Phase Two Environmental Site Assessment

12455 Creditview Road

Caledon, Ontario

Prepared For:

Argo Alloa (BT) Corporation

4900 Palladium Way, Unit 105

Burlington, Ontario

L7M 0W7

DS Project No: 22-390-100

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Executive Summary

DS Consultants Ltd. (DS) was retained by Argo Alloa (BT) Corporation (the "Client") to conduct a Phase Two Environmental Site Assessment (ESA) of the Property located at 12455 Creditview Road, Caledon, Ontario, herein referred to as the "Phase Two Property" or "the Site". It is DS' understanding that this Phase Two ESA has been requested for due diligence purposes in association with the proposed redevelopment of the Site for residential purposes.

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 Phase Two Property is an irregular shaped 40.44-hectare (99.93 acres) parcel of land situated within a agricultural neighbourhood in the Town of Caledon, Ontario. A tributary of the Etobicoke Creek is on the south portion of the Site. The Phase Two Property is located approximately 1.3 km (south) of the intersection of Creditview Road and Old School Road. For the purpose of this report, Old School Road is assumed to be aligned in an east-west orientation, and Creditview Road in a north-south orientation.

The Phase One ESA completed earlier on January 11, 2023 indicated that the Phase Two Property was first developed for residential purposes and has been used for residential and agricultural purposes since 1897. A total of seven (7) Potentially Contaminating Activities (PCAs) were identified in the Phase One ESA, which were considered to be contributing to five (5) APECs on the Phase Two Property. A summary of the APECs, associated PCAs, and contaminants of potential concern (COPC) identified is presented in the table below:

Table E-1: Summary of APECs

Area of Potential Environmental Concern	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Ground water, soil and/or sediment)
APEC-1	Entire Site	#40 - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing,	On-Site PCA-1	Metals, OC Pesticides	Soil

Area of Potential Environmental Concern	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Ground water, soil and/or sediment)
		Processing, Bulk Storage and Large-Scale Applications			
APEC-2	West- Central portion of the Phase One Property	#40 - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	On-Site PCA-2	Metals, OC Pesticides	Soil
APEC 3	West- Central portion of the Phase One Property	#30 - Importation of Fill Material of Unknown Quality	On-Site PCA-3	Metals, As, Sb, Se, B-HWS, CN-,EC, Cr (IV), Hg, Low or high pH, SAR, PAHs, PHC, VOC, PCBs	Soil & Groundwater
APEC- 4	West- Central portion of the Phase One Property	#Others - Seasonal application of de-icing salts	On-Site PCA-4	EC, SAR,	Soil
				Na, Cl-,	Groundwater
APEC- 5	West- Central portion of the Phase One Property	#28 Gasoline and Associated Products Storage in Fixed Tanks	On-Site PCA-7	PHC, BTEX	Soil & Groundwater

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

The soil and groundwater analytical results were compared to the "Table 2 SCS: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Industrial/Commercial/Community Use with coarse-textured soils" 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 2 Standards) for coarse-textured soils and residential/parkland/institutional property use.

This Phase Two ESA involved that advancement of five (5) boreholes, the installation of one (1) monitoring wells on the Phase, and the collection of soil and groundwater samples for

analysis of the potential contaminants of concern, including PAHs, OCPs, PHCs including BTEX, VOCs, Metals, As, Sb, Se, B-HWS, CN-, electrical conductivity, Cr (VI), Hg, SAR.

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

- Topsoil material consisting of trace rootlets and organics was encountered in all boreholes advanced from the ground surface to an approximate depth of 0.6 mbgs. The material below the topsoil consisted of silty sand with trace gravel that extended to a depth of approximately 1.0 mbgs except for BH22-5. The native overburden material encountered was sandy silt till that extended to approximate depths ranging from 1.2 to 6.1 mbgs. Bedrock was not encountered during the investigation.
- The groundwater levels of MW22-1 were found to range between 0.61 to 1.65 mbgs, with corresponding elevations of 259.97 to 261.00 meters above sea level (masl). The groundwater flow direction could not be calculated based on limited mobility of one (1) monitoring well installation. Acording to Phase One ESA completed in January 2023, the groundwater flow direction is inferred to flow south towards the Etobicoke Creek located approximately 2 km from the Site. 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.
- Soil samples were collected from the boreholes advanced on the Phase Two Property and submitted for analysis of PAHs, OCPs, PHCs including BTEX, VOCs and M&I. The results of the chemical analyses conducted on the soil samples met the Table 2 SCS
- Groundwater samples were collected from the monitoring well (MW22-1) installed on the Phase Two Property and submitted for M&I, PHCs, VOCs and PAHs with one VOC Trip Blank. The results of the chemical analyses conducted indicated that all samples analyzed met the applicable Table 2 SCS.

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

- The results of the chemical analyses conducted on the soil and groundwater samples indicate that the applicable Site Condition Standards have been met;
- Based on the findings of this Phase Two ESA, a Record of Site Condition may be filed for the Phase Two Property if the groundwater flow direction can be confirmed.

- 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 Alloa (BT) Corporation to complete a Phase Two Environmental Site Assessment (ESA) of the Property located at 12455 Creditview Road, Caledon, 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 due diligence purposes in association with the proposed redevelopment of the Site for residential purposes.

The intended future property use is not considered to be a more sensitive property use as defined under O.Reg. 153/04 (as amended) than the historical agricultural use; 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 40.44-hectare (99.3 acres) parcel of land situated within a agricultural and residential neighbourhood in the Town of Caledon, Ontario. The Phase Two Property is located approximately 1.3 km (south) of the intersection of Creditview Road and Old School Road and was vacant at the time of this investigation.

For the purposes of this report, Old School Road is assumed to be aligned in an east-west orientation, and Creditview Road in a north-south orientation. A Plan of Survey for the Site dated March 11, 2022, and prepared by R-PE Surveying Ltd, an Ontario Land Surveyor, has been provided under Appendix A.

The property west-central portion of the Site was occupied by a two (2) storey residential dwelling with a basement which was built in 1897. A parking garage is attached to the east wall of the building. A forested area of approximately 8.16 Hectares (20.17 Acres) is located on the north-eastern portion of the Site. The remainder of the property consisted primarily of agricultural farmland.

A Site Plan depicting the orientation of the buildings on-site and property is provided in Figure 1.

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	Part Lot 20, Concession 3 West of Hurontario Street Chinguacousy, Part 1, Plan 43r-40486; Town of Caledon	Land Registry Office
Property Identification Number (PIN)	14252-1959 (LT)	Land Registry Office
Current Site Occupants	Vacant Home- Heritage House Agricultural Land- Farmer Tenant	Phase One Site Reconnaissance Email Questionnaire
Site Area	40.44 hectares (99.93 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
Legal Description	4900 Palladium Way, Unit 105 Burlington, ON L7M 0W7 Email: anil@argoland.com	Anil Datt Email: anil@argoland.com

1.3 Current and Proposed Future Use

The Phase Two Property is primarily a vacant agricultural field which is considered to be Agricultural Property Use under O.Reg. 153/04 (as amended). It is DS's understanding that the Client intends to redevelop the Site for residential purposes.

1.4 Applicable Site Condition Standards

The Phase Two Property is a vacant agricultural property located within the Town of Caledon, and the proposed future land use is residential.

The applicable Site Condition Standards (SCS) for the Phase Two Property are considered by the Qualified Person (QP) to be the Table 2 SCS: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional Use with coarse-textured soils as contained in the April 15, 2011 Ontario Ministry of Environment, Conservation and Parks (MECP) document entitled "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act", herein referred to as the "Table 2 SCS".

The selection of the Table 2 SCS is considered appropriate based on the following rationale:

- The Site is not considered to be environmentally sensitive, as defined under O.Reg. 153/04 (as amended).
- The proposed future use of the Phase Two Property will be residential use;
- A water body (tributary of the Etobicoke Creek) is on the south portion of the Site;
- Three (3) water domestic water supply wells are present at the Site
- The pH of the soils analyzed during this Phase Two ESA are within the accepted range specified under O.Reg. 153/04 (as amended); and
- Bedrock was not encountered within 2 metres of the ground surface.

2.0 Background Information

2.1 Physical Setting

2.1.1 Water Bodies and Areas of Natural Significance

A creek is the present on the south portion of the Site and empties into a tributary of the Etobicoke Creek flowing in a southeast direction along the south property boundary.

No areas of natural or scientific interest were identified within the Study Area.

2.1.2 Topography and Surface Water Draining Features

The Phase Two Property is located in a rural setting, at an elevation of 265 metres above sea level (masl) on the northwest and 257 masl on the southeast. The topography of the Phase Two Property is generally slopes to the south. The neighbouring property are generally at a similar elevation, and the topography in the vicinity of the Phase Two Property generally slopes to the south towards the Etobicoke Creek. 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

No previous reports were provided by the client for the Site.

