70 - 130	117	70 - 130	<0.40	ug/L		
7166181	Acetone (2-Propanone)	2021/01/26	118	60 - 140	115	60 - 140	<10	ug/L		
7166181	Benzene	2021/01/26	94	70 - 130	95	70 - 130	<0.20	ug/L		
7166181	Bromodichloromethane	2021/01/26	104	70 - 130	104	70 - 130	<0.50	ug/L		
7166181	Bromoform	2021/01/26	97	70 - 130	96	70 - 130	<1.0	ug/L		
7166181	Bromomethane	2021/01/26	91	60 - 140	90	60 - 140	<0.50	ug/L		
7166181	Carbon Tetrachloride	2021/01/26	94	70 - 130	96	70 - 130	<0.19	ug/L		
7166181	Chlorobenzene	2021/01/26	101	70 - 130	100	70 - 130	<0.20	ug/L		
7166181	Chloroform	2021/01/26	98	70 - 130	98	70 - 130	<0.20	ug/L		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7166181	cis-1,2-Dichloroethylene	2021/01/26	105	70 - 130	106	70 - 130	<0.50	ug/L	2.6	30
7166181	cis-1,3-Dichloropropene	2021/01/26	100	70 - 130	96	70 - 130	<0.30	ug/L		
7166181	Dibromochloromethane	2021/01/26	99	70 - 130	97	70 - 130	<0.50	ug/L		
7166181	Dichlorodifluoromethane (FREON 12)	2021/01/26	72	60 - 140	70	60 - 140	<1.0	ug/L		
7166181	Ethylbenzene	2021/01/26	97	70 - 130	97	70 - 130	<0.20	ug/L		
7166181	Ethylene Dibromide	2021/01/26	101	70 - 130	98	70 - 130	<0.19	ug/L		
7166181	Hexane	2021/01/26	102	70 - 130	101	70 - 130	<1.0	ug/L		
7166181	Methyl Ethyl Ketone (2-Butanone)	2021/01/26	123	60 - 140	123	60 - 140	<10	ug/L		
7166181	Methyl Isobutyl Ketone	2021/01/26	127	70 - 130	125	70 - 130	<5.0	ug/L		
7166181	Methyl t-butyl ether (MTBE)	2021/01/26	93	70 - 130	95	70 - 130	<0.50	ug/L		
7166181	Methylene Chloride(Dichloromethane)	2021/01/26	100	70 - 130	99	70 - 130	<2.0	ug/L		
7166181	o-Xylene	2021/01/26	97	70 - 130	97	70 - 130	<0.20	ug/L		
7166181	p+m-Xylene	2021/01/26	101	70 - 130	100	70 - 130	<0.20	ug/L		
7166181	Styrene	2021/01/26	107	70 - 130	107	70 - 130	<0.40	ug/L		
7166181	Tetrachloroethylene	2021/01/26	87	70 - 130	87	70 - 130	<0.20	ug/L		
7166181	Toluene	2021/01/26	95	70 - 130	93	70 - 130	<0.20	ug/L		
7166181	Total Xylenes	2021/01/26					<0.20	ug/L		
7166181	trans-1,2-Dichloroethylene	2021/01/26	104	70 - 130	103	70 - 130	<0.50	ug/L	NC	30
7166181	trans-1,3-Dichloropropene	2021/01/26	111	70 - 130	102	70 - 130	<0.40	ug/L		
7166181	Trichloroethylene	2021/01/26	99	70 - 130	100	70 - 130	<0.20	ug/L	1.8	30
7166181	Trichlorofluoromethane (FREON 11)	2021/01/26	90	70 - 130	90	70 - 130	<0.50	ug/L		
7166181	Vinyl Chloride	2021/01/26	94	70 - 130	92	70 - 130	<0.20	ug/L	NC	30
7167399	F2 (C10-C16 Hydrocarbons)	2021/01/26	104	60 - 130	109	60 - 130	<100	ug/L	NC	30
7167399	F3 (C16-C34 Hydrocarbons)	2021/01/26	104	60 - 130	108	60 - 130	<200	ug/L	NC	30

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7167399	F4 (C34-C50 Hydrocarbons)	2021/01/26	107	60 - 130	110	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).

