Phase Two Environmental Site Assessment

1720 Sherwood Forrest Circle

Mississauga, Ontario

Revision 1

Prepared For:

Argo Development Corporation

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Burlington, Ontario

L7M 0W7

DS Project No: 23-162-100

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Executive Summary

DS Consultants Ltd. (DS) was retained by Argo Development Corporation (the "Client") to conduct a Phase Two Environmental Site Assessment (ESA) of the Property located at 1720 Sherwood Forrest Circle, Mississauga, Ontario, herein referred to as the "Phase Two Property". It is DS's understanding that this Phase Two ESA has been requested for pre-purchase due diligence purposes and in support of the proposed redevelopment of the Property.

The Phase Two ESA was completed to satisfy the intent of the requirements, methodology and practices for a Phase Two ESA as described in Ontario Regulation 153/04 (as amended). The objective of this Phase Two ESA is to confirm whether contaminants are present, and at what concentration are they present on the Phase Two Property, as related to the Areas of Potential Environmental Concern (APEC) identified in the Phase One ESA.

The intended future residential property use is not considered to be a more sensitive property use than the historic senior's home and convent (residential property use), as defined under O.Reg. 153/04 (as amended); therefore, the filing of a Record of Site Condition (RSC) with the Ontario Ministry of Environment, Conservation and Parks (MECP) is not mandated under O.Reg. 153/04.

The Phase Two Property is an irregular shaped 4.7 hectares (11.5 acres) parcel of land situated within a residential neighbourhood in the City of Mississauga, Ontario. The Phase Two Property is located at in the southwest corner of the intersection of Mississauga Road and Dundas Street West and was occupied by a multi-level structure with three (3) wings (Site Building A), spanning between 1 to 3 storeys with one level of basement at the time of this investigation. A detached garage is located approximately 25 metres north of Site Building A. The structure was vacant at the time of the assessment but was most recently used for residential purposes.

The Phase One ESA completed in June 2023 identified that the subject Site was first developed for agricultural and residential purposes circa 1877. The Carmelite Sisters of Canada have owned the Phase One Property since 1952 and developed a senior retirement home and convent on the property. The convent and senior retirement home (residential property use) building was vacant with no operations since 2022. A total of twelve (12) Potentially Contaminating Activities (PCAs) were identified in the Phase One ESA, which were considered to be contributing to eight (8) APECs on the Phase Two Property. A

summary of the APECs, associated PCAs, and Potential Contaminants of Concern (PCOCs) identified is presented in the table below:

Table E-1: Summary of APECs

APEC	Location of APEC on Phase One Property	PCA	Location of PCA	COPCs	Media Potentially Impacted
APEC-1	Central and Southern Portions of the Site	#30: Importation of Fill Material of Unknown Quality	On Site **PCA-1**	PHCs, BTEX, Metals, As, Sb, Se, B-HWS, CN-, electrical conductivity, Cr (VI), Hg, low or high pH, SAR, PAHs	Soil
APEC-2	Central portion of the Site, 10 m east of Site Building A	#28: Gasoline and associated products storage in fixed tanks	On-Site **PCA-2**	PHCs, BTEX, PAHs	Soil and groundwater
APEC-3	Northern portion of Site	#40: Pesticides (including herbicides, fungicides, and anti-fouling agents) manufacturing, processing, bulk storage, and large-scale applications.	On-Site **PCA-3**	OCPs, Metals, As, Sb, Se, CN-	Soil
APEC-4	Northern and central portions of Site	#N/S: Application of De-Icing Agents[1]	On-Site **PCA-4**	EC, SAR	Soil
				Na, Cl-	Groundwater
APEC-5	Central portion of the Site, approx. 25 m south of Site Building A	#30: Importation of Fill Material of Unknown Quality	On Site **PCA-9**	PHCs, BTEX, Metals, As, Sb, Se, B-HWS, CN-, electrical conductivity, Cr (VI), Hg, low or high pH, SAR, PAHs	Soil
APEC-6	Central Portion of the Site, approx. 50 m south of Site Building A	#30: Importation of Fill Material of Unknown Quality	On Site **PCA-10**		Soil
APEC-7	Central portion of the Site, 10 m east of Site Building A	#30: Importation of Fill Material of Unknown Quality	On Site **PCA-11**		Soil
APEC-8	Western Portion of the Site	#40: Pesticides (including herbicides, fungicides, and anti-fouling agents) manufacturing, processing, bulk storage, and large-scale applications.	On-Site **PCA-12**	OCPs, Metals, As, Sb, Se, CN-	Soil

N/S - not specified in Table 2, Schedule D, of O.Reg. 153/04

1 - The area is subject to the application of de-icing salts for road safety purposes. Per Section 49.1 (1) of O.Reg. 153/04 (as amended) "*If an applicable site condition standard is exceeded at a property solely because of one of the following reasons, the*

applicable site condition standard is deemed not to be exceeded for the purpose of Part XV.1 of the Act": "*…that a substance has been applied to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both*". Any potential impacts associated with sodium and/or chloride in groundwater will be deemed not to exceed the MECP Site Conditions Standards for the area identified in APEC-4.

Based on the findings of the Phase One ESA it was concluded that a Phase Two ESA is warranted to assess the soil and groundwater conditions on the Phase Two Property.

The Phase Two ESA involved the advancement of eight boreholes, which were completed between May 18, 2023, and June 14, 2023. The boreholes were advanced to a maximum depth of 9.8 metres below ground surface (mbgs) under the supervision of DS personnel. Groundwater monitoring wells were installed in three (3) of the boreholes to facilitate the collection of groundwater samples and the assessment of groundwater flow direction. The borehole locations were determined based on the findings of the Phase One ESA. All APECs were investigated with boreholes and/or monitoring wells in accordance with the requirements of O.Reg. 153/04 (as amended).

A total of forty-one (41) soil samples were submitted for chemical analysis as follow:

- Ten (10) soil samples (including 2 QA/QC duplicates) for analysis of metals and Other Regulated Parameters (ORPs), three samples (including 1 QA/QC duplicates) were submitted for analysis of pH, and three (3) samples were submitted for hydride forming metals and, cyanide;
- Ten (10) soil samples (including 2 QA/QC duplicates) for analysis of Petroleum Hydrocarbons (PHCs) including Benzene, Toluene, Ethylbenzene, Xylenes (BTEX);
- Nine (9) soil samples (including 1 QA/QC duplicates) for analysis for Volatile Organic Compounds (VOCs);
- Nine (9) soil samples (including 1 QA/QC duplicates) for analysis of Polycyclic Aromatic Compounds (PAHs); and
- Three (3) soil samples for analysis of Organochlorine Pesticides (OCPs).

Groundwater samples were collected from monitoring wells MW23-1, MW23-2, and MW23-3, and submitted for chemical analysis as follows:

- Two (2) groundwater sample for analysis of Metals & ORPs;
- Two (2) groundwater samples for the analysis of PHCs including BTEX;
- Three (3) groundwater samples (including one (1) QAQC duplicate) for the analysis of VOCs; and
- Two (2) groundwater sample for the analysis of PAHs.

The soil and groundwater analytical results were compared to the "Table 1: Full Depth Background Site Condition Standards" provided in the MECP document entitled, "*Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act*" dated April 15, 2011 (Table 1 SCS) for residential/parkland/institutional property use.

Based on the findings of the Phase Two ESA, DS presents the following findings:

- A surficial layer of asphalt approximately 60 to 300 mm in thickness was encountered in boreholes BH23-1 through BH23-3 located in the parking areas. A surficial layer of topsoil of 100mm in thickness was encountered in all hand dug boreholes. Underlying the asphalt or topsoil, fill material was encountered from depths ranging from 0.15 to 1.5 mbgs. The fill material generally consisted of clayey silt, sand and gravel. Below the fill material, a sand and gravel unit was encountered, extending to the maximum depth investigated of 7.6 mbgs. A layer of clayey silt was encountered underlying the sand and gravel unit between depths ranging of 6.1 mbgs up to the maximum depth investigated of 9.8 mbgs. Bedrock was not encountered. Isolated pockets of fill material may be encountered at the time of construction within the footprints of former demolished structures.
- The depth to groundwater was measured in the three (3) monitoring wells installed during the course of this investigation. The monitoring wells were screened to intercept the groundwater water table. The groundwater levels were found to range between 5.26 to 5.64 mbgs, with corresponding elevations of 110.47 to 110.79 metres above sea level (masl). Based on the groundwater elevations recorded, the groundwater flow direction appears to be east towards Credit River. It is possible that the groundwater levels may vary seasonally. The groundwater levels may also be impacted by other factors such as historical infilling activities, subsurface utility trenches, and similar subsurface anomalies. The groundwater flow direction can only be confirmed through long term monitoring.
- The results of the soil chemical analyses conducted indicated the following exceedances of the Table 1 Site Conditions Standards (SCS):

Table E-2: Summary of Soil Impacts Identified

Sample ID	Sample Depth (mbgs)	Parameter	Units	Table 1 SCS	Analytical Result
BH23-1 SS1	0.0-0.6	Sodium Adsorption Ratio (SAR)	N/A	2.4	**43**
		Electrical Conductivity (EC)	mS/cm	0.57	**1.6**

Sample ID	Sample Depth (mbgs)	Parameter	Units	Table 1 SCS	Analytical Result
BH23-1 SS3	1.5-2.1	SAR	N/A	2.4	**36**
		EC	mS/cm	0.57	**1.6**
BH23-2 SS1	0.0-0.6	SAR	N/A	2.4	**55**
		EC	mS/cm	0.57	**2.3**
BH23-2 SS4	2.3-2.9	SAR	N/A	2.4	**30**
		EC	mS/cm	0.57	**2**
BH23-3 SS1	0.0-0.6	SAR	N/A	2.4	**7.4**
BH23-3 SS3	1.5-2.1	SAR	N/A	2.4	**4.2**
DUP-1	1.5-2.1	SAR	N/A	2.4	**4.9**
DUP-1	1.5-2.1	EC	mS/cm	0.57	**0.63**

Notes:
BOLD Elevated concentrations of EC and/or SAR – Exempt per Section 49.1(1) of O.Reg. 153/04 (as amended)

- The results of the groundwater chemical analyses conducted indicated the following exceedances of the Table 1 SCS:

Table E-3: Summary of Groundwater Impacts Identified

Sample ID	Well Screen Interval	Parameter[1]	Units	Table 1 SCS	Analytical Result
MW23-1	4.6-7.6	Chloride	mg/L	790	**1200**
		Sodium	µg/L	490000	**780000**

Notes:
BOLD Elevated concentrations of EC and/or SAR – Exempt per Section 49.1(1) of O.Reg. 153/04 (as amended)

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

- It is the opinion of DS that Section 49.1 (1) of O.Reg153/04 is applicable, which states: "*If an applicable site condition standard is exceeded at a property solely because of one of the following reasons, the applicable site condition standard is deemed not to be exceeded for the purpose of Part XV.1 of the Act*": *"…that a substance has been applied to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both*". The EC and SAR impacts in soil at boreholes BH23-1, BH23-2 and BH23-3 and sodium and chloride in groundwater at well MW23-1 are attributed to the application of de-icing salts on-Site at the parking areas. Therefore, the applicable Table 1 SCS for SAR are deemed not exceeded.

- It is concluded that the soil and groundwater quality on-Site met the applicable MECP Table 1 Site Conditions Standards. It is the opinion of DS that a Record of Site Condition may be filed on the basis of this report, if requested.
- All monitoring wells should be decommissioned in accordance with O.Reg. 903 when no longer required.

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1.0 Introduction

DS Consultants Ltd. (DS) was retained by Argo Development Corporation to complete a Phase Two Environmental Site Assessment (ESA) of the Property located at 1720 Sherwood Forrest Circle, Mississauga, Ontario, herein referred to as the "Phase Two Property" or "Site". It is DS's understanding that this Phase Two ESA has been requested for pre-purchase due diligence purposes and in support of the proposed redevelopment of the Property.

The intended future residential property use is not considered to be a more sensitive property use than the historic senior's home and convent (residential property use), as defined under O.Reg. 153/04 (as amended); therefore, the filing of a Record of Site Condition (RSC) with the Ontario Ministry of Environment, Conservation and Parks (MECP) is not mandated under O.Reg. 153/04.

The Phase Two ESA was completed to satisfy the intent of the requirements, methodology and practices for a Phase One ESA as described in Ontario Regulation 153/04 (as amended). The objective of this Phase Two ESA is to confirm whether contaminants are present, and at what concentration are they present on the Phase Two Property, as related to the Areas of Potential Environmental Concern (APEC) identified in the Phase One ESA.

1.1 Site Description

The Phase Two Property is a 4.7 hectares (11.5 acres) parcel of land situated within a mixed residential and parkland neighbourhood in the City of Mississauga, Ontario. The Phase Two Property is located at in the southeast corner of the intersection of Mississauga Road and Dundas Street West. A Site Location Plan depicting the general setting of the Phase Two Property is provided in Figure 1.

For the purposes of this report, Mississauga Road is assumed to be aligned in a north-south orientation, and Dundas Street West in an east-west orientation. A Plan of Survey for the Phase Two Property dated May 31st, 2023, and prepared by R-PE Surveying Ltd., an Ontario Land Surveyor, has been provided under Appendix A.

The Phase Two Property is currently developed with one structure, a vacant Carmel Heights Seniors Residence, with a convent attached (Site Building A). Site Building A is situated within the western and central portion of the Site. The building is comprised of three (3) wings which range between 1 to 3 storeys and includes one (1) level of basement. The basement extends along the majority of the structure with the exception of the eastern wing.

A detached domestic garage is located approximately 25 metres north of Site Building A. The garage was vacant at the time of this investigation, but it appears to have been used for domestic uses. Site Building A was constructed in 1955, with additions completed in 1963 and 1976. There is a driveway and parking lot located west of the Site Building A. A Site Plan depicting the orientation of the building is provided in Figure 2. Additional details regarding the Phase Two Property are provided in the table below.

Table 1-1: Phase Two Property Information

Criteria	Information	Source
Legal Description	PT LT 3, RANGE 1 SDS TT , AS IN TT168777 & TT69053 EXCEPT TT141752; MISSISSAUGA	Parcel Register
Property Identification Number (PIN)	13440-0314	Parcel Register
Current Site Occupants	Unoccupied since 2015	Phase One Site Reconnaissance and questionnaire
Site Area	4.7 hectare (11.6 acres)	Land Registry Office

1.2 Property Ownership

The ownership details for the Phase Two Property are provided in the table below.

Table 1-2: Phase Two Property Ownership

Property Owner	Address	Contact
Carmelite Sisters of Canada	78 Yates St, St Catharines, ON, L2R 5R9	(905) 685-9155

1.3 Current and Proposed Future Use

The Phase Two Property is currently vacant and was formerly used as a senior residence and convent, which is considered to be Residential Property Use under O.Reg. 153/04 (as amended). It is DS's understanding that the Client intends to redevelop the Site for residential use.

1.4 Applicable Site Condition Standards

The Phase Two Property is a residential property located within the City of Mississauga, and the proposed future land use is residential.

Per Section 41 of O.Reg. 153/04 (as amended), a property is classified as environmentally sensitive under the following circumstances:

- The Site is within an area of natural significance.

- The Site includes or is adjacent to an area of natural significance of part of such an area, or
- The Site includes land that is within 30 metres of an area of natural significance or part of such an area.

An Area of Natural and Scientific Interest (ANSI) associated with the Credit River was identified to be situated along the eastern portion of the Site, and along the east and southeast adjacent lands.

As such, the Phase Two Property is considered to be environmentally sensitive.

2.0 Background Information

2.1 Physical Setting

2.1.1 Water Bodies and Areas of Natural Significance

The Credit River is the closest body of water to the Phase Two Property, located approximately 100 m east of the Phase Two Property.

The Natural Heritage Areas database published by the Ministry of Natural Resources (MNR) was reviewed in order to identify the presence/absence of areas of natural significance including provincial parks, conservation reserves, areas of natural and scientific interest, wetlands, environmentally significant areas, habitats of threatened or endangered species, and wilderness areas.

A review of the MNRF database indicated that the Site may provide a viable habitat for the Henslow's Sparrow, the Eastern Meadowlark, and the Bank Swallow (threatened and endangered species). In addition, the northern portion of the Site in within a Life Science ANSI.

2.1.2 Topography and Surface Water Draining Features

The Phase Two Property is located in an urban setting, at an elevation of 116 metres above sea level (masl). The topography of the Phase Two Property is generally flat. The neighbouring properties to the west and south are generally at a similar elevation, and the topography in the vicinity of the Phase Two Property generally slopes to the east in the north and east portions of the Site. There are no drainage features (e.g., ditches, swales, etc.) present on-Site. Surface water flow associated with precipitation events is anticipated to run overland and drain into the municipal storm sewer catch basins.

2.2 Past Investigations

2.2.1 Previous Report Summary

The following environmental and geotechnical reports were provided for DS to review:

- *"Geotechnical Investigation and Slopes Stability Assessment Proposed Carmel Heights Seniors Development, 1720 Sherwood Forrest Circle, Mississauga, Ontario,"* prepared for Mississauga Seniors Land Corporation Ltd, prepared by Terraprobe Inc, dated November 23, 2017 (2017 Terraprobe Geotechnical Investigation).
- *"Phase 1 Environmental Site Assessment, 1720 Sherwood Forrest Circle, Mississauga, Ontario,"* prepared for Micor Development Inc, prepared by LandTek Limited, dated December 2018 (2018 LandTek Phase 1 ESA).

2017 Terraprobe Geotechnical Investigation

The geotechnical investigation was completed in July 2017, and it involved the advancement of seventeen (17) boreholes. The boreholes were advanced to depths ranging from 8.1 to 15.7 mbgs. Monitoring wells were instrumented in ten (10) of the boreholes with screen interval ranging between 5.5 to 14.2 mbgs. Fill material was encountered below the topsoil/pavement layer and ranged in depth between 1.5 and 2.5 mbgs. The native soil beneath the fill consisted of sand and gravel sand to sandy gravel with trace of silt and clay until boreholes termination. A clayey silt layer was encountered in all the boreholes at depth ranging between 4.6 to 9.7 mbgs. A pocket of silt was located in one (1) borehole from depths ranging of 6.1 to 7.6 mbgs. The groundwater levels collected on August 1, 2017, ranged from 5.5 to 14. 8 mbgs.

2018 LandTek Phase 1 ESA

The Phase 1 ESA was completed in general accordance with the requirements described in CSA Standard Z768-01, as well as the document "Guideline: Professional Engineers Providing Services in Environmental Site Assessment, Remediation and Management (Association of Professional Engineers of Ontario, 1996). The summary of pertinent information is as follows:

- It was reported that according to Sister Mary Veronica, who was interviewed by LandTek, a fuel oil UST was removed off-Site in 1995. The UST was reported by Sister Mary Veronica to have been in good condition at the time of the removal. The historic UST was located centrally on the Phase One Property, west of the building on Site. No further details were available.

- During the Site Reconnaissance, Sister May Veronica reported that an asbestos survey was conducted on Site, however the documentation was not available for LandTek to review. The building was constructed in 1955, as such LandTek recommends a Designated Substance Survey (DSS) to be completed as the possibility building materials to contain ACMs, PCBs and LBPs is likely and observed during the Site Reconnaissance.

2.2.2 Use of Previous Analytical Results

Neither of the previous reports made available to DS included chemical analysis, and there are no previous analytical results.

3.0 Scope of the Investigation

The scope of the Phase Two ESA was designed to investigate the portions of the Site determined in the Phase One ESA to be Areas of Potential Environmental Concern. This Phase Two ESA was conducted in general accordance with O.Reg. 153/04 (as amended). The scope of the investigation including the subsurface investigation, sampling, and laboratory analysis was based on the findings of the Phase One ESA and was limited to the portions of the Site which were accessible.

3.1 Overview of Site Investigation

The following tasks were completed as part of the Phase Two ESA:

- Preparation of a Health and Safety Plan to ensure that all work was executed safely;
- Clearance of public private underground utility services prior to commencement of subsurface investigative operations;
- Preparation of a Sampling and Analysis Plan (SAP);
- DS conducted two sampling events at the Site:
    - Retained a MECP licenced driller to advance a total of three (3) boreholes on May 23, 2023, at the Phase Two Property (designated as BH23-1 through BH23-3), to a maximum depth of 9.8 mbgs. The three (3) boreholes were instrumented with groundwater monitoring wells upon completion (designated as MW23-1 through MW23-3). The soil lithology was logged during drilling, and representative soil samples were collected at regular intervals.
    - Three (3) additional boreholes were advanced on June 14, 2023, using a hand auger (designated as BH23-4 through BH23-8), and were advanced to depths

ranging from 0.3 to 0.6 mbgs. The soil lithology was logged during drilling, and examined for visual and olfactory indications of soil impacts.

- The soil samples were screened for organic vapours using an RKI Eagle 2 MultiGas Detector, and examined for visual and olfactory indications of soil impacts;
- Submitted "worst case" soil samples collected from the boreholes for laboratory analysis of relevant contaminants of potential concern (COPCs) as identified in the Phase One ESA;
- Conducted groundwater level measurements in the monitoring wells in order to determine the groundwater elevation, and to establish the local groundwater flow direction;
- Surveyed all monitoring wells to a geodetic benchmark;
- Developed and purged all monitoring wells prior to sampling. Groundwater samples were collected for all COPCs identified in the Phase One ESA;
- Compared all soil and groundwater analytical data to the applicable MECP SCS; and
- Prepared a Phase Two ESA Report in general accordance with O.Reg. 153/04 (as amended).

3.2 Media Investigated

3.2.1 Rationale for Inclusion or Exclusion of Media

Table 3-1: Rationale of Sampling Media

Media	Included or Excluded	Rationale
Soil	Included	Soil was identified as a media of potential impact in the Phase One ESA, based on the historical operations conducted on-Site.
Groundwater	Included	Groundwater was identified as a media of potential impact in the Phase One ESA, based on the historical operations conducted on-Site.
Sediment	Excluded	Sediment is not present on the Phase Two Property.
Surface Water	Excluded	Surface water is not present on the Phase Two Property.

3.2.2 Overview of Field Investigation of Media

Table 3-2: Field Investigation of Media

Media	Methodology of Investigation
Soil	A total of eight (8) boreholes were advanced on the Phase Two Property, to a maximum depth of 9.8 mbgs. Soil samples were collected and submitted for analysis of all relevant PCOCs.
Groundwater	A total of three (3) monitoring wells were installed on the Phase Two Property at the time of the investigation. Representative groundwater samples were collected from each monitoring well and submitted for analysis of all relevant PCOCs.

3.3 Phase One Conceptual Site Model

A Conceptual Site Model was developed for the Phase One Property, located at 1720 Sherwood Forrest Circle, Mississauga, Ontario. The Phase One Conceptual Site Model is presented in Figures 3, 4, and 5 which visually depict the following:

- Any existing buildings and structures
- Water bodies located in whole, or in part, on the Phase One Study Area
- Areas of natural significance located in whole, or in part, on the Phase One Study Area
- Water wells at the Phase One Property or within the Phase One Study Area
- Roads, including names, within the Phase One Study Area
- Uses of properties adjacent to the Phase One Property
- Areas where any PCAs have occurred, including location of any tanks
- Areas of Potential Environmental Concern

3.3.1 Potentially Contaminating Activity Affecting the Phase One Property

All PCAs identified within the Phase One Study Area are presented on Figure 4. The PCAs which are considered to contribute to APECs on, in or under the Phase One Property are summarized in the table below:

Table 3-3: Summary of PCAs Contributing to APECs

PCA Item.	PCA Description (Per. Table 2, Schedule D of O.Reg. 153/04)	Description	Rationale
PCA-1	#30: Importation of Fill Material of Unknown Quality	Fill material may have been used for grading purposes in the vicinity of the Site Building A. Terraprobe 2017 Geotechnical Investigation reported that fill material was encountered below the topsoil/pavement layer and ranged in depth between 1.5 and 2.5 mbgs.	PCA is on Site
PCA-2	#28: Gasoline and associated products storage in fixed tanks	One fuel oil UST was formerly present on Site. The UST was reported to have had a 22,700 L (5,000 gallons) capacity. The UST was reportedly removed off-Site in 1995. No additional details were available.	PCA is on Site
PCA-3	#40: Pesticides (including herbicides, fungicides, and anti-fouling agents) manufacturing, processing, bulk storage, and large-scale applications.	Based on the 1877 County Atlas of Peel, an orchard was observed at the northern portion of the Site.	PCA is on Site

PCA Item.	PCA Description (Per. Table 2, Schedule D of O.Reg. 153/04)	Description	Rationale
PCA-4	#N/S: Application of De-Icing Agents	Seasonal application of de-icing salts for vehicle and pedestrian safety is anticipated on the laneway, sidewalks, driveway, and parking areas present on the Site.	PCA is on Site
PCA-9	#30: Importation of Fill Material of Unknown Quality	Based on the 1975 aerial photographs Former Site Building C may have been demolished. Fill material of unknown quality may have been imported to the site to backfield the demolished structure.	PCA is on Site
PCA-10	#30 – Importation of fill material of unknown quality	Based on the 1975 aerial photographs Former Site Building D may have been demolished. Fill material of unknown quality may have been imported to the site to backfield the demolished structure.	PCA is on Site
PCA-11	#30 – Importation of fill material of unknown quality	The Site used to be heated with fuel oil. The UST was reportedly situated outside Site Building A. The UST was removed circa 1995. Fill material may have been used to backfill the void at the location of the former fuel oil UST.	PCA is on Site
PCA-12	#40 – Pesticides (including herbicides, fungicides, and anti-fouling agents) manufacturing, processing, bulk storage, and large-scale applications	Based on the 1954, 1966 and 1975 aerial photographs, portion of the orchard located on the west adjacent properties was within an area on the western portion of the Site.	PCA is on Site

N/S - not specified in Table 2, Schedule D, of O.Reg. 153/04

3.3.2 Contaminants of Potential Concern

The following contaminants of potential concern were identified for the Phase One Property: PHCs, VOCs, BTEX, Metals, As, Sb, Se, B-HWS, CN-, electrical conductivity, Cr (VI), Hg, low or high pH, SAR, PAHs and OCPs.

3.3.3 Underground Utilities and Contaminant Distribution and Transport

Underground utilities can affect contaminant distribution and transport. Trenches excavated to install utility services, and the associated granular backfill may provide preferential pathways for horizontal contaminant migration in the shallow subsurface.

It is anticipated that underground utilities and corridors exist under the Phase One Property to connect the buildings on the Phase One Property to municipal water and wastewater and supplied utilities. Plans were not available to confirm the depths of these utilities, however they are estimated to be installed at depths ranging from 2 to 3 metres below ground surface.

According to the 2017 Terraprobe Geotechnical Investigation report, the depth to groundwater at the Phase One Property is 5.5 to 14. 8 mbgs, therefore the utility corridors are expected to be well above the water table and would not act as preferential pathways for contaminant distribution and transport in the event that shallow subsurface contaminants exist at the Phase One Property.

3.3.4 Geological and Hydrogeological Information

The topography of the Phase One Property is generally flat with a surface elevation of 116 metres above sea level (masl). The Site is generally flat with a surface elevation of approximately 116 masl, the eastern boundary of the of the Site slopes towards Credit River with a surface elevation range from 110 to 115 masl. Based on the Geotechnical Investigation completed by Terraprobe 2017, the depth to groundwater ranged from 5.5 to 14. 8 mbgs. The shallow groundwater flow direction within the Phase One Study Area is inferred to flow easterly towards Credit River.

The Site is situated within a sand plains physiographic region. The surficial geology within the Phase One Study area is described "*till, clay to silt-textured till (derived from glaciolacustrine deposits of shale*" towards the north of the Site, and "*fine-textures glaciolacustrine deposits, silt and clay, minor sand and gravel, interbedded silt and clay and gritty, pebbly flow till and rainout deposits*" towards the south of the Site. The bedrock is described as "*Shale, limestone, dolostone, siltstone of the Georgian Bay Formation; Blue Mountain Formation; Billings Formation; Collingwood Member; Eastview Member*". Based on a review of Ministry of Mines, Forestry and Natural resources bedrock topography database, the bedrock in the Phase One Study Area is anticipated to be encountered at an approximate depth of 18 mbgs.

3.3.5 Uncertainty and Absence of Information

DS has relied upon information obtained from federal, provincial, municipal, and private databases, in addition to records and summaries provided by ERIS. All information obtained was reviewed and assessed for consistency, however the conclusions drawn by DS are subject to the nature and accuracy of the records reviewed.

All reasonable inquiries were made to obtain reasonably accessible information, as mandated by O.Reg.153/04 (as amended). All responses to database requests were received prior to completion of this report, with the exception of the MECP FOI request. If the MECP FOI request produces information which may alter the conclusions of this report, an

addendum will be provided to the Client. This report reflects the best judgement of DS based on the information available at the time of the investigation.

Information used in this report was evaluated based on proximity to the Phase One Property, anticipated direction of local groundwater flow, and the potential environmental impact on the Phase One Property as a result of potentially contaminating activities.

The QP has determined that the uncertainty does not affect the validity of the Phase One ESA Conceptual Site Model or the conclusions of this report.

3.4 Deviations from Sampling and Analysis Plan

The Phase Two ESA was completed in accordance with the SAP.

3.5 Impediments

DS was granted complete access to the Phase Two Property throughout the course of the investigation. No impediments were encountered.

4.0 Investigation Method

4.1 General

The Phase Two ESA followed the methodology outlined in the following documents:

- Ontario Ministry of the Environment "Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario" (December 1996);
- Ontario Ministry of the Environment "Guide for Completing Phase Two Environmental Site Assessments under Ontario regulation 153/04" (June 2011);
- Ontario Ministry of the Environment "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act" (July 2011) (Analytical Protocol);

The methods used in the Phase Two ESA investigation did not differ from the associated standard operating procedures.

4.2 Drilling and Excavating

A Site visit was conducted prior to drilling in order to identify the borehole locations based on the APECs identified in the Phase One ESA. The selected borehole locations are presented on Figure 5. The borehole locations were cleared of underground public and private utility services prior to commencement of drilling. A summary of the drilling activities is provided in the table below.

Table 4-1: Summary of Drilling Activities

Parameter	Details	
Drilling Contractor	Davis Drilling	N/A – DS Consultants Ltd.
Drilling Dates	May 18th, 2023	June 14th, 2023
Drilling Equipment Used	Track-mounted CME 75	Hand Auger
Measures taken to minimize the potential for cross contamination	◆ Soil sampling was conducted using a 50 mm stainless steel split spoon sampler. The split spoon sampler was brushed clean of soil, washed in municipal water containing phosphate free detergent, rinsed in municipal water, and then rinsed with distilled water for each sampling interval in order to reduce the potential for cross contamination;	◆ The handheld auger was brushed off between sample locations in order to minimize cross contamination. ◆ Where possible, shallow soil samples were collected by hand directly from the augured hole using dedicated nitrile gloves. ◆ Use of dedicated and disposable nitrile gloves for the handling of soil samples. A new set of gloves was used for each sample.
Sample collection frequency	Samples were collected at a frequency of every 0.6 m per 0.8 m from the ground surface to 3.1 mbgs, followed by one sample per 1.5 m to borehole termination depth.	Samples were collected from the barrel of the hand auger wit a frequency of 0.6 metres.

4.3 Soil Sampling

Soil samples were collected using 50 mm stainless steel split spoon sampler, and hand-held auger and hand tools.

The discrete soil samples were collected from the split-spoon samplers and hand auger sample tube by DS personnel using dedicated nitrile gloves.

A portion of each sample was placed in a resealable plastic bag for field screening, and the remaining portion was placed into laboratory supplied glass sampling jars. Samples intended for VOC and the F1 fraction of petroleum hydrocarbons analysis were collected using a laboratory-supplied soil core sampler, placed into the vials containing methanol for preservation purposes and sealed using Teflon lined septa lids. All sample jars were stored in dedicated coolers with ice for storage, pending transport to the analytical laboratory. A formal chain of custody was maintained for all samples submitted to the laboratory.

The subsurface soil conditions were logged by DS personnel at the time of drilling and recorded on field borehole logs. The borehole logs are presented under Appendix C. Additional detail regarding the lithology encountered in the boreholes is presented under Section 6.1, and depicted visually in Appendix C.

4.4 Field Screening Measurements

All retrieved soil samples were screened in the field for visual and olfactory observations. No obvious visual or olfactory evidence of potential contamination were noted. No aesthetic impacts (e.g., cinders, slag, hydrocarbon odours) were encountered during this investigation. The soil sample headspace vapour concentrations for all soil samples recovered during the investigation were screened using portable organic vapour testing equipment in accordance with the procedure outlined in the MECP's '*Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario'.*

The soil samples were inspected and examined to assess soil type, ground water conditions, and possible chemical contamination by visual and olfactory observations or by organic vapour screening. Samples submitted for chemical analysis were collected from locations judged by the assessor to be most likely to exhibit the highest concentrations of contaminants based on several factors including (i) visual or olfactory observations, (ii) sample location, depth, and soil type (iii) ground water conditions and headspace reading. A summary of the equipment used for field screening is provided below:

Table 4-2: Field Screening Equipment

Parameter	Details
Make and Model of Field Screening Instrument	RKI Eagle 2, Model 5101-P2
Chemicals the equipment can detect and associated detection limits	VOCs with dynamic range of 0 parts per million (ppm) to 2,000 ppm PHCs with range of 0 to 50, 000 ppm
Precision of the measurements	3 significant figures
Accuracy of the measurements	VOCs: ± 10% display reading + one digit Hydrocarbons: ± 5% display reading + one digit
Calibration reference standards	PID: Isobutylene CGD: Hexane
Procedures for checking calibration of equipment	In-field re-calibration of the CGI was conducted (using the gas standard in accordance with the operator's manual instructions) if the calibration check indicated that the calibration had drifted by more than +/- 10%.

A summary of the soil headspace measurements is provided in the borehole logs, provided under Appendix C.

4.5 Groundwater Monitoring Well Installation

Monitoring wells were installed upon completion of the three (3) boreholes advanced on the Phase Two Property. The monitoring wells were constructed of 51-millimetre (2-inch) inner diameter (ID) flush-threaded schedule 40 polyvinyl chloride (PVC) risers, equipped with a

3.1 m length of No. 10 slot PVC screen. The well screens were sealed at the bottom using a threaded cap and at the top with a lockable J-plug.

Silica sand was placed around and up to 0.6m above the well screen to act as a filter pack. Bentonite was placed from the ground surface to the top of the sand pack. The wells were completed with protective flush mount casings.

Details regarding the monitoring well construction can be found in Table 1 (enclosed), and on the borehole logs provided in Appendix C.

Disposable nitrile gloves were used to minimize the potential for cross-contamination during well installation. Dedicated equipment was used for well development and sampling for further minimize the risk of cross contamination.

The monitoring wells were developed on May 23, 2023. In accordance with DS SOPs for monitoring well development, the wells were developed by removing a minimum of three standing water column volumes using dedicated inertial pumps comprised of Waterra polyethylene tubing and dedicated foot valves.

4.6 Groundwater Field Measurement of Water Quality Parameters

Field measurements of water quality parameters including temperature, specific conductivity, pH, turbidity, dissolved oxygen, oxidation-reduction potential and turbidity were collected using a flow-through cell and a YSI Water Quality Meter (YSI-556™). The YSI Water Quality Meter was calibrated by the supplier, Maxim, in accordance with the manufacturer's specifications.

The measurements were conducted at regular intervals to determine whether stabilized geochemical conditions had been established in the monitoring well, indicating representative groundwater conditions.

The field measurements have been archived and can be provided upon request.

4.7 Groundwater Sampling

Groundwater samples were collected a minimum of 24 hours after the development of the monitoring wells. The wells were purged using a peristaltic pump equipped with dedicated polyethylene tubing. A YSI Water Quality Meter equipped with a flow-through cell was used to monitor the geochemical conditions during purging to assess whether steady-state conditions were achieved prior to sampling.

Samples were collected upon stabilization of the water quality parameters. Groundwater samples for metals analysis were field filtered using dedicated 0.45 micro in-line filters. The groundwater was transferred directly into laboratory supplied containers and preserved as appropriate using the containers supplied by the analytical laboratory. The samples were placed in coolers upon completion of sampling and stored on ice for storage, pending transport to the analytical laboratory. A formal chain of custody was maintained for all samples submitted to the laboratory.

4.8 Sediment Sampling

No sediment as defined under O.Reg. 153/04 (as amended) was present on the Phase Two Property at the time of this investigation. Sediment sampling was not conducted as a result.

4.9 Analytical Testing

The soil and groundwater samples collected were submitted to Bureau Veritas (BV) under chain of custody protocols. BV is an independent laboratory accredited by the Canadian Association for Laboratory Accreditation. BV conducted the analyses in accordance with the MECP document "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act" dated March 9, 2004 (revised on July 1, 2011).

4.10 Residue Management Procedures

4.10.1 Soil Cuttings from Drilling and Excavations

The soil cuttings generated by the borehole drilling program were stored in 205 L drums and left on-Site for disposal by a MECP approved waste-hauler for disposal at a MECP-approved waste management facility.

4.10.2 Water from Well Development and Purging

Excess water derived from well purging activities was stored in 20-L sealed plastic pails and temporarily stored on Site for disposal by a MECP approved waste-hauler for disposal at a MECP-approved waste management facility.

4.10.3 Fluids from Equipment Cleaning

Excess equipment cleaning fluids were stored in 20-L sealed plastic pails and temporarily stored on Site for disposal by a MECP approved waste-hauler for disposal at a MECP-approved waste management facility.

4.11 Elevation Surveying

The ground surface elevations of the boreholes/monitoring wells were surveyed using a Sokkia GCX-2 GNSS RTK receiver, based on global positioning systems satellites, with datum NAD83, UTM zone 17T.

The ground surface elevations can be found on the borehole logs presented in Appendix C.

4.12 Quality Assurance and Quality Control Measures

4.12.1 Sample containers, preservation, labelling, handling, and custody for samples submitted for laboratory analysis, including any deviations from the SAP

All soil and groundwater samples were stored in laboratory-supplied sample containers in accordance with the MECP Analytical Protocol. A summary of the preservatives supplied by the laboratory is provided in the table below.

Table 4-3: Summary of Sample Bottle Preservatives

Media	Parameter	Sample Container
Soil	PHCs F1 VOCs	40 mL methanol preserved glass vial with septum lid.
	PHCs F2-F4 metals and ORPs PAHs	120 mL or 250 mL unpreserved glass jar with Teflon™-lined lid.
Groundwater	PHCs F1 VOCs	40 mL glass vial with septum lid, containing sodium bisulphate preservative.
	PHCs F2-F4	250 mL amber glass bottle with sodium bisulphate preservative
	PAHs	250 mL amber glass bottle (unpreserved)
	Inorganics	500 mL high density polyethylene bottle (unpreserved)
Groundwater	Metals	125 mL high density polyethylene bottle containing nitric acid preservative
	Hexavalent Chromium	125 mL high density polyethylene bottle containing ammonium sulphate/ammonium hydroxide preservative
	Mercury	125 mL glass bottle containing hydrochloric acid preservative
	Cyanide	125 mL high density polyethylene bottle containing sodium hydroxide preservative

Groundwater samples were collected using dedicated equipment for each well. Groundwater samples collected for analysis of dissolved metals, mercury and hexavalent chromium were filtered in the field using a dedicated 0.45-micron in-line filter. Each sample container was labelled with a unique sample identification, the project number, and the sampling date. All samples were placed in an ice-filled cooler upon completion of sampling and kept under refrigerated conditions until the time of delivery to the analytical laboratory. A formal chain of custody was maintained for all samples submitted to the laboratory.

4.12.2 Description of equipment cleaning procedures followed during all sampling

Dedicated, disposable nitrile gloves were used for each sampling event to reduce the potential for cross-contamination.

The split spoon sampler was brushed clean of soil, washed in municipal water containing phosphate free detergent, rinsed in municipal water, and then rinsed with distilled water for each sampling interval in order to reduce the potential for cross contamination. The hand auger was also rinsed in this manner between samples.

Dedicated equipment was used for well development and sampling for further minimize the risk of cross contamination. Non-dedicated equipment (i.e. interface probe) was cleaned before initial use and between all measurement points with a solution of Alconox™ and distilled water. The Alconox™ solution was rinsed off using distilled water.

4.12.3 Description of how the field quality control measures referred to in subsection 3 (3) were carried out

Field duplicate samples were collected at the time of sampling. In accordance with O.Reg. 153/04, one duplicate sample was analyzed per ten samples submitted for analysis. A laboratory prepared trip blank accompanied the groundwater samples during each sampling event and was submitted for laboratory analysis of VOCs.

All field screening devices (RKI Eagle 2, YSI Water Quality Meter) were calibrated prior to use by the supplier. Calibration checks were completed, and re-calibrations were conducted as required.

4.12.4 Description of, and rational for, any deviations from the procedures set out in the quality assurance and quality control program set out in the SAP

There were no deviations from the QA/QC program described in the SAP.

5.0 Review and Evaluation

5.1 Geology

A summary of the subsurface conditions is presented below. Additional details may be found in the borehole logs appended in Appendix C. The boundaries of soil indicated on the borehole logs and described below are intended to reflect transition zones for the purpose of environmental assessment and should not be interpreted as exact planes of geological change.

A surficial layer of asphalt approximately 60 to 300 mm in thickness was encountered in boreholes BH23-1 through BH23-3 located in the parking areas. A surficial layer of topsoil and organics of 100mm in thickness was encountered in all hand dug boreholes. Underlying the asphalt or topsoil, fill material was encountered from depths ranging from 0.15 to 1.5 mbgs. The fill material generally consisted of clayey silt, sand, and gravel. Below the fill material, a sand and gravel unit was encountered, extending to the maximum depth investigated of 7.6 mbgs. A layer of clayey silt was encountered underlying the sand and gravel unit between depths ranging of 6.1 mbgs up to the maximum depth investigated of 9.8 mbgs. Bedrock was not encountered. Based on a review of the MNRF bedrock topographic mapping, the depth to bedrock on-Site is anticipated to be approximately 18 mbgs.

Table 5-1: Summary of Geologic Units Investigated

Geologic Unit	Inferred Thickness (m)	Top Elevation (masl)	Bottom Elevation (masl)	Properties
Fill Material	0.0-3.0	116	113	Trace roots in the top 0.2mbgs, brown, gravel
Sand and Gravel	3.0-7.6	113	108.5	Very moist to wet, contains the water table
Clayey Silt	<3.7	110	106.3	Very moist

5.2 Ground Water Elevations and Flow Direction

5.2.1 Rationale for Monitoring Well Location and Well Screen Intervals

Monitoring wells MW23-2 and MW23-3 were positioned within APEC 2 to assess the groundwater quality. MW23-1 was installed northwest of MW23-2 and MW23-3 to allow for triangulation of groundwater flow direction. The monitoring wells were screened to intersect the first water bearing formation encountered, in order to allow for the assessment of LNAPL, and to provide information regarding the quality of the groundwater at the water table. The monitoring wells were screened within the sand and gravel unit encountered at an approximate depth of 7.6 to 9.8 mbgs. This unit is inferred to be an unconfined aquifer.

5.2.2 Results of Interface Probe Measurements

A summary of the groundwater level measurements is provided in Table 1 (enclosed). The groundwater level measurements were collected using a Solinst interface probe Model 122. The depth to groundwater was found to range between 5.26 to 5.64 mbgs on May 23, 2023. There was no indication of DNAPL or LNAPL in the monitoring wells at this time.

5.2.3 Product Thickness and Free Flowing Product

No evidence of product was observed in the monitoring wells at the time of the investigation.

5.2.4 Groundwater Elevation

The groundwater elevation was calculated by subtracting the depth to groundwater from the surface elevation determined by the surface elevation survey conducted as part of this investigation. A summary of the groundwater elevations calculated is presented in Table 1 (enclosed). Generally, the groundwater elevation was found to range from 110.47 to 110.79 in the aquifer investigated.

5.2.5 Groundwater Flow Direction

The groundwater flow direction was interpreted using the groundwater elevations calculated for the monitoring wells installed on the Phase Two Property. Based on the groundwater elevations calculated, the groundwater flow direction is interpreted to be southeasterly towards The Credit River. The groundwater elevation contours, and flow direction are presented on Figure 6.

5.2.6 Assessment of Potential for Temporal Variability in Groundwater Flow Direction

The shallow aquifer investigated is inferred to be an unconfined aquifer, based on the soil stratigraphy observed in the boreholes advanced on the Phase Two Property. It is possible that temporal variations in groundwater elevations may occur on the Phase Two Property in response to seasonal weather patterns.

Temporal variability in groundwater level has the ability to influence the groundwater flow direction. The degree of variation in groundwater levels on the Phase Two Property can only be confirmed with long-term monitoring.

5.2.7 Evaluation of Potential Interaction Between Buried Utilities and the Water Table

The groundwater table was encountered at depths ranging from 5.25 to 5.66 mbgs on the Phase Two Property. Buried utility services are present on the Phase Two Property and are inferred to be situated at depths ranging between 2 and 3 mbgs. Based on this there is the potential for the utility trenches to act as preferential pathways. However, no groundwater impacts were identified, therefore the potential for preferential migration of contaminants is not of concern at this time.

5.3 Ground Water Hydraulic Gradients

5.3.1 Horizontal Hydraulic Gradient

The horizontal hydraulic gradient was calculated based on the groundwater levels recorded on May 23, 2023.

Table 5-2: Summary of Horizontal Hydraulic Gradient Calculations

Hydrogeological Unit	Calculated Horizontal Hydraulic Gradient
Sand and Gravel	Minimum: 0.00266 Maximum: 0.00396 Average: 0.00266

5.3.2 Vertical Hydraulic Gradient

The vertical hydraulic gradient was not calculated, as no groundwater impacts were identified on the Phase Two Property.

5.4 Fine-Medium Soil Texture

Not applicable – there is no differentiation in soil texture for the Table 1 SCS.

5.5 Soil Field Screening

Soil vapour headspace readings were collected at the time of sample collection, the results of which are presented on the borehole logs (Appendix C). The soil vapour headspace readings were collected using a calibrated RKI Eagle 2 operated in methane elimination mode. The PID readings ranged between non-detected (0 ppm) and 40 ppm. The CGD readings ranged between non-detected (0 ppm) and 1 ppm.

The soil samples were also screened for visual and olfactory indicators of impacts (e.g., staining, odours). Observable olfactory and visual indicators were not present in any soil sample collected.

5.6 Soil Quality

The results of the chemical analyses conducted are presented in Tables 5 through 9 (enclosed). A visual summary of the location of the sample locations is provided in Figures 7A through 7F. The laboratory certificates of analysis have been provided under Appendix D.

5.6.1 Metals and ORPs

A total of ten (10) samples, including two (2) field duplicates for QA/QC purposes were submitted for analysis of metals and ORPs. The results of the analyses are tabulated in Table

5 (enclosed) and presented on Figure 7A and Figure 7B. The results of the analyses indicated the following exceedances of the Table 1 SCS:

Table 5-3: Summary of Metals and ORPs Exceedances in Soil

Sample ID	Sample Depth (mbgs)	Parameter	Units	Table 1 SCS	Analytical Result
BH23-1 SS1	0.0-0.6	SAR	N/A	2.4	**43***
		EC	mS/cm	0.57	**1.6***
BH23-1 SS3	1.5-2.1	SAR	N/A	2.4	**36***
		EC	mS/cm	0.57	**1.6***
BH23-2 SS1	0.0-0.6	SAR	N/A	2.4	**55***
		EC	mS/cm	0.57	**2.3***
BH23-2 SS4	2.3-2.9	SAR	N/A	2.4	**30***
		EC	mS/cm	0.57	**2***
BH23-3 SS1	0.0-0.6	SAR	N/A	2.4	**7.4***
BH23-3 SS3	1.5-2.1	SAR	N/A	2.4	**4.2***
DUP-1	1.5-2.1	SAR	N/A	2.4	**4.9***
DUP-1	1.5-2.1	EC	mS/cm	0.57	**0.63***

Notes:
BOLD Result exceeds Table 1 SCS
* Salt exemption as per provision under Section 49.1 of O. Reg 153/04 is applied, contaminant considered to meet the applicable Site Condition Standards.