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);
- Retained a MECP licenced driller to advance a total of 5 boreholes on the Phase Two Property, to a maximum depth of 6.1 mbgs. One (1) of the boreholes were instrumented with groundwater monitoring wells upon completion. The soil lithology was logged during drilling, and representative soil samples were collected at regular intervals. The soil samples were screened for organic vapours using (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 five (5) boreholes were advanced on the Phase Two Property, to a maximum depth of 6.1 mbgs. Soil samples were collected and submitted for analysis of all relevant PCOCs.
Groundwater	A total of one (1) monitoring wells were present 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 12455 Creditview Road, Caledon, Ontario. The Phase One Conceptual Site Model is presented in Drawings 1 to 5 and 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	#40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	Application of pesticides on the Phase One Property for agricultural purposes.	PCA is on-Site
PCA-2	#40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	Historic presence of an Orchard (1880) on the Phase One Property and adjacent neighbouring properties	PCA is on-Site
PCA-3	#30 - Importation of Fill Material of Unknown Quality	Fill material of unknown quality is inferred to have been used for grading purposes after the barn was demolished in 2015 at the Site.	PCA is on-Site
PCA-4	#N/S – Application of de-icing agents[1]	De-icing salt may have been applied to the unpaved driveway and road along Creditview Road during winter months.	PCA is on-Site
PCA-7	#28 - Gasoline and Associated Products Storage in Fixed Tanks	Former presence of oil tank in the basement of the Site building	PCA is on-Site

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

3.3.1 Contaminants of Potential Concern

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

3.3.2 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.

Underground utilities were assumed to be present at the Phase One Property, including water, natural gas, electrical, and sewer services to the existing Site Buildings. A sewage

treatment system is understood to be present at the Site. The location of sewage treatment system is unknown. 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.

3.3.3 Geological and Hydrogeological Information

The topography of the Phase One Property is generally flat with a tributary of the Etobicoke Creek, on the south portion of the Property and flows southeast towards a branch of the Etobicoke Creek. The topography of the Site slopes towards the tributary of the Etobicoke Creek on the Phase One Property. The Phase Property has a surface elevation of 265 meters above sea level (masl) on the northwest and 257 masl on the southeast. The topography within the Phase One Study Area generally slopes to the south. The groundwater flow direction within the Phase One Study Area is inferred to the south towards the tributary of the Etobicoke Creek, located on the south of the Site. Based on a review of the MECP well records, the depth to shallow groundwater level is approximately 0.6 – 1.5 mbgs and the deep groundwater level is at 5.4 – 7.3 mbgs.

The Site is situated within a drumlinized till plains physiographic region. The surficial geology within the majority of the Phase One Property is described as “clay to silt-textured till derived from glaciolacustrine deposits or shale” and as “Fine-textured glaciolacustrine deposits consisting of silt and clay, minor sand and gravel Interbedded silt and clay and gritty, pebbly flow till and rainout deposit” along the water bodies intersecting across the Property. The bedrock is described as “Shale, limestone, dolostone, siltstone and Queenston Formation”. Based on a review of “Bedrock Topography and Overburden Thickness Mapping, Southern Ontario, prepared by Ontario Geological Survey, published 2006,” the bedrock in the vicinity of the Site is anticipated to be encountered at a depth of approximately 20 to 25 metres below ground surface (mbgs).

3.3.4 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. If the City Directory Search 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 4. 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	Profile Drilling
Drilling Dates	December 22, 2022
Drilling Equipment Used	Track-mounted ATX PowerPro 9700
Measures taken to minimize the potential for cross contamination	◆ Soil samples were collected using a macro-core sampling system. A new, disposable PVC sample liner was used for each sample interval; ◆ Soil samples were extracted from the interior of the sampler rather than from areas in contact with the sampler sidewalls; ◆ 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	Soil samples were collected using a macro-core sampling system. A new, disposable PVC sample liner was used for each sample interval.

4.3 Soil Sampling

Soil samples were collected using a macro-core sampling system. Discrete soil samples were collected from the dedicated sample liners 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 5.1.

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 Serial Number: E2G721
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 he calibration had drifted by more than +/- 10%.

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

4.5 Groundwater Monitoring Well Installation

Monitoring wells were installed upon completion of one (1) selected borehole 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 aboveground monument casing.

Details regarding the monitoring well construction can be found in Table 1 of Appendix D, 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 December 22, 2022. 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-Pro DSS). The YSI Water Quality Meter was calibrated by the supplier (Spectra Scientific) in accordance with the manufacturer's specifications.

The measurements were conducted at regular intervals in order 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 monitoring wells was sampled using low flow methodology using a peristaltic pump due to the high yield and good recovery of the monitoring wells. The monitoring wells were purged to dryness at the lower possible pumping rate. The monitoring wells were allowed to recover prior to sampling. Groundwater samples to be submitted for analysis of volatile parameters (PHC F1, and VOCs) were collected using a dedicated inertial pump. The remaining samples were collected using a peristaltic pump with dedicated 6.4 mm ID polyethylene tubing.

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 BV under chain of custody protocols. Bureau Veritas (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 were surveyed using a Sokkia GCX-2 GNSS RTK receiver, based on global positioning system satellites. The ground surface elevations can be found on the borehole logs presented in Appendix B.

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

Media	Parameter	Sample Container
	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.

Dedicated single-use PVC sample liners were used in the macrocore sampling system for each sampling event.

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 (i.e. PID, CGD, 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.

Topsoil material consisting of trace rootlets and organics was encountered in all boreholes advanced from the ground surface to an approximate depth of 0.6 mbgs. The material below the topsoil consisted of silty sand with trace gravel that extended to a depth of approximately 1.0 mbgs except for BH22-5. The native overburden material encountered was sandy silt till that extended to approximate depths ranging from 1.2 to 6.1 mbgs. Bedrock was not encountered during the investigation.

Table 5-1: Summary of Geologic Units Investigated

Geologic Unit	Inferred Thickness (m)	Top Elevation (masl)	Bottom Elevation (masl)	Properties
Topsoil	0.6	262.7	262.1	Trace rootlets and organics
Silty Sand	1.5	262.1	260.4	Little to somewhat moist
Sandy Silt Till	6.1	260.4	255.5	Moist to wet.
Weathered Shale	Not determined	Not determined	Not determined	Not determined
Shale Bedrock	Not determined	Not determined	Not determined	Not determined

Some of the material encountered in the boreholes are permeable enough to allow groundwater to be remitted between the different geological units. Hence, the is a potential for contaminants identified in the APECs to be present in groundwater.

5.2 Ground Water Elevations and Flow Direction

5.2.1 Rationale for Monitoring Well Location and Well Screen Intervals

A total of one (1) monitoring wells were installed on the Phase Two Property in order to assess the groundwater quality in relation to APECs (1, 4 and 5). The COPCs associated with these APECs were (PHCs, PAHs, VOCs, and M&I). 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 (sandy silt till) unit encountered at an approximate depth of (3.1 to 6.1 mbgs). This unit is inferred to be a unconfined aquifer.

5.2.2 Results of Interface Probe Measurements

A summary of the groundwater level measurements is provided in Table 1. The groundwater level measurements were collected using a Solinst interface probe (model #122). The depth to groundwater was found at 0.62 on January 13, 2022 and 1.65 on January 16, 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. Generally, the groundwater elevation was found to range from 259.97 to 261.00 in the upper aquifer investigated.

5.2.5 Groundwater Flow Direction

According to the Phase One ESA conducted in January 2023, the groundwater flow direction is inferred to the south towards the Etobicoke Creek, located approximately 2 km from the Site. An additional of two (2) monitoring well would need to be installed on the Phase Two Property to determine the seasonal groundwater flow direction.

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 Phase Two Property is currently undeveloped, no buried services are present.

5.3 Ground Water Hydraulic Gradients

5.3.1 Horizontal Hydraulic Gradient

Hydraulic gradient could not be determined as only one monitoring well was installed at the site. Further investigation is required to determine the hydraulic gradient.

5.4 Fine-Medium Soil Texture

Not Applicable – more than one-third of the soils encountered on the Phase Two Property are considered to be coarse textured. For the purposes of evaluating the SCS, all soils on the Phase Two Property are considered coarse textured.

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 PID and CGD in methane elimination mode. The PID readings were 0 ppm. The CGD readings ranged between 0 and 5 ppm.

The soil samples were also screened for visual and olfactory indicators of impacts (e.g. staining, odours). No visual evidence of contamination was observed on the core soil samples.

5.6 Soil Quality

A visual summary of the location of the sample locations is provided in Figures 7A through 7E of Tables. A summary of the maximum concentration for each tested parameter is presented in Table 14. The results of the chemical analyses conducted are presented in Tables 5 through 13. The laboratory certificates of analysis have been provided under Appendix D.

