



Azure Group

**PHASE TWO
ENVIRONMENTAL SITE ASSESSMENT
RECORD OF SITE CONDITION STANDARD**

**3016, 3020, 3026, 3032 & 3034 KIRWIN AVENUE AND
3031 LITTLEJOHN LANE
MISSISSAUGA, ONTARIO**

**PREPARED FOR DVB REAL ESTATE INVESTMENTS
INC. C/O WESTON CONSULTING**

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**PROJECT NO. 2012-001
DATE JANUARY 7, 2021**



GLOSSARY OF ABBREVIATIONS

ENVIRONMENTAL MINISTRY TERMS

ESA – Environmental Site Assessment
EPA – Environmental Protection Act
RSC – Record of Site Condition
MECP – Ministry of the Environment, Conservation and Parks
MOE – Ministry of the Environment (name of Ministry prior to 2015)
PCA – Potentially Contaminating Activity
APEC – Areas of Potential Environmental Concern
MNR – Ontario Ministry of Natural Resources
OGS – Ontario Geological Society
ACMs – Asbestos-containing materials
PCBs – Polychlorinated Biphenyl
AST – Above-ground Storage Tank
UST – Underground Storage Tank
CSM – Conceptual Site Model
ANSI – Areas of Natural or Scientific Interest
COPC – Contaminants of Potential Concern
WWIS – Water Well Information System
OBM – Ontario Base Map
SCC – Standards Council of Canada
CALA – Canadian Association for Laboratory Accreditation Inc.
QA/QC – Quality Assurance/Quality Control



GLOSSARY OF ABBREVIATIONS

MEASUREMENT OR CHEMICAL TERMS

VOCs – Volatile Organic Compounds
PHCs – Petroleum Hydrocarbons, Fractions 1-4
PAHs – Polycyclic Aromatic Hydrocarbons
BTEX – Benzene, Toluene, Ethylbenzene and Xylenes
BH – Borehole
MW – Monitoring Well
ppm – parts per million
mbgs – metres below ground surface
SAR – Sodium Adsorption Ratio
EC – Electrical Conductivity
mamsl – metres above mean sea level
ml/min – millilitres per minute
PID – Photo-Ionization Detector
LEL – Lower Explosive Limit
LNAPL – Light Non Aqueous Phase Liquids
DNAPL – Dense Non Aqueous Phase Liquids
CFCs – Chlorofluorocarbons
IFS – Infrared Sensor
µS/cm – micro Siemens per centimetre
ORP – Oxidation-Reduction Potential
DO – Dissolved Oxygen
RPD - Relative Percent Differences



EXECUTIVE SUMMARY

Azure Group Inc. (Azure) was retained by DVB Real Estate Investments Inc. C/O Weston Consulting (the Client) to conduct a Phase Two Environmental Site Assessment (ESA) on a roughly rectangular-shaped parcel of land, located at the municipal address of 3016, 3020, 3026, 3032 & 3034 Kirwin Avenue and 3031 Littlejohn Lane, Mississauga, Ontario ('Subject Property' and 'Phase Two Property'). For the purpose of this report, we have referenced Kirwin Avenue as to the east of the Subject Property, to be generally oriented in a north-south direction.

At the time of the site reconnaissance, the Subject Property was a roughly rectangular shaped parcel of land to the east of Kirwin Avenue in the City of Mississauga. At the time of the site reconnaissance, the Subject Property consisted of a vacant property with some asphalt paved areas from the former residential dwellings on the east portion, and vegetated areas on the west portion.

We understand that the Phase Two ESA has been requested by the Client as part of the future redevelopment and the City of Mississauga's development application requirements. Azure was provided with the following previous environmental reports:

- "Phase One Environmental Site Assessment Revised, Vacant Property, 3016, 3020, 3026 and 3032 Kirwin Avenue and 3031 Littlejohn Lane, Mississauga, Ontario" Project No. 20479-001, prepared by OHE Consultants, prepared for Nyx Capital Corp., dated October 13, 2017; and
- "Phase Two Environmental Site Assessment, Vacant Property, 3016, 3020, 3026 and 3032 Kirwin Avenue and 3031 Littlejohn Lane, Mississauga, Ontario" Project No. 20479-001, prepared by OHE Consultants, prepared for Nyx Capital Corp., dated October 13, 2017.

In addition, Azure understands that a Record of Site Condition (RSC No. 224283) had been filed for the Subject Property by OHE Consultants on February 21, 2018, and certified on October 6, 2017.

A residential development is being proposed for the Subject Property, and the previous RSC filed for the Subject Property was filed for residential property use. The Subject Property has been vacant with no building structures since October 2017. Therefore, there is no change to a more sensitive land use, and a Record of Site Condition (RSC) filing is not required. The current investigation report was written in accordance with Ontario Regulation (O. Reg.) 153/04, as amended by O. Reg. 366/05, O. Reg. 66/08, O. Reg. 511/09, O. Reg. 245/10, O. Reg. 179/11, O. Reg. 269/11, O. Reg. 333/13, O.Reg. 407/19 and O.Reg. 274/20, hereinafter referred to as O. Reg. 153/04 as defined under the Environmental Protection Act (EPA).



Phase Two Investigation Details

The Phase Two ESA was designed in order to investigate the Areas of Potential Environmental Concerns (APECs) identified by Azure in a previous Phase One ESA Update (Dated December 22, 2020):

APEC 1: Potential impact from the fill materials of unknown quality from previous building structures at the eastern portion of the Subject Property;

APEC 2: Potential impact from the current dry cleaner (131 Dundas Street) to the south of the Subject Property;

APEC 3: Potential impact from the current auto service garage (135 Dundas Street East) with aboveground storage tanks to the southeast of the Subject Property.

The scope of work consisted of advancing three (3) boreholes installed as monitoring wells at the Subject Property for environmental investigation purposes in order to investigate the surficial and subsurface soils in the vicinity of the APECs. All sampling was done in accordance to O.Reg 153/04, including applicable duplicate sampling.

The borehole drilling program was conducted on December 9, 2020. Groundwater was monitored at the monitoring well locations on December 11 and 23, 2020.

Soil samples from each borehole were collected and submitted for laboratory analysis of concentrations of the chemical parameters identified in our Phase Two ESA. The rationale for the selection of the borehole/monitoring well locations is presented in the table below:

Areas of Potential Environmental Concerns (APECs)	Borehole / Monitoring Well ID
APEC 1: Potential impact from the fill materials of unknown quality from previous building structures at the eastern portion of the Subject Property.	BH1, BH3
APEC 2: Potential impact from the current dry cleaner (131 Dundas Street) to the south of the Subject Property.	BH2
APEC 3: Potential impact from the current auto service garage (135 Dundas Street East) with aboveground storage tanks to the southeast of the Subject Property.	BH1

A summary of soil and groundwater samples (including QA/QC samples) to be submitted is presented in the Table below:



Soil Sample (including QA/QC Samples)

Borehole / Monitoring Well	Metals and/or Inorganics	PHCs & BTEX	VOC	PAH
BH1	1	1	1	1
BH2	1	1	1	-
BH3	1	-	-	-
Duplicate Soil Sample	-	1	1	-

Groundwater Sample (including QA/QC Samples)

Borehole / Monitoring Well	Metals and/or Inorganics	PHCs & BTEX	VOC	PAH
MW1	1	1	1	1
MW2	-	1	1	-
MW3	1	-	-	-
Duplicate GW Sample	-	1	1	-
Trip Blank	-	-	1	

Based on the information regarding the Subject Property from the Phase One ESA Update and Phase Two ESA investigation, Azure determined the applicable site condition standards for the Subject Property was the Table 2, Full Depth Generic Site Condition Standards for Use in a Potable Groundwater Condition for Residential/Parkland/Institutional property use and for coarse textured soils as published in the “Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act” (EPA), April 15, 2011 (referred to as the applicable MECF Standards). It should be noted that a response from the Regional Municipality of Peel with regards to the permission to apply the Non-Potable Ground Water site condition for the Subject Property had not been received as of the writing of this report.

A review of the analytical test results of soil samples indicated that the tested parameters at the test locations met the applicable MECF Standard.

A review of the groundwater sample MW2 from the BH2 monitoring well location had a concentration of 760 µg/L which exceeded the applicable MECF Table Standard of 500 µg/L. The laboratory certificate of analysis indicated that this groundwater sample was noted to contain visible sediment. The organic material in sediment of the water sample would be biased due to the presence of sediment. In addition, the remaining fractions PHC F1, F2 and F4 had measured concentrations of <25 µg/L, <100 µg/L and <250 µg/L, respectively, which were below detection limits with no distribution within the other fraction groups. Therefore, Azure believes that this groundwater sample was a false positive. Azure conducted an additional groundwater monitoring and sampling round for the monitoring well BH2 on December 23, 2020 to verify the concentration of the PHC parameters in this monitoring well location. The groundwater sample MW2-2 and its duplicate sample DUPW-2 had a measured concentration of <250 µg/L, which met the applicable MECF Standard.

Based on the findings of the Phase Two ESA, it is our opinion that the property is suitable for the proposed development. No further environmental investigation is recommended at this time.



The Executive Summary statements are subject to the same limitations included in the Closure, Section 7.0, and are to be read in conjunction with the rest of this report. The full conclusions can be found in Section 6.0 of this report.



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1.0 INTRODUCTION

Azure Group Inc. (Azure) was retained by DVB Real Estate Investments Inc. C/O Weston Consulting (the Client) to conduct a Phase Two Environmental Site Assessment (ESA) on a roughly rectangular-shaped parcel of land, located at the municipal address of 3016, 3020, 3026, 3032 & 3034 Kirwin Avenue and 3031 Littlejohn Lane, Mississauga, Ontario ('Subject Property' and 'Phase Two Property'). For the purpose of this report, we have referenced Kirwin Avenue as to the east of the Subject Property, to be generally oriented in a north-south direction.

This Phase Two ESA was completed in accordance with *Ontario Regulation 153/04, as amended (O. Reg. 153/04) (including amendments up to O. Reg. 274/20 – Record of Site Condition (as amended))*, and a Record of Site Condition (RSC) can be filed with the Ontario Ministry of Environment, Conservation and Parks (MECP), if necessary. The Phase Two ESA was also conducted in accordance with CSA Standards Z768-01 (R2016).

1.1 Site Description

The Phase Two Property consists of a roughly rectangular-shaped parcel of land, located at the municipal address of 3016, 3020, 3026, 3032 & 3034 Kirwin Avenue and 3031 Littlejohn Lane, Mississauga, Ontario, Ontario. The following details regarding the Phase Two Property are provided below:

Subject Property Description	
Municipal Address	3016, 3020, 3026, 3032 & 3034 Kirwin Avenue and 3031 Littlejohn Lane, Mississauga, Ontario
Property Identification Number (PIN)	13157-0071 (LT) : 3016 Kirwin Avenue 13157-0072 (LT) : 3020 Kirwin Avenue 13157-0073 (LT) : 3026 Kirwin Avenue 13157-0074 (LT) : 3032 Kirwin Avenue 13157-0055 (LT) : 3034 Kirwin Avenue and 3031 Littlejohn Lane
Legal Description	13157-0071 (LT): LT 27 PL C 14 TORONTO ; MISSISSAUGA 13157-0072 (LT): LT 28 PL C 14 TORONTO; CITY OF MISSISSAUGA 13157-0073 (LT): LT 29 PL C 14 TORONTO; CITY OF MISSISSAUGA 13157-0074 (LT): LT 30 PL C 14 TORONTO ; MISSISSAUGA 13157-0055 (LT): PT LT 15, CON 1 NDSTT & PT LT 5, EHS, "PL TOR-12", TORONTO, AS IN VS71301, EXCEPT VS74671 AND PL RD67; T/W VS71301; "AMENDED 1999/05/28, LAND REGISTRAR #17"; TOGETHER WITH AN EASEMENT AS IN VS74671; TOGETHER WITH AN EASEMENT AS IN VS74672; CITY OF MISSISSAUGA
Site Area	0.64 hectares (1.58 acres)
UTM Coordinates for Approximate Centroid of Subject Property	611,887.22 m E, 4,826,542.73 m N (Utilizing a 1983 North American Datum, and currently zoned as 17T)



1.1.1 Ownership Details

The Phase Two Property is part of Lots 27 to 30 Registered Plan NO. C-14 and Part of Lot 5 Registered Plan TOR-12 and Part of Lot 15 Concession 1, North of Dundas Street. A survey plan was provided to Azure and is included in the Appendix.

At the time of the Phase Two ESA, the Subject Property was owned by DVB Real Estate Investments Inc. as per the parcel registers. The contact information of the Client is as follows:

Client Information:

Company Name	DVB Real Estate Investments Inc.
Company Address	4918 King Street, P.O. Box 1194 Beamsville, Ontario L0R 1B0
Company Contact Name	Mr. John Fracchioni
Company Contact Email	JohnF@fbhgroup.ca

1.2 Selection of Site Condition Standards

In accordance with the requirements of the amended O. Reg. 153/04, Azure selected applicable site condition standards. The rationale for the selection of these site condition standards is provided in this section and the reasoning to support the determination of the appropriate site condition standards is presented below.

1.2.1 Environmentally Sensitive Areas

The Subject Property was not considered to be environmentally sensitive based on the following details:

- The Subject Property was neither located within an area of natural significance nor adjacent to such an area within 30 m from the Subject Property boundaries, as defined below:
 - A provincial park designated by a regulation under the Provincial Parks Act;
 - A conservation area established under the Public Lands Act;
 - An ANSI identified by the MNR as having provincial significance;
 - A wetland identified by the MNR as having provincial significance;
 - An area designated by the municipality in its Official Plan as environmentally significant, however expressed, including designations of environmentally sensitive areas, being of environmental concern and being ecologically significant;
 - An area designated as an escarpment natural area or an escarpment protection area by the Niagara Escarpment Plan under the Niagara Escarpment and Development Act;
 - A endangered or threatened species habitat identified by the MNR;
 - A property within an area designated as a natural core area or natural linkage area within the area to which the Oak Ridges Moraine Conservation Plan under the Oak Ridges Moraine Conservation Act, 2001, applies;
 - The soil pH is within 5 and 9 for subsurface soils;



- The Subject Property is not a “shallow soil property”;and
- Currently, there is no permanent watercourse or water body located at the Subject Property or within 30 m from the Subject Property boundaries.

1.2.2 Land Use

Due to the plans for development of the Subject Property to residential, the residential/parkland/institutional standards shall be applied to determine the sites' suitability for the proposed development.

1.2.3 Soil Grain Size Analysis

The grain size analysis conducted indicated that the soils on the Subject Property were comprised of coarse textured soils. Based on the grain size analyses, the most appropriate classification of the soils is coarse textured soils.

1.2.4 Potable Water

Based on the review of the well records in the MECP Well Records Database and ERIS report; there were nine (9) well records within the Phase One Property and Phase One Study Area. There was one (1) monitoring well record at the Subject Property. There were five (5) monitoring well records and three (3) well records with no description within the Phase One Study Area. No domestic well records were indicated at the Subject Property or at the neighbouring properties within the Phase One Study Area.

A request to update the permission of the non-potable groundwater usage was submitted to the Regional Municipality of Peel (Peel Region) on December 8, 2020. However, a response from the Regional Municipality of Peel has not been received as of the writing of this report. As a precautionary measure, Azure utilized the more stringent Table 2 SCS for the comparison criteria.

After a review of the RSC (# 224283), The Table 3 SCS were utilized for the purposes of site characterization. Therefore in the event that the Region of Peel provides a sufficient response, it is likely that utilization of the less stringent Table 3 Criteria is possible, if deemed necessary.

1.2.5 Applicable Site Condition Standards

Based on the above information and assumptions, the restoration criteria for this Subject Property corresponded to residential/parkland/institutional land use for coarse textured soil using the generic site condition standards in a potable ground water condition (Table 2, O. Regulation 153/04) (hereinafter referred to as the applicable MECP Standards for the Subject Property) at this time.



2.0 BACKGROUND INFORMATION

2.1 Physical Setting

At the time of the site reconnaissance, the Subject Property was a roughly rectangular shaped parcel of land to the east of Kirwin Avenue in the City of Mississauga. At the time of the site reconnaissance, the Subject Property consisted of a vacant property with some asphalt paved areas from the former residential dwellings on the east portion, and vegetated areas on the west portion.

A site location plan is shown as Figure No. 1, in Appendix A.

The physical setting of the Subject Property was also described in further detail in the Phase One ESA report, prepared by Azure, provided under separate cover. A summary of the site topography, hydrology and regional geology is described below.

2.1.1. Site Topography, Hydrology, and Regional Geology

The Ontario Ministry of Natural Resource and Forestry (MNRF) Topographic Map was reviewed for the Subject Property and Phase One Study Area. The map indicates that the Subject Property is relatively flat; with the grade descend slightly towards the southwest.

The surficial geology map containing information such as point features such as drumlins and glacial striae and line features such as eskers, shore bluffs and moraines was reviewed for the Subject Property. The information reveals that the Subject Property is underlain by coarse-textured glaciolacustrine deposits consisting of sand, gravel, minor silt and clay foreshore and basinal deposits.

The bedrock geology map, which contains information about the solid rock underlying the Province of Ontario, was reviewed. The information reveals that the Subject Property is underlain by shale, limestone, dolostone, siltstone of the Georgian Bay Formation; Blue Mountain Formation; Billings Formation; Collingwood Member; Eastview Member.

2.2 Previous Environmental Investigations

The objective of the Phase Two ESA was to determine the soil quality at the Subject Property, as related to the following Areas of Potential Environmental Concerns (APECs) identified in our Phase One ESA (dated December 22, 2020):

APEC 1: Potential impact from the fill materials of unknown quality from previous building structures at the eastern portion of the Subject Property;

APEC 2: Potential impact from the current dry cleaner (131 Dundas Street) to the south of the Subject Property;



APEC 3: Potential impact from the current auto service garage (135 Dundas Street East) with aboveground storage tanks to the southeast of the Subject Property.

Therefore, the scope of the current Phase Two ESA was to thoroughly investigate all APECs identified by Azure in the aforementioned Phase One ESA.

3.0 SCOPE OF SUBSURFACE INVESTIGATION

3.1 Overview of the Site Investigation

This Phase Two ESA was carried out for the Subject Property in general accordance with O. Reg. 153/04, as amended, to assess the surficial & subsurface soil conditions on-site in the vicinity of the APECs identified by Azure in a previously conducted Phase Two ESA.

3.3.1 Scope of Work

The scope of work for the Phase Two ESA consisted of the following:

- Locate the underground and overhead utilities;
- Conduct a total of three (3) boreholes at depths ranging from 6.1 m below existing grade surface (mbgs) to 6.8mbgs for the environmental investigation;
- Collect representative soil samples from the boreholes;
- Undertake field examination of the retrieved soil samples for visual and olfactory evidence of potential contamination;
- Undertake soil vapour measurements for the retrieved soil samples using a combustible gas detector (RKI Eagle 2) in methane elimination mode, calibrated with hexane and isobutylene and having a minimum detection level of 1 ppm (parts per million by volume);
- Install monitoring wells in three (3) of the boreholes for groundwater monitoring purposes only;
- Conduct two groundwater monitoring rounds;
- Carry out analytical testing program on selected soil samples and groundwater samples including quality assurance/quality control (QA/QC samples) for one or more of the following parameters: Petroleum Hydrocarbons (PHCs), Volatile Organic Compounds (VOCs), Polycyclic Aromatic Hydrocarbons (PAHs), and Metals and/or Inorganic (M&I) parameters;
- Conduct surveying at the Subject Property to determine the ground elevation of the boreholes and monitoring wells in metres above sea level (masl).
- Review analytical testing results of submitted soil samples using applicable Site Condition Standards; and
- Prepare a Phase Two ESA report containing the findings of the investigation.



3.2 Media Investigated

The media investigated during this Phase Two ESA included soil and groundwater.

There is no surface water or sediment on the Subject Property. As such, no surface water or sediment samples were collected.

3.3 Phase Two Conceptual Site Model

The Phase Two Conceptual Site Model (CSM) for the Subject Property is included in the Appendix of this report.

3.4 Sampling and Analysis Plan

Soil samples from each borehole were collected and submitted for laboratory analysis of concentrations of the chemical parameters identified in our Phase Two ESA. The rationale for the selection of the borehole/monitoring well locations is presented in the table below:

Areas of Potential Environmental Concerns (APECs)	Borehole / Monitoring Well ID
APEC 1: Potential impact from the fill materials of unknown quality from previous building structures at the eastern portion of the Subject Property.	BH1, BH3
APEC 2: Potential impact from the current dry cleaner (131 Dundas Street) to the south of the Subject Property.	BH2
APEC 3: Potential impact from the current auto service garage (135 Dundas Street East) with aboveground storage tanks to the southeast of the Subject Property.	BH1

A summary of soil and groundwater samples (including QA/QC samples) to be submitted is presented in the Table below:

Soil Sample (including QA/QC Samples)

Borehole / Monitoring Well	Metals and/or Inorganics	PHCs & BTEX	VOC	PAH
BH1	1	1	1	1
BH2	1	1	1	-
BH3	1	-	-	-
Duplicate Soil Sample	-	1	1	-



Groundwater Sample (including QA/QC Samples)

Borehole / Monitoring Well	Metals and/or Inorganics	PHCs & BTEX	VOC	PAH
MW1	1	1	1	1
MW2	-	1	1	-
MW3	1	-	-	-
Duplicate GW Sample	-	1	1	-
Trip Blank	-	-	1	

The borehole locations are included in Figure No. 2 in Appendix A. The full sampling and analysis plan for the Phase Two ESA is included in Appendix D.

3.4.1 Deviations

No deviations to the sampling and analysis plan were made based on field observations during the assessment.

3.4.2 Impediments

No physical impediments or denial of access were encountered during the implementation of the sampling and analysis plan.

4.0 SUBSURFACE INVESTIGATION METHODOLOGY

4.1 General

The investigation methodology was conducted in general accordance with O. Reg. 153/04 (including amendments up to O. Reg. 274/20) RSCs, Part XV.1 of the EPA, the former Ministry of the Environment and Energy (now MECP) Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario, December 1996 document (MECP Sampling Guideline), and Azure standard field procedures (collectively referred to as Standard Protocols).

4.2 Borehole Investigation

Azure Group Inc. retained Altech Drilling & Investigative Services (Altech) of Cambridge, Ontario, to advance three (3) boreholes (BH1, BH2 and BH3) on December 9, 2020. Altech utilized a Diedrich D-120 in order to obtain soil samples and to assist with the installation of monitoring wells on-site.

4.2.1 Soil Sampling

Soil samples from each borehole were obtained continuously using a 0.76 m spilt spoon sampler driven into the ground via a percussion drill head. Non-dedicated equipment and samplers were washed with Alconox powder, and deionized and distilled water before each use. Subsurface conditions encountered in the boreholes were logged by Azure personnel at the time of drilling.



Soil samples were recovered from the boreholes at regular intervals, visually classified, and collected in laboratory prepared bottles, preserved at temperature below 10°C and submitted for laboratory analyses. A portion of each soil sample was placed in a disposable plastic bag and analyzed in the field for petroleum derived headspace vapour concentrations (where possible) using an RKI Model Eagle 2 portable gas monitor equipped with a dual sensor for hydrocarbons (i.e., in the ppm and LEL range) and for volatile compounds (i.e., PID sensor in the ppm range). The hydrocarbon sensor was set to methane elimination mode and calibrated with hexane (for petroleum-derived vapours) and the PID sensor was calibrated with isobutylene (for solvent-derived vapours).

Soil samples were recovered, classified, collected and preserved in accordance with Standard Protocols to minimize the potential for cross-contamination. Disposable nitrile gloves were worn and changed between samples, and sampling tools were washed with Alconox Powder detergent and rinsed with Deionized and Distilled water prior to use and between samples.

Following the collection of soil samples, the boreholes were completed using 100 mm solid stem augers to facilitate the installation of monitoring wells.

Geologic descriptions of the subsurface soils encountered at the Subject Property are discussed in Section 5.1; the borehole logs are presented in Appendix B.

4.3 Monitoring Well Investigation

Three (3) monitoring wells were installed for groundwater monitoring and sampling purposes. The monitoring well installation details are summarized in the table below:

Monitoring Well I.D.	Bottom of Monitoring Well (mbgs)	Monument Casing Height (mbgs)	Monitoring Well Depth (mbgs)	Screen Length (m)	Screen Interval (m)	Filter Pack (m)	Bentonite Plug (m)
BH1	7.62	0.82	6.8	3	3.8 - 6.8	3.8 - 6.8	0.0 - 3.8
BH2	7.12	1.06	6.06	3	3.06 - 6.06	3.06 - 6.06	0.0 - 3.06
BH3	7.69	1.12	6.57	3	3.57 - 6.57	3.57 - 6.57	0.0 - 3.57

The logs of well construction can be found in Appendix B (following Azure's borehole logs).

The installed monitoring wells at BH2 and BH3 locations were monitored on December 11, 2020. The water levels are summarized in the table below:



Monitoring Well No.	Ground Elevation (masl)	Measured Groundwater Level		Field Observations		
		December 11, 2020				
		Depth (mbgs)	Elevation (m)	Odour	Colour	Sheen or Free Product
BH1	113.13	4.46	108.67	None	Silty and Cloudy	None
BH2	112.56	4.86	107.7	None	Silty and Cloudy	None
BH3	113.31	4.48	108.83	None	Silty and Cloudy	None

4.3.1 Groundwater Sampling

The initial groundwater sampling was conducted on December 11, 2020, after purging and allowing the water to stabilize. The groundwater purging and sampling activities were carried out using dedicated low-density polyethylene tubing. Groundwater samples were collected into laboratory-supplied containers, prepared with preservative for the analysis being conducted. The samples scheduled for analysis of metals were passed through a 0.45 micron filter as part of the sampling process.

The above noted analyses on the groundwater samples were conducted by ALS Environmental (ALS) of Waterloo, Ontario. ALS is accredited by the SCC in co-operation with CALA.

4.4 Field Screening Measurements

As noted in Section 4.2 – Borehole Investigation, field screening of the collected soil samples were completed based on visual and olfactory evidence of impact and analyzed for petroleum- and solvent-derived headspace vapour concentrations (where possible) using an RKI Model Eagle 2, manufactured by RKI Instruments. The Eagle 2 was equipped with PID with a 10.6 eV standard lamp and calibrated on site with 100 ppm isobutylene gas for detection of solvent-derived vapours, as well as an IRS calibrated on-site with 15% LEL hexane for detection of petroleum-derived vapours. The Eagle 2 was selected for field screening purposes since it can be used to field screen for solvent derived headspace vapour concentrations from BTEX compounds, chlorinated hydrocarbons, CFCs, and some semi-volatiles, as well as petroleum-derived vapours from PHCs. The Eagle 2 is reportedly accurate to within 5% of the displayed reading or 25 ppm, whichever is greater.

Groundwater levels in the monitoring wells at the time of the drilling program and monitoring events were monitored using a Solinst Model 122 Interface Meter, which identifies the presence of product (non-conductive liquid) with a steady state light and tone and the presence of water (conductive liquid) with an intermittent tone and light. The conductive liquid must have an EC that is greater than 50 $\mu\text{S}/\text{cm}$. The conductive and non-conductive sensors have a reported



accuracy of 1/200 feet or 1.0 mm. The conductive sensor has a reported accuracy of 1/100 feet or 1.0 mm.

4.6 Laboratory Analyses

ALS Environmental (ALS) of Mississauga, Ontario, conducted all chemical analyses. ALS is a member of the Canadian Association for Laboratory Accreditation Inc. (CALA) and meets the requirements of Section 47 of O. Reg. 153/04 certifying that the analytical laboratory be accredited in accordance with the International Standard ISO/IEC 17025 and with standards developed by the Standards Council of Canada.

4.6.1 Soil

Soil samples were collected during the drilling investigation on the Subject Property and submitted for laboratory analyses of the contaminants of potential concern (COPCs).

4.6.2 Groundwater

Groundwater samples were collected during the drilling investigation on the Subject Property and submitted for laboratory analyses of the contaminants of potential concern (COPCs).

4.7 Residue Management Practices

Soil cuttings and purged groundwater were collected in soil drums and stored at the Subject Property for subsequent off-site disposal by an MECP approved waste hauler, as per the scope of work.

4.8 Elevation Surveying

Elevations of the boreholes were surveyed by Azure representative by using the elevation of a nearby catch basin. A laser survey set RL-H4C was utilized to determine the topographic elevation of each borehole/monitoring well installed.

4.9 Quality Assurance and Quality Control Measures

The Quality Assurance and Quality Control (QA/QC) Measures are conducted following the Sampling and Analysis Plan, which detailed the procedures of sample collection, storage, transportation in order to meet the requirements of O.Reg. 153/04 to properly assess the soil and groundwater quality at the Site. The QA/QC program included decontamination procedures to minimize the potential of cross-contamination, the selection of worst-case samples, and the collection of QA/QC samples. The QA/QC details are documented in Appendix C.

One (1) duplicate soil sample was collected during the drilling program and submitted for analysis of PHCs/VOCs, PAHs, and Metals & Inorganic parameters, for QA/QC purposes. In



addition, there were two (2) duplicate groundwater samples were collected during the drilling program. There were no deviations between the results and the sampling and analysis plan.

5.0 RESULTS OF THE PHASE TWO ESA

5.1 Site Geology and Stratigraphy

The surficial geology map containing information such as point features such as drumlins and glacial striae and line features such as eskers, shore bluffs and moraines was reviewed for the Subject Property. The information reveals that the Phase Two Property is underlain by coarse-textured glaciolacustrine deposits consisting of sand, gravel, minor silt and clay foreshore and basinal deposits.

The bedrock geology map, which contains information about the solid rock underlying the Province of Ontario, was reviewed. The information reveals that the Subject Property is underlain by shale, limestone, dolostone, siltstone.

During the Phase Two ESA, the main geological unit was identified to be fill (i.e. mixture of sand, rocks, gravel and cobbles) underlain by a native silty clay. The boreholes were terminated within this silty clay layer at depths ranging from 6.1 to 6.8 mbgs. Bedrock was not encountered to a maximum drilling depth of 6.8 mbgs, however, some weathered shale fragments were encountered within the silty clay layer. Geologic cross sections of the Subject Property are presented in Drawing No. 3, 4 and 5 in Appendix A.

5.2 Groundwater Monitoring

5.2.1 Groundwater Flow Direction

Based on the measured groundwater elevations, the groundwater flow direction appears to flow generally to the southwest.

5.2.2 Groundwater Horizontal Hydraulic Gradient

The horizontal hydraulic gradient for the Subject Property was determined to range from 0.032 m/m to 0.075 m/m.

5.2.3 Subsurface Non-Aqueous Phase Liquids

LNAPL/DNAPLs were not encountered in the boreholes during drilling and during monitoring, purging (development) and sampling of the monitoring wells. No petroleum odours or sheen were observed during the soil sampling and groundwater monitoring program.



5.3 Soil Results

5.3.1 Subsurface Vapour Concentrations

Headspace vapour concentrations that were measured during recovery of the soil samples during drilling are presented on the borehole logs in Appendix B.; The soil samples did not exhibit odours/staining. Soil vapour measurements were 0 ppm were recorded for the soil samples, indicating insignificant combustible gases in the soil samples retrieved from the boreholes.

No regulatory criteria for PHC- or solvent-derived soil vapour concentrations was observed. Elevated soil vapour concentrations are generally indicative of the presence of volatile combustible products, i.e., gasoline, methane, solvents and, to a lesser extent, diesel and fuel oil. Especially in the absence of visual or olfactory evidence of impact, it should be noted that elevated soil vapour concentrations may also be associated with the presence of moisture, microbial activity or decaying organic matter.

5.3.2 Soil Quality

Representative “worst case” soil sample from each borehole was selected based on the soil vapour measurements and visual and olfactory observations. The selected soil samples were submitted to the laboratory for chemical analyses of Petroleum Hydrocarbons (PHCs), Volatile Organic Compounds (VOCs), Polycyclic Aromatic Hydrocarbons (PAHs), and Metals and/or Inorganics.

The soil test results were reviewed using the Table 2, Generic Site Condition Standards for Use in a Potable Groundwater Condition for Residential/Parkland/Institutional property use and for coarse textured soils as published in the “Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act” (EPA), April 15, 2011 (referred to as the applicable MECP Standards).

Soil quality data containing results of the chemical analyses for the tested soil samples is presented in Tables 1 to 4.

The findings of the soil test results are summarized below:

Petroleum Hydrocarbons (PHCs)

Two (2) original soil samples and one (1) duplicate sample were submitted for analysis of PHCs. The results indicate that the concentration of PHC parameters in the samples meet the applicable MECP Standard.

Volatile Organic Compounds (VOCs)

Two (2) original soil samples and one (1) duplicate sample were submitted for analysis of VOCs. The results indicate that the concentration of the VOC parameters in the samples meet the applicable MECP Standard.



Polycyclic Aromatic Hydrocarbons (PAHs)

One (1) original soil sample was submitted for analysis of PAHs. The results indicated that the concentration of PAH parameters in the samples met the applicable MECP Standard.

Metals and/or Inorganics

Two (2) original soil samples were submitted for analysis of Metals and/or Inorganics. The results indicated that the concentration of Metals and/or Inorganic parameters in the samples met the applicable MECP Standard.

The pH of three (3) tested soil samples (representative samples of surface soil and subsurface soil) were found in the range of 5 to 9, which is within the limits for the use of the Generic criteria of O. Reg. 153/04, as amended.

Laboratory certificates for the soil analytical results are included in Appendix C.

5.4 Groundwater Results

5.4.1 Groundwater Quality

Groundwater samples collected from all the monitoring wells at the Subject Property were submitted to the laboratory for chemical analyses of PHCs, VOCs, PAHs and Metals and/or Inorganic parameters.

The groundwater test results were reviewed using the Table 2, Generic Site Condition Standards for Use in a Potable Groundwater Condition for All Types of Property Use and for coarse textured soils as published in the “Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act” (EPA), April 15, 2011 (referred to as the applicable MECP Standards).