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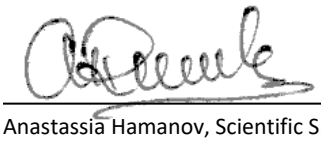
BV Labs Job #: C116347
Report Date: 2021/02/03

WSP Canada Inc
Client Project #: 201-11808-01
Site Location: REBECCA ST., OAKVILLE
Sampler Initials: DW

VALIDATION SIGNATURE PAGE

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



Anastassia Hamanov, Scientific Specialist

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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20-Jan-21 16:00

Ashton Gibson

C116347

URE ENV-562

Presence of Visible Particulate/Sediment

Maxxam Analytics
CAM FCD-01013/5

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

Bottle Types

	Sample ID	All	Inorganics					Organics										Hydrocarbons							Volatiles				Other
			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 Vial4	F2-F4 1 of 2	F2-F4 2 of 2	F4G	VOC Vial 1	VOC Vial 2	VOC Vial 3	VOC Vial 4	
1	BH20-1	S																										
2	BH20-2	1S																										
3	BH20-4	1S																										
4	QAQC-1	S																										
5																												
6																												
7																												
8																												
9																												
10																												

Comments: Except all DISM, CRV 1 and DHG Bottles

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

Recorded By: (signature/print) Fraser Brazeau

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

CHAIN OF CUSTODY RECORD

Page of

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#23879 WSP Canada Inc	Company Name:	Randy Fortado	Quotation #:	B62738	BV Labs Job #:	Bottle Order #:
Attention:	Accounts Payable	Attention:	WSP	P.O. #:			809079
Address:	51 Constellation Court Toronto ON M9W 1K4	Address:	2 International Blvd. Toronto	Project:	201-11908-01	COC #:	Project Manager:
Tel:	(416) 798-0065 Fax: (905) 550-2288	Tel:		Project Name:	Rebecca St. Oakville	C#809079-01-01	Ashton Gibson
Email:	payables.ontario@wsp.com	Email:	randy.fortado@wsp.com	Site #:			
				Sampled By:	DW		

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

Regulation 153 (2011)	Other Regulations	Special Instructions
☐ Table 1 ☑ Res/Park ☐ Medium/Fine	☐ CCME ☐ Sanitary Sewer Bylaw	
☑ Table 2 ☐ Ind/Comm ☑ Coarse	☐ Reg 558 ☐ Storm Sewer Bylaw	
☐ Table 3 ☐ Agri/Other ☑ For RSC	☐ MISA Municipality	
☐ Table	☐ PWQO ☐ Reg 406 Table	
	☐ Other	

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

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

Turnaround Time (TAT) Required:

Please provide advance notice for rush projects

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

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

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr VI	O Reg 153 Metals & Inorganics Pkg (Mn)	O Reg 153 VOCs by HS & F1-F4	# of Bottles	Comments
1		BH20-1	Jan 20/21	pm	GW		✓	✓	5	Very Silty
2		BH20-2	↓	↓	↓	✓	✓	✓	10	
3		BH20-4				✓	✓	✓	10	
4		QAQC-1						✓	5	
5										
6		Trip Blank	—	—	—			✓	3	
7										
8										
9										
10										

20-Jan-21 16:00
Ashton Gibson
C116347

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only				
Derek Warnar	21/01/20	3:57pm	E/ALEXANDRA FOBAR	2021/01/20	16:00		Time Sensitive	Temperature (°C) on Recei	Custody Seal Present	Yes	No
Dwt								5/4/4 2.8 ICE	Intact		