5.6.1 Metals and ORPs

A total of thirteen (13) soil samples including one (1) field duplicates for QA/QC purposes were submitted for analysis of metals and ORPs. The results of the analyses are tabulated in Table 5 and presented on Figure 7A. The results of the analyses indicated that the concentration of the tested parameter met the Table 2 SCS.

5.6.2 Petroleum Hydrocarbons

A total of five (5) soil samples including one (1) field duplicates for QA/QC purpose were submitted for analysis of PHCs (incl. BTEX). The results of the analyses are tabulated in Table 6 and presented on Figure 7B. The results of the analyses indicated that the concentration of the tested parameter met the Table 2 SCS.

5.6.3 Volatile Organic Compounds

A total of three (3) 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 and presented on Figure 7C. The results of the analyses indicated that the concentration of the tested parameter met the Table 2 SCS.

5.6.4 Polycyclic Aromatic Hydrocarbons

A total of five (5) 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 and presented on Figure 7D. The results of the analyses indicated that the concentration of the tested parameter met the Table 2 SCS.

5.6.5 Organochlorine Pesticides

A total of eight (8) samples, including one (1) field duplicates for QA/QC purposes were submitted for analysis of OCPs. The results of the analyses are tabulated in Table 9 and presented on Figure 7E. The results of the analyses indicated that the concentration of the tested parameter met the Table 2 SCS.

5.6.6 Commentary on Soil Quality

No evidence of chemical or biological transformations of the parameters analyzed was observed.

5.7 Ground Water Quality

The results of the chemical analyses conducted are presented in Tables 10 through Table 13 of Tables. A summary of the maximum concentration for each tested parameter is presented in Table 15. A visual summary of the location of the sample locations is provided in Figures 7A through 7D. The laboratory certificates of analysis have been provided under Appendix D.

5.7.1 Metals and ORPs

A total of one (1) sample, including one (1) field duplicates for QA/QC purposes were submitted for analysis of metals and ORPs. The results of the analyses are tabulated in Table 10 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 the concentration of the tested parameter met the Table 2 SCS.

5.7.2 Petroleum Hydrocarbons

A total of one (1) sample was submitted for analysis of PHCs (incl. BTEX). The results of the analyses are tabulated in Table 11 and presented on Figure 8B. The results of the analyses indicated that the concentration of the tested parameter met the Table 2 SCS.

5.7.3 Volatile Organic Compounds

A total of one (1) sample, including one (1) VOC trip blank were submitted for analysis of VOCs. The results of the analyses are tabulated in Table 12 and presented on Figure 8C. The results of the analyses indicated that the concentration of the tested parameter met the Table 2 SCS.

5.7.4 Polycyclic Aromatic Hydrocarbons

A total of one (1) sample was submitted for analysis of PAHs. The results of the analyses are tabulated in Table 13 and presented on Figure 8D. The results of the analyses indicated that the concentration of the tested parameter met the Table 2 SCS.

5.7.5 Commentary on Groundwater Quality

No evidence of chemical or biological transformations of the parameters analyzed was observed.

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 5-2: Summary of QA/QC Results

Sample ID	QA/QC duplicate	Medium	Parameter Analyzed	QA/QC Result
MW22-1 S4	DUP-1	Soil	PHCs, VOCs	All results were within the analytical protocol criteria for RPD.
MW22-1 S3	DUP-2	Soil	PAHs	All results were within the analytical protocol criteria for RPD.
BH22-5 S1	DUP-3	Soil	OCPs	All results were within the analytical protocol criteria for RPD.
BH22-5 S5	DUP-4	Soil	M&I	All results were within the analytical protocol criteria for RPD except for the parameter listed below.

The following exceptions in the RPD protocols were identified:

- The RPD value for BH22-5 S5 and DUP-4 (QAQC1) of 34% exceeded the recommended 30% RPD limit for Arsenic. The variance in the analytical result between the parent and duplicate sample are attributed to the heterogeneity of the sample material analyzed.

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.

Bureau Veritas (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.

The following comments were provided by BV on the laboratory Certificates of Analysis. Commentary on the comments has been provided below:

- Laboratory Certificate C2AR265 – OC Pesticide Analysis: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly. As such, DS does not consider this to be an issue of significant concern and it has no impact on the overall interpretation of the analytical data.

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 five (5) boreholes, the installation of one (1) monitoring wells on the Property. Soil samples were collected from the boreholes and monitoring wells. Groundwater samples were collected from one of the monitoring well installed. The samples of analysis of the potential contaminants of concern, including PAHs, OCPs, PHCs including BTEX, VOCs, Metals, As, Sb, Se, B-HWS, CN-, electrical conductivity, Cr (VI), Hg, SAR.

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

- The results of the chemical analyses conducted on the soil and groundwater samples were found to meet the applicable Site Condition Standards.
- Based on the findings of this Phase Two ESA, a Record of Site Condition may be filed for the Phase Two Property if the groundwater flow direction can be confirmed; and
- All monitoring wells should be decommissioned in accordance with O.Reg. 903 when no longer required.

It is the opinion of the QP_{ESA} that the applicable SCS for the soil and groundwater at the Phase Two Property have been met as of the Certification Date of January 2023. No further sub-surface investigation is required regarding the environmental quality of the soil and groundwater at the Phase Two Property.

6.1 Qualifications of the Assessors

Omar Jaffer, Chemical Engineering Technologist

Mr. Omar Jaffer, is an Environmental Technologist with DS Consultants Ltd. He obtained a Chemical Engineering Technologist Advanced Diploma from Humber College with honors. Omar has over 15 years' experience in engineering and designing groundwater pumps and controllers used in Phase Two applications. He has experience in conducting Phase One and Two Environmental Site Assessments, and in completing soil and groundwater contamination programs in accordance with Ontario Regulation 153/04 to support the future filing of Record of Site Conditions.

Efuange Khumbah, M.Sc. P.Eng., QP_{ESA}

Efuange is a Senior Project Manager, providing environmental services at DS Consultants Ltd. He is a registered professional engineer, in the provinces of Ontario. With over 13 years working for the public and private sectors, Efuange has experience serving clients in constructional, financial institutions, insurance companies, legal firms, manufacturing industries, oil/gas/petrochemical as well as municipal, provincial and federal agencies. In Canada he has managed projects in British Columbia, Alberta, Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, and Newfound land. His area of expertise includes, environmental site assessment, soil and groundwater remediation, litigation support, excess soil management, senior review of environmental reports, and air quality monitoring. Reports prepared by Efuange have been published by the Town of Newmarket, City of Mississauga, and the Ontario Ministry of Environment Conservation and Parks. Efuange hold a M.Sc. degree in Environmental Science and Resource management.

Mr. Patrick (Rick) Fioravanti, B.Sc., P.Geo., QP_{ESA}

Mr. Fioravanti is the Manager of Environmental Services with DS Consultants Limited. Patrick holds a 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, Conservation and Parks. 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., QP$_{ESA}$ 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:

Omar Jaffer
Environmental Technologist

Reviewed By:

Efuange Khumbah, M.Sc. P.Eng., QP$_{ESA}$
Senior Environmental Project Manager

Rick Fioravanti, B.Sc., P.Geo., QP$_{ESA}$
Environmental Project Manager

6.3 Limitations

This report was prepared for the sole use of Argo Alloa (BT) Corporation and is intended to provide an assessment of the environmental condition on the property located at 12455 Creditview Road, Caledon, 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*.

Tables

Table 1: Summary of Monitoring Well Installation and Groundwater Data

Well ID			MW22-1
Installed By:			DS
Installation Date:			20-Dec-22
Well Status:			Active
EastUTM17			591150.993
NorthUTM17			4840746.85
Inner Diameter		(mm)	50
Surface Elevation		(masl)	261.62
Bottom of Concrete Seal/Top of Bentonite Seal		mbgs	0.61
		masl	261.01
Bottom of Bentonite Seal/Top of Sand Pack		mbgs	2.13
		masl	259.49
Top of Well Screen		mbgs	3.10
		masl	258.52
Well Screen Length		m	3.00
Bottom of Well Screen		mbgs	6.10
		masl	255.52
GW Monitoring			
13-Jan-23	Depth to GW	mbgs	0.62
	GW Elevation	masl	261.00
16-Jan-23	Depth to GW	mbgs	1.65
	GW Elevation	masl	259.97