Groundwater quality data containing results of the chemical analyses for the tested groundwater samples is presented in Table 5 to 8.

The Certificates of Analyses for the groundwater samples are presented in Appendix C.

The findings of the groundwater test results are summarized below:

Petroleum Hydrocarbons (PHCs)

Two (2) original groundwater samples and one (1) duplicate sample were submitted for analysis of PHCs. The results indicated that the groundwater sample MW2 from the BH2 monitoring well location had a concentration of 760 µg/L which exceeded the applicable MECP Table Standard of 500 µg/L. The laboratory certificate of analysis indicated that this groundwater sample was noted to contain visible sediment. The organic material in sediment of the water sample would be biased due to the presence of sediment. In addition, the remaining fractions PHC F1, F2 and



F4 had measured concentrations of <25 µg/L, <100 µg/L and <250 µg/L, respectively, which were below detection limits with no distribution within the other fraction groups. Therefore, Azure believes that this groundwater sample was a false positive.

Azure conducted an additional groundwater monitoring and sampling round for the monitoring well BH2 on December 23, 2020 to verify the concentration of the PHC parameters in this monitoring well location. The groundwater sample MW2-2 and its duplicate sample DUPW-2 had a measured concentration of <250 µg/L, which met the applicable MECP Standard.

The results of the remaining tested groundwater samples indicated that the concentration of the PHC parameters met the applicable MECP Standard.

Volatile Organic Compounds (VOCs)

Two (2) original groundwater samples and one (1) duplicate sample from the monitoring wells BH1 and BH2, and trip blank sample were submitted for analysis of VOCs. The results indicate that the concentration of VOC parameters in the samples met the applicable MECP Standards.

Polycyclic Aromatic Hydrocarbons (PAHs)

One (1) original groundwater sample was submitted for analysis of PAHs from monitoring well location BH1. The results indicate that the concentration of PAH parameters in the samples meet the applicable MECP Standard.

Metals and/or Inorganics

Two (2) original groundwater samples were submitted for analysis of Metals and/or Inorganics. The results indicate that the concentration of Metals and/or Inorganic parameters in the samples meet the applicable MECP Standard.

The Certificates of Analyses for the groundwater samples are presented in Appendix C.

5.6 Quality Assurance/Quality Control Results

Azure staff with experience in both intrusive field investigation techniques and the COPCs that were encountered at the Subject Property supervised and/or performed the soil and groundwater sampling under the guidance of the QP_{ESA}. As previously mentioned, the field program maintained QA/QC using all appropriate equipment-cleaning procedures and duplicate sampling. Appropriate measures (such as field staff wearing disposable gloves, using dedicated sampling equipment, decontaminating non-dedicated sampling equipment, using pre-cleaned laboratory supplied sample containers, labeling samples and completing laboratory-supplied chain of custody records) were used to ensure data quality.

Azure collected soil and groundwater samples in conformance with our Standard Operating Procedures, developed in accordance with O. Reg. 153/04, as amended.



Samples were shipped in ice-filled coolers (to maintain temperatures at less than 10°C) along with a chain of custody to an accredited laboratory for conducting required chemical testing. The laboratory performed the chemical analysis in compliance with the MECP, Laboratory Services Branch, Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the EPA, as amended.

Field Duplicate samples were collected for a minimum of 10% of the submitted samples in order to evaluate sample precision related to the analysis of all submitted soil and groundwater samples. RPDs were calculated for each compound detected if it was present in both samples of the duplicate pair, at concentrations above 5 times of the method detection limits of each parameter.

To assess any potential contamination introduced during sample transportation or from field handling procedures and/or the sampling process, one laboratory-supplied trip blank would be submitted per groundwater submission for laboratory analysis.

Field Duplicate samples were collected to evaluate sample precision related to the analysis of all submitted soil and groundwater samples. RPD calculations were determined for each compound if it was measured in both the result of the submitted sample and the corresponding duplicate sample and it was more than 5 times the method detection limit for the respective parameter.

5.6.1 Data Quality Objectives

The analytical data received from the laboratory was reviewed for the following:

- To verify samples were analyzed for the methods requested in the chain of custody;
- To verify the requested analyses were conducted as outlined in the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the EPA, as amended;
- To review any laboratory QA/QC issues with respect to laboratory duplicates, matrix spikes, spiked blanks, method blanks or surrogate; and
- Comparability of the data. Standard analytical procedures and standard units for reporting were used to ensure comparability of the data. The results obtained are comparable to industry standards as the collection and analytical techniques that followed approved documented procedures.

The laboratory certificates for the field QA/QC analytical results are included in Appendix C.

5.6.2 Standard Operating Procedures

Azure standard field procedures were developed in compliance with O. Reg. 153/04, as amended, for borehole drilling, soil sampling, field screening measurements, monitoring well installation, monitoring well development, field measurement of water quality indicators and ground water sampling (collectively referred to as Standard Protocols). These Standard Protocols were adhered to in completing the field activities for this Phase Two ESA.



In consultation with Azure field staff, other Azure team members and the laboratory, the QP^{ESA} concluded that the data met the data quality objectives of this investigation and, therefore, the overall objectives of the Phase Two ESA investigation and assessment were met.

5.6 Phase Two Conceptual Site Model

The Phase Two Conceptual Site Model is prepared based on the findings of the Phase One ESA and this Phase Two ESA.

Description and Assessment

The Phase Two Property consists of a roughly rectangular-shaped parcel of land, located at the municipal address of 3016, 3020, 3026, 3032 & 3034 Kirwin Avenue and 3031 Littlejohn Lane, Mississauga, Ontario, Ontario. The following details regarding the Phase Two Property are provided below:

Subject Property Description	
Municipal Address	3016, 3020, 3026, 3032 & 3034 Kirwin Avenue and 3031 Littlejohn Lane, Mississauga, Ontario
Property Identification Number (PIN)	13157-0071 (LT) : 3016 Kirwin Avenue 13157-0072 (LT) : 3020 Kirwin Avenue 13157-0073 (LT) : 3026 Kirwin Avenue 13157-0074 (LT) : 3032 Kirwin Avenue 13157-0055 (LT) : 3034 Kirwin Avenue and 3031 Littlejohn Lane
Legal Description	13157-0071 (LT): LT 27 PL C 14 TORONTO ; MISSISSAUGA 13157-0072 (LT): LT 28 PL C 14 TORONTO; CITY OF MISSISSAUGA 13157-0073 (LT): LT 29 PL C 14 TORONTO; CITY OF MISSISSAUGA 13157-0074 (LT): LT 30 PL C 14 TORONTO ; MISSISSAUGA 13157-0055 (LT): PT LT 15, CON 1 NDSTT & PT LT 5, EHS, "PL TOR-12", TORONTO, AS IN VS71301, EXCEPT VS74671 AND PL RD67; T/W VS71301; "AMENDED 1999/05/28, LAND REGISTRAR #17"; TOGETHER WITH AN EASEMENT AS IN VS74671; TOGETHER WITH AN EASEMENT AS IN VS74672; CITY OF MISSISSAUGA
Site Area	0.64 hectares (1.58 acres)
UTM Coordinates for Approximate Centroid of Subject Property	611,887.22 m E, 4,826,542.73 m N (Utilizing a 1983 North American Datum, and currently zoned as 17T)

Areas where Potentially Contaminating Activity Has Occurred

The Phase One ESA determined the Potentially Contaminating Activities (PCAs) at the Subject Property and in the Phase One Study Area that may contribute to Areas of Potential Environmental Concern (APECs) for the soil and groundwater condition at the Subject Property, based on records review, interviews and Site reconnaissance.

The areas of PCAs along with the corresponding list in Table 2 Schedule D of O. Reg. 153/04 are summarized below:



Based on the Phase One ESA Update research, the following potentially contaminating activities (PCAs) were evaluated to be contributing new areas of potential environmental concern (APEC) at the Subject Property:

Contributing PCA No.	PCA No. (As per Table 2 of O.Reg. 153/04)	Location and Proximity relative to Subject Property	Summary	Potential Environmental Concern (Yes/No)
1	30. Importation of Fill Materials of Unknown Quality	Subject Property	There were minor undulations at the southeastern portion of the Subject Property. These might be related to the fill materials used to fill in the basements of the former buildings at the southeastern portion of the Subject Property.	Yes, due to the presence of fill materials at the southeastern section of the Subject Property.
2	37. Operation of Dry Cleaning Equipment (where chemicals are used)	131 Dundas Street East (adjacent south)	<p>One Hour Martinizing Mary & Rosie Cleaners (Generator No. ON0494600) reportedly generated halogenated solvents (waste class 241) in 1986, 1987, 1988 and 1989.</p> <p>J&S Cleaners (Generator No. ON0494600, ON1727300) reportedly generated halogenated solvents (waste class 241) from 1992 to 2009. They also reportedly generated petroleum distillates (waste class 213) from 1999 to December 2018. They generated 473 kg of PERC, 184 L of waste water and 369 L of residue in 2005 and 2006.</p> <p>1632886 Ontario Inc. (Generator No. ON3930117) reportedly generated petroleum distillates (waste class 213) from 2010 to July 2020.</p>	Yes, due to their continued dry-cleaning operations and close proximity to the Subject Property, this is considered as an environmental concern for the Subject Property.
3	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems 28. Gasoline and Associated	135 Dundas Street East (adjacent southeast)	Various auto related businesses (L Mastromarco, OMEGA 29, J & J Gas Bar, Cooksville Service Center) were located at this property. In addition, there were active fuel oil tank records for this property. In addition, a pair of vent and filler pipes indicating the presence of an aboveground storage tank was observed on this property.	Yes, due to their continued auto service garage operations, presence of the fuel oil tank and close proximity to the Subject Property, this is considered as an environmental concern for the Subject Property.



Contributing PCA No.	PCA No. (As per Table 2 of O.Reg. 153/04)	Location and Proximity relative to Subject Property	Summary	Potential Environmental Concern (Yes/No)
	Products Storage in Fixed Tanks			

Based on the Phase One ESA Update research, the following PCAs were evaluated to be non-contributing to new APECs at the Subject Property:

Non-Contributing PCA No.	PCA No. (As per Table 2 of O.Reg. 153/04)	Location and Proximity relative to Subject Property	Summary	Potential Environmental Concern (Yes/No)
4	52. Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems 28. Gasoline and Associated Products Storage in Fixed Tanks	225 Dundas Street East (165 m northeast)	The car dealership (Hawley Pontiac Buick Cad) was a waste generator of waste oils and lubricants from 1995 to 2001. This company also has a 9 L of hydraulic oil spill to the road. They also had a waste oil furnace model.	No, due to the relative distance and trans-gradient location of this property, there is low potential for environmental contaminant impact to the Subject Property.
5	28. Gasoline and Associated Products Storage in Fixed Tanks Not listed in Table 2 Schedule D of O.Reg. 153/04 - #PCB waste storage	47 Dundas Street East (100 m southwest)	Bell Canada had waste generator records for other specified inorganics (waste class 146), and PCBs (waste class 243) from 1995 to 2001; light fuels (waste class 221) and oil skimmings& sludges (waste class 251) from 2007 to 2008; acid waste – other metals in 2010; waste crankcase oils and lubricants (waste class 252 L); . This business also has active commercial fuel oil tank records.	No, due to the relative distance and trans-gradient location of this property, there is low potential for environmental contaminant impact to the Subject Property.

The above noted contributing and non-contributing PCAs as listed in Table 2 of O.Reg. 153/04 are included as part of the Site Location Plan on Drawing No. 1.

Areas of Potential Environmental Concern

The Phase One ESA identified Areas of Potential Environmental Concern (APECs) at the



Subject Property that may have been resulted from the PCAs listed above. The identified APECs include:

APEC 1: Potential impact from the fill materials of unknown quality from previous building structures at the eastern portion of the Subject Property;

APEC 2: Potential impact from the current dry cleaner (131 Dundas Street) to the south of the Subject Property;

APEC 3: Potential impact from the current auto service garage (135 Dundas Street East) with aboveground storage tanks to the southeast of the Subject Property.

The locations of APECs are shown on Drawing No. 2.

Subsurface Structures and Utilities

At the time of the assessment, no structures were present at the Subject Property. Underground utilities (gas, hydro, Bell and water) were not present or were abandoned at the Subject Property

Since no contaminants are found at the Subject Property at a concentration above the applicable site condition standard, no subsurface structures or utilities with the potential to affect contaminants distribution or transport are identified at the Subject Property.

Physical Setting

Stratigraphy

The field investigation for this Phase Two ESA consisted of drilling three (3) boreholes installed as monitoring wells to depths ranging from 6.1 m below ground surface (bgs) to 6.8 m bgs. The subsoil conditions at the borehole/monitoring well locations indicate a layer of topsoil or asphalt followed by fill (i.e. mixture of sand, rocks, gravel and cobbles) underlain by a native silty clay till at the borehole locations. The site is generally underlain by strata of silty clay till deposits at various depths and locations. Detailed descriptions of the encountered subsurface conditions are presented on the Borehole Logs provided in Appendix 'B'.

Hydrogeological Characteristics

The Subject Property is located in the larger hydrogeological region known as Southern Ontario Lowlands. A watershed map provided by the Credit Valley Conservation Authority shows the Subject Property is situated in the Credit River watershed. No watercourses were within 30 m of the boundaries of the Subject Property. The ground surface at the Subject Property is relatively flat with minor undulations. The overall grade of the subject site generally descends towards the southwest.

Three (3) monitoring wells were installed at all the borehole locations during the field investigation for this Phase Two ESA. The monitoring wells were installed at various depths,



within the glacial till deposit. Based on the groundwater records, the groundwater flow direction was determined to be towards the southwest.

Approximate Depth to Bedrock

Bedrock was not encountered at the Subject Property during the field investigation within the maximum drilling depth of 6.8 mbgs. However, it should be noted that shale fragments were encountered at depths of approximately 4.0 mbgs.

Approximate Depth to Water Table

Based on the groundwater records for this investigation, depth to the water table at the subject site ranges from 4.46 mbgs to 4.86 mbgs.

Section 41 or 43.1 of the Regulation

The Subject Property is not within/adjacent/part of an area of natural significance and the analytical testing indicated the pH of the tested soil samples is between 5 and 9. Therefore, Section 41 of the regulation (Site Condition Standards, Environmental Sensitive Areas) does not apply to the Subject Property.

The property is not a shallow soil property, as the bedrock was not encountered within 2 mbgs during the investigation. No watercourses were within the Subject Property or within 30 m from the boundaries of the Subject Property.

Soils Placed On, In or Under the Phase Two Property

The findings of our Phase One ESA indicate that fill materials were present at the Subject Property. The drilling investigation of the Phase Two ESA indicate fill materials were present at most of the borehole locations. The encountered fill material was assessed during this Phase Two ESA.

Proposed Building and Other Structures

A residential building is being proposed for the Subject Property. It is anticipated that the new development will be provided with municipal services meeting urban standards.

Contamination In or Under the Phase Two Property

Based on the findings of the Phase One ESA, contaminants of potential concern in the soil and groundwater with respect to the identified Areas of Potential Environmental Concern (APECs) at the Subject Property were assessed during the Phase Two ESA.

Based on the information obtained from the Phase One ESA and Phase Two ESA, the Ministry of the Environment and Climate Change (MOECC) Table 2, Full Depth Generic Site Condition Standards for Use in a Potable Groundwater Condition, for residential/parkland/institutional use



and coarse textured soils under Part XV.1 of EPA (Table 2 Standards and applicable MECP Standard) has been selected for assessing the soil and groundwater condition at the Subject Property.

Area Where Contaminants are Present

Soil and groundwater samples were collected during the Phase Two ESA and submitted for chemical analysis of one or more of the following parameters: Petroleum Hydrocarbons (PHCs), Volatile Organic Compounds (VOCs), Polycyclic Aromatic Hydrocarbons (PAHs), and/or Metals and Inorganics.

A review of the analytical test results of soil and groundwater samples indicates the tested samples for the tested parameters meet the applicable MECP site condition standards.

Consequently, there are no contaminants identified at the Subject Property at a concentration above the applicable site condition standards during the Phase Two ESA.

Distribution of Contaminants

No contaminants are identified at the Subject Property at a concentration above the applicable site condition standards.

Contaminant Medium

No contaminants are identified at the Subject Property at a concentration above applicable site condition standards.

Reasons for Discharge

No contaminants are identified at the Subject Property at a concentration above applicable site condition standards.

Migration of Contaminants

No contaminants are identified at the Subject Property at a concentration above applicable site condition standards.

Potential Exposure Pathways and Receptors

Since no contaminants are found at the Subject Property at a concentration above the applicable site condition standard, no potential exposure pathways and receptors are identified.



6.0 CONCLUSIONS

This Phase Two ESA was carried out for the Subject Property located at 3016, 3020, 3026, 3032 & 3036 Kirwin Avenue and 3031 Littlejohn Lane in Mississauga, Ontario, in general accordance with O. Reg. 153/04, as amended, to assess the surficial and subsurface soil conditions as well as groundwater conditions on-site.

The Phase Two ESA was designed in order to investigate the Areas of Potential Environmental Concerns (APECs) identified by Azure in a previous Phase One ESA (Dated December 22, 2020):

APEC 1: Potential impact from the fill materials of unknown quality from previous building structures at the eastern portion of the Subject Property;

APEC 2: Potential impact from the current dry cleaner (131 Dundas Street) to the south of the Subject Property;

APEC 3: Potential impact from the current auto service garage (135 Dundas Street East) with aboveground storage tanks to the southeast of the Subject Property.

The scope of work consisted of advancing three (3) boreholes installed as monitoring wells at the Subject Property for environmental (led by Azure Group Inc.) purposes in order to investigate the surficial and subsurface soils in the vicinity of the APECs. All sampling was done in accordance to O.Reg 153/04, including applicable duplicate sampling.

The borehole drilling program was conducted on December 9, 2020. Groundwater was monitored at the monitoring well locations on December 11 and 23, 2020.

Soil samples from each borehole were collected and submitted for laboratory analysis of concentrations of the chemical parameters identified in our Phase Two ESA. The rationale for the selection of the borehole/monitoring well locations is presented in the table below:

Areas of Potential Environmental Concerns (APECs)	Borehole / Monitoring Well ID
APEC 1: Potential impact from the fill materials of unknown quality from previous building structures at the eastern portion of the Subject Property.	BH1, BH3
APEC 2: Potential impact from the current dry cleaner (131 Dundas Street) to the south of the Subject Property.	BH2
APEC 3: Potential impact from the current auto service garage (135 Dundas Street East) with aboveground storage tanks to the southeast of the Subject Property.	BH1



A summary of soil and groundwater samples (including QA/QC samples) to be submitted is presented in the Table below:

Soil Sample (including QA/QC Samples)

Borehole / Monitoring Well	Metals and/or Inorganics	PHCs & BTEX	VOC	PAH
BH1	1	1	1	1
BH2	1	1	1	-
BH3	1	-	-	-
Duplicate Soil Sample	-	1	1	-

Groundwater Sample (including QA/QC Samples)

Borehole / Monitoring Well	Metals and/or Inorganics	PHCs & BTEX	VOC	PAH
MW1	1	1	1	1
MW2	-	1	1	-
MW3	1	-	-	-
Duplicate GW Sample	-	1	1	-
Trip Blank	-	-	1	-

Based on the information regarding the Subject Property from the Phase One and Phase Two ESA received to date, Azure determined the most applicable site condition standards applied to the Subject Property corresponded to residential/parkland/institutional land use for coarse textured soil using the generic site condition standards in a potable ground water condition (Table 2, O. Regulation 153/04 and applicable MECP Standard). It should be noted that a response from the Regional Municipality of Peel had not been received with regards to the permission to apply the Non-Potable Ground Water site condition for the Subject Property.

A review of the analytical test results of soil samples indicated that the tested parameters at the test locations met the applicable MECP Standard.

A review of the groundwater sample MW2 from the BH2 monitoring well location had a concentration of 760 µg/L which exceeded the applicable MECP Table Standard of 500 µg/L. The laboratory certificate of analysis indicated that this groundwater sample was noted to contain visible sediment. The organic material in sediment of the water sample would be biased due to the presence of sediment. In addition, the remaining fractions PHC F1, F2 and F4 had measured concentrations of <25 µg/L, <100 µg/L and <250 µg/L, respectively, which were below detection limits with no distribution within the other fraction groups. Therefore, Azure believes that this groundwater sample was a false positive. Azure conducted an additional groundwater monitoring and sampling round for the monitoring well BH2 on December 23, 2020 to verify the concentration of the PHC parameters in this monitoring well location. The groundwater sample MW2-2 and its duplicate sample DUPW-2 had a measured concentration of <250 µg/L, which met the applicable MECP Standard.



Based on the findings of the Phase Two ESA, it is our opinion that the property is suitable for the proposed development. No further environmental investigation is recommended at this time.

7.0 CLOSURE

This report has been prepared for the sole benefit of DVB Real Estate Inc. C/o Weston Consulting (the Client).

This report may not be relied upon by any other person or entity without the express written consent of Azure Group Inc., and the Client. Any use that a third party makes of this report, or any reliance on decisions made based on it, is the responsibility of such parties. Azure Group Inc. accepts no responsibility for damages, if any, suffered by any party as a result of decisions made or actions based on this report.

Azure Group Inc. makes no other representation whatsoever, including those concerning the legal significance of its findings or as to the other legal matters addressed incidentally in this report, including but not limited to, ownership of any property or the application of any law to the facts set forth herein. With respect to any regulatory compliance issues, regulatory statutes are subject to interpretation. These interpretations may change over time, thus the Client should review such issues with appropriate legal counsel.

An environmental site characterization is a limited sampling of a site. The conclusions given herein are based on information gathered at specific borehole locations and, therefore, these conclusions can only be interpreted to an undefined limited area around these locations. The extent of that limited area depends on the soil and groundwater conditions, as well as the history of the site reflecting natural, construction and other activities. In addition, since analyses have been carried out for a limited number of chemical parameters, it should not be inferred that other chemical groups are not present. Due to the nature of the investigation and the limited data available, Azure Group Inc. cannot warrant against undiscovered environmental liabilities. No other warranty or representation, either expressed or implied, is included or intended in this report.

If any conditions at the site are encountered which differ from those at the borehole locations and/or additional site information become available, Azure Group Inc. requests that this information be brought to our attention so that we may re-evaluate the conclusions presented herein. It should also be noted that current environmental Regulations, Guidelines, Policies, Standards, Protocols and Objectives are subject to change, and when and if such changes are then put into effect, this may alter the conclusions and recommendations noted throughout this report.



The undersigned Qualified Person, Ahmed Al-Temimi, P.Eng., QP_{ESA}, confirms that he/she was responsible for conducting and/or supervising this Phase Two ESA and the associated findings and conclusions.

AZURE GROUP INC.

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Senior Environmental Engineer



TABLES



SOIL CHEMICAL ANALYSIS

Project No. 2012-001

Sample ID	Ontario Regulation 153/04 Table 2 Standards** (U - ug/g)	RDL*	BH1-2	BH2-2	BH2-6	BH3-2
Sample Date			9-Dec-2020	9-Dec-2020	9-Dec-2020	9-Dec-2020
Laboratory ID			L2538999-1	L2538999-3	L2538999-4	L2538999-5
Bore Hole No.			BH1	BH2	BH2	BH3
Depth (mbgs)			0.76 - 1.52	0.76 - 1.52	3.81 - 4.56	0.76 - 1.52

METALS & INORGANIC PARAMETERS

pH	NA	0.1	7.56	7.79	7.85	7.71
Cyanide, Weak Acid Diss	0.051 (U)	0.05	<0.050	<0.050	-	<0.050
Antimony (Sb)	7.5 (U)	1	<1.0	<1.0	-	<1.0
Arsenic (As)	18 (U)	1	3.6	9.4	-	5.5
Barium (Ba)	390 (U)	1	104	143	-	67.7
Beryllium (Be)	4 (U)	0.5	0.71	0.63	-	<0.50
Boron (B), Hot Water Ext.	1.5 (U)	0.1	0.14	0.3	-	0.22
Boron (B)	120 (U)	5	7.5	8	-	<5.0
Cadmium (Cd)	1.2 (U)	0.5	<0.50	<0.50	-	<0.50
Chromium (Cr)	160 (U)	1	28.4	23.4	-	12.8
Cobalt (Co)	22 (U)	1	10.9	10.3	-	5.4
Copper (Cu)	140 (U)	1	22.5	52.4	-	33.1
Lead (Pb)	120 (U)	1	10.2	14.6	-	20.3
Mercury (Hg)	0.27 (U)	0.005	0.0211	0.045	-	0.0465
Molybdenum (Mo)	6.9 (U)	1	<1.0	<1.0	-	<1.0
Nickel (Ni)	100 (U)	1	25.1	24.6	-	12.3
Selenium (Se)	2.4 (U)	1	<1.0	<1.0	-	<1.0
Silver (Ag)	20 (U)	0.2	<0.20	<0.20	-	<0.20
Thallium (Tl)	1 (U)	0.5	<0.50	<0.50	-	<0.50
Uranium (U)	23 (U)	1	<1.0	<1.0	-	<1.0
Vanadium (V)	86 (U)	1	37.9	35.8	-	26.2
Zinc (Zn)	340 (U)	5	48.6	69.6	-	64
Chromium, Hexavalent	8 (U)	0.2	<0.20	<0.20	-	0.49

Analysis by ALS Environmental, all results in ppm (µg/g) unless otherwise stated.

* Analytical Reportable Detection Limits (RDLs) are shown except as indicated in brackets.

** Standards shown are for Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for residential/parkland/institutional property use (coarse textured soils).

ORANGE- Results exceed MECP Table 2 Standard



SOIL CHEMICAL ANALYSIS

Project No. 2012-001

Project No.: 2012-001	Sample ID	Ontario Regulation 153/04 Table 2 Standards** (U - ug/g)	RDL *	BH1-6	BH2-6	DUP-S1
	Sample Date			9-Dec-2020	9-Dec-2020	9-Dec-2020
	Laboratory ID			L2538999-2	L2538999-4	L2538999-8
	Bore Hole No.			BH1	BH2	BH1
	Depth (mbgs)			3.81 - 4.56	3.81 - 4.56	3.81 - 4.56
VOLATILE ORGANIC COMPOUNDS (VOCs)						
Acetone	16 (U)	0.5	<0.50	<0.50	<0.50	
Benzene	0.21 (U)	0.0068	<0.0068	<0.0068	<0.0068	
Bromodichloromethane	1.5 (U)	0.05	<0.050	<0.050	<0.050	
Bromoform	0.27 (U)	0.05	<0.050	<0.050	<0.050	
Bromomethane	0.05 (U)	0.05	<0.050	<0.050	<0.050	
Carbon tetrachloride	0.05 (U)	0.05	<0.050	<0.050	<0.050	
Chlorobenzene	2.4 (U)	0.05	<0.050	<0.050	<0.050	
Dibromochloromethane	2.3 (U)	0.05	<0.050	<0.050	<0.050	
Chloroform	0.05 (U)	0.05	<0.050	<0.050	<0.050	
1,2-Dibromoethane	0.05 (U)	0.05	<0.050	<0.050	<0.050	
1,2-Dichlorobenzene	1.2 (U)	0.05	<0.050	<0.050	<0.050	
1,3-Dichlorobenzene	4.8 (U)	0.05	<0.050	<0.050	<0.050	
1,4-Dichlorobenzene	0.083 (U)	0.05	<0.050	<0.050	<0.050	
Dichlorodifluoromethane	16 (U)	0.05	<0.050	<0.050	<0.050	
1,1-Dichloroethane	0.47 (U)	0.05	<0.050	<0.050	<0.050	
1,2-Dichloroethane	0.05 (U)	0.05	<0.050	<0.050	<0.050	
1,1-Dichloroethylene	0.05 (U)	0.05	<0.050	<0.050	<0.050	
cis-1,2-Dichloroethylene	1.9 (U)	0.05	<0.050	<0.050	<0.050	
trans-1,2-Dichloroethylene	0.084 (U)	0.05	<0.050	<0.050	<0.050	
Methylene Chloride	0.1 (U)	0.05	<0.050	<0.050	<0.050	
1,2-Dichloropropane	0.05 (U)	0.05	<0.050	<0.050	<0.050	
cis-1,3-Dichloropropene	NA	0.03	<0.030	<0.030	<0.030	
trans-1,3-Dichloropropene	NA	0.03	<0.030	<0.030	<0.030	
1,3-Dichloropropene (cis & trans)	0.05 (U)	0.042	<0.042	<0.042	<0.042	
Ethylbenzene	1.1 (U)	0.018	<0.018	<0.018	<0.018	
n-Hexane	2.8 (U)	0.05	<0.050	<0.050	<0.050	
Methyl Ethyl Ketone	16 (U)	0.5	<0.50	<0.50	<0.50	
Methyl Isobutyl Ketone	1.7 (U)	0.5	<0.50	<0.50	<0.50	
MTBE	0.75 (U)	0.05	<0.050	<0.050	<0.050	
Styrene	0.7 (U)	0.05	<0.050	<0.050	<0.050	
1,1,1,2-Tetrachloroethane	0.058 (U)	0.05	<0.050	<0.050	<0.050	
1,1,2,2-Tetrachloroethane	0.05 (U)	0.05	<0.050	<0.050	<0.050	
Tetrachloroethylene	0.28 (U)	0.05	<0.050	<0.050	<0.050	
Toluene	2.3 (U)	0.08	<0.080	<0.080	<0.080	
1,1,1-Trichloroethane	0.38 (U)	0.05	<0.050	<0.050	<0.050	
1,1,2-Trichloroethane	0.05 (U)	0.05	<0.050	<0.050	<0.050	
Trichloroethylene	0.061 (U)	0.01	<0.010	<0.010	<0.010	
Trichlorofluoromethane	4 (U)	0.05	<0.050	<0.050	<0.050	
Vinyl chloride	0.02 (U)	0.02	<0.020	<0.020	<0.020	
o-Xylene	NA	0.02	<0.020	<0.020	<0.020	
m+p-Xylenes	NA	0.03	<0.030	<0.030	<0.030	
Xylenes (Total)	3.1 (U)	0.05	<0.050	<0.050	<0.050	

Analysis by ALS Environmental, all results in ppm (ug/g) unless otherwise stated.

* Analytical Reportable Detection Limits (RDLs) are shown except as indicated in brackets.

** Standards shown are for Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for residential/parkland/institutional property use (coarse textured soils).

ORANGE- Results exceed MECP Table 2 Standard



SOIL CHEMICAL ANALYSIS

Project No. 2012-001

Sample ID	Ontario Regulation 153/04 Table 2 Standards** (U - ug/g)	RDL *	BH1-6	BH2-6	DUP-S1
Sample Date			9-Dec-2020	9-Dec-2020	9-Dec-2020
Laboratory ID			L2538999-2	L2538999-4	L2538999-8
Bore Hole No.			BH1	BH2	BH1
Depth (mbgs)			3.81 - 4.56	3.81 - 4.56	3.81 - 4.56
PETROLEUM HYDROCARBONS (PHCs)					
F1 (C6-C10)	55 (U)	5	<5.0	<5.0	<5.0
F1-BTEX	55 (U)	5	<5.0	<5.0	<5.0
F2 (C10-C16)	98 (U)	10	<10	<10	<10
F3 (C16-C34)	300 (U)	50	<50	62	<50
F4 (C34-C50)	2800 (U)	50	<50	82	<50
Analysis by ALS Environmental, all results in ppm (µg/g) unless otherwise stated.					
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ORANGE- Results exceed MECP Table 2 Standard					



SOIL CHEMICAL ANALYSIS

Project No. 2012-001

Project No: 2012-001

Sample ID	Ontario Regulation 153/04 Table 2 Standards** (U - ug/g)	RDL*	BH1-2
Sample Date			9-Dec-2020
Laboratory ID			L2538999-1
Bore Hole No.			BH1
Depth (mbgs)			0.76 - 1.52
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)			
Acenaphthene	7.9 (U)	0.05	<0.050
Acenaphthylene	0.15 (U)	0.05	<0.050
Anthracene	0.67 (U)	0.05	<0.050
Benzo(a)anthracene	0.5 (U)	0.05	<0.050
Benzo(a)pyrene	0.3 (U)	0.05	<0.050
Benzo(b)fluoranthene	0.78 (U)	0.05	<0.050
Benzo(g,h,i)perylene	6.6 (U)	0.05	<0.050
Benzo(k)fluoranthene	0.78 (U)	0.05	<0.050
Chrysene	7 (U)	0.05	<0.050
Dibenzo(ah)anthracene	0.1 (U)	0.05	<0.050
Fluoranthene	0.69 (U)	0.05	<0.050
Fluorene	62 (U)	0.05	<0.050
Indeno(1,2,3-cd)pyrene	0.38 (U)	0.05	<0.050
1+2-Methylnaphthalenes	0.99 (U)	0.042	<0.042
1-Methylnaphthalene	0.99 (U)	0.03	<0.030
2-Methylnaphthalene	0.99 (U)	0.03	<0.030
Naphthalene	0.6 (U)	0.013	<0.013
Phenanthrene	6.2 (U)	0.046	<0.046
Pyrene	78 (U)	0.05	<0.050

Analysis by ALS Environmental, all results in ppm (µg/g) unless otherwise stated.

* Analytical Reportable Detection Limits (RDLs) are shown except as indicated in brackets.

** Standards shown are for Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for residential/parkland/institutional property use (coarse textured soils).