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

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

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

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

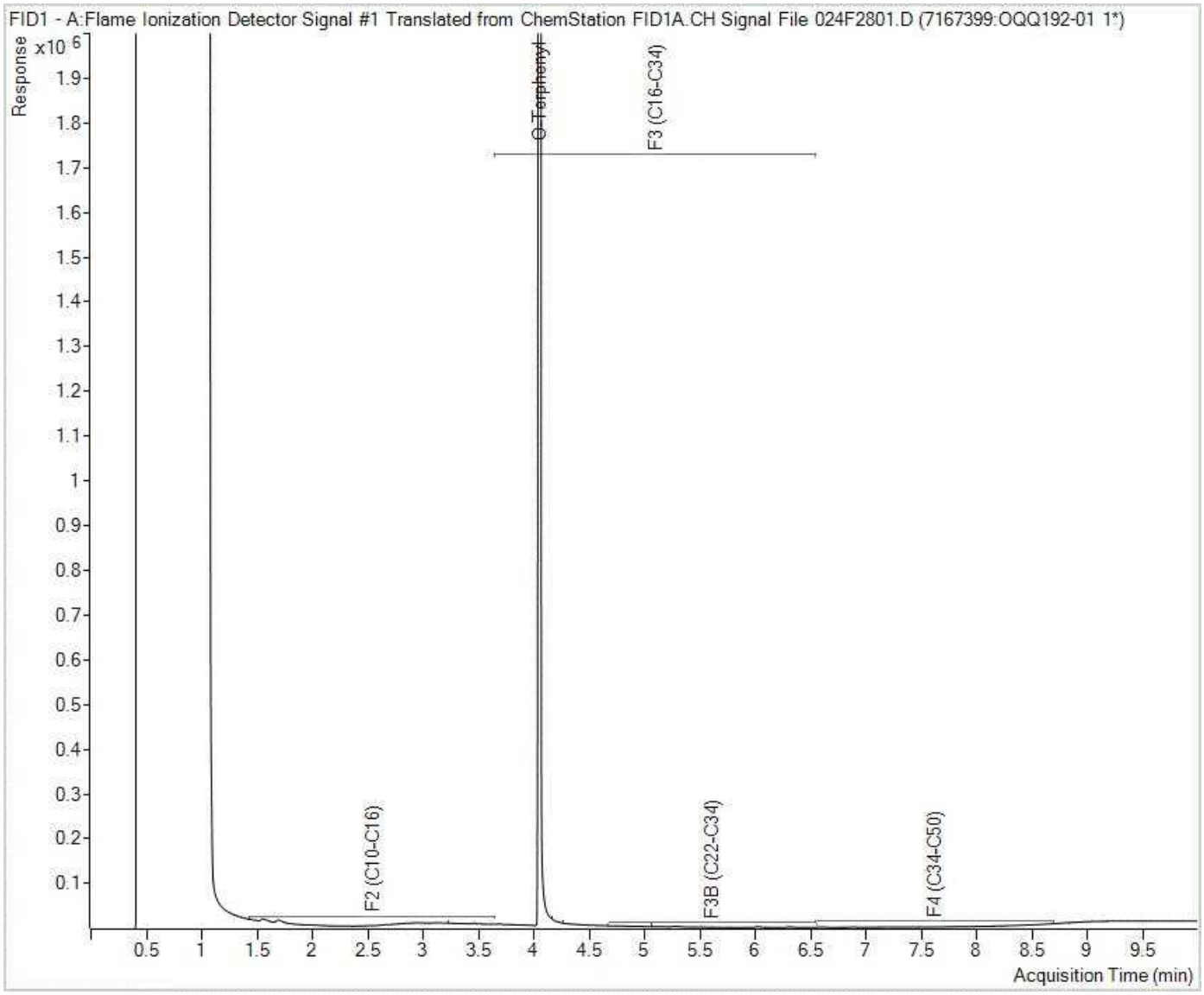
White: BV Labs Yellow: Client

Bureau Veritas Canada (2019) Inc.

BV Labs Job #: C116347
Report Date: 2021/02/03
BV Labs Sample: OQQ192

WSP Canada Inc
Client Project #: 201-11808-01
Project name: REBECCA ST., OAKVILLE
Client ID: BH21-1