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
MW22-1	S1	0-0.6	Top Soil	OCPs	APEC -1, APEC - 4, APEC-5
	S2	0.61-1.21	Clayey silt till	Metals and ORPs, PHCs	
	S3	1.21-1.83	Silty Sand	PAHs	
	DUP-2			PAHs	
	S4	1.83-2.44	Sandy silt	PHCs,VOCs	
	DUP-1				
	S5	2.44-3.05	Sandy silt	Metals and ORPs	
BH22-2	S1	0-0.6	Top Soil	OCPs	APEC-1, APEC-2, APEC-3
	S2	0.6-1.21	Silty Sand	Metals and ORPs	
	S3	1.21-1.83	Silty Sand	Metals and ORPs. PAHs	
	S4	1.83-2.44	Sandy silt	PHCs,VOCs	
	S5	2.44-3.05	Sandy silt	Metals and ORPs	
	DUP-4	2.44-3.05	Sandy silt	Metals and ORPs	
BH22-3	S1	0-0.6	Top Soil	OCPs	APEC-1
	S2	0.6-1.21	Silty Sand	Metals and ORPs, OCPs	
	S3	1.21-1.83	Silty Sand	PHCs,VOCs	
	S4	1.83-2.44	Sandy silt	Metals and ORPs. PAHs	
	S5	2.44-3.05	Sandy silt	Metals and ORPs, PHCs	
BH22-4	S1	0-0.6	Top Soil	Metals and ORPs, OCPs	APEC-1
	S2	0.6-1.21	Silty Sand	Metals and ORPs, PAHs, OCPs	
BH22-5	S1	0-0.6	Top Soil	Metals and ORPs, OCPs	APEC-1, APEC-2, APEC-3
	DUP-3	0-0.6	Top Soil	OCPs	
	S2	0.6-1.21	Silty Sand	Metals and ORPs, PAHs, OCPs	

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
MW22-1	255.52	-	258.52	24-Aug-20	Metals and ORPs, PAHs, PHCs, VOCs, DUP-1, Trip Blank	APEC-1, APEC-4, APEC-5

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	Entire Site - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	PHCs, VOCs, BTEX, Metals, As, Sb, Se, B-, HWS, CN-, Cr (VI), Hg, low or high pH, SAR, PAHs	Soil	MW22-1	S1	OCPs
					S2	Metals and ORPs, PHCs
					S3	PAHs
					DUP-2	PAHs
					S4	PHCs,VOCs
					DUP-1	
					S5	Metals and ORPs
				BH22-2	S1	OCPs
					S2	Metals and ORPs
					S3	Metals and ORPs. PAHs
					S4	PHCs,VOCs
					S5	Metals and ORPs
					DUP-4	Metals and ORPs
				BH22-3	S1	OCPs
					S2	Metals and ORPs, OCPs
					S3	PHCs,VOCs
					S4	Metals and ORPs. PAHs
					S5	Metals and ORPs, PHCs
				BH22-4	S1	Metals and ORPs, OCPs
					S2	Metals and ORPs, PAHs, OCPs
				BH22-5	S1	Metals and ORPs, OCPs
					DUP-3	OCPs
					S2	Metals and ORPs, PAHs, OCPs
			Groundwater	MW22-1		Metals and ORPs, PHCs, VOCs, PAHs
				DUP-1		Metals and ORPs
APEC-2	The presence of historical Orchard appeared to be in 1880 in the West - Central portion of the Phase One Property - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	OCPs, Metals, As, Sb, Se, CN-	Soil	BH22-2	S1	OCPs
					S2	Metals and ORPs
					S3	Metals and ORPs. PAHs
					S4	PHCs,VOCs
					S5	Metals and ORPs
					DUP-4	Metals and ORPs
				BH22-5	S1	Metals and ORPs, OCPs
					DUP-3	OCPs
					S2	Metals and ORPs, PAHs, OCPs
APEC-3	The importation of fill material may have occurred in the West-Central portion of the Phase One Property	PHCs, VOCs, BTEX, Metals, As, Sb, Se, B-, HWS, CN-, Cr (VI), Hg, low or high pH, SAR, PAHs	Soil	BH22-2	S1	OCPs
					S2	Metals and ORPs
					S3	Metals and ORPs. PAHs
					S4	PHCs,VOCs
					S5	Metals and ORPs
					DUP-4	Metals and ORPs
				BH22-5	S1	Metals and ORPs, OCPs
					DUP-3	OCPs
					S2	Metals and ORPs, PAHs, OCPs
APEC-4	There appeared to be Seasonal application of de-icing salts in the West Central portion of the Phase One Property along the driveway	PHCs, VOCs, BTEX, Metals, As, Sb, Se, B-, HWS, CN-, Cr (VI), Hg, low or high pH, SAR, PAHs	Soil	MW22-1	S1	OCPs
					S2	Metals and ORPs, PHCs
					S3	PAHs
					DUP-2	PAHs
					S4	PHCs,VOCs
					DUP-1	
					S5	Metals and ORPs
			Groundwater	MW22-1		Metals and ORPs, PHCs, VOCs, PAHs
				DUP-1		Metals and ORPs
APEC-5	Gasoline and Associated Products Storage in Fixed Tanks in the West- Central portion of the Phase One Property	PHC, BTEX	Soil	MW22-1	S1	OCPs
					S2	Metals and ORPs, PHCs
					S3	PAHs
					DUP-2	PAHs
					S4	PHCs,VOCs
					DUP-1	
					S5	Metals and ORPs
			Groundwater	MW22-1		Metals and ORPs, PHCs, VOCs, PAHs
				DUP-1		Metals and ORPs

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		MW22-1 S2	MW22-1 S5	BH22-2 S2	BH22-2 S3	BH22-3 S2	BH22-3 S4	BH22-3 S5	BH22-4 S1	BH22-4 S2	BH22-5 S1	BH22-5 S2	BH22-2 S5	DUP-4 (BH22-2 S5)
Date of Collection		22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22
Date Reported	**MECP Table 2 SCS**	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23
Sampling Depth (mbgs)		0-0.6	2.44-3.05	0.6-1.21	1.21-1.83	0.6-1.21	1.83-2.44	2.44-3.05	0-0.6	0.6-1.21	0-0.6	0.6-1.21	2.44-3.05	2.44-3.05
Analytical Report Reference No.		C2AR265	C2AR265	C2AR265	C2AR265	C2AR265	C2AR265	C2AR265	C2AR265	C2AR265	C2AR265	C2AR265	C2AR265	C2AR265
Antimony	7.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Arsenic	18	4.6	3.3	4.2	6	3	4	4.2	4.4	4.8	3.7	3.1	3.1	4.7
Barium	390	61	67	72	46	49	98	93	86	120	79	60	51	49
Beryllium	4	0.49	0.4	0.57	0.36	0.53	0.58	0.5	0.59	0.61	0.46	0.37	0.34	0.37
Boron (Hot Water Soluble)	1.5	0.18	0.15	0.1	0.15	0.083	0.2	0.23	0.17	0.13	0.28	0.12	0.17	0.15
Cadmium	1.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.11	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	160	16	14	18	14	15	18	17	18	18	17	13	14	15
Chromium VI	8	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
Cobalt	22	9.2	7.6	10	6.4	6.5	13	11	9.7	12	7.4	6.9	6.3	7.3
Copper	140	29	17	31	20	23	26	26	25	29	22	23	20	24
Lead	120	8.7	6.5	8.7	6.7	6.9	11	9.9	9.1	10	7.9	6.5	6.2	6.2
Mercury	0.27	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Molybdenum	6.9	<0.50	<0.50	<0.50	<0.50	<0.50	0.63	0.6	0.58	1	0.54	<0.50	0.56	<0.50
Nickel	100	19	15	21	14	15	24	22	19	23	15	14	13	16
Selenium	2.4	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Silver	20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Thallium	1	0.097	0.077	0.11	0.076	0.083	0.13	0.15	0.11	0.13	0.11	0.08	0.085	0.088
Vanadium	86	24	21	25	21	26	26	25	28	27	26	21	20	21
Zinc	340	41	35	45	33	32	50	46	43	46	40	33	33	38
pH (pH Units)	NV	7.67	8.03	7.79	7.95	7.59	7.9	7.93	7.61	7.67	7.5	7.86	7.94	7.84
Conductivity (ms/cm)	0.7	0.15	0.13	0.19	0.17	0.21	0.15	0.15	0.23	0.2	0.21	0.17	0.16	0.17
Sodium Adsorption Ratio	5	0.29	0.31	0.3	0.27	0.24	0.29	0.29	0.22	0.27	0.34	0.27	0.27	0.28
Cyanide, Free	0.051	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chloride	NV	-	-	-	-	-	-	-	-	-	-	-	-	-
Boron (Total)	120	6.2	7.8	7.4	5.6	<5.0	9.9	8.4	8.9	9.2	5.8	<5.0	6.6	5.2
Uranium	23	0.45	0.41	0.38	0.46	0.45	0.54	0.46	0.62	0.44	0.48	0.38	0.5	0.5