ORANGE- Results exceed MECP Table 2 Standard



GROUNDWATER CHEMICAL ANALYSIS

Project No. 2012-001

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Page 1 of 1

Sample ID	Ontario Regulation 153/04 Table 2 Standards** (U - ug/L)	RDL *	MW1	MW3
Sample Date			11-Dec-2020	11-Dec-2020
Laboratory ID			L2538999-1	L2538999-5
Monitoring Well No.			BH1	BH3
Water Level Depth (mbgs)			4.46	4.48
METALS & INORGANIC PARAMETERS				
pH	NA	0.1	7.49	7.67
Cyanide, Weak Acid Diss	66 (U)	0.05	<2.0	<2.0
Antimony (Sb)	6 (U)	1	<1.0	0.23
Arsenic (As)	25 (U)	1	<1.0	0.93
Barium (Ba)	1000 (U)	1	204	142
Beryllium (Be)	4 (U)	0.5	<0.5	<0.10
Boron (B)	5000 (U)	5	170	89
Cadmium (Cd)	2.7 (U)	0.5	<0.050	0.015
Chromium (Cr)	50 (U)	1	<5.0	1.64
Cobalt (Co)	3.8 (U)	1	<1.0	1.11
Copper (Cu)	87 (U)	1	3.1	2.97
Lead (Pb)	10 (U)	1	<0.50	0.592
Mercury (Hg)	0.29 (U)	0.005	<0.0050	<0.0050
Molybdenum (Mo)	70 (U)	1	3.94	4.77
Nickel (Ni)	100 (U)	1	<5.0	3.84
Selenium (Se)	10 (U)	1	0.73	0.982
Silver (Ag)	1.5 (U)	0.2	<0.30	<0.050
Thallium (Tl)	2 (U)	0.5	<0.10	0.051
Uranium (U)	20 (U)	1	0.69	0.856
Vanadium (V)	6.2 (U)	1	<3.9	1.81
Zinc (Zn)	1100 (U)	5	<10	3.5
Chromium, Hexavalent	25 (U)	0.2	<0.50	<0.50
Analysis by ALS Environmental, all results in ppm (µg/L) unless otherwise stated				
* Analytical Reportable Detection Limits (RDLs) are shown except as indicated in brackets.				
**Table 2 Standards shown are for Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for residential/parkland/institutional property use (coarse textured soils).				
ORANGE - Results exceed MECP Table 2 Standards.				



GROUNDWATER CHEMICAL ANALYSIS

Project No. 2012-001

Project No: 2012-001	Sample ID	Ontario Regulation 153/04 Table 2 Standards** (U - ug/L)	RDL *	MW1	MW2	DUP-W1	TRIP BLANK
	Sample Date			11-Dec-2020	11-Dec-2020	11-Dec-2020	11-Dec-2020
	Laboratory ID			L2539648-1	L2539648-2	L2539648-3	L2539648-4
	Monitoring Well No.			BH1	BH2	BH1	NA
	Depth (mbgs)			4.46	4.86	4.48	NA
VOLATILE ORGANIC COMPOUNDS (VOCs)							
Acetone	2700 (U)	0.5	<30	<30	<30	<30	
Benzene	5 (U)	0.0068	<0.50	<0.50	<0.50	<0.50	
Bromodichloromethane	16 (U)	0.05	<2.0	<2.0	<2.0	<2.0	
Bromoform	25 (U)	0.05	<5.0	<5.0	<5.0	<5.0	
Bromomethane	0.89 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
Carbon tetrachloride	0.79 (U)	0.05	<0.20	<0.20	<0.20	<0.20	
Chlorobenzene	30 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
Dibromochloromethane	25 (U)	0.05	<2.0	<2.0	<2.0	<2.0	
Chloroform	2.4 (U)	0.05	<1.0	<1.0	<1.0	<1.0	
1,2-Dibromoethane	0.2 (U)	0.05	<0.20	<0.20	<0.20	<0.20	
1,2-Dichlorobenzene	3 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
1,3-Dichlorobenzene	59 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
1,4-Dichlorobenzene	1 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
Dichlorodifluoromethane	590 (U)	0.05	<2.0	<2.0	<2.0	<2.0	
1,1-Dichloroethane	5 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
1,2-Dichloroethane	1.6 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
1,1-Dichloroethylene	1.6 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
cis-1,2-Dichloroethylene	1.6 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
trans-1,2-Dichloroethylene	1.6 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
Methylene Chloride	50 (U)	0.05	<5.0	<5.0	<5.0	<5.0	
1,2-Dichloropropane	5 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
cis-1,3-Dichloropropene	NA	0.03	<0.30	<0.30	<0.30	<0.30	
trans-1,3-Dichloropropene	NA	0.03	<0.30	<0.30	<0.30	<0.30	
1,3-Dichloropropene (cis & trans)	0.5 (U)	0.042	<0.50	<0.50	<0.50	<0.50	
Ethylbenzene	2.4 (U)	0.018	<0.50	<0.50	<0.50	<0.50	
n-Hexane	51 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
Methyl Ethyl Ketone	1800 (U)	0.5	<20	<20	<20	<20	
Methyl Isobutyl Ketone	640 (U)	0.5	<20	<20	<20	<20	
MTBE	15 (U)	0.05	<2.0	<2.0	<2.0	<2.0	
Styrene	5.4 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
1,1,1,2-Tetrachloroethane	1.1 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
1,1,2,2-Tetrachloroethane	1 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
Tetrachloroethylene	1.6 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
Toluene	24 (U)	0.08	<0.50	<0.50	<0.50	<0.50	
1,1,1-Trichloroethane	200 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
1,1,2-Trichloroethane	4.7 (U)	0.05	<0.50	<0.50	<0.50	<0.50	
Trichloroethylene	1.6 (U)	0.01	<0.50	<0.50	<0.50	<0.50	
Trichlorofluoromethane	150 (U)	0.05	<5.0	<5.0	<5.0	<5.0	
Vinyl chloride	0.5 (U)	0.02	<0.50	<0.50	<0.50	<0.50	
o-Xylene	NA	0.02	<0.30	<0.30	<0.30	<0.30	
m+p-Xylenes	NA	0.03	<0.40	<0.40	<0.40	<0.40	
Xylenes (Total)	300 (U)	0.05	<0.50	<0.50	<0.50	<0.50	

Analysis by ALS Environmental, all results in ppm (ug/L) unless otherwise stated

* Analytical Reportable Detection Limits (RDLs) are shown except as indicated in brackets.

**Table 2 Standards shown are for Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for residential/parkland/institutional property use (coarse textured soils).

ORANGE - Results exceed MECP Table 2 Standards.



GROUNDWATER CHEMICAL ANALYSIS

Project No. 2012-001

Sample ID	Ontario Regulation 153/04 Table 2 Standards** (U - ug/L)	RDL*	MW1	MW2	DUP-W1	MW2-2	DUPW-2
Sample Date			11-Dec-2020	11-Dec-2020	11-Dec-2020	23-Dec-2020	23-Dec-2020
Laboratory ID			L2539648-1	L2539648-2	L2539648-3	L2543542-1	L2543542-2
Monitoring Well No.			BH1	BH2	BH1	BH2	BH2
Depth (mbgs)			4.46	4.86	4.48	4.86	4.86
PETROLEUM HYDROCARBONS (PHCs)							
F1 (C6-C10)	750 (U)	5	<25	<25	<25	<25	<25
F1-BTEX	750 (U)	5	<25	<25	<25	<25	<25
F2 (C10-C16)	150 (U)	10	<100	<100	<100	<100	<100
F3 (C16-C34)	500 (U)	50	<250	760	<250	<250	<250
F4 (C34-C50)	500 (U)	50	<250	<250	<250	<250	<250

Analysis by ALS Environmental, all results in ppm (µg/L) unless otherwise stated

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**Table 2 Standards shown are for Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for residential/parkland/institutional property use (coarse textured soils).

ORANGE - Results exceed MECP Table 2 Standards.



GROUNDWATER CHEMICAL ANALYSIS

Project No. 2012-001

Sample ID	Ontario Regulation 153/04 Table 2 Standards** (U - ug/L)	RDL *	MW1
Sample Date			11-Dec-2020
Laboratory ID			L2539648-1
Monitoring Well No.			BH2
Water Level Depth (mbgs)			2.86
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)			
Acenaphthene	4.1 (U)	0.05	<0.020
Acenaphthylene	1 (U)	0.05	<0.020
Anthracene	2.4 (U)	0.05	<0.020
Benzo(a)anthracene	1 (U)	0.05	<0.020
Benzo(a)pyrene	0.01 (U)	0.05	<0.010
Benzo(b)fluoranthene	0.1 (U)	0.05	<0.020
Benzo(g,h,i)perylene	0.2 (U)	0.05	<0.020
Benzo(k)fluoranthene	0.1 (U)	0.05	<0.020
Chrysene	0.1 (U)	0.05	<0.020
Dibenzo(ah)anthracene	0.2 (U)	0.05	<0.020
Fluoranthene	0.41 (U)	0.05	<0.020
Fluorene	120 (U)	0.05	<0.020
Indeno(1,2,3-cd)pyrene	0.2 (U)	0.05	<0.020
1+2-Methylnaphthalenes	3.2 (U)	0.042	<0.028
1-Methylnaphthalene	3.2 (U)	0.03	<0.020
2-Methylnaphthalene	3.2 (U)	0.03	<0.020
Naphthalene	11 (U)	0.013	<0.050
Phenanthrene	1 (U)	0.046	<0.020
Pyrene	4.1 (U)	0.05	<0.020
Analysis by ALS Environmental, all results in ppm (µg/L) unless otherwise stated			
* Analytical Reportable Detection Limits (RDLs) are shown except as indicated in brackets.			
**Table 2 Standards shown are for Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for residential/parkland/institutional property use (coarse textured soils).			
ORANGE - Results exceed MECP Table 2 Standards.			



APPENDIX A




DRAWINGS





LEGEND

-  Subject Property
-  Phase One Study Area
-  Commercial Use
-  Land Use

Contributing Potentially Contaminating Activities (PCAs)

-  1 Imported fill materials of unknown quality
-  2 Off-site Dry Cleaner Operations
-  3 Auto service garage and fuel oil tank

Non-Contributing Potentially Contaminating Activities (PCAs)

-  4 Auto service garage, vehicle storage and fuel oil tank
-  5 Fuel oil tank and PCB waste storage



Source: City of Mississauga Interactive Map
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Subject Property



Borehole/Monitoring Well Location



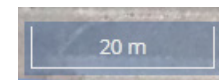
APEC 1



APEC 2



APEC 3



Title Borehole Location Plan	Project 3016, 3020, 3026, 3032 & 3034 Kirwin Avenue & 3031 Little John Lane, City of Mississauga	Project No. 2012-001	Scale See Drawing	Date January, 2021	Drawing No. 2
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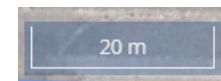
Subject Property



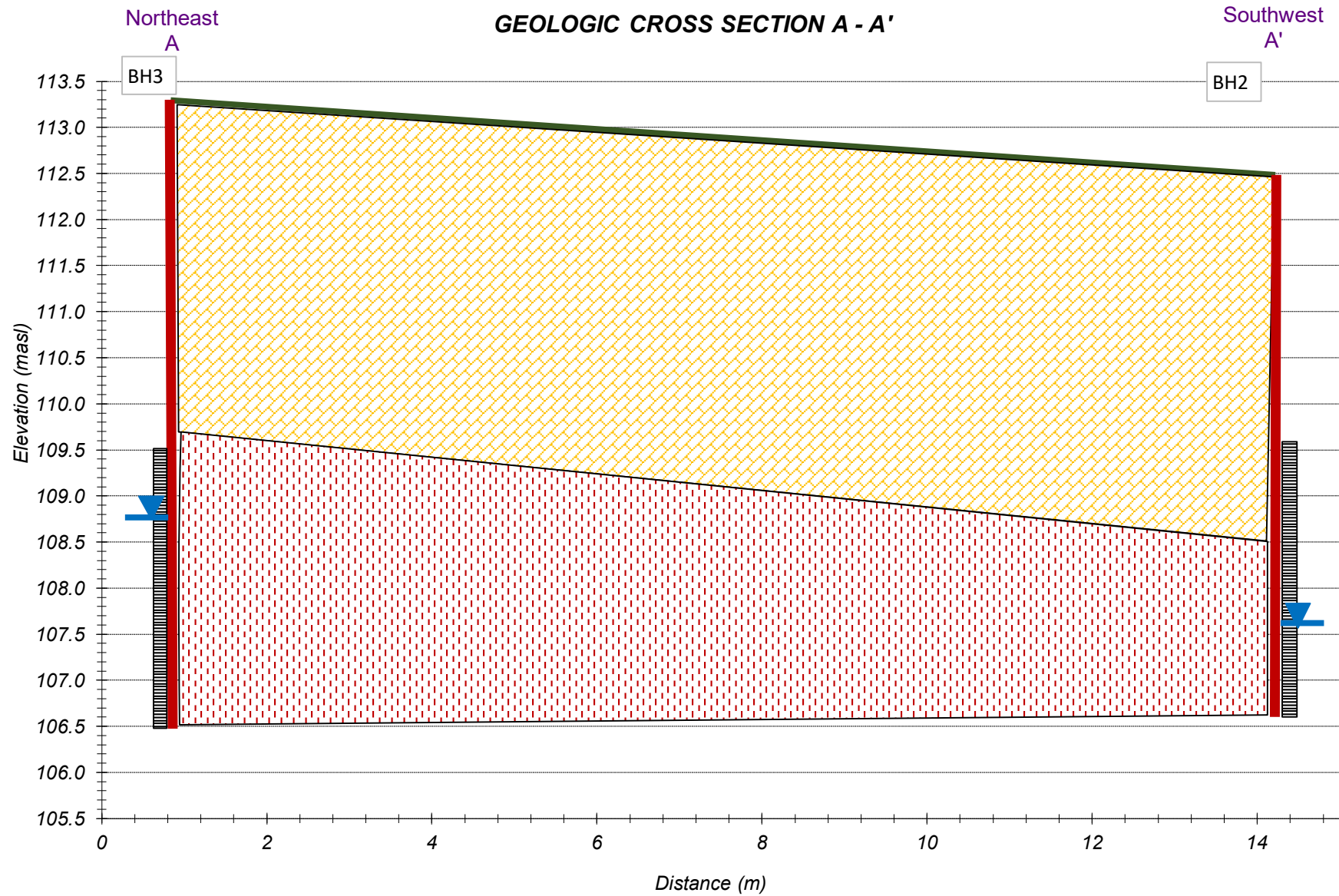
Borehole/Monitoring Well Location

A — A'

Cross-Section Direction



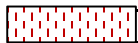
Title	Cross Section Key Plan AA' – BB'	Project	3016, 3020, 3026, 3032 & 3034 Kirwin Avenue & 3031 Little John Lane, City of Mississauga	Project No.	2012-001	Scale	See Drawing	Date	January, 2021	Drawing No.	3
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LEGEND



Topsoil



Silty Clay



Well Screen



Silty Sand Fill



Water Level



Azure Group

Title: Geological Cross Section A-A'

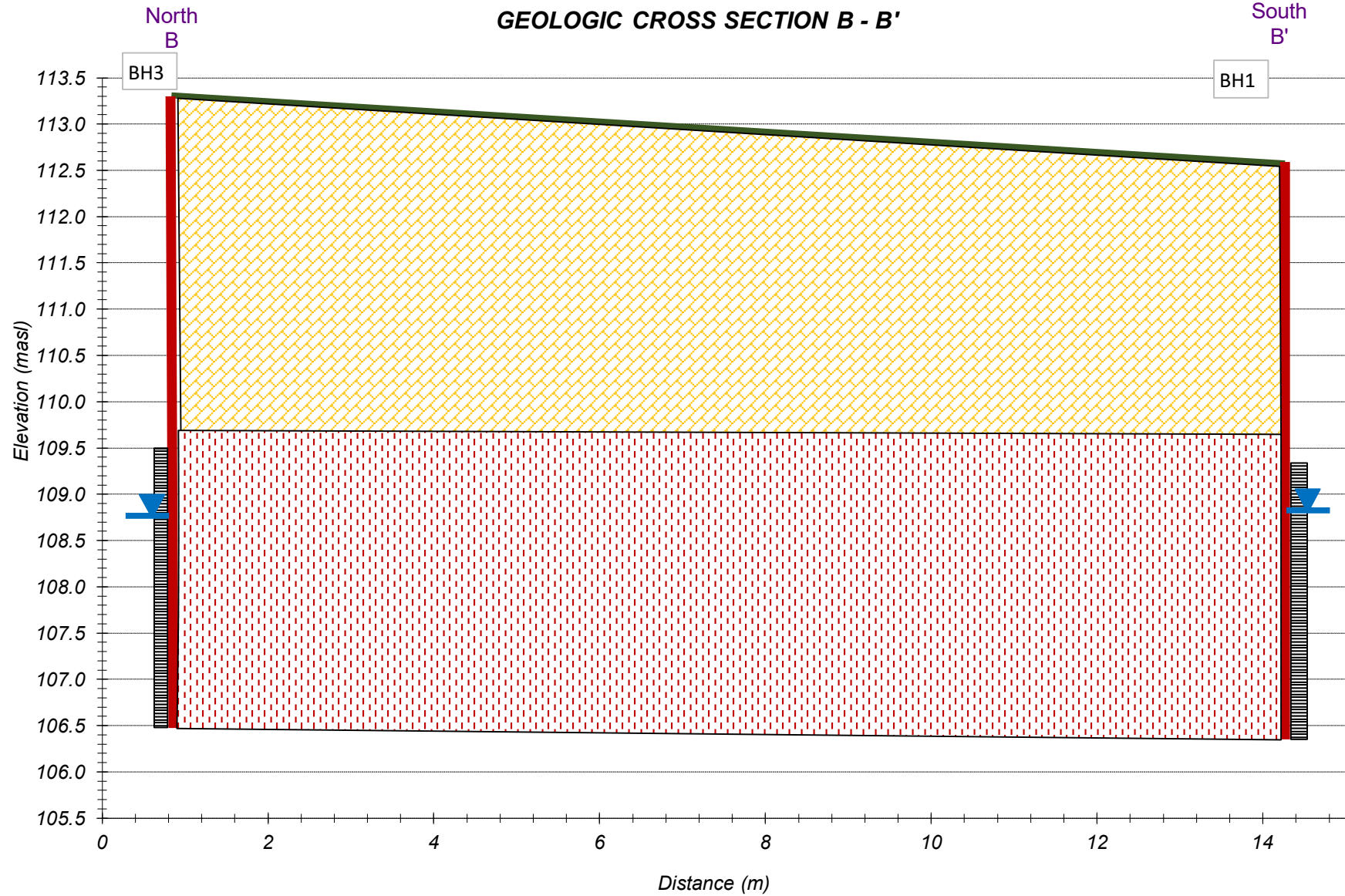
Project: 3016, 3020, 3026, 3032 & 3034 Kirwin Avenue and 3031 Littlejohn Lane, Mississauga

Project No. : 2012-001

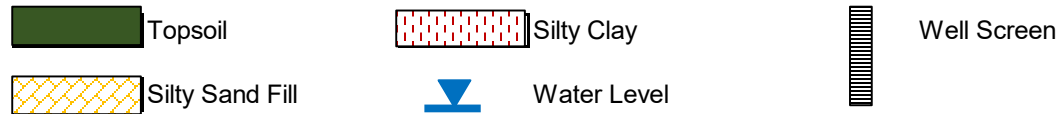
Date: January 2021

Drawing No. 4

GEOLOGIC CROSS SECTION B - B'



LEGEND



Azure Group

Title: Geological Cross Section B-B'
 Project: 3016, 3020, 3026, 3032 & 3034 Kirwin Avenue and 3031 Littlejohn Lane, Mississauga
 Project No. : 2012-001
 Date: January, 2021
 Drawing No. 5



Subject Property

108.0



Groundwater Elevation Contour (masl)

20 m



Borehole/Monitoring Well Location



Interpreted Shallow Groundwater Flow Direction

Title	Shallow Groundwater Contour Map	Project	3016, 3020, 3026, 3032 & 3034 Kirwin Avenue & 3031 Little John Lane, City of Mississauga	Project No.	2012-001	Scale	See Drawing	Date	January, 2021	Drawing No.	6
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APPENDIX B

BOREHOLE LOGS



BH1

PROJECT NUMBER: 2012-001

PROJECT NAME: Phase Two ESA

CLIENT: DBV Real Estate Investments Inc.

ADDRESS: 3031 Littlejohn Ln and 3016, 3020, 3026, 3032 & 3034 Kirwin Av, Mississauga

UTM COORD. (m) 17 T611938 m E 4826562 m N **TOTAL WELL DEPTH:** 6.8 mbgs

HOLE SIZE/SAMPLING METHOD: 50 mm /SS **SURFACE ELEVATION:** 113.13 masl

RIG MODEL: Diedrich D-120

WELL SCREEN: 3.05 m; #10 Slot Screen

DRILLING METHOD: Spilt Spoon, Hollow Stem A **WATER LEVEL:** 4.46 mbgs

SAMPLING LENGTH: 0.762 m

COMMENTS : masl: meter above sea level - SS: Split-Spoon

LOGGED BY ST

CHECKED BY AT

Elevation (masl)	Depth (m)	Soil Sample ID	Sample Type	% Recovery	Soil Lab Analyses	Graphic Log	Material Description	HSVC as Isobutylene (ppm)	HSVC as Hexane (ppm)	Well Diagram
113	0	1	SS	0			100 mm Topsoil	0	0.0	
112.5	0.5						SILTY CLAY FILL, brown, some gravel, moist-wet, no odours & stains	0	0.0	
112	1	2	SS		PAHs, M&I			0	0.0	
111.5	1.5	3	SS				SILTY SAND FILL, brown, some gravel & cobbles, dry, no odours & stains	0	0.0	
111	2							0	0.0	
110.5	2.5	4	SS					0	0.0	
110	3	5	SS					0	0.0	
109.5	3.5							0	0.0	
109	4	6	SS		PHC, VOC, DUP-S1		SILTY CLAY, brown-grey, moist, some gravel & rocks, firm - stiff	0	0.0	
108.5	4.5	7A	SS					0	0.0	
108	5	7B					- grey, stiff to hard, weathered shale fragments	0	0.0	
107.5	5.5	8	SS					0	0.0	
107	6							0	0.0	
106.5	6.5	9	SS					0	0.0	
106	7							0	0.0	



BH2

PROJECT NUMBER: 2012-001

PROJECT NAME: Phase Two ESA

CLIENT: DBV Real Estate Investments Inc.

ADDRESS: 3031 Littlejohn Ln and 3016, 3020, 3026, 3032 & 3034 Kirwin Av, Mississauga

UTM COORD. (m) 17 T611938 m E 4826562 m N **TOTAL WELL DEPTH:** 6.06 mbgs

HOLE SIZE/SAMPLING METHOD: 50 mm /SS **SURFACE ELEVATION:** 112.56 masl

RIG MODEL: Diedrich D-120

WELL SCREEN: 3.05 m; #10 Slot Screen

DRILLING METHOD: Spilt Spoon, Hollow Stem A **WATER LEVEL:** 4.86 mbgs

SAMPLING LENGTH: 0.762 m

COMMENTS : masl: meter above sea level - SS: Split-Spoon

LOGGED BY ST

CHECKED BY AT

Elevation (masl)	Depth (m)	Soil Sample ID	Sample Type	% Recovery	Soil Lab Analyses	Graphic Log	Material Description	HSVC as Isobutylene (ppm)	HSVC as Hexane (ppm)	Well Diagram
112.5		1	SS				Topsoil and Asphalt			
	0.5						SILTY SAND FILL, brown, some gravel & cobbles, dry, no odours & stains	0	0.0	
112										
	1	2	SS		M&I			0	0.0	
111.5										
	1.5	3	SS					0	0.0	
111										
	2							0	0.0	
110.5										
	2.5	4	SS					0	0.0	
110										
	3	5A	SS					0	0.0	
109.5										
	3.5	5B						0	0.0	
109										
	4	6	SS		PHC, VOC		SILTY CLAY, grey, some organic, moist, soft-firm	0	0.0	
108.5										
	4.5							0	0.0	
108		7	SS				- stiff to hard	0	0.0	
	5									
107.5							- weathered shale fragments	0	0.0	
	5.5	8	SS					0	0.0	
107										
	6							0	0.0	
106.5										
	6.5									
106										
	7									
105.5										



BH3

PROJECT NUMBER: 2012-001

PROJECT NAME: Phase Two ESA

CLIENT: DBV Real Estate Investments Inc.

ADDRESS: 3031 Littlejohn Ln and 3016, 3020, 3026, 3032 & 3034 Kirwin Av, Mississauga

UTM COORD. (m) 17 T611938 m E 4826562 m N **TOTAL WELL DEPTH:** 6.57 mbgs

HOLE SIZE/SAMPLING METHOD: 50 mm /SS **SURFACE ELEVATION:** 113.31 masl

RIG MODEL: Diedrich D-120

WELL SCREEN: 3.05 m; #10 Slot Screen

DRILLING METHOD: Spilt Spoon, Hollow Stem A **WATER LEVEL:** 4.48 mbgs

SAMPLING LENGTH: 0.762 m

COMMENTS : masl: meter above sea level - SS: Split-Spoon

LOGGED BY ST

CHECKED BY AT

Elevation (masl)	Depth (m)	Soil Sample ID	Sample Type	% Recovery	Soil Lab Analyses	Graphic Log	Material Description	HSVC as Isobutylene (ppm)	HSVC as Hexane (ppm)	Well Diagram
113	0.5	1	SS				100 mm Topsoil	0	0.0	
112.5	1	2	SS		M&I		SILTY SAND FILL, brown, some gravel & cobbles, dry, no odours & stains	0	0.0	
112	1.5	3	SS					0	0.0	
111.5	2	4	SS					0	0.0	
111	2.5	5	SS					0	0.0	
110.5	3	6	SS					0	0.0	
110	3.5	7A	SS					0	0.0	
109.5	4	7B	SS					0	0.0	
109	4.5	8	SS					0	0.0	
108.5	5	9	SS					0	0.0	
108	5.5							0	0.0	
107.5	6							0	0.0	
107	6.5							0	0.0	
106.5	7							0	0.0	
106										



APPENDIX C

LABORATORY CERTIFICATES OF ANALYSES



Azure Group Inc.(Mississauga)
ATTN: Ahmed Al-Temimi
6751 Professional Court
Suite 201
Mississauga ON L4V 1Y3

Date Received: 10-DEC-20
Report Date: 06-JAN-21 11:55 (MT)
Version: FINAL REV. 2

Client Phone: 416-779-2694

Certificate of Analysis

Lab Work Order #: L2538999
Project P.O. #: NOT SUBMITTED
Job Reference: 2012-001 (UIRWIN AV)
C of C Numbers: 20-889953
Legal Site Desc:

Amanda Overholster
Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 5730 Coopers Avenue, Unit #26 , Mississauga, ON L4Z 2E9 Canada | Phone: +1 905 507 6910 | Fax: +1 905 507 6927
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L2538999 CONT'D....
Job Reference: 2012-001 (UIRWIN AV)
PAGE 2 of 14
06-JAN-21 11:55 (MT)



ANALYTICAL REPORT

Physical Tests - SOIL

		Lab ID	L2538999-1	L2538999-2	L2538999-3	L2538999-4	L2538999-5	L2538999-6	L2538999-7	L2538999-8
		Sample Date	09-DEC-20	09-DEC-20	09-DEC-20	09-DEC-20	09-DEC-20	09-DEC-20	09-DEC-20	09-DEC-20
		Sample ID	BH1-2	BH1-6	BH2-2	BH2-6	BH3-2	BH3-6	BH1-7A	DUP-S1
Analyte	Unit	Guide Limits								
		#1	#2							
Grain Size Curve		-	-						SEE ATTACHED	SEE ATTACHED
% Moisture	%	-	-	15.5	6.75	15.1	9.07	6.99		7.20
pH	pH units	-	-	7.56		7.79	7.85	7.71		

Guide Limit #1: T2-Soil-Res/Park/Inst. Property Use (Coarse)

- Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
- Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.



ANALYTICAL REPORT

Particle Size - SOIL

Analyte	Unit	Guide Limits		Lab ID	
		#1	#2	Sample Date	Sample ID
Gravel (4.75mm - 3in.)	%	-	-	09-DEC-20	BH3-6
Medium Sand (0.425mm - 2.0mm)	%	-	-	09-DEC-20	BH1-7A
Coarse Sand (2.0mm - 4.75mm)	%	-	-		
Fine Sand (0.075mm - 0.425mm)	%	-	-		
Silt (0.002mm - 0.075mm)	%	-	-		
Silt (0.005mm - 0.075mm)	%	-	-		
Clay (<0.002mm)	%	-	-		
Clay (<0.005mm)	%	-	-		

Guide Limit #1: T2-Soil-Res/Park/Inst. Property Use (Coarse)

- Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
- Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.



Environmental

ANALYTICAL REPORT

Cyanides - SOIL

Cyanide - 2012						
Analyte	Unit	Lab ID	L2538999-1	L2538999-3	L2538999-5	
		Sample Date	09-DEC-20	09-DEC-20	09-DEC-20	
		Sample ID	BH1-2	BH2-2	BH3-2	
		Guide Limits				
	#1	#2				
Cyanide, Weak Acid Diss	ug/g	0.051	-	<0.050	<0.050	<0.050

Guide Limit #1: T2-Soil-Res/Park/Inst. Property Use (Coarse)

- Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
- Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.



ANALYTICAL REPORT

Metals - SOIL

Analyte	Unit	Guide Limits		Lab ID	Sample Date	Sample ID
		#1	#2	L2538999-1	L2538999-3	L2538999-5
				09-DEC-20	09-DEC-20	09-DEC-20
				BH1-2	BH2-2	BH3-2
Antimony (Sb)	ug/g	7.5	-	<1.0	<1.0	<1.0
Arsenic (As)	ug/g	18	-	3.6	9.4	5.5
Barium (Ba)	ug/g	390	-	104	143	67.7
Beryllium (Be)	ug/g	4	-	0.71	0.63	<0.50
Boron (B)	ug/g	120	-	7.5	8.0	<5.0
Boron (B), Hot Water Ext.	ug/g	1.5	-	0.14	0.30	0.22
Cadmium (Cd)	ug/g	1.2	-	<0.50	<0.50	<0.50
Chromium (Cr)	ug/g	160	-	28.4	23.4	12.8
Cobalt (Co)	ug/g	22	-	10.9	10.3	5.4
Copper (Cu)	ug/g	140	-	22.5	52.4	33.1
Lead (Pb)	ug/g	120	-	10.2	14.6	20.3
Mercury (Hg)	ug/g	0.27	-	0.0211	0.0450	0.0465
Molybdenum (Mo)	ug/g	6.9	-	<1.0	<1.0	<1.0
Nickel (Ni)	ug/g	100	-	25.1	24.6	12.3
Selenium (Se)	ug/g	2.4	-	<1.0	<1.0	<1.0
Silver (Ag)	ug/g	20	-	<0.20	<0.20	<0.20
Thallium (Tl)	ug/g	1	-	<0.50	<0.50	<0.50
Uranium (U)	ug/g	23	-	<1.0	<1.0	<1.0
Vanadium (V)	ug/g	86	-	37.9	35.8	26.2
Zinc (Zn)	ug/g	340	-	48.6	69.6	64.0

Guide Limit #1: T2-Soil-Res/Park/Inst. Property Use (Coarse)

- Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
- Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.

ANALYTICAL REPORT

Job Reference: 2012-001 (UIRWIN AV)

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06-JAN-21 11:55 (MT)

Speciated Metals - SOIL

Speciated Metals - Cr12							
Analyte	Unit	Lab ID	Sample Date	Sample ID	L2538999-1	L2538999-3	L2538999-5
					09-DEC-20	09-DEC-20	09-DEC-20
					BH1-2	BH2-2	BH3-2
		Guide Limits					
		#1	#2				
Chromium, Hexavalent	ug/g	8	-	<0.20	<0.20		0.49

Guide Limit #1: T2-Soil-Res/Park/Inst. Property Use (Coarse)

Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.



ANALYTICAL REPORT

Volatile Organic Compounds - SOIL

Analyte	Unit	Guide Limits		Lab ID	Sample Date	Sample ID
		#1	#2	L2538999-2	L2538999-4	L2538999-8
				09-DEC-20	09-DEC-20	09-DEC-20
				BH1-6	BH2-6	DUP-S1
Acetone	ug/g	16	-	<0.50	<0.50	<0.50
Benzene	ug/g	0.21	-	<0.0068	<0.0068	<0.0068
Bromodichloromethane	ug/g	1.5	-	<0.050	<0.050	<0.050
Bromoform	ug/g	0.27	-	<0.050	<0.050	<0.050
Bromomethane	ug/g	0.05	-	<0.050	<0.050	<0.050
Carbon tetrachloride	ug/g	0.05	-	<0.050	<0.050	<0.050
Chlorobenzene	ug/g	2.4	-	<0.050	<0.050	<0.050
Dibromochloromethane	ug/g	2.3	-	<0.050	<0.050	<0.050
Chloroform	ug/g	0.05	-	<0.050	<0.050	<0.050
1,2-Dibromoethane	ug/g	0.05	-	<0.050	<0.050	<0.050
1,2-Dichlorobenzene	ug/g	1.2	-	<0.050	<0.050	<0.050
1,3-Dichlorobenzene	ug/g	4.8	-	<0.050	<0.050	<0.050
1,4-Dichlorobenzene	ug/g	0.083	-	<0.050	<0.050	<0.050
Dichlorodifluoromethane	ug/g	16	-	<0.050	<0.050	<0.050
1,1-Dichloroethane	ug/g	0.47	-	<0.050	<0.050	<0.050
1,2-Dichloroethane	ug/g	0.05	-	<0.050	<0.050	<0.050
1,1-Dichloroethylene	ug/g	0.05	-	<0.050	<0.050	<0.050
cis-1,2-Dichloroethylene	ug/g	1.9	-	<0.050	<0.050	<0.050
trans-1,2-Dichloroethylene	ug/g	0.084	-	<0.050	<0.050	<0.050
Methylene Chloride	ug/g	0.1	-	<0.050	<0.050	<0.050
1,2-Dichloropropane	ug/g	0.05	-	<0.050	<0.050	<0.050
cis-1,3-Dichloropropene	ug/g	-	-	<0.030	<0.030	<0.030
trans-1,3-Dichloropropene	ug/g	-	-	<0.030	<0.030	<0.030
1,3-Dichloropropene (cis & trans)	ug/g	0.05	-	<0.042	<0.042	<0.042
Ethylbenzene	ug/g	1.1	-	<0.018	<0.018	<0.018
n-Hexane	ug/g	2.8	-	<0.050	<0.050	<0.050
Methyl Ethyl Ketone	ug/g	16	-	<0.50	<0.50	<0.50
Methyl Isobutyl Ketone	ug/g	1.7	-	<0.50	<0.50	<0.50
MTBE	ug/g	0.75	-	<0.050	<0.050	<0.050
Styrene	ug/g	0.7	-	<0.050	<0.050	<0.050

Guide Limit #1: T2-Soil-Res/Park/Inst. Property Use (Coarse)

ANALYTICAL REPORT

Volatile Organic Compounds - SOIL

Analyte	Unit	Guide Limits		L2538999-2	L2538999-4	L2538999-8
		#1	#2			
1,1,1,2-Tetrachloroethane	ug/g	0.058	-	<0.050	<0.050	<0.050
1,1,2,2-Tetrachloroethane	ug/g	0.05	-	<0.050	<0.050	<0.050
Tetrachloroethylene	ug/g	0.28	-	<0.050	<0.050	<0.050
Toluene	ug/g	2.3	-	<0.080	<0.080	<0.080
1,1,1-Trichloroethane	ug/g	0.38	-	<0.050	<0.050	<0.050
1,1,2-Trichloroethane	ug/g	0.05	-	<0.050	<0.050	<0.050
Trichloroethylene	ug/g	0.061	-	<0.010	<0.010	<0.010
Trichlorofluoromethane	ug/g	4	-	<0.050	<0.050	<0.050
Vinyl chloride	ug/g	0.02	-	<0.020	<0.020	<0.020
o-Xylene	ug/g	-	-	<0.020	<0.020	<0.020
m+p-Xylenes	ug/g	-	-	<0.030	<0.030	<0.030
Xylenes (Total)	ug/g	3.1	-	<0.050	<0.050	<0.050
Surrogate: 4-Bromofluorobenzene	%	-	-	93.5	94.9	93.6
Surrogate: 1,4-Difluorobenzene	%	-	-	108.0	112.1	108.9

Guide Limit #1: T2-Soil-Res/Park/Inst. Property Use (Coarse)

- Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
- Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.