5.6.2 Petroleum Hydrocarbons

A total of ten (10) samples, including two (2) field duplicates for QA/QC purposes were submitted for analysis of PHCs (incl. BTEX). The results of the analyses are tabulated in Table 6 (enclosed) and presented on Figure 7C. The results of the analyses indicated that all samples met applicable Table 1 SCS.

5.6.3 Volatile Organic Compounds

A total of nine (9) samples, including one (1) field duplicates for QA/QC purposes were submitted for analysis of VOCs. The results of the analyses are tabulated in Table 7 (enclosed) and presented on Figure 7D. The results of the analyses indicated that all samples met applicable Table 1 SCS.

5.6.4 Polycyclic Aromatic Hydrocarbons

A total of nine (9) samples, including one (1) field duplicates for QA/QC purposes were submitted for analysis of PAHs. The results of the analyses are tabulated in Table 8 (enclosed) and presented on Figure 7E. The results of the analyses indicated that all samples met applicable Table 1 SCS.

5.6.5 OC Pesticides

A total of three (3) samples were submitted for analysis of OCPs. The results of the analyses are tabulated in Table 9 (enclosed) and presented on Figure 7F. The results of the analyses indicated that all samples met applicable Table 1 SCS.

5.6.6 Commentary on Soil Quality

Elevated levels of EC and SAR in excess of the MECP Table 1 SCS were identified in boreholes BH23-1, BH23-2 and BH23-3 at depths ranging from 0.0 to 2.9 mbgs. The vertical extent of the EC and SAR impacts in soil is currently unknown.

The EC and SAR impacts are attributed to the application of de-icing salts on the Phase Two Property. Based on Section 49.1 (1) of O.Reg. 153/04, "*If an applicable site condition standard is exceeded at a property solely because of one of the following reasons, the applicable site condition standard is deemed not to be exceeded for the purpose of Part XV.1 of the Act*": *"…that a substance has been applied to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both*". Therefore, the applicable Table 1 SCS for EC and SAR are deemed not exceeded.

It is concluded that the soil quality in the samples analysed satisfies the Table 1 SCS.

5.7 Ground Water Quality

The results of the chemical analyses conducted are presented in Tables 10 through 13 (enclosed). A visual summary of the location of the sample locations is provided in Figures 8A through 8D. The laboratory certificates of analysis have been provided under Appendix D.

5.7.1 Metals and ORPs

A total of two (2) samples were submitted for analysis of metals and ORPs. The results of the analyses are tabulated in Table 10 (enclosed) and presented on Figure 8A. The groundwater samples transferred into the metals, mercury, and hexavalent chromium bottles were field

filtered using a 0.45-micron in-line filter. The results of the analyses indicated that all samples met applicable Table 1 SCS.

Table 5-4: Summary of Metals and ORPs Exceedances in Groundwater

Sample ID	Well Screen Interval	Parameter[1]	Units	Table 1 SCS	Analytical Result
MW23-1	4.6-7.6	Chloride	mg/L	790	**1200***
		Sodium	µg/L	490000	**780000***

Notes:
BOLD Result exceeds Table 1 SCS
* Salt exemption as per provision under Section 49.1 of O. Reg 153/04 is applied, contaminant considered to meet the applicable Site Condition Standards.

5.7.2 Petroleum Hydrocarbons

A total of two (2) samples, were submitted for analysis of PHCs (incl. BTEX). The results of the analyses are tabulated in Table 11 (enclosed) and presented on Figure 8B. The results of the analyses indicated that all samples met applicable Table 1 SCS.

5.7.3 Volatile Organic Compounds

A total of four (4) samples were submitted for analysis of VOCs including one (1) field duplicate and a trip blank for QA/QC purposes. The results of the analyses are tabulated in Table 12 (enclosed) and presented on Figure 8C. The results of the analyses indicated that all samples met applicable Table 1 SCS.

5.7.4 Polycyclic Aromatic Hydrocarbons

A total of two (2) samples were submitted for analysis of PAHs. The results of the analyses are tabulated in Table 13 (enclosed) and presented on Figure 8D. The results of the analyses indicated that all samples met applicable Table 1 SCS.

5.7.5 Commentary on Groundwater Quality

Elevated levels of chloride and sodium in excess of the MECP Table 1 SCS were identified in monitoring wells MW23-1.

The chloride and sodium impacts are attributed to the application of de-icing salts on the Phase Two Property. Based on Section 49.1 (1) of O.Reg. 153/04, "*If an applicable site condition standard is exceeded at a property solely because of one of the following reasons, the applicable site condition standard is deemed not to be exceeded for the purpose of Part XV.1 of the Act*": *"...that a substance has been applied to surfaces for the safety of vehicular or*

pedestrian traffic under conditions of snow or ice or both". Therefore, the applicable Table 1 SCS for SAR are deemed not exceeded.

It is concluded that the site condition standards for groundwater have been satisfied.

5.8 Sediment Quality

No sediment was present on the Phase Two Property at the time of the investigation.

5.9 Quality Assurance and Quality Control Results

Collection of soil and groundwater samples was conducted in general accordance with the MECP *Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario*. As described in Section 5.12, dedicated equipment was used where possible, and all non-dedicated equipment was decontaminated before and between sampling events. All soil and groundwater samples were transferred directly into laboratory-supplied containers. The laboratory containers were prepared by the laboratory with suitable preservative, as required. All samples were stored and transported under refrigerated conditions. Chain of custody protocols were maintained from the time of sampling to delivery to the analytical laboratory.

The field QA/QC program involved the collection of field duplicate soil and groundwater samples, and the use of a trip blank for each groundwater sampling event (when suitable). In addition to the controls listed above, the analytical laboratory employed method blanks, internal laboratory duplicates, surrogate spike samples, matrix spike samples, and standard reference materials.

A summary of the field duplicate samples analyzed and an interpretation of the efficacy of the QA/QC program is provided in the table below.

Table 5-5: Summary of QA/QC Results

Sample ID	QA/QC duplicate	Medium	Parameter Analyzed	QA/QC Result
BH23-3 SS3	DUP-1 (May)	Soil	Metals and ORPs	All results were within the analytical protocol criteria for RPD
BH23-2 SS5	DUP-2	Soil	pH	All results were within the analytical protocol criteria for RPD
BH23-2 SS2	DUP-3	Soil	PHCs	All results were within the analytical protocol criteria for RPD
BH23-7	DUP-1	Soil	Metals and ORPs, PHC, VOC, PAH	All results were within the analytical protocol criteria for RPD

Sample ID	QA/QC duplicate	Medium	Parameter Analyzed	QA/QC Result
MW23-2	DUP-1	Groundwater	VOCs	All results were within the analytical protocol criteria for RPD

Based on the interpretation of the laboratory results and the QA/QC program, it is the opinion of the QP that the laboratory analytical data can be relied upon.

All samples were handled in accordance with the MECP Analytical Protocol regarding sample holding time, preservation methods, storage requirements, and type of container.

BV routinely conducts internal QA/QC analyses in order to satisfy regulatory QA/QC requirements. The results of the BV QA/QC analyses for the submitted soil samples are summarized in the laboratory Certificates of Analyses provided in Appendix D.

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

A review of the QA/QC sample results indicated that no issues were identified with respect to both the field collection methodology and the laboratory reporting. It is the opinion of the QP that the analytical data obtained are representative of the soil and groundwater conditions at the Phase Two Property for the purpose of assessing whether the soil and groundwater at the Phase Property meets the applicable MECP SCS.

5.10 Phase Two Conceptual Site Model

The Phase Two Conceptual Site Model is presented under Appendix E.

6.0 Conclusions

This Phase Two ESA involved that advancement of eight (8) boreholes, the installation of Three (3) monitoring wells on the Phase, and the collection of soil and groundwater samples for analysis of the potential contaminants of concern, including: Metals and ORPs, PHCs, BTEX, VOCs, PAHs, OCPs.

Based on the results of the information gathered through the course of the investigation, DS presents the following conclusions:

- Fill material was identified in boreholes to a maximum depth of 2.9 mbgs. The fill material was identified to be impacted with EC and SAR exceeding the Table 1 SCS.

- Monitoring well MW23-1 was identified to be impacted with sodium and chloride exceeding the Table 1 SCS.
- It is the opinion of DS that Section 49.1 (1) of O.Reg153/04 is applicable, which states: "*If an applicable site condition standard is exceeded at a property solely because of one of the following reasons, the applicable site condition standard is deemed not to be exceeded for the purpose of Part XV.1 of the Act*": *"...that a substance has been applied to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both*". The EC and SAR impacts in soil at boreholes BH23-1, BH23-2 and BH23-3 and sodium and chloride in groundwater at well MW23-1 are attributed to the application of de-icing salts on-Site at the parking areas. Therefore, the applicable Table 1 SCS for SAR are deemed not exceeded.
- It is concluded that the soil and groundwater quality on-Site met the applicable MECP Table 1 Site Conditions Standards. It is the opinion of DS that a Record of Site Condition may be filed on the basis of this report, if requested.
- All monitoring wells should be decommissioned in accordance with O.Reg. 903 when no longer required.

6.1 Qualifications of the Assessors

Alexii Hernandez, B.Eng. EIT

Ms. Hernandez is an Environmental Specialist with DS Consultants Ltd. Alexii holds a Bachelor of Engineering in Chemical Engineering from McMaster University, with a focus on water and energy technology. Alexii has experience in conducting soil and groundwater sampling and evaluation and has supported the completion of Phase One and Phase Two Environmental Site Assessments.

John Gaviria-Ballen, B. Eng., EIT

Mr. Gaviria-Ballen is an Environmental Technician with DS Consultants Ltd. John holds a bachelor's degree in environmental engineering from Carleton University and a Post Graduate Certificate in Environmental Engineering Application from Conestoga College. John is a registered Engineer in Training (EIT) with Professional Engineers of Ontario (PEO) and has been conducting Phase One and Two Environmental Site Assessments and Remediation Investigations for over 2 years in environmental consulting.

Mr. Patrick (Rick) Fioravanti, B.Sc., P.Geo., QP$_{ESA}$

Mr. Fioravanti is the Manager of Environmental Services with DS Consultants Limited. Patrick holds an Honours Bachelor of Science with distinction in Toxicology from the University of Guelph and is a practicing member of the Association of Professional Geoscientists of Ontario (APGO). Patrick has over ten years of environmental consulting experience and has conducted and/or managed hundreds of projects in his professional experience. Patrick has extensive experience conducting Phase One and Phase Two Environmental Site Assessments in support of brownfields redevelopment in urban settings, and been involved in numerous remediation projects, supported many risk assessments, and successfully filed Records of Site Condition with the Ministry of Environment and Climate Change. He has conducted work across southern and eastern Ontario, and Quebec in his professional experience. Patrick is considered a Qualified Person to conduct Environmental Site Assessments as defined by Ontario Regulation 153/04 (as amended).

6.2 Signatures

This Phase Two ESA was conducted under the supervision of Rick Fioravanti, B.Sc., P.Geo., QPESA, in accordance with the requirements of O.Reg. 153/04 (as amended). The findings and conclusions presented have been determined based on the information obtained at the time of the investigation, and on an assessment of the conditions of the Site at this time.

We trust this report meets with your requirements. Should you have any questions regarding the information presented, please do not hesitate to contact our office.

Yours truly,

DS Consultants Ltd

Prepared by:

Alexii Hernandez, B.Eng., EIT
Environmental Specialist

Reviewed by:

John Gaviria-Ballen, B.Eng., EIT
Environmental Project Manager

Rick Fioravanti, B.Sc., P.Geo., QP_{ESA}
Manager – Environmental Services

6.3 Limitations

This report was prepared for the sole use of Argo Development Corporation and is intended to provide an assessment of the environmental condition on the property located at 1720 Sherwood Forrest Circle, Mississauga, Ontario. The information presented in this report is based on information collected during the completion of the Phase Two Environmental Site Assessment by DS Consultants Ltd. The material in this report reflects DS' judgment in light of the information available at the time of report preparation. This report may not be relied upon by any other person or entity without the written authorization of DS Consultants Ltd. The scope of services performed in the execution of this investigation may not be appropriate to satisfy the needs of other users, and any use or reuse of this documents or findings, conclusions and recommendations represented herein, is at the sole risk of said users.

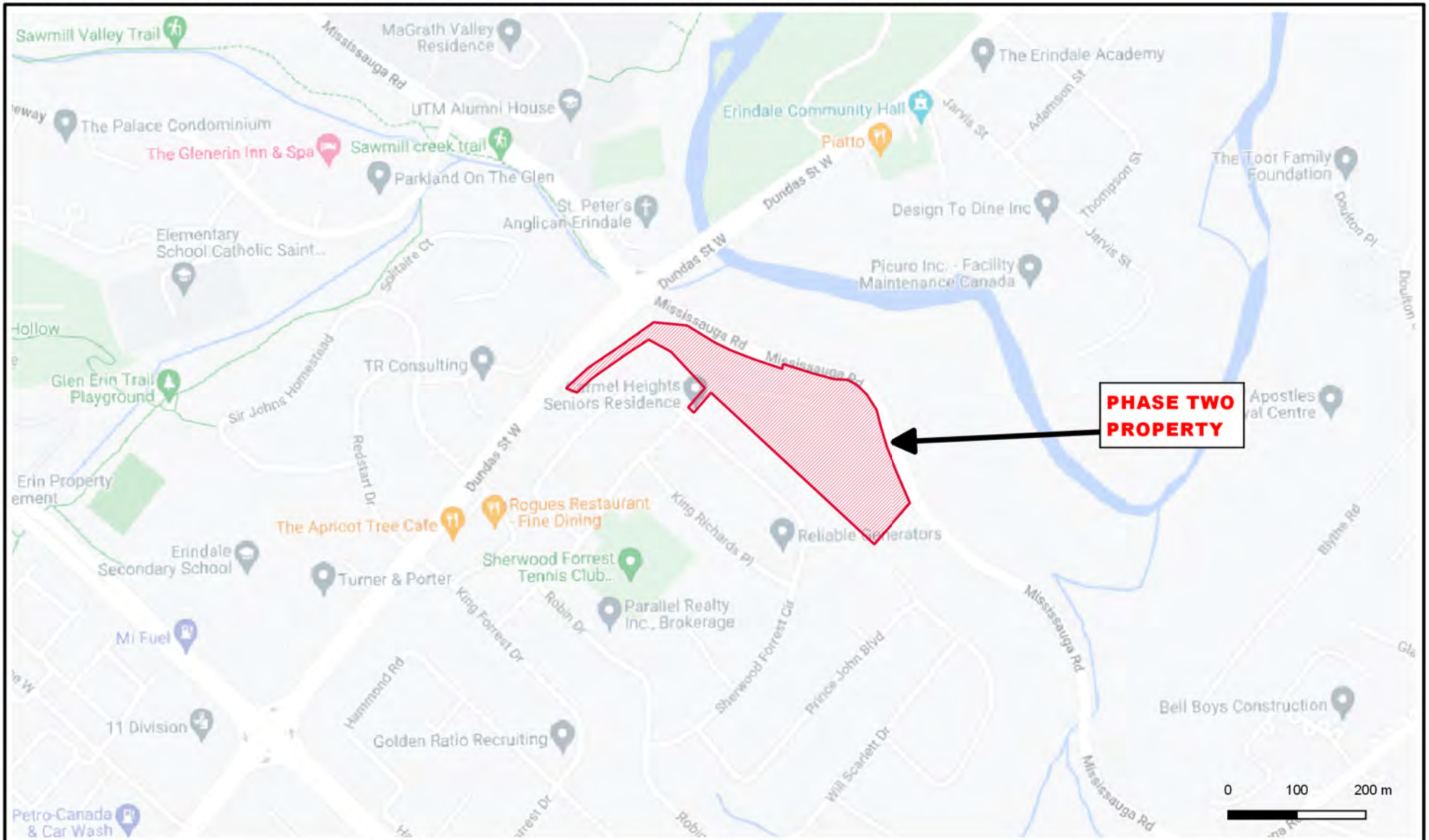
The conclusions drawn from the Phase Two ESA were based on information at selected observation and sampling locations. Conditions between and beyond these locations may become apparent during future investigations or on-Site work, which could not be detected or anticipated at the time of this investigation. The sampling locations were chosen based upon a cursory historical search, visual observations and limited information provided by persons knowledgeable about past and current activities on this Site during the Phase Two ESA activities. As such, DS Consultants Ltd. cannot be held responsible for environmental conditions at the Site that was not apparent from the available information.

7.0 References

- Armstrong, D.K. and Dodge, J.E.P. *Paleozoic Geology Map of Southern Ontario*. Ontario Geological Survey, Miscellaneous Release--Data 219.
- Chapman, L.J. and Putnam, D.F. 2007. *The Physiography of Southern Ontario*. Ontario Geological Survey, Miscellaneous Release--Data 228.
- Freeze, R. Allen and Cherry, John A., 1979. *Ground water*. Page 29.
- Ontario Ministry of the Environment, December 1996. *Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario.*
- Ontario Ministry of Environment, 15 April 2011. *Soil, Ground Water and Sediment Standards for use under part XV.1of the Environmental Protection Act.*
- Ontario Ministry of the Environment, June 2011. *Guide for Completing Phase Two Environmental Site Assessments under Ontario regulation 153/04.*
- Ontario Ministry of the Environment, July 2011. *Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act.*
- The Ontario Geological Survey. 2003. *Surficial Geology of Southern Ontario*.
- "Phase One Environmental Site Assessment, 1720 Sherwood Forrest Circle, Mississauga, Ontario", prepared for Argo Development Corporation, prepared by DS Consultants Ltd., dated July 11, 2023.

Figures

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 1 - Site Location Plan.qgs Jul-11 16:36



Legend

Property Boundary

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www.dsconsultants.ca

Project:	PHASE TWO ENVIRONMENTAL SITE ASSESSMENT 1720 Sherwood Forrest Circle, Mississauga, ON
Title:	**SITE LOCATION PLAN**
Client:	ARGO DEVELOPMENT CORPORATION
Size:	8.5 x 11
Rev:	0
Approved By:	R.F
Drawn By:	P.P
Date:	July 2023
Scale:	As Shown
Project No.:	23-162-100
Figure No.:	1
Image/Map Source	*Google Streetmap Image*

N

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 2 - Phase Two Property Site Plan.qgs Jul-13 16:14

Legend

- Property Boundary
- ANSI (Life Science) - Credit River at Erindale
- Reported Location of Former UST

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1720 Sherwood Forrest Circle, Mississauga, ON

Title: **PHASE TWO PROPERTY SITE PLAN**

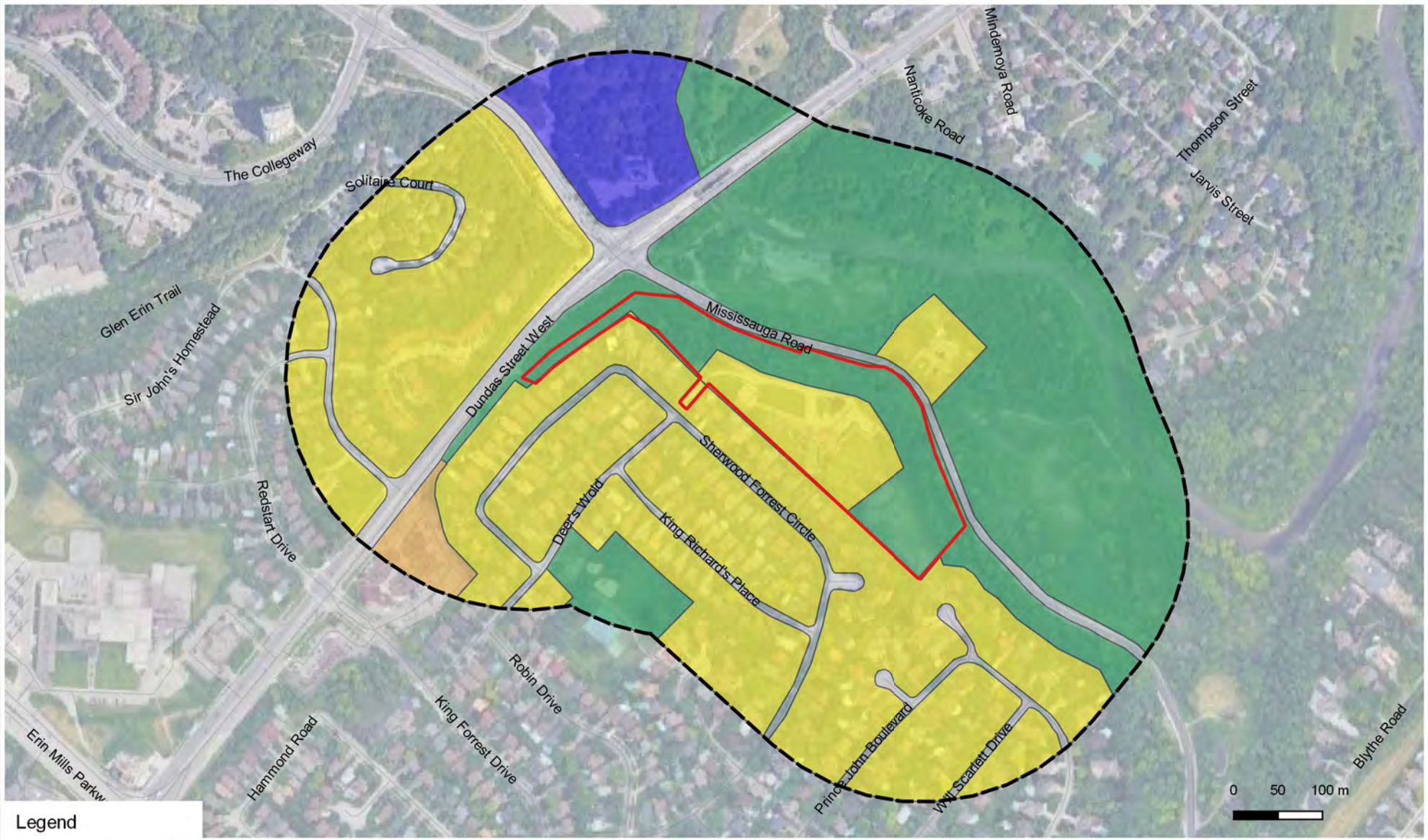
N

Client: ARGO DEVELOPMENT CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	R.F	P.P	July 2023
Rev: 0	Scale: As Shown	Project No.: 23-162-100	Figure No.: 2

Image/Map Source: *Google Satellite Image*

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 3 - Phase One Study Area.qgs Jul-11 16:39



Legend

- Property Boundary
- 250m Buffer
- Commercial Use
- Institutional Use
- Parkland Use
- Residential Use

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Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1720 Sherwood Forrest Circle, Mississauga, ON

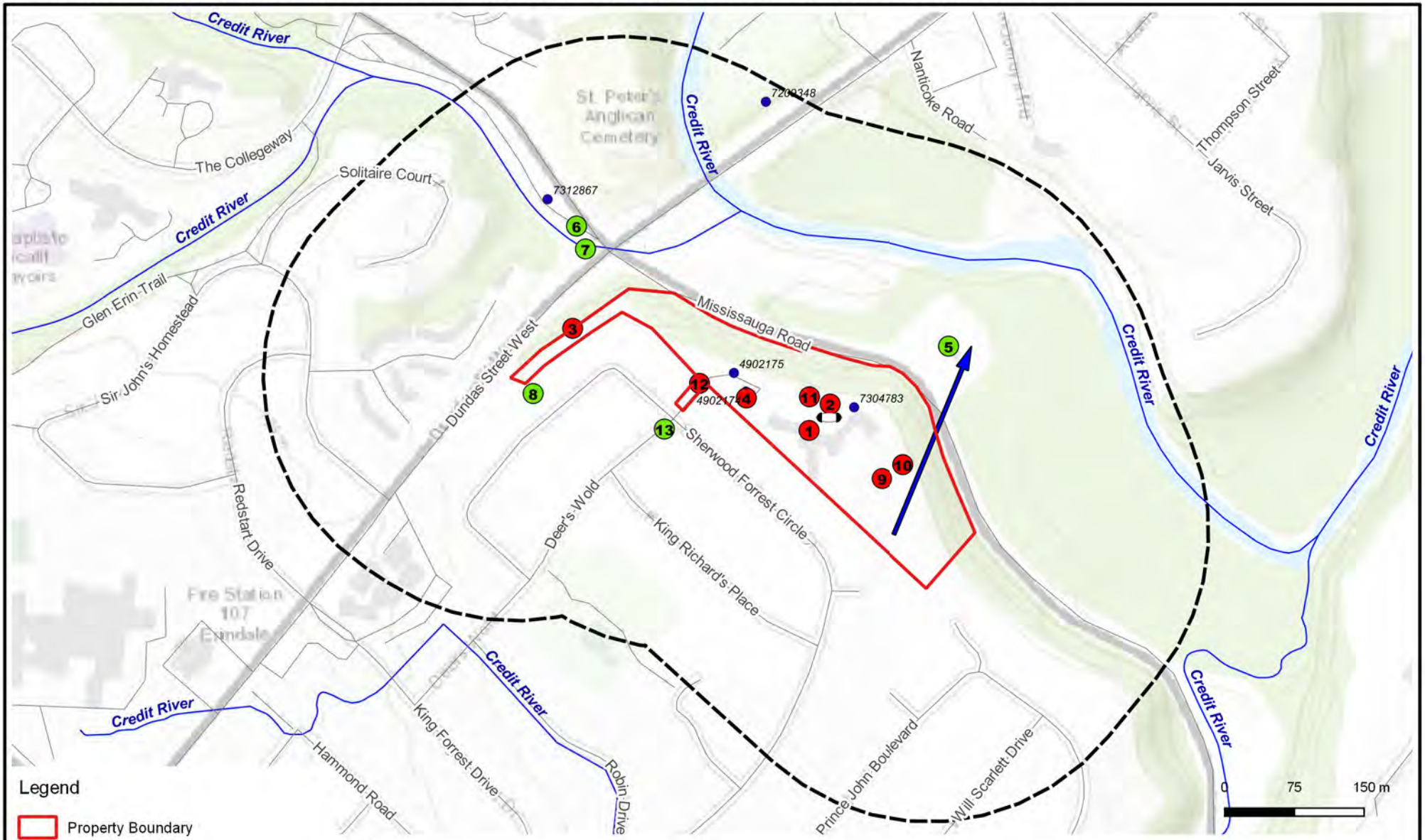
Title: **PHASE ONE STUDY AREA**

Client: ARGO DEVELOPMENT CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	R.F	P.P	July 2023
Rev: 0	Scale: As Shown	Project No.: 23-162-100	Figure No.: 3

Image/Map Source: *Google Satellite Image*

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 4 - PCA within Phase One Study Area.qgs Jul-11 16:40



Legend

- Property Boundary
- 250m Buffer
- Former UST
- PCA Contributing to APEC
- PCA Not Contributing to APEC
- Registered Water Well (MECP WWR)
- Inferred Groundwater Flow Direction

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Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1720 Sherwood Forrest Circle, Mississauga, ON

Title: **PCAs WITHIN PHASE ONE STUDY AREA**

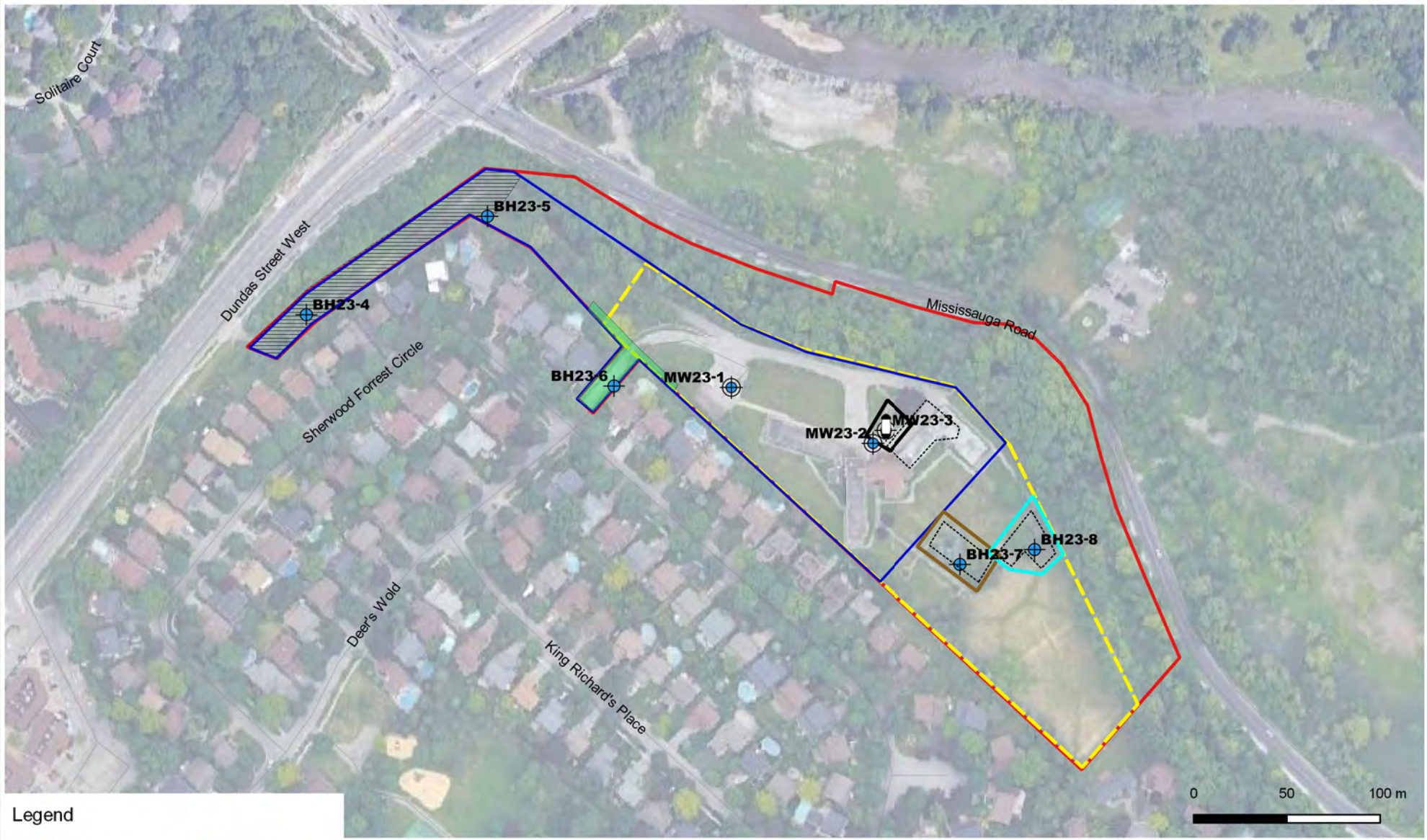
N

Client: ARGO DEVELOPMENT CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	R.F	P.P	July 2023
Rev:	Scale:	Project No.:	Figure No.:
0	As Shown	23-162-100	4

Image/Map Source: *Esri Topo Image*

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 5 - Borehole-Monitoring Well Location Plan with APECs.qgs Jul-13 16:18



Legend

- Property Boundary
- Borehole Location
- Monitoring Well
- APEC-1
- APEC-2,7
- APEC-3
- APEC-4
- APEC-5
- APEC-6
- APEC-8
- Former Site Buildings
- Former UST

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Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1720 Sherwood Forrest Circle, Mississauga, ON

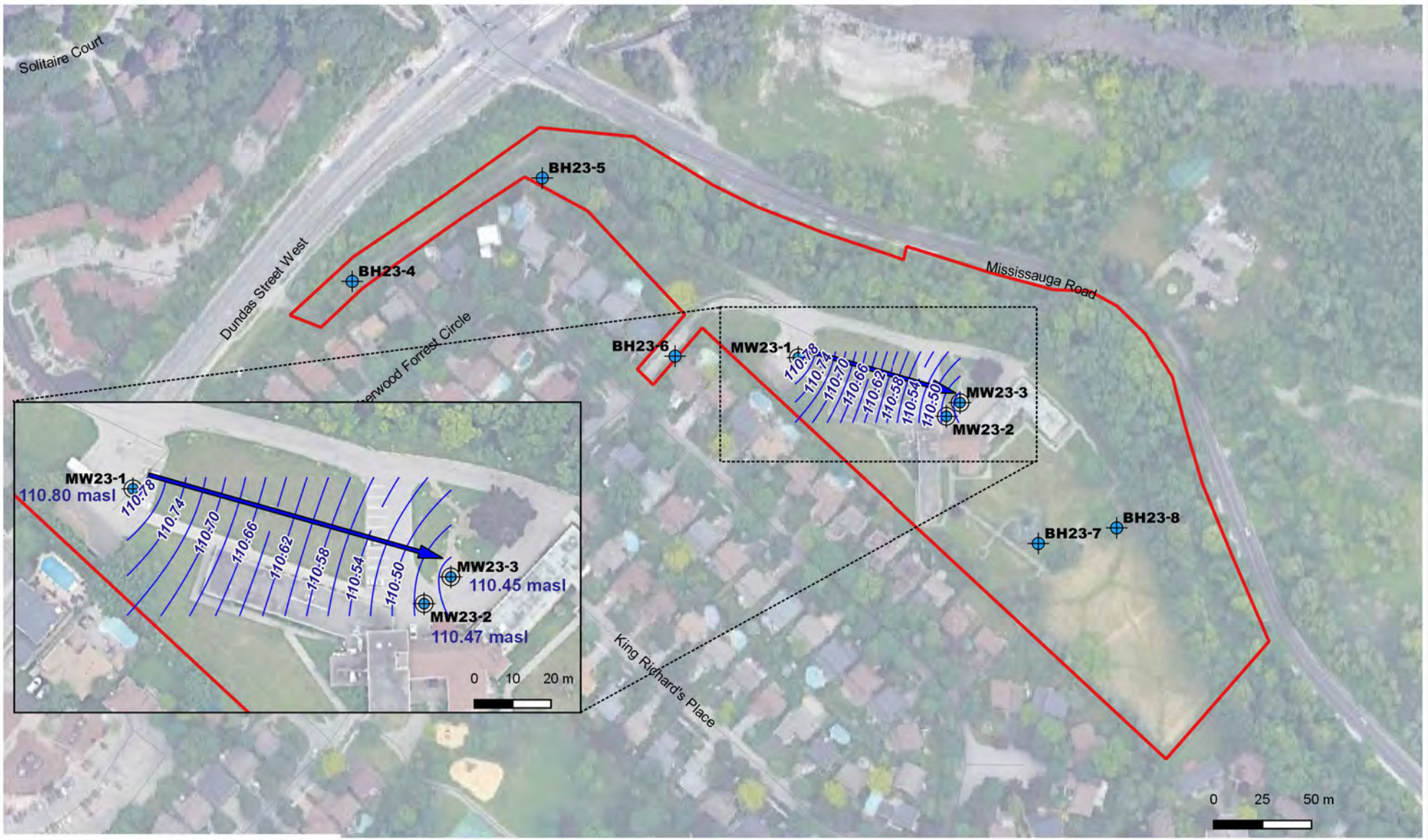
Title: **BOREHOLE/MONITORING WELL LOCATION PLAN WITH APECs**

N

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	R.F	P.P	July 2023
Rev: 0	Scale: As Shown	Project No.: 23-162-100	Figure No.: 5

Image/Map Source: *Google Satellite Image*

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 6 - Groundwater Elevation Contours and Flow Direction.qgs Jul-13 08:42



Legend

- Property Boundary
- Borehole Location
- Monitoring Well
- Interpreted Groundwater Flow Direction
- Groundwater Elevation Contours

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Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1720 Sherwood Forrest Circle, Mississauga, ON

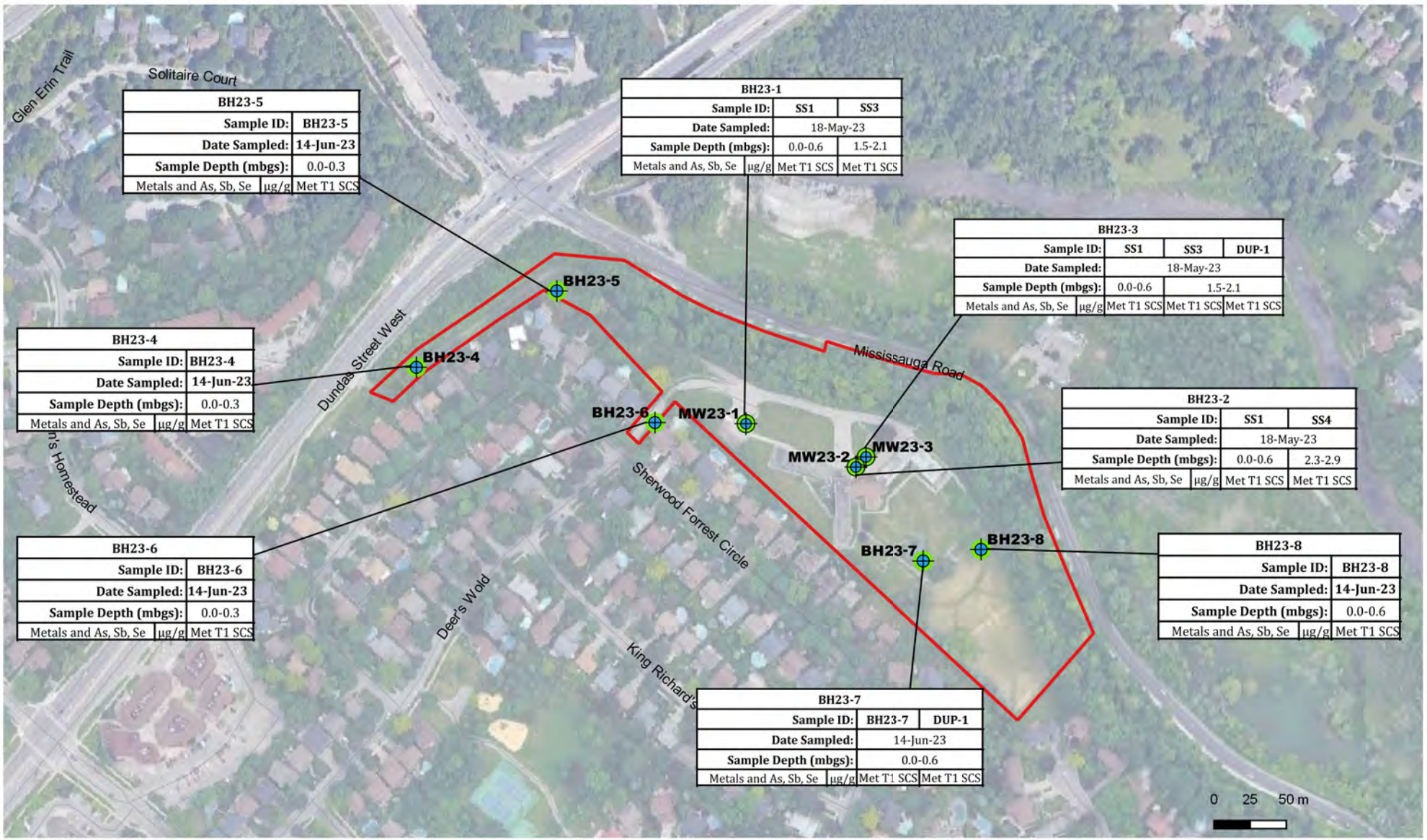
Title: **GROUNDWATER ELEVATION CONTOURS AND FLOW DIRECTION**

Client: ARGO DEVELOPMENT CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	R.F	P.P	July 2023
Rev: 0	Scale: As Shown	Project No.: 23-162-100	Figure No.: 6

Image/Map Source: *Google Satellite Image*

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 7A - Soil Characterization - Metals & Hydride-Forming Metals.qgs Jul-13 16:58



BH23-5		
Sample ID:	BH23-5	
Date Sampled:	14-Jun-23	
Sample Depth (mbgs):	0.0-0.3	
Metals and As, Sb, Se	µg/g	Met T1 SCS

BH23-1			
Sample ID:	SS1	SS3	
Date Sampled:	18-May-23		
Sample Depth (mbgs):	0.0-0.6	1.5-2.1	
Metals and As, Sb, Se	µg/g	Met T1 SCS	Met T1 SCS

BH23-3				
Sample ID:	SS1	SS3	DUP-1	
Date Sampled:	18-May-23			
Sample Depth (mbgs):	0.0-0.6	1.5-2.1		
Metals and As, Sb, Se	µg/g	Met T1 SCS	Met T1 SCS	Met T1 SCS

BH23-4		
Sample ID:	BH23-4	
Date Sampled:	14-Jun-23	
Sample Depth (mbgs):	0.0-0.3	
Metals and As, Sb, Se	µg/g	Met T1 SCS

BH23-2			
Sample ID:	SS1	SS4	
Date Sampled:	18-May-23		
Sample Depth (mbgs):	0.0-0.6	2.3-2.9	
Metals and As, Sb, Se	µg/g	Met T1 SCS	Met T1 SCS

BH23-6		
Sample ID:	BH23-6	
Date Sampled:	14-Jun-23	
Sample Depth (mbgs):	0.0-0.3	
Metals and As, Sb, Se	µg/g	Met T1 SCS

BH23-8		
Sample ID:	BH23-8	
Date Sampled:	14-Jun-23	
Sample Depth (mbgs):	0.0-0.6	
Metals and As, Sb, Se	µg/g	Met T1 SCS

BH23-7			
Sample ID:	BH23-7	DUP-1	
Date Sampled:	14-Jun-23		
Sample Depth (mbgs):	0.0-0.6		
Metals and As, Sb, Se	µg/g	Met T1 SCS	Met T1 SCS

Legend

- Property Boundary
- Borehole Location
- Monitoring Well
- Sample Met Applicable Standards

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Client: ARGO DEVELOPMENT CORPORATION

Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1720 Sherwood Forrest Circle, Mississauga, ON

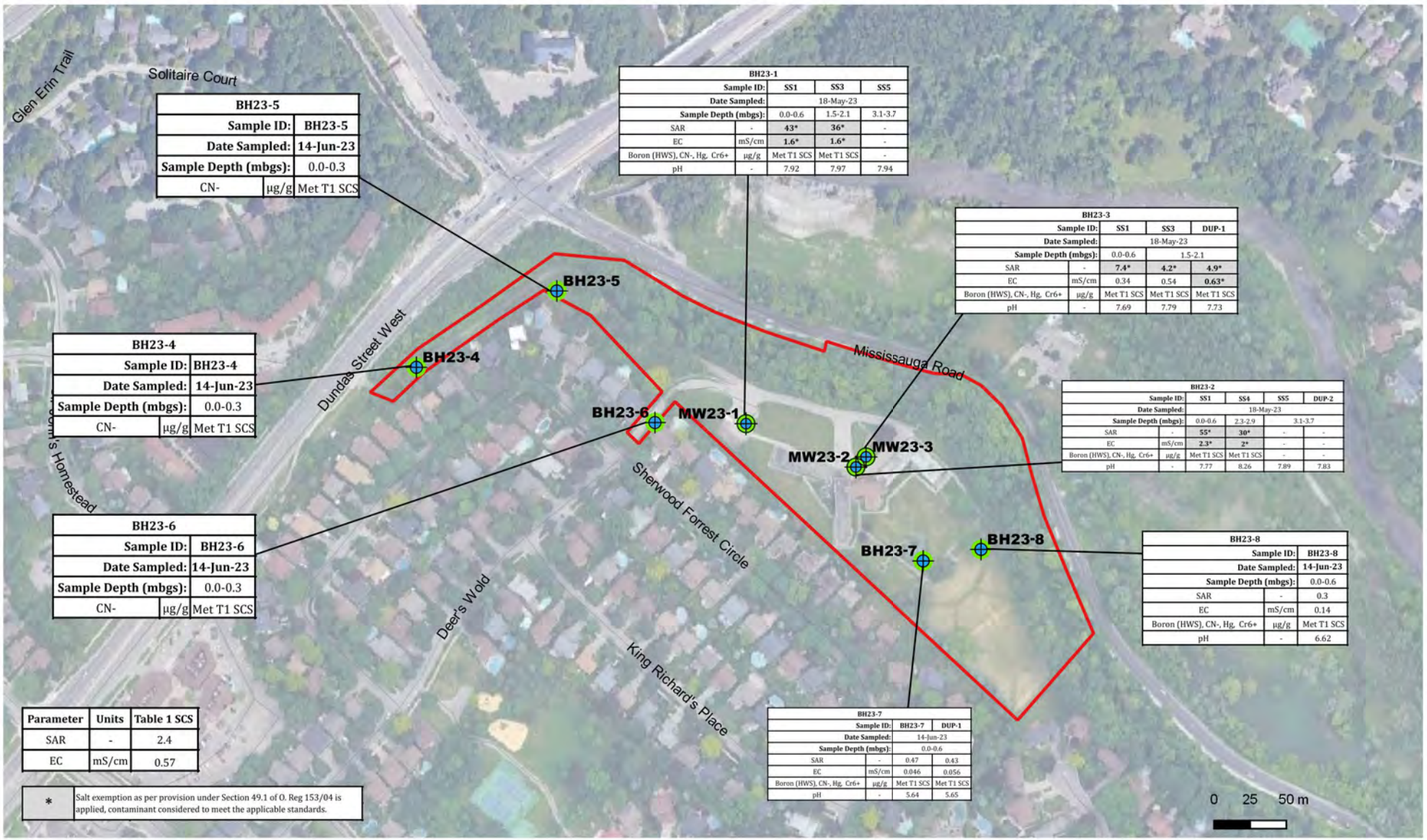
Title: **SOIL CHARACTERIZATION - METALS & HYDRIDE-FORMING METALS**

N

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	R.F	P.P	July 2023
Rev: 0	Scale: As Shown	Project No.: 23-162-100	Figure No.: **7A**

Image/Map Source: *Google Satellite Image*

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 7B - Soil Characterization - ORPs.qgs Jul-13 17:00



BH23-5		
Sample ID:		BH23-5
Date Sampled:		14-Jun-23
Sample Depth (mbgs):		0.0-0.3
CN-	µg/g	Met T1 SCS

BH23-1				
Sample ID:		SS1	SS3	SS5
Date Sampled:		18-May-23		
Sample Depth (mbgs):		0.0-0.6	1.5-2.1	3.1-3.7
SAR	-	**43***	**36***	-
EC	mS/cm	**1.6***	**1.6***	-
Boron (HWS), CN-, Hg, Cr6+	µg/g	Met T1 SCS	Met T1 SCS	-
pH	-	7.92	7.97	7.94

BH23-3				
Sample ID:		SS1	SS3	DUP-1
Date Sampled:		18-May-23		
Sample Depth (mbgs):		0.0-0.6	1.5-2.1	
SAR	-	**7.4***	**4.2***	**4.9***
EC	mS/cm	0.34	0.54	**0.63***
Boron (HWS), CN-, Hg, Cr6+	µg/g	Met T1 SCS	Met T1 SCS	Met T1 SCS
pH	-	7.69	7.79	7.73

BH23-4		
Sample ID:		BH23-4
Date Sampled:		14-Jun-23
Sample Depth (mbgs):		0.0-0.3
CN-	µg/g	Met T1 SCS

BH23-2					
Sample ID:		SS1	SS4	SS5	DUP-2
Date Sampled:		18-May-23			
Sample Depth (mbgs):		0.0-0.6	2.3-2.9	3.1-3.7	
SAR	-	**55***	**30***	-	-
EC	mS/cm	**2.3***	**2***	-	-
Boron (HWS), CN-, Hg, Cr6+	µg/g	Met T1 SCS	Met T1 SCS	-	-
pH	-	7.77	8.26	7.89	7.83

BH23-6		
Sample ID:		BH23-6
Date Sampled:		14-Jun-23
Sample Depth (mbgs):		0.0-0.3
CN-	µg/g	Met T1 SCS

BH23-8		
Sample ID:		BH23-8
Date Sampled:		14-Jun-23
Sample Depth (mbgs):		0.0-0.6
SAR	-	0.3
EC	mS/cm	0.14
Boron (HWS), CN-, Hg, Cr6+	µg/g	Met T1 SCS
pH	-	6.62

BH23-7			
Sample ID:		BH23-7	DUP-1
Date Sampled:		14-Jun-23	
Sample Depth (mbgs):		0.0-0.6	
SAR	-	0.47	0.43
EC	mS/cm	0.046	0.056
Boron (HWS), CN-, Hg, Cr6+	µg/g	Met T1 SCS	Met T1 SCS
pH	-	5.64	5.65

Parameter	Units	Table 1 SCS
SAR	-	2.4
EC	mS/cm	0.57

*	Salt exemption as per provision under Section 49.1 of O. Reg 153/04 is applied, contaminant considered to meet the applicable standards.