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 2 SCS	MW22-1 S2	MW22-1 S4	DUP-1 (MW22-1 S4)	BH22-2 S4	BH22-3 S3	BH22-3 S5
Date of Collection		22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22
Date Reported		05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23
Sampling Depth (mbgs)		0.61-1.21	1.83-2.44	1.83-2.44	1.83-2.44	1.21-1.83	2.44-3.05
Analytical Report Reference No.		C2AR265	C2AR265	C2AR265	C2AR265	C2AR265	C2AR265
Benzene	0.21	<0.020	<0.0060	<0.0060	<0.0060	<0.0060	<0.020
Toluene	2.3	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Ethylbenzene	1.1	<0.020	<0.010	<0.010	<0.010	<0.010	<0.020
Xylenes (Total)	3.1	<0.040	<0.020	<0.020	<0.020	<0.020	<0.040
F1 (C6-C10) -BTEX	55	<10	<10	<10	<10	<10	<10
F2 (C10-C16)	98	<10	<10	<10	<10	<10	<10
F3 (C16-C34)	300	<50	<50	<50	<50	<50	<50
F4 (C34-C50)	2800	<50	<50	<50	<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 2 SCS	MW22-1 S4	DUP-1 (MW22-1 S4)	BH22-2 S4	BH22-3 S3
Date of Collection		22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22
Date Reported		05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23
Sampling Depth (mbgs)		1.83-2.44	1.83-2.44	1.83-2.44	1.21-1.83
Analytical Report Reference No.		C2AR265	C2AR265	C2AR265	C2AR265
Acetone	16	<0.49	0.51	<0.49	<0.49
Benzene	0.21	<0.0060	<0.0060	<0.0060	<0.0060
Bromodichloromethane	1.5	<0.040	<0.040	<0.040	<0.040
Bromoform	0.27	<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	2.4	<0.040	<0.040	<0.040	<0.040
Chloroform	0.05	<0.040	<0.040	<0.040	<0.040
Dibromochloromethane	2.3	<0.040	<0.040	<0.040	<0.040
1,2-Dichlorobenzene	1.2	<0.040	<0.040	<0.040	<0.040
1,3-Dichlorobenzene	4.8	<0.040	<0.040	<0.040	<0.040
1,4-Dichlorobenzene	0.083	<0.040	<0.040	<0.040	<0.040
1,1-Dichloroethane	0.47	<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	1.9	<0.040	<0.040	<0.040	<0.040
Trans-1,2-Dichloroethylene	0.084	<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
Ethylbenzene	1.1	<0.010	<0.010	<0.010	<0.010
Ethylene Dibromide	0.05	<0.040	<0.040	<0.040	<0.040
Methyl Ethyl Ketone	16	<0.40	<0.40	<0.40	<0.40
Methylene Chloride	0.1	<0.049	0.097	0.063	<0.049
Methyl Isobutyl Ketone	1.7	<0.40	<0.40	<0.40	<0.40
Methyl-t-Butyl Ether	0.75	<0.040	<0.040	<0.040	<0.040
Styrene	0.7	<0.040	<0.040	<0.040	<0.040
1,1,1,2-Tetrachloroethane	0.058	<0.040	<0.040	<0.040	<0.040
1,1,2,2-Tetrachloroethane	0.05	<0.040	<0.040	<0.040	<0.040
Toluene	2.3	<0.020	<0.020	<0.020	<0.020
Tetrachloroethylene	0.28	<0.040	<0.040	<0.040	<0.040
1,1,1-Trichloroethane	0.38	<0.040	<0.040	<0.040	<0.040
1,1,2-Trichloroethane	0.05	<0.040	<0.040	<0.040	<0.040
Trichloroethylene	0.061	<0.010	<0.010	<0.010	<0.010
Vinyl Chloride	0.02	<0.019	<0.019	<0.019	<0.019
m-Xylene & p-Xylene	NV	<0.020	<0.020	<0.020	<0.020
o-Xylene	NV	<0.020	<0.020	<0.020	<0.020
Total Xylenes	3.1	<0.020	<0.020	<0.020	<0.020
Dichlorodifluoromethane	16	<0.040	<0.040	<0.040	<0.040
Dioxane, 1,4-	1.8	-	-	-	-
Hexane(n)	2.8	<0.040	<0.040	<0.040	<0.040
Trichlorofluoromethane	4	<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 2 SCS	MW22-1 S3	DUP-2 (MW22-1 S3)	BH22-2 S3	BH22-3 S4	BH22-4 S2	BH22-5 S2
Date of Collection		22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22
Date Reported		05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23
Sampling Depth (mbgs)		1.21-1.83	1.21-1.83	1.21-1.83	1.83-2.44	0.6-1.21	0.6-1.21
Analytical Report Reference No.		C2AR265	C2AR265	C2AR265	C2AR265	C2AR265	C2AR265
Acenaphthene	7.9	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Acenaphthylene	0.15	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Anthracene	0.67	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Benzo(a)anthracene	0.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Benzo(a)pyrene	0.3	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Benzo(b/j)fluoranthene	0.78	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Benzo(ghi)perylene	6.6	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Benzo(k)fluoranthene	0.78	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chrysene	7	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dibenzo(a,h)anthracene	0.1	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Fluoranthene	0.69	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Fluorene	62	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Indeno(1,2,3-cd)pyrene	0.38	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
1-Methylnaphthalene	0.99	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
2-Methylnaphthalene	0.99	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Naphthalene	0.6	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Phenanthrene	6.2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Pyrene	78	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Methylnaphthalene, 2-(1-)	0.99	<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 9: Summary of OCPs in Soil

Parameter	MECP Table 2 SCS	MW22-1 S1	BH22-2 S1	BH22-3 S1	BH22-3 S2	BH22-4 S1	BH22-4 S2	BH22-5 S1	DUP-3 (BH22-5 S1)	BH22-5 S2
Date of Collection		22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22	22-Dec-22
Date Reported		05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23	05-Jan-23
Screen Interval (mbgs)		0-0.6	0-0.6	0-0.6	0.61-1.21	0-0.6	0.61-1.21	0-0.6	0-0.6	0.61-1.21
lytical Report Reference No.		C2AR265	C2AR265	C2AR265	C2AR265	C2AR265	C2AR265	C2AR265	C2AR265	C2AR265
Aldrin	0.05	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Chlordane (alpha)	NV	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Chlordane (gamma)	NV	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Chlordane (total)	0.05	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
o,p DDD	NV	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
p,p-DDD	NV	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
DDD (total)	3.3	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
o,p DDE	NV	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
p,p-DDE	NV	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
DDE (total)	0.26	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
op-DDT	NV	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
pp-DDT	NV	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
DDT (total)	1.4	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Dieldrin	0.05	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Endosulphan I	NV	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Endosulphan II	NV	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Total Endosulphan	0.04	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Endrin	0.04	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Heptachlor	0.15	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Heptachlor Epoxide	0.05	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Lindane	0.056	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Methoxychlor	0.13	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Total PCB	0.35	<0.075	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Hexachlorobenzene	0.52	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Hexachlorobutadiene	0.012	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Hexachloroethane	0.089	<0.010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020

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 2 SCS	MW22-1	DUP-1
Date of Collection		16-Jan-23	16-Jan-23
Date Reported		23-Jan-23	23-Jan-23
Screen Interval (mbgs)		3.1-6.1	3.1-6.2
ytical Report Reference No.		C313303	C313303
Antimony	6	<0.50	<0.50
Arsenic	25	5.5	6
Barium	1000	140	150
Beryllium	4	<0.40	<0.40
Boron	5000	51	49
Cadmium	2.7	<0.090	<0.090
Chromium	50	<5.0	<5.0
Chromium VI	25	<0.50	<0.50
Cobalt	3.8	<0.50	<0.50
Copper	87	<0.90	<0.90
Lead	10	<0.50	<0.50
Mercury	0.29	<0.10	<0.10
Molybdenum	70	0.73	0.79
Nickel	100	<1.0	48
Sodium	490000	6900	6800
Selenium	10	<2.0	<2.0
Silver	1.5	<0.090	<0.090
Thallium	2	<0.050	<0.050
Vanadium	6.2	6	<0.50
Zinc	1100	<5.0	<5.0
Cyanide, Free	66	<1	<1
Nitrate (**mg/L**)	NV	-	-
Nitrite (**mg/L**)	NV	-	-
Chloride (**mg/L**)	790	15	15
Uranium	20	<0.10	<0.10