ANALYTICAL REPORT

Hydrocarbons - SOIL

		<div> <div>Lab ID</div> <div>Sample Date</div> <div>Sample ID</div> </div>				
		L2538999-2	L2538999-4	L2538999-8		
		09-DEC-20	09-DEC-20	09-DEC-20		
		BH1-6	BH2-6	DUP-S1		
Analyte	Unit	<div> <div>Guide Limits</div> <div>#1</div> <div>#2</div> </div>				
F1 (C6-C10)	ug/g	55	-	<5.0	<5.0	<5.0
F1-BTEX	ug/g	55	-	<5.0	<5.0	<5.0
F2 (C10-C16)	ug/g	98	-	<10	<10	<10
F3 (C16-C34)	ug/g	300	-	<50	62	<50
F4 (C34-C50)	ug/g	2800	-	<50	82	<50
Total Hydrocarbons (C6-C50)	ug/g	-	-	<72	144	<72
Chrom. to baseline at nC50		-	-	YES	YES	YES
Surrogate: 2-Bromobenzotrifluoride	%	-	-	83.9	83.5	82.2
Surrogate: 3,4-Dichlorotoluene	%	-	-	109.5	104.7	118.0

Guide Limit #1: T2-Soil-Res/Park/Inst. Property Use (Coarse)

- Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
- Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.



ANALYTICAL REPORT

Polycyclic Aromatic Hydrocarbons - SOIL

		Lab ID	L2538999-1	
		Sample Date	09-DEC-20	
		Sample ID	BH1-2	
Analyte	Unit	Guide Limits		
		#1	#2	
Acenaphthene	ug/g	7.9	-	<0.050
Acenaphthylene	ug/g	0.15	-	<0.050
Anthracene	ug/g	0.67	-	<0.050
Benzo(a)anthracene	ug/g	0.5	-	<0.050
Benzo(a)pyrene	ug/g	0.3	-	<0.050
Benzo(b)fluoranthene	ug/g	0.78	-	<0.050
Benzo(g,h,i)perylene	ug/g	6.6	-	<0.050
Benzo(k)fluoranthene	ug/g	0.78	-	<0.050
Chrysene	ug/g	7	-	<0.050
Dibenzo(ah)anthracene	ug/g	0.1	-	<0.050
Fluoranthene	ug/g	0.69	-	<0.050
Fluorene	ug/g	62	-	<0.050
Indeno(1,2,3-cd)pyrene	ug/g	0.38	-	<0.050
1+2-Methylnaphthalenes	ug/g	0.99	-	<0.042
1-Methylnaphthalene	ug/g	0.99	-	<0.030
2-Methylnaphthalene	ug/g	0.99	-	<0.030
Naphthalene	ug/g	0.6	-	<0.013
Phenanthrene	ug/g	6.2	-	<0.046
Pyrene	ug/g	78	-	<0.050
Surrogate: 2-Fluorobiphenyl	%	-	-	77.8
Surrogate: p-Terphenyl d14	%	-	-	89.1

Guide Limit #1: T2-Soil-Res/Park/Inst. Property Use (Coarse)

- Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
- Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.

Reference Information

L2538999 CONT'D....
 Job Reference: 2012-001 (UIRWIN AV)
 PAGE 12 of 14
 06-JAN-21 11:55 (MT)

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference**
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B-HWS-R511-WT Soil Boron-HWE-O.Reg 153/04 (July 2011) HW EXTR, EPA 6010B

A dried solid sample is extracted with calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES.

Analysis conducted 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).

CN-WAD-R511-WT Soil Cyanide (WAD)-O.Reg 153/04 (July 2011) MOE 3015/APHA 4500CN I-WAD

The sample is extracted with a strong base for 16 hours, and then filtered. The filtrate is then distilled where the cyanide is converted to cyanogen chloride by reacting with chloramine-T, the cyanogen chloride then reacts with a combination of barbituric acid and isonicotinic acid to form a highly colored complex.

Analysis conducted 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).

CR-CR6-IC-WT Soil Hexavalent Chromium in Soil SW846 3060A/7199

This analysis is carried out using procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846, Method 7199, published by the United States Environmental Protection Agency (EPA). The procedure involves analysis for chromium (VI) by ion chromatography using diphenylcarbazide in a sulphuric acid solution.

Analysis conducted 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).

F1-F4-511-CALC-WT Soil F1-F4 Hydrocarbon Calculated Parameters CCME CWS-PHC, Pub #1310, Dec 2001-S

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

Hydrocarbon results are expressed on a dry weight basis.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.

In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:

1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:

1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

F1-HS-511-WT Soil F1-O.Reg 153/04 (July 2011) E3398/CCME TIER 1-HS

Fraction F1 is determined by extracting a soil or sediment sample as received with methanol, then analyzing by headspace-GC/FID.

Analysis conducted 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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference**
F2-F4-511-WT	Soil	F2-F4-O.Reg 153/04 (July 2011)	CCME Tier 1
<p>Petroleum Hydrocarbons (F2-F4 fractions) are extracted from soil with 1:1 hexane:acetone using a rotary extractor. Extracts are treated with silica gel to remove polar organic interferences. F2, F3, & F4 are analyzed by GC-FID. F4G-sg is analyzed gravimetrically.</p> <p>Notes:</p> <ol style="list-style-type: none"> 1. F2 (C10-C16): Sum of all hydrocarbons that elute between nC10 and nC16. 2. F3 (C16-C34): Sum of all hydrocarbons that elute between nC16 and nC34. 3. F4 (C34-C50): Sum of all hydrocarbons that elute between nC34 and nC50. 4. F4G: Gravimetric Heavy Hydrocarbons 5. F4G-sg: Gravimetric Heavy Hydrocarbons (F4G) after silica gel treatment. 6. Where both F4 (C34-C50) and F4G-sg are reported for a sample, the larger of the two values is used for comparison against the relevant CCME guideline for F4. 7. F4G-sg cannot be added to the C6 to C50 hydrocarbon results to obtain an estimate of total extractable hydrocarbons. 8. This method is validated for use. 9. Data from analysis of validation and quality control samples is available upon request. 10. Reported results are expressed as milligrams per dry kilogram, unless otherwise indicated. <p>Analysis conducted 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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).</p>			
GRAIN SIZE-HYD-SK	Soil	Grain Size by Hydrometer	ASTM D6913/D7928
<p>Particle size curve is generated from dry sieving (particles > 2 mm), wet sieving (particles 2 mm-75 um) and hydrometer readings (particles < 75 um)</p> <p>ASTM D422-63 has been withdrawn, the ASTM D6913/D7928 standard serves as the successor method.</p>			
HG-200.2-CVAA-WT	Soil	Mercury in Soil by CVAAS	EPA 200.2/1631E (mod)
<p>Soil samples are digested with nitric and hydrochloric acids, followed by analysis by CVAAS.</p> <p>Analysis conducted 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).</p>			
MET-200.2-CCMS-WT	Soil	Metals in Soil by CRC ICPMS	EPA 200.2/6020B (mod)
<p>Soil/sediment is dried, disaggregated, and sieved (2 mm). For tests intended to support Ontario regulations, the <2mm fraction is ground to pass through a 0.355 mm sieve. Strong Acid Leachable Metals in the <2mm fraction are solubilized by heated digestion with nitric and hydrochloric acids. Instrumental analysis is by Collision / Reaction Cell ICPMS.</p> <p>Limitations: This method is intended to liberate environmentally available metals. Silicate minerals are not solubilized. Some metals may be only partially recovered (matrix dependent), including Al, Ba, Be, Cr, S, Sr, Ti, Tl, V, W, and Zr. Elemental Sulfur may be poorly recovered by this method. Volatile forms of sulfur (e.g. sulfide, H₂S) may be excluded if lost during sampling, storage, or digestion.</p> <p>Analysis conducted 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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).</p>			
METHYLNAPS-CALC-WT	Soil	ABN-Calculated Parameters	SW846 8270
MOISTURE-WT	Soil	% Moisture	CCME PHC in Soil - Tier 1 (mod)
PAH-511-WT	Soil	PAH-O.Reg 153/04 (July 2011)	SW846 3510/8270

A representative sub-sample of soil is fortified with deuterium-labelled surrogates and a mechanical shaking technique is used to extract the sample with a mixture of methanol and toluene. The extracts are concentrated and analyzed by GC/MS. Results for benzo(b) fluoranthene may include contributions from benzo(j)fluoranthene, if also present in the sample.

Analysis conducted 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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

Reference Information

L2538999 CONT'D....
 Job Reference: 2012-001 (UIRWIN AV)
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Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference**
PH-WT	Soil	pH	MOEE E3137A
A minimum 10g portion of the sample is extracted with 20mL of 0.01M calcium chloride solution by shaking for at least 30 minutes. The aqueous layer is separated from the soil and then analyzed using a pH meter and electrode.			
Analysis conducted 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).			
VOC-1,3-DCP-CALC-WT	Soil	Regulation 153 VOCs	SW8260B/SW8270C
VOC-511-HS-WT	Soil	VOC-O.Reg 153/04 (July 2011)	SW846 8260 (511)
Soil and sediment samples are extracted in methanol and analyzed by headspace-GC/MS.			
Analysis conducted 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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).			
XYLENES-SUM-CALC-WT	Soil	Sum of Xylene Isomer Concentrations	CALCULATION
Total xylenes represents the sum of o-xylene and m&p-xylene.			

**ALS test methods may incorporate modifications from specified reference methods to improve performance.

Chain of Custody Numbers:

20-889953

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
SK	ALS ENVIRONMENTAL - SASKATOON, SASKATCHEWAN, CANADA
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg ww - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight
mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guideline limits are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.



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Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
B-HWS-R511-WT		Soil						
Batch R5317069								
WG3461801-4 DUP		L2539659-5						
Boron (B), Hot Water Ext.		0.20	0.20		ug/g	2.1	30	15-DEC-20
WG3461801-2 IRM		WT SAR4						
Boron (B), Hot Water Ext.			99.4		%		70-130	15-DEC-20
WG3461801-3 LCS								
Boron (B), Hot Water Ext.			101.0		%		70-130	15-DEC-20
WG3461801-1 MB								
Boron (B), Hot Water Ext.			<0.10		ug/g		0.1	15-DEC-20
Batch R5317560								
WG3461794-4 DUP		L2539013-12						
Boron (B), Hot Water Ext.		0.12	0.12		ug/g	0.1	30	15-DEC-20
WG3461794-2 IRM		WT SAR4						
Boron (B), Hot Water Ext.			99.8		%		70-130	15-DEC-20
WG3461794-3 LCS								
Boron (B), Hot Water Ext.			102.0		%		70-130	15-DEC-20
WG3461794-1 MB								
Boron (B), Hot Water Ext.			<0.10		ug/g		0.1	15-DEC-20
CN-WAD-R511-WT		Soil						
Batch R5317336								
WG3461206-3 DUP		L2538833-1						
Cyanide, Weak Acid Diss		<0.050	<0.050	RPD-NA	ug/g	N/A	35	15-DEC-20
WG3461206-2 LCS								
Cyanide, Weak Acid Diss			95.8		%		80-120	15-DEC-20
WG3461206-1 MB								
Cyanide, Weak Acid Diss			<0.050		ug/g		0.05	15-DEC-20
WG3461206-4 MS		L2538833-1						
Cyanide, Weak Acid Diss			125.6		%		70-130	15-DEC-20
CR-CR6-IC-WT		Soil						
Batch R5318014								
WG3461214-4 CRM		WT-SQC012						
Chromium, Hexavalent			93.0		%		70-130	16-DEC-20
WG3461214-3 DUP		L2538833-1						
Chromium, Hexavalent		<0.20	<0.20	RPD-NA	ug/g	N/A	35	16-DEC-20
WG3461214-2 LCS								
Chromium, Hexavalent			83.5		%		80-120	16-DEC-20
WG3461214-1 MB								
Chromium, Hexavalent			<0.20		ug/g		0.2	16-DEC-20

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Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F1-HS-511-WT		Soil						
Batch	R5316577							
WG3460352-4	DUP	WG3460352-3						
F1 (C6-C10)		<5.0	<5.0	RPD-NA	ug/g	N/A	30	15-DEC-20
WG3460352-2	LCS							
F1 (C6-C10)			102.8		%		80-120	15-DEC-20
WG3460352-1	MB							
F1 (C6-C10)			<5.0		ug/g		5	14-DEC-20
Surrogate: 3,4-Dichlorotoluene			111.7		%		60-140	14-DEC-20
WG3460352-6	MS	L2538999-2						
F1 (C6-C10)			82.2		%		60-140	15-DEC-20
F2-F4-511-WT		Soil						
Batch	R5318292							
WG3461186-3	DUP	WG3461186-5						
F2 (C10-C16)		12	<10	RPD-NA	ug/g	N/A	30	16-DEC-20
F3 (C16-C34)		60	<50	RPD-NA	ug/g	N/A	30	16-DEC-20
F4 (C34-C50)		<50	<50	RPD-NA	ug/g	N/A	30	16-DEC-20
WG3461186-2	LCS							
F2 (C10-C16)			100.8		%		80-120	16-DEC-20
F3 (C16-C34)			99.9		%		80-120	16-DEC-20
F4 (C34-C50)			103.5		%		80-120	16-DEC-20
WG3461186-1	MB							
F2 (C10-C16)			<10		ug/g		10	16-DEC-20
F3 (C16-C34)			<50		ug/g		50	16-DEC-20
F4 (C34-C50)			<50		ug/g		50	16-DEC-20
Surrogate: 2-Bromobenzotrifluoride			96.7		%		60-140	16-DEC-20
WG3461186-4	MS	WG3461186-5						
F2 (C10-C16)			94.0		%		60-140	16-DEC-20
F3 (C16-C34)			92.5		%		60-140	16-DEC-20
F4 (C34-C50)			98.0		%		60-140	16-DEC-20
GRAIN SIZE-HYD-SK		Soil						
Batch	R5320178							
WG3463349-1	DUP	L2540557-1						
Gravel (4.75mm - 3in.)		<1.0	<1.0	RPD-NA	%	N/A	5	18-DEC-20
Coarse Sand (2.0mm - 4.75mm)		<1.0	<1.0	RPD-NA	%	N/A	5	18-DEC-20
Medium Sand (0.425mm - 2.0mm)		<1.0	<1.0	RPD-NA	%	N/A	5	18-DEC-20
Fine Sand (0.075mm - 0.425mm)		2.2	1.8	J	%	0.4	5	18-DEC-20
Silt (0.005mm - 0.075mm)		18.0	18.5	J	%	0.5	5	18-DEC-20

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Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
GRAIN SIZE-HYD-SK Soil								
Batch R5320178								
WG3463349-1	DUP	L2540557-1						
Clay (<0.005mm)		78.8	78.9	J	%	0.1	5	18-DEC-20
Silt (0.002mm - 0.075mm)		35.8	35.7	J	%	0.0	5	18-DEC-20
Clay (<0.002mm)		61.1	61.7	J	%	0.5	5	18-DEC-20
WG3463349-2	IRM	2017-PSA						
Medium Sand (0.425mm - 2.0mm)			8.7		%		3.9-13.9	18-DEC-20
Fine Sand (0.075mm - 0.425mm)			33.0		%		27.6-37.6	18-DEC-20
Silt (0.005mm - 0.075mm)			33.3		%		25.8-35.8	18-DEC-20
Clay (<0.005mm)			25.0		%		22.7-32.7	18-DEC-20
Silt (0.002mm - 0.075mm)			37.6		%		31.1-41.1	18-DEC-20
Clay (<0.002mm)			20.7		%		17.4-27.4	18-DEC-20
HG-200.2-CVAA-WT Soil								
Batch R5316976								
WG3461780-2	CRM	WT-SS-2						
Mercury (Hg)			105.0		%		70-130	15-DEC-20
WG3461780-6	DUP	WG3461780-5						
Mercury (Hg)		0.0454	0.0444		ug/g	2.4	40	15-DEC-20
WG3461780-3	LCS		114.5		%		80-120	15-DEC-20
Mercury (Hg)								
WG3461780-1	MB		<0.0050		mg/kg		0.005	15-DEC-20
Mercury (Hg)								
Batch R5316982								
WG3461791-2	CRM	WT-SS-2						
Mercury (Hg)			112.7		%		70-130	15-DEC-20
WG3461791-6	DUP	WG3461791-5						
Mercury (Hg)		0.0446	0.0425		ug/g	4.7	40	15-DEC-20
WG3461791-3	LCS		112.5		%		80-120	15-DEC-20
Mercury (Hg)								
WG3461791-1	MB		<0.0050		mg/kg		0.005	15-DEC-20
Mercury (Hg)								
MET-200.2-CCMS-WT Soil								
Batch R5316937								
WG3461780-2	CRM	WT-SS-2						
Antimony (Sb)			110.0		%		70-130	15-DEC-20
Arsenic (As)			105.9		%		70-130	15-DEC-20
Barium (Ba)			106.0		%		70-130	15-DEC-20

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Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-WT		Soil						
Batch	R5316937							
WG3461780-2	CRM	WT-SS-2						
Beryllium (Be)			101.6		%		70-130	15-DEC-20
Boron (B)			8.9		mg/kg		3.5-13.5	15-DEC-20
Cadmium (Cd)			102.7		%		70-130	15-DEC-20
Chromium (Cr)			104.0		%		70-130	15-DEC-20
Cobalt (Co)			108.2		%		70-130	15-DEC-20
Copper (Cu)			108.3		%		70-130	15-DEC-20
Lead (Pb)			109.0		%		70-130	15-DEC-20
Molybdenum (Mo)			109.9		%		70-130	15-DEC-20
Nickel (Ni)			108.7		%		70-130	15-DEC-20
Selenium (Se)			0.17		mg/kg		0-0.34	15-DEC-20
Silver (Ag)			109.1		%		70-130	15-DEC-20
Thallium (Tl)			0.079		mg/kg		0.029-0.129	15-DEC-20
Uranium (U)			99.0		%		70-130	15-DEC-20
Vanadium (V)			107.6		%		70-130	15-DEC-20
Zinc (Zn)			101.9		%		70-130	15-DEC-20
WG3461780-6	DUP	WG3461780-5						
Antimony (Sb)		0.19	0.37	J	ug/g	0.18	0.2	15-DEC-20
Arsenic (As)		3.86	4.11		ug/g	6.1	30	15-DEC-20
Barium (Ba)		106	115		ug/g	8.6	40	15-DEC-20
Beryllium (Be)		0.76	0.83		ug/g	8.5	30	15-DEC-20
Boron (B)		9.3	12.7	J	ug/g	3.4	10	15-DEC-20
Cadmium (Cd)		0.235	0.252		ug/g	7.1	30	15-DEC-20
Chromium (Cr)		26.7	28.8		ug/g	7.3	30	15-DEC-20
Cobalt (Co)		10.8	11.4		ug/g	5.9	30	15-DEC-20
Copper (Cu)		23.5	25.9		ug/g	10	30	15-DEC-20
Lead (Pb)		14.6	20.9		ug/g	35	40	15-DEC-20
Molybdenum (Mo)		0.38	0.54		ug/g	34	40	15-DEC-20
Nickel (Ni)		23.8	25.8		ug/g	8.2	30	15-DEC-20
Selenium (Se)		<0.20	0.21	RPD-NA	ug/g	N/A	30	15-DEC-20
Silver (Ag)		<0.10	<0.10	RPD-NA	ug/g	N/A	40	15-DEC-20
Thallium (Tl)		0.162	0.223	J	ug/g	0.061	0.1	15-DEC-20
Uranium (U)		0.689	0.715		ug/g	3.7	30	15-DEC-20
Vanadium (V)		36.2	39.8		ug/g	9.5	30	15-DEC-20



Environmental

Quality Control Report

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Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-WT		Soil						
Batch	R5316937							
WG3461780-6	DUP	WG3461780-5						
Zinc (Zn)		66.7	71.8		ug/g	7.4	30	15-DEC-20
WG3461780-4	LCS							
Antimony (Sb)			103.7		%		80-120	15-DEC-20
Arsenic (As)			103.1		%		80-120	15-DEC-20
Barium (Ba)			102.1		%		80-120	15-DEC-20
Beryllium (Be)			103.3		%		80-120	15-DEC-20
Boron (B)			99.0		%		80-120	15-DEC-20
Cadmium (Cd)			100.4		%		80-120	15-DEC-20
Chromium (Cr)			104.5		%		80-120	15-DEC-20
Cobalt (Co)			101.0		%		80-120	15-DEC-20
Copper (Cu)			101.1		%		80-120	15-DEC-20
Lead (Pb)			101.0		%		80-120	15-DEC-20
Molybdenum (Mo)			105.2		%		80-120	15-DEC-20
Nickel (Ni)			102.6		%		80-120	15-DEC-20
Selenium (Se)			98.7		%		80-120	15-DEC-20
Silver (Ag)			101.2		%		80-120	15-DEC-20
Thallium (Tl)			100.2		%		80-120	15-DEC-20
Uranium (U)			105.4		%		80-120	15-DEC-20
Vanadium (V)			105.0		%		80-120	15-DEC-20
Zinc (Zn)			96.0		%		80-120	15-DEC-20
WG3461780-1	MB							
Antimony (Sb)			<0.10		mg/kg		0.1	15-DEC-20
Arsenic (As)			<0.10		mg/kg		0.1	15-DEC-20
Barium (Ba)			<0.50		mg/kg		0.5	15-DEC-20
Beryllium (Be)			<0.10		mg/kg		0.1	15-DEC-20
Boron (B)			<5.0		mg/kg		5	15-DEC-20
Cadmium (Cd)			<0.020		mg/kg		0.02	15-DEC-20
Chromium (Cr)			<0.50		mg/kg		0.5	15-DEC-20
Cobalt (Co)			<0.10		mg/kg		0.1	15-DEC-20
Copper (Cu)			<0.50		mg/kg		0.5	15-DEC-20
Lead (Pb)			<0.50		mg/kg		0.5	15-DEC-20
Molybdenum (Mo)			<0.10		mg/kg		0.1	15-DEC-20
Nickel (Ni)			<0.50		mg/kg		0.5	15-DEC-20
Selenium (Se)			<0.20		mg/kg		0.2	15-DEC-20

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6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-WT								
Soil								
Batch R5316937								
WG3461780-1 MB								
Silver (Ag)			<0.10		mg/kg		0.1	15-DEC-20
Thallium (Tl)			<0.050		mg/kg		0.05	15-DEC-20
Uranium (U)			<0.050		mg/kg		0.05	15-DEC-20
Vanadium (V)			<0.20		mg/kg		0.2	15-DEC-20
Zinc (Zn)			<2.0		mg/kg		2	15-DEC-20
Batch R5317987								
WG3461791-2 CRM								
WT-SS-2								
Antimony (Sb)			116.5		%		70-130	15-DEC-20
Arsenic (As)			101.5		%		70-130	15-DEC-20
Barium (Ba)			105.3		%		70-130	15-DEC-20
Beryllium (Be)			111.8		%		70-130	15-DEC-20
Boron (B)			10.3		mg/kg		3.5-13.5	15-DEC-20
Cadmium (Cd)			101.3		%		70-130	15-DEC-20
Chromium (Cr)			101.0		%		70-130	15-DEC-20
Cobalt (Co)			104.5		%		70-130	15-DEC-20
Copper (Cu)			105.1		%		70-130	15-DEC-20
Lead (Pb)			112.3		%		70-130	15-DEC-20
Molybdenum (Mo)			112.4		%		70-130	15-DEC-20
Nickel (Ni)			104.6		%		70-130	15-DEC-20
Selenium (Se)			0.17		mg/kg		0-0.34	15-DEC-20
Silver (Ag)			93.6		%		70-130	15-DEC-20
Thallium (Tl)			0.082		mg/kg		0.029-0.129	15-DEC-20
Uranium (U)			108.3		%		70-130	15-DEC-20
Vanadium (V)			104.0		%		70-130	15-DEC-20
Zinc (Zn)			97.9		%		70-130	15-DEC-20
WG3461791-6 DUP								
WG3461791-5								
Antimony (Sb)		0.34	0.39		ug/g	15	30	15-DEC-20
Arsenic (As)		3.72	3.64		ug/g	2.3	30	15-DEC-20
Barium (Ba)		75.1	77.0		ug/g	2.5	40	15-DEC-20
Beryllium (Be)		0.58	0.64		ug/g	10	30	15-DEC-20
Boron (B)		10.1	9.8		ug/g	3.0	30	15-DEC-20
Cadmium (Cd)		0.273	0.270		ug/g	1.0	30	15-DEC-20
Chromium (Cr)		23.2	24.1		ug/g	3.9	30	15-DEC-20
Cobalt (Co)		7.46	7.59		ug/g	1.7	30	15-DEC-20

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6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-WT		Soil						
Batch	R5317987							
WG3461791-6	DUP	WG3461791-5						
Copper (Cu)		19.9	19.9		ug/g	0.0	30	15-DEC-20
Lead (Pb)		26.6	27.4		ug/g	3.1	40	15-DEC-20
Molybdenum (Mo)		0.62	0.53		ug/g	15	40	15-DEC-20
Nickel (Ni)		17.3	17.5		ug/g	1.3	30	15-DEC-20
Selenium (Se)		0.22	0.25		ug/g	13	30	15-DEC-20
Silver (Ag)		<0.10	<0.10	RPD-NA	ug/g	N/A	40	15-DEC-20
Thallium (Tl)		0.137	0.139		ug/g	1.4	30	15-DEC-20
Uranium (U)		0.529	0.508		ug/g	4.0	30	15-DEC-20
Vanadium (V)		28.2	29.0		ug/g	2.8	30	15-DEC-20
Zinc (Zn)		71.2	67.7		ug/g	5.1	30	15-DEC-20
WG3461791-4	LCS							
Antimony (Sb)			105.7		%		80-120	15-DEC-20
Arsenic (As)			100.7		%		80-120	15-DEC-20
Barium (Ba)			97.3		%		80-120	15-DEC-20
Beryllium (Be)			97.1		%		80-120	15-DEC-20
Boron (B)			92.1		%		80-120	15-DEC-20
Cadmium (Cd)			98.3		%		80-120	15-DEC-20
Chromium (Cr)			98.7		%		80-120	15-DEC-20
Cobalt (Co)			97.3		%		80-120	15-DEC-20
Copper (Cu)			97.6		%		80-120	15-DEC-20
Lead (Pb)			97.8		%		80-120	15-DEC-20
Molybdenum (Mo)			102.0		%		80-120	15-DEC-20
Nickel (Ni)			97.4		%		80-120	15-DEC-20
Selenium (Se)			99.0		%		80-120	15-DEC-20
Silver (Ag)			100.6		%		80-120	15-DEC-20
Thallium (Tl)			100.4		%		80-120	15-DEC-20
Uranium (U)			96.3		%		80-120	15-DEC-20
Vanadium (V)			99.9		%		80-120	15-DEC-20
Zinc (Zn)			94.5		%		80-120	15-DEC-20
WG3461791-1	MB							
Antimony (Sb)			<0.10		mg/kg		0.1	15-DEC-20
Arsenic (As)			<0.10		mg/kg		0.1	15-DEC-20
Barium (Ba)			<0.50		mg/kg		0.5	15-DEC-20
Beryllium (Be)			<0.10		mg/kg		0.1	15-DEC-20

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Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-WT		Soil						
Batch	R5317987							
WG3461791-1	MB							
Boron (B)			<5.0		mg/kg		5	15-DEC-20
Cadmium (Cd)			<0.020		mg/kg		0.02	15-DEC-20
Chromium (Cr)			<0.50		mg/kg		0.5	15-DEC-20
Cobalt (Co)			<0.10		mg/kg		0.1	15-DEC-20
Copper (Cu)			<0.50		mg/kg		0.5	15-DEC-20
Lead (Pb)			<0.50		mg/kg		0.5	15-DEC-20
Molybdenum (Mo)			<0.10		mg/kg		0.1	15-DEC-20
Nickel (Ni)			<0.50		mg/kg		0.5	15-DEC-20
Selenium (Se)			<0.20		mg/kg		0.2	15-DEC-20
Silver (Ag)			<0.10		mg/kg		0.1	15-DEC-20
Thallium (Tl)			<0.050		mg/kg		0.05	15-DEC-20
Uranium (U)			<0.050		mg/kg		0.05	15-DEC-20
Vanadium (V)			<0.20		mg/kg		0.2	15-DEC-20
Zinc (Zn)			<2.0		mg/kg		2	15-DEC-20
MOISTURE-WT		Soil						
Batch	R5316102							
WG3461386-3	DUP	L2539013-1						
% Moisture		17.5	17.7		%	1.3	20	15-DEC-20
WG3461386-2	LCS							
% Moisture			109.2		%		90-110	15-DEC-20
WG3461386-1	MB							
% Moisture			<0.25		%		0.25	15-DEC-20
Batch	R5316104							
WG3461305-3	DUP	L2538964-1						
% Moisture		14.8	14.4		%	2.2	20	15-DEC-20
WG3461305-2	LCS							
% Moisture			109.8		%		90-110	15-DEC-20
WG3461305-1	MB							
% Moisture			<0.25		%		0.25	15-DEC-20
PAH-511-WT		Soil						
Batch	R5317696							
WG3461196-3	DUP	WG3461196-5						
1-Methylnaphthalene		<0.030	<0.030	RPD-NA	ug/g	N/A	40	15-DEC-20
2-Methylnaphthalene		<0.030	<0.030	RPD-NA	ug/g	N/A	40	15-DEC-20
Acenaphthene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20

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Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-511-WT		Soil						
Batch	R5317696							
WG3461196-3	DUP	WG3461196-5						
Acenaphthylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Anthracene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Benzo(a)anthracene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Benzo(a)pyrene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Benzo(b)fluoranthene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Benzo(g,h,i)perylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Benzo(k)fluoranthene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Chrysene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Dibenzo(ah)anthracene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Fluoranthene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Fluorene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Indeno(1,2,3-cd)pyrene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Naphthalene		<0.013	<0.013	RPD-NA	ug/g	N/A	40	15-DEC-20
Phenanthrene		<0.046	<0.046	RPD-NA	ug/g	N/A	40	15-DEC-20
Pyrene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
WG3461196-2	LCS							
1-Methylnaphthalene			86.1		%		50-140	15-DEC-20
2-Methylnaphthalene			82.8		%		50-140	15-DEC-20
Acenaphthene			86.2		%		50-140	15-DEC-20
Acenaphthylene			81.4		%		50-140	15-DEC-20
Anthracene			84.0		%		50-140	15-DEC-20
Benzo(a)anthracene			88.8		%		50-140	15-DEC-20
Benzo(a)pyrene			87.9		%		50-140	15-DEC-20
Benzo(b)fluoranthene			87.9		%		50-140	15-DEC-20
Benzo(g,h,i)perylene			90.7		%		50-140	15-DEC-20
Benzo(k)fluoranthene			86.3		%		50-140	15-DEC-20
Chrysene			103.2		%		50-140	15-DEC-20
Dibenzo(ah)anthracene			93.3		%		50-140	15-DEC-20
Fluoranthene			85.3		%		50-140	15-DEC-20
Fluorene			80.3		%		50-140	15-DEC-20
Indeno(1,2,3-cd)pyrene			90.3		%		50-140	15-DEC-20
Naphthalene			89.0		%		50-140	15-DEC-20
Phenanthrene			89.1		%		50-140	15-DEC-20