Legend

- Property Boundary
- Borehole Location
- Monitoring Well
- Sample Met Applicable Standards

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Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1720 Sherwood Forrest Circle, Mississauga, ON

Title: **SOIL CHARACTERIZATION - ORPs**

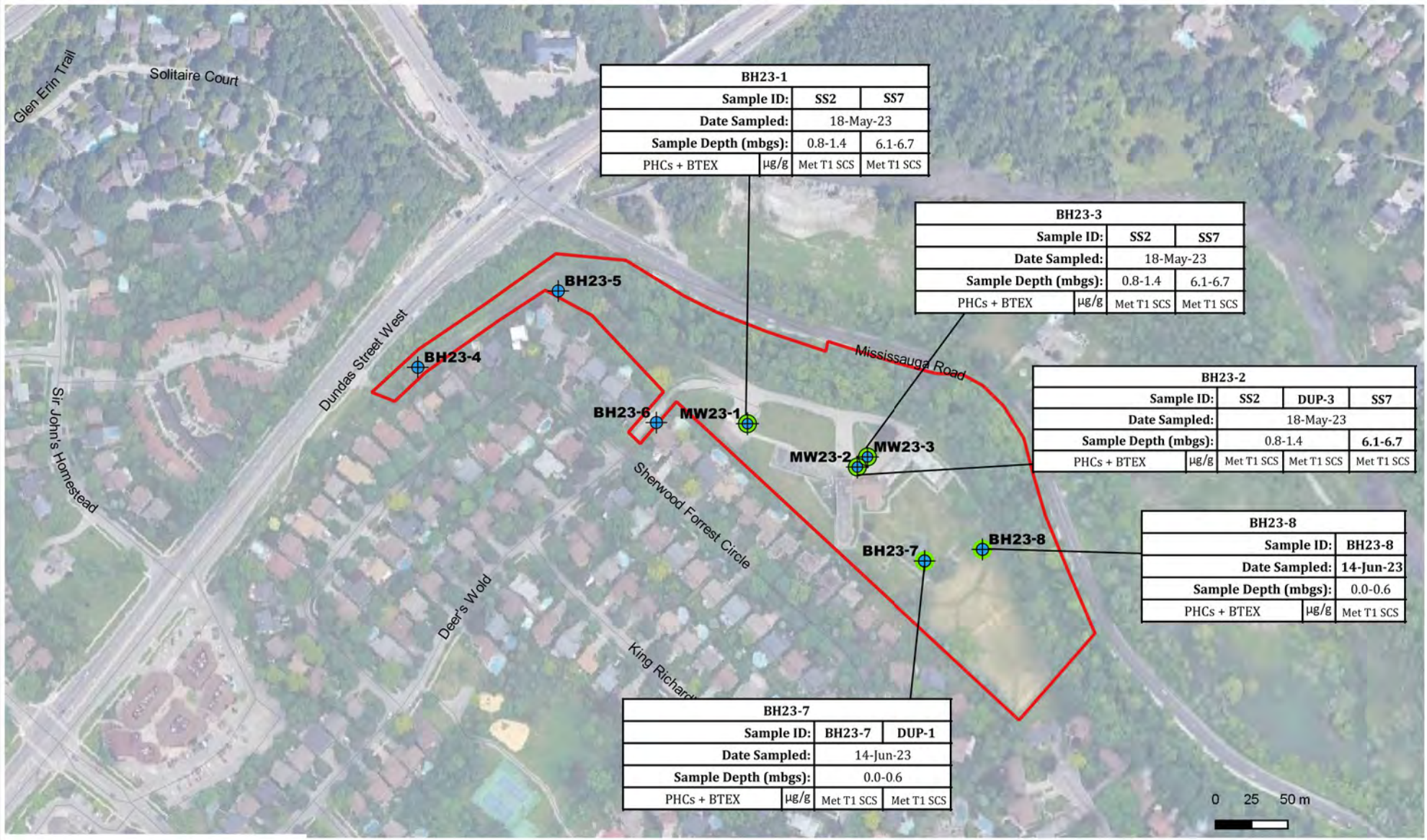
N

Client: ARGO DEVELOPMENT CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	R.F	P.P	July 2023
Rev: 0	Scale: As Shown	Project No.: 23-162-100	Figure No.: **7B**

Image/Map Source: *Google Satellite Image*

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 7C - Soil Characterization - PHCs & BTEX.qgs Jul-13 09:06



BH23-1			
Sample ID:		SS2	SS7
Date Sampled:		18-May-23	
Sample Depth (mbgs):		0.8-1.4	6.1-6.7
PHCs + BTEX	µg/g	Met T1 SCS	Met T1 SCS

BH23-3			
Sample ID:		SS2	SS7
Date Sampled:		18-May-23	
Sample Depth (mbgs):		0.8-1.4	6.1-6.7
PHCs + BTEX	µg/g	Met T1 SCS	Met T1 SCS

BH23-2				
Sample ID:		SS2	DUP-3	SS7
Date Sampled:		18-May-23		
Sample Depth (mbgs):		0.8-1.4		6.1-6.7
PHCs + BTEX	µg/g	Met T1 SCS	Met T1 SCS	Met T1 SCS

BH23-8		
Sample ID:		BH23-8
Date Sampled:		14-Jun-23
Sample Depth (mbgs):		0.0-0.6
PHCs + BTEX	µg/g	Met T1 SCS

BH23-7			
Sample ID:		BH23-7	DUP-1
Date Sampled:		14-Jun-23	
Sample Depth (mbgs):		0.0-0.6	
PHCs + BTEX	µg/g	Met T1 SCS	Met T1 SCS

Legend

- Property Boundary
- Borehole Location
- Monitoring Well
- Sample Met Applicable Standards

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Vaughan, Ontario L4H 0K8
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Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1720 Sherwood Forrest Circle, Mississauga, ON

Title: **SOIL CHARACTERIZATION - PHCs & BTEX**

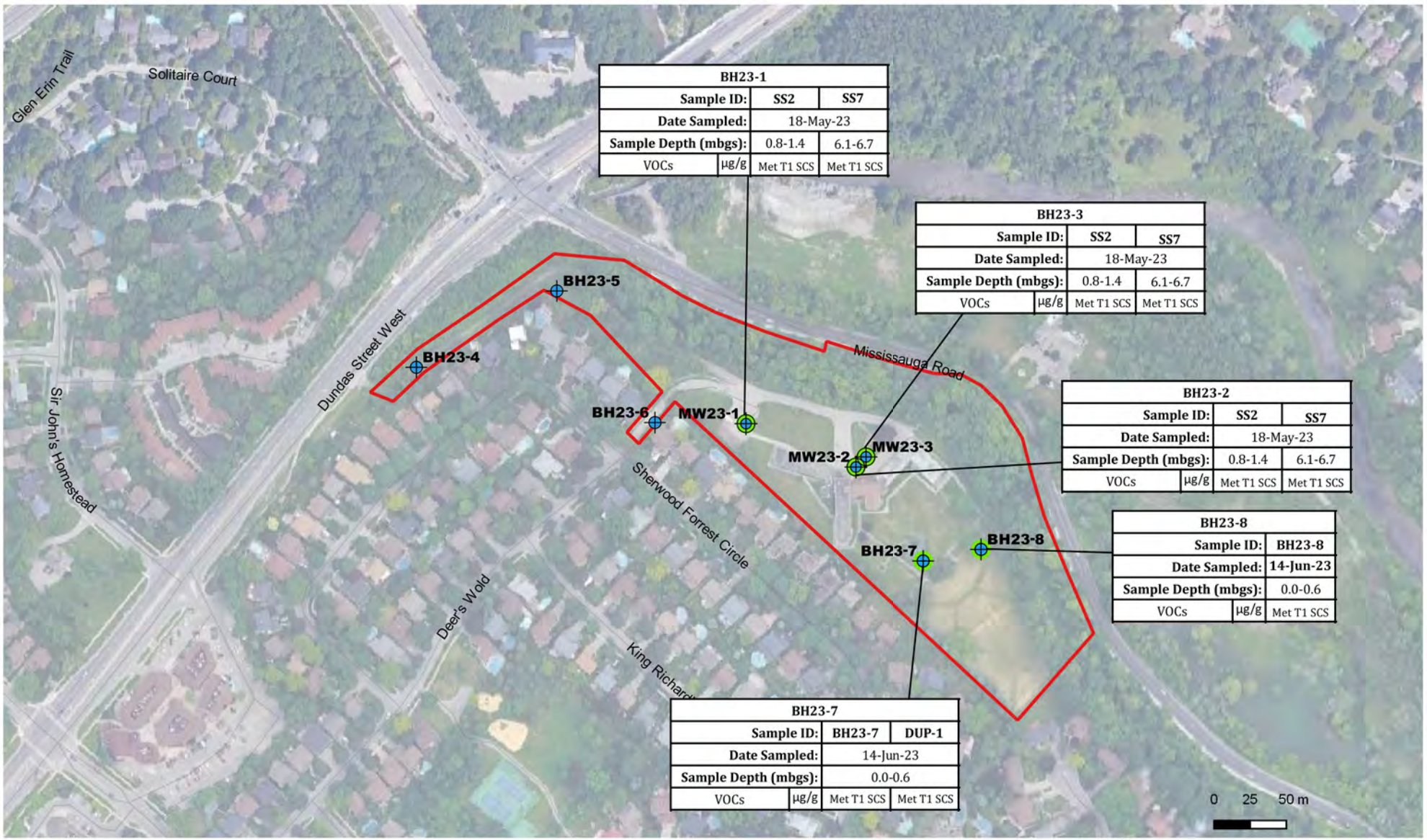
N

Client: ARGO DEVELOPMENT CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	R.F	P.P	July 2023
Rev: 0	Scale: As Shown	Project No.: 23-162-100	Figure No.: 7C

Image/Map Source: *Google Satellite Image*

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 7D - Soil Characterization - VOCs.qgs Jul-13 09:08



BH23-1			
Sample ID:		SS2	SS7
Date Sampled:		18-May-23	
Sample Depth (mbgs):		0.8-1.4	6.1-6.7
VOCs	µg/g	Met T1 SCS	Met T1 SCS

BH23-3			
Sample ID:		SS2	SS7
Date Sampled:		18-May-23	
Sample Depth (mbgs):		0.8-1.4	6.1-6.7
VOCs	µg/g	Met T1 SCS	Met T1 SCS

BH23-2			
Sample ID:		SS2	SS7
Date Sampled:		18-May-23	
Sample Depth (mbgs):		0.8-1.4	6.1-6.7
VOCs	µg/g	Met T1 SCS	Met T1 SCS

BH23-8		
Sample ID:		BH23-8
Date Sampled:		14-Jun-23
Sample Depth (mbgs):		0.0-0.6
VOCs	µg/g	Met T1 SCS

BH23-7			
Sample ID:		BH23-7	DUP-1
Date Sampled:		14-Jun-23	
Sample Depth (mbgs):		0.0-0.6	
VOCs	µg/g	Met T1 SCS	Met T1 SCS

Legend

- Property Boundary
- Borehole Location
- Monitoring Well
- Sample Met Applicable Standards

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1720 Sherwood Forrest Circle, Mississauga, ON

Title: **SOIL CHARACTERIZATION - VOCs**

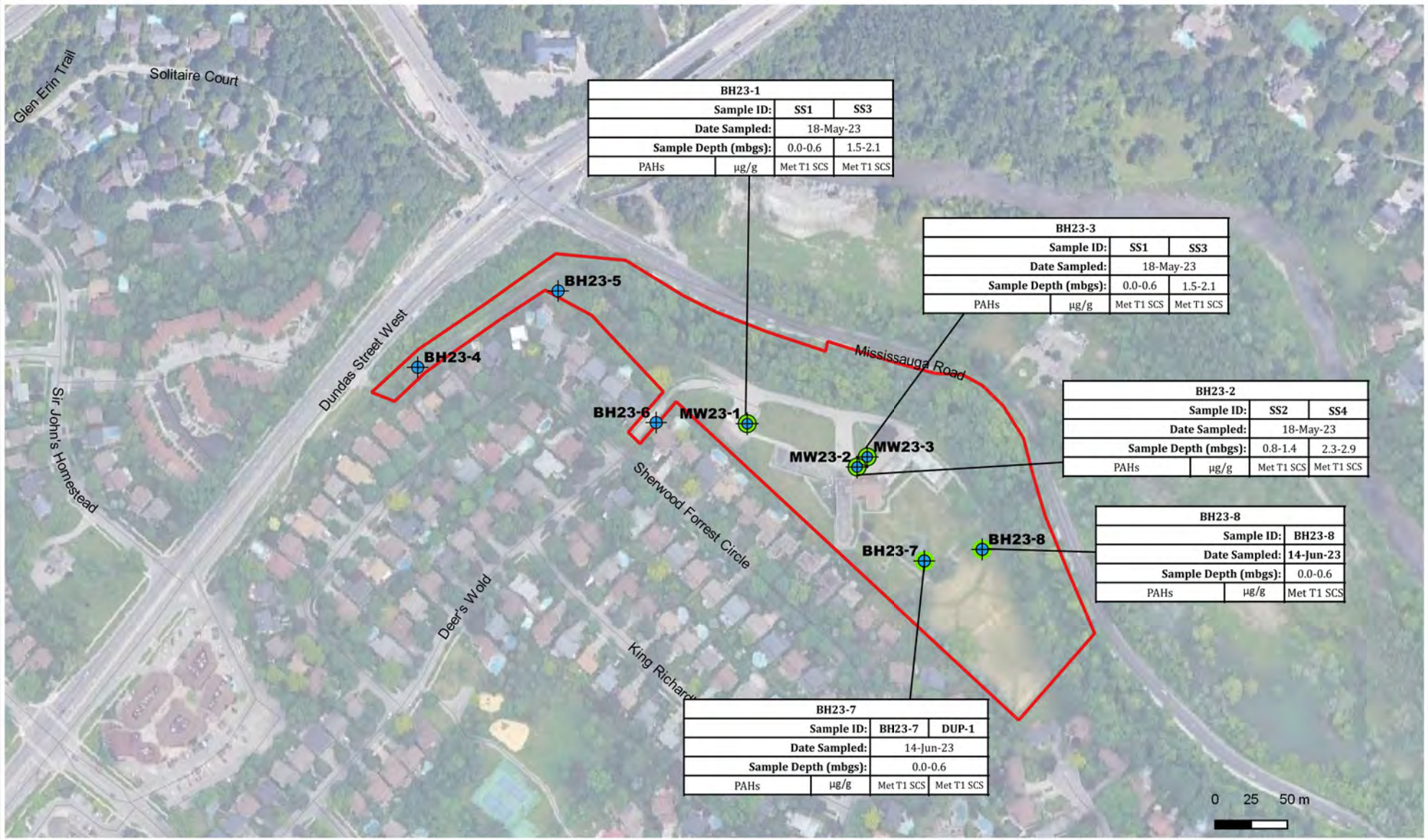
N

Client: ARGO DEVELOPMENT CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	R.F	P.P	July 2023
Rev: 0	Scale: As Shown	Project No.: 23-162-100	Figure No.: **7D**

Image/Map Source: *Google Satellite Image*

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 7E - Soil Characterization - PAHs.qgs Jul-13 09:09



BH23-1			
Sample ID:		SS1	SS3
Date Sampled:		18-May-23	
Sample Depth (mbgs):		0.0-0.6	1.5-2.1
PAHs	µg/g	Met T1 SCS	Met T1 SCS

BH23-3			
Sample ID:		SS1	SS3
Date Sampled:		18-May-23	
Sample Depth (mbgs):		0.0-0.6	1.5-2.1
PAHs	µg/g	Met T1 SCS	Met T1 SCS

BH23-2			
Sample ID:		SS2	SS4
Date Sampled:		18-May-23	
Sample Depth (mbgs):		0.8-1.4	2.3-2.9
PAHs	µg/g	Met T1 SCS	Met T1 SCS

BH23-8		
Sample ID:		BH23-8
Date Sampled:		14-Jun-23
Sample Depth (mbgs):		0.0-0.6
PAHs	µg/g	Met T1 SCS

BH23-7			
Sample ID:		BH23-7	DUP-1
Date Sampled:		14-Jun-23	
Sample Depth (mbgs):		0.0-0.6	
PAHs	µg/g	Met T1 SCS	Met T1 SCS

Legend

- Property Boundary
- Borehole Location
- Monitoring Well
- Sample Met Applicable Standards

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1720 Sherwood Forrest Circle, Mississauga, ON

Title: **SOIL CHARACTERIZATION - PAHs**

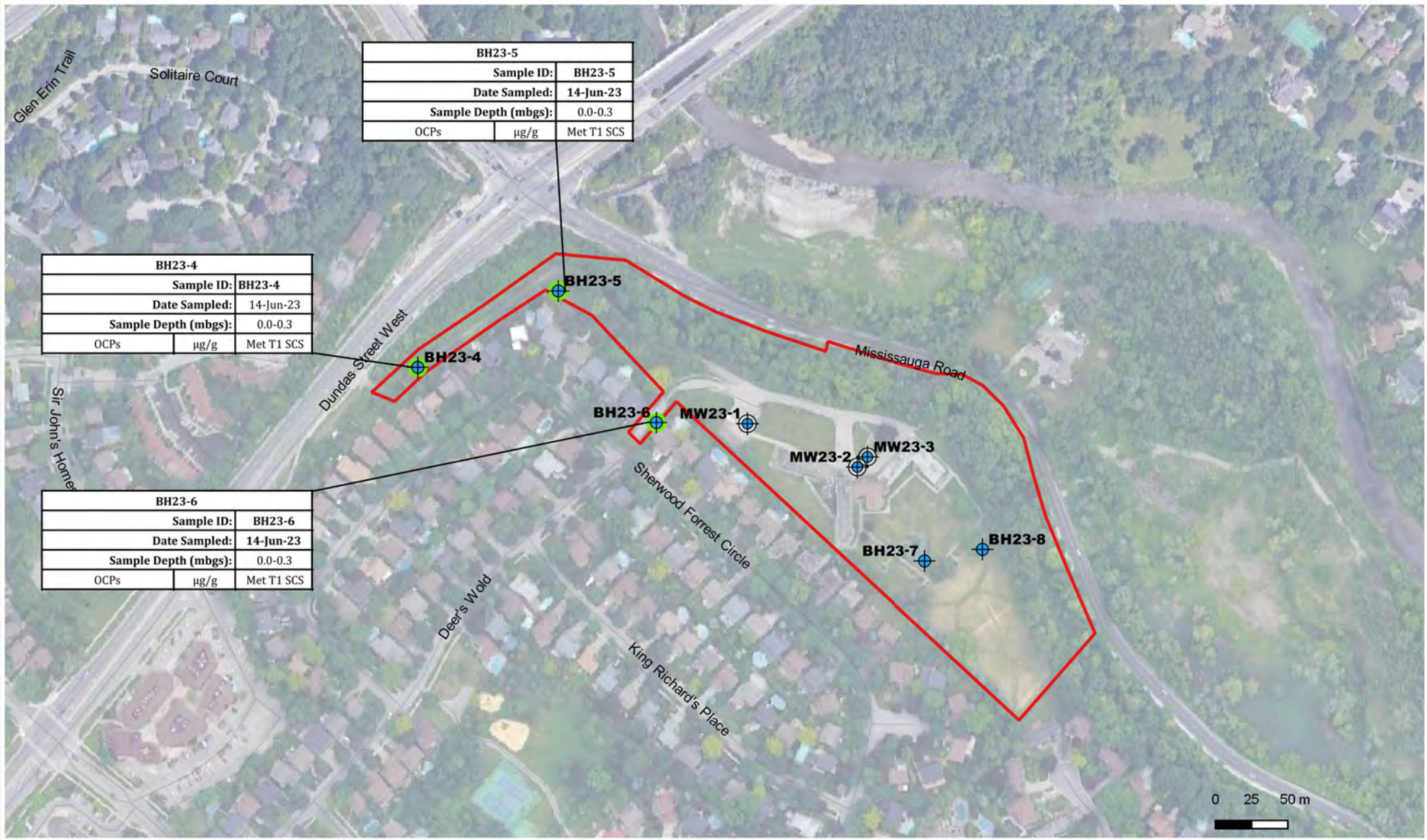
N

Client: ARGO DEVELOPMENT CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	R.F	P.P	July 2023
Rev: 0	Scale: As Shown	Project No.: 23-162-100	Figure No.: **7E**

Image/Map Source: *Google Satellite Image*

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 7F - Soil Characterization - OCPs.qgs Jul-13 09:10



BH23-5		
Sample ID:		BH23-5
Date Sampled:		14-Jun-23
Sample Depth (mbgs):		0.0-0.3
OCPs	µg/g	Met T1 SCS

BH23-4		
Sample ID:		BH23-4
Date Sampled:		14-Jun-23
Sample Depth (mbgs):		0.0-0.3
OCPs	µg/g	Met T1 SCS

BH23-6		
Sample ID:		BH23-6
Date Sampled:		14-Jun-23
Sample Depth (mbgs):		0.0-0.3
OCPs	µg/g	Met T1 SCS

Legend

- Property Boundary
- Borehole Location
- Monitoring Well
- Sample Met Applicable Standards

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Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1720 Sherwood Forrest Circle, Mississauga, ON

Title: **SOIL CHARACTERIZATION - OCPs**

N

Client: ARGO DEVELOPMENT CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	R.F	P.P	July 2023
Rev: 0	Scale: As Shown	Project No.: 23-162-100	Figure No.: 7F

Image/Map Source: *Google Satellite Image*

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 8A - Groundwate Characterization - Metals & ORPs.qgs Jul-13 09:13

Legend

- Property Boundary
- Borehole Location
- Monitoring Well
- Sample Met Applicable Standards

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Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1720 Sherwood Forrest Circle, Mississauga, ON

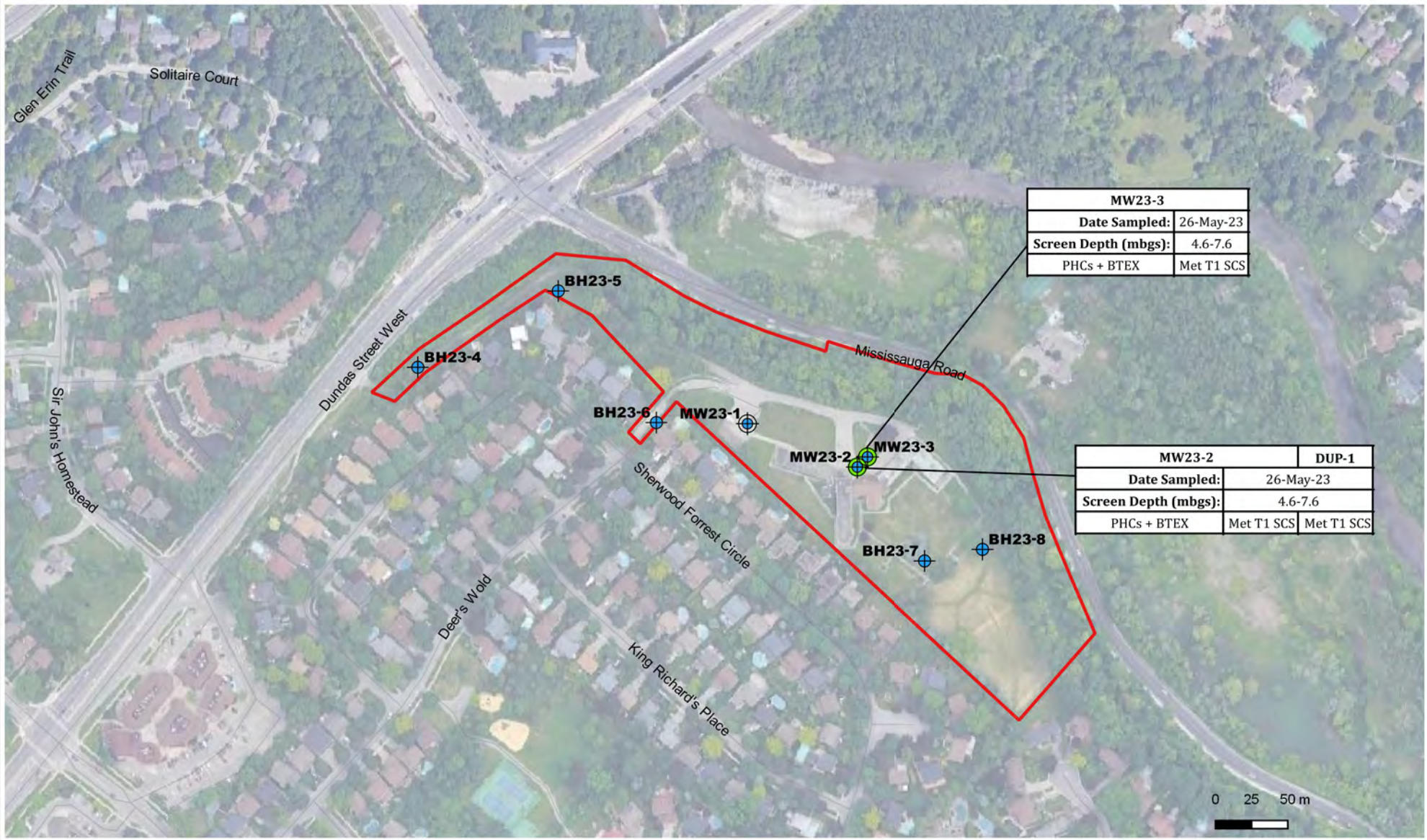
Title: **GROUNDWATER CHARACTERIZATION - METALS & ORPs**

N

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	R.F	P.P	July 2023
Rev: 0	Scale: As Shown	Project No.: 23-162-100	Figure No.: **8A**

Image/Map Source: *Google Satellite Image*

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 8B - Groundwate Characterization - PHCs & BTEX.qgs Jul-13 09:14



MW23-3	
Date Sampled:	26-May-23
Screen Depth (mbgs):	4.6-7.6
PHCs + BTEX	Met T1 SCS

MW23-2		DUP-1
Date Sampled:	26-May-23	
Screen Depth (mbgs):	4.6-7.6	
PHCs + BTEX	Met T1 SCS	Met T1 SCS

Legend

- Property Boundary
- Borehole Location
- Monitoring Well
- Sample Met Applicable Standards

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1720 Sherwood Forrest Circle, Mississauga, ON

Title: **GROUNDWATER CHARACTERIZATION - PHCs & BTEX**

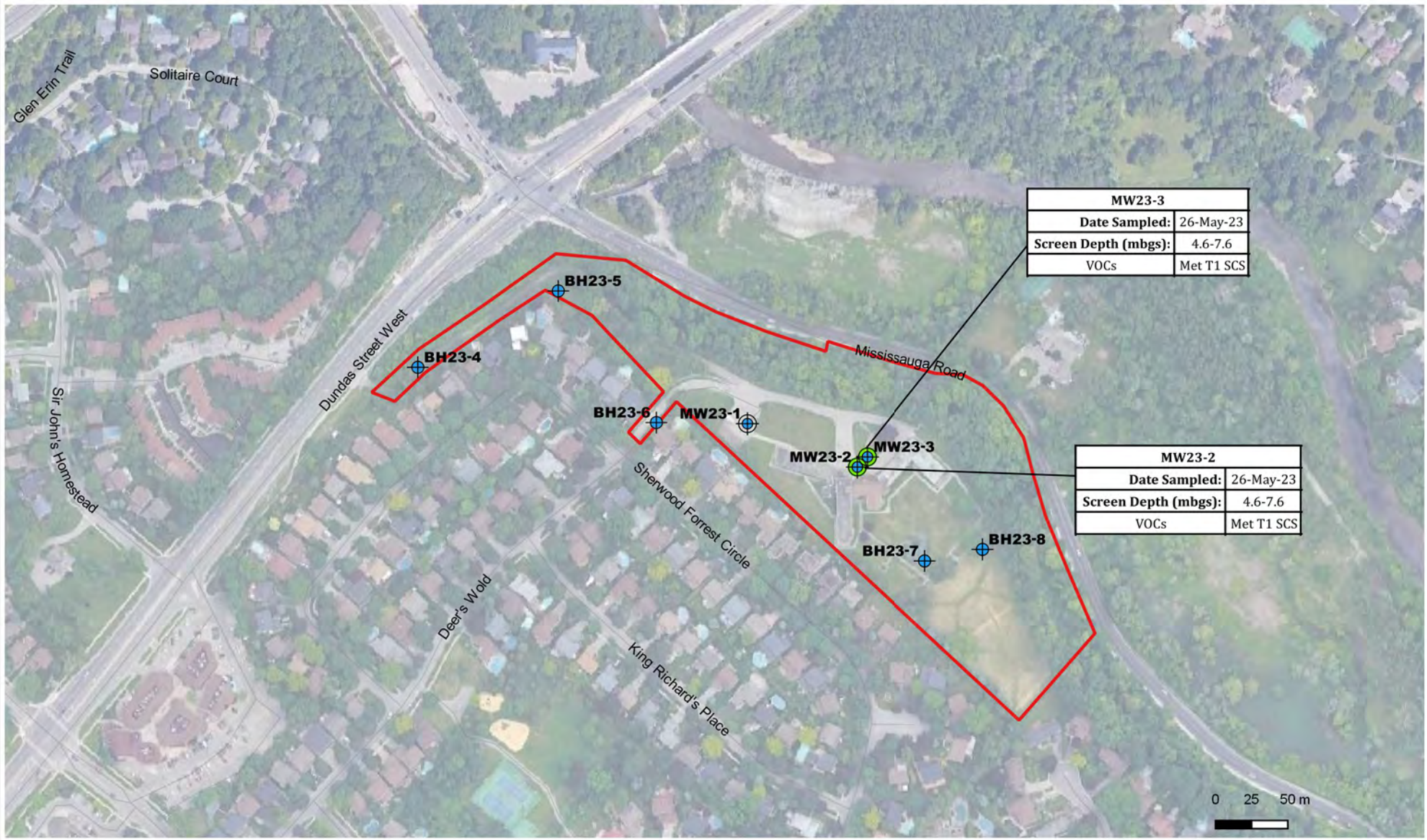
N

Client: ARGO DEVELOPMENT CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	R.F	P.P	July 2023
Rev: 0	Scale: As Shown	Project No.: 23-162-100	Figure No.: 8B

Image/Map Source: *Google Satellite Image*

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 8C - Groundwate Characterization - VOCs.qgs Jul-13 09:15



Legend

- Property Boundary
- Borehole Location
- Monitoring Well
- Sample Met Applicable Standards

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1720 Sherwood Forrest Circle, Mississauga, ON

Title: **GROUNDWATER CHARACTERIZATION - VOCs**

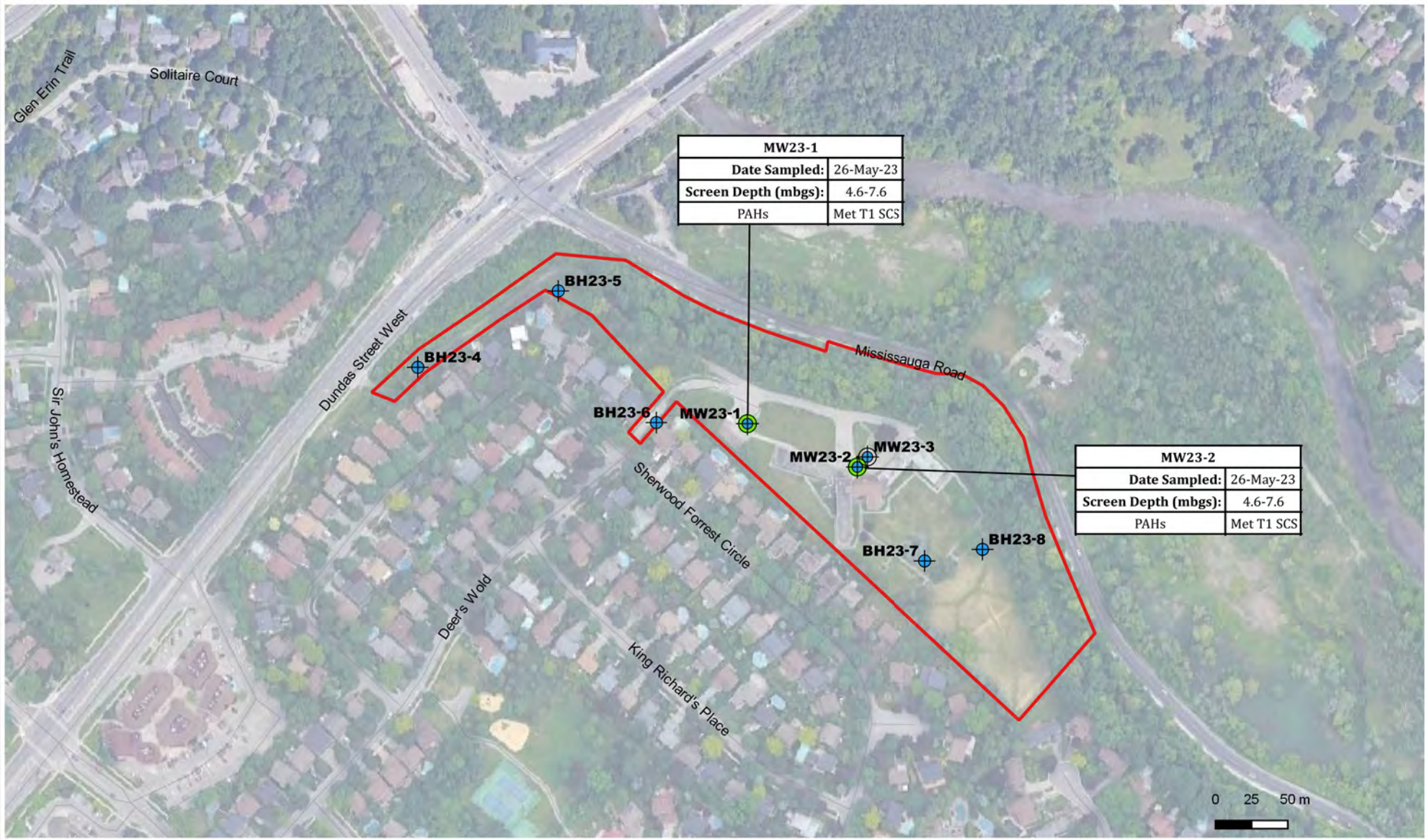
N

Client: ARGO DEVELOPMENT CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	R.F	P.P	July 2023
Rev: 0	Scale: As Shown	Project No.: 23-162-100	Figure No.: 8C

Image/Map Source: *Google Satellite Image*

J:\-GIS\2023 PROJECTS\23-162-100 - 1720 Sherwood Forrest Circle, Mississauga, ON\1-QGIS\Phase Two\Figure 8D - Groundwate Characterization - PAHs.qgs Jul-13 09:15



Legend

- Property Boundary
- Borehole Location
- Monitoring Well
- Sample Met Applicable Standards

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Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
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Title: **GROUNDWATER CHARACTERIZATION - PAHs**

N

Size:	Approved By:	Drawn By:	Date:
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Rev: 0	Scale: As Shown	Project No.: 23-162-100	Figure No.: **8D**

Image/Map Source: *Google Satellite Image*

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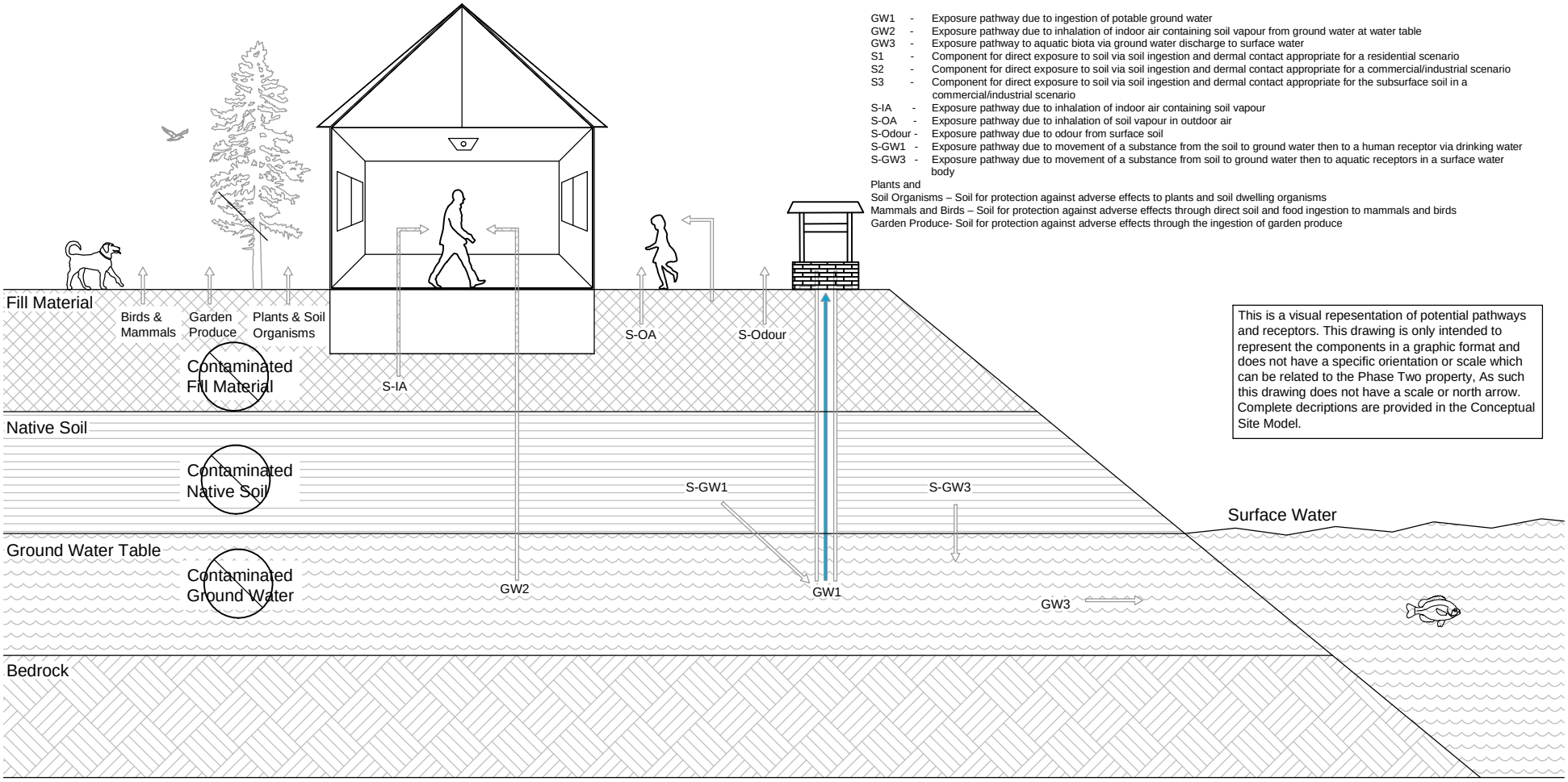

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Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
1720 Sherwood Forrest Circle, Mississauga, ON

Title: **CONTAMINANT TRANSPORT DIAGRAM**

Client:	Size:	Approved By:	Drawn By:	Date:
ARGO DEVELOPMENT CORPORATION	8.5 x 11	J.G	P.P	July 2023
	Rev.	Scale: As Shown	Project No: 23-162-100	Figure No. 9

Tables

Table 1: Summary of Monitoring Well Installation and Groundwater Data

Well ID			MW23-1	MW23-2	MW23-3
Installed By:			DS	DS	DS
Installation Date:			18-May-23	18-May-23	18-May-23
Well Status:			Active	Active	Active
EastUTM17			608457.570	608534.447	608541.998
NorthUTM17			4821781.876	4821745.944	4821757.115
Inner Diameter		(mm)	50	50	50
Surface Elevation		(masl)	116.05	116.08	116.11
Bottom of Concrete Seal/Top of Bentonite Seal		mbgs	0.30	0.30	0.30
		masl	115.75	115.78	115.81
Bottom of Bentonite Seal/Top of Sand Pack		mbgs	4.00	4.00	4.00
		masl	112.05	112.08	112.11
Top of Well Screen		mbgs	4.60	4.60	4.60
		masl	111.45	111.48	111.51
Well Screen Length		m	3.00	3.00	3.00
Bottom of Well Screen		mbgs	7.60	7.60	7.60
		masl	108.45	108.48	108.51
GW Monitoring					
23-May-23	Depth to GW	mbgs	5.25	5.61	5.66
	GW Elevation	masl	110.80	110.47	110.45
26-May-23	Depth to GW	mbgs	5.26	5.59	5.64
	GW Elevation	masl	110.79	110.49	110.47

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 2: Summary of Soil Samples Submitted for Chemical Analysis

Borehole ID	Sample No.	Sample Depth (mbgs)	Soil Description	Parameter Analyzed	APEC Investigated
BH23-1	SS1	0-0.6	Fill - clayey silt	Metals & ORPs, PAHs	APEC -1
	SS2	0.8-1.4	Fill - clayey silt	PHCs, VOCs	
	SS3	1.5-2.1	Sand and Gravel	Metals $ ORPs, PAHs	
	SS5	3.0-3.7	Sand and Gravel	pH	
	SS7	6.1-6.7	Clayey silt till	PHCs, VOCs	
BH23-2	SS1	0-0.6	Fill - clayey silt	Metals & ORPs	APEC-1, APEC-2, APEC-7
	SS2	0.8-1.4	Fill - clayey silt	PHCs, VOCs, PAHs	
	SS4	2.3-2.9	Fill - clayey silt	Metals & ORPs, PAHs	
	SS5	3.0-3.7	Sand and Gravel	pH	
	SS7	6.1-6.7	Sand and Gravel	PHCs, VOCs	
BH23-3	SS1	0-0.6	Fill - clayey silt	Metals & ORPs, PAHs	APEC-1, APEC-2, APEC-7
	SS2	0.8-1.4	Fill - clayey silt	PHCs, VOCs	
	SS3	1.5-2.1	Fill - clayey silt	Metals & ORPs, PAHs	
	SS7	6.1-6.7	Sand and Gravel	PHCs, VOCs	
BH23-4	BH23-4	0.0-0.3	Topsoil and Fill material	OCPs, Metals, As, Sn, Se, CN-	APEC-3, APEC-4
BH23-5	BH23-5	0.0-0.3	Topsoil and Fill material	OCPs, Metals, As, Sn, Se, CN-	APEC-3, APEC-4
BH23-6	BH23-6	0.0-0.3	Topsoil and Fill material	OCPs, Metals, As, Sn, Se, CN-	APEC-8
BH23-7	BH23-7	0.0-0.6	Topsoil and Fill material	Metals & ORPs, PHCs, VOCs, PAHs	APEC-1, APEC-5
BH23-8	BH23-8	0.0-0.6	Topsoil and Fill material	Metals & ORPs, PHCs, VOCs, PAHs	APEC-1, APEC-6

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 3: Summary of Groundwater Samples Submitted for Chemical Analysis

Well ID	Well Screen Interval (masl)			Sample Date	Parameter Analyzed	APEC Investigated
MW23-1	108.45	-	111.45	18-May-23	Metals and ORPs, PAHs	APEC-4
MW23-2	108.48	-	111.48	18-May-23	Metals and ORPs, PHCs and BTEX, PAHs	APEC-2, APEC-4
MW23-3	108.51	-	111.51	18-May-23	PHCs, VOCs	APEC-2, APEC-4

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 4: Summary of APECs Investigated

APEC	Description	PCOCs	Media	Boreholes Within APEC	Samples Analysed	Parameter Analyzed
APEC-1	Description Fill material may have been used for grading purposes in the vicinity of the Site Building A. Terraprobe 2017 Geotechnical Investigation reported that fill material was encountered below the topsoil/pavement layer and ranged in depth between 1.5 and 2.5 mbgs.	PHCs, BTEX, Metals, As, Sb, Se, B-HWS, CN-, electrical conductivity, Cr (VI), Hg, low or high pH, SAR, PAHs	Soil	BH23-1	SS1	Metals & ORPs, PAHs
					SS2	PHCs, VOCs
					SS3	Metals $ ORPs, PAHs
					SS5	pH
					SS7	PHCs, VOCs
				BH23-2	SS1	Metals & ORPs
					SS2	PHCs, VOCs, PAHs
					SS4	Metals & ORPs, PAHs
					SS5	pH
					SS7	PHCs, VOCs
				BH23-3	SS1	Metals & ORPs, PAHs
					SS2	PHCs, VOCs
					SS3	Metals & ORPs, PAHs
					SS7	PHCs, VOCs
				BH23-7	BH23-7	Metals & ORPs, PHCs, VOCs, PAHs
				BH23-8	BH23-8	Metals & ORPs, PHCs, VOCs, PAHs
APEC-2	One fuel oil UST was formerly present on Site. The UST was reported to have had a 22,700 L (5,000 gallons) capacity. The UST was reportedly removed off-Site in 1995	PHCs, BTEX, PAHs	Soil	BH23-2	SS2	PHCs, VOCs, PAHs
					SS4	PAHs
					SS7	PHCs, VOCs
				BH23-3	SS2	PHCs, VOCs, PAHs
					SS3	PAHs
					SS7	PHCs, VOCs
			Groundwater	MW23-2	18-May-23	PHCs, VOCs, PAHs
				MW23-3	18-May-23	PHCs, VOCs
APEC-3	Based on the 1877 County Atlas of Peel, an orchard was observed at the northern portion of the Site.	OCPs, Metals, As, Sb, Se, CN-	Soil	BH23-4	BH23-4	OCPs, Metals, As, Sn, Se, CN-
				BH23-5	BH23-5	OCPs, Metals, As, Sn, Se, CN-

Table 4: Summary of APECs Investigated

APEC	Description	PCOCs	Media	Boreholes Within APEC	Samples Analysed	Parameter Analyzed
APEC-4	Seasonal application of de-icing salts for vehicle and pedestrian safety is anticipated on the laneway, sidewalks, driveway and parking areas present on the Site.	EC, SAR	Soil	BH23-1	SS1	EC, SAR
				BH23-2	SS1	EC, SAR
				BH23-3	SS1	EC, SAR
		Na, Cl-	Groundwater	MW23-1	18-May-23	Na, Cl-
				MW23-2	18-May-23	Na, Cl-
				MW23-3	18-May-23	Na, Cl-
APEC-5	Based on the 1975 aerial photographs Former Site Building C may have been demolished. Fill material of unknown quality may have been imported to the site to backfield the demolished structure.	PHCs, BTEX, Metals, As, Sb, Se, B-HWS, CN-, electrical conductivity, Cr (VI), Hg, low or high pH, SAR, PAHs	Soil	BH23-7	BH23-7	Metals & ORPs, PHCs, VOCs, PAHs
APEC-6	Based on the 1975 aerial photographs Former Site Building D may have been demolished. Fill material of unknown quality may have been imported to the site to backfield the demolished structure.	PHCs, BTEX, Metals, As, Sb, Se, B-HWS, CN-, electrical conductivity, Cr (VI), Hg, low or high pH, SAR, PAHs	Soil	BH23-8	BH23-8	M&I, PHCs, VOCs, PAHs
APEC-7	The Site used to be heated with fuel oil. The UST was reportedly situated outside Site Building A. The UST was removed circa 1995. Fill material may have been used to backfill the void at the location of the former fuel oil UST.	PHCs, BTEX, Metals, As, Sb, Se, B-HWS, CN-, electrical conductivity, Cr (VI), Hg, low or high pH, SAR, PAHs	Soil	BH23-2	SS1	Metals & ORPs
					SS2	PHCs, VOCs, PAHs
					SS4	Metals & ORPs, PAHs
					SS5	pH
					SS7	PHCs, VOCs
				BH23-3	SS1	Metals & ORPs, PAHs
					SS2	PHCs, VOCs
					SS3	Metals & ORPs, PAHs
					SS7	PHCs, VOCs
APEC-8	Based on the 1954, 1966 and 1975 aerial photographs, portion of the orchard located on the west adjacent properties was within an area on the western portion of the Site.	OCPs, Metals, As, Sb, Se, CN-	Soil	BH23-6	BH23-6	OCPs, Metals, As, Sn, Se, CN-