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 2 SCS	MW22-1
Date of Collection		16-Jan-23
Date Reported		23-Jan-23
Screen Interval (mbgs)		3.1-6.1
Analytical Report Reference No.		C313303
Benzene	5	<0.17
Ethylbenzene	24	<0.20
Toluene	2.4	0.48
Xylenes (Total)	300	<0.20
F1 (C6 to C10) minus BTEX	750	< 25
F2 (C10 to C16)	150	< 100
F3 (C16 to C34)	500	< 200
F4 (C34 to C50) minus PAHs	500	< 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 2 SCS	MW22-1	Trip Blank
Date of Collection		16-Jan-23	16-Jan-23
Date Reported		23-Jan-23	23-Jan-23
Screen Interval (mbgs)		3.1-6.1	-
Analytical Report Reference No.		C313303	C313303
Acetone	2700	<10	<10
Benzene	5	<0.17	<0.20
Bromodichloromethane	16	<0.50	<0.50
Bromoform	25	<1.0	<1.0
Bromomethane	0.89	<0.50	<0.50
Carbon Tetrachloride	0.79	<0.20	<0.19
Chlorobenzene	30	<0.20	<0.20
Chloroform	2.4	<0.20	<0.20
Dibromochloromethane	25	<0.50	<0.50
1,2-Dichlorobenzene	3	<0.50	<0.40
1,3-Dichlorobenzene	59	<0.50	<0.40
1,4-Dichlorobenzene	1	<0.50	<0.40
1,1-Dichloroethane	5	<0.20	<0.20
1,2-Dichloroethane	1.6	<0.50	<0.49
1,1-Dichloroethylene	1.6	<0.20	<0.20
Cis-1,2-Dichloroethylene	1.6	<0.50	<0.50
Trans-1,2-Dichloroethylene	1.6	<0.50	<0.50
1,2-Dichloropropane	5	<0.20	<0.20
Cis-1,3-Dichloropropylene	NV	<0.30	<0.30
Trans-1,3-Dichloropropylene	NV	<0.40	<0.40
Ethylbenzene	2.4	<0.20	<0.20
Ethylene Dibromide	0.2	<0.20	<0.19
Methyl Ethyl Ketone	1800	<10	<10
Methylene Chloride	50	<2.0	<2.0
Methyl Isobutyl Ketone	640	<5.0	<5.0
Methyl-t-Butyl Ether	15	<0.50	<0.50
Styrene	5.4	<0.50	<0.40
1,1,1,2-Tetrachloroethane	1.1	<0.50	<0.50
1,1,2,2-Tetrachloroethane	1	<0.50	<0.40
Toluene	24	0.48	<0.20
Tetrachloroethylene	1.6	<0.20	<0.20
1,1,1-Trichloroethane	200	<0.20	<0.20
1,1,2-Trichloroethane	4.7	<0.50	<0.40
Trichloroethylene	1.6	<0.20	<0.20
Vinyl Chloride	0.5	<0.20	<0.20
m-Xylene & p-Xylene	NV	<0.20	<0.20
o-Xylene	NV	<0.20	<0.20
Total Xylenes	300	<0.20	<0.20
Dichlorodifluoromethane	590	<1.0	<1.0
Dioxane, 1,4-	50	-	-
Hexane(n)	51	<1.0	<1.0
Trichlorofluoromethane	150	<0.50	<0.50
1,3-Dichloropropene (cis + trans)	0.5	<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 2 SCS	MW22-1
Date of Collection		16-Jan-23
Date Reported		23-Jan-23
Screen Interval (mbgs)		3.1-6.1
Analytical Report Reference No.		C313303
Acenaphthene	4.1	<0.050
Acenaphthylene	1	<0.050
Anthracene	2.4	<0.050
Benzo(a)anthracene	1	<0.050
Benzo(a)pyrene	0.01	<0.0090
Benzo(b/j)fluoranthene	0.1	<0.050
Benzo(ghi)perylene	0.2	<0.050
Benzo(k)fluoranthene	0.1	<0.050
Chrysene	0.1	<0.050
Dibenzo(a,h)anthracene	0.2	<0.050
Fluoranthene	0.41	<0.050
Fluorene	120	<0.050
Indeno(1,2,3-cd)pyrene	0.2	<0.050
1-Methylnaphthalene	3.2	<0.050
2-Methylnaphthalene	3.2	<0.050
Naphthalene	11	<0.050
Phenanthrene	1	<0.030
Pyrene	4.1	<0.050
Methylnaphthalene, 2-(1-)	3.2	<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	7.5	<0.20	All Samples
	Arsenic	18	6	BH22-2 S3
	Barium	390	120	BH22-4 S2
	Beryllium	4	0.61	BH22-4 S2
	Boron (Hot Water Soluble)	1.5	0.28	BH22-5 S1
	Cadmium	1.2	0.11	BH22-4 S1
	Chromium	160	18	BH22-2 S2
	Chromium VI	8	<0.18	All Samples
	Cobalt	22	13	BH22-3 S4
	Copper	140	31	BH22-2 S2
	Lead	120	11	BH22-3 S4
	Mercury	0.27	<0.050	All Samples
	Molybdenum	6.9	1	BH22-4 S2
	Nickel	100	24	BH22-3 S4
	Selenium	2.4	<0.50	All Samples
	Silver	20	<0.20	All Samples
	Thallium	1	0.15	BH22-3 S5
	Vanadium	86	28	BH22-4 S1
	Zinc	340	50	BH22-3 S4
	pH (pH Units)	NV	8.03	MW22-1 S5
	Conductivity (ms/cm)	0.7	0.23	BH22-4 S1
	Sodium Adsorption Ratio	5	0.34	BH22-5 S1
	Cyanide, Free	0.051	<0.01	All Samples
	Chloride	NV	-	All Samples
	Boron (Total)	120	9.9	BH22-3 S4
	Uranium	23	0.62	BH22-4 S1
PHCs	Benzene	0.21	<0.020	All Samples
	Toluene	2.3	<0.020	All Samples
	Ethylbenzene	1.1	<0.020	All Samples
	Xylenes (Total)	3.1	<0.040	All Samples
	F1 (C6-C10) -BTEX	55	<10	All Samples
	F2 (C10-C16)	98	<10	All Samples
	F3 (C16-C34)	300	<50	All Samples
	F4 (C34-C50)	2800	<50	All Samples

Table 14: Summary of Maximum Concentrations in Soil

	Parameter	Standard	Maximum Concentration	Location
VOCs	Acetone	16	0.51	DUP-1 (MW22-1 S4)
	Benzene	0.21	<0.0060	All Samples
	Bromodichloromethane	1.5	<0.040	All Samples
	Bromoform	0.27	<0.040	All Samples
	Bromomethane	0.05	<0.040	All Samples
	Carbon Tetrachloride	0.05	<0.040	All Samples
	Chlorobenzene	2.4	<0.040	All Samples
	Chloroform	0.05	<0.040	All Samples
	Dibromochloromethane	2.3	<0.040	All Samples
	1,2-Dichlorobenzene	1.2	<0.040	All Samples
	1,3-Dichlorobenzene	4.8	<0.040	All Samples
	1,4-Dichlorobenzene	0.083	<0.040	All Samples
	1,1-Dichloroethane	0.47	<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	1.9	<0.040	All Samples
	Trans-1,2-Dichloroethylene	0.084	<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
	Ethylbenzene	1.1	<0.010	All Samples
	Ethylene Dibromide	0.05	<0.040	All Samples
	Methyl Ethyl Ketone	16	<0.40	All Samples
	Methylene Chloride	0.1	0.097	DUP-1 (MW22-1 S4)
	Methyl Isobutyl Ketone	1.7	<0.40	All Samples
	Methyl-t-Butyl Ether	0.75	<0.040	All Samples
	Styrene	0.7	<0.040	All Samples
	1,1,1,2-Tetrachloroethane	0.058	<0.040	All Samples
	1,1,2,2-Tetrachloroethane	0.05	<0.040	All Samples
	Toluene	2.3	<0.020	All Samples
	Tetrachloroethylene	0.28	<0.040	All Samples
	1,1,1-Trichloroethane	0.38	<0.040	All Samples
	1,1,2-Trichloroethane	0.05	<0.040	All Samples
	Trichloroethylene	0.061	<0.010	All Samples
	Vinyl Chloride	0.02	<0.019	All Samples
	m-Xylene & p-Xylene	NV	<0.020	All Samples
	o-Xylene	NV	<0.020	All Samples
	Total Xylenes	3.1	<0.020	All Samples
	Dichlorodifluoromethane	16	<0.040	All Samples
	Dioxane, 1,4-	1.8	-	All Samples
	Hexane(n)	2.8	<0.040	All Samples
	Trichlorofluoromethane	4	<0.040	All Samples
	1,3-Dichloropropene (cis + trans)	0.05	<0.050	All Samples
PAHs	Acenaphthene	7.9	<0.0050	All Samples
	Acenaphthylene	0.15	<0.0050	All Samples
	Anthracene	0.67	<0.0050	All Samples
	Benzo(a)anthracene	0.5	<0.0050	All Samples
	Benzo(a)pyrene	0.3	<0.0050	All Samples
	Benzo(b/j)fluoranthene	0.78	<0.0050	All Samples
	Benzo(ghi)perylene	6.6	<0.0050	All Samples
	Benzo(k)fluoranthene	0.78	<0.0050	All Samples
	Chrysene	7	<0.0050	All Samples
	Dibenzo(a,h)anthracene	0.1	<0.0050	All Samples
	Fluoranthene	0.69	<0.0050	All Samples
	Fluorene	62	<0.0050	All Samples
	Indeno(1,2,3-cd)pyrene	0.38	<0.0050	All Samples
	1-Methylnaphthalene	0.99	<0.0050	All Samples
	2-Methylnaphthalene	0.99	<0.0050	All Samples
	Naphthalene	0.6	<0.0050	All Samples
	Phenanthrene	6.2	<0.0050	All Samples
	Pyrene	78	<0.0050	All Samples
	Methylnaphthalene, 2-(1-)	62	<0.0071	All Samples