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Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-511-WT		Soil						
Batch	R5317696							
WG3461196-2	LCS							
Pyrene			86.5		%		50-140	15-DEC-20
WG3461196-1	MB							
1-Methylnaphthalene			<0.030		ug/g		0.03	15-DEC-20
2-Methylnaphthalene			<0.030		ug/g		0.03	15-DEC-20
Acenaphthene			<0.050		ug/g		0.05	15-DEC-20
Acenaphthylene			<0.050		ug/g		0.05	15-DEC-20
Anthracene			<0.050		ug/g		0.05	15-DEC-20
Benzo(a)anthracene			<0.050		ug/g		0.05	15-DEC-20
Benzo(a)pyrene			<0.050		ug/g		0.05	15-DEC-20
Benzo(b)fluoranthene			<0.050		ug/g		0.05	15-DEC-20
Benzo(g,h,i)perylene			<0.050		ug/g		0.05	15-DEC-20
Benzo(k)fluoranthene			<0.050		ug/g		0.05	15-DEC-20
Chrysene			<0.050		ug/g		0.05	15-DEC-20
Dibenzo(ah)anthracene			<0.050		ug/g		0.05	15-DEC-20
Fluoranthene			<0.050		ug/g		0.05	15-DEC-20
Fluorene			<0.050		ug/g		0.05	15-DEC-20
Indeno(1,2,3-cd)pyrene			<0.050		ug/g		0.05	15-DEC-20
Naphthalene			<0.013		ug/g		0.013	15-DEC-20
Phenanthrene			<0.046		ug/g		0.046	15-DEC-20
Pyrene			<0.050		ug/g		0.05	15-DEC-20
Surrogate: 2-Fluorobiphenyl			80.4		%		50-140	15-DEC-20
Surrogate: p-Terphenyl d14			89.6		%		50-140	15-DEC-20
WG3461196-4	MS	WG3461196-5						
1-Methylnaphthalene			89.5		%		50-140	15-DEC-20
2-Methylnaphthalene			85.9		%		50-140	15-DEC-20
Acenaphthene			91.7		%		50-140	15-DEC-20
Acenaphthylene			83.8		%		50-140	15-DEC-20
Anthracene			90.3		%		50-140	15-DEC-20
Benzo(a)anthracene			97.8		%		50-140	15-DEC-20
Benzo(a)pyrene			95.7		%		50-140	15-DEC-20
Benzo(b)fluoranthene			95.5		%		50-140	15-DEC-20
Benzo(g,h,i)perylene			95.8		%		50-140	15-DEC-20
Benzo(k)fluoranthene			94.9		%		50-140	15-DEC-20
Chrysene			109.1		%		50-140	15-DEC-20

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Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-511-WT								
Soil								
Batch	R5317696							
WG3461196-4 MS		WG3461196-5						
Dibenzo(ah)anthracene			100.1		%		50-140	15-DEC-20
Fluoranthene			92.5		%		50-140	15-DEC-20
Fluorene			87.7		%		50-140	15-DEC-20
Indeno(1,2,3-cd)pyrene			95.6		%		50-140	15-DEC-20
Naphthalene			89.8		%		50-140	15-DEC-20
Phenanthrene			93.0		%		50-140	15-DEC-20
Pyrene			93.2		%		50-140	15-DEC-20
PH-WT								
Soil								
Batch	R5316918							
WG3461560-1 DUP		L2532089-3						
pH		7.92	7.93	J	pH units	0.01	0.3	15-DEC-20
WG3462038-1 LCS								
pH			6.95		pH units		6.9-7.1	15-DEC-20
VOC-511-HS-WT								
Soil								
Batch	R5316577							
WG3460352-4 DUP		WG3460352-3						
1,1,1,2-Tetrachloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
1,1,2,2-Tetrachloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
1,1,1-Trichloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
1,1,2-Trichloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
1,1-Dichloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
1,1-Dichloroethylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
1,2-Dibromoethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
1,2-Dichlorobenzene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
1,2-Dichloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
1,2-Dichloropropane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
1,3-Dichlorobenzene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
1,4-Dichlorobenzene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Acetone		<0.50	<0.50	RPD-NA	ug/g	N/A	40	15-DEC-20
Benzene		<0.0068	<0.0068	RPD-NA	ug/g	N/A	40	15-DEC-20
Bromodichloromethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Bromoform		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Bromomethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT		Soil						
Batch	R5316577							
WG3460352-4 DUP		WG3460352-3						
Carbon tetrachloride		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Chlorobenzene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Chloroform		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
cis-1,2-Dichloroethylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
cis-1,3-Dichloropropene		<0.030	<0.030	RPD-NA	ug/g	N/A	40	15-DEC-20
Dibromochloromethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Dichlorodifluoromethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Ethylbenzene		<0.018	<0.018	RPD-NA	ug/g	N/A	40	15-DEC-20
n-Hexane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Methylene Chloride		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
MTBE		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
m+p-Xylenes		<0.030	<0.030	RPD-NA	ug/g	N/A	40	15-DEC-20
Methyl Ethyl Ketone		<0.50	<0.50	RPD-NA	ug/g	N/A	40	15-DEC-20
Methyl Isobutyl Ketone		<0.50	<0.50	RPD-NA	ug/g	N/A	40	15-DEC-20
o-Xylene		<0.020	<0.020	RPD-NA	ug/g	N/A	40	15-DEC-20
Styrene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Tetrachloroethylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Toluene		<0.080	<0.080	RPD-NA	ug/g	N/A	40	15-DEC-20
trans-1,2-Dichloroethylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
trans-1,3-Dichloropropene		<0.030	<0.030	RPD-NA	ug/g	N/A	40	15-DEC-20
Trichloroethylene		<0.010	<0.010	RPD-NA	ug/g	N/A	40	15-DEC-20
Trichlorofluoromethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	15-DEC-20
Vinyl chloride		<0.020	<0.020	RPD-NA	ug/g	N/A	40	15-DEC-20
WG3460352-2 LCS								
1,1,1,2-Tetrachloroethane			92.4		%		60-130	15-DEC-20
1,1,2,2-Tetrachloroethane			101.1		%		60-130	15-DEC-20
1,1,1-Trichloroethane			99.8		%		60-130	15-DEC-20
1,1,2-Trichloroethane			96.3		%		60-130	15-DEC-20
1,1-Dichloroethane			102.7		%		60-130	15-DEC-20
1,1-Dichloroethylene			99.4		%		60-130	15-DEC-20
1,2-Dibromoethane			94.1		%		70-130	15-DEC-20
1,2-Dichlorobenzene			98.5		%		70-130	15-DEC-20
1,2-Dichloroethane			109.3		%		60-130	15-DEC-20

Quality Control Report

Workorder: L2538999

Report Date: 06-JAN-21

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Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT		Soil						
Batch	R5316577							
WG3460352-2	LCS							
1,2-Dichloropropane			103.5		%		70-130	15-DEC-20
1,3-Dichlorobenzene			98.6		%		70-130	15-DEC-20
1,4-Dichlorobenzene			99.9		%		70-130	15-DEC-20
Acetone			112.0		%		60-140	15-DEC-20
Benzene			101.2		%		70-130	15-DEC-20
Bromodichloromethane			110.9		%		50-140	15-DEC-20
Bromoform			100.4		%		70-130	15-DEC-20
Bromomethane			95.1		%		50-140	15-DEC-20
Carbon tetrachloride			102.4		%		70-130	15-DEC-20
Chlorobenzene			94.1		%		70-130	15-DEC-20
Chloroform			108.1		%		70-130	15-DEC-20
cis-1,2-Dichloroethylene			103.0		%		70-130	15-DEC-20
cis-1,3-Dichloropropene			105.7		%		70-130	15-DEC-20
Dibromochloromethane			90.2		%		60-130	15-DEC-20
Dichlorodifluoromethane			63.6		%		50-140	15-DEC-20
Ethylbenzene			87.6		%		70-130	15-DEC-20
n-Hexane			91.0		%		70-130	15-DEC-20
Methylene Chloride			113.7		%		70-130	15-DEC-20
MTBE			97.5		%		70-130	15-DEC-20
m+p-Xylenes			93.3		%		70-130	15-DEC-20
Methyl Ethyl Ketone			103.5		%		60-140	15-DEC-20
Methyl Isobutyl Ketone			93.7		%		60-140	15-DEC-20
o-Xylene			94.2		%		70-130	15-DEC-20
Styrene			83.3		%		70-130	15-DEC-20
Tetrachloroethylene			90.5		%		60-130	15-DEC-20
Toluene			89.2		%		70-130	15-DEC-20
trans-1,2-Dichloroethylene			110.7		%		60-130	15-DEC-20
trans-1,3-Dichloropropene			100.8		%		70-130	15-DEC-20
Trichloroethylene			100.3		%		60-130	15-DEC-20
Trichlorofluoromethane			95.1		%		50-140	15-DEC-20
Vinyl chloride			92.3		%		60-140	15-DEC-20
WG3460352-1	MB							
1,1,1,2-Tetrachloroethane			<0.050		ug/g		0.05	14-DEC-20
1,1,2,2-Tetrachloroethane			<0.050		ug/g		0.05	14-DEC-20

Quality Control Report

Workorder: L2538999

Report Date: 06-JAN-21

Page 14 of 17

Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT		Soil						
Batch	R5316577							
WG3460352-1	MB							
1,1,1-Trichloroethane			<0.050		ug/g		0.05	14-DEC-20
1,1,2-Trichloroethane			<0.050		ug/g		0.05	14-DEC-20
1,1-Dichloroethane			<0.050		ug/g		0.05	14-DEC-20
1,1-Dichloroethylene			<0.050		ug/g		0.05	14-DEC-20
1,2-Dibromoethane			<0.050		ug/g		0.05	14-DEC-20
1,2-Dichlorobenzene			<0.050		ug/g		0.05	14-DEC-20
1,2-Dichloroethane			<0.050		ug/g		0.05	14-DEC-20
1,2-Dichloropropane			<0.050		ug/g		0.05	14-DEC-20
1,3-Dichlorobenzene			<0.050		ug/g		0.05	14-DEC-20
1,4-Dichlorobenzene			<0.050		ug/g		0.05	14-DEC-20
Acetone			<0.50		ug/g		0.5	14-DEC-20
Benzene			<0.0068		ug/g		0.0068	14-DEC-20
Bromodichloromethane			<0.050		ug/g		0.05	14-DEC-20
Bromoform			<0.050		ug/g		0.05	14-DEC-20
Bromomethane			<0.050		ug/g		0.05	14-DEC-20
Carbon tetrachloride			<0.050		ug/g		0.05	14-DEC-20
Chlorobenzene			<0.050		ug/g		0.05	14-DEC-20
Chloroform			<0.050		ug/g		0.05	14-DEC-20
cis-1,2-Dichloroethylene			<0.050		ug/g		0.05	14-DEC-20
cis-1,3-Dichloropropene			<0.030		ug/g		0.03	14-DEC-20
Dibromochloromethane			<0.050		ug/g		0.05	14-DEC-20
Dichlorodifluoromethane			<0.050		ug/g		0.05	14-DEC-20
Ethylbenzene			<0.018		ug/g		0.018	14-DEC-20
n-Hexane			<0.050		ug/g		0.05	14-DEC-20
Methylene Chloride			<0.050		ug/g		0.05	14-DEC-20
MTBE			<0.050		ug/g		0.05	14-DEC-20
m+p-Xylenes			<0.030		ug/g		0.03	14-DEC-20
Methyl Ethyl Ketone			<0.50		ug/g		0.5	14-DEC-20
Methyl Isobutyl Ketone			<0.50		ug/g		0.5	14-DEC-20
o-Xylene			<0.020		ug/g		0.02	14-DEC-20
Styrene			<0.050		ug/g		0.05	14-DEC-20
Tetrachloroethylene			<0.050		ug/g		0.05	14-DEC-20
Toluene			<0.080		ug/g		0.08	14-DEC-20

Quality Control Report

Workorder: L2538999

Report Date: 06-JAN-21

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Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT		Soil						
Batch	R5316577							
WG3460352-1	MB							
trans-1,2-Dichloroethylene			<0.050		ug/g		0.05	14-DEC-20
trans-1,3-Dichloropropene			<0.030		ug/g		0.03	14-DEC-20
Trichloroethylene			<0.010		ug/g		0.01	14-DEC-20
Trichlorofluoromethane			<0.050		ug/g		0.05	14-DEC-20
Vinyl chloride			<0.020		ug/g		0.02	14-DEC-20
Surrogate: 1,4-Difluorobenzene			110.1		%		50-140	14-DEC-20
Surrogate: 4-Bromofluorobenzene			89.9		%		50-140	14-DEC-20
WG3460352-5	MS	WG3460352-3						
1,1,1,2-Tetrachloroethane			92.1		%		50-140	15-DEC-20
1,1,2,2-Tetrachloroethane			87.4		%		50-140	15-DEC-20
1,1,1-Trichloroethane			99.8		%		50-140	15-DEC-20
1,1,2-Trichloroethane			93.8		%		50-140	15-DEC-20
1,1-Dichloroethane			101.6		%		50-140	15-DEC-20
1,1-Dichloroethylene			99.96		%		50-140	15-DEC-20
1,2-Dibromoethane			91.7		%		50-140	15-DEC-20
1,2-Dichlorobenzene			62.4		%		50-140	15-DEC-20
1,2-Dichloroethane			101.6		%		50-140	15-DEC-20
1,2-Dichloropropane			99.7		%		50-140	15-DEC-20
1,3-Dichlorobenzene			65.0		%		50-140	15-DEC-20
1,4-Dichlorobenzene			64.0		%		50-140	15-DEC-20
Acetone			101.6		%		50-140	15-DEC-20
Benzene			99.3		%		50-140	15-DEC-20
Bromodichloromethane			105.4		%		50-140	15-DEC-20
Bromoform			91.9		%		50-140	15-DEC-20
Bromomethane			92.1		%		50-140	15-DEC-20
Carbon tetrachloride			102.7		%		50-140	15-DEC-20
Chlorobenzene			94.6		%		50-140	15-DEC-20
Chloroform			105.5		%		50-140	15-DEC-20
cis-1,2-Dichloroethylene			100.6		%		50-140	15-DEC-20
cis-1,3-Dichloropropene			99.2		%		50-140	15-DEC-20
Dibromochloromethane			87.9		%		50-140	15-DEC-20
Dichlorodifluoromethane			58.9		%		50-140	15-DEC-20
Ethylbenzene			91.1		%		50-140	15-DEC-20
n-Hexane			88.6		%		50-140	15-DEC-20



Quality Control Report

Workorder: L2538999 Report Date: 06-JAN-21 Page 16 of 17

Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3
Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT		Soil						
Batch	R5316577							
WG3460352-5	MS	WG3460352-3						
Methylene Chloride			108.5		%		50-140	15-DEC-20
MTBE			96.6		%		50-140	15-DEC-20
m+p-Xylenes			95.7		%		50-140	15-DEC-20
Methyl Ethyl Ketone			89.7		%		50-140	15-DEC-20
Methyl Isobutyl Ketone			80.1		%		50-140	15-DEC-20
o-Xylene			96.2		%		50-140	15-DEC-20
Styrene			82.3		%		50-140	15-DEC-20
Tetrachloroethylene			95.4		%		50-140	15-DEC-20
Toluene			94.0		%		50-140	15-DEC-20
trans-1,2-Dichloroethylene			111.1		%		50-140	15-DEC-20
trans-1,3-Dichloropropene			99.3		%		50-140	15-DEC-20
Trichloroethylene			99.8		%		50-140	15-DEC-20
Trichlorofluoromethane			95.4		%		50-140	15-DEC-20
Vinyl chloride			91.6		%		50-140	15-DEC-20

Quality Control Report

Workorder: L2538999

Report Date: 06-JAN-21

Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3
Contact: Ahmed Al-Temimi

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Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
J	Duplicate results and limits are expressed in terms of absolute difference.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

ALS Laboratory Group

819-58th Street, Saskatoon,SK

PARTICLE SIZE DISTRIBUTION CURVE

Client Name: Azure Group Inc.(Mississauga)

Project Number:

Client Sample ID BH3-6

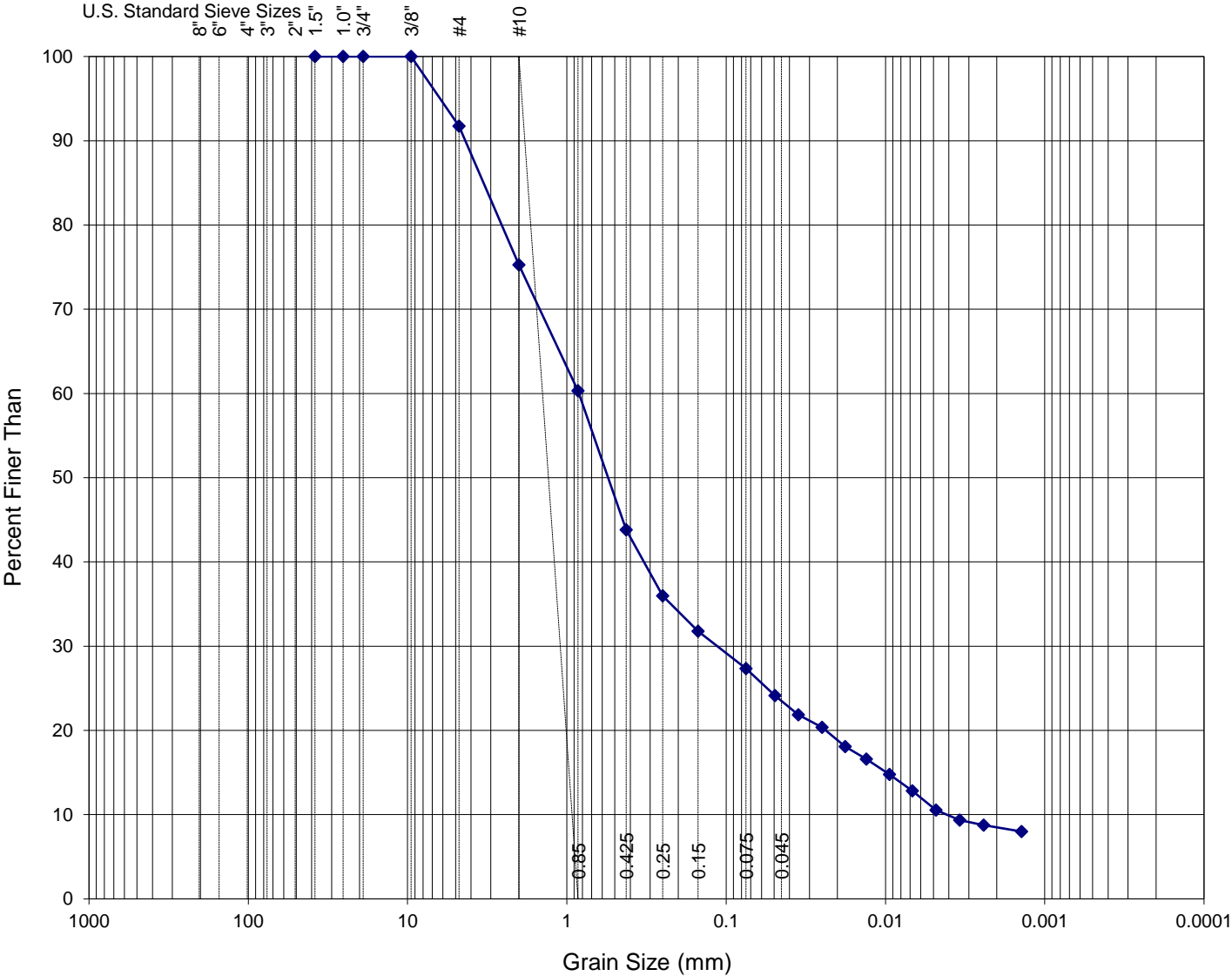
Lab Sample ID L2538999-6

Date Sample Received 10-Dec-20

Test Completion Date: 21-Dec-20

Analyst: HML

BOULDERS	COBBLES	GRAVEL		SAND SIZES			SILT	CLAY
		COARSE	FINE	COARSE	MEDIUM	FINE		



METHOD DESCRIPTION		SUMMARY OF RESULTS		
Method Reference: ASTM D 422 - 63 (2002)		GRAIN SIZE	WT %	DIA. RANGE (mm)
Dispersion method: Mechanical		% GRAVEL :	8.28	> 4.75
Dispersion period: 1 minute		% COARSE SAND :	16.44	2.0 - 4.75
Soil classification system used: ASTM D422-63 Classification		% MEDIUM SAND :	31.48	0.425 - 2.0
DESCRIPTION OF SAND AND GRAVEL PARTICLES		% FINE SAND :	16.47	0.075 - 0.425
Shape: Angular		% SILT :	16.52	0.075 - 0.005
Hardness: Hard		% CLAY :	10.81	< 0.005

819-58th Street, Saskatoon,SK

PARTICLE SIZE DISTRIBUTION CURVE

Client Name: Azure Group Inc.(Mississauga)

Project Number:

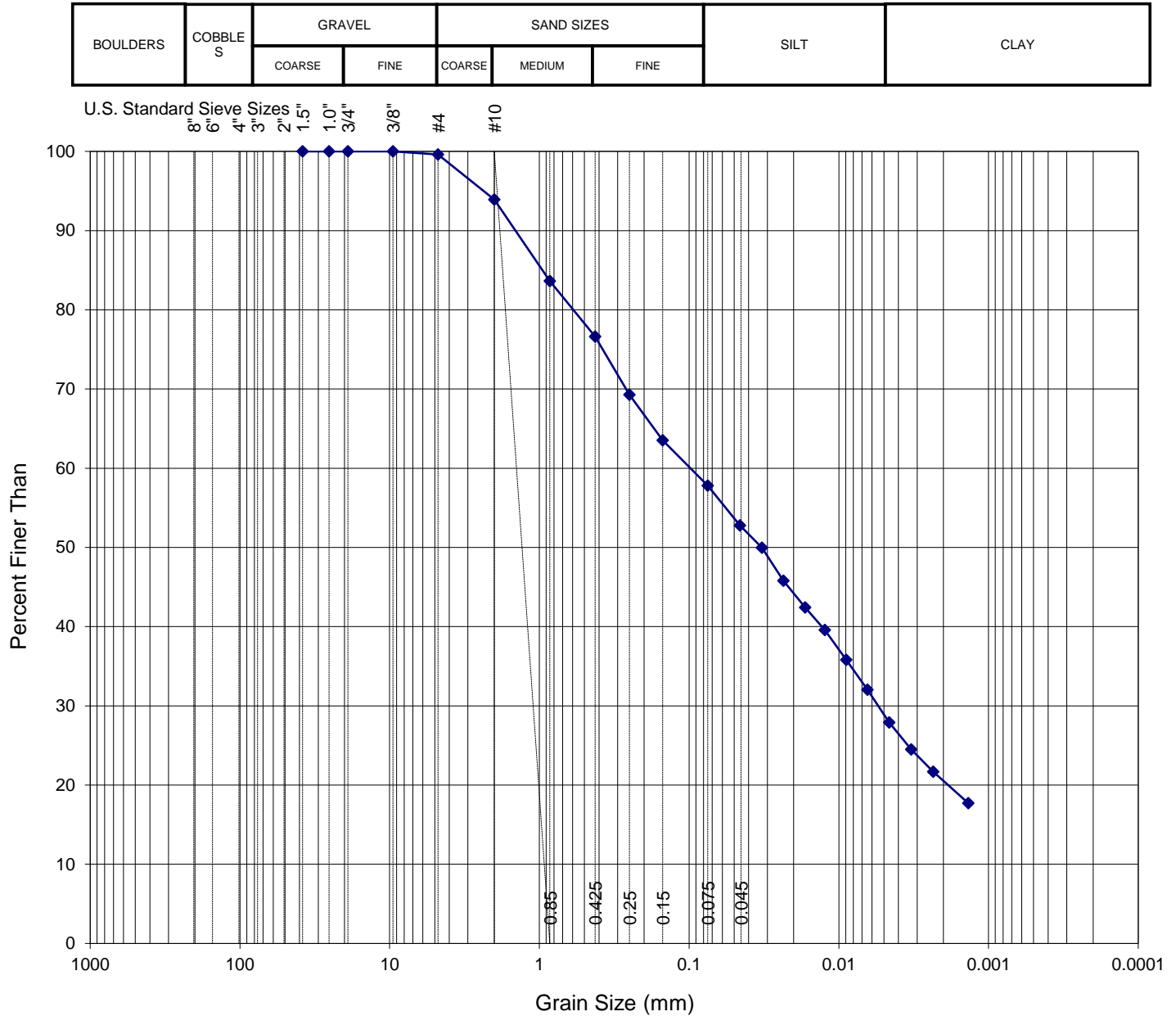
Client Sample ID BH1-7A

Lab Sample ID L2538999-7

Date Sample Received 10-Dec-20

Test Completion Date: 21-Dec-20

Analyst: HML



METHOD DESCRIPTION

Method Reference: ASTM D 422 - 63 (2002)

Dispersion method: Mechanical

Dispersion period: 1 minute cm/s

Soil classification system used: ASTM D422-63 Classification

DESCRIPTION OF SAND AND GRAVEL PARTICLES

Shape: Angular

Hardness: Hard

SUMMARY OF RESULTS

GRAIN SIZE	WT %	DIA. RANGE (mm)
------------	------	-----------------

% GRAVEL :	<1	> 4.75
------------	----	--------

% COARSE SAND :	5.70	2.0 - 4.75
-----------------	------	------------

% MEDIUM SAND :	17.28	0.425 - 2.0
-----------------	-------	-------------

% FINE SAND :	18.82	0.075 - 0.425
---------------	-------	---------------

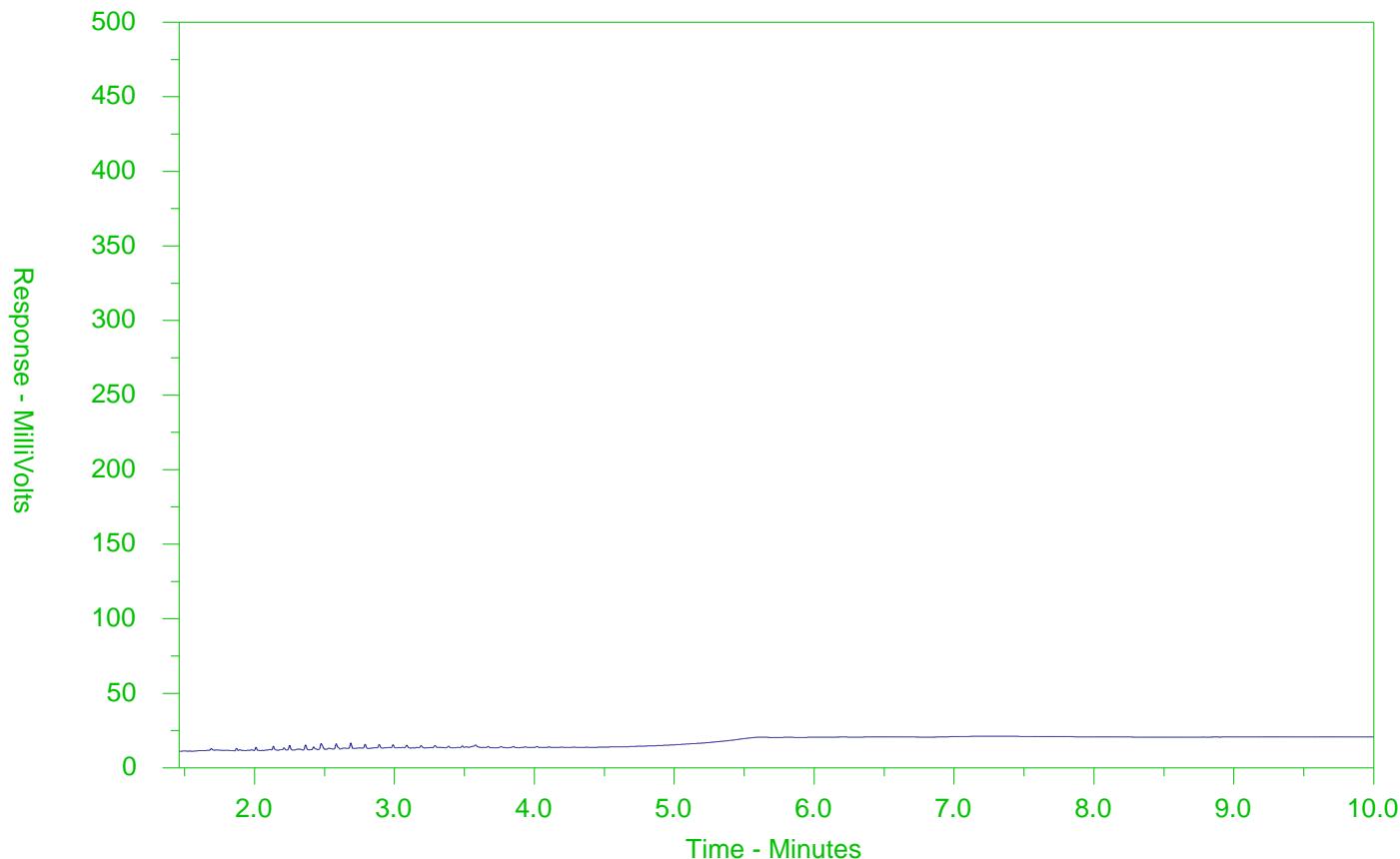
% SILT :	28.90	0.075 - 0.005
----------	-------	---------------

% CLAY :	28.91	< 0.005
----------	-------	---------

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L2538999-2
Client Sample ID: BH1-6



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

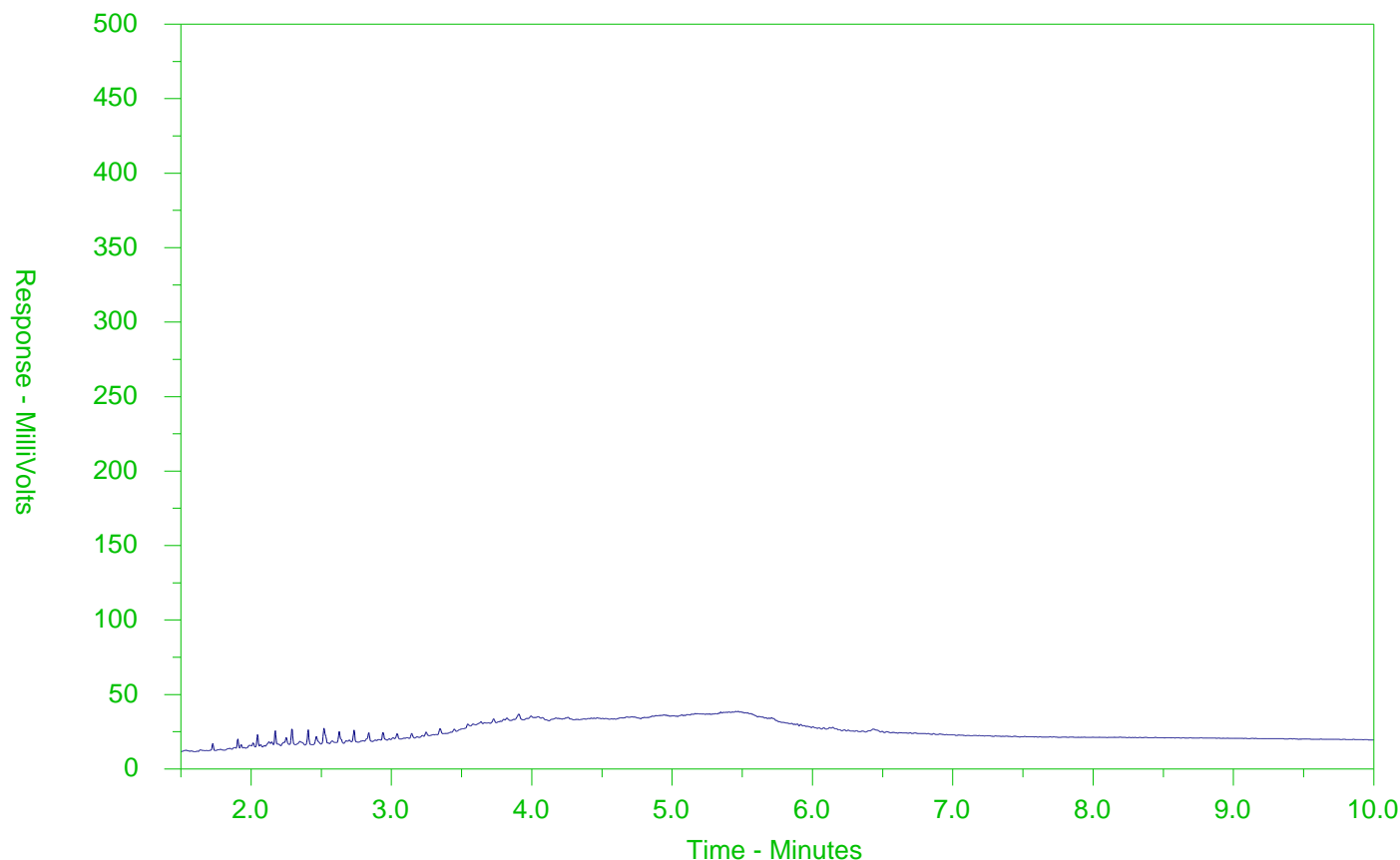
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L2538999-4
Client Sample ID: BH2-6



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

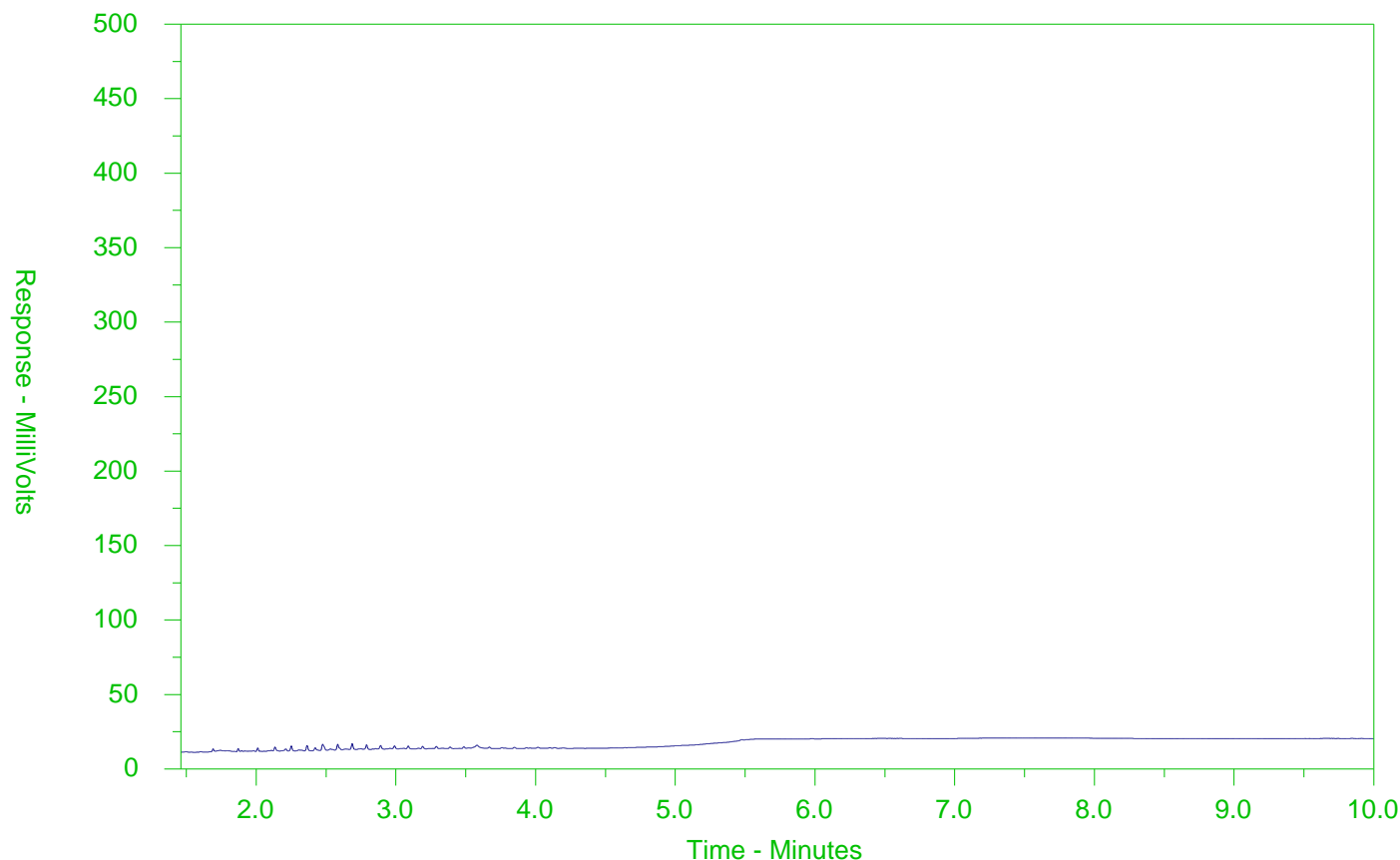
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L2538999-8
Client Sample ID: DUP-S1



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.