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

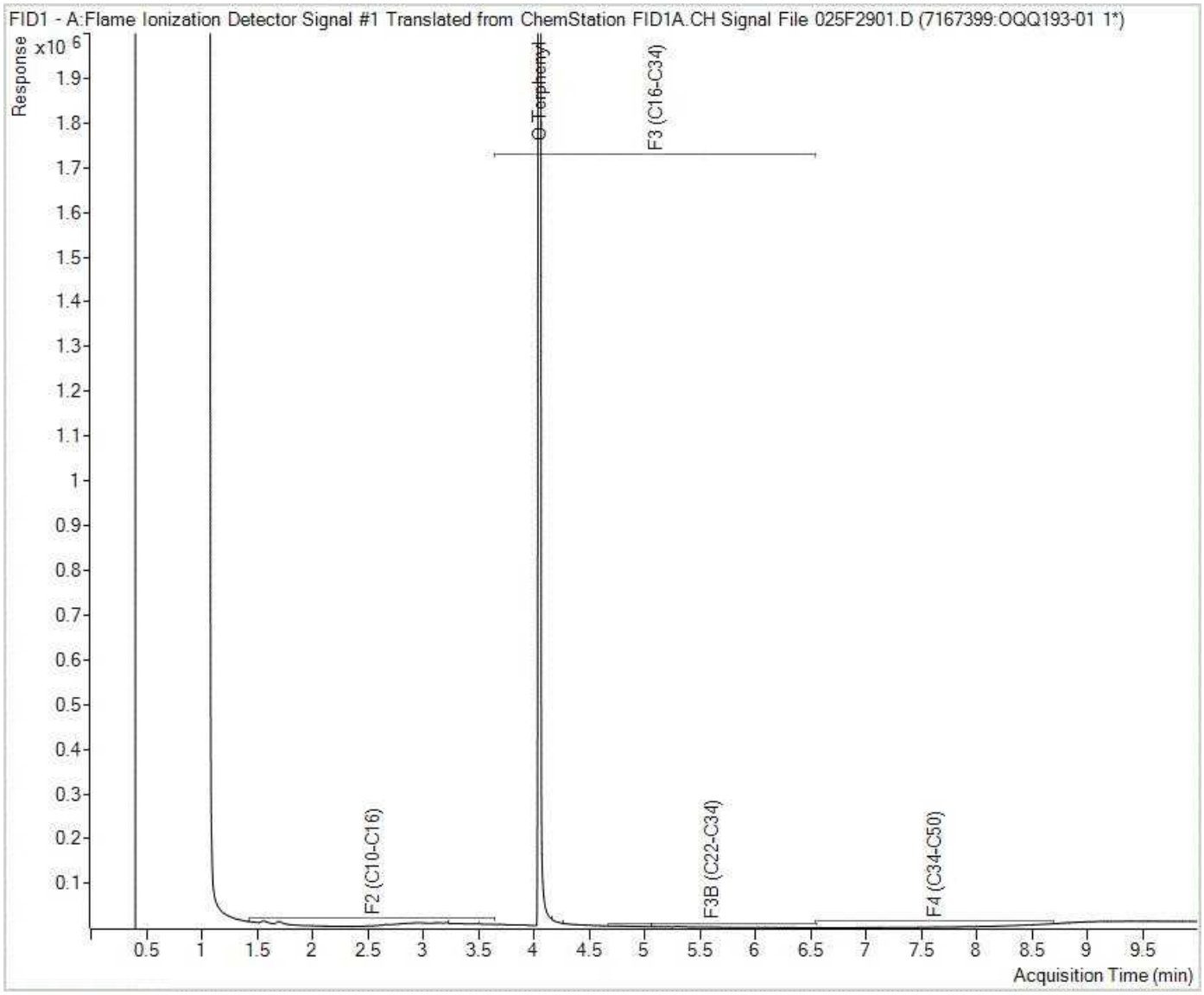


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C116347
Report Date: 2021/02/03
BV Labs Sample: OQQ193

WSP Canada Inc
Client Project #: 201-11808-01
Project name: REBECCA ST., OAKVILLE
Client ID: BH21-2