Table 14: Summary of Maximum Concentrations in Soil

	Parameter	Standard	Maximum Concentration	Location
OCPs	Aldrin	0.05	<0.010	All Samples
	Chlordane (alpha)	NV	<0.010	All Samples
	Chlordane (gamma)	NV	<0.010	All Samples
	Chlordane (total)	0.05	<0.010	All Samples
	o,p DDD	NV	<0.010	All Samples
	p,p-DDD	NV	<0.010	All Samples
	DDD (total)	3.3	<0.010	All Samples
	o,p DDE	NV	<0.010	All Samples
	p,p-DDE	NV	<0.010	All Samples
	DDE (total)	0.26	<0.010	All Samples
	op-DDT	NV	<0.010	All Samples
	pp-DDT	NV	<0.010	All Samples
	DDT (total)	1.4	<0.010	All Samples
	Dieldrin	0.05	<0.010	All Samples
	Endosulphan I	NV	<0.010	All Samples
	Endosulphan II	NV	<0.010	All Samples
	Total Endosulphan	0.04	<0.010	All Samples
	Endrin	0.04	<0.010	All Samples
	Heptachlor	0.15	<0.010	All Samples
	Heptachlor Epoxide	0.05	<0.010	All Samples
	Lindane	0.056	<0.010	All Samples
	Methoxychlor	0.13	<0.025	All Samples
	Total PCB	0.35	<0.075	All Samples
	Hexachlorobenzene	0.52	<0.010	All Samples
	Hexachlorobutadiene	0.012	<0.010	All Samples
	Hexachloroethane	0.089	<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	6	<0.50	All Samples
	Arsenic	25	6	DUP-1
	Barium	1000	150	DUP-1
	Beryllium	4	<0.40	All Samples
	Boron	5000	51	MW22-1
	Cadmium	2.7	<0.090	All Samples
	Chromium	50	<5.0	All Samples
	Chromium VI	25	<0.50	All Samples
	Cobalt	3.8	<0.50	All Samples
	Copper	87	<0.90	All Samples
	Lead	10	<0.50	All Samples
	Mercury	0.29	<0.10	All Samples
	Molybdenum	70	0.79	DUP-1
	Nickel	100	48	DUP-1
	Sodium	490000	6900	MW22-1
	Selenium	10	<2.0	All Samples
	Silver	1.5	<0.090	All Samples
	Thallium	2	<0.050	All Samples
	Vanadium	6.2	6	MW22-1
	Zinc	1100	<5.0	All Samples
	Cyanide, Free	66	<1	All Samples
	Nitrate (mg/L)	NV	-	All Samples
	Nitrite (mg/L)	NV	-	All Samples
	Chloride (mg/L)	790	15	MW22-1
	Uranium	20	<0.10	All Samples
PHCs	Benzene	5	<0.17	All Samples
	Ethylbenzene	24	<0.20	All Samples
	Toluene	2.4	0.48	MW22-1
	Xylenes (Total)	300	<0.20	All Samples
	F1 (C6 to C10) minus BTEX	750	< 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

Table 15: Summary of Maximum Concentrations in Groundwater

	Parameter	Standard	Maximum Concentration	Location
VOCs	Acetone	2700	<10	All Samples
	Benzene	5	<0.17	All Samples
	Bromodichloromethane	16	<0.50	All Samples
	Bromoform	25	<1.0	All Samples
	Bromomethane	0.89	<0.50	All Samples
	Carbon Tetrachloride	0.79	<0.20	All Samples
	Chlorobenzene	30	<0.20	All Samples
	Chloroform	2.4	<0.20	All Samples
	Dibromochloromethane	25	<0.50	All Samples
	1,2-Dichlorobenzene	3	<0.50	All Samples
	1,3-Dichlorobenzene	59	<0.50	All Samples
	1,4-Dichlorobenzene	1	<0.50	All Samples
	1,1-Dichloroethane	5	<0.20	All Samples
	1,2-Dichloroethane	1.6	<0.50	All Samples
	1,1-Dichloroethylene	1.6	<0.20	All Samples
	Cis-1,2-Dichloroethylene	1.6	<0.50	All Samples
	Trans-1,2-Dichloroethylene	1.6	<0.50	All Samples
	1,2-Dichloropropane	5	<0.20	All Samples
	Cis-1,3-Dichloropropylene	NV	<0.30	All Samples
	Trans-1,3-Dichloropropylene	NV	<0.40	All Samples
	Ethylbenzene	2.4	<0.20	All Samples
	Ethylene Dibromide	0.2	<0.20	All Samples
	Methyl Ethyl Ketone	1800	<10	All Samples
	Methylene Chloride	50	<2.0	All Samples
	Methyl Isobutyl Ketone	640	<5.0	All Samples
	Methyl-t-Butyl Ether	15	<0.50	All Samples
	Styrene	5.4	<0.50	All Samples
	1,1,1,2-Tetrachloroethane	1.1	<0.50	All Samples
	1,1,2,2-Tetrachloroethane	1	<0.50	All Samples
	Toluene	24	0.48	MW22-1
	Tetrachloroethylene	1.6	<0.20	All Samples
	1,1,1-Trichloroethane	200	<0.20	All Samples
	1,1,2-Trichloroethane	4.7	<0.50	All Samples
	Trichloroethylene	1.6	<0.20	All Samples
	Vinyl Chloride	0.5	<0.20	All Samples
	m-Xylene & p-Xylene	NV	<0.20	All Samples
	o-Xylene	NV	<0.20	All Samples
	Total Xylenes	300	<0.20	All Samples
	Dichlorodifluoromethane	590	<1.0	All Samples
	Dioxane, 1,4-	50	-	All Samples
	Hexane(n)	51	<1.0	All Samples
	Trichlorofluoromethane	150	<0.50	All Samples
	1,3-Dichloropropene (cis + trans	0.5	<0.50	All Samples
PAHs	Acenaphthylene	1	<0.050	All Samples
	Anthracene	2.4	<0.050	All Samples
	Benzo(a)anthracene	1	<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	0.41	<0.050	All Samples
	Fluorene	120	<0.050	All Samples
	Indeno(1,2,3-cd)pyrene	0.2	<0.050	All Samples
	1-Methylnaphthalene	3.2	<0.050	All Samples
	2-Methylnaphthalene	3.2	<0.050	All Samples
	Naphthalene	11	<0.050	All Samples
	Phenanthrene	1	<0.030	All Samples
	Pyrene	4.1	<0.050	All Samples
	Methylnaphthalene, 2-(1-)	3.2	<0.071	All Samples