Azure Group Inc.(Mississauga)
ATTN: Ahmed Al-Temimi
6751 Professional Court
Suite 201
Mississauga ON L4V 1Y3

Date Received: 11-DEC-20
Report Date: 06-JAN-21 11:41 (MT)
Version: FINAL REV. 2

Client Phone: 416-779-2694

Certificate of Analysis

Lab Work Order #: L2539648
Project P.O. #: NOT SUBMITTED
Job Reference: 2012-001 (KIRWIN AVE)
C of C Numbers: 20-899954
Legal Site Desc:

Amanda Overholster
Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 5730 Coopers Avenue, Unit #26 , Mississauga, ON L4Z 2E9 Canada | Phone: +1 905 507 6910 | Fax: +1 905 507 6927
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ANALYTICAL REPORT

Summary of Guideline Exceedances

Guideline						
ALS ID	Client ID	Grouping	Analyte	Result	Guideline Limit	Unit
Ontario Regulation 153/04 - April 15, 2011 Standards - T2-Ground Water (Coarse Soil)-All Types of Property Use						
L2539648-2	MW2	Hydrocarbons	F3 (C16-C34)	760	500	ug/L

* Please refer to the Reference Information section for an explanation of any qualifiers noted.



Environmental

ANALYTICAL REPORT

Physical Tests - WATER

		Lab ID		L2539648-1	L2539648-5
		Sample Date		11-DEC-20	11-DEC-20
		Sample ID		MW1	MW3
		Guide Limits			
Analyte	Unit	#1	#2		
Conductivity	mS/cm	-	-	3.07	1.43
pH	pH units	-	-	7.49	7.67

Guide Limit #1: T2-Ground Water (Coarse Soil)-All Types of Property Use

- Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
- Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.



Environmental

ANALYTICAL REPORT

Cyanides - WATER

		Lab ID	L2539648-1	L2539648-5
		Sample Date	11-DEC-20	11-DEC-20
		Sample ID	MW1	MW3
		Guide Limits		
Analyte	Unit	#1	#2	
Cyanide, Weak Acid Diss	ug/L	66	-	<2.0
				<2.0

Guide Limit #1: T2-Ground Water (Coarse Soil)-All Types of Property Use

- Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
- Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.



ANALYTICAL REPORT

Dissolved Metals - WATER

		Lab ID	L2539648-1	L2539648-5	
		Sample Date	11-DEC-20	11-DEC-20	
		Sample ID	MW1	MW3	
Analyte	Unit	Guide Limits			
		#1	#2		
Dissolved Mercury Filtration Location		-	-	FIELD	FIELD
Dissolved Metals Filtration Location		-	-	FIELD	FIELD
Antimony (Sb)-Dissolved	ug/L	6	-	<1.0 ^{DLHC}	0.23
Arsenic (As)-Dissolved	ug/L	25	-	<1.0 ^{DLHC}	0.93
Barium (Ba)-Dissolved	ug/L	1000	-	204 ^{DLHC}	142
Beryllium (Be)-Dissolved	ug/L	4	-	<0.5 ^{DLMDL}	<0.10
Boron (B)-Dissolved	ug/L	5000	-	170 ^{DLHC}	89
Cadmium (Cd)-Dissolved	ug/L	2.7	-	<0.050 ^{DLHC}	0.015
Chromium (Cr)-Dissolved	ug/L	50	-	<5.0 ^{DLHC}	1.64
Cobalt (Co)-Dissolved	ug/L	3.8	-	<1.0 ^{DLHC}	1.11
Copper (Cu)-Dissolved	ug/L	87	-	3.1 ^{DLHC}	2.97
Lead (Pb)-Dissolved	ug/L	10	-	<0.50 ^{DLHC}	0.592
Mercury (Hg)-Dissolved	ug/L	0.29	-	<0.0050	<0.0050
Molybdenum (Mo)-Dissolved	ug/L	70	-	3.94 ^{DLHC}	4.77
Nickel (Ni)-Dissolved	ug/L	100	-	<5.0 ^{DLHC}	3.84
Selenium (Se)-Dissolved	ug/L	10	-	0.73 ^{DLHC}	0.982
Silver (Ag)-Dissolved	ug/L	1.5	-	<0.30 ^{DLMDL}	<0.050
Thallium (Tl)-Dissolved	ug/L	2	-	<0.10 ^{DLHC}	0.051
Uranium (U)-Dissolved	ug/L	20	-	0.69 ^{DLHC}	0.856
Vanadium (V)-Dissolved	ug/L	6.2	-	<3.9 ^{DLMDL}	1.81
Zinc (Zn)-Dissolved	ug/L	1100	-	<10 ^{DLHC}	3.5

Guide Limit #1: T2-Ground Water (Coarse Soil)-All Types of Property Use

- Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
- Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.

* Please refer to the Reference Information section for an explanation of any qualifiers noted.



ANALYTICAL REPORT

Speciated Metals - WATER

		Lab ID	L2539648-1	L2539648-5
		Sample Date	11-DEC-20	11-DEC-20
		Sample ID	MW1	MW3
		Guide Limits		
Analyte	Unit	#1	#2	
Chromium, Hexavalent	ug/L	25	-	<0.50
				<0.50

Guide Limit #1: T2-Ground Water (Coarse Soil)-All Types of Property Use

- Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
- Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.



ANALYTICAL REPORT

Volatile Organic Compounds - WATER

Analyte	Unit	Guide Limits		Lab ID	Sample Date	Sample ID	L2539648-1	L2539648-2	L2539648-3	L2539648-4
		#1	#2							
Acetone	ug/L	2700	-	<30	OWP	<30	OWP	<30	OWP	<30
Benzene	ug/L	5	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50
Bromodichloromethane	ug/L	16	-	<2.0	OWP	<2.0	OWP	<2.0	OWP	<2.0
Bromoform	ug/L	25	-	<5.0	OWP	<5.0	OWP	<5.0	OWP	<5.0
Bromomethane	ug/L	0.89	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50
Carbon tetrachloride	ug/L	0.79	-	<0.20	OWP	<0.20	OWP	<0.20	OWP	<0.20
Chlorobenzene	ug/L	30	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50
Dibromochloromethane	ug/L	25	-	<2.0	OWP	<2.0	OWP	<2.0	OWP	<2.0
Chloroform	ug/L	2.4	-	<1.0	OWP	<1.0	OWP	<1.0	OWP	<1.0
1,2-Dibromoethane	ug/L	0.2	-	<0.20	OWP	<0.20	OWP	<0.20	OWP	<0.20
1,2-Dichlorobenzene	ug/L	3	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50
1,3-Dichlorobenzene	ug/L	59	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50
1,4-Dichlorobenzene	ug/L	1	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50
Dichlorodifluoromethane	ug/L	590	-	<2.0	OWP	<2.0	OWP	<2.0	OWP	<2.0
1,1-Dichloroethane	ug/L	5	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50
1,2-Dichloroethane	ug/L	1.6	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50
1,1-Dichloroethylene	ug/L	1.6	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50
cis-1,2-Dichloroethylene	ug/L	1.6	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50
trans-1,2-Dichloroethylene	ug/L	1.6	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50
Methylene Chloride	ug/L	50	-	<5.0	OWP	<5.0	OWP	<5.0	OWP	<5.0
1,2-Dichloropropane	ug/L	5	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50
cis-1,3-Dichloropropene	ug/L	-	-	<0.30	OWP	<0.30	OWP	<0.30	OWP	<0.30
trans-1,3-Dichloropropene	ug/L	-	-	<0.30	OWP	<0.30	OWP	<0.30	OWP	<0.30
1,3-Dichloropropene (cis & trans)	ug/L	0.5	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50
Ethylbenzene	ug/L	2.4	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50
n-Hexane	ug/L	51	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50
Methyl Ethyl Ketone	ug/L	1800	-	<20	OWP	<20	OWP	<20	OWP	<20
Methyl Isobutyl Ketone	ug/L	640	-	<20	OWP	<20	OWP	<20	OWP	<20
MTBE	ug/L	15	-	<2.0	OWP	<2.0	OWP	<2.0	OWP	<2.0
Styrene	ug/L	5.4	-	<0.50	OWP	<0.50	OWP	<0.50	OWP	<0.50

Guide Limit #1: T2-Ground Water (Coarse Soil)-All Types of Property Use

* Please refer to the Reference Information section for an explanation of any qualifiers noted.



ANALYTICAL REPORT

Volatile Organic Compounds - WATER

				Lab ID	L2539648-1	L2539648-2	L2539648-3	L2539648-4
				Sample Date	11-DEC-20	11-DEC-20	11-DEC-20	11-DEC-20
				Sample ID	MW1	MW2	DUP-W1	TRIP BLANK
Analyte	Unit	Guide Limits						
		#1	#2					
1,1,1,2-Tetrachloroethane	ug/L	1.1	-	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50
1,1,2,2-Tetrachloroethane	ug/L	1	-	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50
Tetrachloroethylene	ug/L	1.6	-	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50
Toluene	ug/L	24	-	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50
1,1,1-Trichloroethane	ug/L	200	-	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50
1,1,2-Trichloroethane	ug/L	4.7	-	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50
Trichloroethylene	ug/L	1.6	-	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50
Trichlorofluoromethane	ug/L	150	-	<5.0 ^{OWP}	<5.0 ^{OWP}	<5.0 ^{OWP}	<5.0 ^{OWP}	<5.0
Vinyl chloride	ug/L	0.5	-	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50 ^{OWP}	<0.50
o-Xylene	ug/L	-	-	<0.30 ^{OWP}	<0.30 ^{OWP}	<0.30 ^{OWP}	<0.30 ^{OWP}	<0.30
m+p-Xylenes	ug/L	-	-	<0.40 ^{OWP}	<0.40 ^{OWP}	<0.40 ^{OWP}	<0.40 ^{OWP}	<0.40
Xylenes (Total)	ug/L	300	-	<0.50	<0.50	<0.50	<0.50	<0.50
Surrogate: 4-Bromofluorobenzene	%	-	-	100.0	94.0	91.4		100.3
Surrogate: 1,4-Difluorobenzene	%	-	-	103.1	102.6	102.5		102.3

Guide Limit #1: T2-Ground Water (Coarse Soil)-All Types of Property Use

- Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
- Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.

* Please refer to the Reference Information section for an explanation of any qualifiers noted.



ANALYTICAL REPORT

Hydrocarbons - WATER

Analyte	Unit	Lab ID				
		Sample Date				
		Sample ID				
				L2539648-1	L2539648-2	L2539648-3
				11-DEC-20	11-DEC-20	11-DEC-20
				MW1	MW2	DUP-W1
Analyte	Unit	Guide Limits				
		#1	#2			
F1 (C6-C10)	ug/L	750	-	<25 ^{OWP}	<25 ^{OWP}	<25 ^{OWP}
F1-BTEX	ug/L	750	-	<25	<25	<25
F2 (C10-C16)	ug/L	150	-	<100	<100	<100
F2-Naphth	ug/L	-	-	<100		
F3 (C16-C34)	ug/L	500	-	<250	760	<250
F3-PAH	ug/L	-	-	<250		
F4 (C34-C50)	ug/L	500	-	<250	<250	<250
Total Hydrocarbons (C6-C50)	ug/L	-	-	<370	760	<370
Chrom. to baseline at nC50		-	-	YES	YES	YES
Surrogate: 2-Bromobenzotrifluoride	%	-	-	83.0	81.4	79.3
Surrogate: 3,4-Dichlorotoluene	%	-	-	75.4	78.2	66.9

Guide Limit #1: T2-Ground Water (Coarse Soil)-All Types of Property Use

- Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
- Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.

* Please refer to the Reference Information section for an explanation of any qualifiers noted.



ANALYTICAL REPORT

Polycyclic Aromatic Hydrocarbons - WATER

		Lab ID	L2539648-1		
		Sample Date	11-DEC-20		
		Sample ID	MW1		
		Guide Limits			
Analyte	Unit	#1	#2		
Acenaphthene	ug/L	4.1	-	<0.020	
Acenaphthylene	ug/L	1	-	<0.020	
Anthracene	ug/L	2.4	-	<0.020	
Benzo(a)anthracene	ug/L	1	-	<0.020	
Benzo(a)pyrene	ug/L	0.01	-	<0.010	
Benzo(b)fluoranthene	ug/L	0.1	-	<0.020	
Benzo(g,h,i)perylene	ug/L	0.2	-	<0.020	
Benzo(k)fluoranthene	ug/L	0.1	-	<0.020	
Chrysene	ug/L	0.1	-	<0.020	
Dibenzo(ah)anthracene	ug/L	0.2	-	<0.020	
Fluoranthene	ug/L	0.41	-	<0.020	
Fluorene	ug/L	120	-	<0.020	
Indeno(1,2,3-cd)pyrene	ug/L	0.2	-	<0.020	
1+2-Methylnaphthalenes	ug/L	3.2	-	<0.028	
1-Methylnaphthalene	ug/L	3.2	-	<0.020	
2-Methylnaphthalene	ug/L	3.2	-	<0.020	
Naphthalene	ug/L	11	-	<0.050	
Phenanthrene	ug/L	1	-	<0.020	
Pyrene	ug/L	4.1	-	<0.020	
Surrogate: d10-Acenaphthene	%	-	-	80.3	
Surrogate: d12-Chrysene	%	-	-	89.8	
Surrogate: d8-Naphthalene	%	-	-	82.5	
Surrogate: d10-Phenanthrene	%	-	-	90.4	

Guide Limit #1: T2-Ground Water (Coarse Soil)-All Types of Property Use

- Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
- Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.

* Please refer to the Reference Information section for an explanation of any qualifiers noted.

Reference Information

L2539648 CONT'D....

Job Reference: 2012-001 (KIRWIN AVE)

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Qualifiers for Individual Parameters Listed:

Qualifier	Description
DLMDL	Reported detection limit is at or near the Method Detection Limit (MDL). Measurement uncertainty is high at this level.
OWP	Organic water sample contained visible sediment (must be included as part of analysis). Measured concentrations of organic substances in water can be biased high due to presence of

Reference Information

sediment.

DLHC Detection Limit Raised: Dilution required due to high concentration of test analyte(s).

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference**
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CN-WAD-R511-WT	Water	Cyanide (WAD)-O.Reg 153/04	APHA 4500CN I-Weak acid Dist Colorimet
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Weak acid dissociable cyanide (WAD) is determined by undergoing a distillation procedure. Cyanide is converted to cyanogen chloride by reacting with chloramine-T, the cyanogen chloride then reacts with a combination of barbituric acid and isonicotinic acid to form a highly colored complex.

Analysis conducted 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).

CR-CR6-IC-R511-WT	Water	Hex Chrom-O.Reg 153/04 (July 2011)	EPA 7199
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This analysis is carried out using procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846, Method 7199, published by the United States Environmental Protection Agency (EPA). The procedure involves analysis for chromium (VI) by ion chromatography using diphenylcarbazide in a sulphuric acid solution. Chromium (III) is calculated as the difference between the total chromium and the chromium (VI) results.

Analysis conducted 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).

EC-R511-WT	Water	Conductivity-O.Reg 153/04 (July 2011)	APHA 2510 B
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Water samples can be measured directly by immersing the conductivity cell into the sample.

Analysis conducted 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).

EC-SCREEN-WT	Water	Conductivity Screen (Internal Use Only)	APHA 2510
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Qualitative analysis of conductivity where required during preparation of other tests - e.g. TDS, metals, etc.

F1-F4-511-CALC-WT	Water	F1-F4 Hydrocarbon Calculated Parameters	CCME CWS-PHC, Pub #1310, Dec 2001-L
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Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.

In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:

1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:

1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

F1-HS-511-WT	Water	F1-O.Reg 153/04 (July 2011)	E3398/CCME TIER 1-HS
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Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference**
Fraction F1 is determined by analyzing by headspace-GC/FID.			
Analysis conducted 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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).			
F2-F4-511-WT	Water	F2-F4-O.Reg 153/04 (July 2011)	EPA 3511/CCME Tier 1
Petroleum Hydrocarbons (F2-F4 fractions) are extracted from water using a hexane micro-extraction technique. Instrumental analysis is by GC-FID, as per the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Tier 1 Method, CCME, 2001.			
Analysis conducted 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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).			
HG-D-UG/L-CVAA-WT	Water	Diss. Mercury in Water by CVAAS (ug/L)	EPA 1631E (mod)
Water samples are filtered (0.45 um), preserved with hydrochloric acid, then undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS.			
Analysis conducted 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).			
MET-D-UG/L-MS-WT	Water	Diss. Metals in Water by ICPMS (ug/L)	EPA 200.8
The metal constituents of a non-acidified sample that pass through a membrane filter prior to ICP/MS analysis.			
Analysis conducted 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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).			
METHYLNAPS-CALC-WT	Water	PAH-Calculated Parameters	SW846 8270
PAH-511-WT	Water	PAH-O. Reg 153/04 (July 2011)	SW846 3510/8270
Aqueous samples, fortified with surrogates, are extracted using liquid/liquid extraction technique. The sample extracts are concentrated and then analyzed using GC/MS. Results for benzo(b) fluoranthene may include contributions from benzo(j)fluoranthene, if also present in the sample.			
Analysis conducted 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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).			
PH-WT	Water	pH	APHA 4500 H-Electrode
Water samples are analyzed directly by a calibrated pH meter.			
Analysis conducted 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). Holdtime for samples under this regulation is 28 days			
VOC-1,3-DCP-CALC-WT	Water	Regulation 153 VOCs	SW8260B/SW8270C
VOC-511-HS-WT	Water	VOC by GCMS HS O.Reg 153/04 (July 2011)	SW846 8260
Liquid samples are analyzed by headspace GC/MSD.			
Analysis conducted 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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).			
XYLENES-SUM-CALC-WT	Water	Sum of Xylene Isomer Concentrations	CALCULATION

Reference Information

L2539648 CONT'D....
Job Reference: 2012-001 (KIRWIN AVE)
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Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference**
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Total xylenes represents the sum of o-xylene and m&p-xylene.

**ALS test methods may incorporate modifications from specified reference methods to improve performance.

Chain of Custody Numbers:

20-899954

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
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WT

ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg ww - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guideline limits are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.



Quality Control Report

Workorder: L2539648

Report Date: 06-JAN-21

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Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
CN-WAD-R511-WT		Water						
Batch	R5315137							
WG3461372-3	DUP	WG3461372-5						
Cyanide, Weak Acid Diss		2.9	3.2		ug/L	9.8	20	14-DEC-20
WG3461372-2	LCS							
Cyanide, Weak Acid Diss			104.8		%		80-120	14-DEC-20
WG3461372-1	MB							
Cyanide, Weak Acid Diss			<2.0		ug/L		2	14-DEC-20
WG3461372-4	MS	WG3461372-5						
Cyanide, Weak Acid Diss			109.3		%		75-125	14-DEC-20
CR-CR6-IC-R511-WT		Water						
Batch	R5315057							
WG3461543-4	DUP	WG3461543-3						
Chromium, Hexavalent		1.32	1.16		ug/L	13	20	14-DEC-20
WG3461543-2	LCS							
Chromium, Hexavalent			98.7		%		80-120	14-DEC-20
WG3461543-1	MB							
Chromium, Hexavalent			<0.50		ug/L		0.5	14-DEC-20
WG3461543-5	MS	WG3461543-3						
Chromium, Hexavalent			96.2		%		70-130	14-DEC-20
EC-R511-WT		Water						
Batch	R5318640							
WG3462932-4	DUP	WG3462932-3						
Conductivity		0.739	0.744		mS/cm	0.7	10	16-DEC-20
WG3462932-2	LCS							
Conductivity			97.6		%		90-110	16-DEC-20
WG3462932-1	MB							
Conductivity			<0.0030		mS/cm		0.003	16-DEC-20
F1-HS-511-WT		Water						
Batch	R5317899							
WG3462473-4	DUP	WG3462473-3						
F1 (C6-C10)		<25	<25	RPD-NA	ug/L	N/A	30	16-DEC-20
WG3462473-1	LCS							
F1 (C6-C10)			108.0		%		80-120	16-DEC-20
WG3462473-2	MB							
F1 (C6-C10)			<25		ug/L		25	16-DEC-20
Surrogate: 3,4-Dichlorotoluene			102.8		%		60-140	16-DEC-20
WG3462473-5	MS	WG3462473-3						
F1 (C6-C10)			97.2		%		60-140	16-DEC-20



Quality Control Report

Workorder: L2539648

Report Date: 06-JAN-21

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Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F2-F4-511-WT Water								
Batch	R5316680							
WG3461154-2 LCS								
F2 (C10-C16)			100.9		%		70-130	15-DEC-20
F3 (C16-C34)			103.9		%		70-130	15-DEC-20
F4 (C34-C50)			115.5		%		70-130	15-DEC-20
WG3461154-1 MB								
F2 (C10-C16)			<100		ug/L		100	15-DEC-20
F3 (C16-C34)			<250		ug/L		250	15-DEC-20
F4 (C34-C50)			<250		ug/L		250	15-DEC-20
Surrogate: 2-Bromobenzotrifluoride			90.7		%		60-140	15-DEC-20
HG-D-UG/L-CVAA-WT Water								
Batch	R5317059							
WG3461539-3 DUP		L2539466-9						
Mercury (Hg)-Dissolved		<0.0050	<0.0050	RPD-NA	ug/L	N/A	20	15-DEC-20
WG3461539-2 LCS								
Mercury (Hg)-Dissolved			97.0		%		80-120	15-DEC-20
WG3461539-1 MB								
Mercury (Hg)-Dissolved			<0.0050		ug/L		0.005	15-DEC-20
WG3461539-4 MS		L2539522-7						
Mercury (Hg)-Dissolved			95.3		%		70-130	15-DEC-20
MET-D-UG/L-MS-WT Water								
Batch	R5315899							
WG3461192-4 DUP		WG3461192-3						
Antimony (Sb)-Dissolved		0.12	0.11		ug/L	1.3	20	14-DEC-20
Arsenic (As)-Dissolved		0.27	0.27		ug/L	0.2	20	14-DEC-20
Barium (Ba)-Dissolved		56.4	58.0		ug/L	2.8	20	14-DEC-20
Beryllium (Be)-Dissolved		<0.10	<0.10	RPD-NA	ug/L	N/A	20	14-DEC-20
Boron (B)-Dissolved		11	12		ug/L	4.0	20	14-DEC-20
Cadmium (Cd)-Dissolved		0.0222	0.0222		ug/L	0.0	20	14-DEC-20
Chromium (Cr)-Dissolved		1.64	1.44		ug/L	13	20	14-DEC-20
Cobalt (Co)-Dissolved		0.13	0.13		ug/L	1.4	20	14-DEC-20
Copper (Cu)-Dissolved		1.46	1.44		ug/L	1.5	20	14-DEC-20
Lead (Pb)-Dissolved		<0.050	<0.050	RPD-NA	ug/L	N/A	20	14-DEC-20
Molybdenum (Mo)-Dissolved		0.862	0.881		ug/L	2.2	20	14-DEC-20
Nickel (Ni)-Dissolved		1.29	1.23		ug/L	4.8	20	14-DEC-20
Selenium (Se)-Dissolved		0.409	0.407		ug/L	0.7	20	14-DEC-20

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6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-UG/L-MS-WT		Water						
Batch	R5315899							
WG3461192-4 DUP		WG3461192-3						
Silver (Ag)-Dissolved		<0.050	<0.050	RPD-NA	ug/L	N/A	20	14-DEC-20
Thallium (Tl)-Dissolved		0.012	0.012		ug/L	4.2	20	14-DEC-20
Uranium (U)-Dissolved		5.29	5.49		ug/L	3.6	20	14-DEC-20
Vanadium (V)-Dissolved		<0.50	<0.50	RPD-NA	ug/L	N/A	20	14-DEC-20
Zinc (Zn)-Dissolved		4.8	5.2		ug/L	7.9	20	14-DEC-20
WG3461192-2 LCS								
Antimony (Sb)-Dissolved			101.3		%		80-120	14-DEC-20
Arsenic (As)-Dissolved			105.2		%		80-120	14-DEC-20
Barium (Ba)-Dissolved			102.6		%		80-120	14-DEC-20
Beryllium (Be)-Dissolved			100.2		%		80-120	14-DEC-20
Boron (B)-Dissolved			100.7		%		80-120	14-DEC-20
Cadmium (Cd)-Dissolved			105.3		%		80-120	14-DEC-20
Chromium (Cr)-Dissolved			101.8		%		80-120	14-DEC-20
Cobalt (Co)-Dissolved			102.3		%		80-120	14-DEC-20
Copper (Cu)-Dissolved			101.6		%		80-120	14-DEC-20
Lead (Pb)-Dissolved			104.8		%		80-120	14-DEC-20
Molybdenum (Mo)-Dissolved			103.0		%		80-120	14-DEC-20
Nickel (Ni)-Dissolved			102.3		%		80-120	14-DEC-20
Selenium (Se)-Dissolved			103.9		%		80-120	14-DEC-20
Silver (Ag)-Dissolved			100.4		%		80-120	14-DEC-20
Thallium (Tl)-Dissolved			107.2		%		80-120	14-DEC-20
Uranium (U)-Dissolved			109.2		%		80-120	14-DEC-20
Vanadium (V)-Dissolved			104.5		%		80-120	14-DEC-20
Zinc (Zn)-Dissolved			97.4		%		80-120	14-DEC-20
WG3461192-1 MB								
Antimony (Sb)-Dissolved			<0.10		ug/L		0.1	14-DEC-20
Arsenic (As)-Dissolved			<0.10		ug/L		0.1	14-DEC-20
Barium (Ba)-Dissolved			<0.10		ug/L		0.1	14-DEC-20
Beryllium (Be)-Dissolved			<0.10		ug/L		0.1	14-DEC-20
Boron (B)-Dissolved			<10		ug/L		10	14-DEC-20
Cadmium (Cd)-Dissolved			<0.0050		ug/L		0.005	14-DEC-20
Chromium (Cr)-Dissolved			<0.50		ug/L		0.5	14-DEC-20
Cobalt (Co)-Dissolved			<0.10		ug/L		0.1	14-DEC-20
Copper (Cu)-Dissolved			<0.20		ug/L		0.2	14-DEC-20

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6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-UG/L-MS-WT		Water						
Batch	R5315899							
WG3461192-1 MB								
Lead (Pb)-Dissolved			<0.050		ug/L		0.05	14-DEC-20
Molybdenum (Mo)-Dissolved			<0.050		ug/L		0.05	14-DEC-20
Nickel (Ni)-Dissolved			<0.50		ug/L		0.5	14-DEC-20
Selenium (Se)-Dissolved			<0.050		ug/L		0.05	14-DEC-20
Silver (Ag)-Dissolved			<0.050		ug/L		0.05	14-DEC-20
Thallium (Tl)-Dissolved			<0.010		ug/L		0.01	14-DEC-20
Uranium (U)-Dissolved			<0.010		ug/L		0.01	14-DEC-20
Vanadium (V)-Dissolved			<0.50		ug/L		0.5	14-DEC-20
Zinc (Zn)-Dissolved			<1.0		ug/L		1	14-DEC-20
WG3461192-5 MS		WG3461192-6						
Antimony (Sb)-Dissolved			103.6		%		70-130	14-DEC-20
Arsenic (As)-Dissolved			113.3		%		70-130	14-DEC-20
Barium (Ba)-Dissolved			N/A	MS-B	%		-	14-DEC-20
Beryllium (Be)-Dissolved			104.6		%		70-130	14-DEC-20
Boron (B)-Dissolved			98.5		%		70-130	14-DEC-20
Cadmium (Cd)-Dissolved			106.9		%		70-130	14-DEC-20
Chromium (Cr)-Dissolved			102.4		%		70-130	14-DEC-20
Cobalt (Co)-Dissolved			99.1		%		70-130	14-DEC-20
Copper (Cu)-Dissolved			97.7		%		70-130	14-DEC-20
Lead (Pb)-Dissolved			101.0		%		70-130	14-DEC-20
Molybdenum (Mo)-Dissolved			106.4		%		70-130	14-DEC-20
Nickel (Ni)-Dissolved			97.3		%		70-130	14-DEC-20
Selenium (Se)-Dissolved			119.8		%		70-130	14-DEC-20
Silver (Ag)-Dissolved			98.4		%		70-130	14-DEC-20
Thallium (Tl)-Dissolved			104.1		%		70-130	14-DEC-20
Uranium (U)-Dissolved			N/A	MS-B	%		-	14-DEC-20
Vanadium (V)-Dissolved			105.8		%		70-130	14-DEC-20
Zinc (Zn)-Dissolved			99.6		%		70-130	14-DEC-20
PAH-511-WT		Water						
Batch	R5318677							
WG3461154-2 LCS								
1-Methylnaphthalene			88.7		%		50-140	17-DEC-20
2-Methylnaphthalene			88.0		%		50-140	17-DEC-20
Acenaphthene			97.0		%		50-140	17-DEC-20

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6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-511-WT		Water						
Batch	R5318677							
WG3461154-2	LCS							
Acenaphthylene			98.4		%		50-140	17-DEC-20
Anthracene			98.0		%		50-140	17-DEC-20
Benzo(a)anthracene			113.1		%		50-140	17-DEC-20
Benzo(a)pyrene			98.0		%		50-140	17-DEC-20
Benzo(b)fluoranthene			83.0		%		50-140	17-DEC-20
Benzo(g,h,i)perylene			92.0		%		50-140	17-DEC-20
Benzo(k)fluoranthene			86.0		%		50-140	17-DEC-20
Chrysene			104.5		%		50-140	17-DEC-20
Dibenzo(ah)anthracene			98.4		%		50-140	17-DEC-20
Fluoranthene			100.9		%		50-140	17-DEC-20
Fluorene			98.8		%		50-140	17-DEC-20
Indeno(1,2,3-cd)pyrene			109.7		%		50-140	17-DEC-20
Naphthalene			86.5		%		50-140	17-DEC-20
Phenanthrene			101.3		%		50-140	17-DEC-20
Pyrene			103.2		%		50-140	17-DEC-20
WG3461154-1	MB							
1-Methylnaphthalene			<0.020		ug/L		0.02	17-DEC-20
2-Methylnaphthalene			<0.020		ug/L		0.02	17-DEC-20
Acenaphthene			<0.020		ug/L		0.02	17-DEC-20
Acenaphthylene			<0.020		ug/L		0.02	17-DEC-20
Anthracene			<0.020		ug/L		0.02	17-DEC-20
Benzo(a)anthracene			<0.020		ug/L		0.02	17-DEC-20
Benzo(a)pyrene			<0.010		ug/L		0.01	17-DEC-20
Benzo(b)fluoranthene			<0.020		ug/L		0.02	17-DEC-20
Benzo(g,h,i)perylene			<0.020		ug/L		0.02	17-DEC-20
Benzo(k)fluoranthene			<0.020		ug/L		0.02	17-DEC-20
Chrysene			<0.020		ug/L		0.02	17-DEC-20
Dibenzo(ah)anthracene			<0.020		ug/L		0.02	17-DEC-20
Fluoranthene			<0.020		ug/L		0.02	17-DEC-20
Fluorene			<0.020		ug/L		0.02	17-DEC-20
Indeno(1,2,3-cd)pyrene			<0.020		ug/L		0.02	17-DEC-20
Naphthalene			<0.050		ug/L		0.05	17-DEC-20
Phenanthrene			<0.020		ug/L		0.02	17-DEC-20
Pyrene			<0.020		ug/L		0.02	17-DEC-20