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section

Table 5: Summary of Metals and ORPs in Soil

Parameter	MECP Table 1 RPIICC	BH23-1 SS1	BH23-1 SS3	BH23-1 SS5	BH23-2 SS1	BH23-2 SS4	BH23-2 SS5	DUP-2 (BH23-2 SS5)
Date of Collection		18-May-23	18-May-23	18-May-23	18-May-23	18-May-23	18-May-23	18-May-23
Date Reported		01-Jun-23	01-Jun-23	01-Jun-23	01-Jun-23	01-Jun-23	01-Jun-23	01-Jun-23
Sampling Depth (mbgs)		0-0.6	1.5-2.1	3.1-3.7	0-0.6	2.3-2.9	3.1-3.7	3.1-3.7
Analytical Report Reference No.		R7652914 VWC035	R7652914 VWC037	R7652914 VWC038	R7652914 VWC042	R7652914 VWC044	R7652914 VWC054	R7652914 VWC056
Antimony	1.3	0.22	<0.20	-	<0.20	<0.20	-	-
Arsenic	18	4.9	4.5	-	3.7	4.6	-	-
Barium	220	35	34	-	25	27	-	-
Beryllium	2.5	0.59	0.39	-	0.5	0.45	-	-
Boron (Hot Water Soluble)	NV	0.06	0.06	-	0.14	0.21	-	-
Cadmium	1.2	<0.10	0.12	-	<0.10	<0.10	-	-
Chromium	70	20	12	-	18	16	-	-
Chromium VI	0.66	0.44	<0.18	-	0.2	0.35	-	-
Cobalt	21	10	6.7	-	10	6.9	-	-
Copper	92	26	49	-	18	32	-	-
Lead	120	8.4	7.7	-	8.6	8.8	-	-
Mercury	0.27	<0.050	<0.050	-	<0.050	<0.050	-	-
Molybdenum	2	<0.50	<0.50	-	<0.50	<0.50	-	-
Nickel	82	20	17	-	19	23	-	-
Selenium	1.5	<0.50	<0.50	-	<0.50	<0.50	-	-
Silver	0.5	<0.20	<0.20	-	<0.20	<0.20	-	-
Thallium	1	0.094	0.077	-	0.078	0.067	-	-
Vanadium	86	28	20	-	24	23	-	-
Zinc	290	49	41	-	52	41	-	-
pH (pH Units)	NV	7.92	7.97	7.94	7.77	8.26	7.89	7.83
Conductivity (ms/cm)	0.57	**1.6**	**1.6**	-	**2.3**	**2**	-	-
Sodium Adsorption Ratio	2.4	**43**	**36**	-	**55**	**30**	-	-
Cyanide, Free	0.051	<0.01	<0.01	-	<0.01	<0.01	-	-
Boron (Total)	36	6.2	<5.0	-	<5.0	<5.0	-	-
Uranium	2.5	0.48	0.37	-	0.37	0.4	-	-

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 5: Summary of Metals and ORPs in Soil

Parameter	MECP Table 1 RPIICC	BH23-3 SS1	BH23-3 SS3	DUP-1 (BH23-3 SS3)	BH23-4	BH23-5	BH23-6	BH23-7
Date of Collection		18-May-23	18-May-23	18-May-23	14-Jun-23	14-Jun-23	14-Jun-23	14-Jun-23
Date Reported		01-Jun-23	01-Jun-23	01-Jun-23	26-Jun-23	26-Jun-23	26-Jun-23	26-Jun-23
Sampling Depth (mbgs)		0-0.6	1.5-2.1	1.5-2.1	0-0.3	0-0.3	0-0.3	0-0.6
Analytical Report Reference No.		R7652914 VWC048	R7652914 VWC050	R7652914 VWC055	R7689504 WCJ472	R7689504 WCJ473	R7689504 WCJ474	R7689504 WCJ475
Antimony	1.3	<0.20	<0.20	<0.20	0.4	0.3	0.34	0.21
Arsenic	18	3	5.2	3.8	4.1	7.3	5.1	5.7
Barium	220	29	27	27	23	43	35	35
Beryllium	2.5	0.28	0.3	0.35	<0.20	0.36	0.52	0.59
Boron (Hot Water Soluble)	NV	0.094	0.12	0.091	-	-	-	0.26
Cadmium	1.2	<0.10	<0.10	<0.10	0.35	0.24	0.12	<0.10
Chromium	70	11	13	13	8.9	13	17	20
Chromium VI	0.66	<0.18	<0.18	<0.18	-	-	-	<0.18
Cobalt	21	5.2	6.5	6.9	3.1	5.1	8.4	11
Copper	92	20	35	28	22	26	21	20
Lead	120	9.5	10	7.7	82	48	30	17
Mercury	0.27	<0.050	<0.050	<0.050	-	-	-	<0.050
Molybdenum	2	<0.50	<0.50	<0.50	0.76	<0.50	<0.50	<0.50
Nickel	82	14	14	14	11	12	17	22
Selenium	1.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Silver	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Thallium	1	0.058	0.083	0.076	0.051	0.099	0.084	0.094
Vanadium	86	20	26	22	12	21	25	26
Zinc	290	36	41	39	110	71	52	60
pH (pH Units)	NV	7.69	7.79	7.73	-	-	-	5.64
Conductivity (ms/cm)	0.57	0.34	0.54	**0.63**	-	-	-	0.046
Sodium Adsorption Ratio	2.4	**7.4**	**4.2**	**4.9**	-	-	-	0.47
Cyanide, Free	0.051	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron (Total)	36	<5.0	<5.0	<5.0	9.9	<5.0	6	5.7
Uranium	2.5	0.33	0.39	0.34	0.39	0.37	0.43	0.45

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 5: Summary of Metals and ORPs in Soil

Parameter	MECP Table 1 RPIICC	DUP-1 (BH23-7)	BH23-8
Date of Collection		14-Jun-23	14-Jun-23
Date Reported		26-Jun-23	26-Jun-23
Sampling Depth (mbgs)		0-0.6	0-0.6
Analytical Report Reference No.		R7689504 WCJ476	R7689504 WCJ477
Antimony	1.3	0.25	0.22
Arsenic	18	6.6	3.2
Barium	220	36	39
Beryllium	2.5	0.5	0.4
Boron (Hot Water Soluble)	NV	0.32	0.85
Cadmium	1.2	<0.10	0.2
Chromium	70	17	14
Chromium VI	0.66	<0.18	<0.18
Cobalt	21	9.6	8.1
Copper	92	17	16
Lead	120	22	17
Mercury	0.27	<0.050	<0.050
Molybdenum	2	<0.50	<0.50
Nickel	82	20	15
Selenium	1.5	<0.50	<0.50
Silver	0.5	<0.20	<0.20
Thallium	1	0.085	0.082
Vanadium	86	23	20
Zinc	290	60	56
pH (pH Units)	NV	5.65	6.62
Conductivity (ms/cm)	0.57	0.056	0.14
Sodium Adsorption Ratio	2.4	0.43	0.3
Cyanide, Free	0.051	<0.01	<0.01
Boron (Total)	36	<5.0	<5.0
Uranium	2.5	0.43	0.35

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 6: Summary of PHCs in Soil

Parameter	MECP Table 1 RPIICC	BH23-1 SS2	BH23-1 SS7	BH23-2 SS2	DUP-3 (BH23-2 SS2)	BH23-2 SS7	BH23-3 SS2	BH23-3 SS7
Date of Collection		18-May-23	18-May-23	18-May-23	18-May-23	18-May-23	18-May-23	18-May-23
Date Reported		01-Jun-23	01-Jun-23	01-Jun-23	01-Jun-23	01-Jun-23	01-Jun-23	01-Jun-23
Sampling Depth (mbgs)		0.8-1.4	6.1-6.7	0.8-1.4	0.8-1.4	6.1-6.7	0.8-1.4	6.1-6.7
Analytical Report Reference No.		R7652914 VWC036	R7652914 VWC040	R7652914 VWC043	R7652914 VWC057	R7652914 VWC046	R7652914 VWC049	R7652914 VWC052
Benzene	0.02	<0.0060	<0.0060	<0.0060	<0.020	<0.0060	<0.0060	<0.0060
Ethylbenzene	0.05	<0.010	<0.010	<0.010	<0.020	<0.010	<0.010	<0.010
Toluene	0.2	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Xylenes (Total)	0.05	<0.020	<0.020	<0.020	<0.040	<0.020	<0.020	<0.020
F1 (C6-C10) -BTEX	25	<10	<10	<10	<10	<10	<10	<10
F2 (C10-C16)	10	<10	<10	<10	<10	<10	<10	<10
F3 (C16-C34)	240	<50	<50	<50	<50	<50	<50	<50
F4 (C34-C50)	120	<50	<50	<50	99	<50	<50	<50

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 6: Summary of PHCs in Soil

Parameter	MECP Table 1 RPIICC	BH23-7	DUP-1 (BH23-7)	BH23-8
Date of Collection		14-Jun-23	14-Jun-23	14-Jun-23
Date Reported		26-Jun-23	26-Jun-23	26-Jun-23
Sampling Depth (mbgs)		0-0.6	0-0.6	0-0.6
Analytical Report Reference No.		R7689504 WCJ475	R7689504 WCJ476	R7689504 WCJ477
Benzene	0.02	<0.0061	<0.0062	<0.0063
Ethylbenzene	0.05	<0.010	<0.010	<0.010
Toluene	0.2	<0.020	<0.020	<0.020
Xylenes (Total)	0.05	<0.020	<0.020	<0.020
F1 (C6-C10) -BTEX	25	<10	<10	<10
F2 (C10-C16)	10	<10	<10	<10
F3 (C16-C34)	240	<50	<50	<50
F4 (C34-C50)	120	<50	<50	<50

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 7: Summary of VOCs in Soil

Parameter	MECP Table 1 RPIICC	BH23-1 SS2	BH23-1 SS7	BH23-2 SS2	BH23-2 SS7	BH23-3 SS2
Date of Collection		18-May-23	18-May-23	18-May-23	18-May-23	18-May-23
Date Reported		01-Jun-23	01-Jun-23	01-Jun-23	01-Jun-23	01-Jun-23
Sampling Depth (mbgs)		0.8-1.4	6.1-6.7	0.8-1.4	6.1-6.7	0.8-1.4
Analytical Report Reference No.		R7652914 VWC036	R7652914 VWC040	R7652914 VWC043	R7652914 VWC046	R7652914 VWC046
Acetone	0.5	<0.49	<0.49	<0.49	<0.49	<0.49
Bromodichloromethane	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Bromoform	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Bromomethane	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Carbon Tetrachloride	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Chlorobenzene	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Chloroform	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Dibromochloromethane	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
1,2-Dichlorobenzene	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
1,3-Dichlorobenzene	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
1,4-Dichlorobenzene	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
1,1-Dichloroethane	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
1,2-Dichloroethane	0.05	<0.049	<0.049	<0.049	<0.049	<0.049
1,1-Dichloroethylene	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Cis-1,2-Dichloroethylene	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Trans-1,2-Dichloroethylene	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
1,2-Dichloropropane	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Cis-1,3-Dichloropropylene	NV	<0.030	<0.030	<0.030	<0.030	<0.030
Trans-1,3-Dichloropropylene	NV	<0.040	<0.040	<0.040	<0.040	<0.040
Ethylene Dibromide	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Methyl Ethyl Ketone	0.5	<0.40	<0.40	<0.40	<0.40	<0.40
Methylene Chloride	0.05	<0.049	<0.049	<0.049	<0.049	<0.049
Methyl Isobutyl Ketone	0.5	<0.40	<0.40	<0.40	<0.40	<0.40
Methyl-t-Butyl Ether	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Styrene	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
1,1,1,2-Tetrachloroethane	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
1,1,2,2-Tetrachloroethane	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Tetrachloroethylene	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
1,1,1-Trichloroethane	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
1,1,2-Trichloroethane	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Trichloroethylene	0.05	<0.010	<0.010	<0.010	<0.010	<0.010
Vinyl Chloride	0.02	<0.019	<0.019	<0.019	<0.019	<0.019
Dichlorodifluoromethane	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Hexane(n)	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
Trichlorofluoromethane	0.05	<0.040	<0.040	<0.040	<0.040	<0.040
1,3-Dichloropropene (cis + trans)	0.05	<0.050	<0.050	<0.050	<0.050	<0.050

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 7: Summary of VOCs in Soil

Parameter	MECP Table 1 RPIICC	BH23-3 SS7	BH23-7	DUP-1 (BH23-7)	BH23-8
Date of Collection		18-May-23	14-Jun-23	14-Jun-23	14-Jun-23
Date Reported		01-Jun-23	26-Jun-23	26-Jun-23	26-Jun-23
Sampling Depth (mbgs)		6.1-6.7	0-0.6	0-0.6	0-0.6
Analytical Report Reference No.		R7652914 VWC052	R7689504 WCJ475	R7689504 WCJ476	R7689504 WCJ477
Acetone	0.5	<0.49	<0.49	<0.49	<0.49
Bromodichloromethane	0.05	<0.040	<0.040	<0.040	<0.040
Bromoform	0.05	<0.040	<0.040	<0.040	<0.040
Bromomethane	0.05	<0.040	<0.040	<0.040	<0.040
Carbon Tetrachloride	0.05	<0.040	<0.040	<0.040	<0.040
Chlorobenzene	0.05	<0.040	<0.040	<0.040	<0.040
Chloroform	0.05	<0.040	<0.040	<0.040	<0.040
Dibromochloromethane	0.05	<0.040	<0.040	<0.040	<0.040
1,2-Dichlorobenzene	0.05	<0.040	<0.040	<0.040	<0.040
1,3-Dichlorobenzene	0.05	<0.040	<0.040	<0.040	<0.040
1,4-Dichlorobenzene	0.05	<0.040	<0.040	<0.040	<0.040
1,1-Dichloroethane	0.05	<0.040	<0.040	<0.040	<0.040
1,2-Dichloroethane	0.05	<0.049	<0.049	<0.049	<0.049
1,1-Dichloroethylene	0.05	<0.040	<0.040	<0.040	<0.040
Cis-1,2-Dichloroethylene	0.05	<0.040	<0.040	<0.040	<0.040
Trans-1,2-Dichloroethylene	0.05	<0.040	<0.040	<0.040	<0.040
1,2-Dichloropropane	0.05	<0.040	<0.040	<0.040	<0.040
Cis-1,3-Dichloropropylene	NV	<0.030	<0.030	<0.030	<0.030
Trans-1,3-Dichloropropylene	NV	<0.040	<0.040	<0.040	<0.040
Ethylene Dibromide	0.05	<0.040	<0.040	<0.040	<0.040
Methyl Ethyl Ketone	0.5	<0.40	<0.40	<0.40	<0.40
Methylene Chloride	0.05	<0.049	<0.049	<0.049	<0.049
Methyl Isobutyl Ketone	0.5	<0.40	<0.40	<0.40	<0.40
Methyl-t-Butyl Ether	0.05	<0.040	<0.040	<0.040	<0.040
Styrene	0.05	<0.040	<0.040	<0.040	<0.040
1,1,1,2-Tetrachloroethane	0.05	<0.040	<0.040	<0.040	<0.040
1,1,2,2-Tetrachloroethane	0.05	<0.040	<0.040	<0.040	<0.040
Tetrachloroethylene	0.05	<0.040	<0.040	<0.040	<0.040
1,1,1-Trichloroethane	0.05	<0.040	<0.040	<0.040	<0.040
1,1,2-Trichloroethane	0.05	<0.040	<0.040	<0.040	<0.040
Trichloroethylene	0.05	<0.010	<0.010	<0.010	<0.010
Vinyl Chloride	0.02	<0.019	<0.019	<0.019	<0.019
Dichlorodifluoromethane	0.05	<0.040	<0.040	<0.040	<0.040
Hexane(n)	0.05	<0.040	<0.040	<0.040	<0.040
Trichlorofluoromethane	0.05	<0.040	<0.040	<0.040	<0.040
1,3-Dichloropropene (cis + trans)	0.05	<0.050	<0.050	<0.050	<0.050

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 8: Summary of PAHs in Soil

Parameter	MECP Table 1 RPIICC	BH23-1 SS1	BH23-1 SS3	BH23-2 SS2	BH23-2 SS4	BH23-3 SS1	BH23-3 SS3	BH23-7
Date of Collection		18-May-23	18-May-23	18-May-23	18-May-23	18-May-23	18-May-23	14-Jun-23
Date Reported		01-Jun-23	01-Jun-23	01-Jun-23	01-Jun-23	01-Jun-23	01-Jun-23	26-Jun-23
Sampling Depth (mbgs)		0-0.6	1.5-2.1	0.8-1.4	2.3-2.9	0-0.6	1.5-2.1	0-0.6
Analytical Report Reference No.		R7652914 VWC035	R7652914 VWC037	R7652914 VWC043	R7652914 VWC044	R7652914 VWC048	R7652914 VWC050	R7652914 VWC075
Acenaphthene	0.072	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Acenaphthylene	0.093	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Anthracene	0.16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Benzo(a)anthracene	0.36	<0.0050	<0.0050	<0.0050	0.0089	0.0055	<0.0050	<0.0050
Benzo(a)pyrene	0.3	<0.0050	0.0065	<0.0050	0.01	0.0065	<0.0050	<0.0050
Benzo(b/j)fluoranthene	0.47	<0.0050	0.0095	<0.0050	0.015	0.0092	<0.0050	<0.0050
Benzo(ghi)perylene	0.68	<0.0050	0.0087	<0.0050	0.011	0.0053	<0.0050	<0.0050
Benzo(k)fluoranthene	0.48	<0.0050	<0.0050	<0.0050	0.0051	<0.0050	<0.0050	<0.0050
Chrysene	2.8	<0.0050	0.0062	<0.0050	0.011	0.0057	<0.0050	<0.0050
Dibenzo(a,h)anthracene	0.1	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Fluoranthene	0.56	<0.0050	0.012	<0.0050	0.032	0.015	<0.0050	<0.0050
Fluorene	0.12	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Indeno(1,2,3-cd)pyrene	0.23	<0.0050	0.0054	<0.0050	0.0083	<0.0050	<0.0050	<0.0050
Naphthalene	0.09	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Phenanthrene	0.69	<0.0050	<0.0050	<0.0050	0.021	0.0099	<0.0050	<0.0050
Pyrene	1	<0.0050	0.013	<0.0050	0.024	0.012	<0.0050	<0.0050
Methylnaphthalene, 2-(1-)	0.59	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 8: Summary of PAHs in Soil

Parameter	MECP Table 1 RPIICC	DUP-1 (BH23-7)	BH23-8
Date of Collection		24-Jun-23	14-Jun-23
Date Reported		26-Jun-26	26-Jun-23
Sampling Depth (mbgs)		0-0.6	0-0.6
Analytical Report Reference No.		R7652914 VWC076	R7652914 VWC077
Acenaphthene	0.072	<0.0050	<0.0050
Acenaphthylene	0.093	<0.0050	<0.0050
Anthracene	0.16	<0.0050	<0.0050
Benzo(a)anthracene	0.36	<0.0050	0.0061
Benzo(a)pyrene	0.3	<0.0050	0.0078
Benzo(b/j)fluoranthene	0.47	<0.0050	0.013
Benzo(ghi)perylene	0.68	<0.0050	0.0071
Benzo(k)fluoranthene	0.48	<0.0050	<0.0050
Chrysene	2.8	<0.0050	0.0068
Dibenzo(a,h)anthracene	0.1	<0.0050	<0.0050
Fluoranthene	0.56	0.0058	0.014
Fluorene	0.12	<0.0050	<0.0050
Indeno(1,2,3-cd)pyrene	0.23	<0.0050	0.0066
Naphthalene	0.09	<0.0050	<0.0050
Phenanthrene	0.69	<0.0050	0.0055
Pyrene	1	<0.0050	0.012
Methylnaphthalene, 2-(1-)	0.59	<0.0071	<0.0071

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 9: Summary of OCPs in Soil

Parameter	MECP Table 1 RPIICC	BH23-4	BH23-5	BH23-6
Date of Collection		14-Jun-23	14-Jun-12	14-Jun-23
Date Reported		26-Jun-23	26-Jun-23	26-Jun-23
Screen Interval (mbgs)		0-0.3	0-0.3	0-0.3
Analytical Report Reference No.		R7652914 VWC072	R7652914 VWC073	R7652914 VWC074
Aldrin	0.05	<0.010	<0.0020	<0.010
Chlordane (total)	0.05	<0.010	<0.0020	<0.010
DDD (total)	0.05	<0.010	<0.0020	<0.010
DDE (total)	0.05	<0.010	0.0051	0.05
DDT (total)	1.4	<0.010	0.0032	0.014
Dieldrin	0.05	<0.010	<0.0020	<0.010
Total Endosulphan	0.04	<0.010	<0.0020	<0.010
Endrin	0.04	<0.010	<0.0020	<0.010
Heptachlor	0.05	<0.010	<0.0020	<0.010
Heptachlor Epoxide	0.05	<0.010	<0.0020	<0.010
Lindane	0.01	<0.010	<0.0020	<0.010
Methoxychlor	0.05	<0.025	<0.0050	<0.025
Total PCB	0.3	<0.075	<0.015	<0.075
Hexachlorobenzene	0.01	<0.010	<0.0020	<0.010
Hexachlorobutadiene	0.01	<0.010	<0.0020	<0.010
Hexachloroethane	0.01	<0.010	<0.0020	<0.010

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 10: Summary of Metals and ORPs in Groundwater

Parameter	MECP Table 1 RPIICC	MW23-1	MW23-2
Date of Collection		26-May-23	26-May-23
Date Reported		05-Jun-23	05-Jun-23
Screen Interval (mbgs)		4.6-7.6	4.6-7.6
Analytical Report Reference No.		R7658306 VXU623	R7658306 VXU625
Antimony	1.5	<0.50	<0.50
Arsenic	13	<1.0	<1.0
Barium	610	120	36
Beryllium	0.5	<0.40	<0.40
Boron	1700	38	27
Cadmium	0.5	<0.090	<0.090
Chromium	11	<5.0	<5.0
Chromium VI	25	<0.50	0.54
Cobalt	3.8	<0.50	<0.50
Copper	5	0.91	1.1
Lead	1.9	<0.50	<0.50
Mercury	0.1	<0.10	<0.10
Molybdenum	23	<0.50	<0.50
Nickel	14	1.4	1
Sodium	490000	**780000**	400000
Selenium	5	<2.0	<2.0
Silver	0.3	<0.090	<0.090
Thallium	0.5	<0.050	<0.050
Vanadium	3.9	<0.50	<0.50
Zinc	160	<5.0	<5.0
Cyanide, Free	5	1	2
Chloride (mg/L)	790	**1200**	430
Uranium	8.9	0.45	0.28

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 11: Summary of PHCs in Groundwater

Parameter	MECP Table 1 RPIICC	MW23-2	MW23-3
Date of Collection		26-May-23	26-May-23
Date Reported		05-Jun-23	05-Jun-23
Screen Interval (mbgs)		4.6-7.6	4.6-7.6
Analytical Report Reference No.		R7658306 VXU625	R7658306 VXU624
Benzene	0.5	<0.17	<0.17
Ethylbenzene	0.5	<0.40	<0.40
Toluene	0.8	<0.20	<0.20
Xylenes (Total)	72	<0.20	<0.20
F1 (C6 to C10) minus BTEX	420	< 25	< 25
F2 (C10 to C16)	150	< 100	< 100
F3 (C16 to C34)	500	< 200	< 200
F4 (C34 to C50) minus PAHs	500	< 200	< 200

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 12: Summary of VOCs in Groundwater

Parameter	MECP Table 1 RPIICC	MW23-2	MW23-3	DUP-1 (MW23-2)
Date of Collection		26-May-23	26-May-23	26-May-23
Date Reported		05-Jun-23	05-Jun-23	05-Jun-23
Screen Interval (mbgs)		4.6-7.6	4.6-7.6	4.6-7.6
Analytical Report Reference No.		R7658306 VXU625	R7658306 VXU624	R7658306 VXU626
Acetone	0.5	<10	<10	<10
Benzene	0.02	<0.17	<0.17	<0.20
Bromodichloromethane	0.05	<0.50	<0.50	<0.50
Bromoform	0.05	<1.0	<1.0	<1.0
Bromomethane	0.05	<0.50	<0.50	<0.50
Carbon Tetrachloride	0.05	<0.20	<0.20	<0.19
Chlorobenzene	0.05	<0.20	<0.20	<0.20
Chloroform	0.05	<0.20	<0.20	<0.20
Dibromochloromethane	0.05	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	0.05	<0.50	<0.50	<0.40
1,3-Dichlorobenzene	0.05	<0.50	<0.50	<0.40
1,4-Dichlorobenzene	0.05	<0.50	<0.50	<0.40
1,1-Dichloroethane	0.05	<0.20	<0.20	<0.20
1,2-Dichloroethane	0.05	<0.50	<0.50	<0.49
1,1-Dichloroethylene	0.05	<0.20	<0.20	<0.20
Cis-1,2-Dichloroethylene	0.05	<0.50	<0.50	<0.50
Trans-1,2-Dichloroethylene	0.05	<0.50	<0.50	<0.50
1,2-Dichloropropane	0.05	<0.20	<0.20	<0.20
Ethylbenzene	0.05	<0.20	<0.20	<0.20
Ethylene Dibromide	0.05	<0.20	<0.20	<0.19
Methyl Ethyl Ketone	0.5	<10	<10	<10
Methylene Chloride	0.05	<2.0	<2.0	<2.0
Methyl Isobutyl Ketone	0.5	<5.0	<5.0	<5.0
Methyl-t-Butyl Ether	0.05	<0.50	<0.50	<0.50
Styrene	0.05	<0.50	<0.50	<0.40
1,1,1,2-Tetrachloroethane	0.05	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	0.05	<0.50	<0.50	<0.40
Toluene	0.2	<0.20	<0.20	<0.20
Tetrachloroethylene	0.05	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	0.05	<0.20	<0.20	<0.20
1,1,2-Trichloroethane	0.05	<0.50	<0.50	<0.40
Trichloroethylene	0.05	<0.20	<0.20	<0.20
Vinyl Chloride	0.02	<0.20	<0.20	<0.20
Total Xylenes	0.05	<0.20	<0.20	<0.20
Dichlorodifluoromethane	0.05	<1.0	<1.0	<1.0
Hexane(n)	0.05	<1.0	<1.0	<1.0
Trichlorofluoromethane	0.05	<0.50	<0.50	<0.50
1,3-Dichloropropene (cis + trans)	0.05	<0.50	<0.50	<0.50

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 13:Summary of PAHs in Groundwater

Parameter	MECP Table 1 RPIICC	MW23-1	MW23-2
Date of Collection		26-May-23	26-May-23
Date Reported		05-Jun-23	05-Jun-23
Screen Interval (mbgs)		4.6-7.6	4.6-7.6
Analytical Report Reference No.		R7658306 VXU623	R7658306 VXU625
Acenaphthene	4.1	<0.050	<0.050
Acenaphthylene	1	<0.050	<0.050
Anthracene	0.1	<0.050	<0.050
Benzo(a)anthracene	0.2	<0.050	<0.050
Benzo(a)pyrene	0.01	<0.0090	<0.0090
Benzo(b/j)fluoranthene	0.1	<0.050	<0.050
Benzo(ghi)perylene	0.2	<0.050	<0.050
Benzo(k)fluoranthene	0.1	<0.050	<0.050
Chrysene	0.1	<0.050	<0.050
Dibenzo(a,h)anthracene	0.2	<0.050	<0.050
Fluoranthene	0.4	<0.050	<0.050
Fluorene	120	<0.050	<0.050
Indeno(1,2,3-cd)pyrene	0.2	<0.050	<0.050
Naphthalene	7	<0.050	<0.050
Phenanthrene	0.1	<0.030	<0.030
Pyrene	0.2	<0.050	<0.050
Methylnaphthalene, 2-(1-)	2	<0.071	<0.071

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section.

Table 14: Summary of Maximum Concentrations in Soil

Parameter		Standard	Maximum Concentration	Location
Metals and ORPs	Antimony	1.3	0.4	BH23-4
	Arsenic	18	7.3	BH23-5
	Barium	220	43	BH23-5
	Beryllium	2.5	0.59	BH23-1 SS1
	Boron (Hot Water Soluble)	NV	0.85	BH23-8
	Cadmium	1.2	0.35	BH23-4
	Chromium	70	20	BH23-1 SS1
	Chromium VI	0.66	0.44	BH23-1 SS1
	Cobalt	21	11	BH23-7
	Copper	92	49	BH23-1 SS3
	Lead	120	82	BH23-4
	Mercury	0.27	<0.050	All Samples
	Molybdenum	2	0.76	BH23-4
	Nickel	82	23	BH23-2 SS4
	Selenium	1.5	<0.50	All Samples
	Silver	0.5	<0.20	All Samples
	Thallium	1	0.099	BH23-5
	Vanadium	86	28	BH23-1 SS1
	Zinc	290	110	BH23-4
	pH (pH Units)	NV	8.26	BH23-2 SS4
	Conductivity (ms/cm)	0.57	**2.3**	BH23-2 SS1
	Sodium Adsorption Ratio	2.4	**55**	BH23-2 SS1
	Cyanide, Free	0.051	<0.01	All Samples
	Boron (Total)	36	9.9	BH23-4
	Uranium	2.5	0.48	BH23-1 SS1
PHCs+BTEX	Benzene	0.02	<0.0060	All Samples
	Ethylbenzene	0.05	<0.010	All Samples
	Toluene	0.2	<0.020	All Samples
	Xylenes (Total)	0.05	<0.020	All Samples
	F1 (C6-C10) -BTEX	25	<10	All Samples
	F2 (C10-C16)	10	<10	All Samples
	F3 (C16-C34)	240	<50	All Samples
	F4 (C34-C50)	120	99	DUP-3(BH23-2 SS2)
VOCs	Acetone	0.5	<0.49	All Samples
	Bromodichloromethane	0.05	<0.040	All Samples
	Bromoform	0.05	<0.040	All Samples
	Bromomethane	0.05	<0.040	All Samples
	Carbon Tetrachloride	0.05	<0.040	All Samples
	Chlorobenzene	0.05	<0.040	All Samples
	Chloroform	0.05	<0.040	All Samples
	Dibromochloromethane	0.05	<0.040	All Samples
	1,2-Dichlorobenzene	0.05	<0.040	All Samples
	1,3-Dichlorobenzene	0.05	<0.040	All Samples

Table 14: Summary of Maximum Concentrations in Soil

Parameter		Standard	Maximum Concentration	Location
VOCs	1,4-Dichlorobenzene	0.05	<0.040	All Samples
	1,1-Dichloroethane	0.05	<0.040	All Samples
	1,2-Dichloroethane	0.05	<0.049	All Samples
	1,1-Dichloroethylene	0.05	<0.040	All Samples
	Cis-1,2-Dichloroethylene	0.05	<0.040	All Samples
	Trans-1,2-Dichloroethylene	0.05	<0.040	All Samples
	1,2-Dichloropropane	0.05	<0.040	All Samples
	Cis-1,3-Dichloropropylene	NV	<0.030	All Samples
	Trans-1,3-Dichloropropylene	NV	<0.040	All Samples
	Ethylene Dibromide	0.05	<0.040	All Samples
	Methyl Ethyl Ketone	0.5	<0.40	All Samples
	Methylene Chloride	0.05	<0.049	All Samples
	Methyl Isobutyl Ketone	0.5	<0.40	All Samples
	Methyl-t-Butyl Ether	0.05	<0.040	All Samples
	Styrene	0.05	<0.040	All Samples
	1,1,1,2-Tetrachloroethane	0.05	<0.040	All Samples
	1,1,2,2-Tetrachloroethane	0.05	<0.040	All Samples
	Tetrachloroethylene	0.05	<0.040	All Samples
	1,1,1-Trichloroethane	0.05	<0.040	All Samples
	1,1,2-Trichloroethane	0.05	<0.040	All Samples
	Trichloroethylene	0.05	<0.010	All Samples
	Vinyl Chloride	0.02	<0.019	All Samples
	Dichlorodifluoromethane	0.05	<0.040	All Samples
	Hexane(n)	0.05	<0.040	All Samples
	Trichlorofluoromethane	0.05	<0.040	All Samples
	1,3-Dichloropropene (cis + trans)	0.05	<0.050	All Samples
PAHs	Acenaphthene	0.072	<0.0050	All Samples
	Acenaphthylene	0.093	<0.0050	All Samples
	Anthracene	0.16	<0.0050	All Samples
	Benzo(a)anthracene	0.36	0.0089	BH23-2 SS4
	Benzo(a)pyrene	0.3	0.01	BH23-2 SS4
	Benzo(b/j)fluoranthene	0.47	0.015	BH23-2 SS4
	Benzo(ghi)perylene	0.68	0.011	BH23-2 SS4
	Benzo(k)fluoranthene	0.48	0.0051	BH23-2 SS4
	Chrysene	2.8	0.011	BH23-2 SS4
	Dibenzo(a,h)anthracene	0.1	<0.0050	All Samples
	Fluoranthene	0.56	0.032	BH23-2 SS4
	Fluorene	0.12	<0.0050	All Samples
	Indeno(1,2,3-cd)pyrene	0.23	0.0083	BH23-2 SS4
	Naphthalene	0.09	<0.0050	All Samples
	Phenanthrene	0.69	0.021	BH23-2 SS4
	Pyrene	1	0.024	BH23-2 SS4
	Methylnaphthalene, 2-(1-)	0.59	<0.0071	BH23-2 SS4

Table 14: Summary of Maximum Concentrations in Soil

Parameter		Standard	Maximum Concentration	Location
OCPs	Aldrin	0.05	<0.010	All Samples
	Chlordane (total)	0.05	<0.010	All Samples
	DDD (total)	0.05	<0.010	All Samples
	DDE (total)	0.05	0.05	BH23-6
	DDT (total)	1.4	0.014	BH23-6
	Dieldrin	0.05	<0.010	All Samples
	Total Endosulphan	0.04	<0.010	All Samples
	Endrin	0.04	<0.010	All Samples
	Heptachlor	0.05	<0.010	All Samples
	Heptachlor Epoxide	0.05	<0.010	All Samples
	Lindane	0.01	<0.010	All Samples
	Methoxychlor	0.05	<0.025	All Samples
	Total PCB	0.3	<0.075	All Samples
	Hexachlorobenzene	0.01	<0.010	All Samples
	Hexachlorobutadiene	0.01	<0.010	All Samples
	Hexachloroethane	0.01	<0.010	All Samples

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section

Table 15: Summary of Maximum Concentrations in Groundwater

Parameter		Standard	Maximum Concentration	Location
Metals and ORPs	Antimony	1.5	<0.50	All Samples
	Arsenic	13	<1.0	All Samples
	Barium	610	120	MW23-1
	Beryllium	0.5	<0.40	All Samples
	Boron	1700	38	MW23-1
	Cadmium	0.5	<0.090	All Samples
	Chromium	11	<5.0	All Samples
	Chromium VI	25	0.54	MW23-2
	Cobalt	3.8	<0.50	All Samples
	Copper	5	1.1	MW23-2
	Lead	1.9	<0.50	All Samples
	Mercury	0.1	<0.10	All Samples
	Molybdenum	23	<0.50	All Samples
	Nickel	14	1.4	MW23-1
	Sodium	490000	**780000**	MW23-1
	Selenium	5	<2.0	All Samples
	Silver	0.3	<0.090	All Samples
	Thallium	0.5	<0.050	All Samples
	Vanadium	3.9	<0.50	All Samples
	Zinc	160	<5.0	All Samples
	Cyanide, Free	5	2	MW23-2
	Chloride (mg/L)	790	**1200**	MW23-1
	Uranium	8.9	0.45	MW23-1
PHCs + BTEX	Benzene	0.5	<0.17	All Samples
	Ethylbenzene	0.5	<0.40	All Samples
	Toluene	0.8	<0.20	All Samples
	Xylenes (Total)	72	<0.20	All Samples
	F1 (C6 to C10) minus BTEX	420	< 25	All Samples
	F2 (C10 to C16)	150	< 100	All Samples
	F3 (C16 to C34)	500	< 200	All Samples
	F4 (C34 to C50) minus PAHs	500	< 200	All Samples
VOCs	Acetone	0.5	<10	All Samples
	Benzene	0.02	<0.17	All Samples
	Bromodichloromethane	0.05	<0.50	All Samples
	Bromoform	0.05	<1.0	All Samples
	Bromomethane	0.05	<0.50	All Samples
	Carbon Tetrachloride	0.05	<0.20	All Samples
	Chlorobenzene	0.05	<0.20	All Samples
	Chloroform	0.05	<0.20	All Samples
	Dibromochloromethane	0.05	<0.50	All Samples
	1,2-Dichlorobenzene	0.05	<0.50	All Samples
	1,3-Dichlorobenzene	0.05	<0.50	All Samples
	1,4-Dichlorobenzene	0.05	<0.50	All Samples
	1,1-Dichloroethane	0.05	<0.20	All Samples
	1,2-Dichloroethane	0.05	<0.50	All Samples

Table 15: Summary of Maximum Concentrations in Groundwater

	Parameter	Standard	Maximum Concentration	Location
VOCs	1,1-Dichloroethylene	0.05	<0.20	All Samples
	Cis-1,2-Dichloroethylene	0.05	<0.50	All Samples
	Trans-1,2-Dichloroethylene	0.05	<0.50	All Samples
	1,2-Dichloropropane	0.05	<0.20	All Samples
	Ethylbenzene	0.05	<0.20	All Samples
	Ethylene Dibromide	0.05	<0.20	All Samples
	Methyl Ethyl Ketone	0.5	<10	All Samples
	Methylene Chloride	0.05	<2.0	All Samples
	Methyl Isobutyl Ketone	0.5	<5.0	All Samples
	Methyl-t-Butyl Ether	0.05	<0.50	All Samples
	Styrene	0.05	<0.50	All Samples
	1,1,1,2-Tetrachloroethane	0.05	<0.50	All Samples
	1,1,2,2-Tetrachloroethane	0.05	<0.50	All Samples
	Toluene	0.2	<0.20	All Samples
	Tetrachloroethylene	0.05	<0.20	All Samples
	1,1,1-Trichloroethane	0.05	<0.20	All Samples
	1,1,2-Trichloroethane	0.05	<0.50	All Samples
	Trichloroethylene	0.05	<0.20	All Samples
	Vinyl Chloride	0.02	<0.20	All Samples
	Total Xylenes	0.05	<0.20	All Samples
	Dichlorodifluoromethane	0.05	<1.0	All Samples
	Hexane(n)	0.05	<1.0	All Samples
	Trichlorofluoromethane	0.05	<0.50	All Samples
	1,3-Dichloropropene (cis + trans)	0.05	<0.50	All Samples
PAHs	Acenaphthene	4.1	<0.050	All Samples
	Acenaphthylene	1	<0.050	All Samples
	Anthracene	0.1	<0.050	All Samples
	Benzo(a)anthracene	0.2	<0.050	All Samples
	Benzo(a)pyrene	0.01	<0.0090	All Samples
	Benzo(b/j)fluoranthene	0.1	<0.050	All Samples
	Benzo(ghi)perylene	0.2	<0.050	All Samples
	Benzo(k)fluoranthene	0.1	<0.050	All Samples
	Chrysene	0.1	<0.050	All Samples
	Dibenzo(a,h)anthracene	0.2	<0.050	All Samples
	Fluoranthene	0.4	<0.050	All Samples
	Fluorene	120	<0.050	All Samples
	Indeno(1,2,3-cd)pyrene	0.2	<0.050	All Samples
	Naphthalene	7	<0.050	All Samples
	Phenanthrene	0.1	<0.030	All Samples
	Pyrene	0.2	<0.050	All Samples
	Methylnaphthalene, 2-(1-)	2	<0.071	All Samples

For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section

Notes for Soil and Groundwater Summary Tables

	For soil and groundwater analytical results, concentration exceeds the applicable Standards.
	For soil and groundwater analytical results, laboratory detection limits exceed the applicable Standards.
mbgs	Meters below ground surface
masl	Meters above sea level
MECP Table 1 SCS	Full Depth Background Site oOndition Standards forResidential/ Parkland/ Institutional/ Industrial/ Commercial/ Community Property USe as contained in Table 1 of the "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act", published by the MECP on April 15, 2011.
NM	Not Monitored
NA	Not Available
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
OCPs	Organochlorine Pesticides
ORPs	Other Regulated Parameters
PAHs	Polyaromatic Hydrocarbons
PHCs	Petroluem Hydrocarbons
VOCs	Volatile Organic Compounds
Units	Units for all soil analyses are in µg/g (ppm) unless otherwise indicated
Units	Units for all groundwater analyses are in µg/L (ppb) unless otherwise indicated
Bold	Parameter meets the applicable SCS as per Section 49.1(1) of O.Reg. 153/04

Appendix A

PLAN OF SURVEY OF
LOT 3, RANGE 1,
SOUTH OF DUNDAS STREET,
RACEY TRACT
(GEOGRAPHIC TOWNSHIP OF TORONTO)
CITY OF MISSISSAUGA
REGIONAL MUNICIPALITY OF PEEL

SCALE 1:750

15 0m 15 30m 45 60 metres

R-PE SURVEYING LTD., O.L.S.

DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

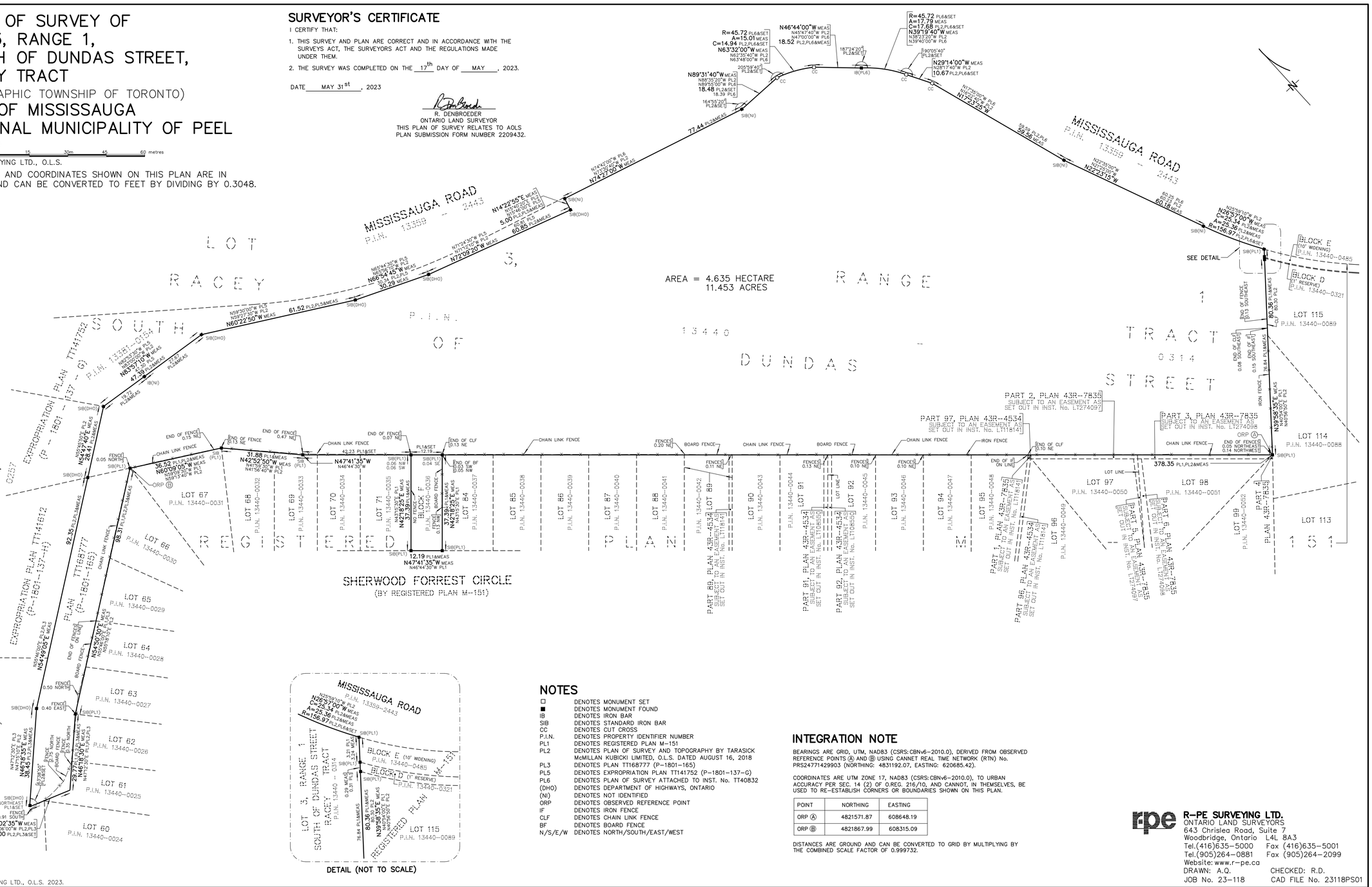
SURVEYOR'S CERTIFICATE

I CERTIFY THAT:

1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON THE 17th DAY OF MAY, 2023.

DATE MAY 31st, 2023

R. DENBROEDER
ONTARIO LAND SURVEYOR
THIS PLAN OF SURVEY RELATES TO AOLS PLAN SUBMISSION FORM NUMBER 2209432.



DETAIL (NOT TO SCALE)

NOTES

□	DENOTES MONUMENT SET
■	DENOTES MONUMENT FOUND
IB	DENOTES IRON BAR
SIB	DENOTES STANDARD IRON BAR
CC	DENOTES CUT CROSS
P.I.N.	DENOTES PROPERTY IDENTIFIER NUMBER
PL1	DENOTES REGISTERED PLAN M-151
PL2	DENOTES PLAN OF SURVEY AND TOPOGRAPHY BY TARASICK McMILLAN KUBICKI LIMITED, O.L.S. DATED AUGUST 16, 2018
PL3	DENOTES PLAN TT168777 (P-1801-165)
PL5	DENOTES EXPROPRIATION PLAN TT141752 (P-1801-137-G)
PL6	DENOTES PLAN OF SURVEY ATTACHED TO INST. No. TT40832
(DHO)	DENOTES DEPARTMENT OF HIGHWAYS, ONTARIO
(NI)	DENOTES NOT IDENTIFIED
ORP	DENOTES OBSERVED REFERENCE POINT
IF	DENOTES IRON FENCE
CLF	DENOTES CHAIN LINK FENCE
BF	DENOTES BOARD FENCE
N/S/E/W	DENOTES NORTH/SOUTH/EAST/WEST

INTEGRATION NOTE

BEARINGS ARE GRID, UTM, NAD83 (CSRS:CBNv6-2010.0), DERIVED FROM OBSERVED REFERENCE POINTS (A) AND (B) USING CANNET REAL TIME NETWORK (RTN) No. PRS24771429903 (NORTHING: 4831192.07, EASTING: 620685.42).

COORDINATES ARE UTM ZONE 17, NAD83 (CSRS:CBNv6-2010.0), TO URBAN ACCURACY PER SEC. 14 (2) OF O.REG. 216/10, AND CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.