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

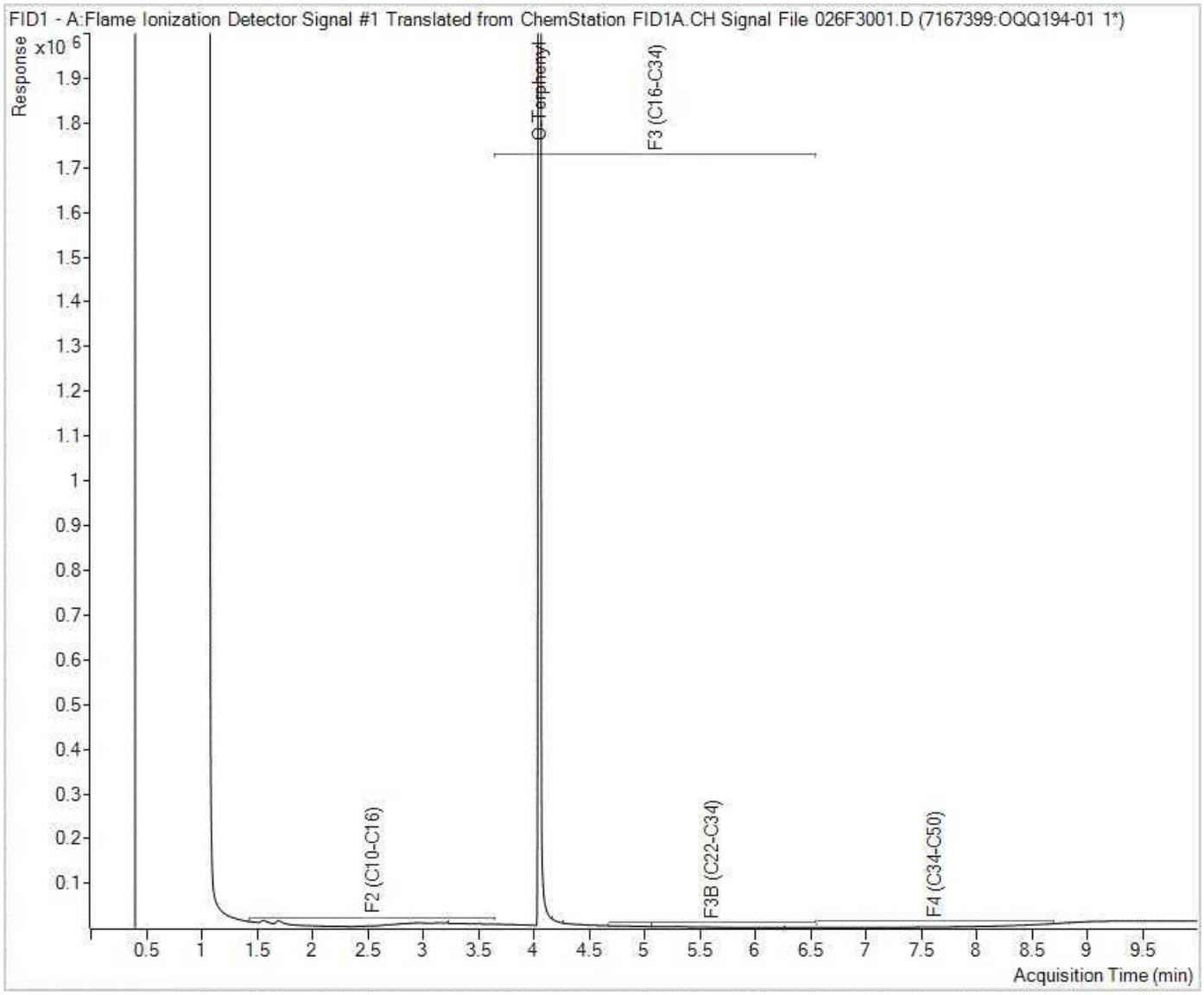


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C116347
Report Date: 2021/02/03
BV Labs Sample: OQQ194

WSP Canada Inc
Client Project #: 201-11808-01
Project name: REBECCA ST., OAKVILLE
Client ID: BH21-4