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Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-511-WT								
Water								
Batch	R5318677							
WG3461154-1 MB								
Surrogate: d8-Naphthalene			97.6		%		60-140	17-DEC-20
Surrogate: d10-Phenanthrene			102.3		%		60-140	17-DEC-20
Surrogate: d12-Chrysene			100.8		%		60-140	17-DEC-20
Surrogate: d10-Acenaphthene			95.0		%		60-140	17-DEC-20
PH-WT								
Water								
Batch	R5317156							
WG3462172-4 DUP		WG3462172-3						
pH		6.62	6.68	J	pH units	0.06	0.2	15-DEC-20
WG3462172-2 LCS								
pH			7.09		pH units		6.9-7.1	15-DEC-20
VOC-511-HS-WT								
Water								
Batch	R5317899							
WG3462473-4 DUP		WG3462473-3						
1,1,1,2-Tetrachloroethane		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
1,1,2,2-Tetrachloroethane		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
1,1,1-Trichloroethane		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
1,1,2-Trichloroethane		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
1,1-Dichloroethane		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
1,1-Dichloroethylene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
1,2-Dibromoethane		<0.20	<0.20	RPD-NA	ug/L	N/A	30	16-DEC-20
1,2-Dichlorobenzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
1,2-Dichloroethane		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
1,2-Dichloropropane		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
1,3-Dichlorobenzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
1,4-Dichlorobenzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
Acetone		<30	<30	RPD-NA	ug/L	N/A	30	16-DEC-20
Benzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
Bromodichloromethane		<2.0	<2.0	RPD-NA	ug/L	N/A	30	16-DEC-20
Bromoform		<5.0	<5.0	RPD-NA	ug/L	N/A	30	16-DEC-20
Bromomethane		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
Carbon tetrachloride		<0.20	<0.20	RPD-NA	ug/L	N/A	30	16-DEC-20
Chlorobenzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
Chloroform		<1.0	<1.0	RPD-NA	ug/L	N/A	30	16-DEC-20

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Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT		Water						
Batch	R5317899							
WG3462473-4 DUP		WG3462473-3						
cis-1,2-Dichloroethylene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
cis-1,3-Dichloropropene		<0.30	<0.30	RPD-NA	ug/L	N/A	30	16-DEC-20
Dibromochloromethane		<2.0	<2.0	RPD-NA	ug/L	N/A	30	16-DEC-20
Dichlorodifluoromethane		<2.0	<2.0	RPD-NA	ug/L	N/A	30	16-DEC-20
Ethylbenzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
n-Hexane		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
m+p-Xylenes		<0.40	<0.40	RPD-NA	ug/L	N/A	30	16-DEC-20
Methyl Ethyl Ketone		<20	<20	RPD-NA	ug/L	N/A	30	16-DEC-20
Methyl Isobutyl Ketone		<20	<20	RPD-NA	ug/L	N/A	30	16-DEC-20
Methylene Chloride		<5.0	<5.0	RPD-NA	ug/L	N/A	30	16-DEC-20
MTBE		<2.0	<2.0	RPD-NA	ug/L	N/A	30	16-DEC-20
o-Xylene		<0.30	<0.30	RPD-NA	ug/L	N/A	30	16-DEC-20
Styrene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
Tetrachloroethylene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
Toluene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
trans-1,2-Dichloroethylene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
trans-1,3-Dichloropropene		<0.30	<0.30	RPD-NA	ug/L	N/A	30	16-DEC-20
Trichloroethylene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
Trichlorofluoromethane		<5.0	<5.0	RPD-NA	ug/L	N/A	30	16-DEC-20
Vinyl chloride		<0.50	<0.50	RPD-NA	ug/L	N/A	30	16-DEC-20
WG3462473-1 LCS								
1,1,1,2-Tetrachloroethane			97.5		%		70-130	16-DEC-20
1,1,2,2-Tetrachloroethane			90.5		%		70-130	16-DEC-20
1,1,1-Trichloroethane			102.2		%		70-130	16-DEC-20
1,1,2-Trichloroethane			97.7		%		70-130	16-DEC-20
1,1-Dichloroethane			99.6		%		70-130	16-DEC-20
1,1-Dichloroethylene			100.0		%		70-130	16-DEC-20
1,2-Dibromoethane			99.1		%		70-130	16-DEC-20
1,2-Dichlorobenzene			105.4		%		70-130	16-DEC-20
1,2-Dichloroethane			99.0		%		70-130	16-DEC-20
1,2-Dichloropropane			99.6		%		70-130	16-DEC-20
1,3-Dichlorobenzene			107.0		%		70-130	16-DEC-20
1,4-Dichlorobenzene			106.1		%		70-130	16-DEC-20

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6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT		Water						
Batch	R5317899							
WG3462473-1	LCS							
Acetone			106.3		%		60-140	16-DEC-20
Benzene			99.97		%		70-130	16-DEC-20
Bromodichloromethane			105.4		%		70-130	16-DEC-20
Bromoform			103.2		%		70-130	16-DEC-20
Bromomethane			93.5		%		60-140	16-DEC-20
Carbon tetrachloride			105.9		%		70-130	16-DEC-20
Chlorobenzene			104.2		%		70-130	16-DEC-20
Chloroform			104.8		%		70-130	16-DEC-20
cis-1,2-Dichloroethylene			106.4		%		70-130	16-DEC-20
cis-1,3-Dichloropropene			100.2		%		70-130	16-DEC-20
Dibromochloromethane			93.3		%		70-130	16-DEC-20
Dichlorodifluoromethane			77.0		%		50-140	16-DEC-20
Ethylbenzene			103.7		%		70-130	16-DEC-20
n-Hexane			93.2		%		70-130	16-DEC-20
m+p-Xylenes			102.9		%		70-130	16-DEC-20
Methyl Ethyl Ketone			103.0		%		60-140	16-DEC-20
Methyl Isobutyl Ketone			95.7		%		60-140	16-DEC-20
Methylene Chloride			104.7		%		70-130	16-DEC-20
MTBE			96.5		%		70-130	16-DEC-20
o-Xylene			110.0		%		70-130	16-DEC-20
Styrene			99.9		%		70-130	16-DEC-20
Tetrachloroethylene			102.1		%		70-130	16-DEC-20
Toluene			99.1		%		70-130	16-DEC-20
trans-1,2-Dichloroethylene			101.6		%		70-130	16-DEC-20
trans-1,3-Dichloropropene			96.7		%		70-130	16-DEC-20
Trichloroethylene			107.1		%		70-130	16-DEC-20
Trichlorofluoromethane			102.8		%		60-140	16-DEC-20
Vinyl chloride			97.2		%		60-140	16-DEC-20
WG3462473-2	MB							
1,1,1,2-Tetrachloroethane			<0.50		ug/L		0.5	16-DEC-20
1,1,2,2-Tetrachloroethane			<0.50		ug/L		0.5	16-DEC-20
1,1,1-Trichloroethane			<0.50		ug/L		0.5	16-DEC-20
1,1,2-Trichloroethane			<0.50		ug/L		0.5	16-DEC-20
1,1-Dichloroethane			<0.50		ug/L		0.5	16-DEC-20



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6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT		Water						
Batch	R5317899							
WG3462473-2	MB							
1,1-Dichloroethylene			<0.50		ug/L		0.5	16-DEC-20
1,2-Dibromoethane			<0.20		ug/L		0.2	16-DEC-20
1,2-Dichlorobenzene			<0.50		ug/L		0.5	16-DEC-20
1,2-Dichloroethane			<0.50		ug/L		0.5	16-DEC-20
1,2-Dichloropropane			<0.50		ug/L		0.5	16-DEC-20
1,3-Dichlorobenzene			<0.50		ug/L		0.5	16-DEC-20
1,4-Dichlorobenzene			<0.50		ug/L		0.5	16-DEC-20
Acetone			<30		ug/L		30	16-DEC-20
Benzene			<0.50		ug/L		0.5	16-DEC-20
Bromodichloromethane			<2.0		ug/L		2	16-DEC-20
Bromoform			<5.0		ug/L		5	16-DEC-20
Bromomethane			<0.50		ug/L		0.5	16-DEC-20
Carbon tetrachloride			<0.20		ug/L		0.2	16-DEC-20
Chlorobenzene			<0.50		ug/L		0.5	16-DEC-20
Chloroform			<1.0		ug/L		1	16-DEC-20
cis-1,2-Dichloroethylene			<0.50		ug/L		0.5	16-DEC-20
cis-1,3-Dichloropropene			<0.30		ug/L		0.3	16-DEC-20
Dibromochloromethane			<2.0		ug/L		2	16-DEC-20
Dichlorodifluoromethane			<2.0		ug/L		2	16-DEC-20
Ethylbenzene			<0.50		ug/L		0.5	16-DEC-20
n-Hexane			<0.50		ug/L		0.5	16-DEC-20
m+p-Xylenes			<0.40		ug/L		0.4	16-DEC-20
Methyl Ethyl Ketone			<20		ug/L		20	16-DEC-20
Methyl Isobutyl Ketone			<20		ug/L		20	16-DEC-20
Methylene Chloride			<5.0		ug/L		5	16-DEC-20
MTBE			<2.0		ug/L		2	16-DEC-20
o-Xylene			<0.30		ug/L		0.3	16-DEC-20
Styrene			<0.50		ug/L		0.5	16-DEC-20
Tetrachloroethylene			<0.50		ug/L		0.5	16-DEC-20
Toluene			<0.50		ug/L		0.5	16-DEC-20
trans-1,2-Dichloroethylene			<0.50		ug/L		0.5	16-DEC-20
trans-1,3-Dichloropropene			<0.30		ug/L		0.3	16-DEC-20
Trichloroethylene			<0.50		ug/L		0.5	16-DEC-20

Quality Control Report

Workorder: L2539648

Report Date: 06-JAN-21

Page 10 of 12

Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT		Water						
Batch	R5317899							
WG3462473-2 MB								
Trichlorofluoromethane			<5.0		ug/L		5	16-DEC-20
Vinyl chloride			<0.50		ug/L		0.5	16-DEC-20
Surrogate: 1,4-Difluorobenzene			101.4		%		70-130	16-DEC-20
Surrogate: 4-Bromofluorobenzene			104.4		%		70-130	16-DEC-20
WG3462473-5 MS		WG3462473-3						
1,1,1,2-Tetrachloroethane			96.4		%		50-140	16-DEC-20
1,1,2,2-Tetrachloroethane			81.9		%		50-140	16-DEC-20
1,1,1-Trichloroethane			104.3		%		50-140	16-DEC-20
1,1,2-Trichloroethane			95.3		%		50-140	16-DEC-20
1,1-Dichloroethane			99.7		%		50-140	16-DEC-20
1,1-Dichloroethylene			99.8		%		50-140	16-DEC-20
1,2-Dibromoethane			98.0		%		50-140	16-DEC-20
1,2-Dichlorobenzene			104.8		%		50-140	16-DEC-20
1,2-Dichloroethane			96.8		%		50-140	16-DEC-20
1,2-Dichloropropane			98.6		%		50-140	16-DEC-20
1,3-Dichlorobenzene			108.1		%		50-140	16-DEC-20
1,4-Dichlorobenzene			106.3		%		50-140	16-DEC-20
Acetone			103.7		%		50-140	16-DEC-20
Benzene			99.9		%		50-140	16-DEC-20
Bromodichloromethane			103.6		%		50-140	16-DEC-20
Bromoform			96.5		%		50-140	16-DEC-20
Bromomethane			90.8		%		50-140	16-DEC-20
Carbon tetrachloride			107.2		%		50-140	16-DEC-20
Chlorobenzene			104.2		%		50-140	16-DEC-20
Chloroform			104.6		%		50-140	16-DEC-20
cis-1,2-Dichloroethylene			106.3		%		50-140	16-DEC-20
cis-1,3-Dichloropropene			94.8		%		50-140	16-DEC-20
Dibromochloromethane			90.9		%		50-140	16-DEC-20
Dichlorodifluoromethane			73.4		%		50-140	16-DEC-20
Ethylbenzene			105.5		%		50-140	16-DEC-20
n-Hexane			93.0		%		50-140	16-DEC-20
m+p-Xylenes			104.4		%		50-140	16-DEC-20
Methyl Ethyl Ketone			98.3		%		50-140	16-DEC-20
Methyl Isobutyl Ketone			86.3		%		50-140	16-DEC-20

Quality Control Report

Workorder: L2539648

Report Date: 06-JAN-21

Page 11 of 12

Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT		Water						
Batch	R5317899							
WG3462473-5 MS		WG3462473-3						
Methylene Chloride			104.0		%		50-140	16-DEC-20
MTBE			96.3		%		50-140	16-DEC-20
o-Xylene			110.2		%		50-140	16-DEC-20
Styrene			97.3		%		50-140	16-DEC-20
Tetrachloroethylene			105.8		%		50-140	16-DEC-20
Toluene			102.4		%		50-140	16-DEC-20
trans-1,2-Dichloroethylene			101.1		%		50-140	16-DEC-20
trans-1,3-Dichloropropene			92.2		%		50-140	16-DEC-20
Trichloroethylene			107.6		%		50-140	16-DEC-20
Trichlorofluoromethane			103.1		%		50-140	16-DEC-20
Vinyl chloride			95.9		%		50-140	16-DEC-20
Batch	R5318454							
WG3462562-4 DUP		WG3462562-3						
1,2-Dichlorobenzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	17-DEC-20
1,3-Dichlorobenzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	17-DEC-20
1,4-Dichlorobenzene		<0.50	<0.50	RPD-NA	ug/L	N/A	30	17-DEC-20
WG3462562-1 LCS								
1,2-Dichlorobenzene			100.7		%		70-130	16-DEC-20
1,3-Dichlorobenzene			102.1		%		70-130	16-DEC-20
1,4-Dichlorobenzene			100.9		%		70-130	16-DEC-20
WG3462562-2 MB								
1,2-Dichlorobenzene			<0.50		ug/L		0.5	17-DEC-20
1,3-Dichlorobenzene			<0.50		ug/L		0.5	17-DEC-20
1,4-Dichlorobenzene			<0.50		ug/L		0.5	17-DEC-20
WG3462562-5 MS		WG3462562-3						
1,2-Dichlorobenzene			75.7		%		50-140	17-DEC-20
1,3-Dichlorobenzene			79.6		%		50-140	17-DEC-20
1,4-Dichlorobenzene			78.1		%		50-140	17-DEC-20

Quality Control Report

Workorder: L2539648

Report Date: 06-JAN-21

Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3
Contact: Ahmed Al-Temimi

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Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
J	Duplicate results and limits are expressed in terms of absolute difference.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

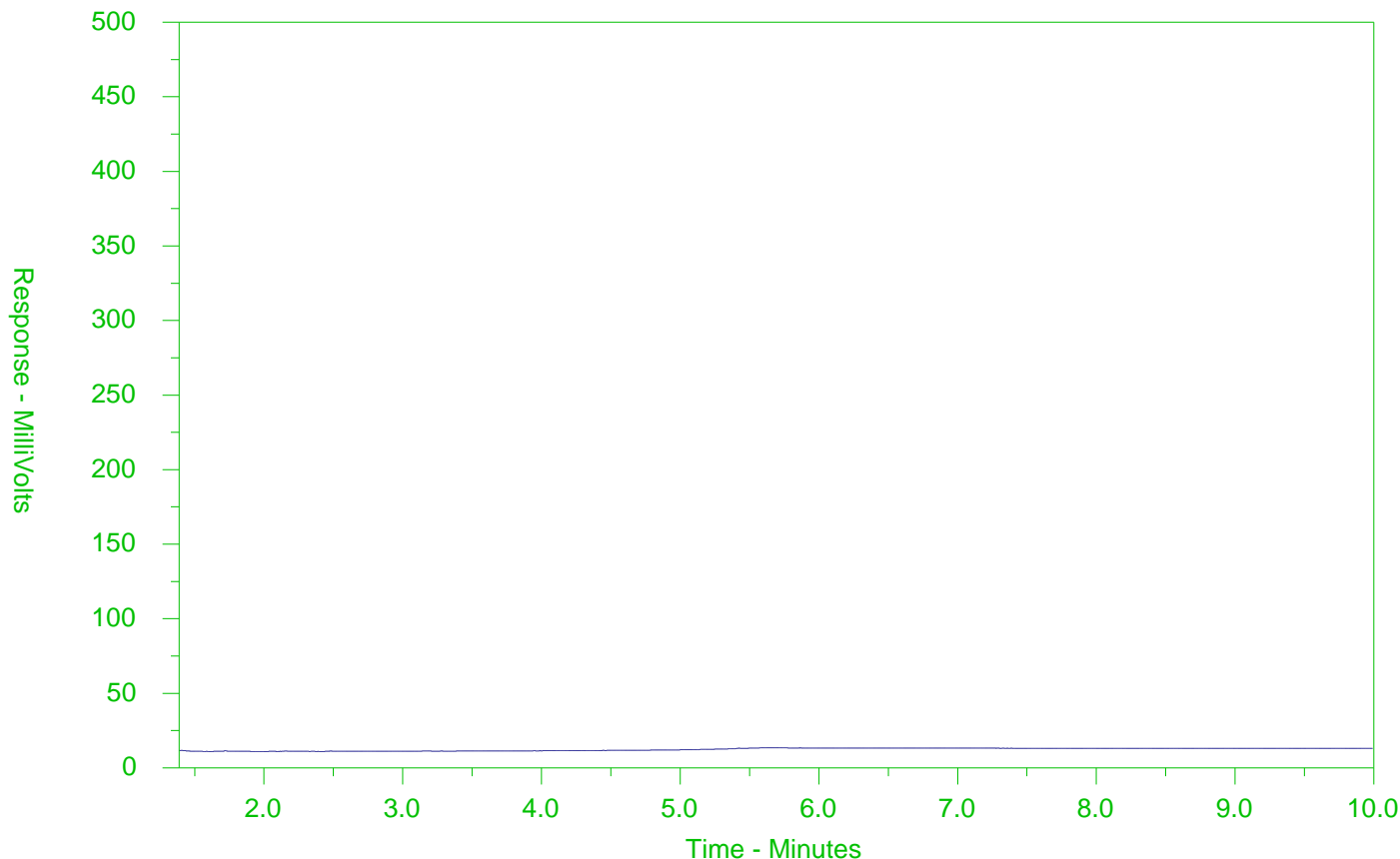
The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L2539648-1
Client Sample ID: MW1



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

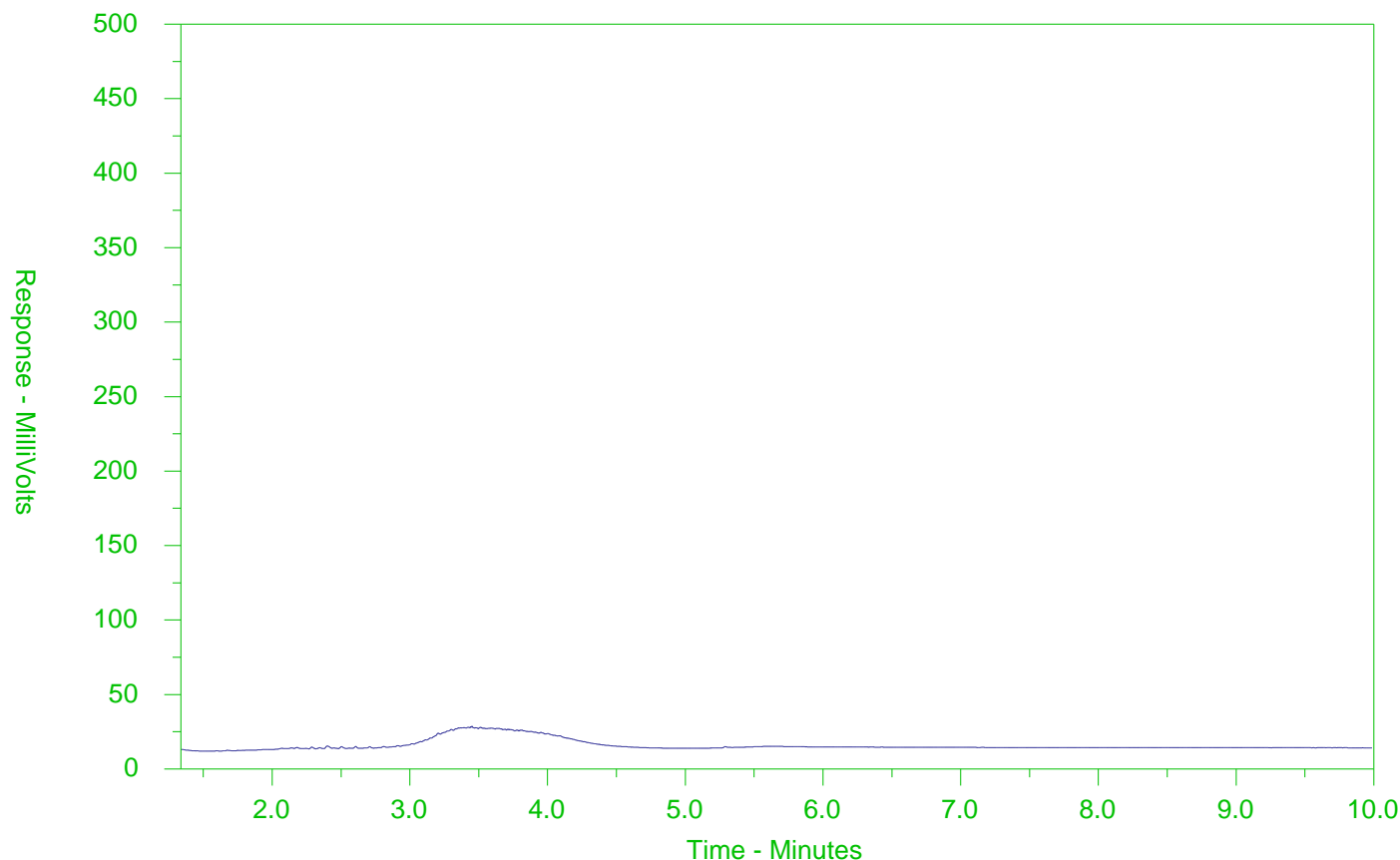
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L2539648-2
Client Sample ID: MW2



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

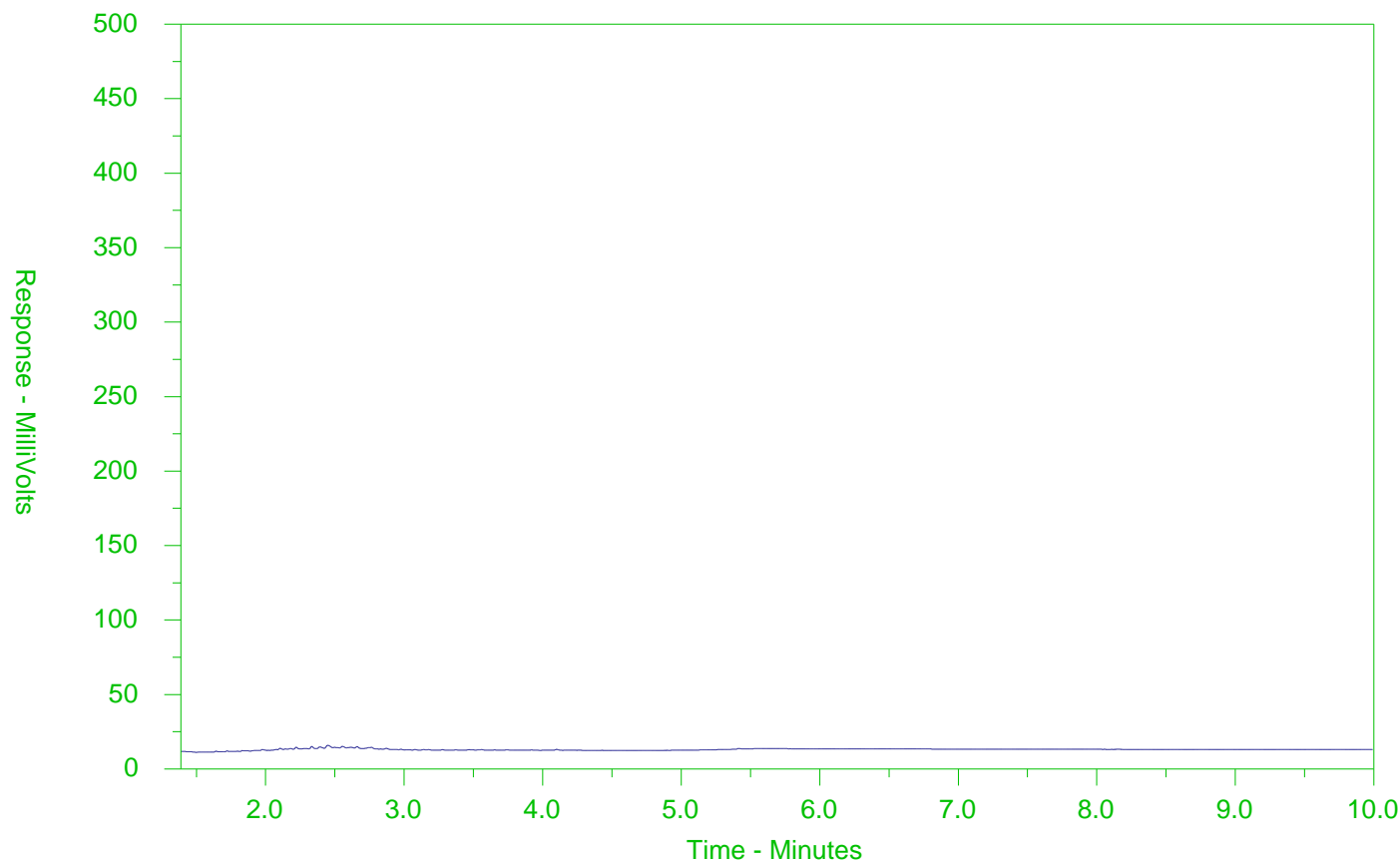
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L2539648-3
Client Sample ID: DUP-W1



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.



www.alsglobal.com

Chain of Custody (COC)

Canada Toll Free



L2539648-COFC

COC Number: 20 - 889954

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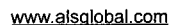
Report To Contact and company name below will appear on the final report		Reports / Recipients		Turnaround Time (TAT) Requested		APPEND ALS BARCODE LABEL HERE (ALS use only)	
Company: AZURE GROUP INC.		Select Report Format: <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL)		<input checked="" type="checkbox"/> Routine [R] if received by 3pm M-F - no surcharges apply			
Contact: AHMED AL-TEMIMI		Merge QC/QCI Reports with COA <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		<input type="checkbox"/> 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum			
Phone: 416-779-2694		<input checked="" type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked		<input type="checkbox"/> 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum			
Company address below will appear on the final report		Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX		<input type="checkbox"/> 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum			
Street: 6751 PROFESSIONAL CRT, 20		Email 1 or Fax: aaltemimi@azuregroup.ca		<input type="checkbox"/> 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum			
City/Province: MISSISSAUGA, ON		Email 2: team@azuregroup.ca		<input type="checkbox"/> Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests			
Postal Code: L4V 1Y3		Email 3: stebasson@azuregroup.ca		Date and Time Required for all E&P TATs:			
Invoice To: Same as Report To <input type="checkbox"/> YES <input type="checkbox"/> NO		Invoice Recipients		Analysis Request			
Copy of Invoice with Report <input type="checkbox"/> YES <input type="checkbox"/> NO		Select Invoice Distribution: <input type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX		For all tests with rush TATs requested, please contact your AM to confirm availability.			
Company:		Email 1 or Fax: aaltemimi@azuregroup.ca		Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below			
Contact:		Email 2:					
Project Information		Oil and Gas Required Fields (client use)		NUMBER OF CONTAINERS		SAMPLES ON HOLD	
ALS Account # / Quote #:		AFE/Cost Center:		Reg 153 PHC			
Job #: 2012-001 (KIRKWIN AVE)		Major/Minor Code:		Reg 53 VOC			
PO / AFE:		Routing Code:		Reg 153 PAH			
LSD:		Requisitioner:		Reg 153 M+T			
ALS Lab Work Order # (ALS use only): L2539648		ALS Contact:		Reg 153 M+T			
ALS Sample # (ALS use only):		Sampler:		Exclude Na			
Sample Identification and/or Coordinates (This description will appear on the report)		Date (dd-mm-yy)		Time (hh:mm)		Sample Type	
		11-Dec-20		10 A		GW	
MW1						X X X X	
MW2						X X	
DUP-W1				11:30A		X X	
TRIP BLANK						X	
MW3						X	
Drinking Water (DW) Samples¹ (client use)		Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)		SAMPLE RECEIPT DETAILS (ALS use only)			
Are samples taken from a Regulated DW System? <input type="checkbox"/> YES <input type="checkbox"/> NO		Please compare to T1 RPICC		Cooling Method: <input type="checkbox"/> NONE <input checked="" type="checkbox"/> ICE <input checked="" type="checkbox"/> ICE PACKS <input type="checkbox"/> FROZEN <input type="checkbox"/> COOLING INITIATED			
Are samples for human consumption/ use? <input type="checkbox"/> YES <input type="checkbox"/> NO		T3 RPI		Submission Comments identified on Sample Receipt Notification: <input type="checkbox"/> YES <input type="checkbox"/> NO			
				Cooler Custody Seals Intact: <input type="checkbox"/> YES <input type="checkbox"/> N/A Sample Custody Seals Intact: <input type="checkbox"/> YES <input type="checkbox"/> N/A			
				INITIAL COOLER TEMPERATURES °C: 8.4			
				FINAL COOLER TEMPERATURES °C:			
SHIPMENT RELEASE (client use)		INITIAL SHIPMENT RECEPTION (ALS use only)		FINAL SHIPMENT RECEPTION (ALS use only)			
Released by: SAMIYA		Received by: Karim Arshad		Received by:			
Date: Dec 11/2020		Date: 12/11/2020		Date:			
Time: 12:00 PM		Time: 12:28		Time:			

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

AUG 2020 FRONT



L2538999-COFC

Page 1 of 1

AFFIX ALS BARCODE LABEL HERE
(ALS use only)

[illegible]

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

AUG 2020 FROM



Azure Group Inc.(Mississauga)
ATTN: Ahmed Al-Temimi
6751 Professional Court
Suite 201
Mississauga ON L4V 1Y3

Date Received: 23-DEC-20
Report Date: 31-DEC-20 12:04 (MT)
Version: FINAL

Client Phone: 416-779-2694

Certificate of Analysis

Lab Work Order #: L2543542
Project P.O. #: NOT SUBMITTED
Job Reference: 2012-001
C of C Numbers: 17-800920
Legal Site Desc:

Amanda Overholster
Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 5730 Coopers Avenue, Unit #26 , Mississauga, ON L4Z 2E9 Canada | Phone: +1 905 507 6910 | Fax: +1 905 507 6927
ALS CANADA LTD Part of the ALS Group An ALS Limited Company



L2543542 CONTD....

Page 2 of 4

31-DEC-20 12:04 (MT)

2012-001

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1/T3-WATER

#1: T1-Ground Water-All Types of Property Uses

#2: T3-Non-Potable Ground Water-All Types of Property Uses (Coarse)

#3: T3-Non-Potable Ground Water-All Types of Property Uses (Fine)

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference***
F1-F4-511-CALC-WT	Water	F1-F4 Hydrocarbon Calculated Parameters	CCME CWS-PHC, Pub #1310, Dec 2001-L

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.
In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:

1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:

1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

F1-HS-511-WT	Water	F1-O.Reg 153/04 (July 2011)	E3398/CCME TIER 1-HS
--------------	-------	-----------------------------	----------------------

Fraction F1 is determined by analyzing by headspace-GC/FID.

Analysis conducted 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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

F2-F4-511-WT	Water	F2-F4-O.Reg 153/04 (July 2011)	EPA 3511/CCME Tier 1
--------------	-------	--------------------------------	----------------------

Petroleum Hydrocarbons (F2-F4 fractions) are extracted from water using a hexane micro-extraction technique. Instrumental analysis is by GC-FID, as per the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Tier 1 Method, CCME, 2001.

Analysis conducted 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), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

*** ALS test methods may incorporate modifications from specified reference methods to improve performance.

Chain of Custody numbers:

17-800920

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA		

Reference Information

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg ww - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guideline limits are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.