POINT	NORTHING	EASTING
ORP (A)	4821571.87	608648.19
ORP (B)	4821867.99	608315.09

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999732.

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Website: www.r-pe.ca

DRAWN: A.Q. CHECKED: R.D.
JOB No. 23-118 CAD FILE No. 23118PS01

Appendix B

23-162-100 **May 1, 2023**

Argo Development Corporation
4900 Palladium Way, Unit 105
Burlington, Ontario
L7M 0W7
via email: tony@argoland.com

Attention: Tony Vella

Re: Sampling and Analysis Plan – Phase Two Environmental Site Assessment
1720 Sherwood Forrest Circle, Mississauga, ON

1. Introduction

DS Consultants Limited (DS) is pleased to present the Sampling and Analysis Plan (SAP) for the proposed Phase Two Environmental Site Assessment of 1720 Sherwood Forrest Circle, Mississauga, ON , (the Site). The purpose of the proposed Phase Two ESA program is to assess the current subsurface environmental conditions in support of the pre-purchase due diligence purposes and in support of the proposed redevelopment of the.

The Phase Two ESA will involve intrusive investigation in the areas determined in the Site visit to be Areas of Potential Environmental Concern (APECs), and will be completed in general accordance with O.Reg 153/04. Based on the findings of the field and laboratory analyses, a Phase Two ESA report will be prepared.

2. Background

Based on the Phase One Environmental Site Assessment completed by DS, it is DS's understanding that the Site is a 0.23 hectare (0.7 acres) parcel of land which is currently used for mixed residential purposes. The first developed use of the Site is interpreted to be Residential based on the findings of the Phase One ESA. A total of thirteen (13) potentially contaminating activities (PCAs) were identified on the Phase One Property or on neighbouring properties within the Phase One Study Area which are considered to be contributing to Areas of Potential Environmental Concern (APECs) on the Phase Two Property. A summary of the APECs identified, the potential contaminants of concern, and the media potentially impacted is presented in Table 1 below:

Table 1: Areas of Potential Environmental Concern

APEC	Location of APEC on Phase One Property	PCA	Location of PCA	COPCs	Media Potentially Impacted
APEC-1	Central and Southern Portions of the Site	#30: Importation of Fill Material of Unknown Quality	On Site **PCA-1**	PHCs, BTEX, Metals, As, Sb, Se, B-HWS, CN-, electrical conductivity, Cr (VI), Hg, low or high pH, SAR, PAHs	Soil
APEC-2	Central portion of the Site, 10 m east of Site Building A	#28: Gasoline and associated products storage in fixed tanks	On-Site **PCA-2**	PHCs, BTEX	Soil and groundwater
APEC-3	Northern portion of Site	#40: Pesticides (including herbicides, fungicides and anti-fouling agents) manufacturing, processing, bulk storage and large-scale applications.	On-Site **PCA-3**	OCPs, Metals, As, Sb, Se, CN-	Soil
APEC-4	Northern and central portions of Site	#N/S: Application of De-Icing Agents[1]	On-Site **PCA-4**	EC, SAR	Soil
				Na, Cl-	Groundwater
APEC-5	Central portion of the Site, approx. 25 m south of Site Building A	#30: Importation of Fill Material of Unknown Quality	On Site **PCA-9**	PHCs, BTEX, Metals, As, Sb, Se, B-HWS, CN-, electrical conductivity, Cr (VI), Hg, low or high pH, SAR, PAHs	Soil
APEC-6	Central Portion of the Site, approx. 50 m south of Site Building A	#30: Importation of Fill Material of Unknown Quality	On Site **PCA-10**		Soil
APEC-7	Central portion of the Site, 10 m east of Site Building A	#30: Importation of Fill Material of Unknown Quality	On Site **PCA-11**		Soil
APEC-8	Western Portion of the Site	#40: Pesticides (including herbicides, fungicides and anti-fouling agents) manufacturing, processing, bulk storage and large-scale applications.	On-Site **PCA-12**	OCPs, Metals, As, Sb, Se, CN-	Soil

N/S - not specified in Table 2, Schedule D, of O.Reg. 153/04

1 - The area is subject to the application of de-icing salts for road safety purposes. Per Section 49.1 (1) of O.Reg. 153/04 (as amended) "*If an applicable site condition standard is exceeded at a property solely because of one of the following reasons, the*

applicable site condition standard is deemed not to be exceeded for the purpose of Part XV.1 of the Act": "*…that a substance has been applied to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both*". Any potential impacts associated with sodium and/or chloride in groundwater will be deemed not to exceed the MECP Site Conditions Standards for the area identified in APEC-4.

Notes:

1. N/S - not specified in Table 2, Schedule D, of O.Reg. 153/04
2. PHC (F1-F4) = Petroleum Hydrocarbons in the F1-F4 fraction ranges
3. VOCs = Volatile Organic Compounds
4. PAHs = Polycyclic Aromatic Hydrocarbons
5. OCPs = Organochlorine Pesticides

3. Site Investigation Program

The proposed field investigation will involve the advancement of eight (8) boreholes and the installation of three (3). Details regarding the proposed boreholes/monitoring wells are provided in the following table:

Table 3-1: Summary of Proposed Investigation Program

ID	Proposed Depth	Well Installation (Y/N)	Well Install Depth	Purpose
BH/MW23-1	9.8 mbgs	Y	7.6 mbgs	Investigate soil and groundwater quality on site for APEC-1
BH/MW23-2	9.8 mbgs	Y	7.6 mbgs	Investigate soil and groundwater quality on site for APEC-1
BH/MW23-3	9.8 mbgs	Y	7.6 mbgs	Investigate soil and groundwater quality on site for APEC-1, 2, 7
BH23-4	0.6 mbgs	N	N/A	Investigate soil quality on site for APEC-2
BH23-5	0.6 mbgs	N	N/A	Investigate soil quality on site for APEC-2
BH23-6	0.6 mbgs	N	N/A	Investigate soil quality on site for APEC-8
BH23-7	0.6 mbgs	N	N/A	Investigate soil quality on site for APEC-1, 5
BH23-8	0.6 mbgs	N	N/A	Investigate soil quality on site for APEC-1, 6

Prior to mobilizing a drilling rig, we will lay out the proposed borehole and clear the buried utilities and services by using Ontario One Call System in addition to private utility locates.

The borings will be advanced to the indicated depths using a combination of a truck mounted continuous flight auger machine and portable drilling equipment (for BH/MW23-1, BH/MW23-2 and BH/MW23-3). Samples will be retrieved by means of a 50 mm O.D. split-spoon barrel sampler at 0.75 metre intervals in the upper 3 metres and at 1.5 metres intervals below this level. The monitoring wells will be constructed using 50 mm I.D. PVC pipe, equipped with 3.1 m slotted screens and finished at the ground surface with flush mount well casings. A handheld auger will be used to

retrieve the soil samples for BH23-4 through BH23-8. A geodetic benchmark will be used to establish the elevation of each borehole. Drilling and sampling will conform to standard practice.

The Phase Two ESA involves the following principal tasks:

- Preparation of a sampling and analysis plan in accordance with the requirements of O.Reg.153/04 (as amended);
- Retain the services of public and private utility locaters to identify the locations of buried and overhead utility services prior to any excavation or demolition activities;
    - Certain underground utilities (such as those constructed or encased in plastic, fibreglass, clay, concrete pipe, untraceable cast iron, steel, and/or repaired services) cannot be traced by standard locating practices. DS will review all available Site Plans and/or "As Built" figures in an attempt to identify the locations of potential untraceable services. DS will not be held responsible for any damages to utility services that are not on the figures provided or cannot be located by standard utility locating practices;
- Three (3) of the boreholes will be advanced for environmental purposes to a maximum depth of 9.8 metres below ground surface, or until the groundwater table is intercepted or sample/auger refusal is encountered. Each borehole will be instrumented with a groundwater monitoring well upon completion and screened to intersect the groundwater table. The proposed boreholes will be used to facilitate the collection of representative soil and groundwater samples, and to provide information regarding the Site-specific geological and hydrogeological conditions. The monitoring wells will be constructed using 50 mm I.D. PVC pipe, equipped with 3.1m slotted screens, and finished at the ground surface with monument style well casings;
- All soil samples recovered during the proposed drilling activities will be field screened for visual and olfactory evidence of deleterious impacts and for the presence of petroleum hydrocarbon (PHC) and volatile organic compound (VOC) derived vapours using either a combustible gas detector (CGD) calibrated to hexane or a photo-ionization detector (PID) calibrated to isobutylene or equivalent;
- Measure the depth to groundwater levels in the monitoring wells installed, and monitor the wells for the presence/absence of non-aqueous phase liquid using an interface probe;
- Survey each of the monitoring wells to a geodetic datum;
- Develop and purge all of the monitoring wells installed, and collect representative groundwater samples;

- Submit soil and groundwater samples from the newly advanced boreholes monitoring wells to a CALA accredited laboratory for the following analyses:

Soil	Groundwater
• 8 Samples for analysis of metals and inorganics • 3 Samples for analysis of metals, As, Sn, Se, CN- and OCPs • 8 Samples for analysis of PHCs • 8 Samples for analysis of VOCs • 8 Samples for analysis of PAHs • 2 Samples for pH analysis	• 2 Samples for analysis of metals and inorganics • 2 Samples for analysis of PHCs • 2 Samples for analysis of VOCs • 2 Samples for analysis of PAHs • 1 QAQC Duplicate • 1 VOC Trip Blank

- A Quality Assurance and Quality Control (QAQC) program will be implemented, involving the collection and analysis of duplicate soil and groundwater samples and trip blanks at the frequency specified under O.Reg. 153/04 (as amended);
- A Phase Two ESA Report will be prepared upon receipt of all analytical results and groundwater monitoring data. The Phase Two ESA Report will be completed in general accordance with O.Reg. 153/04 (as amended).

It should be noted that drilling activities may result in some disturbance to the ground surface at the site. Precautions will be taken by the drilling contractor to minimize any damage. The Client will be notified should there be cause to extend the borehole termination depth based on field observations. It is assumed that the site can be accessed at our convenience, during regular business hours. Prior notice will be sent to the client and site representative.

The SAP was created based on the request to complete a Phase Two ESA in support of the proposed redevelopment of the Site. The SAP was compiled to collect data to provide information on soil and/or groundwater quality in each APEC.

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

- Unexpected contamination not previously discovered, or not related to identified APECs, is discovered which will require further delineation to identify source(s); and
- If the sampling results indicate that the soil and/or groundwater impacts are deeper than initially expected.

4. Closure

We trust that this Sampling and Analysis Plan meets the objectives of the Client. If further assistance is required on this matter, please do not hesitate to contact the undersigned.

Yours Very Truly,

DS Consultants Ltd.

Rick Fioravanti, B.Sc., P.Geo., QP_{ESA}
Manager – Environmental Services

Appendix C

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LOG OF BOREHOLE BH/MW23-1

PROJECT: Phase Two Environmental Site Assessment
CLIENT: Argo Development Corporation
PROJECT LOCATION: 1720 Sherwood Forest Circle, Mississauga, ON
DATUM: Geodetic
BH LOCATION: Refer to Figure 5 N 4821781.876 E 608457.57

DRILLING DATA
Method: Hollow Stem Auger
Diameter: 200mm
Date: May-18-2023

REF. NO.: 23-162-100
ENCL NO.: 1

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES: NUMBER	TYPE	BLOWS 0.3 m "N"	GROUND WATER CONDITIONS	ELEVATION	Soil Head Space Vapors: PID (ppm)	CGD (ppm)	PLASTIC LIMIT W_P / NATURAL MOISTURE CONTENT W / LIQUID LIMIT W_L — WATER CONTENT (%)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
116.1								10 20 30 40	10 20 30 40	10 20 30			
116.0 0.1	**ASPHALT:** 50mm												
	FILLL: clayey silt, sand and trace gravel, brown, moist		SS	1	10								M&I, PAHs
1			SS	2	3		115						PHCs, VOCs
114.5													
1.5	**SAND AND GRAVEL:** some silt, trace clay, brown, moist		SS	3	23								M&I, PAHs
2							114						
			SS	4	54								
3							113						
			SS	5	50 for 5"								M&I
4							112						
			SS	6	24								
5							111						
								W. L. 110.8 masl May 23, 2023					
6 110.0							110						
6.1	**CLAYEY SILT:**trace gravel, grey, very moist to wet		SS	7	19								PHCs, VOCs
7							109						
			SS	8	32								
8							108						
9							107						
			SS	9	41								
106.3													
9.8	**END OF BOREHOLE:**												

Notes:
1) 50mm dia. monitoring well installed from 4.6 to 7.6 mbgs
2) Water Level Readings:

Date:	Water Level(mbgs):
May 23, 2023	5.25
May 26, 2023	5.26

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

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LOG OF BOREHOLE BH/MW23-2

PROJECT: Phase Two Environmental Site Assessment
CLIENT: Argo Development Corporation
PROJECT LOCATION: 1720 Sherwood Forest Circle, Mississauga, ON
DATUM: Geodetic
BH LOCATION: Refer to Figure 5 N 4821745.944 E 608534.447

DRILLING DATA
Method: Hollow Stem Auger
Diameter: 200mm
Date: May-18-2023

REF. NO.: 23-162-100
ENCL NO.: 2

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES: NUMBER	TYPE	BLOWS 0.3 m "N"	GROUND WATER CONDITIONS	ELEVATION	Soil Head Space Vapors: PID (ppm)	CGD (ppm)	PLASTIC LIMIT / NATURAL MOISTURE CONTENT / LIQUID LIMIT; WATER CONTENT (%)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
116.1													
116.0 / 0.1	**ASPHALT:** 50mm												
	FILLL: clayey silt, trace sand and gravel, trace silt, reddish brown, moist		SS	1	9		116						M&I, PAHs
	very moist at 0.6m		SS	2	3		115						PHCs, VOCs, PAHs
			SS	3	0		114						
113.0 / 3.1			SS	4	0								M&I, PAHs
	SAND AND GRAVEL: some silt, trace cobbles, brown		SS	5	11		113						M&I
			SS	6	32		112						
	wet at 5.8m					W. L. 110.5 masl May 23, 2023	111						
			SS	7	50 for 5"		110						PHCs, VOCs
108.5 / 7.6	**CLAYEY SILT:** trace gravel, grey, very moist		SS	8	38		109						
							108						
			SS	9	45		107						
106.3 / 9.8	**END OF BOREHOLE:**												

Notes:
1) 50mm dia. monitoring well installed from 4.6 to 7.6 mbgs
2) Water Level Readings:

Date:	Water Level(mbgs):
May 23, 2023	5.61
May 26, 2023	5.59

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

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LOG OF BOREHOLE BH/MW23-3

PROJECT: Phase Two Environmental Site Assessment
CLIENT: Argo Development Corporation
PROJECT LOCATION: 1720 Sherwood Forest Circle, Mississauga, ON
DATUM: Geodetic
BH LOCATION: Refer to Figure 5 N 4821757.115 E 608541.998

DRILLING DATA
Method: Hollow Stem Auger
Diameter: 200mm
Date: May-18-2023

REF. NO.: 23-162-100
ENCL NO.: 3

(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES: NUMBER	TYPE	"N" BLOWS 0.3 m	GROUND WATER CONDITIONS	ELEVATION	Soil Head Space Vapors: PID (ppm)	CGD (ppm)	PLASTIC LIMIT / NATURAL MOISTURE CONTENT / LIQUID LIMIT: w_P w w_L WATER CONTENT (%)	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
116.1 / 0.0	**ASPHALT:** 50mm						116						
116.0 / 0.1	**FILL:** silty sand, trace gravel, trace clay, brown		SS	1	23								M&I, PAHs
1			SS	2	15		115						PHCs, VOCs
	very moist at 1.2m												
2	sandy silt, trace clay and gravel at 1.8m		SS	3	21								M&I, PAHs
113.8 / 2.3	**SAND AND GRAVEL:** trace silt, trace cobbles, brown, moist to very moist		SS	4	8		114						
3							113						
			SS	5	6								
4							112						
5			SS	6	9								
							111						
6	wet at 5.8m							W. L. 110.5 masl May 23, 2023					
			SS	7	16		110						PHCs, VOCs
7							109						
108.5 / 7.6	**CLAYEY SILT:** gravel, grey, very moist		SS	8	50/ 100mm								
8							108						
9													
			SS	9	92		107						
106.3 / 9.8	**END OF BOREHOLE:**												

Notes:
1) 50mm dia. monitoring well installed from 4.6 to 7.6 mbgs
2) Water Level Readings:

Date:	Water Level(mbgs):
May 23, 2023	5.66
May 26, 2023	5.64

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

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LOG OF BOREHOLE BH23-4

PROJECT: Phase Two Environmental Site Assessment
CLIENT: Argo Development Corporation
PROJECT LOCATION: 1720 Sherwood Forest Circle, Mississauga, ON
DATUM: Geodetic
BH LOCATION: Refer to Figure 5 N 4821818 E 608231

DRILLING DATA
Method: Hollow Stem Auger
Diameter: 200mm
Date: Jun-14-2023

REF. NO.: 23-162-100
ENCL NO.: 4

SOIL PROFILE			SAMPLES			GROUND WATER CONDITIONS	ELEVATION	Soil Head Space Vapors		PLASTIC LIMIT / NATURAL MOISTURE CONTENT / LIQUID LIMIT	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%)
(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	BLOWS / 0.3 m "N"			PID (ppm)	CGD (ppm)	W_P — W — W_L ; WATER CONTENT (%)			GR SA SI CL
116.1								10 20 30 40	10 20 30 40	10 20 30			
116.0 0.0	**TOPSOIL:** 100mm												
0.1 115.8	**FILL:** clayey silt, trace gravel, trace rootlets, brown						116						OCPs, Metals, AS, Se, Sn, CN-
0.3	**END OF BOREHOLE:**												

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

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LOG OF BOREHOLE BH23-5

PROJECT: Phase Two Environmental Site Assessment
CLIENT: Argo Development Corporation
PROJECT LOCATION: 1720 Sherwood Forest Circle, Mississauga, ON
DATUM: Geodetic
BH LOCATION: Refer to Figure 5 N 4821866 E 608333

DRILLING DATA
Method: Hand Auger
Diameter:
Date: Jun-14-2023

REF. NO.: 23-162-100
ENCL NO.: 5

SOIL PROFILE			SAMPLES									
(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	"N" BLOWS 0.3 m	GROUND WATER CONDITIONS	ELEVATION	Soil Head Space Vapors: PID (ppm) 10 20 30 40	Soil Head Space Vapors: CGD (ppm) 10 20 30 40	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L; WATER CONTENT (%) 10 20 30	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
116.1 / 0.0	**TOPSOIL:** 100mm												
115.9 / 0.1	**FILL:** clayey silt, trace gravel, trace rootlets, brown						116						OCPs, Metals, AS, Se, Sn, CN-
115.8 / 0.3	**END OF BOREHOLE:**												

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GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

GRAPH NOTES: $+^3$, $\times^3$: Numbers refer to Sensitivity; ○ ε=3% Strain at Failure

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LOG OF BOREHOLE BH23-6

PROJECT: Phase Two Environmental Site Assessment
CLIENT: Argo Development Corporation
PROJECT LOCATION: 1720 Sherwood Forest Circle, Mississauga, ON
DATUM: Geodetic
BH LOCATION: Refer to Figure 5 N 4821777 E 608399

DRILLING DATA
Method: Hand Auger
Diameter:
Date: Jun-14-2023

REF. NO.: 23-162-100
ENCL NO.: 6

SOIL PROFILE			SAMPLES											
(m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	NUMBER	TYPE	"N" BLOWS / 0.3 m	GROUND WATER CONDITIONS	ELEVATION	Soil Head Space Vapors PID (ppm) 10 20 30 40	Soil Head Space Vapors CGD (ppm) 10 20 30 40	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L WATER CONTENT (%) 10 20 30	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
116.2													
116.0 0.0	**TOPSOIL:** 100mm												OCPs, Metals, AS, Se, Sn, CN-
0.1 115.9	**FILL:** clayey silt, trace gravel, trace rootlets, brown						116						
0.3	**END OF BOREHOLE:**												

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GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

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LOG OF BOREHOLE BH23-7

PROJECT: Phase Two Environmental Site Assessment
CLIENT: Argo Development Corporation
PROJECT LOCATION: 1720 Sherwood Forest Circle, Mississauga, ON
DATUM: Geodetic
BH LOCATION: Refer to Figure 5 N 4821684 E 608582

DRILLING DATA
Method: Hand Auger
Diameter:
Date: Jun-14-2023

REF. NO.: 23-162-100
ENCL NO.: 7

SOIL PROFILE (m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES "N" BLOWS / 0.3 m	GROUND WATER CONDITIONS	ELEVATION	Soil Head Space Vapors PID (ppm) 10 20 30 40	Soil Head Space Vapors CGD (ppm) 10 20 30 40	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L WATER CONTENT (%) 10 20 30	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
115.9 0.0	**TOPSOIL:** 100mm												M&I, PHCs, VOCs, PAHs
0.1 115.3	**FILL:** clayey silt, trace gravel, trace rootlets, brown												
0.6	**END OF BOREHOLE:**												

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

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LOG OF BOREHOLE BH23-8

PROJECT: Phase Two Environmental Site Assessment
CLIENT: Argo Development Corporation
PROJECT LOCATION: 1720 Sherwood Forest Circle, Mississauga, ON
DATUM: Geodetic
BH LOCATION: Refer to Figure 5 N 4821692 E 608622

DRILLING DATA
Method: Hand Auger
Diameter:
Date: Jun-14-2023

REF. NO.: 23-162-100
ENCL NO.: 8

SOIL PROFILE (m) ELEV / DEPTH	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES "N" BLOWS / 0.3 m	GROUND WATER CONDITIONS	ELEVATION	Soil Head Space Vapors PID (ppm) 10 20 30 40	Soil Head Space Vapors CGD (ppm) 10 20 30 40	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L WATER CONTENT (%) 10 20 30	POCKET PEN. (Cu) (kPa)	NATURAL UNIT WT (kN/m³)	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
115.9 0.0	**TOPSOIL:** 100mm												M&I, PHCs, VOCs, PAHs
0.1 115.3	**FILL:** clayey silt, trace gravel, some coobles, trace rootlets, brown												
0.6	**END OF BOREHOLE:**												

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

DS ENVIRO 0~50 PPM-2021 23-162-100 ENV.GPJ DS.GDT 23-7-12

Appendix D

Your Project #: 23-162-100
Your C.O.C. #: 929924-29-01

Attention: John Gaviria-Ballen

DS Consultants Limited
6221 Highway 7, Unit 16
Vaughan, ON
CANADA L4H 0K8

Report Date: 2023/06/01
Report #: R7652914
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3E3953
Received: 2023/05/18, 17:47

Sample Matrix: Soil
Samples Received: 17

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum	6	N/A	2023/05/26	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron	1	2023/05/24	2023/05/24	CAM SOP-00408	R153 Ana. Prot. 2011
Hot Water Extractable Boron	2	2023/05/24	2023/05/25	CAM SOP-00408	R153 Ana. Prot. 2011
Hot Water Extractable Boron	4	2023/05/24	2023/05/30	CAM SOP-00408	R153 Ana. Prot. 2011
1,3-Dichloropropene Sum	6	N/A	2023/05/25		EPA 8260C m
Free (WAD) Cyanide	7	2023/05/24	2023/05/24	CAM SOP-00457	OMOE E3015 m
Conductivity	3	2023/05/24	2023/05/24	CAM SOP-00414	OMOE E3530 v1 m
Conductivity	4	2023/05/25	2023/05/25	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1)	6	2023/05/24	2023/05/25	CAM SOP-00436	EPA 3060A/7199 m
Hexavalent Chromium in Soil by IC (1)	1	2023/05/25	2023/05/25	CAM SOP-00436	EPA 3060A/7199 m
Petroleum Hydro. CCME F1 & BTEX in Soil (2)	1	N/A	2023/05/25	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Soil (3)	7	2023/05/24	2023/05/25	CAM SOP-00316	CCME CWS m
Acid Extractable Metals by ICPMS	2	2023/05/24	2023/05/24	CAM SOP-00447	EPA 6020B m
Acid Extractable Metals by ICPMS	5	2023/05/24	2023/05/25	CAM SOP-00447	EPA 6020B m
Moisture	14	N/A	2023/05/20	CAM SOP-00445	Carter 2nd ed 51.2 m
PAH Compounds in Soil by GC/MS (SIM)	6	2023/05/24	2023/05/25	CAM SOP-00318	EPA 8270E
pH CaCl2 EXTRACT	10	2023/05/25	2023/05/25	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR)	7	N/A	2023/05/26	CAM SOP-00102	EPA 6010C
Volatile Organic Compounds and F1 PHCs	6	N/A	2023/05/24	CAM SOP-00230	EPA 8260C m

Remarks:

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

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

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report.

Your Project #: 23-162-100
Your C.O.C. #: 929924-29-01

Attention: John Gaviria-Ballen

DS Consultants Limited
6221 Highway 7, Unit 16
Vaughan, ON
CANADA L4H 0K8

Report Date: 2023/06/01
Report #: R7652914
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3E3953
Received: 2023/05/18, 17:47

Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

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

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Soils are reported on a dry weight basis unless otherwise specified.
(2) No lab extraction date is given for F1BTEX & VOC samples that are field preserved with methanol. Extraction date is the date sampled unless otherwise stated.
(3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key

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

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

O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID			VWC035	VWC037		VWC042		
Sampling Date			2023/05/18	2023/05/18		2023/05/18		
COC Number			929924-29-01	929924-29-01		929924-29-01		
	UNITS	Criteria	BH23-1 SS1	BH23-1 SS3	QC Batch	BH23-2 SS1	RDL	QC Batch
Calculated Parameters								
Sodium Adsorption Ratio	N/A	5.0	**43**	**36**	8674590	**55**		8674590
Inorganics								
Conductivity	mS/cm	0.7	**1.6**	**1.6**	8681284	**2.3**	0.002	8683629
Available (CaCl2) pH	pH	-	7.92	7.97	8683683	7.77		8683683
WAD Cyanide (Free)	ug/g	0.051	<0.01	<0.01	8681425	<0.01	0.01	8681425
Chromium (VI)	ug/g	8	0.44	<0.18	8681115	0.20	0.18	8683572
Metals								
Hot Water Ext. Boron (B)	ug/g	1.5	0.060	0.060	8680803	0.14	0.050	8680803
Acid Extractable Antimony (Sb)	ug/g	7.5	0.22	<0.20	8680825	<0.20	0.20	8680753
Acid Extractable Arsenic (As)	ug/g	18	4.9	4.5	8680825	3.7	1.0	8680753
Acid Extractable Barium (Ba)	ug/g	390	35	34	8680825	25	0.50	8680753
Acid Extractable Beryllium (Be)	ug/g	4	0.59	0.39	8680825	0.50	0.20	8680753
Acid Extractable Boron (B)	ug/g	120	6.2	<5.0	8680825	<5.0	5.0	8680753
Acid Extractable Cadmium (Cd)	ug/g	1.2	<0.10	0.12	8680825	<0.10	0.10	8680753
Acid Extractable Chromium (Cr)	ug/g	160	20	12	8680825	18	1.0	8680753
Acid Extractable Cobalt (Co)	ug/g	22	10	6.7	8680825	10	0.10	8680753
Acid Extractable Copper (Cu)	ug/g	140	26	49	8680825	18	0.50	8680753
Acid Extractable Lead (Pb)	ug/g	120	8.4	7.7	8680825	8.6	1.0	8680753
Acid Extractable Molybdenum (Mo)	ug/g	6.9	<0.50	<0.50	8680825	<0.50	0.50	8680753
Acid Extractable Nickel (Ni)	ug/g	100	20	17	8680825	19	0.50	8680753
Acid Extractable Selenium (Se)	ug/g	2.4	<0.50	<0.50	8680825	<0.50	0.50	8680753
Acid Extractable Silver (Ag)	ug/g	20	<0.20	<0.20	8680825	<0.20	0.20	8680753
Acid Extractable Thallium (Tl)	ug/g	1	0.094	0.077	8680825	0.078	0.050	8680753
Acid Extractable Uranium (U)	ug/g	23	0.48	0.37	8680825	0.37	0.050	8680753
Acid Extractable Vanadium (V)	ug/g	86	28	20	8680825	24	5.0	8680753
Acid Extractable Zinc (Zn)	ug/g	340	49	41	8680825	52	5.0	8680753
Acid Extractable Mercury (Hg)	ug/g	0.27	<0.050	<0.050	8680825	<0.050	0.050	8680753

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

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

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O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID			VWC042			VWC044		VWC048		
Sampling Date			2023/05/18			2023/05/18		2023/05/18		
COC Number			929924-29-01			929924-29-01		929924-29-01		
	UNITS	Criteria	BH23-2 SS1 Lab-Dup	RDL	QC Batch	BH23-2 SS4	QC Batch	BH23-3 SS1	RDL	QC Batch
Calculated Parameters										
Sodium Adsorption Ratio	N/A	5.0				**30**	8674590	**7.4**		8674590
Inorganics										
Conductivity	mS/cm	0.7				**2.0**	8681284	0.34	0.002	8683714
Available (CaCl2) pH	pH	-				8.26	8683683	7.69		8683642
WAD Cyanide (Free)	ug/g	0.051				<0.01	8681425	<0.01	0.01	8681425
Chromium (VI)	ug/g	8	<0.18	0.18	8683572	0.35	8681115	<0.18	0.18	8681115
Metals										
Hot Water Ext. Boron (B)	ug/g	1.5				0.21	8680803	0.094	0.050	8680824
Acid Extractable Antimony (Sb)	ug/g	7.5				<0.20	8680753	<0.20	0.20	8680753
Acid Extractable Arsenic (As)	ug/g	18				4.6	8680753	3.0	1.0	8680753
Acid Extractable Barium (Ba)	ug/g	390				27	8680753	29	0.50	8680753
Acid Extractable Beryllium (Be)	ug/g	4				0.45	8680753	0.28	0.20	8680753
Acid Extractable Boron (B)	ug/g	120				<5.0	8680753	<5.0	5.0	8680753
Acid Extractable Cadmium (Cd)	ug/g	1.2				<0.10	8680753	<0.10	0.10	8680753
Acid Extractable Chromium (Cr)	ug/g	160				16	8680753	11	1.0	8680753
Acid Extractable Cobalt (Co)	ug/g	22				6.9	8680753	5.2	0.10	8680753
Acid Extractable Copper (Cu)	ug/g	140				32	8680753	20	0.50	8680753
Acid Extractable Lead (Pb)	ug/g	120				8.8	8680753	9.5	1.0	8680753
Acid Extractable Molybdenum (Mo)	ug/g	6.9				<0.50	8680753	<0.50	0.50	8680753
Acid Extractable Nickel (Ni)	ug/g	100				23	8680753	14	0.50	8680753
Acid Extractable Selenium (Se)	ug/g	2.4				<0.50	8680753	<0.50	0.50	8680753
Acid Extractable Silver (Ag)	ug/g	20				<0.20	8680753	<0.20	0.20	8680753
Acid Extractable Thallium (Tl)	ug/g	1				0.067	8680753	0.058	0.050	8680753
Acid Extractable Uranium (U)	ug/g	23				0.40	8680753	0.33	0.050	8680753
Acid Extractable Vanadium (V)	ug/g	86				23	8680753	20	5.0	8680753
Acid Extractable Zinc (Zn)	ug/g	340				41	8680753	36	5.0	8680753
Acid Extractable Mercury (Hg)	ug/g	0.27				<0.050	8680753	<0.050	0.050	8680753

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

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

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O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID			VWC048		VWC050		VWC055		
Sampling Date			2023/05/18		2023/05/18		2023/05/18		
COC Number			929924-29-01		929924-29-01		929924-29-01		
	UNITS	Criteria	BH23-3 SS1 Lab-Dup	QC Batch	BH23-3 SS3	QC Batch	DUP-1	RDL	QC Batch
Calculated Parameters									
Sodium Adsorption Ratio	N/A	5.0			4.2	8674590	4.9		8674590
Inorganics									
Conductivity	mS/cm	0.7			0.54	8683629	0.63	0.002	8683629
Available (CaCl2) pH	pH	-	7.62	8683642	7.79	8683683	7.73		8683683
WAD Cyanide (Free)	ug/g	0.051			<0.01	8681425	<0.01	0.01	8681425
Chromium (VI)	ug/g	8			<0.18	8681115	<0.18	0.18	8681115
Metals									
Hot Water Ext. Boron (B)	ug/g	1.5			0.12	8680824	0.091	0.050	8681006
Acid Extractable Antimony (Sb)	ug/g	7.5			<0.20	8680753	<0.20	0.20	8680753
Acid Extractable Arsenic (As)	ug/g	18			5.2	8680753	3.8	1.0	8680753
Acid Extractable Barium (Ba)	ug/g	390			27	8680753	27	0.50	8680753
Acid Extractable Beryllium (Be)	ug/g	4			0.30	8680753	0.35	0.20	8680753
Acid Extractable Boron (B)	ug/g	120			<5.0	8680753	<5.0	5.0	8680753
Acid Extractable Cadmium (Cd)	ug/g	1.2			<0.10	8680753	<0.10	0.10	8680753
Acid Extractable Chromium (Cr)	ug/g	160			13	8680753	13	1.0	8680753
Acid Extractable Cobalt (Co)	ug/g	22			6.5	8680753	6.9	0.10	8680753
Acid Extractable Copper (Cu)	ug/g	140			35	8680753	28	0.50	8680753
Acid Extractable Lead (Pb)	ug/g	120			10	8680753	7.7	1.0	8680753
Acid Extractable Molybdenum (Mo)	ug/g	6.9			<0.50	8680753	<0.50	0.50	8680753
Acid Extractable Nickel (Ni)	ug/g	100			14	8680753	14	0.50	8680753
Acid Extractable Selenium (Se)	ug/g	2.4			<0.50	8680753	<0.50	0.50	8680753
Acid Extractable Silver (Ag)	ug/g	20			<0.20	8680753	<0.20	0.20	8680753
Acid Extractable Thallium (Tl)	ug/g	1			0.083	8680753	0.076	0.050	8680753
Acid Extractable Uranium (U)	ug/g	23			0.39	8680753	0.34	0.050	8680753
Acid Extractable Vanadium (V)	ug/g	86			26	8680753	22	5.0	8680753
Acid Extractable Zinc (Zn)	ug/g	340			41	8680753	39	5.0	8680753
Acid Extractable Mercury (Hg)	ug/g	0.27			<0.050	8680753	<0.050	0.050	8680753

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

RDL = Reportable Detection Limit
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Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
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O.REG 153 PAHS (SOIL)

Bureau Veritas ID			VWC035	VWC037	VWC043	VWC044	VWC048		
Sampling Date			2023/05/18	2023/05/18	2023/05/18	2023/05/18	2023/05/18		
COC Number			929924-29-01	929924-29-01	929924-29-01	929924-29-01	929924-29-01		
	UNITS	Criteria	BH23-1 SS1	BH23-1 SS3	BH23-2 SS2	BH23-2 SS4	BH23-3 SS1	RDL	QC Batch
Calculated Parameters									
Methylnaphthalene, 2-(1-)	ug/g	-	<0.0071	<0.0071	<0.0071	<0.0071	<0.0071	0.0071	8675495
Polyaromatic Hydrocarbons									
Acenaphthene	ug/g	7.9	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8682034
Acenaphthylene	ug/g	0.15	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8682034
Anthracene	ug/g	0.67	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8682034
Benzo(a)anthracene	ug/g	0.5	<0.0050	<0.0050	<0.0050	0.0089	0.0055	0.0050	8682034
Benzo(a)pyrene	ug/g	0.3	<0.0050	0.0065	<0.0050	0.010	0.0065	0.0050	8682034
Benzo(b/j)fluoranthene	ug/g	0.78	<0.0050	0.0095	<0.0050	0.015	0.0092	0.0050	8682034
Benzo(g,h,i)perylene	ug/g	6.6	<0.0050	0.0087	<0.0050	0.011	0.0053	0.0050	8682034
Benzo(k)fluoranthene	ug/g	0.78	<0.0050	<0.0050	<0.0050	0.0051	<0.0050	0.0050	8682034
Chrysene	ug/g	7	<0.0050	0.0062	<0.0050	0.011	0.0057	0.0050	8682034
Dibenzo(a,h)anthracene	ug/g	0.1	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8682034
Fluoranthene	ug/g	0.69	<0.0050	0.012	<0.0050	0.032	0.015	0.0050	8682034
Fluorene	ug/g	62	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8682034
Indeno(1,2,3-cd)pyrene	ug/g	0.38	<0.0050	0.0054	<0.0050	0.0083	<0.0050	0.0050	8682034
1-Methylnaphthalene	ug/g	0.99	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8682034
2-Methylnaphthalene	ug/g	0.99	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8682034
Naphthalene	ug/g	0.6	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	8682034
Phenanthrene	ug/g	6.2	<0.0050	<0.0050	<0.0050	0.021	0.0099	0.0050	8682034
Pyrene	ug/g	78	<0.0050	0.013	<0.0050	0.024	0.012	0.0050	8682034
Surrogate Recovery (%)									
D10-Anthracene	%	-	105	103	105	103	104		8682034
D14-Terphenyl (FS)	%	-	99	97	100	98	100		8682034
D8-Acenaphthylene	%	-	76	80	81	84	81		8682034

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

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
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Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soil

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O.REG 153 PAHS (SOIL)

Bureau Veritas ID			VWC050		
Sampling Date			2023/05/18		
COC Number			929924-29-01		
	UNITS	Criteria	BH23-3 SS3	RDL	QC Batch
Calculated Parameters					
Methylnaphthalene, 2-(1-)	ug/g	-	<0.0071	0.0071	8675495
Polyaromatic Hydrocarbons					
Acenaphthene	ug/g	7.9	<0.0050	0.0050	8682034
Acenaphthylene	ug/g	0.15	<0.0050	0.0050	8682034
Anthracene	ug/g	0.67	<0.0050	0.0050	8682034
Benzo(a)anthracene	ug/g	0.5	<0.0050	0.0050	8682034
Benzo(a)pyrene	ug/g	0.3	<0.0050	0.0050	8682034
Benzo(b/j)fluoranthene	ug/g	0.78	<0.0050	0.0050	8682034
Benzo(g,h,i)perylene	ug/g	6.6	<0.0050	0.0050	8682034
Benzo(k)fluoranthene	ug/g	0.78	<0.0050	0.0050	8682034
Chrysene	ug/g	7	<0.0050	0.0050	8682034
Dibenzo(a,h)anthracene	ug/g	0.1	<0.0050	0.0050	8682034
Fluoranthene	ug/g	0.69	<0.0050	0.0050	8682034
Fluorene	ug/g	62	<0.0050	0.0050	8682034
Indeno(1,2,3-cd)pyrene	ug/g	0.38	<0.0050	0.0050	8682034
1-Methylnaphthalene	ug/g	0.99	<0.0050	0.0050	8682034
2-Methylnaphthalene	ug/g	0.99	<0.0050	0.0050	8682034
Naphthalene	ug/g	0.6	<0.0050	0.0050	8682034
Phenanthrene	ug/g	6.2	<0.0050	0.0050	8682034
Pyrene	ug/g	78	<0.0050	0.0050	8682034
Surrogate Recovery (%)					
D10-Anthracene	%	-	103		8682034
D14-Terphenyl (FS)	%	-	98		8682034
D8-Acenaphthylene	%	-	78		8682034

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

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

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

Bureau Veritas ID			VWC057			VWC057		
Sampling Date			2023/05/18			2023/05/18		
COC Number			929924-29-01			929924-29-01		
	UNITS	Criteria	DUP-3	RDL	QC Batch	DUP-3 Lab-Dup	RDL	QC Batch
BTEX & F1 Hydrocarbons								
Benzene	ug/g	0.21	<0.020	0.020	8683259	<0.020	0.020	8683259
Toluene	ug/g	2.3	<0.020	0.020	8683259	<0.020	0.020	8683259
Ethylbenzene	ug/g	1.1	<0.020	0.020	8683259	<0.020	0.020	8683259
o-Xylene	ug/g	-	<0.020	0.020	8683259	<0.020	0.020	8683259
p+m-Xylene	ug/g	-	<0.040	0.040	8683259	<0.040	0.040	8683259
Total Xylenes	ug/g	3.1	<0.040	0.040	8683259	<0.040	0.040	8683259
F1 (C6-C10)	ug/g	55	<10	10	8683259	<10	10	8683259
F1 (C6-C10) - BTEX	ug/g	55	<10	10	8683259	<10	10	8683259
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/g	98	<10	10	8681973			
F3 (C16-C34 Hydrocarbons)	ug/g	300	<50	50	8681973			
F4 (C34-C50 Hydrocarbons)	ug/g	2800	99	50	8681973			
Reached Baseline at C50	ug/g	-	Yes		8681973			
Surrogate Recovery (%)								
1,4-Difluorobenzene	%	-	101		8683259	102		8683259
4-Bromofluorobenzene	%	-	99		8683259	98		8683259
D10-o-Xylene	%	-	108		8683259	106		8683259
D4-1,2-Dichloroethane	%	-	106		8683259	108		8683259
o-Terphenyl	%	-	96		8681973			

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

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

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

Bureau Veritas ID			VWC036	VWC040	VWC043	VWC046	VWC049		
Sampling Date			2023/05/18	2023/05/18	2023/05/18	2023/05/18	2023/05/18		
COC Number			929924-29-01	929924-29-01	929924-29-01	929924-29-01	929924-29-01		
	UNITS	Criteria	BH23-1 SS2	BH23-1 SS7	BH23-2 SS2	BH23-2 SS7	BH23-3 SS2	RDL	QC Batch
Calculated Parameters									
1,3-Dichloropropene (cis+trans)	ug/g	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8674849
Volatile Organics									
Acetone (2-Propanone)	ug/g	16	<0.49	<0.49	<0.49	<0.49	<0.49	0.49	8679191
Benzene	ug/g	0.21	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	0.0060	8679191
Bromodichloromethane	ug/g	1.5	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
Bromoform	ug/g	0.27	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
Bromomethane	ug/g	0.05	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
Carbon Tetrachloride	ug/g	0.05	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
Chlorobenzene	ug/g	2.4	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
Chloroform	ug/g	0.05	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
Dibromochloromethane	ug/g	2.3	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
1,2-Dichlorobenzene	ug/g	1.2	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
1,3-Dichlorobenzene	ug/g	4.8	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
1,4-Dichlorobenzene	ug/g	0.083	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
Dichlorodifluoromethane (FREON 12)	ug/g	16	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
1,1-Dichloroethane	ug/g	0.47	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
1,2-Dichloroethane	ug/g	0.05	<0.049	<0.049	<0.049	<0.049	<0.049	0.049	8679191
1,1-Dichloroethylene	ug/g	0.05	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
cis-1,2-Dichloroethylene	ug/g	1.9	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
trans-1,2-Dichloroethylene	ug/g	0.084	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
1,2-Dichloropropane	ug/g	0.05	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
cis-1,3-Dichloropropene	ug/g	0.05	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8679191
trans-1,3-Dichloropropene	ug/g	0.05	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
Ethylbenzene	ug/g	1.1	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8679191
Ethylene Dibromide	ug/g	0.05	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
Hexane	ug/g	2.8	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
Methylene Chloride(Dichloromethane)	ug/g	0.1	<0.049	<0.049	<0.049	<0.049	<0.049	0.049	8679191
Methyl Ethyl Ketone (2-Butanone)	ug/g	16	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	8679191
Methyl Isobutyl Ketone	ug/g	1.7	<0.40	<0.40	<0.40	<0.40	<0.40	0.40	8679191
Methyl t-butyl ether (MTBE)	ug/g	0.75	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191

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

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

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

Bureau Veritas ID			VWC036	VWC040	VWC043	VWC046	VWC049		
Sampling Date			2023/05/18	2023/05/18	2023/05/18	2023/05/18	2023/05/18		
COC Number			929924-29-01	929924-29-01	929924-29-01	929924-29-01	929924-29-01		
	UNITS	Criteria	BH23-1 SS2	BH23-1 SS7	BH23-2 SS2	BH23-2 SS7	BH23-3 SS2	RDL	QC Batch
Styrene	ug/g	0.7	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
1,1,1,2-Tetrachloroethane	ug/g	0.058	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
1,1,2,2-Tetrachloroethane	ug/g	0.05	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
Tetrachloroethylene	ug/g	0.28	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
Toluene	ug/g	2.3	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8679191
1,1,1-Trichloroethane	ug/g	0.38	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
1,1,2-Trichloroethane	ug/g	0.05	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
Trichloroethylene	ug/g	0.061	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8679191
Trichlorofluoromethane (FREON 11)	ug/g	4	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8679191
Vinyl Chloride	ug/g	0.02	<0.019	<0.019	<0.019	<0.019	<0.019	0.019	8679191
p+m-Xylene	ug/g	-	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8679191
o-Xylene	ug/g	-	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8679191
Total Xylenes	ug/g	3.1	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8679191
F1 (C6-C10)	ug/g	55	<10	<10	<10	<10	<10	10	8679191
F1 (C6-C10) - BTEX	ug/g	55	<10	<10	<10	<10	<10	10	8679191
F2-F4 Hydrocarbons									
F2 (C10-C16 Hydrocarbons)	ug/g	98	<10	<10	<10	<10	<10	10	8681973
F3 (C16-C34 Hydrocarbons)	ug/g	300	<50	<50	<50	<50	<50	50	8681973
F4 (C34-C50 Hydrocarbons)	ug/g	2800	<50	<50	<50	<50	<50	50	8681973
Reached Baseline at C50	ug/g	-	Yes	Yes	Yes	Yes	Yes		8681973
Surrogate Recovery (%)									
o-Terphenyl	%	-	100	96	93	95	97		8681973
4-Bromofluorobenzene	%	-	101	101	101	101	101		8679191
D10-o-Xylene	%	-	104	103	111	101	114		8679191
D4-1,2-Dichloroethane	%	-	100	101	101	104	101		8679191
D8-Toluene	%	-	95	96	95	95	95		8679191

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

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

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

Bureau Veritas ID			VWC052		
Sampling Date			2023/05/18		
COC Number			929924-29-01		
	UNITS	Criteria	BH23-3 SS7	RDL	QC Batch
Calculated Parameters					
1,3-Dichloropropene (cis+trans)	ug/g	0.05	<0.050	0.050	8674849
Volatile Organics					
Acetone (2-Propanone)	ug/g	16	<0.49	0.49	8679191
Benzene	ug/g	0.21	<0.0060	0.0060	8679191
Bromodichloromethane	ug/g	1.5	<0.040	0.040	8679191
Bromoform	ug/g	0.27	<0.040	0.040	8679191
Bromomethane	ug/g	0.05	<0.040	0.040	8679191
Carbon Tetrachloride	ug/g	0.05	<0.040	0.040	8679191
Chlorobenzene	ug/g	2.4	<0.040	0.040	8679191
Chloroform	ug/g	0.05	<0.040	0.040	8679191
Dibromochloromethane	ug/g	2.3	<0.040	0.040	8679191
1,2-Dichlorobenzene	ug/g	1.2	<0.040	0.040	8679191
1,3-Dichlorobenzene	ug/g	4.8	<0.040	0.040	8679191
1,4-Dichlorobenzene	ug/g	0.083	<0.040	0.040	8679191
Dichlorodifluoromethane (FREON 12)	ug/g	16	<0.040	0.040	8679191
1,1-Dichloroethane	ug/g	0.47	<0.040	0.040	8679191
1,2-Dichloroethane	ug/g	0.05	<0.049	0.049	8679191
1,1-Dichloroethylene	ug/g	0.05	<0.040	0.040	8679191
cis-1,2-Dichloroethylene	ug/g	1.9	<0.040	0.040	8679191
trans-1,2-Dichloroethylene	ug/g	0.084	<0.040	0.040	8679191
1,2-Dichloropropane	ug/g	0.05	<0.040	0.040	8679191
cis-1,3-Dichloropropene	ug/g	0.05	<0.030	0.030	8679191
trans-1,3-Dichloropropene	ug/g	0.05	<0.040	0.040	8679191
Ethylbenzene	ug/g	1.1	<0.010	0.010	8679191
Ethylene Dibromide	ug/g	0.05	<0.040	0.040	8679191
Hexane	ug/g	2.8	<0.040	0.040	8679191
Methylene Chloride(Dichloromethane)	ug/g	0.1	<0.049	0.049	8679191
Methyl Ethyl Ketone (2-Butanone)	ug/g	16	<0.40	0.40	8679191
Methyl Isobutyl Ketone	ug/g	1.7	<0.40	0.40	8679191