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

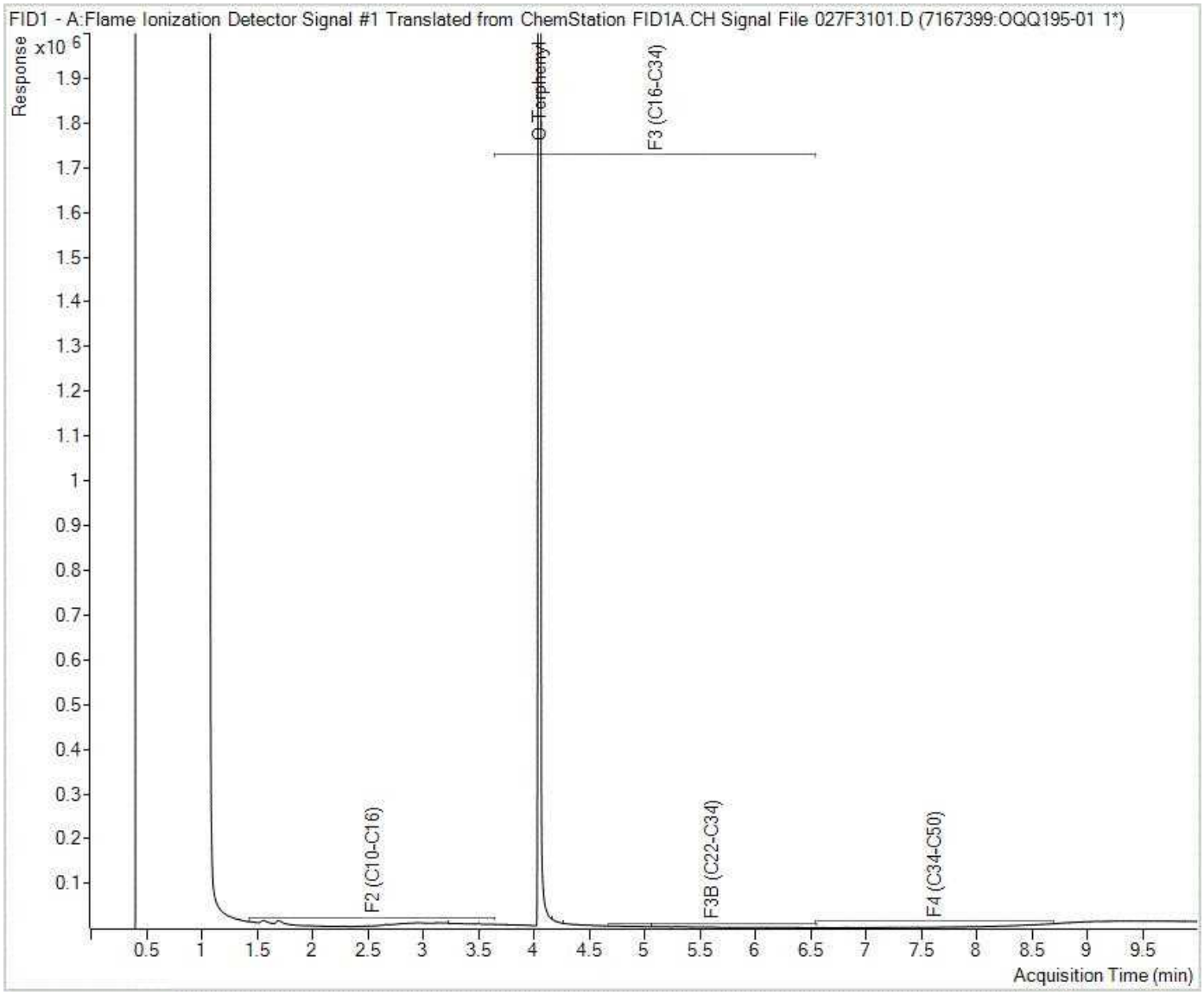


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C116347
Report Date: 2021/02/03
BV Labs Sample: OQQ195

WSP Canada Inc
Client Project #: 201-11808-01
Project name: REBECCA ST., OAKVILLE
Client ID: QAQC-1

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.

BV Labs Job #: C116347
Report Date: 2021/02/03

WSP Canada Inc
Client Project #: 201-11808-01
Site Location: REBECCA ST., OAKVILLE
Sampler Initials: DW

Exceedance Summary Table – Reg153/04 T2-GW-C

Result Exceedances

Sample ID	BV Labs ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						

The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to applicable regulatory guidelines.

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