Environmental

Quality Control Report

Workorder: L2543542

Report Date: 31-DEC-20

Page 1 of 2

Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3

Contact: Ahmed Al-Temimi

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F1-HS-511-WT Water								
Batch	R5327944							
WG3467325-4	DUP	WG3467325-3						
F1 (C6-C10)		<25	<25	RPD-NA	ug/L	N/A	30	31-DEC-20
COMMENTS: Submitted vials suspected of containing activated carbon. Vials have not been inverted to reduce possible matrix interferences on internal standard responses and surrogate recoveries.								
WG3467325-1	LCS							
F1 (C6-C10)			113.5		%		80-120	29-DEC-20
WG3467325-2	MB							
F1 (C6-C10)			<25		ug/L		25	30-DEC-20
Surrogate: 3,4-Dichlorotoluene			104.7		%		60-140	30-DEC-20
WG3467325-5	MS	WG3467325-3						
F1 (C6-C10)			86.0		%		60-140	31-DEC-20
COMMENTS: Submitted vials suspected of containing activated carbon. Vials have not been inverted to reduce possible matrix interferences on internal standard responses and surrogate recoveries.								
Batch	R5328836							
WG3468189-4	DUP	WG3468189-3						
F1 (C6-C10)		<25	<25	RPD-NA	ug/L	N/A	30	31-DEC-20
WG3468189-1	LCS							
F1 (C6-C10)			105.5		%		80-120	31-DEC-20
WG3468189-2	MB							
F1 (C6-C10)			<25		ug/L		25	31-DEC-20
Surrogate: 3,4-Dichlorotoluene			106.3		%		60-140	31-DEC-20
WG3468189-5	MS	WG3468189-3						
F1 (C6-C10)			81.8		%		60-140	31-DEC-20
F2-F4-511-WT Water								
Batch	R5325897							
WG3466886-2	LCS							
F2 (C10-C16)			104.7		%		70-130	29-DEC-20
F3 (C16-C34)			107.0		%		70-130	29-DEC-20
F4 (C34-C50)			107.8		%		70-130	29-DEC-20
WG3466886-1	MB							
F2 (C10-C16)			<100		ug/L		100	29-DEC-20
F3 (C16-C34)			<250		ug/L		250	29-DEC-20
F4 (C34-C50)			<250		ug/L		250	29-DEC-20
Surrogate: 2-Bromobenzotrifluoride			89.5		%		60-140	29-DEC-20

Quality Control Report

Workorder: L2543542

Report Date: 31-DEC-20

Client: Azure Group Inc.(Mississauga)
6751 Professional Court Suite 201
Mississauga ON L4V 1Y3
Contact: Ahmed Al-Temimi

Page 2 of 2

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

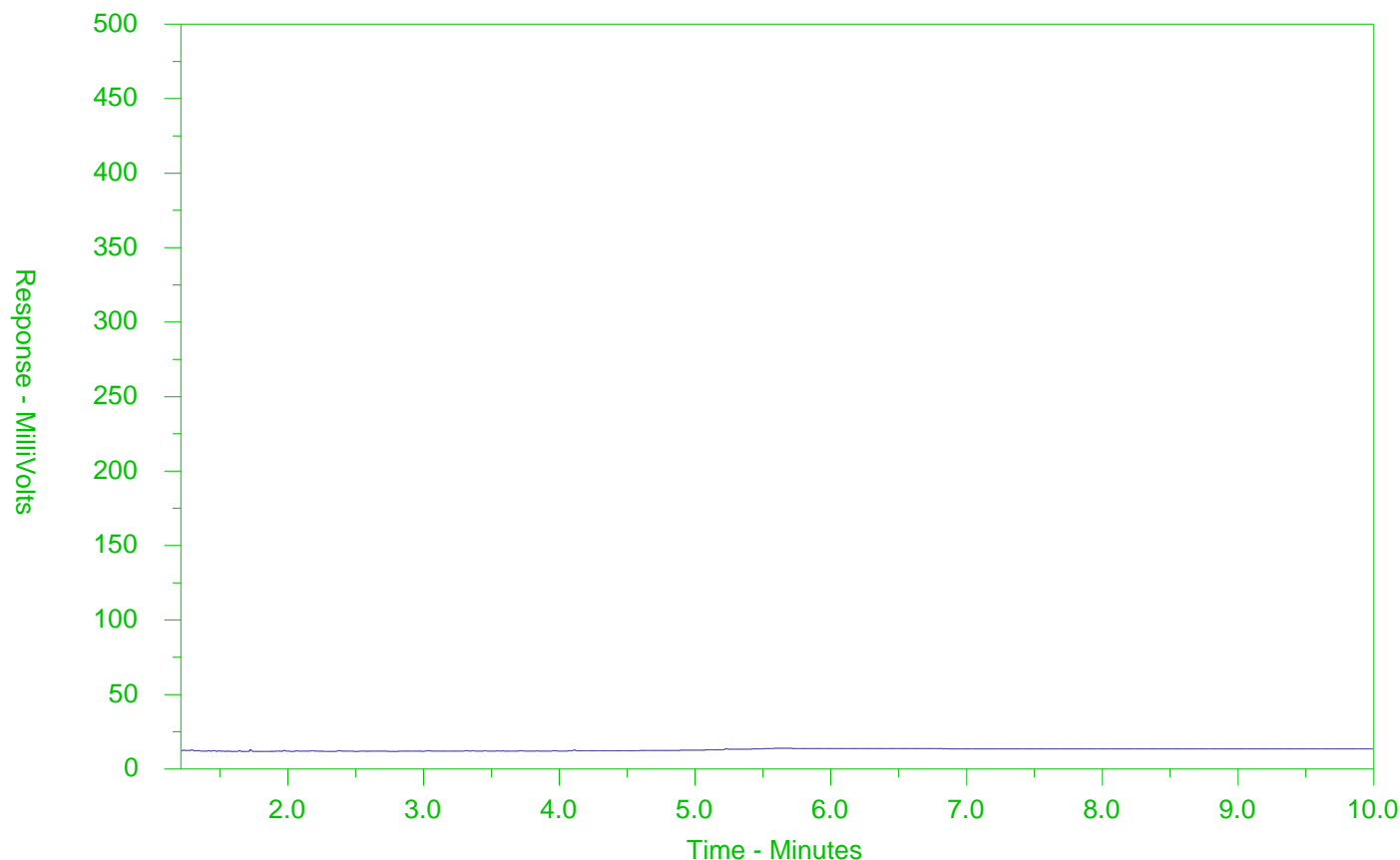
The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L2543542-1
Client Sample ID: MW2-2



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

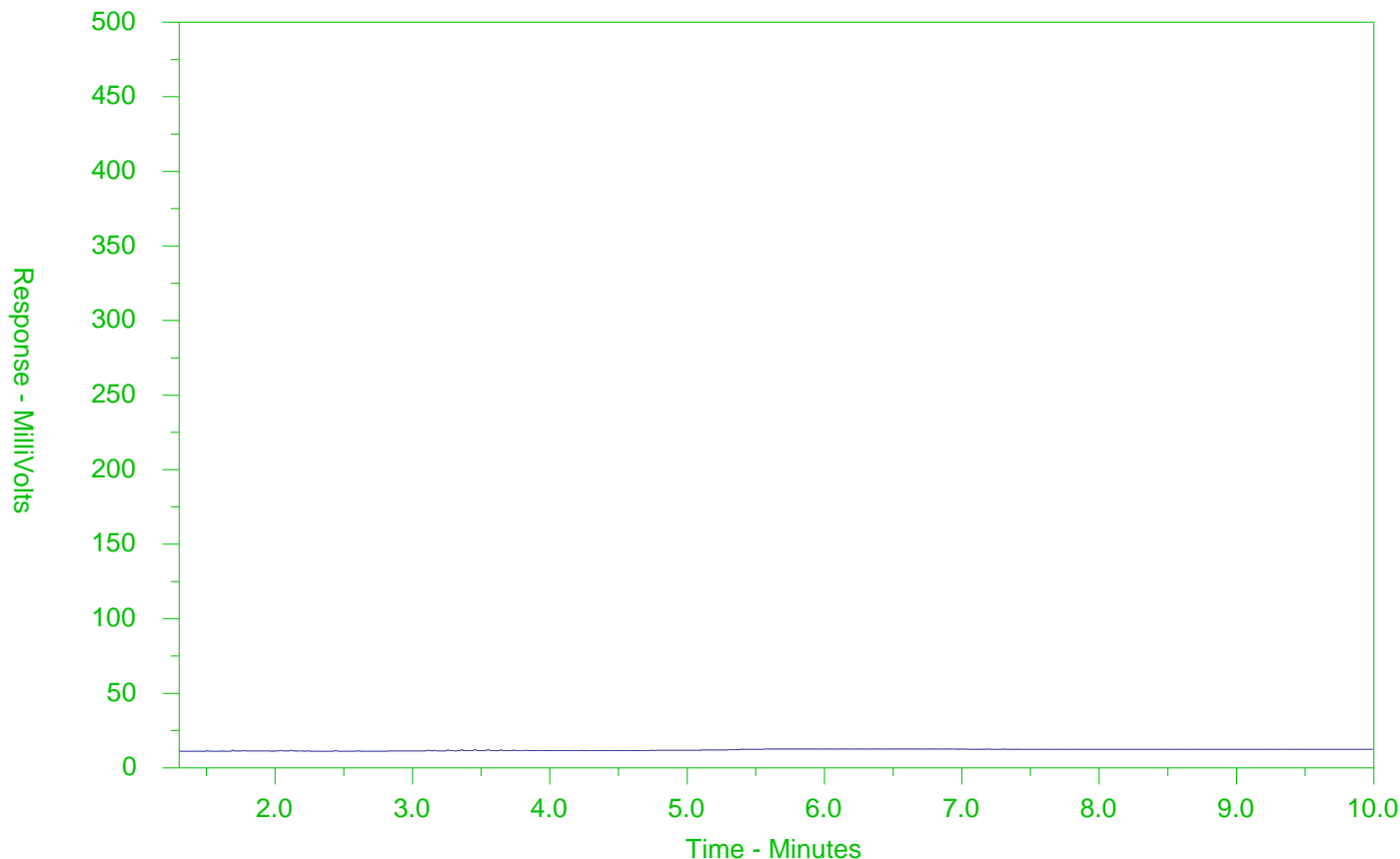
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L2543542-2
Client Sample ID: DUPW-2



← F2 →		← F3 →		← F4 →	
nC10	nC16		nC34		nC50
174°C	287°C		481°C		575°C
346°F	549°F		898°F		1067°F
Gasoline →			← Motor Oils/Lube Oils/Grease		
← Diesel/Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

Chain of Custody (COC) / Analytic Request Form

Canada Toll Free: 1 800 668 9878



L2543542-COFC

COC Number: 17 - 800920

Page 1 of 1

www.aisglobal.com

Report To			Contact and company name below will appear on the final report								
Company:			AZURE GROUP INC.								
Contact:			AHMED AL-TEMIMI								
Phone:			416-779-2694								
			Company address below will appear on the final report								
Street:			6751 PROFESSIONAL CRT, 201								
City/Province:			MISSISSAUGA, ON								
Postal Code:			L4V1Y3								
Invoice To			Same as Report To <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO								
			Copy of Invoice with Report <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO								
Company:											
Contact:											
Project Information											
ALS Account # / Quote #:											
Job #: 2012-001											
PO / AFE:											
LSD:											
ALS Lab Work Order # (lab use only): L2543542KH											
ALS Contact:											
Sampler:											
Report Format / Distribution			Select Report Format: <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL)								
			Quality Control (QC) Report with Report <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO								
			<input checked="" type="checkbox"/> Compare Results to Criteria on Report - provide details below if box checked								
			Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX								
Email 1 or Fax			team@azuregroup.ca								
Email 2			aaltemimi@azuregroup.ca								
Email 3			stahassum@azuregroup.ca								
Invoice Distribution			Select Invoice Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX								
Email 1 or Fax			aaltemimi@azuregroup.ca								
Email 2			team@azuregroup.ca								
Oil and Gas Required Fields (client use)											
AFE/Cost Center:			PO#								
Major/Minor Code:			Routing Code:								
Requisitioner:											
Location:											
Analysis Request											
Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below											
NUMBER OF CONTAINERS											
SAMPLES ON HOLD											
SUSPECTED HAZARD (see Special Instructions)											
Drinking Water (DW) Samples ¹ (client use)			Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic CDC only)								
Are samples taken from a Regulated DW System? <input type="checkbox"/> YES <input type="checkbox"/> NO			Please compare to T1 RPIIC 2 T3 RPI								
Are samples for human consumption/ use? <input type="checkbox"/> YES <input type="checkbox"/> NO											
Sample Condition AS RECEIVED (lab use only)											
Frozen <input type="checkbox"/>			Ice Packs <input checked="" type="checkbox"/>			Ice Cubes <input checked="" type="checkbox"/>			Custody seal intact Yes <input type="checkbox"/> No <input type="checkbox"/>		
Cooling Initiated <input type="checkbox"/>											
INITIAL COOLER TEMPERATURES °C			2.4			FINAL COOLER TEMPERATURES °C			8.0		
SHIPMENT RELEASE (client use)											
Released by: SAMIYA			Date: Dec 23, 2020			Time: 2PM			Received by: Karam Hattal		
INITIAL SHIPMENT RECEPTION (lab use only)											
Date: 12/23/2020			Time: 13:54			Date: 12/23/2020			Time: 17:00		

1. If any water samples are taken from a **Regulated Drinking Water (DW) System**, please submit using an **Authorized DW COC form**.

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

LINE 2018 FRON



APPENDIX D

SAMPLING AND ANALYSIS PLAN



This Sampling and Analysis Plan is prepared for a Phase Two Environmental Site Assessment (ESA) as defined by Ontario Regulation (O. Reg.) 153/04, as amended. The Subject Property is located at 3016, 3020, 3026, 3032 & 3034 Kirwin Avenue and 3031 Littlejohn Lane in the City of Mississauga (hereinafter referred to as the “Subject Property”).

The Sampling and Analysis Plan is based on the findings of our Phase One Environmental Site Assessment (Phase One ESA, Reference No. 2012-001, dated December 23, 2020).

1) **OBJECTIVE**

The objective of the Phase Two ESA was to determine the soil and groundwater quality at the site, as related to the following Areas of Potential Environmental Concerns (APECs) identified in the Phase One ESA by Azure Group Inc. (Azure):

APEC 1: Potential impact from the fill materials of unknown quality from previous building structures at the eastern portion of the Subject Property;

APEC 2: Potential impact from the current dry cleaner (131 Dundas Street) to the south of the Subject Property;

APEC 3: Potential impact from the current auto service garage (135 Dundas Street East) with aboveground storage tanks to the southeast of the Subject Property.



2) **SCOPE OF WORK**

The scope of work for the Phase Two ESA includes:

- Locate the underground and overhead utilities
- Conduct a total of three (3) boreholes installed as monitoring wells to depths ranging from 6.1 m to 6.8 m below grade surface (mbgs).
- Collect representative soil samples from the boreholes.
- Undertake soil vapour measurements for the retrieval soil samples using a combustible gas detector (RKI Eagle 2) in methane elimination mode, calibrated with hexane and isobutylene, and having a minimum detection level of 1 ppm (parts per million by volume).
- Install monitoring wells in all of the boreholes for groundwater sampling, testing and determining groundwater flow direction.
- Conduct one groundwater monitoring round and collect groundwater samples for chemical testing.
- Carry out analytical testing program on selected soil samples and groundwater samples (including QA/QC samples) for one or more of the following parameters: soil grain size analyses, Petroleum Hydrocarbons (PHCs), Volatile Organic Compounds (VOCs), Polycyclic Aromatic Hydrocarbons (PAHs), Metals and/or Inorganics.
- Review analytical testing results of submitted soil and groundwater samples using applicable Site Condition Standards.
- Conduct surveying at the Subject Property to determine the ground elevation of the boreholes and monitoring wells in metres above sea level (masl).
- Prepare a Phase Two ESA report incorporating the findings of the investigation.



3) **RATIONALE OF BOREHOLE / MONITORING WELL LOCATION**

The rationale for the selection of the borehole/monitoring well locations is presented in the Table below:

Areas of Potential Environmental Concerns (APECs)	Borehole / Monitoring Well ID
APEC 1: Potential impact from the fill materials of unknown quality from previous building structures at the eastern portion of the Subject Property.	BH1, BH3
APEC 2: Potential impact from the current dry cleaner (131 Dundas Street) to the south of the Subject Property.	BH2
APEC 3: Potential impact from the current auto service garage (135 Dundas Street East) with aboveground storage tanks to the southeast of the Subject Property.	BH1

The locations of proposed borehole/monitoring well for the Phase Two ESA are shown in Drawing No. 2.



4) **SOIL AND GROUNDWATER SAMPLES (INCLUDING QA/QC SAMPLES)**
ANALYTICAL SCHEDULE

A summary of soil and groundwater samples (including QA/QC samples) to be submitted is presented in the Table below:

Soil Sample (including QA/QC Samples)

Borehole / Monitoring Well	Metals and/or Inorganics	PHCs & BTEX	VOC	PAH
BH1	1	1	1	1
BH2	1	1	1	-
BH3	1	-	-	-
Duplicate Soil Sample	-	1	1	-

Groundwater Sample (including QA/QC Samples)

Borehole / Monitoring Well	Metals and/or Inorganics	PHCs & BTEX	VOC	PAH
MW1	1	1	1	1
MW2	-	1	1	-
MW3	1	-	-	-
Duplicate GW Sample	-	1	1	-
Trip Blank	-	-	1	-

5) **SOIL AND GROUNDWATER SAMPLING PROCEDURES**

Azure's Standard Operation Procedures (SOPs) will be followed throughout the field investigation (sampling, decontamination of equipment, observation and documentation) including field QA/QC program. Azure's Standard Operating Procedure is presented in section 7 of this sampling and analysis plan.

6) **DATA QUALITY OBJECTIVES**

Sampling and decontamination procedures including QA/QC program should be carried out in accordance with:

- Azure's Standard Operating Procedures, as presented in the section 7 below.



- The “Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario”, May 1996, revised December 1996, as amended by O. Reg. 511/09.

Laboratory analytical methods, protocols and procedures should be carried out in accordance with the “Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act”, dated March 9, 2004, amended as of July 1, 2011, in accordance with O. Reg. 511/09 and O. Reg. 269/11.

7) **STANDARD OPERATING PROCEDURES (SOPs)**

7.1) **Borehole Drilling**

The purpose of borehole drilling is to provide access to subsurface soils at specified locations and depths. Soil borings also allow for installation of groundwater monitoring wells.

7.1.1) **Underground Utilities**

Prior to drilling, the public utility service (One Call) and private utility services are contacted. The underground utility services are located and marked out in the field.

7.1.2) **Drilling Methods**

Direct Push Drilling (i.e. Geoprobe, Powerprobe, Pionjar, etc.)

The direct push drilling machine is a hydraulically powered hammer/ram sampling device. The unit is designed so that the weight of the vehicle provides the majority of downward force. The hydraulics, with the aid of a percussion hammer, push lengths of specially modified 54 mm (2.125 inch) outside diameter (OD), hardened steel rod into the ground. The rod is advanced to target sampling depth is reached. The steel rod has been specially modified for specific types of sample collection.



Flight-Auger Drilling

The flight-auger drilling machine is a hydraulically powered feed and retract system that provides 28,275 pounds (12,826 kg) of retract force and 18,650 pounds (8,460 kg) of down pressure. The 183 cm (72 inch) stroke, hydraulic vertical drive system has no chains or cables which can stretch. It is equipped with hollow-stem augers. It is extended to pre-determined sampling intervals using conventional drilling methods, at which time a decontaminated 51 mm split-spoon sampler is extended ahead of the lead auger to collect a soil sample. The split-spoon sampler is then brought to surface and opened, exposing the soil core sample.

Hand Dug Test Pit

The hand-dug test pits were hand-dug using shovel. Prior to digging and sampling at each test pit location, the shovel was brushed clean using a solution of phosphate-free detergent and distilled water.

7.1.3) Occupational Health and Safety

Prior to drilling, the site is inspected to ensure that no potentially hazardous material is present near/around the drilling area. Safety procedures are reviewed and a safety check of the equipment is conducted including locating the emergency stop button on the drill rig, checking personal protective equipment (hard hats, safety shoes, eye/ear protection), locating the first aid kit and confirming the location of the nearest hospital, and verifying the standard procedure in case of injury.



7.1.4) Drilling Spoils

Excess soil generated during sampling and drilling procedure is stored at the site in metal barrels. If the analytical results indicate the soil is contaminated, a licensed disposal company is notified to collect the barrels of soil for proper disposal.

7.1.5) Borehole Abandonment

After drilling, logging and/or sampling, boreholes will be backfilled by the method described below:

- Bentonite is thoroughly mixed into the grout within the specified percentage range. The tremie grout is usually placed into the hole; however, for selected boreholes (e.g., shallow borings well above the water table) at certain sites, the grout may be allowed to free fall, taking care to ensure the grout does not bridge and form gaps or voids in the grout column.
- The volume of the borehole is calculated and compared to the grout volume used during grouting to aid in verifying that bridging did not occur.
- When using a tremie to place grout in the borehole, the bottom of the tremie is submerged into the grout column and withdrawn slowly as the hole fills with grout. If allowing the grout to free fall (and not using a tremie), the grout is poured slowly into the boring. The rise of the grout column is visually monitored or sounded with a weighted tape.
- If the method used to drill the boring utilized a drive casing, the casing is slowly extracted during grouting such that the bottom of the casing does not come above the top of the grout column.



- During the grouting process, no contaminating material (oil, grease, or fuels from gloves, pumps, hoses, et. al) is permitted to enter the grout mix and personnel wear personal protective equipment as specified in the Project Health and Safety Plan.
- Following grouting, barriers are placed over grouted boreholes as the grout is likely to settle in time, creating a physical hazard. Grouted boreholes typically require at least a second visit to ‘top off’ the hole.
- The surface hole condition should match the pre-drilling condition (asphalt, concrete, or smoothed flush with native surface), unless otherwise specified in the project work plans.

7.1.6) Subsurface Obstruction

Where refusal to drilling occurs due to rock, foundation or underground services, the borehole is relocated within 2.0 m downstream from the original borehole location.

7.2) Soil Sampling

7.2.1) Introduction

Soil sampling is conducted in accordance with the “Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario, May 1996” as revised December 1996 (MOE Guidance Manual) and as amended by O. Reg. 366/05, 66/08, 511/09, 245/10, 179/11, 269/11 and 333/13. The sampling procedures are described herein.



Drilling Rig Decontamination

Geoprobe

One-time use Shelby tube (thin-walled) samples are recovered from the boreholes in clear disposable PVC liners to prevent cross-contamination.

CME 55

Drilling equipment such as drill rigs, augers, drill pipes, drilling rods and split-spoons are decontaminated prior to initial use, between borehole locations and at the completion of drilling activities. The drilling equipment is manually scrubbed with a brush using a phosphate-free solution and thoroughly steam cleaned and/or power washed to remove any foreign material and potential contaminants.

In addition, the spilt-spoon sampler and any sub-sampling equipment is decontaminated prior to each usage. Various solutions are used for sampling equipment decontamination as described below:

- Phosphate-free soap solution (i.e., Alconox), tap water and distilled water are used for suspected petroleum hydrocarbon soil sampling.
- A reagent-grade methanol solution and distilled water are used for suspected VOCs soil sampling. The restate waste is collected.
- Reagent-grade 10% nitric acid solution and distilled water are used for suspected metals soil sampling. The restate waste will be collected.



Sample Logging and Field Screening

Samples are typically collected at 0.8m to 1.5 m intervals in the overburden. Tactile examination of the samples is made to classify the soil, and a log is recorded for each borehole detailing the physical characteristics of the soil including colour, soil type, structure, and any observed staining or odour. The organic vapour readings, the moisture content of the samples as determined in the laboratory, the groundwater and cave-in levels measured at the time of investigation, and the groundwater monitoring well construction details are given on the borehole logs.

7.2.2) Field Screening and Calibration Procedures

The soil samples are classified based on physical characteristics including colour, soil type, moisture, and visible observation of staining and/or odour. In addition, the organic vapour reading for each soil sample is determined using a gas detector. Based on the overall soil physical characteristics, representative soil sample are selected for chemical analysis.

The organic vapour readings are measured using a portable RKI Eagle 2 gas detector, TYPE 101 set to include all gases, and having a minimum detection of 1 ppm. Prior to measurement, the detector is calibrated using a Hexane 40% LEL gas. The allowable range of calibration is 38% to 42%.



Soil Sampling

The soil from the disposable sampler liner is handled using new disposable gloves in order to avoid the risk of cross-contamination between the samples. Sufficient amounts of the soil samples are placed into clean glass jars with Teflon lined lids for analyses for Polychlorinated Biphenyls, Polyaromatic Hydrocarbons, moisture content, medium to heavy PHCs, and Metals and Inorganics.

Small amounts of the soil samples are collected using a disposable 'T'-shaped Terracore sampler and stored in methanol or sodium bisulfate vials for light PHCs (CCME F1) and VOCs analysis, respectively; the remainder of the samples is placed into a sealable bag for vapour measurement and soil classification. The samples are stored in an insulated container with ice after sampling and during shipment to the laboratory.

The minimum requirements for the number, type and frequency of field quality control are given below:

- i. Field Duplicates: At least 1 field duplicate sample is collected and submitted for laboratory analysis for every 10 soil samples that are collected to ensure the soil sampling technique is accurate.



7.3) **Well Installation, Well Development/Purging and Groundwater Sampling**

7.3.1) **Monitoring Well Installation**

7.3.1.1) **Screen and Riser Pipe**

Monitoring wells are constructed from individually wrapped 38 or 50 mm inside diameter (ID) schedule 40 polyvinyl chloride (PVC) flush threaded casing equipped with O-rings. The screen consists of casing material which is factory slotted (slot width = 0.25 mm) to permit the entry of water into the well. The bottom of the screens are equipped with threaded end caps. The appropriate number of risers are coupled with the screen section(s) via threaded joints to construct the well. The top of the wells are tightly capped using a locking well cap, which prevents the infiltration of surface water and foreign material into the well and also provides security. A watertight, traffic-rated protective casing is installed over each monitoring well within a concrete pad extending approximately 0.5 mbgs. No PVC cements or other solvent based cements are used in the construction of the monitoring wells.

7.3.1.2) **Well Materials Decontamination**

Dedicated sampling equipment, such as submersible pumps, are decontaminated prior to installation inside monitoring wells.

Where factory-cleaned, hermetically sealed materials are used, no decontamination is conducted.

Setting Screen, Riser Casings and Filter Materials

At total depth, the soil cuttings are removed through circulation or rapidly spinning the augers prior to constructing the well. The drill pipe and bit or centre bit boring is removed. The well construction materials are then installed inside the open borehole or through the centre of the drive casing or augers.



After the monitoring well assembly is lowered to the bottom of the borehole, the filter pack is added until its height is approximately two feet above the top of the screen, and placement is verified. The filter pack is then surged using a surge block or swab in order to settle the pack material and reduce the possibility of bridging.

Setting Seals and Grouting

Once the top of the filter pack is verified to be in the correct position, a bentonite seal is placed above the filter pack. The seal is allowed to hydrate for at least one hour before proceeding with the grouting operation.

After hydration of the bentonite seal, grout is then pumped through a tremie pipe and filled from the top of the bentonite seal upward. The bottom of the tremie pipe should be maintained below the top of the grout to prevent free fall and bridging. When using drive casing or hollow-stem auger techniques, the drive casing/augers should be raised in incremental intervals, keeping the bottom of the drive casing/augers below the top of the grout. Grouting will cease when the grout level has risen to within approximately one to two feet of the ground surface, depending on the surface completion type (flush-mount versus above-ground). Grout levels are monitored to assure that grout taken into the formation is replaced by additional grout.

Capping the Wells

For above-ground completions, the protective steel casing will be centered on the well casing and inserted into the grouted annulus. Prior to installation, a 2-inch deep temporary spacer may be placed between the PVC well cap and the bottom of the protective casing cover to keep the protective casing from settling onto the well cap. A minimum of 24 hours after grouting should elapse before installation of the concrete pad and steel guard posts for above-ground completions, or street boxes or vaults for flush mount completions. For above-ground completions, a concrete pad, usually 3-foot by 3-foot by 4-inch thick, is constructed at ground



surface around the protective steel casing. The concrete is sloped away from the protective casing to promote surface drainage from the well.

For flush-mount (or subgrade) completions, a street box or vault is set and cemented in position. The top of the street box or vault will be raised slightly above grade and the cement sloped to grade to promote surface drainage away from the well.

7.3.1.3) Documentation of Monitoring Well Configuration

The following information is recorded:

- Length of well screen
- Total depth of well boring
- Depth from ground surface to top of grout or bentonite plug in bottom of borehole (if present)
- Depth to base of well string
- Depth to top and bottom of well screen

7.3.2) Monitoring Well Development/Purging

Installed monitoring wells will have to be developed to remove any fluids that may have been introduced into the well during drilling and to remove particles that may have become entrained in the well and filter pack (a minimum of three (3) well casing volumes of groundwater from each well will have to be developed).

Prior to each groundwater sampling events, groundwater will be purged from each monitoring well utilizing the three well casing volumes method. The monitoring wells will be instrumented with dedicated low-density polyethylene tubing to facilitate well development, purging and sampling requirements. Purged water will be contained and stored at the Site for future disposal.



7.3.3) Water Level Measurements and Field Observation/Measurement of Water Quality Parameters

Water level measurements and water temperature will be taken using a water level meter (Dipper-T) equipped with a thermometer. Groundwater observations will be recorded for colour, clarity, the presence or absence of any free product / surface sheen and any odours present during purging the wells. The water level measuring device will be cleaned after each measurement using Alconox solution and water, followed by a distilled water rinse and a methanol rinse, in order to prevent cross-contamination between monitoring wells.

Prior to taking the measurements, the instrument will be calibrated using calibration solutions (conductivity solutions, pH solutions) according to the instruction manual for the instrument. The instrument will be calibrated or tuned up by the supplier seasonally.

7.3.4) Groundwater Sampling

Prior to each groundwater sampling events, groundwater will have to be purged from each monitoring well utilizing the three well casing volumes method. The monitoring wells will be instrumented with dedicated low-density polyethylene tubing to facilitate well development, purging and sampling requirements. Purged water will be contained and stored at the Site for future disposal.

Groundwater sampling will be conducted after purging and allow the water to stabilize. The groundwater purging and sampling activities will be carried out using dedicated low-density polyethylene tubing. Groundwater samples will be collected into laboratory-supplied containers, prepared with preservative for the analysis being conducted. The samples scheduled for analysis of metals will be passed through a 0.45 micron filter as part of the sampling process.



APPENDIX E

SURVEY PLAN

PLAN OF SURVEY OF
ALL OF LOTS 27 TO 30
REGISTERED PLAN No. C-14
AND
PART OF LOT 5
REGISTERED PLAN TOR-12
AND
PART OF LOT 15
CONCESSION 1,
NORTH OF DUNDAS STREET
(GEOGRAPHIC TOWNSHIP OF TORONTO, COUNTY OF PEEI)
CITY OF MISSISSAUGA
REGIONAL MUNICIPALITY OF PEEI

SCALE: 1 : 200
0 5 10 15 metres
VAN HARTEN SURVEYING INC.

SURVEYOR'S CERTIFICATE

- I CERTIFY THAT:
- THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT, THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM.
 - THIS SURVEY WAS COMPLETED ON THE 14th DAY OF OCTOBER, 2016.

DATE: OCTOBER 6, 2017

LUKE G. WILCOX
ONTARIO LAND SURVEYOR

PROPERTY DESCRIPTION:

ALL OF PINS 13715-0055, 13715-0071, 13715-0072, 13715-0073 AND 13715-0074; ALL OF LOTS 27 TO 30, REGISTERED PLAN No. C-14 AND PART OF LOT 5, REGISTERED PLAN TOR-12 AND PART OF LOT 15, CONCESSION 1, NORTH OF DUNDAS STREET, (GEOGRAPHIC TOWNSHIP OF TORONTO, COUNTY OF PEEI), CITY OF MISSISSAUGA, REGIONAL MUNICIPALITY OF PEEI.

AREA- 0.64ha (6389.7 sq. metres)

Subject Property and Phase Two Property

BEARING AND COORDINATE NOTE:

- BEARINGS ARE GRID BEARINGS AND ARE DERIVED FROM GPS OBSERVATIONS AND ARE REFERRED TO THE UTM PROJECTION, ZONE 17, NAD 83 (CSRS-2010) ADJUSTMENT.
- DISTANCES SHOWN ON THIS PLAN ARE ADJUSTED GROUND DISTANCES AND CAN BE CONVERTED TO GRID DISTANCES BY MULTIPLYING BY AN AVERAGED COMBINED SCALE FACTOR OF 0.999745.

BEARING COMPARISONS:

FOR THE PURPOSES OF BEARING COMPARISONS, PREVIOUS SURVEYS HAVE BEEN ROTATED TO UTM BEARINGS BY THE ANGLES SHOWN BELOW.

PLAN	ROTATION FOR NORTHEAST BEARINGS
P1	-2°55'55"
P2, P4	-1°43'20"
P3	-2°54'00"

LEGEND:

- DENOTES SURVEY MONUMENT SET
- DENOTES SURVEY MONUMENT FOUND
- IB DENOTES 0.25 x 0.25 x 1.20 STANDARD IRON BAR
- SIB DENOTES 0.25 x 0.25 x 0.60 IRON BAR
- BP DENOTES 0.25 DIA. X 0.07 ROUND IRON BAR WITH STAMPED WASHER
- PB DENOTES 0.25 x 0.25 x 0.30 PLASTIC BAR
- C DENOTES CUT CROSS
- WT DENOTES WITNESS
- OU DENOTES ORIGIN UNKNOWN
- VH DENOTES VAN HARTEN SURVEYING INC., O.L.S.'s
- XH DENOTES VAN HARTEN SURVEYING INC., O.L.S.'s
- 923 DENOTES P. W. TARASICK, O.L.S.
- B33 DENOTES R. H. BROWN, O.L.S.
- 103 DENOTES J. A. WINTLE, O.L.S.
- 103 DENOTES J. A. WINTLE, O.L.S.
- 1493 DENOTES J. F. G. YOUNG, O.L.S.
- 1493 DENOTES J. F. G. YOUNG, O.L.S.
- MMM DENOTES MARSHAL, MACKIN, MCKINACHAN LIMITED
- P1 DENOTES PLAN BY TARASICK, MCKINACHAN LIMITED, DATED MARCH 30, 1999
- P2 DENOTES REGISTERED PLAN No. C-14
- P3 DENOTES PLAN 436-344
- P4 DENOTES PLAN BY MCKINACHAN & CAMERON LTD., DATED SEPTEMBER 27, 1994
- P5 DENOTES PLAN OF SURVEY BY YOUNG & YOUNG SURVEYING INC., DATED DECEMBER 11, 1989
- P6 DENOTES PLAN BY TARASICK, MCKINACHAN LIMITED, DATED JANUARY 17, 1986

METRIC:

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 (AMERICAN) FORM
2004453



THIS PLAN IS NOT VALID
UNLESS IT IS AN ENCLOSED
ORIGINAL COPY
ISSUED BY THE SURVEYOR
In accordance with
Regulation (2005, Section 29(1))

Van Harten
SURVEYING INC.
LAND SURVEYORS AND ENGINEERS

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Checked By: AM
Project No: 24130-16