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

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

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

Bureau Veritas ID			VWC052		
Sampling Date			2023/05/18		
COC Number			929924-29-01		
	UNITS	**Criteria**	**BH23-3 SS7**	**RDL**	**QC Batch**
Methyl t-butyl ether (MTBE)	ug/g	0.75	<0.040	0.040	8679191
Styrene	ug/g	0.7	<0.040	0.040	8679191
1,1,1,2-Tetrachloroethane	ug/g	0.058	<0.040	0.040	8679191
1,1,2,2-Tetrachloroethane	ug/g	0.05	<0.040	0.040	8679191
Tetrachloroethylene	ug/g	0.28	<0.040	0.040	8679191
Toluene	ug/g	2.3	<0.020	0.020	8679191
1,1,1-Trichloroethane	ug/g	0.38	<0.040	0.040	8679191
1,1,2-Trichloroethane	ug/g	0.05	<0.040	0.040	8679191
Trichloroethylene	ug/g	0.061	<0.010	0.010	8679191
Trichlorofluoromethane (FREON 11)	ug/g	4	<0.040	0.040	8679191
Vinyl Chloride	ug/g	0.02	<0.019	0.019	8679191
p+m-Xylene	ug/g	-	<0.020	0.020	8679191
o-Xylene	ug/g	-	<0.020	0.020	8679191
Total Xylenes	ug/g	3.1	<0.020	0.020	8679191
F1 (C6-C10)	ug/g	55	<10	10	8679191
F1 (C6-C10) - BTEX	ug/g	55	<10	10	8679191
F2-F4 Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	ug/g	98	<10	10	8681973
F3 (C16-C34 Hydrocarbons)	ug/g	300	<50	50	8681973
F4 (C34-C50 Hydrocarbons)	ug/g	2800	<50	50	8681973
Reached Baseline at C50	ug/g	-	Yes		8681973
Surrogate Recovery (%)					
o-Terphenyl	%	-	97		8681973
4-Bromofluorobenzene	%	-	102		8679191
D10-o-Xylene	%	-	130		8679191
D4-1,2-Dichloroethane	%	-	101		8679191
D8-Toluene	%	-	95		8679191

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

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

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RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		VWC035	VWC036	VWC037			VWC038	
Sampling Date		2023/05/18	2023/05/18	2023/05/18			2023/05/18	
COC Number		929924-29-01	929924-29-01	929924-29-01			929924-29-01	
	UNITS	BH23-1 SS1	BH23-1 SS2	BH23-1 SS3	RDL	QC Batch	BH23-1 SS5	QC Batch
Inorganics								
Moisture	%	15	20	8.4	1.0	8677411		
Available (CaCl2) pH	pH						7.94	8683642

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		VWC040	VWC042	VWC043	VWC044	VWC046	VWC048		
Sampling Date		2023/05/18	2023/05/18	2023/05/18	2023/05/18	2023/05/18	2023/05/18		
COC Number		929924-29-01	929924-29-01	929924-29-01	929924-29-01	929924-29-01	929924-29-01		
	UNITS	BH23-1 SS7	BH23-2 SS1	BH23-2 SS2	BH23-2 SS4	BH23-2 SS7	BH23-3 SS1	RDL	QC Batch
Inorganics									
Moisture	%	18	14	16	15	11	12	1.0	8677411

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		VWC049	VWC050	VWC052			VWC054	
Sampling Date		2023/05/18	2023/05/18	2023/05/18			2023/05/18	
COC Number		929924-29-01	929924-29-01	929924-29-01			929924-29-01	
	UNITS	BH23-3 SS2	BH23-3 SS3	BH23-3 SS7	RDL	QC Batch	BH23-2 SS5	QC Batch
Inorganics								
Moisture	%	17	10	13	1.0	8677411		
Available (CaCl2) pH	pH						7.89	8683642

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		VWC055			VWC056		VWC057		
Sampling Date		2023/05/18			2023/05/18		2023/05/18		
COC Number		929924-29-01			929924-29-01		929924-29-01		
	UNITS	DUP-1	RDL	QC Batch	DUP-2	QC Batch	DUP-3	RDL	QC Batch
Inorganics									
Moisture	%	17	1.0	8677411			15	1.0	8677411
Available (CaCl2) pH	pH				7.83	8683642			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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TEST SUMMARY

Bureau Veritas ID: VWC035
Sample ID: BH23-1 SS1
Matrix: Soil

Collected: 2023/05/18
Shipped:
Received: 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8675495	N/A	2023/05/26	Automated Statchk
Hot Water Extractable Boron	ICP	8680803	2023/05/24	2023/05/30	Japneet Gill
Free (WAD) Cyanide	TECH	8681425	2023/05/24	2023/05/24	Chloe Pollock
Conductivity	AT	8681284	2023/05/24	2023/05/24	Leily Karimi
Hexavalent Chromium in Soil by IC	IC/SPEC	8681115	2023/05/24	2023/05/25	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	8680825	2023/05/24	2023/05/24	Indira HarryPaul
Moisture	BAL	8677411	N/A	2023/05/20	Shivani Desai
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8682034	2023/05/24	2023/05/25	Mitesh Raj
pH CaCl2 EXTRACT	AT	8683683	2023/05/25	2023/05/25	Surinder Rai
Sodium Adsorption Ratio (SAR)	CALC/MET	8674590	N/A	2023/05/26	Automated Statchk

Bureau Veritas ID: VWC036
Sample ID: BH23-1 SS2
Matrix: Soil

Collected: 2023/05/18
Shipped:
Received: 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8674849	N/A	2023/05/25	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8681973	2023/05/24	2023/05/25	Emir Danisman
Moisture	BAL	8677411	N/A	2023/05/20	Shivani Desai
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8679191	N/A	2023/05/24	Juan Pangilinan

Bureau Veritas ID: VWC037
Sample ID: BH23-1 SS3
Matrix: Soil

Collected: 2023/05/18
Shipped:
Received: 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8675495	N/A	2023/05/26	Automated Statchk
Hot Water Extractable Boron	ICP	8680803	2023/05/24	2023/05/30	Japneet Gill
Free (WAD) Cyanide	TECH	8681425	2023/05/24	2023/05/24	Chloe Pollock
Conductivity	AT	8681284	2023/05/24	2023/05/24	Leily Karimi
Hexavalent Chromium in Soil by IC	IC/SPEC	8681115	2023/05/24	2023/05/25	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	8680825	2023/05/24	2023/05/24	Indira HarryPaul
Moisture	BAL	8677411	N/A	2023/05/20	Shivani Desai
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8682034	2023/05/24	2023/05/25	Mitesh Raj
pH CaCl2 EXTRACT	AT	8683683	2023/05/25	2023/05/25	Surinder Rai
Sodium Adsorption Ratio (SAR)	CALC/MET	8674590	N/A	2023/05/26	Automated Statchk

Bureau Veritas ID: VWC038
Sample ID: BH23-1 SS5
Matrix: Soil

Collected: 2023/05/18
Shipped:
Received: 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH CaCl2 EXTRACT	AT	8683642	2023/05/25	2023/05/25	Surinder Rai

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TEST SUMMARY

Bureau Veritas ID: VWC040 **Collected:** 2023/05/18
Sample ID: BH23-1 SS7 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8674849	N/A	2023/05/25	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8681973	2023/05/24	2023/05/25	Emir Danisman
Moisture	BAL	8677411	N/A	2023/05/20	Shivani Desai
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8679191	N/A	2023/05/24	Juan Pangilinan

Bureau Veritas ID: VWC042 **Collected:** 2023/05/18
Sample ID: BH23-2 SS1 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8680803	2023/05/24	2023/05/30	Japneet Gill
Free (WAD) Cyanide	TECH	8681425	2023/05/24	2023/05/24	Chloe Pollock
Conductivity	AT	8683629	2023/05/25	2023/05/25	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8683572	2023/05/25	2023/05/25	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	8680753	2023/05/24	2023/05/25	Daniel Teclu
Moisture	BAL	8677411	N/A	2023/05/20	Shivani Desai
pH CaCl2 EXTRACT	AT	8683683	2023/05/25	2023/05/25	Surinder Rai
Sodium Adsorption Ratio (SAR)	CALC/MET	8674590	N/A	2023/05/26	Automated Statchk

Bureau Veritas ID: VWC042 Dup **Collected:** 2023/05/18
Sample ID: BH23-2 SS1 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hexavalent Chromium in Soil by IC	IC/SPEC	8683572	2023/05/25	2023/05/25	Sousan Besharatlou

Bureau Veritas ID: VWC043 **Collected:** 2023/05/18
Sample ID: BH23-2 SS2 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8675495	N/A	2023/05/26	Automated Statchk
1,3-Dichloropropene Sum	CALC	8674849	N/A	2023/05/25	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8681973	2023/05/24	2023/05/25	Emir Danisman
Moisture	BAL	8677411	N/A	2023/05/20	Shivani Desai
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8682034	2023/05/24	2023/05/25	Mitesh Raj
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8679191	N/A	2023/05/24	Juan Pangilinan

Bureau Veritas ID: VWC044 **Collected:** 2023/05/18
Sample ID: BH23-2 SS4 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8675495	N/A	2023/05/26	Automated Statchk
Hot Water Extractable Boron	ICP	8680803	2023/05/24	2023/05/30	Japneet Gill
Free (WAD) Cyanide	TECH	8681425	2023/05/24	2023/05/24	Chloe Pollock

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TEST SUMMARY

Bureau Veritas ID: VWC044 **Collected:** 2023/05/18
Sample ID: BH23-2 SS4 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	8681284	2023/05/24	2023/05/24	Leily Karimi
Hexavalent Chromium in Soil by IC	IC/SPEC	8681115	2023/05/24	2023/05/25	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	8680753	2023/05/24	2023/05/25	Daniel Teclu
Moisture	BAL	8677411	N/A	2023/05/20	Shivani Desai
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8682034	2023/05/24	2023/05/25	Mitesh Raj
pH CaCl2 EXTRACT	AT	8683683	2023/05/25	2023/05/25	Surinder Rai
Sodium Adsorption Ratio (SAR)	CALC/MET	8674590	N/A	2023/05/26	Automated Statchk

Bureau Veritas ID: VWC046 **Collected:** 2023/05/18
Sample ID: BH23-2 SS7 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8674849	N/A	2023/05/25	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8681973	2023/05/24	2023/05/25	Emir Danisman
Moisture	BAL	8677411	N/A	2023/05/20	Shivani Desai
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8679191	N/A	2023/05/24	Juan Pangilinan

Bureau Veritas ID: VWC048 **Collected:** 2023/05/18
Sample ID: BH23-3 SS1 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8675495	N/A	2023/05/26	Automated Statchk
Hot Water Extractable Boron	ICP	8680824	2023/05/24	2023/05/25	Suban Kanapathippllai
Free (WAD) Cyanide	TECH	8681425	2023/05/24	2023/05/24	Chloe Pollock
Conductivity	AT	8683714	2023/05/25	2023/05/25	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8681115	2023/05/24	2023/05/25	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	8680753	2023/05/24	2023/05/25	Daniel Teclu
Moisture	BAL	8677411	N/A	2023/05/20	Shivani Desai
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8682034	2023/05/24	2023/05/25	Mitesh Raj
pH CaCl2 EXTRACT	AT	8683642	2023/05/25	2023/05/25	Surinder Rai
Sodium Adsorption Ratio (SAR)	CALC/MET	8674590	N/A	2023/05/26	Automated Statchk

Bureau Veritas ID: VWC048 Dup **Collected:** 2023/05/18
Sample ID: BH23-3 SS1 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH CaCl2 EXTRACT	AT	8683642	2023/05/25	2023/05/25	Surinder Rai

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TEST SUMMARY

Bureau Veritas ID: VWC049 **Collected:** 2023/05/18
Sample ID: BH23-3 SS2 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8674849	N/A	2023/05/25	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8681973	2023/05/24	2023/05/25	Emir Danisman
Moisture	BAL	8677411	N/A	2023/05/20	Shivani Desai
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8679191	N/A	2023/05/24	Juan Pangilinan

Bureau Veritas ID: VWC050 **Collected:** 2023/05/18
Sample ID: BH23-3 SS3 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8675495	N/A	2023/05/26	Automated Statchk
Hot Water Extractable Boron	ICP	8680824	2023/05/24	2023/05/25	Suban Kanapathippllai
Free (WAD) Cyanide	TECH	8681425	2023/05/24	2023/05/24	Chloe Pollock
Conductivity	AT	8683629	2023/05/25	2023/05/25	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8681115	2023/05/24	2023/05/25	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	8680753	2023/05/24	2023/05/25	Daniel Teclu
Moisture	BAL	8677411	N/A	2023/05/20	Shivani Desai
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8682034	2023/05/24	2023/05/25	Mitesh Raj
pH CaCl2 EXTRACT	AT	8683683	2023/05/25	2023/05/25	Surinder Rai
Sodium Adsorption Ratio (SAR)	CALC/MET	8674590	N/A	2023/05/26	Automated Statchk

Bureau Veritas ID: VWC052 **Collected:** 2023/05/18
Sample ID: BH23-3 SS7 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8674849	N/A	2023/05/25	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8681973	2023/05/24	2023/05/25	Emir Danisman
Moisture	BAL	8677411	N/A	2023/05/20	Shivani Desai
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8679191	N/A	2023/05/24	Juan Pangilinan

Bureau Veritas ID: VWC054 **Collected:** 2023/05/18
Sample ID: BH23-2 SS5 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH CaCl2 EXTRACT	AT	8683642	2023/05/25	2023/05/25	Surinder Rai

Bureau Veritas ID: VWC055 **Collected:** 2023/05/18
Sample ID: DUP-1 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8681006	2023/05/24	2023/05/24	Medhat Nasr
Free (WAD) Cyanide	TECH	8681425	2023/05/24	2023/05/24	Chloe Pollock
Conductivity	AT	8683629	2023/05/25	2023/05/25	Gurparteek KAUR

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TEST SUMMARY

Bureau Veritas ID: VWC055 **Collected:** 2023/05/18
Sample ID: DUP-1 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hexavalent Chromium in Soil by IC	IC/SPEC	8681115	2023/05/24	2023/05/25	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	8680753	2023/05/24	2023/05/25	Daniel Teclu
Moisture	BAL	8677411	N/A	2023/05/20	Shivani Desai
pH CaCl2 EXTRACT	AT	8683683	2023/05/25	2023/05/25	Surinder Rai
Sodium Adsorption Ratio (SAR)	CALC/MET	8674590	N/A	2023/05/26	Automated Statchk

Bureau Veritas ID: VWC056 **Collected:** 2023/05/18
Sample ID: DUP-2 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH CaCl2 EXTRACT	AT	8683642	2023/05/25	2023/05/25	Surinder Rai

Bureau Veritas ID: VWC057 **Collected:** 2023/05/18
Sample ID: DUP-3 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	8683259	N/A	2023/05/25	Ravinder Gaidhu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8681973	2023/05/24	2023/05/25	Emir Danisman
Moisture	BAL	8677411	N/A	2023/05/20	Shivani Desai

Bureau Veritas ID: VWC057 Dup **Collected:** 2023/05/18
Sample ID: DUP-3 **Shipped:**
Matrix: Soil **Received:** 2023/05/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	8683259	N/A	2023/05/25	Ravinder Gaidhu

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GENERAL COMMENTS

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

Package 1	14.3°C

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8679191	4-Bromofluorobenzene	2023/05/24	103	60 - 140	103	60 - 140	101	%		
8679191	D10-o-Xylene	2023/05/24	104	60 - 130	67	60 - 130	94	%		
8679191	D4-1,2-Dichloroethane	2023/05/24	101	60 - 140	102	60 - 140	100	%		
8679191	D8-Toluene	2023/05/24	100	60 - 140	100	60 - 140	95	%		
8681973	o-Terphenyl	2023/05/24	91	60 - 130	91	60 - 130	96	%		
8682034	D10-Anthracene	2023/05/24	107	50 - 130	110	50 - 130	107	%		
8682034	D14-Terphenyl (FS)	2023/05/24	104	50 - 130	106	50 - 130	101	%		
8682034	D8-Acenaphthylene	2023/05/24	90	50 - 130	92	50 - 130	81	%		
8683259	1,4-Difluorobenzene	2023/05/26	99	60 - 140	98	60 - 140	113	%		
8683259	4-Bromofluorobenzene	2023/05/26	103	60 - 140	104	60 - 140	92	%		
8683259	D10-o-Xylene	2023/05/26	103	60 - 140	104	60 - 140	93	%		
8683259	D4-1,2-Dichloroethane	2023/05/26	110	60 - 140	104	60 - 140	138	%		
8677411	Moisture	2023/05/20							1.4	20
8679191	1,1,1,2-Tetrachloroethane	2023/05/24	99	60 - 140	104	60 - 130	<0.040	ug/g	NC	50
8679191	1,1,1-Trichloroethane	2023/05/24	106	60 - 140	108	60 - 130	<0.040	ug/g	NC	50
8679191	1,1,2,2-Tetrachloroethane	2023/05/24	90	60 - 140	98	60 - 130	<0.040	ug/g	NC	50
8679191	1,1,2-Trichloroethane	2023/05/24	98	60 - 140	103	60 - 130	<0.040	ug/g	NC	50
8679191	1,1-Dichloroethane	2023/05/24	93	60 - 140	97	60 - 130	<0.040	ug/g	NC	50
8679191	1,1-Dichloroethylene	2023/05/24	100	60 - 140	102	60 - 130	<0.040	ug/g	NC	50
8679191	1,2-Dichlorobenzene	2023/05/24	95	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
8679191	1,2-Dichloroethane	2023/05/24	99	60 - 140	103	60 - 130	<0.049	ug/g	NC	50
8679191	1,2-Dichloropropane	2023/05/24	96	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
8679191	1,3-Dichlorobenzene	2023/05/24	95	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
8679191	1,4-Dichlorobenzene	2023/05/24	110	60 - 140	116	60 - 130	<0.040	ug/g	NC	50
8679191	Acetone (2-Propanone)	2023/05/24	95	60 - 140	102	60 - 140	<0.49	ug/g	NC	50
8679191	Benzene	2023/05/24	92	60 - 140	95	60 - 130	<0.0060	ug/g	NC	50
8679191	Bromodichloromethane	2023/05/24	101	60 - 140	105	60 - 130	<0.040	ug/g	NC	50
8679191	Bromoform	2023/05/24	97	60 - 140	103	60 - 130	<0.040	ug/g	NC	50
8679191	Bromomethane	2023/05/24	103	60 - 140	106	60 - 140	<0.040	ug/g	NC	50
8679191	Carbon Tetrachloride	2023/05/24	103	60 - 140	105	60 - 130	<0.040	ug/g	NC	50
8679191	Chlorobenzene	2023/05/24	95	60 - 140	100	60 - 130	<0.040	ug/g	NC	50

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8679191	Chloroform	2023/05/24	98	60 - 140	101	60 - 130	<0.040	ug/g	NC	50
8679191	cis-1,2-Dichloroethylene	2023/05/24	100	60 - 140	104	60 - 130	<0.040	ug/g	NC	50
8679191	cis-1,3-Dichloropropene	2023/05/24	99	60 - 140	105	60 - 130	<0.030	ug/g	NC	50
8679191	Dibromochloromethane	2023/05/24	96	60 - 140	101	60 - 130	<0.040	ug/g	NC	50
8679191	Dichlorodifluoromethane (FREON 12)	2023/05/24	106	60 - 140	106	60 - 140	<0.040	ug/g	NC	50
8679191	Ethylbenzene	2023/05/24	91	60 - 140	93	60 - 130	<0.010	ug/g	NC	50
8679191	Ethylene Dibromide	2023/05/24	93	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
8679191	F1 (C6-C10) - BTEX	2023/05/24					<10	ug/g	NC	30
8679191	F1 (C6-C10)	2023/05/24	83	60 - 140	94	80 - 120	<10	ug/g	NC	30
8679191	Hexane	2023/05/24	95	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
8679191	Methyl Ethyl Ketone (2-Butanone)	2023/05/24	94	60 - 140	103	60 - 140	<0.40	ug/g	NC	50
8679191	Methyl Isobutyl Ketone	2023/05/24	105	60 - 140	115	60 - 130	<0.40	ug/g	NC	50
8679191	Methyl t-butyl ether (MTBE)	2023/05/24	95	60 - 140	99	60 - 130	<0.040	ug/g	NC	50
8679191	Methylene Chloride(Dichloromethane)	2023/05/24	94	60 - 140	99	60 - 130	<0.049	ug/g	NC	50
8679191	o-Xylene	2023/05/24	93	60 - 140	97	60 - 130	<0.020	ug/g	NC	50
8679191	p+m-Xylene	2023/05/24	95	60 - 140	99	60 - 130	<0.020	ug/g	NC	50
8679191	Styrene	2023/05/24	107	60 - 140	111	60 - 130	<0.040	ug/g	NC	50
8679191	Tetrachloroethylene	2023/05/24	94	60 - 140	98	60 - 130	<0.040	ug/g	NC	50
8679191	Toluene	2023/05/24	91	60 - 140	95	60 - 130	<0.020	ug/g	NC	50
8679191	Total Xylenes	2023/05/24					<0.020	ug/g	NC	50
8679191	trans-1,2-Dichloroethylene	2023/05/24	100	60 - 140	103	60 - 130	<0.040	ug/g	NC	50
8679191	trans-1,3-Dichloropropene	2023/05/24	101	60 - 140	108	60 - 130	<0.040	ug/g	NC	50
8679191	Trichloroethylene	2023/05/24	106	60 - 140	110	60 - 130	<0.010	ug/g	NC	50
8679191	Trichlorofluoromethane (FREON 11)	2023/05/24	107	60 - 140	108	60 - 130	<0.040	ug/g	NC	50
8679191	Vinyl Chloride	2023/05/24	101	60 - 140	103	60 - 130	<0.019	ug/g	NC	50
8680753	Acid Extractable Antimony (Sb)	2023/05/25	83	75 - 125	94	80 - 120	<0.20	ug/g		
8680753	Acid Extractable Arsenic (As)	2023/05/25	89	75 - 125	99	80 - 120	<1.0	ug/g		
8680753	Acid Extractable Barium (Ba)	2023/05/25	88	75 - 125	98	80 - 120	<0.50	ug/g		
8680753	Acid Extractable Beryllium (Be)	2023/05/25	85	75 - 125	90	80 - 120	<0.20	ug/g		
8680753	Acid Extractable Boron (B)	2023/05/25	83	75 - 125	89	80 - 120	<5.0	ug/g		
8680753	Acid Extractable Cadmium (Cd)	2023/05/25	86	75 - 125	94	80 - 120	<0.10	ug/g		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8680753	Acid Extractable Chromium (Cr)	2023/05/25	89	75 - 125	97	80 - 120	<1.0	ug/g		
8680753	Acid Extractable Cobalt (Co)	2023/05/25	87	75 - 125	97	80 - 120	<0.10	ug/g		
8680753	Acid Extractable Copper (Cu)	2023/05/25	95	75 - 125	103	80 - 120	<0.50	ug/g		
8680753	Acid Extractable Lead (Pb)	2023/05/25	82	75 - 125	95	80 - 120	<1.0	ug/g		
8680753	Acid Extractable Mercury (Hg)	2023/05/25	90	75 - 125	101	80 - 120	<0.050	ug/g		
8680753	Acid Extractable Molybdenum (Mo)	2023/05/25	88	75 - 125	95	80 - 120	<0.50	ug/g		
8680753	Acid Extractable Nickel (Ni)	2023/05/25	119	75 - 125	118	80 - 120	<0.50	ug/g		
8680753	Acid Extractable Selenium (Se)	2023/05/25	90	75 - 125	101	80 - 120	<0.50	ug/g		
8680753	Acid Extractable Silver (Ag)	2023/05/25	89	75 - 125	98	80 - 120	<0.20	ug/g		
8680753	Acid Extractable Thallium (Tl)	2023/05/25	89	75 - 125	99	80 - 120	<0.050	ug/g		
8680753	Acid Extractable Uranium (U)	2023/05/25	87	75 - 125	95	80 - 120	<0.050	ug/g		
8680753	Acid Extractable Vanadium (V)	2023/05/25	86	75 - 125	94	80 - 120	<5.0	ug/g		
8680753	Acid Extractable Zinc (Zn)	2023/05/25	86	75 - 125	98	80 - 120	<5.0	ug/g		
8680803	Hot Water Ext. Boron (B)	2023/05/30	94	75 - 125	102	75 - 125	<0.050	ug/g	1.7	40
8680824	Hot Water Ext. Boron (B)	2023/05/25	95	75 - 125	92	75 - 125	<0.050	ug/g	4.4	40
8680825	Acid Extractable Antimony (Sb)	2023/05/24	106	75 - 125	102	80 - 120	<0.20	ug/g	NC	30
8680825	Acid Extractable Arsenic (As)	2023/05/24	109	75 - 125	97	80 - 120	<1.0	ug/g	7.9	30
8680825	Acid Extractable Barium (Ba)	2023/05/24	107	75 - 125	94	80 - 120	<0.50	ug/g	19	30
8680825	Acid Extractable Beryllium (Be)	2023/05/24	105	75 - 125	94	80 - 120	<0.20	ug/g	NC	30
8680825	Acid Extractable Boron (B)	2023/05/24	102	75 - 125	91	80 - 120	<5.0	ug/g	NC	30
8680825	Acid Extractable Cadmium (Cd)	2023/05/24	106	75 - 125	98	80 - 120	<0.10	ug/g	NC	30
8680825	Acid Extractable Chromium (Cr)	2023/05/24	112	75 - 125	97	80 - 120	<1.0	ug/g	8.5	30
8680825	Acid Extractable Cobalt (Co)	2023/05/24	108	75 - 125	98	80 - 120	<0.10	ug/g	9.0	30
8680825	Acid Extractable Copper (Cu)	2023/05/24	107	75 - 125	99	80 - 120	<0.50	ug/g	4.4	30
8680825	Acid Extractable Lead (Pb)	2023/05/24	101	75 - 125	97	80 - 120	<1.0	ug/g	1.8	30
8680825	Acid Extractable Mercury (Hg)	2023/05/24	110	75 - 125	104	80 - 120	<0.050	ug/g	NC	30
8680825	Acid Extractable Molybdenum (Mo)	2023/05/24	111	75 - 125	99	80 - 120	<0.50	ug/g	NC	30
8680825	Acid Extractable Nickel (Ni)	2023/05/24	106	75 - 125	98	80 - 120	<0.50	ug/g	4.8	30
8680825	Acid Extractable Selenium (Se)	2023/05/24	108	75 - 125	99	80 - 120	<0.50	ug/g	NC	30
8680825	Acid Extractable Silver (Ag)	2023/05/24	111	75 - 125	99	80 - 120	<0.20	ug/g	NC	30
8680825	Acid Extractable Thallium (Tl)	2023/05/24	101	75 - 125	96	80 - 120	<0.050	ug/g	NC	30

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8680825	Acid Extractable Uranium (U)	2023/05/24	102	75 - 125	96	80 - 120	<0.050	ug/g	4.8	30
8680825	Acid Extractable Vanadium (V)	2023/05/24	106	75 - 125	94	80 - 120	<5.0	ug/g	6.6	30
8680825	Acid Extractable Zinc (Zn)	2023/05/24	153 (1)	75 - 125	100	80 - 120	<5.0	ug/g	13	30
8681006	Hot Water Ext. Boron (B)	2023/05/24	87	75 - 125	95	75 - 125	<0.050	ug/g	3.7	40
8681115	Chromium (VI)	2023/05/25	85	70 - 130	93	80 - 120	<0.18	ug/g	NC	35
8681284	Conductivity	2023/05/24			105	90 - 110	<0.002	mS/cm	1.8	10
8681425	WAD Cyanide (Free)	2023/05/24	92	75 - 125	101	80 - 120	<0.01	ug/g	NC	35
8681973	F2 (C10-C16 Hydrocarbons)	2023/05/25	99	60 - 130	99	80 - 120	<10	ug/g	NC	30
8681973	F3 (C16-C34 Hydrocarbons)	2023/05/25	107	60 - 130	105	80 - 120	<50	ug/g	16	30
8681973	F4 (C34-C50 Hydrocarbons)	2023/05/25	114	60 - 130	108	80 - 120	<50	ug/g	7.7	30
8682034	1-Methylnaphthalene	2023/05/25	98	50 - 130	106	50 - 130	<0.0050	ug/g	NC	40
8682034	2-Methylnaphthalene	2023/05/25	87	50 - 130	95	50 - 130	<0.0050	ug/g	NC	40
8682034	Acenaphthene	2023/05/25	93	50 - 130	95	50 - 130	<0.0050	ug/g	NC	40
8682034	Acenaphthylene	2023/05/25	91	50 - 130	94	50 - 130	<0.0050	ug/g	NC	40
8682034	Anthracene	2023/05/25	99	50 - 130	102	50 - 130	<0.0050	ug/g	NC	40
8682034	Benzo(a)anthracene	2023/05/25	101	50 - 130	94	50 - 130	<0.0050	ug/g	NC	40
8682034	Benzo(a)pyrene	2023/05/25	92	50 - 130	90	50 - 130	<0.0050	ug/g	NC	40
8682034	Benzo(b/j)fluoranthene	2023/05/25	94	50 - 130	94	50 - 130	<0.0050	ug/g	NC	40
8682034	Benzo(g,h,i)perylene	2023/05/25	95	50 - 130	93	50 - 130	<0.0050	ug/g	NC	40
8682034	Benzo(k)fluoranthene	2023/05/25	84	50 - 130	90	50 - 130	<0.0050	ug/g	NC	40
8682034	Chrysene	2023/05/25	100	50 - 130	96	50 - 130	<0.0050	ug/g	NC	40
8682034	Dibenzo(a,h)anthracene	2023/05/25	87	50 - 130	85	50 - 130	<0.0050	ug/g	NC	40
8682034	Fluoranthene	2023/05/25	118	50 - 130	101	50 - 130	<0.0050	ug/g	26	40
8682034	Fluorene	2023/05/25	92	50 - 130	93	50 - 130	<0.0050	ug/g	NC	40
8682034	Indeno(1,2,3-cd)pyrene	2023/05/25	95	50 - 130	94	50 - 130	<0.0050	ug/g	NC	40
8682034	Naphthalene	2023/05/25	80	50 - 130	93	50 - 130	<0.0050	ug/g	NC	40
8682034	Phenanthrene	2023/05/25	97	50 - 130	95	50 - 130	<0.0050	ug/g	NC	40
8682034	Pyrene	2023/05/25	115	50 - 130	101	50 - 130	<0.0050	ug/g	26	40
8683259	Benzene	2023/05/25	91	50 - 140	93	50 - 140	<0.020	ug/g	NC	50
8683259	Ethylbenzene	2023/05/25	97	50 - 140	101	50 - 140	<0.020	ug/g	NC	50
8683259	F1 (C6-C10) - BTEX	2023/05/25					<10	ug/g	NC	30

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8683259	F1 (C6-C10)	2023/05/25	85	60 - 140	98	80 - 120	<10	ug/g	NC	30
8683259	o-Xylene	2023/05/25	98	50 - 140	99	50 - 140	<0.020	ug/g	NC	50
8683259	p+m-Xylene	2023/05/25	93	50 - 140	95	50 - 140	<0.040	ug/g	NC	50
8683259	Toluene	2023/05/25	88	50 - 140	86	50 - 140	<0.020	ug/g	NC	50
8683259	Total Xylenes	2023/05/25					<0.040	ug/g	NC	50
8683572	Chromium (VI)	2023/05/25	84	70 - 130	93	80 - 120	<0.18	ug/g	8.7	35
8683629	Conductivity	2023/05/25			104	90 - 110	<0.002	mS/cm	0.84	10
8683642	Available (CaCl2) pH	2023/05/25			100	97 - 103			0.83	N/A
8683683	Available (CaCl2) pH	2023/05/25			100	97 - 103			0.14	N/A
8683714	Conductivity	2023/05/25			105	90 - 110	<0.002	mS/cm	7.1	10

N/A = Not Applicable

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

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

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

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

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

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

(1) Matrix Spike exceeds acceptance limits, sample inhomogeneity suspected".

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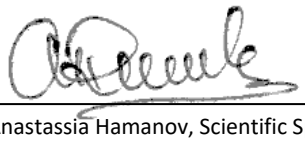
VALIDATION SIGNATURE PAGE

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



Anastassia Hamanov, Scientific Specialist

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

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
BH23-1 SS1	VWC035-02	Conductivity	0.7	1.6	0.002	mS/cm
BH23-1 SS1	VWC035-02	Sodium Adsorption Ratio	5.0	43		N/A
BH23-1 SS3	VWC037-02	Conductivity	0.7	1.6	0.002	mS/cm
BH23-1 SS3	VWC037-02	Sodium Adsorption Ratio	5.0	36		N/A
BH23-2 SS1	VWC042-01	Conductivity	0.7	2.3	0.002	mS/cm
BH23-2 SS1	VWC042-01	Sodium Adsorption Ratio	5.0	55		N/A
BH23-2 SS4	VWC044-02	Conductivity	0.7	2.0	0.002	mS/cm
BH23-2 SS4	VWC044-02	Sodium Adsorption Ratio	5.0	30		N/A
BH23-3 SS1	VWC048-02	Sodium Adsorption Ratio	5.0	7.4		N/A

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

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Your Project #: 23-162-100
Site Location: 1720 Sherwood Forrest Circle
Your C.O.C. #: 939668-02-01

Attention: John Gaviria-Ballen

DS Consultants Limited
6221 Highway 7, Unit 16
Vaughan, ON
CANADA L4H 0K8

Report Date: 2023/06/26
Report #: R7689504
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3H3273
Received: 2023/06/14, 17:30

Sample Matrix: Soil
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum	3	N/A	2023/06/22	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron	3	2023/06/19	2023/06/20	CAM SOP-00408	R153 Ana. Prot. 2011
1,3-Dichloropropene Sum	3	N/A	2023/06/21		EPA 8260C m
Free (WAD) Cyanide	6	2023/06/20	2023/06/20	CAM SOP-00457	OMOE E3015 m
Conductivity	3	2023/06/20	2023/06/20	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1)	3	2023/06/21	2023/06/21	CAM SOP-00436	EPA 3060A/7199 m
Petroleum Hydrocarbons F2-F4 in Soil (2)	3	2023/06/17	2023/06/20	CAM SOP-00316	CCME CWS m
Acid Extractable Metals by ICPMS	5	2023/06/20	2023/06/20	CAM SOP-00447	EPA 6020B m
Acid Extractable Metals by ICPMS	1	2023/06/21	2023/06/21	CAM SOP-00447	EPA 6020B m
Moisture	3	N/A	2023/06/16	CAM SOP-00445	Carter 2nd ed 51.2 m
Moisture	3	N/A	2023/06/20	CAM SOP-00445	Carter 2nd ed 51.2 m
OC Pesticides (Selected) & PCB (3)	2	2023/06/20	2023/06/21	CAM SOP-00307	EPA 8081B/ 8082A
OC Pesticides (Selected) & PCB (3)	1	2023/06/20	2023/06/23	CAM SOP-00307	EPA 8081B/ 8082A
OC Pesticides Summed Parameters	2	N/A	2023/06/20	CAM SOP-00307	EPA 8081B/ 8082A
OC Pesticides Summed Parameters	1	N/A	2023/06/21	CAM SOP-00307	EPA 8081B/ 8082A
PAH Compounds in Soil by GC/MS (SIM)	3	2023/06/19	2023/06/21	CAM SOP-00318	EPA 8270E
pH CaCl2 EXTRACT	3	2023/06/21	2023/06/21	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR)	3	N/A	2023/06/21	CAM SOP-00102	EPA 6010C
Volatile Organic Compounds and F1 PHCs	3	N/A	2023/06/20	CAM SOP-00230	EPA 8260C m

Remarks:

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

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

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report.

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Your Project #: 23-162-100
Site Location: 1720 Sherwood Forrest Circle
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Attention: John Gaviria-Ballen

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6221 Highway 7, Unit 16
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BUREAU VERITAS JOB #: C3H3273
Received: 2023/06/14, 17:30

Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

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

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Soils are reported on a dry weight basis unless otherwise specified.
(2) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following “Alberta Environment’s Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003”. Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
(3) Chlordane (Total) = Alpha Chlordane + Gamma Chlordane

Encryption Key

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

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

Bureau Veritas Job #: C3H3273
Report Date: 2023/06/26

DS Consultants Limited
Client Project #: 23-162-100
Site Location: 1720 Sherwood Forrest Circle

O.REG 153 ICPMS METALS (SOIL)

Bureau Veritas ID			WCJ472	WCJ473		WCJ474	WCJ474		
Sampling Date			2023/06/14	2023/06/14		2023/06/14	2023/06/14		
COC Number			939668-02-01	939668-02-01		939668-02-01	939668-02-01		
	UNITS	Criteria	BH23-4	BH23-5	QC Batch	BH23-6	BH23-6 Lab-Dup	RDL	QC Batch
Metals									
Acid Extractable Antimony (Sb)	ug/g	1.3	0.40	0.30	8738130	0.34	0.31	0.20	8741319
Acid Extractable Arsenic (As)	ug/g	18	4.1	7.3	8738130	5.1	5.3	1.0	8741319
Acid Extractable Barium (Ba)	ug/g	220	23	43	8738130	35	35	0.50	8741319
Acid Extractable Beryllium (Be)	ug/g	2.5	<0.20	0.36	8738130	0.52	0.50	0.20	8741319
Acid Extractable Boron (B)	ug/g	36	9.9	<5.0	8738130	6.0	6.4	5.0	8741319
Acid Extractable Cadmium (Cd)	ug/g	1.2	0.35	0.24	8738130	0.12	0.13	0.10	8741319
Acid Extractable Chromium (Cr)	ug/g	70	8.9	13	8738130	17	16	1.0	8741319
Acid Extractable Cobalt (Co)	ug/g	21	3.1	5.1	8738130	8.4	8.1	0.10	8741319
Acid Extractable Copper (Cu)	ug/g	92	22	26	8738130	21	21	0.50	8741319
Acid Extractable Lead (Pb)	ug/g	120	82	48	8738130	30	30	1.0	8741319
Acid Extractable Molybdenum (Mo)	ug/g	2	0.76	<0.50	8738130	<0.50	<0.50	0.50	8741319
Acid Extractable Nickel (Ni)	ug/g	82	11	12	8738130	17	17	0.50	8741319
Acid Extractable Selenium (Se)	ug/g	1.5	<0.50	<0.50	8738130	<0.50	<0.50	0.50	8741319
Acid Extractable Silver (Ag)	ug/g	0.5	<0.20	<0.20	8738130	<0.20	<0.20	0.20	8741319
Acid Extractable Thallium (Tl)	ug/g	1	0.051	0.099	8738130	0.084	0.074	0.050	8741319
Acid Extractable Uranium (U)	ug/g	2.5	0.39	0.37	8738130	0.43	0.46	0.050	8741319
Acid Extractable Vanadium (V)	ug/g	86	12	21	8738130	25	25	5.0	8741319
Acid Extractable Zinc (Zn)	ug/g	290	110	71	8738130	52	52	5.0	8741319

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

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 1: Full Depth Background Site Condition Standards
Soil - Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use

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Bureau Veritas Job #: C3H3273
Report Date: 2023/06/26

DS Consultants Limited
Client Project #: 23-162-100
Site Location: 1720 Sherwood Forrest Circle

O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID			WCJ475			WCJ475			WCJ476		
Sampling Date			2023/06/14			2023/06/14			2023/06/14		
COC Number			939668-02-01			939668-02-01			939668-02-01		
	UNITS	Criteria	BH23-7	RDL	QC Batch	BH23-7 Lab-Dup	RDL	QC Batch	DUP-1	RDL	QC Batch
Calculated Parameters											
Sodium Adsorption Ratio	N/A	2.4	0.47 (1)		8727020				0.43 (1)		8727020
Inorganics											
Conductivity	mS/cm	0.57	0.046	0.002	8738651				0.056	0.002	8738651
Available (CaCl2) pH	pH	-	5.64		8741995				5.65		8741995
WAD Cyanide (Free)	ug/g	0.051	<0.01	0.01	8738129	<0.01	0.01	8738129	<0.01	0.01	8738129
Chromium (VI)	ug/g	0.66	<0.18	0.18	8741659				<0.18	0.18	8741659
Metals											
Hot Water Ext. Boron (B)	ug/g	-	0.26	0.050	8735925				0.32	0.050	8735925
Acid Extractable Antimony (Sb)	ug/g	1.3	0.21	0.20	8738130				0.25	0.20	8738130
Acid Extractable Arsenic (As)	ug/g	18	5.7	1.0	8738130				6.6	1.0	8738130
Acid Extractable Barium (Ba)	ug/g	220	35	0.50	8738130				36	0.50	8738130
Acid Extractable Beryllium (Be)	ug/g	2.5	0.59	0.20	8738130				0.50	0.20	8738130
Acid Extractable Boron (B)	ug/g	36	5.7	5.0	8738130				<5.0	5.0	8738130
Acid Extractable Cadmium (Cd)	ug/g	1.2	<0.10	0.10	8738130				<0.10	0.10	8738130
Acid Extractable Chromium (Cr)	ug/g	70	20	1.0	8738130				17	1.0	8738130
Acid Extractable Cobalt (Co)	ug/g	21	11	0.10	8738130				9.6	0.10	8738130
Acid Extractable Copper (Cu)	ug/g	92	20	0.50	8738130				17	0.50	8738130
Acid Extractable Lead (Pb)	ug/g	120	17	1.0	8738130				22	1.0	8738130
Acid Extractable Molybdenum (Mo)	ug/g	2	<0.50	0.50	8738130				<0.50	0.50	8738130
Acid Extractable Nickel (Ni)	ug/g	82	22	0.50	8738130				20	0.50	8738130
Acid Extractable Selenium (Se)	ug/g	1.5	<0.50	0.50	8738130				<0.50	0.50	8738130
Acid Extractable Silver (Ag)	ug/g	0.5	<0.20	0.20	8738130				<0.20	0.20	8738130
Acid Extractable Thallium (Tl)	ug/g	1	0.094	0.050	8738130				0.085	0.050	8738130
Acid Extractable Uranium (U)	ug/g	2.5	0.45	0.050	8738130				0.43	0.050	8738130
Acid Extractable Vanadium (V)	ug/g	86	26	5.0	8738130				23	5.0	8738130
Acid Extractable Zinc (Zn)	ug/g	290	60	5.0	8738130				60	5.0	8738130
Acid Extractable Mercury (Hg)	ug/g	0.27	<0.050	0.050	8738130				<0.050	0.050	8738130

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

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 1: Full Depth Background Site Condition Standards
Soil - Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use
(1) Sodium was not detected. To report SAR the sodium detection limit was used in the calculation. This value represents a maximum ratio.

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O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID			WCJ477		
Sampling Date			2023/06/14		
COC Number			939668-02-01		
	UNITS	Criteria	BH23-8	RDL	QC Batch
Calculated Parameters					
Sodium Adsorption Ratio	N/A	2.4	0.30 (1)		8727020
Inorganics					
Conductivity	mS/cm	0.57	0.14	0.002	8738651
Available (CaCl2) pH	pH	-	6.62		8742109
WAD Cyanide (Free)	ug/g	0.051	<0.01	0.01	8738129
Chromium (VI)	ug/g	0.66	<0.18	0.18	8741659
Metals					
Hot Water Ext. Boron (B)	ug/g	-	0.85	0.050	8735925
Acid Extractable Antimony (Sb)	ug/g	1.3	0.22	0.20	8738130
Acid Extractable Arsenic (As)	ug/g	18	3.2	1.0	8738130
Acid Extractable Barium (Ba)	ug/g	220	39	0.50	8738130
Acid Extractable Beryllium (Be)	ug/g	2.5	0.40	0.20	8738130
Acid Extractable Boron (B)	ug/g	36	<5.0	5.0	8738130
Acid Extractable Cadmium (Cd)	ug/g	1.2	0.20	0.10	8738130
Acid Extractable Chromium (Cr)	ug/g	70	14	1.0	8738130
Acid Extractable Cobalt (Co)	ug/g	21	8.1	0.10	8738130
Acid Extractable Copper (Cu)	ug/g	92	16	0.50	8738130
Acid Extractable Lead (Pb)	ug/g	120	17	1.0	8738130
Acid Extractable Molybdenum (Mo)	ug/g	2	<0.50	0.50	8738130
Acid Extractable Nickel (Ni)	ug/g	82	15	0.50	8738130
Acid Extractable Selenium (Se)	ug/g	1.5	<0.50	0.50	8738130
Acid Extractable Silver (Ag)	ug/g	0.5	<0.20	0.20	8738130
Acid Extractable Thallium (Tl)	ug/g	1	0.082	0.050	8738130
Acid Extractable Uranium (U)	ug/g	2.5	0.35	0.050	8738130
Acid Extractable Vanadium (V)	ug/g	86	20	5.0	8738130
Acid Extractable Zinc (Zn)	ug/g	290	56	5.0	8738130
Acid Extractable Mercury (Hg)	ug/g	0.27	<0.050	0.050	8738130

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

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 1: Full Depth Background Site Condition Standards
Soil - Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use

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

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O.REG 153 OC PESTICIDES (SOIL)

Bureau Veritas ID			WCJ472		WCJ473		WCJ474		
Sampling Date			2023/06/14		2023/06/14		2023/06/14		
COC Number			939668-02-01		939668-02-01		939668-02-01		
	UNITS	Criteria	BH23-4	RDL	BH23-5	RDL	BH23-6	RDL	QC Batch
Calculated Parameters									
Chlordane (Total)	ug/g	0.05	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8726112
o,p-DDD + p,p-DDD	ug/g	-	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8726112
o,p-DDE + p,p-DDE	ug/g	-	<0.010	0.010	0.0051	0.0020	0.050	0.010	8726112
o,p-DDT + p,p-DDT	ug/g	-	<0.010	0.010	0.0032	0.0020	0.014	0.010	8726112
Total Endosulfan	ug/g	-	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8726112
Total PCB	ug/g	0.3	<0.075	0.075	<0.015	0.015	<0.075	0.075	8726112
Pesticides & Herbicides									
Aldrin	ug/g	0.05	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
a-Chlordane	ug/g	0.05	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
g-Chlordane	ug/g	0.05	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
o,p-DDD	ug/g	0.05	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
p,p-DDD	ug/g	0.05	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
o,p-DDE	ug/g	0.05	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
p,p-DDE	ug/g	0.05	<0.010	0.010	0.0051	0.0020	0.050	0.010	8740301
o,p-DDT	ug/g	1.4	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
p,p-DDT	ug/g	1.4	<0.010	0.010	0.0032	0.0020	0.014	0.010	8740301
Dieldrin	ug/g	0.05	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
Lindane	ug/g	0.01	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
Endosulfan I (alpha)	ug/g	0.04	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
Endosulfan II (beta)	ug/g	0.04	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
Endrin	ug/g	0.04	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
Heptachlor	ug/g	0.05	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
Heptachlor epoxide	ug/g	0.05	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
Hexachlorobenzene	ug/g	0.01	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
Hexachlorobutadiene	ug/g	0.01	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
Hexachloroethane	ug/g	0.01	<0.010	0.010	<0.0020	0.0020	<0.010	0.010	8740301
Methoxychlor	ug/g	0.05	<0.025	0.025	<0.0050	0.0050	<0.025	0.025	8740301
Aroclor 1242	ug/g	-	<0.075	0.075	<0.015	0.015	<0.075	0.075	8740301
Aroclor 1248	ug/g	-	<0.075	0.075	<0.015	0.015	<0.075	0.075	8740301
Aroclor 1254	ug/g	-	<0.075	0.075	<0.015	0.015	<0.075	0.075	8740301

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

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 1: Full Depth Background Site Condition Standards
Soil - Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use

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O.REG 153 OC PESTICIDES (SOIL)

Bureau Veritas ID			WCJ472		WCJ473		WCJ474		
Sampling Date			2023/06/14		2023/06/14		2023/06/14		
COC Number			939668-02-01		939668-02-01		939668-02-01		
	UNITS	Criteria	BH23-4	RDL	BH23-5	RDL	BH23-6	RDL	QC Batch
Aroclor 1260	ug/g	-	<0.075	0.075	<0.015	0.015	<0.075	0.075	8740301
Surrogate Recovery (%)									
2,4,5,6-Tetrachloro-m-xylene	%	-	88		90		101		8740301
Decachlorobiphenyl	%	-	97		97		125		8740301

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

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 1: Full Depth Background Site Condition Standards
Soil - Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use

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O.REG 153 PAHS (SOIL)

Bureau Veritas ID			WCJ475	WCJ476	WCJ477		
Sampling Date			2023/06/14	2023/06/14	2023/06/14		
COC Number			939668-02-01	939668-02-01	939668-02-01		
	UNITS	Criteria	BH23-7	DUP-1	BH23-8	RDL	QC Batch
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/g	0.59	<0.0071	<0.0071	<0.0071	0.0071	8726832
Polyaromatic Hydrocarbons							
Acenaphthene	ug/g	0.072	<0.0050	<0.0050	<0.0050	0.0050	8736865
Acenaphthylene	ug/g	0.093	<0.0050	<0.0050	<0.0050	0.0050	8736865
Anthracene	ug/g	0.16	<0.0050	<0.0050	<0.0050	0.0050	8736865
Benzo(a)anthracene	ug/g	0.36	<0.0050	<0.0050	0.0061	0.0050	8736865
Benzo(a)pyrene	ug/g	0.3	<0.0050	<0.0050	0.0078	0.0050	8736865
Benzo(b/j)fluoranthene	ug/g	0.47	<0.0050	<0.0050	0.013	0.0050	8736865
Benzo(g,h,i)perylene	ug/g	0.68	<0.0050	<0.0050	0.0071	0.0050	8736865
Benzo(k)fluoranthene	ug/g	0.48	<0.0050	<0.0050	<0.0050	0.0050	8736865
Chrysene	ug/g	2.8	<0.0050	<0.0050	0.0068	0.0050	8736865
Dibenzo(a,h)anthracene	ug/g	0.1	<0.0050	<0.0050	<0.0050	0.0050	8736865
Fluoranthene	ug/g	0.56	<0.0050	0.0058	0.014	0.0050	8736865
Fluorene	ug/g	0.12	<0.0050	<0.0050	<0.0050	0.0050	8736865
Indeno(1,2,3-cd)pyrene	ug/g	0.23	<0.0050	<0.0050	0.0066	0.0050	8736865
1-Methylnaphthalene	ug/g	0.59	<0.0050	<0.0050	<0.0050	0.0050	8736865
2-Methylnaphthalene	ug/g	0.59	<0.0050	<0.0050	<0.0050	0.0050	8736865
Naphthalene	ug/g	0.09	<0.0050	<0.0050	<0.0050	0.0050	8736865
Phenanthrene	ug/g	0.69	<0.0050	<0.0050	0.0055	0.0050	8736865
Pyrene	ug/g	1	<0.0050	<0.0050	0.012	0.0050	8736865
Surrogate Recovery (%)							
D10-Anthracene	%	-	99	103	93		8736865
D14-Terphenyl (FS)	%	-	94	97	93		8736865
D8-Acenaphthylene	%	-	87	84	81		8736865

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

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 1: Full Depth Background Site Condition Standards
Soil - Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use

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

Bureau Veritas ID			WCJ475	WCJ476	WCJ477		
Sampling Date			2023/06/14	2023/06/14	2023/06/14		
COC Number			939668-02-01	939668-02-01	939668-02-01		
	UNITS	Criteria	BH23-7	DUP-1	BH23-8	RDL	QC Batch
Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/g	0.05	<0.050	<0.050	<0.050	0.050	8726083
Volatile Organics							
Acetone (2-Propanone)	ug/g	0.5	<0.49	<0.49	<0.49	0.49	8733045
Benzene	ug/g	0.02	<0.0060	<0.0060	<0.0060	0.0060	8733045
Bromodichloromethane	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
Bromoform	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
Bromomethane	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
Carbon Tetrachloride	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
Chlorobenzene	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
Chloroform	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
Dibromochloromethane	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
1,2-Dichlorobenzene	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
1,3-Dichlorobenzene	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
1,4-Dichlorobenzene	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
Dichlorodifluoromethane (FREON 12)	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
1,1-Dichloroethane	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
1,2-Dichloroethane	ug/g	0.05	<0.049	<0.049	<0.049	0.049	8733045
1,1-Dichloroethylene	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
cis-1,2-Dichloroethylene	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
trans-1,2-Dichloroethylene	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
1,2-Dichloropropane	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
cis-1,3-Dichloropropene	ug/g	0.05	<0.030	<0.030	<0.030	0.030	8733045
trans-1,3-Dichloropropene	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
Ethylbenzene	ug/g	0.05	<0.010	<0.010	<0.010	0.010	8733045
Ethylene Dibromide	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
Hexane	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
Methylene Chloride(Dichloromethane)	ug/g	0.05	<0.049	<0.049	<0.049	0.049	8733045
Methyl Ethyl Ketone (2-Butanone)	ug/g	0.5	<0.40	<0.40	<0.40	0.40	8733045
Methyl Isobutyl Ketone	ug/g	0.5	<0.40	<0.40	<0.40	0.40	8733045
Methyl t-butyl ether (MTBE)	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045

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

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 1: Full Depth Background Site Condition Standards
Soil - Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use

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

Bureau Veritas ID			WCJ475	WCJ476	WCJ477		
Sampling Date			2023/06/14	2023/06/14	2023/06/14		
COC Number			939668-02-01	939668-02-01	939668-02-01		
	UNITS	Criteria	BH23-7	DUP-1	BH23-8	RDL	QC Batch
Styrene	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
1,1,1,2-Tetrachloroethane	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
1,1,2,2-Tetrachloroethane	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
Tetrachloroethylene	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
Toluene	ug/g	0.2	<0.020	<0.020	<0.020	0.020	8733045
1,1,1-Trichloroethane	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
1,1,2-Trichloroethane	ug/g	0.05	<0.040	<0.040	<0.040	0.040	8733045
Trichloroethylene	ug/g	0.05	<0.010	<0.010	<0.010	0.010	8733045
Trichlorofluoromethane (FREON 11)	ug/g	0.25	<0.040	<0.040	<0.040	0.040	8733045
Vinyl Chloride	ug/g	0.02	<0.019	<0.019	<0.019	0.019	8733045
p+m-Xylene	ug/g	-	<0.020	<0.020	<0.020	0.020	8733045
o-Xylene	ug/g	-	<0.020	<0.020	<0.020	0.020	8733045
Total Xylenes	ug/g	0.05	<0.020	<0.020	<0.020	0.020	8733045
F1 (C6-C10)	ug/g	25	<10	<10	<10	10	8733045
F1 (C6-C10) - BTEX	ug/g	25	<10	<10	<10	10	8733045
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/g	10	<10	<10	<10	10	8733410
F3 (C16-C34 Hydrocarbons)	ug/g	240	<50	<50	<50	50	8733410
F4 (C34-C50 Hydrocarbons)	ug/g	120	<50	<50	<50	50	8733410
Reached Baseline at C50	ug/g	-	Yes	Yes	Yes		8733410
Surrogate Recovery (%)							
o-Terphenyl	%	-	94	94	94		8733410
4-Bromofluorobenzene	%	-	93	94	94		8733045
D10-o-Xylene	%	-	69	75	75		8733045
D4-1,2-Dichloroethane	%	-	113	111	113		8733045
D8-Toluene	%	-	91	92	91		8733045

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

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 1: Full Depth Background Site Condition Standards
Soil - Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use

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Bureau Veritas Job #: C3H3273
Report Date: 2023/06/26

DS Consultants Limited
Client Project #: 23-162-100
Site Location: 1720 Sherwood Forrest Circle

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID			WCJ472	WCJ473	WCJ474			WCJ475		
Sampling Date			2023/06/14	2023/06/14	2023/06/14			2023/06/14		
COC Number			939668-02-01	939668-02-01	939668-02-01			939668-02-01		
	UNITS	Criteria	BH23-4	BH23-5	BH23-6	RDL	QC Batch	BH23-7	RDL	QC Batch
Inorganics										
Moisture	%	-	13	19	16	1.0	8737876	12	1.0	8730693
WAD Cyanide (Free)	ug/g	0.051	<0.01	<0.01	<0.01	0.01	8738129			

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

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 1: Full Depth Background Site Condition Standards
Soil - Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use

Bureau Veritas ID			WCJ476	WCJ477		
Sampling Date			2023/06/14	2023/06/14		
COC Number			939668-02-01	939668-02-01		
	UNITS	Criteria	DUP-1	BH23-8	RDL	QC Batch
Inorganics						
Moisture	%	-	12	20	1.0	8730693

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

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 1: Full Depth Background Site Condition Standards
Soil - Residential/Parkland/Institutional/Industrial/Commercial/Community Property Use

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TEST SUMMARY

Bureau Veritas ID: WCJ472 **Collected:** 2023/06/14
Sample ID: BH23-4 **Shipped:**
Matrix: Soil **Received:** 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	TECH	8738129	2023/06/20	2023/06/20	Prgya Panchal
Acid Extractable Metals by ICPMS	ICP/MS	8738130	2023/06/20	2023/06/20	Indira HarryPaul
Moisture	BAL	8737876	N/A	2023/06/20	Shivani Desai
OC Pesticides (Selected) & PCB	GC/ECD	8740301	2023/06/20	2023/06/23	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	8726112	N/A	2023/06/20	Automated Statchk

Bureau Veritas ID: WCJ473 **Collected:** 2023/06/14
Sample ID: BH23-5 **Shipped:**
Matrix: Soil **Received:** 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	TECH	8738129	2023/06/20	2023/06/20	Prgya Panchal
Acid Extractable Metals by ICPMS	ICP/MS	8738130	2023/06/20	2023/06/20	Indira HarryPaul
Moisture	BAL	8737876	N/A	2023/06/20	Shivani Desai
OC Pesticides (Selected) & PCB	GC/ECD	8740301	2023/06/20	2023/06/21	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	8726112	N/A	2023/06/20	Automated Statchk

Bureau Veritas ID: WCJ474 **Collected:** 2023/06/14
Sample ID: BH23-6 **Shipped:**
Matrix: Soil **Received:** 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	TECH	8738129	2023/06/20	2023/06/20	Prgya Panchal
Acid Extractable Metals by ICPMS	ICP/MS	8741319	2023/06/21	2023/06/21	Indira HarryPaul
Moisture	BAL	8737876	N/A	2023/06/20	Shivani Desai
OC Pesticides (Selected) & PCB	GC/ECD	8740301	2023/06/20	2023/06/21	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	8726112	N/A	2023/06/21	Automated Statchk

Bureau Veritas ID: WCJ474 Dup **Collected:** 2023/06/14
Sample ID: BH23-6 **Shipped:**
Matrix: Soil **Received:** 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractable Metals by ICPMS	ICP/MS	8741319	2023/06/21	2023/06/21	Indira HarryPaul

Bureau Veritas ID: WCJ475 **Collected:** 2023/06/14
Sample ID: BH23-7 **Shipped:**
Matrix: Soil **Received:** 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8726832	N/A	2023/06/22	Automated Statchk
Hot Water Extractable Boron	ICP	8735925	2023/06/19	2023/06/20	Medhat Nasr
1,3-Dichloropropene Sum	CALC	8726083	N/A	2023/06/21	Automated Statchk
Free (WAD) Cyanide	TECH	8738129	2023/06/20	2023/06/20	Prgya Panchal
Conductivity	AT	8738651	2023/06/20	2023/06/20	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8741659	2023/06/21	2023/06/21	Sousan Besharatlou

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TEST SUMMARY

Bureau Veritas ID: WCJ475 **Collected:** 2023/06/14
Sample ID: BH23-7 **Shipped:**
Matrix: Soil **Received:** 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8733410	2023/06/17	2023/06/20	(Kent) Maolin Li
Acid Extractable Metals by ICPMS	ICP/MS	8738130	2023/06/20	2023/06/20	Indira HarryPaul
Moisture	BAL	8730693	N/A	2023/06/16	Simrat Bhathal
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8736865	2023/06/19	2023/06/21	Joe Paino
pH CaCl2 EXTRACT	AT	8741995	2023/06/21	2023/06/21	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8727020	N/A	2023/06/21	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8733045	N/A	2023/06/20	Denis Reid

Bureau Veritas ID: WCJ475 Dup **Collected:** 2023/06/14
Sample ID: BH23-7 **Shipped:**
Matrix: Soil **Received:** 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	TECH	8738129	2023/06/20	2023/06/20	Prgya Panchal

Bureau Veritas ID: WCJ476 **Collected:** 2023/06/14
Sample ID: DUP-1 **Shipped:**
Matrix: Soil **Received:** 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8726832	N/A	2023/06/22	Automated Statchk
Hot Water Extractable Boron	ICP	8735925	2023/06/19	2023/06/20	Medhat Nasr
1,3-Dichloropropene Sum	CALC	8726083	N/A	2023/06/21	Automated Statchk
Free (WAD) Cyanide	TECH	8738129	2023/06/20	2023/06/20	Prgya Panchal
Conductivity	AT	8738651	2023/06/20	2023/06/20	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8741659	2023/06/21	2023/06/21	Sousan Besharatlou
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8733410	2023/06/17	2023/06/20	(Kent) Maolin Li
Acid Extractable Metals by ICPMS	ICP/MS	8738130	2023/06/20	2023/06/20	Indira HarryPaul
Moisture	BAL	8730693	N/A	2023/06/16	Simrat Bhathal
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8736865	2023/06/19	2023/06/21	Joe Paino
pH CaCl2 EXTRACT	AT	8741995	2023/06/21	2023/06/21	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8727020	N/A	2023/06/21	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8733045	N/A	2023/06/20	Denis Reid

Bureau Veritas ID: WCJ477 **Collected:** 2023/06/14
Sample ID: BH23-8 **Shipped:**
Matrix: Soil **Received:** 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8726832	N/A	2023/06/22	Automated Statchk
Hot Water Extractable Boron	ICP	8735925	2023/06/19	2023/06/20	Medhat Nasr
1,3-Dichloropropene Sum	CALC	8726083	N/A	2023/06/21	Automated Statchk
Free (WAD) Cyanide	TECH	8738129	2023/06/20	2023/06/20	Prgya Panchal
Conductivity	AT	8738651	2023/06/20	2023/06/20	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8741659	2023/06/21	2023/06/21	Sousan Besharatlou

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Bureau Veritas Job #: C3H3273
Report Date: 2023/06/26

DS Consultants Limited
Client Project #: 23-162-100
Site Location: 1720 Sherwood Forrest Circle

TEST SUMMARY

Bureau Veritas ID: WCJ477
Sample ID: BH23-8
Matrix: Soil

Collected: 2023/06/14
Shipped:
Received: 2023/06/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8733410	2023/06/17	2023/06/20	(Kent) Maolin Li
Acid Extractable Metals by ICPMS	ICP/MS	8738130	2023/06/20	2023/06/20	Indira HarryPaul
Moisture	BAL	8730693	N/A	2023/06/16	Simrat Bhathal
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8736865	2023/06/19	2023/06/21	Joe Paino
pH CaCl2 EXTRACT	AT	8742109	2023/06/21	2023/06/21	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8727020	N/A	2023/06/21	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8733045	N/A	2023/06/20	Denis Reid

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GENERAL COMMENTS

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

Package 1	16.3°C

Sample WCJ472 [BH23-4] : OC Pesticide Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Sample WCJ474 [BH23-6] : OC Pesticide Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8733045	4-Bromofluorobenzene	2023/06/20	99	60 - 140	99	60 - 140	95	%		
8733045	D10-o-Xylene	2023/06/20	89	60 - 130	91	60 - 130	74	%		
8733045	D4-1,2-Dichloroethane	2023/06/20	104	60 - 140	107	60 - 140	108	%		
8733045	D8-Toluene	2023/06/20	107	60 - 140	105	60 - 140	93	%		
8733410	o-Terphenyl	2023/06/19	106	60 - 130	85	60 - 130	94	%		
8736865	D10-Anthracene	2023/06/21	100	50 - 130	100	50 - 130	112	%		
8736865	D14-Terphenyl (FS)	2023/06/21	100	50 - 130	97	50 - 130	101	%		
8736865	D8-Acenaphthylene	2023/06/21	90	50 - 130	92	50 - 130	92	%		
8740301	2,4,5,6-Tetrachloro-m-xylene	2023/06/21	85	50 - 130	80	50 - 130	81	%		
8740301	Decachlorobiphenyl	2023/06/21	87	50 - 130	78	50 - 130	83	%		
8730693	Moisture	2023/06/16							8.7	20
8733045	1,1,1,2-Tetrachloroethane	2023/06/20	95	60 - 140	97	60 - 130	<0.040	ug/g	NC	50
8733045	1,1,1-Trichloroethane	2023/06/20	95	60 - 140	96	60 - 130	<0.040	ug/g	NC	50
8733045	1,1,2,2-Tetrachloroethane	2023/06/20	107	60 - 140	110	60 - 130	<0.040	ug/g	NC	50
8733045	1,1,2-Trichloroethane	2023/06/20	105	60 - 140	108	60 - 130	<0.040	ug/g	NC	50
8733045	1,1-Dichloroethane	2023/06/20	102	60 - 140	104	60 - 130	<0.040	ug/g	NC	50
8733045	1,1-Dichloroethylene	2023/06/20	100	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
8733045	1,2-Dichlorobenzene	2023/06/20	92	60 - 140	93	60 - 130	<0.040	ug/g	NC	50
8733045	1,2-Dichloroethane	2023/06/20	94	60 - 140	97	60 - 130	<0.049	ug/g	NC	50
8733045	1,2-Dichloropropane	2023/06/20	109	60 - 140	110	60 - 130	<0.040	ug/g	NC	50
8733045	1,3-Dichlorobenzene	2023/06/20	90	60 - 140	89	60 - 130	<0.040	ug/g	NC	50
8733045	1,4-Dichlorobenzene	2023/06/20	102	60 - 140	99	60 - 130	<0.040	ug/g	NC	50
8733045	Acetone (2-Propanone)	2023/06/20	125	60 - 140	105	60 - 140	<0.49	ug/g	NC	50
8733045	Benzene	2023/06/20	98	60 - 140	99	60 - 130	<0.0060	ug/g	NC	50
8733045	Bromodichloromethane	2023/06/20	100	60 - 140	102	60 - 130	<0.040	ug/g	NC	50
8733045	Bromoform	2023/06/20	91	60 - 140	95	60 - 130	<0.040	ug/g	NC	50
8733045	Bromomethane	2023/06/20	105	60 - 140	108	60 - 140	<0.040	ug/g	NC	50
8733045	Carbon Tetrachloride	2023/06/20	87	60 - 140	88	60 - 130	<0.040	ug/g	NC	50
8733045	Chlorobenzene	2023/06/20	93	60 - 140	94	60 - 130	<0.040	ug/g	NC	50
8733045	Chloroform	2023/06/20	98	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
8733045	cis-1,2-Dichloroethylene	2023/06/20	102	60 - 140	104	60 - 130	<0.040	ug/g	NC	50

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8733045	cis-1,3-Dichloropropene	2023/06/20	102	60 - 140	102	60 - 130	<0.030	ug/g	NC	50
8733045	Dibromochloromethane	2023/06/20	91	60 - 140	95	60 - 130	<0.040	ug/g	NC	50
8733045	Dichlorodifluoromethane (FREON 12)	2023/06/20	113	60 - 140	117	60 - 140	<0.040	ug/g	NC	50
8733045	Ethylbenzene	2023/06/20	79	60 - 140	77	60 - 130	<0.010	ug/g	NC	50
8733045	Ethylene Dibromide	2023/06/20	97	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
8733045	F1 (C6-C10) - BTEX	2023/06/20					<10	ug/g	NC	30
8733045	F1 (C6-C10)	2023/06/20	88	60 - 140	87	80 - 120	<10	ug/g	NC	30
8733045	Hexane	2023/06/20	110	60 - 140	107	60 - 130	<0.040	ug/g	NC	50
8733045	Methyl Ethyl Ketone (2-Butanone)	2023/06/20	134	60 - 140	121	60 - 140	<0.40	ug/g	NC	50
8733045	Methyl Isobutyl Ketone	2023/06/20	116	60 - 140	113	60 - 130	<0.40	ug/g	NC	50
8733045	Methyl t-butyl ether (MTBE)	2023/06/20	93	60 - 140	91	60 - 130	<0.040	ug/g	NC	50
8733045	Methylene Chloride(Dichloromethane)	2023/06/20	107	60 - 140	109	60 - 130	<0.049	ug/g	NC	50
8733045	o-Xylene	2023/06/20	86	60 - 140	84	60 - 130	<0.020	ug/g	NC	50
8733045	p+m-Xylene	2023/06/20	83	60 - 140	80	60 - 130	<0.020	ug/g	NC	50
8733045	Styrene	2023/06/20	98	60 - 140	95	60 - 130	<0.040	ug/g	NC	50
8733045	Tetrachloroethylene	2023/06/20	86	60 - 140	86	60 - 130	<0.040	ug/g	NC	50
8733045	Toluene	2023/06/20	92	60 - 140	93	60 - 130	<0.020	ug/g	NC	50
8733045	Total Xylenes	2023/06/20					<0.020	ug/g	NC	50
8733045	trans-1,2-Dichloroethylene	2023/06/20	101	60 - 140	102	60 - 130	<0.040	ug/g	NC	50
8733045	trans-1,3-Dichloropropene	2023/06/20	113	60 - 140	113	60 - 130	<0.040	ug/g	NC	50
8733045	Trichloroethylene	2023/06/20	96	60 - 140	97	60 - 130	<0.010	ug/g	NC	50
8733045	Trichlorofluoromethane (FREON 11)	2023/06/20	88	60 - 140	90	60 - 130	<0.040	ug/g	NC	50
8733045	Vinyl Chloride	2023/06/20	122	60 - 140	127	60 - 130	<0.019	ug/g	NC	50
8733410	F2 (C10-C16 Hydrocarbons)	2023/06/20	117	60 - 130	92	80 - 120	<10	ug/g	NC	30
8733410	F3 (C16-C34 Hydrocarbons)	2023/06/20	120	60 - 130	93	80 - 120	<50	ug/g	NC	30
8733410	F4 (C34-C50 Hydrocarbons)	2023/06/20	119	60 - 130	102	80 - 120	<50	ug/g	NC	30
8735925	Hot Water Ext. Boron (B)	2023/06/20	110	75 - 125	111	75 - 125	<0.050	ug/g	13	40
8736865	1-Methylnaphthalene	2023/06/21	99	50 - 130	100	50 - 130	<0.0050	ug/g	NC	40
8736865	2-Methylnaphthalene	2023/06/21	89	50 - 130	91	50 - 130	<0.0050	ug/g	102 (1)	40
8736865	Acenaphthene	2023/06/21	98	50 - 130	97	50 - 130	<0.0050	ug/g	107 (1)	40
8736865	Acenaphthylene	2023/06/21	93	50 - 130	94	50 - 130	<0.0050	ug/g	NC	40

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8736865	Anthracene	2023/06/21	98	50 - 130	97	50 - 130	<0.0050	ug/g	160 (1)	40
8736865	Benzo(a)anthracene	2023/06/21	104	50 - 130	95	50 - 130	<0.0050	ug/g	167 (1)	40
8736865	Benzo(a)pyrene	2023/06/21	97	50 - 130	91	50 - 130	<0.0050	ug/g	167 (1)	40
8736865	Benzo(b/j)fluoranthene	2023/06/21	97	50 - 130	99	50 - 130	<0.0050	ug/g	161 (1)	40
8736865	Benzo(g,h,i)perylene	2023/06/21	103	50 - 130	94	50 - 130	<0.0050	ug/g	158 (1)	40
8736865	Benzo(k)fluoranthene	2023/06/21	94	50 - 130	91	50 - 130	<0.0050	ug/g	164 (1)	40
8736865	Chrysene	2023/06/21	106	50 - 130	98	50 - 130	<0.0050	ug/g	161 (1)	40
8736865	Dibenzo(a,h)anthracene	2023/06/21	93	50 - 130	79	50 - 130	<0.0050	ug/g	117 (1)	40
8736865	Fluoranthene	2023/06/21	114	50 - 130	100	50 - 130	<0.0050	ug/g	168 (1)	40
8736865	Fluorene	2023/06/21	90	50 - 130	89	50 - 130	<0.0050	ug/g	105 (1)	40
8736865	Indeno(1,2,3-cd)pyrene	2023/06/21	99	50 - 130	90	50 - 130	<0.0050	ug/g	165 (1)	40
8736865	Naphthalene	2023/06/21	90	50 - 130	94	50 - 130	<0.0050	ug/g	153 (1)	40
8736865	Phenanthrene	2023/06/21	100	50 - 130	96	50 - 130	<0.0050	ug/g	171 (1)	40
8736865	Pyrene	2023/06/21	114	50 - 130	101	50 - 130	<0.0050	ug/g	165 (1)	40
8737876	Moisture	2023/06/20							2.0	20
8738129	WAD Cyanide (Free)	2023/06/20	80	75 - 125	87	80 - 120	<0.01	ug/g	NC	35
8738130	Acid Extractable Antimony (Sb)	2023/06/20	88	75 - 125	103	80 - 120	<0.20	ug/g	7.4	30
8738130	Acid Extractable Arsenic (As)	2023/06/20	90	75 - 125	101	80 - 120	<1.0	ug/g	5.7	30
8738130	Acid Extractable Barium (Ba)	2023/06/20	NC	75 - 125	92	80 - 120	<0.50	ug/g	3.7	30
8738130	Acid Extractable Beryllium (Be)	2023/06/20	88	75 - 125	95	80 - 120	<0.20	ug/g	2.8	30
8738130	Acid Extractable Boron (B)	2023/06/20	82	75 - 125	95	80 - 120	<5.0	ug/g	7.9	30
8738130	Acid Extractable Cadmium (Cd)	2023/06/20	87	75 - 125	98	80 - 120	<0.10	ug/g	3.7	30
8738130	Acid Extractable Chromium (Cr)	2023/06/20	86	75 - 125	98	80 - 120	<1.0	ug/g	5.5	30
8738130	Acid Extractable Cobalt (Co)	2023/06/20	86	75 - 125	101	80 - 120	<0.10	ug/g	2.0	30
8738130	Acid Extractable Copper (Cu)	2023/06/20	NC	75 - 125	98	80 - 120	<0.50	ug/g	2.2	30
8738130	Acid Extractable Lead (Pb)	2023/06/20	NC	75 - 125	103	80 - 120	<1.0	ug/g	1.4	30
8738130	Acid Extractable Mercury (Hg)	2023/06/20	86	75 - 125	106	80 - 120	<0.050	ug/g	NC	30
8738130	Acid Extractable Molybdenum (Mo)	2023/06/20	89	75 - 125	101	80 - 120	<0.50	ug/g	NC	30
8738130	Acid Extractable Nickel (Ni)	2023/06/20	87	75 - 125	97	80 - 120	<0.50	ug/g	2.6	30
8738130	Acid Extractable Selenium (Se)	2023/06/20	89	75 - 125	101	80 - 120	<0.50	ug/g	NC	30
8738130	Acid Extractable Silver (Ag)	2023/06/20	90	75 - 125	101	80 - 120	<0.20	ug/g	NC	30

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8738130	Acid Extractable Thallium (Tl)	2023/06/20	89	75 - 125	104	80 - 120	<0.050	ug/g	9.0	30
8738130	Acid Extractable Uranium (U)	2023/06/20	91	75 - 125	103	80 - 120	<0.050	ug/g	2.3	30
8738130	Acid Extractable Vanadium (V)	2023/06/20	86	75 - 125	99	80 - 120	<5.0	ug/g	7.1	30
8738130	Acid Extractable Zinc (Zn)	2023/06/20	NC	75 - 125	103	80 - 120	<5.0	ug/g	7.3	30
8738651	Conductivity	2023/06/20			104	90 - 110	<0.002	mS/cm	5.9	10
8740301	a-Chlordane	2023/06/21	90	50 - 130	84	50 - 130	<0.0020	ug/g	NC	40
8740301	Aldrin	2023/06/21	84	50 - 130	79	50 - 130	<0.0020	ug/g	NC	40
8740301	Aroclor 1242	2023/06/21					<0.015	ug/g	NC	40
8740301	Aroclor 1248	2023/06/21					<0.015	ug/g	NC	40
8740301	Aroclor 1254	2023/06/21					<0.015	ug/g	NC	40
8740301	Aroclor 1260	2023/06/21					<0.015	ug/g	NC	40
8740301	Dieldrin	2023/06/21	96	50 - 130	89	50 - 130	<0.0020	ug/g	NC	40
8740301	Endosulfan I (alpha)	2023/06/21	91	50 - 130	84	50 - 130	<0.0020	ug/g	NC	40
8740301	Endosulfan II (beta)	2023/06/21	97	50 - 130	99	50 - 130	<0.0020	ug/g	NC	40
8740301	Endrin	2023/06/21	98	50 - 130	89	50 - 130	<0.0020	ug/g	NC	40
8740301	g-Chlordane	2023/06/21	93	50 - 130	82	50 - 130	<0.0020	ug/g	NC	40
8740301	Heptachlor epoxide	2023/06/21	88	50 - 130	82	50 - 130	<0.0020	ug/g	NC	40
8740301	Heptachlor	2023/06/21	91	50 - 130	87	50 - 130	<0.0020	ug/g	NC	40
8740301	Hexachlorobenzene	2023/06/21	79	50 - 130	80	50 - 130	<0.0020	ug/g	NC	40
8740301	Hexachlorobutadiene	2023/06/21	87	50 - 130	99	50 - 130	<0.0020	ug/g	NC	40
8740301	Hexachloroethane	2023/06/21	67	50 - 130	80	50 - 130	<0.0020	ug/g	NC	40
8740301	Lindane	2023/06/21	82	50 - 130	78	50 - 130	<0.0020	ug/g	NC	40
8740301	Methoxychlor	2023/06/21	114	50 - 130	118	50 - 130	<0.0050	ug/g	NC	40
8740301	o,p-DDD	2023/06/21	98	50 - 130	91	50 - 130	<0.0020	ug/g	NC	40
8740301	o,p-DDE	2023/06/21	96	50 - 130	89	50 - 130	<0.0020	ug/g	NC	40
8740301	o,p-DDT	2023/06/21	106	50 - 130	97	50 - 130	<0.0020	ug/g	NC	40
8740301	p,p-DDD	2023/06/21	96	50 - 130	90	50 - 130	<0.0020	ug/g	NC	40
8740301	p,p-DDE	2023/06/21	87	50 - 130	80	50 - 130	<0.0020	ug/g	NC	40
8740301	p,p-DDT	2023/06/21	122	50 - 130	108	50 - 130	<0.0020	ug/g	NC	40
8741319	Acid Extractable Antimony (Sb)	2023/06/21	94	75 - 125	102	80 - 120	<0.20	ug/g	11	30
8741319	Acid Extractable Arsenic (As)	2023/06/21	103	75 - 125	100	80 - 120	<1.0	ug/g	4.8	30

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8741319	Acid Extractable Barium (Ba)	2023/06/21	NC	75 - 125	99	80 - 120	<0.50	ug/g	0.56	30
8741319	Acid Extractable Beryllium (Be)	2023/06/21	103	75 - 125	99	80 - 120	<0.20	ug/g	3.7	30
8741319	Acid Extractable Boron (B)	2023/06/21	90	75 - 125	99	80 - 120	<5.0	ug/g	7.5	30
8741319	Acid Extractable Cadmium (Cd)	2023/06/21	99	75 - 125	99	80 - 120	<0.10	ug/g	9.4	30
8741319	Acid Extractable Chromium (Cr)	2023/06/21	100	75 - 125	104	80 - 120	<1.0	ug/g	0.51	30
8741319	Acid Extractable Cobalt (Co)	2023/06/21	100	75 - 125	101	80 - 120	<0.10	ug/g	3.6	30
8741319	Acid Extractable Copper (Cu)	2023/06/21	102	75 - 125	103	80 - 120	<0.50	ug/g	0.86	30
8741319	Acid Extractable Lead (Pb)	2023/06/21	NC	75 - 125	102	80 - 120	<1.0	ug/g	1.0	30
8741319	Acid Extractable Molybdenum (Mo)	2023/06/21	101	75 - 125	100	80 - 120	<0.50	ug/g	NC	30
8741319	Acid Extractable Nickel (Ni)	2023/06/21	100	75 - 125	103	80 - 120	<0.50	ug/g	2.3	30
8741319	Acid Extractable Selenium (Se)	2023/06/21	101	75 - 125	98	80 - 120	<0.50	ug/g	NC	30
8741319	Acid Extractable Silver (Ag)	2023/06/21	104	75 - 125	101	80 - 120	<0.20	ug/g	NC	30
8741319	Acid Extractable Thallium (Tl)	2023/06/21	104	75 - 125	103	80 - 120	<0.050	ug/g	12	30
8741319	Acid Extractable Uranium (U)	2023/06/21	103	75 - 125	100	80 - 120	<0.050	ug/g	6.2	30
8741319	Acid Extractable Vanadium (V)	2023/06/21	99	75 - 125	100	80 - 120	<5.0	ug/g	0.42	30
8741319	Acid Extractable Zinc (Zn)	2023/06/21	NC	75 - 125	97	80 - 120	<5.0	ug/g	0.12	30
8741659	Chromium (VI)	2023/06/21	87	70 - 130	96	80 - 120	<0.18	ug/g	NC	35
8741995	Available (CaCl2) pH	2023/06/21			100	97 - 103			0.58	N/A
8742109	Available (CaCl2) pH	2023/06/21			100	97 - 103			0.49	N/A

N/A = Not Applicable

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

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

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

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

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

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

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

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

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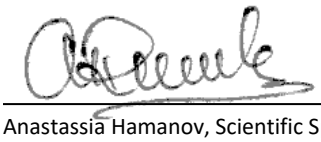
VALIDATION SIGNATURE PAGE

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



Anastassia Hamanov, Scientific Specialist

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Exceedance Summary Table – Reg153/04 T1-Soil/Res

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						

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

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Your Project #: 23-162-100
Site Location: 1720 SHERWOOD FOREST CIRCLE
Your C.O.C. #: 936537-01-01

Attention: John Gaviria-Ballen

DS Consultants Limited
6221 Highway 7, Unit 16
Vaughan, ON
CANADA L4H 0K8

Report Date: 2023/06/05
Report #: R7658306
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3F1623
Received: 2023/05/26, 14:50

Sample Matrix: Water
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum	2	N/A	2023/06/02	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum	4	N/A	2023/06/01		EPA 8260C m
Chloride by Automated Colourimetry	2	N/A	2023/06/01	CAM SOP-00463	SM 23 4500-Cl E m
Chromium (VI) in Water	2	N/A	2023/05/30	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	2	N/A	2023/06/03	CAM SOP-00457	OMOE E3015 m
Petroleum Hydrocarbons F2-F4 in Water (1)	1	2023/05/30	2023/05/30	CAM SOP-00316	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (1)	1	2023/05/30	2023/06/01	CAM SOP-00316	CCME PHC-CWS m
Mercury	2	2023/05/30	2023/05/30	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	1	N/A	2023/05/30	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS	1	N/A	2023/05/31	CAM SOP-00447	EPA 6020B m
PAH Compounds in Water by GC/MS (SIM)	2	2023/05/30	2023/06/01	CAM SOP-00318	EPA 8270E
Volatile Organic Compounds and F1 PHCs	2	N/A	2023/05/31	CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds in Water	2	N/A	2023/05/31	CAM SOP-00228	EPA 8260D

Remarks:

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

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

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

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

Your Project #: 23-162-100
Site Location: 1720 SHERWOOD FOREST CIRCLE
Your C.O.C. #: 936537-01-01

Attention: John Gaviria-Ballen

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BUREAU VERITAS JOB #: C3F1623
Received: 2023/05/26, 14:50

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

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

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

Encryption Key

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

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

Bureau Veritas Job #: C3F1623
Report Date: 2023/06/05

DS Consultants Limited
Client Project #: 23-162-100
Site Location: 1720 SHERWOOD FOREST CIRCLE
Sampler Initials: MS

O.REG 153 METALS & INORGANICS PKG (WTR)

Bureau Veritas ID			VXU623		VXU625		
Sampling Date			2023/05/26		2023/05/26		
COC Number			936537-01-01		936537-01-01		
	UNITS	Criteria	MW23-1	RDL	MW23-2	RDL	QC Batch
Inorganics							
WAD Cyanide (Free)	ug/L	66	1	1	2	1	8696873
Dissolved Chloride (Cl-)	mg/L	790	**1200**	20	430	5.0	8694545
Metals							
Chromium (VI)	ug/L	25	<0.50	0.50	0.54	0.50	8692233
Mercury (Hg)	ug/L	0.29	<0.10	0.10	<0.10	0.10	8692272
Dissolved Antimony (Sb)	ug/L	6.0	<0.50	0.50	<0.50	0.50	8693223
Dissolved Arsenic (As)	ug/L	25	<1.0	1.0	<1.0	1.0	8693223
Dissolved Barium (Ba)	ug/L	1000	120	2.0	36	2.0	8693223
Dissolved Beryllium (Be)	ug/L	4.0	<0.40	0.40	<0.40	0.40	8693223
Dissolved Boron (B)	ug/L	5000	38	10	27	10	8693223
Dissolved Cadmium (Cd)	ug/L	2.7	<0.090	0.090	<0.090	0.090	8693223
Dissolved Chromium (Cr)	ug/L	50	<5.0	5.0	<5.0	5.0	8693223
Dissolved Cobalt (Co)	ug/L	3.8	<0.50	0.50	<0.50	0.50	8693223
Dissolved Copper (Cu)	ug/L	87	0.91	0.90	1.1	0.90	8693223
Dissolved Lead (Pb)	ug/L	10	<0.50	0.50	<0.50	0.50	8693223
Dissolved Molybdenum (Mo)	ug/L	70	<0.50	0.50	<0.50	0.50	8693223
Dissolved Nickel (Ni)	ug/L	100	1.4	1.0	1.0	1.0	8693223
Dissolved Selenium (Se)	ug/L	10	<2.0	2.0	<2.0	2.0	8693223
Dissolved Silver (Ag)	ug/L	1.5	<0.090	0.090	<0.090	0.090	8693223
Dissolved Sodium (Na)	ug/L	490000	**780000**	500	400000	100	8693223
Dissolved Thallium (Tl)	ug/L	2.0	<0.050	0.050	<0.050	0.050	8693223
Dissolved Uranium (U)	ug/L	20	0.45	0.10	0.28	0.10	8693223
Dissolved Vanadium (V)	ug/L	6.2	<0.50	0.50	<0.50	0.50	8693223
Dissolved Zinc (Zn)	ug/L	1100	<5.0	5.0	<5.0	5.0	8693223

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

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

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Bureau Veritas Job #: C3F1623
Report Date: 2023/06/05

DS Consultants Limited
Client Project #: 23-162-100
Site Location: 1720 SHERWOOD FOREST CIRCLE
Sampler Initials: MS

O.REG 153 PAHS (WATER)

Bureau Veritas ID			VXU623	VXU625		
Sampling Date			2023/05/26	2023/05/26		
COC Number			936537-01-01	936537-01-01		
	UNITS	Criteria	MW23-1	MW23-2	RDL	QC Batch
Calculated Parameters						
Methylnaphthalene, 2-(1-)	ug/L	3.2	<0.071	<0.071	0.071	8689936
Polyaromatic Hydrocarbons						
Acenaphthene	ug/L	4.1	<0.050	<0.050	0.050	8692611
Acenaphthylene	ug/L	1	<0.050	<0.050	0.050	8692611
Anthracene	ug/L	2.4	<0.050	<0.050	0.050	8692611
Benzo(a)anthracene	ug/L	1.0	<0.050	<0.050	0.050	8692611
Benzo(a)pyrene	ug/L	0.01	<0.0090	<0.0090	0.0090	8692611
Benzo(b/j)fluoranthene	ug/L	0.1	<0.050	<0.050	0.050	8692611
Benzo(g,h,i)perylene	ug/L	0.2	<0.050	<0.050	0.050	8692611
Benzo(k)fluoranthene	ug/L	0.1	<0.050	<0.050	0.050	8692611
Chrysene	ug/L	0.1	<0.050	<0.050	0.050	8692611
Dibenzo(a,h)anthracene	ug/L	0.2	<0.050	<0.050	0.050	8692611
Fluoranthene	ug/L	0.41	<0.050	<0.050	0.050	8692611
Fluorene	ug/L	120	<0.050	<0.050	0.050	8692611
Indeno(1,2,3-cd)pyrene	ug/L	0.2	<0.050	<0.050	0.050	8692611
1-Methylnaphthalene	ug/L	3.2	<0.050	<0.050	0.050	8692611
2-Methylnaphthalene	ug/L	3.2	<0.050	<0.050	0.050	8692611
Naphthalene	ug/L	11	<0.050	<0.050	0.050	8692611
Phenanthrene	ug/L	1	<0.030	<0.030	0.030	8692611
Pyrene	ug/L	4.1	<0.050	<0.050	0.050	8692611
Surrogate Recovery (%)						
D10-Anthracene	%	-	100	103		8692611
D14-Terphenyl (FS)	%	-	93	97		8692611
D8-Acenaphthylene	%	-	92	98		8692611

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

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

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

Bureau Veritas ID			VXU624		VXU625		
Sampling Date			2023/05/26		2023/05/26		
COC Number			936537-01-01		936537-01-01		
	UNITS	Criteria	MW23-3	QC Batch	MW23-2	RDL	QC Batch
Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/L	0.5	<0.50	8691459	<0.50	0.50	8691459
Volatile Organics							
Acetone (2-Propanone)	ug/L	2700	<10	8693024	<10	10	8693024
Benzene	ug/L	5.0	<0.17	8693024	<0.17	0.17	8693024
Bromodichloromethane	ug/L	16.0	<0.50	8693024	<0.50	0.50	8693024
Bromoform	ug/L	25.0	<1.0	8693024	<1.0	1.0	8693024
Bromomethane	ug/L	0.89	<0.50	8693024	<0.50	0.50	8693024
Carbon Tetrachloride	ug/L	0.79	<0.20	8693024	<0.20	0.20	8693024
Chlorobenzene	ug/L	30	<0.20	8693024	<0.20	0.20	8693024
Chloroform	ug/L	2.4	<0.20	8693024	<0.20	0.20	8693024
Dibromochloromethane	ug/L	25.0	<0.50	8693024	<0.50	0.50	8693024
1,2-Dichlorobenzene	ug/L	3.0	<0.50	8693024	<0.50	0.50	8693024
1,3-Dichlorobenzene	ug/L	59	<0.50	8693024	<0.50	0.50	8693024
1,4-Dichlorobenzene	ug/L	1.0	<0.50	8693024	<0.50	0.50	8693024
Dichlorodifluoromethane (FREON 12)	ug/L	590	<1.0	8693024	<1.0	1.0	8693024
1,1-Dichloroethane	ug/L	5	<0.20	8693024	<0.20	0.20	8693024
1,2-Dichloroethane	ug/L	1.6	<0.50	8693024	<0.50	0.50	8693024
1,1-Dichloroethylene	ug/L	1.6	<0.20	8693024	<0.20	0.20	8693024
cis-1,2-Dichloroethylene	ug/L	1.6	<0.50	8693024	<0.50	0.50	8693024
trans-1,2-Dichloroethylene	ug/L	1.6	<0.50	8693024	<0.50	0.50	8693024
1,2-Dichloropropane	ug/L	5.0	<0.20	8693024	<0.20	0.20	8693024
cis-1,3-Dichloropropene	ug/L	0.5	<0.30	8693024	<0.30	0.30	8693024
trans-1,3-Dichloropropene	ug/L	0.5	<0.40	8693024	<0.40	0.40	8693024
Ethylbenzene	ug/L	2.4	<0.20	8693024	<0.20	0.20	8693024
Ethylene Dibromide	ug/L	0.2	<0.20	8693024	<0.20	0.20	8693024
Hexane	ug/L	51	<1.0	8693024	<1.0	1.0	8693024
Methylene Chloride(Dichloromethane)	ug/L	50	<2.0	8693024	<2.0	2.0	8693024
Methyl Ethyl Ketone (2-Butanone)	ug/L	1800	<10	8693024	<10	10	8693024
Methyl Isobutyl Ketone	ug/L	640	<5.0	8693024	<5.0	5.0	8693024

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

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

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

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

Bureau Veritas ID			VXU624		VXU625		
Sampling Date			2023/05/26		2023/05/26		
COC Number			936537-01-01		936537-01-01		
	UNITS	Criteria	MW23-3	QC Batch	MW23-2	RDL	QC Batch
Methyl t-butyl ether (MTBE)	ug/L	15	<0.50	8693024	<0.50	0.50	8693024
Styrene	ug/L	5.4	<0.50	8693024	<0.50	0.50	8693024
1,1,1,2-Tetrachloroethane	ug/L	1.1	<0.50	8693024	<0.50	0.50	8693024
1,1,2,2-Tetrachloroethane	ug/L	1.0	<0.50	8693024	<0.50	0.50	8693024
Tetrachloroethylene	ug/L	1.6	<0.20	8693024	<0.20	0.20	8693024
Toluene	ug/L	24	<0.20	8693024	<0.20	0.20	8693024
1,1,1-Trichloroethane	ug/L	200	<0.20	8693024	<0.20	0.20	8693024
1,1,2-Trichloroethane	ug/L	4.7	<0.50	8693024	<0.50	0.50	8693024
Trichloroethylene	ug/L	1.6	<0.20	8693024	<0.20	0.20	8693024
Trichlorofluoromethane (FREON 11)	ug/L	150	<0.50	8693024	<0.50	0.50	8693024
Vinyl Chloride	ug/L	0.5	<0.20	8693024	<0.20	0.20	8693024
p+m-Xylene	ug/L	-	<0.20	8693024	<0.20	0.20	8693024
o-Xylene	ug/L	-	<0.20	8693024	<0.20	0.20	8693024
Total Xylenes	ug/L	300	<0.20	8693024	<0.20	0.20	8693024
F1 (C6-C10)	ug/L	750	<25	8693024	<25	25	8693024
F1 (C6-C10) - BTEX	ug/L	750	<25	8693024	<25	25	8693024
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/L	150	<100	8692263	<100	100	8692612
F3 (C16-C34 Hydrocarbons)	ug/L	500	<200	8692263	<200	200	8692612
F4 (C34-C50 Hydrocarbons)	ug/L	500	<200	8692263	<200	200	8692612
Reached Baseline at C50	ug/L	-	Yes	8692263	Yes		8692612
Surrogate Recovery (%)							
o-Terphenyl	%	-	92	8692263	103		8692612
4-Bromofluorobenzene	%	-	95	8693024	97		8693024
D4-1,2-Dichloroethane	%	-	102	8693024	102		8693024
D8-Toluene	%	-	96	8693024	96		8693024

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

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

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Bureau Veritas Job #: C3F1623
Report Date: 2023/06/05

DS Consultants Limited
Client Project #: 23-162-100
Site Location: 1720 SHERWOOD FOREST CIRCLE
Sampler Initials: MS

O.REG 153 VOCS BY HS (WATER)

Bureau Veritas ID			VXU626			VXU626			VXU627		
Sampling Date			2023/05/26			2023/05/26			2023/05/26		
COC Number			936537-01-01			936537-01-01			936537-01-01		
	UNITS	Criteria	DUP-1	RDL	QC Batch	DUP-1 Lab-Dup	RDL	QC Batch	TRIP BLANK	RDL	QC Batch
Calculated Parameters											
1,3-Dichloropropene (cis+trans)	ug/L	0.5	<0.50	0.50	8691459				<0.50	0.50	8691459
Volatile Organics											
Acetone (2-Propanone)	ug/L	2700	<10	10	8692631	<10	10	8692631	<10	10	8692631
Benzene	ug/L	5.0	<0.20	0.20	8692631	<0.20	0.20	8692631	<0.20	0.20	8692631
Bromodichloromethane	ug/L	16.0	<0.50	0.50	8692631	<0.50	0.50	8692631	<0.50	0.50	8692631
Bromoform	ug/L	25.0	<1.0	1.0	8692631	<1.0	1.0	8692631	<1.0	1.0	8692631
Bromomethane	ug/L	0.89	<0.50	0.50	8692631	<0.50	0.50	8692631	<0.50	0.50	8692631
Carbon Tetrachloride	ug/L	0.79	<0.19	0.19	8692631	<0.19	0.19	8692631	<0.19	0.19	8692631
Chlorobenzene	ug/L	30	<0.20	0.20	8692631	<0.20	0.20	8692631	<0.20	0.20	8692631
Chloroform	ug/L	2.4	<0.20	0.20	8692631	<0.20	0.20	8692631	<0.20	0.20	8692631
Dibromochloromethane	ug/L	25.0	<0.50	0.50	8692631	<0.50	0.50	8692631	<0.50	0.50	8692631
1,2-Dichlorobenzene	ug/L	3.0	<0.40	0.40	8692631	<0.40	0.40	8692631	<0.40	0.40	8692631
1,3-Dichlorobenzene	ug/L	59	<0.40	0.40	8692631	<0.40	0.40	8692631	<0.40	0.40	8692631
1,4-Dichlorobenzene	ug/L	1.0	<0.40	0.40	8692631	<0.40	0.40	8692631	<0.40	0.40	8692631
Dichlorodifluoromethane (FREON 12)	ug/L	590	<1.0	1.0	8692631	<1.0	1.0	8692631	<1.0	1.0	8692631
1,1-Dichloroethane	ug/L	5	<0.20	0.20	8692631	<0.20	0.20	8692631	<0.20	0.20	8692631
1,2-Dichloroethane	ug/L	1.6	<0.49	0.49	8692631	<0.49	0.49	8692631	<0.49	0.49	8692631
1,1-Dichloroethylene	ug/L	1.6	<0.20	0.20	8692631	<0.20	0.20	8692631	<0.20	0.20	8692631
cis-1,2-Dichloroethylene	ug/L	1.6	<0.50	0.50	8692631	<0.50	0.50	8692631	<0.50	0.50	8692631
trans-1,2-Dichloroethylene	ug/L	1.6	<0.50	0.50	8692631	<0.50	0.50	8692631	<0.50	0.50	8692631
1,2-Dichloropropane	ug/L	5.0	<0.20	0.20	8692631	<0.20	0.20	8692631	<0.20	0.20	8692631
cis-1,3-Dichloropropene	ug/L	0.5	<0.30	0.30	8692631	<0.30	0.30	8692631	<0.30	0.30	8692631
trans-1,3-Dichloropropene	ug/L	0.5	<0.40	0.40	8692631	<0.40	0.40	8692631	<0.40	0.40	8692631
Ethylbenzene	ug/L	2.4	<0.20	0.20	8692631	<0.20	0.20	8692631	<0.20	0.20	8692631
Ethylene Dibromide	ug/L	0.2	<0.19	0.19	8692631	<0.19	0.19	8692631	<0.19	0.19	8692631
Hexane	ug/L	51	<1.0	1.0	8692631	<1.0	1.0	8692631	<1.0	1.0	8692631
Methylene Chloride(Dichloromethane)	ug/L	50	<2.0	2.0	8692631	<2.0	2.0	8692631	<2.0	2.0	8692631
Methyl Ethyl Ketone (2-Butanone)	ug/L	1800	<10	10	8692631	<10	10	8692631	<10	10	8692631

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

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

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Bureau Veritas Job #: C3F1623
Report Date: 2023/06/05

DS Consultants Limited
Client Project #: 23-162-100
Site Location: 1720 SHERWOOD FOREST CIRCLE
Sampler Initials: MS

O.REG 153 VOCS BY HS (WATER)

Bureau Veritas ID			VXU626			VXU626			VXU627		
Sampling Date			2023/05/26			2023/05/26			2023/05/26		
COC Number			936537-01-01			936537-01-01			936537-01-01		
	UNITS	Criteria	DUP-1	RDL	QC Batch	DUP-1 Lab-Dup	RDL	QC Batch	TRIP BLANK	RDL	QC Batch
Methyl Isobutyl Ketone	ug/L	640	<5.0	5.0	8692631	<5.0	5.0	8692631	<5.0	5.0	8692631
Methyl t-butyl ether (MTBE)	ug/L	15	<0.50	0.50	8692631	<0.50	0.50	8692631	<0.50	0.50	8692631
Styrene	ug/L	5.4	<0.40	0.40	8692631	<0.40	0.40	8692631	<0.40	0.40	8692631
1,1,1,2-Tetrachloroethane	ug/L	1.1	<0.50	0.50	8692631	<0.50	0.50	8692631	<0.50	0.50	8692631
1,1,2,2-Tetrachloroethane	ug/L	1.0	<0.40	0.40	8692631	<0.40	0.40	8692631	<0.40	0.40	8692631
Tetrachloroethylene	ug/L	1.6	<0.20	0.20	8692631	<0.20	0.20	8692631	<0.20	0.20	8692631
Toluene	ug/L	24	<0.20	0.20	8692631	<0.20	0.20	8692631	<0.20	0.20	8692631
1,1,1-Trichloroethane	ug/L	200	<0.20	0.20	8692631	<0.20	0.20	8692631	<0.20	0.20	8692631
1,1,2-Trichloroethane	ug/L	4.7	<0.40	0.40	8692631	<0.40	0.40	8692631	<0.40	0.40	8692631
Trichloroethylene	ug/L	1.6	<0.20	0.20	8692631	<0.20	0.20	8692631	<0.20	0.20	8692631
Trichlorofluoromethane (FREON 11)	ug/L	150	<0.50	0.50	8692631	<0.50	0.50	8692631	<0.50	0.50	8692631
Vinyl Chloride	ug/L	0.5	<0.20	0.20	8692631	<0.20	0.20	8692631	<0.20	0.20	8692631
p+m-Xylene	ug/L	-	<0.20	0.20	8692631	<0.20	0.20	8692631	<0.20	0.20	8692631
o-Xylene	ug/L	-	<0.20	0.20	8692631	<0.20	0.20	8692631	<0.20	0.20	8692631
Total Xylenes	ug/L	300	<0.20	0.20	8692631	<0.20	0.20	8692631	<0.20	0.20	8692631
Surrogate Recovery (%)											
4-Bromofluorobenzene	%	-	107		8692631	107		8692631	108		8692631
D4-1,2-Dichloroethane	%	-	99		8692631	97		8692631	100		8692631
D8-Toluene	%	-	91		8692631	90		8692631	91		8692631

No Fill	No Exceedance
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Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
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Bureau Veritas Job #: C3F1623
Report Date: 2023/06/05

DS Consultants Limited
Client Project #: 23-162-100
Site Location: 1720 SHERWOOD FOREST CIRCLE
Sampler Initials: MS

TEST SUMMARY

Bureau Veritas ID: VXU623
Sample ID: MW23-1
Matrix: Water

Collected: 2023/05/26
Shipped:
Received: 2023/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8689936	N/A	2023/06/02	Automated Statchk
Chloride by Automated Colourimetry	KONE	8694545	N/A	2023/06/01	Alina Dobreanu
Chromium (VI) in Water	IC	8692233	N/A	2023/05/30	Theodora Luck
Free (WAD) Cyanide	SKAL/CN	8696873	N/A	2023/06/03	Chloe Pollock
Mercury	CV/AA	8692272	2023/05/30	2023/05/30	Jaswinder Kaur
Dissolved Metals by ICPMS	ICP/MS	8693223	N/A	2023/05/31	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	8692611	2023/05/30	2023/06/01	Jonghan Yoon

Bureau Veritas ID: VXU624
Sample ID: MW23-3
Matrix: Water

Collected: 2023/05/26
Shipped:
Received: 2023/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8691459	N/A	2023/06/01	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8692263	2023/05/30	2023/05/30	Emir Danisman
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8693024	N/A	2023/05/31	Blair Gannon

Bureau Veritas ID: VXU625
Sample ID: MW23-2
Matrix: Water

Collected: 2023/05/26
Shipped:
Received: 2023/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8689936	N/A	2023/06/02	Automated Statchk
1,3-Dichloropropene Sum	CALC	8691459	N/A	2023/06/01	Automated Statchk
Chloride by Automated Colourimetry	KONE	8694545	N/A	2023/06/01	Alina Dobreanu
Chromium (VI) in Water	IC	8692233	N/A	2023/05/30	Theodora Luck
Free (WAD) Cyanide	SKAL/CN	8696873	N/A	2023/06/03	Chloe Pollock
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8692612	2023/05/30	2023/06/01	Emir Danisman
Mercury	CV/AA	8692272	2023/05/30	2023/05/30	Jaswinder Kaur
Dissolved Metals by ICPMS	ICP/MS	8693223	N/A	2023/05/30	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	8692611	2023/05/30	2023/06/01	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8693024	N/A	2023/05/31	Blair Gannon

Bureau Veritas ID: VXU626
Sample ID: DUP-1
Matrix: Water

Collected: 2023/05/26
Shipped:
Received: 2023/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8691459	N/A	2023/06/01	Automated Statchk
Volatile Organic Compounds in Water	GC/MS	8692631	N/A	2023/05/31	Hai Son Tran

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Bureau Veritas Job #: C3F1623
Report Date: 2023/06/05

DS Consultants Limited
Client Project #: 23-162-100
Site Location: 1720 SHERWOOD FOREST CIRCLE
Sampler Initials: MS

TEST SUMMARY

Bureau Veritas ID: VXU626 Dup
Sample ID: DUP-1
Matrix: Water

Collected: 2023/05/26
Shipped:
Received: 2023/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organic Compounds in Water	GC/MS	8692631	N/A	2023/05/31	Hai Son Tran

Bureau Veritas ID: VXU627
Sample ID: TRIP BLANK
Matrix: Water

Collected: 2023/05/26
Shipped:
Received: 2023/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8691459	N/A	2023/06/01	Automated Statchk
Volatile Organic Compounds in Water	GC/MS	8692631	N/A	2023/05/31	Hai Son Tran

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GENERAL COMMENTS

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

Package 1	21.7°C

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8692263	o-Terphenyl	2023/05/30	100	60 - 130	92	60 - 130	95	%		
8692611	D10-Anthracene	2023/05/31	116	50 - 130	102	50 - 130	105	%		
8692611	D14-Terphenyl (FS)	2023/05/31	110	50 - 130	91	50 - 130	104	%		
8692611	D8-Acenaphthylene	2023/05/31	110	50 - 130	97	50 - 130	99	%		
8692612	o-Terphenyl	2023/06/01	101	60 - 130	116	60 - 130	108	%		
8692631	4-Bromofluorobenzene	2023/05/31	110	70 - 130	109	70 - 130	109	%		
8692631	D4-1,2-Dichloroethane	2023/05/31	98	70 - 130	95	70 - 130	96	%		
8692631	D8-Toluene	2023/05/31	98	70 - 130	98	70 - 130	93	%		
8693024	4-Bromofluorobenzene	2023/05/31	96	70 - 130	95	70 - 130	96	%		
8693024	D4-1,2-Dichloroethane	2023/05/31	93	70 - 130	93	70 - 130	99	%		
8693024	D8-Toluene	2023/05/31	102	70 - 130	104	70 - 130	97	%		
8692233	Chromium (VI)	2023/05/30	97	80 - 120	103	80 - 120	<0.50	ug/L	NC	20
8692263	F2 (C10-C16 Hydrocarbons)	2023/05/30	112	60 - 130	100	60 - 130	<100	ug/L	NC	30
8692263	F3 (C16-C34 Hydrocarbons)	2023/05/30	114	60 - 130	103	60 - 130	<200	ug/L	NC	30
8692263	F4 (C34-C50 Hydrocarbons)	2023/05/30	116	60 - 130	105	60 - 130	<200	ug/L	NC	30
8692272	Mercury (Hg)	2023/05/30	103	75 - 125	106	80 - 120	<0.10	ug/L	NC	20
8692611	1-Methylnaphthalene	2023/05/31	124	50 - 130	103	50 - 130	<0.050	ug/L	NC	30
8692611	2-Methylnaphthalene	2023/05/31	111	50 - 130	91	50 - 130	<0.050	ug/L	NC	30
8692611	Acenaphthene	2023/05/31	115	50 - 130	102	50 - 130	<0.050	ug/L	NC	30
8692611	Acenaphthylene	2023/05/31	119	50 - 130	105	50 - 130	<0.050	ug/L	NC	30
8692611	Anthracene	2023/05/31	119	50 - 130	105	50 - 130	<0.050	ug/L	NC	30
8692611	Benzo(a)anthracene	2023/05/31	115	50 - 130	103	50 - 130	<0.050	ug/L	NC	30
8692611	Benzo(a)pyrene	2023/05/31	112	50 - 130	101	50 - 130	<0.0090	ug/L	NC	30
8692611	Benzo(b/j)fluoranthene	2023/05/31	117	50 - 130	106	50 - 130	<0.050	ug/L	NC	30
8692611	Benzo(g,h,i)perylene	2023/05/31	124	50 - 130	113	50 - 130	<0.050	ug/L	NC	30
8692611	Benzo(k)fluoranthene	2023/05/31	115	50 - 130	97	50 - 130	<0.050	ug/L	NC	30
8692611	Chrysene	2023/05/31	115	50 - 130	103	50 - 130	<0.050	ug/L	NC	30
8692611	Dibenzo(a,h)anthracene	2023/05/31	112	50 - 130	102	50 - 130	<0.050	ug/L	NC	30
8692611	Fluoranthene	2023/05/31	118	50 - 130	103	50 - 130	<0.050	ug/L	NC	30
8692611	Fluorene	2023/05/31	115	50 - 130	100	50 - 130	<0.050	ug/L	NC	30
8692611	Indeno(1,2,3-cd)pyrene	2023/05/31	119	50 - 130	109	50 - 130	<0.050	ug/L	NC	30

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8692611	Naphthalene	2023/05/31	112	50 - 130	96	50 - 130	<0.050	ug/L	NC	30
8692611	Phenanthrene	2023/05/31	116	50 - 130	103	50 - 130	<0.030	ug/L	NC	30
8692611	Pyrene	2023/05/31	122	50 - 130	102	50 - 130	<0.050	ug/L	NC	30
8692612	F2 (C10-C16 Hydrocarbons)	2023/06/01	85	60 - 130	88	60 - 130	<100	ug/L	NC	30
8692612	F3 (C16-C34 Hydrocarbons)	2023/06/01	88	60 - 130	107	60 - 130	<200	ug/L	NC	30
8692612	F4 (C34-C50 Hydrocarbons)	2023/06/01	89	60 - 130	100	60 - 130	<200	ug/L	NC	30
8692631	1,1,1,2-Tetrachloroethane	2023/05/31	99	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
8692631	1,1,1-Trichloroethane	2023/05/31	99	70 - 130	101	70 - 130	<0.20	ug/L	NC	30
8692631	1,1,2,2-Tetrachloroethane	2023/05/31	89	70 - 130	85	70 - 130	<0.40	ug/L	NC	30
8692631	1,1,2-Trichloroethane	2023/05/31	90	70 - 130	88	70 - 130	<0.40	ug/L	NC	30
8692631	1,1-Dichloroethane	2023/05/31	88	70 - 130	88	70 - 130	<0.20	ug/L	NC	30
8692631	1,1-Dichloroethylene	2023/05/31	89	70 - 130	91	70 - 130	<0.20	ug/L	NC	30
8692631	1,2-Dichlorobenzene	2023/05/31	93	70 - 130	93	70 - 130	<0.40	ug/L	NC	30
8692631	1,2-Dichloroethane	2023/05/31	93	70 - 130	90	70 - 130	<0.49	ug/L	NC	30
8692631	1,2-Dichloropropane	2023/05/31	90	70 - 130	89	70 - 130	<0.20	ug/L	NC	30
8692631	1,3-Dichlorobenzene	2023/05/31	93	70 - 130	95	70 - 130	<0.40	ug/L	NC	30
8692631	1,4-Dichlorobenzene	2023/05/31	105	70 - 130	107	70 - 130	<0.40	ug/L	NC	30
8692631	Acetone (2-Propanone)	2023/05/31	91	60 - 140	89	60 - 140	<10	ug/L	NC	30
8692631	Benzene	2023/05/31	90	70 - 130	90	70 - 130	<0.20	ug/L	NC	30
8692631	Bromodichloromethane	2023/05/31	99	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
8692631	Bromoform	2023/05/31	105	70 - 130	101	70 - 130	<1.0	ug/L	NC	30
8692631	Bromomethane	2023/05/31	97	60 - 140	96	60 - 140	<0.50	ug/L	NC	30
8692631	Carbon Tetrachloride	2023/05/31	99	70 - 130	101	70 - 130	<0.19	ug/L	NC	30
8692631	Chlorobenzene	2023/05/31	97	70 - 130	97	70 - 130	<0.20	ug/L	NC	30
8692631	Chloroform	2023/05/31	95	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
8692631	cis-1,2-Dichloroethylene	2023/05/31	100	70 - 130	100	70 - 130	<0.50	ug/L	NC	30
8692631	cis-1,3-Dichloropropene	2023/05/31	90	70 - 130	89	70 - 130	<0.30	ug/L	NC	30
8692631	Dibromochloromethane	2023/05/31	97	70 - 130	95	70 - 130	<0.50	ug/L	NC	30
8692631	Dichlorodifluoromethane (FREON 12)	2023/05/31	79	60 - 140	79	60 - 140	<1.0	ug/L	NC	30
8692631	Ethylbenzene	2023/05/31	84	70 - 130	85	70 - 130	<0.20	ug/L	NC	30
8692631	Ethylene Dibromide	2023/05/31	93	70 - 130	91	70 - 130	<0.19	ug/L	NC	30

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8692631	Hexane	2023/05/31	89	70 - 130	90	70 - 130	<1.0	ug/L	NC	30
8692631	Methyl Ethyl Ketone (2-Butanone)	2023/05/31	96	60 - 140	93	60 - 140	<10	ug/L	NC	30
8692631	Methyl Isobutyl Ketone	2023/05/31	89	70 - 130	85	70 - 130	<5.0	ug/L	NC	30
8692631	Methyl t-butyl ether (MTBE)	2023/05/31	88	70 - 130	87	70 - 130	<0.50	ug/L	NC	30
8692631	Methylene Chloride(Dichloromethane)	2023/05/31	97	70 - 130	96	70 - 130	<2.0	ug/L	NC	30
8692631	o-Xylene	2023/05/31	84	70 - 130	87	70 - 130	<0.20	ug/L	NC	30
8692631	p+m-Xylene	2023/05/31	88	70 - 130	90	70 - 130	<0.20	ug/L	NC	30
8692631	Styrene	2023/05/31	100	70 - 130	101	70 - 130	<0.40	ug/L	NC	30
8692631	Tetrachloroethylene	2023/05/31	97	70 - 130	98	70 - 130	<0.20	ug/L	NC	30
8692631	Toluene	2023/05/31	88	70 - 130	90	70 - 130	<0.20	ug/L	NC	30
8692631	Total Xylenes	2023/05/31					<0.20	ug/L	NC	30
8692631	trans-1,2-Dichloroethylene	2023/05/31	100	70 - 130	100	70 - 130	<0.50	ug/L	NC	30
8692631	trans-1,3-Dichloropropene	2023/05/31	92	70 - 130	90	70 - 130	<0.40	ug/L	NC	30
8692631	Trichloroethylene	2023/05/31	107	70 - 130	108	70 - 130	<0.20	ug/L	NC	30
8692631	Trichlorofluoromethane (FREON 11)	2023/05/31	96	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
8692631	Vinyl Chloride	2023/05/31	86	70 - 130	87	70 - 130	<0.20	ug/L	NC	30
8693024	1,1,1,2-Tetrachloroethane	2023/05/31	95	70 - 130	105	70 - 130	<0.50	ug/L	NC	30
8693024	1,1,1-Trichloroethane	2023/05/31	99	70 - 130	114	70 - 130	<0.20	ug/L	NC	30
8693024	1,1,2,2-Tetrachloroethane	2023/05/31	92	70 - 130	96	70 - 130	<0.50	ug/L	NC	30
8693024	1,1,2-Trichloroethane	2023/05/31	94	70 - 130	101	70 - 130	<0.50	ug/L	NC	30
8693024	1,1-Dichloroethane	2023/05/31	90	70 - 130	102	70 - 130	<0.20	ug/L	NC	30
8693024	1,1-Dichloroethylene	2023/05/31	93	70 - 130	109	70 - 130	<0.20	ug/L	NC	30
8693024	1,2-Dichlorobenzene	2023/05/31	92	70 - 130	100	70 - 130	<0.50	ug/L	NC	30
8693024	1,2-Dichloroethane	2023/05/31	86	70 - 130	92	70 - 130	<0.50	ug/L	NC	30
8693024	1,2-Dichloropropane	2023/05/31	91	70 - 130	100	70 - 130	<0.20	ug/L	NC	30
8693024	1,3-Dichlorobenzene	2023/05/31	94	70 - 130	104	70 - 130	<0.50	ug/L	NC	30
8693024	1,4-Dichlorobenzene	2023/05/31	105	70 - 130	115	70 - 130	<0.50	ug/L	NC	30
8693024	Acetone (2-Propanone)	2023/05/31	90	60 - 140	89	60 - 140	<10	ug/L	NC	30
8693024	Benzene	2023/05/31	88	70 - 130	100	70 - 130	<0.17	ug/L	NC	30
8693024	Bromodichloromethane	2023/05/31	97	70 - 130	105	70 - 130	<0.50	ug/L	NC	30
8693024	Bromoform	2023/05/31	87	70 - 130	92	70 - 130	<1.0	ug/L	NC	30

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8693024	Bromomethane	2023/05/31	94	60 - 140	110	60 - 140	<0.50	ug/L	NC	30
8693024	Carbon Tetrachloride	2023/05/31	97	70 - 130	112	70 - 130	<0.20	ug/L	NC	30
8693024	Chlorobenzene	2023/05/31	90	70 - 130	101	70 - 130	<0.20	ug/L	NC	30
8693024	Chloroform	2023/05/31	97	70 - 130	108	70 - 130	<0.20	ug/L	NC	30
8693024	cis-1,2-Dichloroethylene	2023/05/31	94	70 - 130	105	70 - 130	<0.50	ug/L	NC	30
8693024	cis-1,3-Dichloropropene	2023/05/31	83	70 - 130	91	70 - 130	<0.30	ug/L	NC	30
8693024	Dibromochloromethane	2023/05/31	92	70 - 130	99	70 - 130	<0.50	ug/L	NC	30
8693024	Dichlorodifluoromethane (FREON 12)	2023/05/31	86	60 - 140	107	60 - 140	<1.0	ug/L	NC	30
8693024	Ethylbenzene	2023/05/31	80	70 - 130	93	70 - 130	<0.20	ug/L	NC	30
8693024	Ethylene Dibromide	2023/05/31	88	70 - 130	94	70 - 130	<0.20	ug/L	NC	30
8693024	F1 (C6-C10) - BTEX	2023/05/31					<25	ug/L	NC	30
8693024	F1 (C6-C10)	2023/05/31	94	60 - 140	107	60 - 140	<25	ug/L	NC	30
8693024	Hexane	2023/05/31	92	70 - 130	110	70 - 130	<1.0	ug/L	NC	30
8693024	Methyl Ethyl Ketone (2-Butanone)	2023/05/31	83	60 - 140	85	60 - 140	<10	ug/L	NC	30
8693024	Methyl Isobutyl Ketone	2023/05/31	72	70 - 130	76	70 - 130	<5.0	ug/L	NC	30
8693024	Methyl t-butyl ether (MTBE)	2023/05/31	77	70 - 130	83	70 - 130	<0.50	ug/L	NC	30
8693024	Methylene Chloride(Dichloromethane)	2023/05/31	98	70 - 130	108	70 - 130	<2.0	ug/L	NC	30
8693024	o-Xylene	2023/05/31	82	70 - 130	94	70 - 130	<0.20	ug/L	NC	30
8693024	p+m-Xylene	2023/05/31	82	70 - 130	94	70 - 130	<0.20	ug/L	NC	30
8693024	Styrene	2023/05/31	88	70 - 130	100	70 - 130	<0.50	ug/L	NC	30
8693024	Tetrachloroethylene	2023/05/31	91	70 - 130	105	70 - 130	<0.20	ug/L	NC	30
8693024	Toluene	2023/05/31	89	70 - 130	103	70 - 130	<0.20	ug/L	NC	30
8693024	Total Xylenes	2023/05/31					<0.20	ug/L	NC	30
8693024	trans-1,2-Dichloroethylene	2023/05/31	96	70 - 130	109	70 - 130	<0.50	ug/L	NC	30
8693024	trans-1,3-Dichloropropene	2023/05/31	88	70 - 130	96	70 - 130	<0.40	ug/L	NC	30
8693024	Trichloroethylene	2023/05/31	98	70 - 130	111	70 - 130	<0.20	ug/L	NC	30
8693024	Trichlorofluoromethane (FREON 11)	2023/05/31	98	70 - 130	116	70 - 130	<0.50	ug/L	NC	30
8693024	Vinyl Chloride	2023/05/31	91	70 - 130	110	70 - 130	<0.20	ug/L	NC	30
8693223	Dissolved Antimony (Sb)	2023/05/30	104	80 - 120	104	80 - 120	<0.50	ug/L	11	20
8693223	Dissolved Arsenic (As)	2023/05/30	99	80 - 120	100	80 - 120	<1.0	ug/L	19	20
8693223	Dissolved Barium (Ba)	2023/05/30	99	80 - 120	100	80 - 120	<2.0	ug/L	3.0	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8693223	Dissolved Beryllium (Be)	2023/05/30	100	80 - 120	100	80 - 120	<0.40	ug/L	NC	20
8693223	Dissolved Boron (B)	2023/05/30	99	80 - 120	103	80 - 120	<10	ug/L	1.3	20
8693223	Dissolved Cadmium (Cd)	2023/05/30	101	80 - 120	100	80 - 120	<0.090	ug/L	NC	20
8693223	Dissolved Chromium (Cr)	2023/05/30	99	80 - 120	99	80 - 120	<5.0	ug/L	NC	20
8693223	Dissolved Cobalt (Co)	2023/05/30	98	80 - 120	98	80 - 120	<0.50	ug/L	NC	20
8693223	Dissolved Copper (Cu)	2023/05/30	100	80 - 120	101	80 - 120	<0.90	ug/L	3.1	20
8693223	Dissolved Lead (Pb)	2023/05/30	95	80 - 120	97	80 - 120	<0.50	ug/L	NC	20
8693223	Dissolved Molybdenum (Mo)	2023/05/30	104	80 - 120	103	80 - 120	<0.50	ug/L	0.66	20
8693223	Dissolved Nickel (Ni)	2023/05/30	98	80 - 120	99	80 - 120	<1.0	ug/L	NC	20
8693223	Dissolved Selenium (Se)	2023/05/30	101	80 - 120	100	80 - 120	<2.0	ug/L	NC	20
8693223	Dissolved Silver (Ag)	2023/05/30	99	80 - 120	102	80 - 120	<0.090	ug/L	NC	20
8693223	Dissolved Sodium (Na)	2023/05/30	NC	80 - 120	101	80 - 120	<100	ug/L	0.98	20
8693223	Dissolved Thallium (Tl)	2023/05/30	95	80 - 120	99	80 - 120	<0.050	ug/L	NC	20
8693223	Dissolved Uranium (U)	2023/05/30	103	80 - 120	103	80 - 120	<0.10	ug/L	3.0	20
8693223	Dissolved Vanadium (V)	2023/05/30	101	80 - 120	100	80 - 120	<0.50	ug/L	NC	20
8693223	Dissolved Zinc (Zn)	2023/05/30	98	80 - 120	100	80 - 120	<5.0	ug/L	NC	20
8694545	Dissolved Chloride (Cl-)	2023/06/01	NC	80 - 120	100	80 - 120	<1.0	mg/L	9.1	20
8696873	WAD Cyanide (Free)	2023/06/03	91	80 - 120	90	80 - 120	<1	ug/L	5.4	20

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

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

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

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

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

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

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

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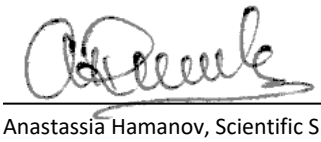
Bureau Veritas Job #: C3F1623
Report Date: 2023/06/05

DS Consultants Limited
Client Project #: 23-162-100
Site Location: 1720 SHERWOOD FOREST CIRCLE
Sampler Initials: MS

VALIDATION SIGNATURE PAGE

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



Anastassia Hamanov, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
MW23-1	VXU623-01	Dissolved Chloride (Cl-)	790	1200	20	mg/L
MW23-1	VXU623-02	Dissolved Sodium (Na)	490000	780000	500	ug/L

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

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Appendix E

Phase Two Conceptual Site Model

This Phase Two Conceptual Site Model (CSM) has been prepared for the property located at 1720 Sherwood Forrest Circle, Mississauga, Ontario hereafter referred as the "Site". This CSM has been prepared based on the information obtained through the completion of the Phase One ESA, and the data collected as part of the Phase Two ESA.

The Phase Two CSM is comprised of the following figures and text:

Figure 1 – Site Location Plan
Figure 2 – Phase Two Property Site Plan
Figure 3 – Phase One Study Area
Figure 4 – PCA within Phase One Study Area
Figure 5 – Borehole/Monitoring Well Locations Plan with APECs
Figure 6 – Groundwater Flow Direction
Figure 7A – Soil Characterization – Metals and Hydride Forming Metals
Figure 7B – Soil Characterization – ORPs
Figure 7C – Soil Characterization – PHCs and BTEX
Figure 7D – Soil Characterization – VOCs
Figure 7E – Soil Characterization – PAHs
Figure 7F– Soil Characterization – OCPs
Figure 8A – Groundwater Characterization – Metals and ORPs
Figure 8B – Groundwater Characterization – PHCs and BTEX
Figure 8C – Groundwater Characterization – VOCs
Figure 8D – Groundwater Characterization – PAHs
Figure 9 – Contaminant Transport Diagram

The Phase Two Property is an irregular shaped 4.7 hectares (11.5 acres) parcel of land situated within a residential neighbourhood in the City of Mississauga, Ontario. The Phase Two Property is located at in the southwest corner of the intersection of Mississauga Road and Dundas Street West and was occupied by a multi-level structure with three (3) wings (Site Building A), spanning between 1 to 3 storeys with one level of basement at the time of this investigation. A detached garage is located approximately 25 metres north of Site Building A. The structure was vacant at the time of the assessment but was most recently used for residential purposes.

The Phase One ESA completed in June 2023 identified that the subject Site was first developed for agricultural and residential purposes circa 1877. The Carmelite Sisters of Canada have owned the Phase One Property since 1952 and developed a senior retirement home and convent on the property. The convent and senior retirement home (residential property use) building was vacant with no operations since 2022.

Background

The findings of the Phase One ESA completed in July 2023 identified a total of twelve (12) Potentially Contaminating Activities (PCAs) were identified in the Phase One ESA, which were considered to be contributing to eight (8) APECs on the on the Site.

The fieldwork of the Phase Two included the advancement of eight boreholes, which were completed between May 18, 2023, and June 14, 2023. The boreholes were advanced to a maximum depth of 9.8 metres below ground surface (mbgs) under the supervision of DS personnel. Groundwater monitoring wells were installed in three (3) of the boreholes to facilitate the collection of groundwater samples and the assessment of groundwater flow direction. The borehole locations were determined based on the findings of the Phase One ESA. All APECs were investigated with boreholes and/or monitoring wells in accordance with the requirements of O.Reg. 153/04 (as amended).

A total of forty-one (41) soil samples were submitted for chemical analysis as follow:

- Ten (10) soil samples (including 2 QA/QC duplicates) for analysis of metals and Other Regulated Parameters (ORPs), three samples (including 1 QA/QC duplicates) were submitted for analysis of pH, and three (3) samples were submitted for hydride forming metals and, cyanide;
- Ten (10) soil samples (including 2 QA/QC duplicates) for analysis of Petroleum Hydrocarbons (PHCs) including Benzene, Toluene, Ethylbenzene, Xylenes (BTEX);
- Nine (9) soil samples (including 1 QA/QC duplicates) for analysis for Volatile Organic Compounds (VOCs);
- Nine (9) soil samples (including 1 QA/QC duplicates) for analysis of Polycyclic Aromatic Compounds (PAHs); and
- Three (3) soil samples for analysis of Organochlorine Pesticides (OCPs).

Groundwater samples were collected from monitoring wells MW23-1, MW23-2 and MW23-3, and submitted for chemical analysis as follows:

- Two (2) groundwater sample for analysis of Metals & ORPs;
- Two (2) groundwater samples for the analysis of PHCs including BTEX;
- Three (3) groundwater samples (including one (1) QAQC duplicate) for the analysis of VOCs; and
- Two (2) groundwater sample for the analysis of PAHs.

The soil and groundwater analytical results were compared to the "Table 1: Full Depth Background Site Condition Standards" provided in the MECP document entitled, "*Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act*" dated April 15, 2011 (Table 1 SCS) for residential/parkland/institutional property use.

I. Description and Assessment of:

A. Areas where potentially contaminating activity has occurred

A total of eight (8) PCAs were identified in the Phase One ESA. A summary of the PCAs considered to be contributing to APECs on the Phase Two Property is provided in the table below.

Summary of PCAs Contributing to APECs

PCA Item.	PCA Description (Per. Table 2, Schedule D of O.Reg. 153/04)	Description	Rationale
PCA-1	#30: Importation of Fill Material of Unknown Quality	Fill material may have been used for grading purposes in the vicinity of the Site Building A. Terraprobe 2017 Geotechnical Investigation reported that fill material was encountered below the topsoil/pavement layer and ranged in depth between 1.5 and 2.5 mbgs.	PCA is on Site
PCA-2	#28: Gasoline and associated products storage in fixed tanks	One fuel oil UST was formerly present on Site. The UST was reported to have had a 22,700 L (5,000 gallons) capacity. The UST was reportedly removed off-Site in 1995. No additional details were available.	PCA is on Site

PCA Item.	PCA Description (Per. Table 2, Schedule D of O.Reg. 153/04)	Description	Rationale
PCA-3	#40: Pesticides (including herbicides, fungicides and anti-fouling agents) manufacturing, processing, bulk storage and large scale applications.	Based on the 1877 County Atlas of Peel, an orchard was observed at the northern portion of the Site.	PCA is on Site
PCA-4	#N/S: Application of De-Icing Agents	Seasonal application of de-icing salts for vehicle and pedestrian safety is anticipated on the laneway, sidewalks, driveway and parking areas present on the Site.	PCA is on Site
PCA-9	#30: Importation of Fill Material of Unknown Quality	Based on the 1975 aerial photographs Former Site Building C may have been demolished. Fill material of unknown quality may have been imported to the site to backfield the demolished structure.	PCA is on Site
PCA-10	#30 – Importation of fill material of unknown quality	Based on the 1975 aerial photographs Former Site Building D may have been demolished. Fill material of unknown quality may have been imported to the site to backfield the demolished structure.	PCA is on Site
PCA-11	#30 – Importation of fill material of unknown quality	The Site used to be heated with fuel oil. The UST was reportedly situated outside Site Building A. The UST was removed circa 1995. Fill material may have been used to backfill the void at the location of the former fuel oil UST.	PCA is on Site
PCA-12	#40 – Pesticides (including herbicides, fungicides and anti-fouling agents) manufacturing, processing, bulk storage and large-scale applications	Based on the 1954, 1966 and 1975 aerial photographs, portion of the orchard located on the west adjacent properties was within an area on the western portion of the Site.	PCA is on Site

N/S - not specified in Table 2, Schedule D, of O.Reg. 153/04

B. Areas of potential environmental concern

A total of eight (8) APECs were identified to be present on the Phase Two Property through the completion of the Phase One ESA. A summary of the APECs identified, and the associated PCOCs is provided in the table below.

Summary of APECs

APEC	Location of APEC on Phase One Property	PCA	Location of PCA	COPCs	Media Potentially Impacted
APEC-1	Central and Southern Portions of the Site	#30: Importation of Fill Material of Unknown Quality	On Site **PCA-1**	PHCs, BTEX, Metals, As, Sb, Se, B-HWS, CN-, electrical conductivity, Cr (VI), Hg, low or high pH, SAR, PAHs	Soil
APEC-2	Central portion of the Site, 10 m east of Site Building A	#28: Gasoline and associated products storage in fixed tanks	On-Site **PCA-2**	PHCs, BTEX, PAHs	Soil and groundwater
APEC-3	Northern portion of Site	#40: Pesticides (including herbicides, fungicides and anti-fouling agents) manufacturing, processing, bulk storage and large-scale applications.	On-Site **PCA-3**	OCPs, Metals, As, Sb, Se, CN-	Soil
APEC-4	Northern and central portions of Site	#N/S: Application of De-Icing Agents[1]	On-Site **PCA-4**	EC, SAR	Soil
				Na, Cl-	Groundwater
APEC-5	Central portion of the Site, approx. 25 m south of Site Building A	#30: Importation of Fill Material of Unknown Quality	On Site **PCA-9**	PHCs, BTEX, Metals, As, Sb, Se, B-HWS, CN-, electrical conductivity, Cr (VI), Hg, low or high pH, SAR, PAHs	Soil
APEC-6	Central Portion of the Site, approx. 50 m south of Site Building A	#30: Importation of Fill Material of Unknown Quality	On Site **PCA-10**		Soil
APEC-7	Central portion of the Site, 10 m east of Site Building A	#30: Importation of Fill Material of Unknown Quality	On Site **PCA-11**		Soil
APEC-8	Western Portion of the Site	#40: Pesticides (including herbicides, fungicides and anti-fouling agents) manufacturing, processing, bulk storage and large-scale applications.	On-Site **PCA-12**	OCPs, Metals, As, Sb, Se, CN-	Soil

N/S - not specified in Table 2, Schedule D, of O.Reg. 153/04

1 - The area is subject to the application of de-icing salts for road safety purposes. Per Section 49.1 (1) of O.Reg. 153/04 (as amended) "*If an applicable site condition standard is exceeded at a property solely because of one of the following reasons, the applicable site condition standard is deemed not to be exceeded for the purpose of Part XV.1 of the Act*": "*…that a substance has been applied to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both*". Any potential impacts associated with sodium and/or chloride in groundwater will be deemed not to exceed the MECP Site Conditions Standards for the area identified in APEC-4.

C. <u>Any subsurface structures and utilities on, in or under the Phase Two Property that may affect contaminant distribution and transport</u>

The groundwater table was encountered at depths ranging from 5.25 to 5.66 mbgs on the Site.

Underground utilities were present on the Phase One Property, including water, natural gas, electrical, and sewer services to Site Building A. Plans were not available to confirm the depths of these utilities, however they are estimated to be installed at depths ranging from 2 to 3 metres below ground surface.

The utility servicing 1720 Sherwood Forrest Circle are expected to be situated above the water table and would be unlikely to act as preferential pathways for contaminant distribution and transport. However, no groundwater impacts were identified; therefore, the potential for preferential migration of contaminants is not of concern at this time.

II. Description of, and as appropriate, figures illustrating, the physical setting of the Phase Two Property and any areas under it including:

A. <u>Stratigraphy from ground surface to the deepest aquifer or aquitard investigated</u>

III. A surficial layer of asphalt approximately 60 to 300 mm in thickness was encountered in boreholes BH23-1 through BH23-3 located in the parking areas. A surficial layer of topsoil and organics of 100mm in thickness was encountered in all hand dug boreholes. Underlying the asphalt or topsoil, fill material was encountered from depths ranging from 0.15 to 1.5 mbgs. The fill material generally consisted of clayey silt, sand and gravel. Below the fill material, a sand and gravel unit was encountered, extending to the maximum depth investigated of 7.6 mbgs. A layer of clayey silt was encountered underlying the sand and gravel unit between depths ranging of 6.1 mbgs up to the maximum depth investigated of 9.8 mbgs. Bedrock was not encountered.

Based on a review of the MNRF bedrock topographic mapping, the depth to bedrock on-Site is anticipated to be approximately 18 mbgs.

Summary of Geologic Units Investigated

Geologic Unit	Inferred Thickness (m)	Top Elevation (masl)	Bottom Elevation (masl)	Properties
Fill Material	0.0-3.0	116	113	Trace roots in the top 0.2mbgs, brown, gravel
Sand and Gravel	3.0-7.6	113	108.5	Very moist to wet, contains the water table
Clayey Silt	<3.7	110	106.3	Very moist

The borehole locations are depicted on Figure 5.

A. Hydrogeological Characteristics, including aquifers, aquitards and, in each hydrostratigraphic unit where one or more contaminants is present at concentrations above the applicable site condition standards, lateral and vertical gradients

The groundwater table was encountered in a sand and gravel unit, which is considered to be an unconfined aquifer.

Based on the groundwater elevations, the groundwater flow direction is interpreted to be southeasterly towards the Credit River.

The horizontal hydraulic gradient was calculated based on the groundwater levels recorded on May 23, 2023.

Summary of Horizontal Hydraulic Gradient Calculations

Hydrogeological Unit	Calculated Horizontal Hydraulic Gradient
Sand and Gravel	Minimum: 0.00266 Maximum: 0.00396 Average: 0.00266

B. Depth to bedrock

Based on a review of the Ministry of Mines, Forestry and Natural resources bedrock topography database, the bedrock in the Phase One Study Area is anticipated to be encountered at an approximate depth of 18 mbgs.

C. Approximate depth to water table

The depth to groundwater was found to range between 5.25 to 5.66 mbgs on May 23, 2023.

D. Any respect in which section 41 or 43.1 of the regulation applies to the property

Section 35

Section 35 is not applicable to the property as permission to use the non-potable groundwater standards has not been granted.

Section 41

The Phase Two Property is within 30 metres of a Regional Life Science ANSI called "Credit River at Erindale". Since the Site is within a Life Science ANSI, Section 41 is applicable.

Section 43.1

The site is not considered to be a shallow soil property and there are no water bodies present on, or within 30 m of the site. Therefore Section 43.1 does not apply.

E. Areas where soil has been brought from another property and placed on, in or under the Phase Two Property

No fill material was brought to the Phase Two Property at the time of the investigation.

F. Approximate locations, if known, of any proposed buildings and other structures

It is DS understanding that redevelopment of the Site for residential purposes has been proposed. Plans of the new development have not been provided yet.

IV. Where a contaminant is present on, in or under the Phase Two Property at a concentration greater than the applicable site condition standard, identification of

A. <u>Each area where a contaminant is present on, in or under the Phase Two Property at a concentration greater than the applicable SCS</u>

Elevated levels of EC and SAR in excess of the MECP Table 1 SCS were identified in boreholes BH23-1, BH23-2 and BH23-3 at depths ranging from 0.0 to 2.9 mbgs. The vertical extent of the EC and SAR impacts in soil is currently unknown.

Elevated levels of chloride and sodium in excess of the MECP Table 1 SCS were identified in monitoring wells MW23-1.

The EC and SAR impacts in soil and sodium and chloride impacts in groundwater are attributed to the application of de-icing salts on the Phase Two Property. Based on Section 49.1 (1) of O.Reg. 153/04, "*If an applicable site condition standard is exceeded at a property solely because of one of the following reasons, the applicable site condition standard is deemed not to be exceeded for the purpose of Part XV.1 of the Act*": *"…that a substance has been applied to surfaces for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both*". Therefore, the applicable Table 1 SCS for EC and SAR in soil and sodium and chloride in groundwater are deemed not exceeded.

It is concluded that the soil and groundwater quality in the samples analysed satisfies the Table 1 SCS.

It should be noted that for the purposes of construction and development, disposal premiums may still be incurred for the removal of the soil impacted with EC and SAR.

A visual representation of the location of the impacts identified are presented in Figure 7B and 8A.

B. <u>The contaminants associated with each of the areas</u>

No impacts were encounter in the soil and groundwater investigated. Per Section 49.1(1) of O.Reg. 407/19, published December 4, 2019 the EC, SAR in soil and sodium and chloride in groundwater are deemed not exceeded for the purpose of a future RSC submission.

C. <u>Medium that contaminants were identified in</u>

EC and SAR were identified in soil at boreholes BH23-1, BH23-2 and BH23-3. Chloride and sodium were identified in groundwater in monitoring wells MW23-1. Per Section 49.1(1) of

O.Reg. 407/19, published December 4, 2019 the EC, SAR in soil and sodium and chloride in groundwater are deemed not exceeded for the purpose of a future RSC submission.

D. Description and assessment of what is know about each of the areas

No impacts were encounter in the areas where PCOCs were a potential for contamination.

E. Distribution in which the areas of each contaminant is present in the area at a concentration greater than the applicable SCS, for each medium in which the contaminant is present, together with figures showing the distribution

No impacts were encounter in the soil or groundwater investigated.

F. Anything know about the reason for the discharge of the contaminants present on, in or under the Phase Two Property at a concentrations greater than the applicable SCS

No discharge of contaminants was present on, in or under the Phase Two Property. No impacts were encounter in the soil or groundwater investigated.

G. Anything known about migration of the contaminants present on, in or under the phase two property at a concentration greater than the applicable SCS away from any area of potential environmental concern, including the identification of any preferential pathways

No impacts were encounter in the soil or groundwater investigated.

H. Climatic or meteorological conditions that may have influenced distribution and migration of the contaminants, such as temporal fluctuations in groundwater levels

The groundwater levels may be impacted by other factors such as historical infilling activities, subsurface utility trenches, and similar subsurface anomalies. The groundwater flow direction can only be confirmed through long term monitoring. It is expected to have a considerable effect of meteorological and climatic conditions on the contaminant distribution and migration in the subsurface. Therefore, it is the opinion of the QP that the meteorological and climatic conditions may have an influence on the migration of

contaminants on the Phase Two Property. However, no contaminants were identified in the soil or groundwater at the site.

I. <u>Information concerning soil vapour intrusion of the contaminants into buildings</u>

No volatile parameters were identified at concentrations greater than the applicable SCS, therefore vapour intrusion is not considered to be an exposure pathway at this time.

V. Where contaminants on, in or under the Phase Two Property are present at concentrations greater than the applicable SCS, one or more cross-sections showing

- **A. <u>The lateral and vertical distribution of a contaminant in each area where the contaminants are present at concentrations greater than the applicable SCS in soil, groundwater and sediment</u>**
- **B. <u>Approximate depth to water table</u>**
- **C. <u>Stratigraphy from ground surface to the deepest aquifer or aquitard investigated</u>**
- **D. <u>Any subsurface structures and utilities that may affect contaminants distribution and transport</u>**

No impacts were encounter in the soil or groundwater investigated.

VI. For each area where a contaminant is present on, in or under the property at a concentration greater than the applicable SCS for the contaminant, a diagram identifying, with narrative explanatory notes

- **A. The release mechanisms**
- **B. Contaminant transport pathway**
- **C. The human and ecological receptors located on, in or under the phase two property**
- **D. Receptor exposure points**
- **E. Routes of exposure**

Not applicable. A contaminant transport diagram is provided in Figure 9.