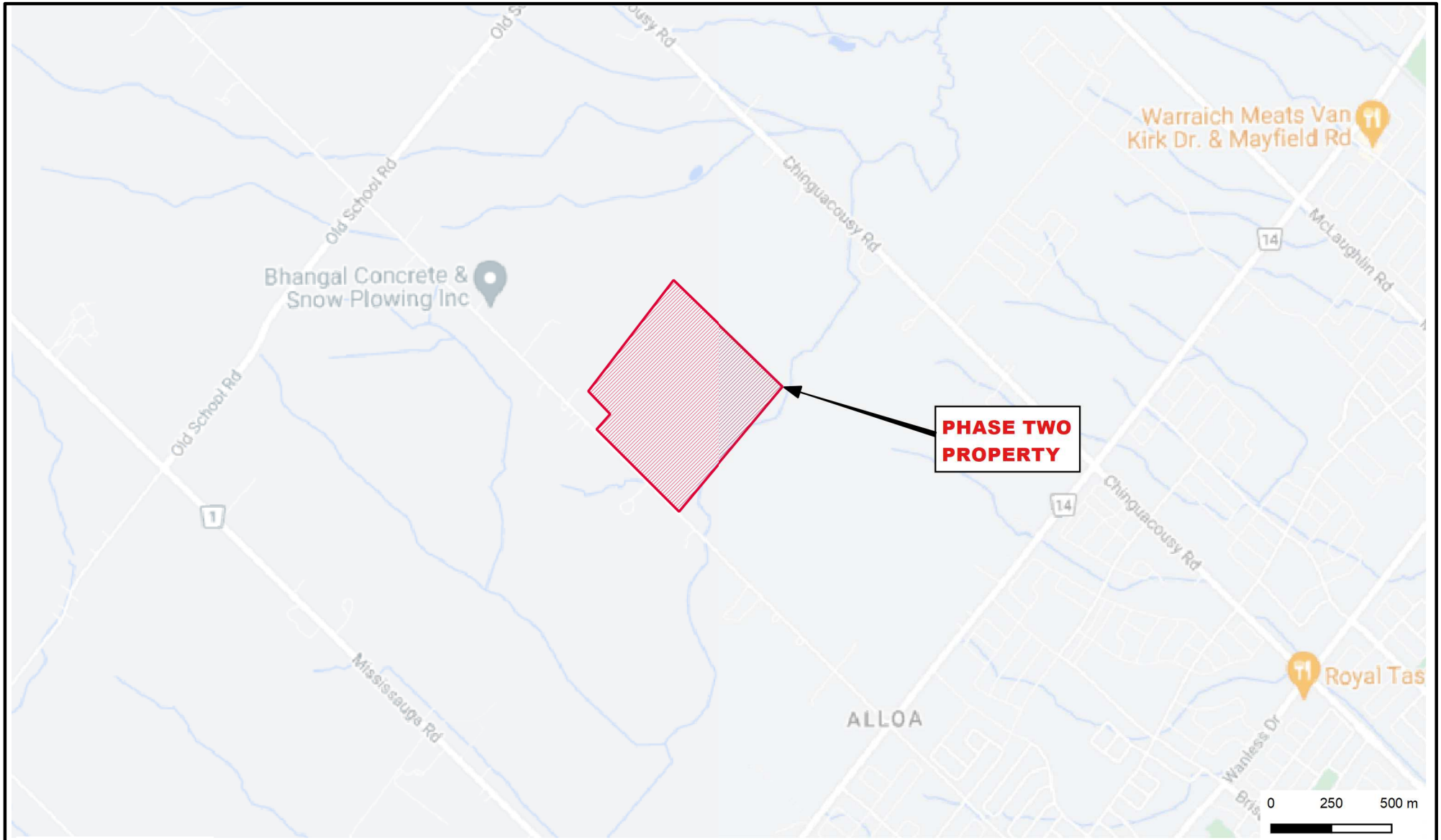
For Table Notes see **Notes for Soil and Groundwater Summary Tables,** included at the end of this Section

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.
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
masl	Meters above sea level
MECP Table 2 SCS	Table 2 SCS: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional Use with coarse-textured soils as contained in Table 8 of the "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act", published by the MOECC on April 15, 2011
mbgs	Meters below ground surface
NM	Not Monitored
NA	Not Available
OCPs	Organochlorine Pesticides
PAH	Polyaromatic Hydrocarbon
PHC	Petroluem Hydrocarbon
VOC	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

Figures

J:\-GIS\2022 PROJECTS\22-390-100 - 12455 Creditview Road, Caledon, ON\1-QGIS\Phase Two\Figure 1 - Site Location Plan.qgs Feb-07 09:08



Legend

Property Boundary

DS CONSULTANTS LTD.
6221 Highway 7, UNIT 16
Vaughan, Ontario L4H 0K8
Telephone: (905) 264-9393
www.dsconsultants.ca

Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
12455 Creditview Road, Caledon, ON

Title: **SITE LOCATION PLAN**

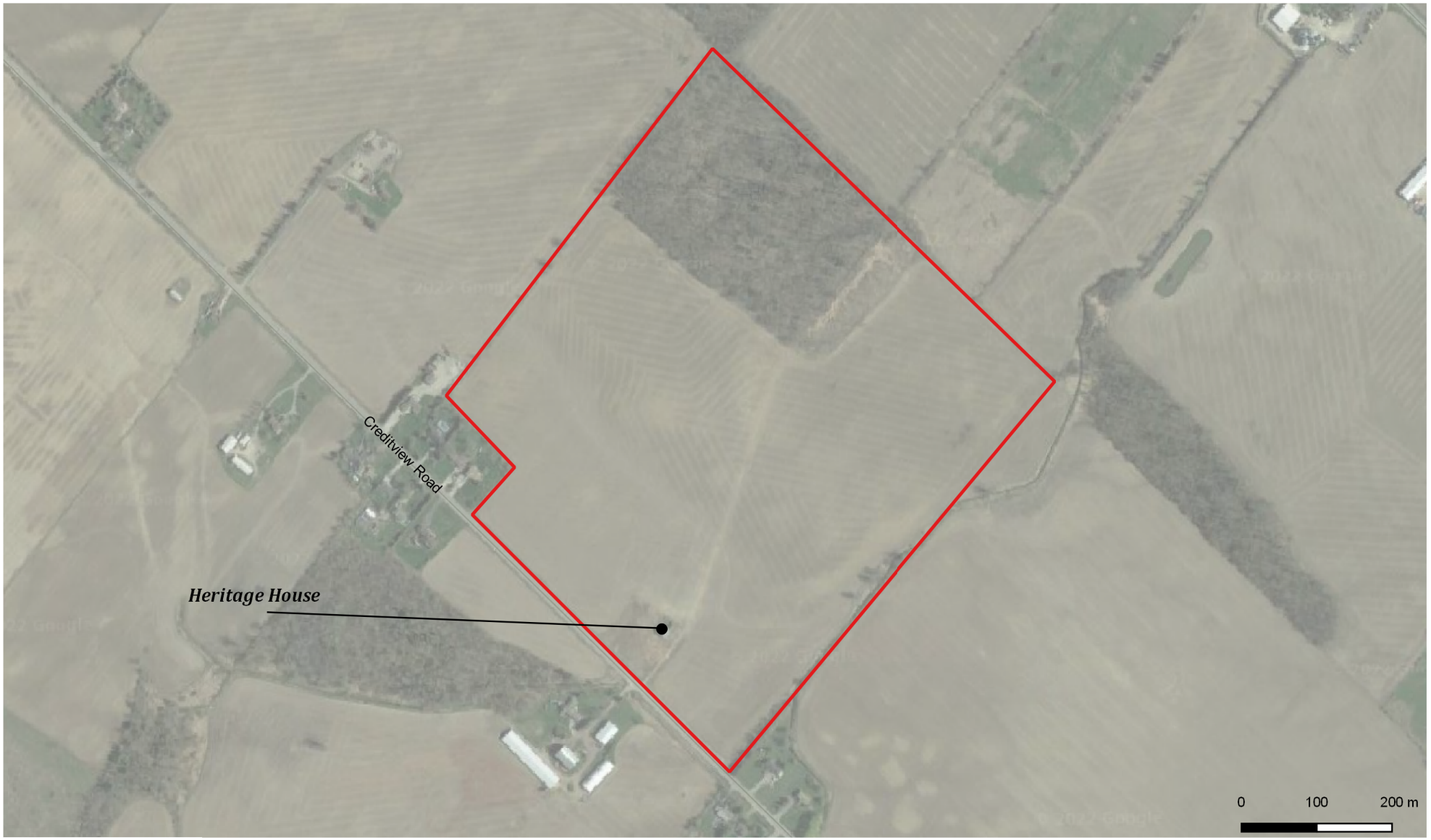
N

Client: ARGO ALLOA (BT) CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	E.K.	P.P	February 2023
Rev: 0	Scale: As Shown	Project No.: 22-390-100	Figure No.: 1

Image/Map Source: *Google Streetmap Image*

J:\-GIS\2022 PROJECTS\22-390-100 - 12455 Creditview Road, Caledon, ON\1-QGIS\Phase One\Figure 2 - Phase One Property Site Plan.qgs Feb-07 10:01



Legend

Property Boundary

DS CONSULTANTS LTD.
6221 Highway 7, UNIT 16
Vaughan, Ontario L4H 0K8
Telephone: (905) 264-9393
www.dsconsultants.ca

Client: ARGO ALLOA (BT) CORPORATION

Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
12455 Creditview Road, Caledon, ON

Title: **PHASE ONE PROPERTY SITE PLAN**

N

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	E.K.	P.P	February 2023
Rev: 0	Scale: As Shown	Project No.: 22-390-100	Figure No.: **2**

Image/Map Source: *Google Satellite Image*

J:\-GIS\2022 PROJECTS\22-390-100 - 12455 Creditview Road, Caledon, ON\1-QGIS\Phase Two\Figure 3 - Phase One Study Area.qgs Feb-07 10:03

Legend

- Property Boundary
- 250m Buffer
- Agricultural Use
- Residential Use

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Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
12455 Creditview Road, Caledon, ON

Title: **PHASE ONE STUDY AREA**

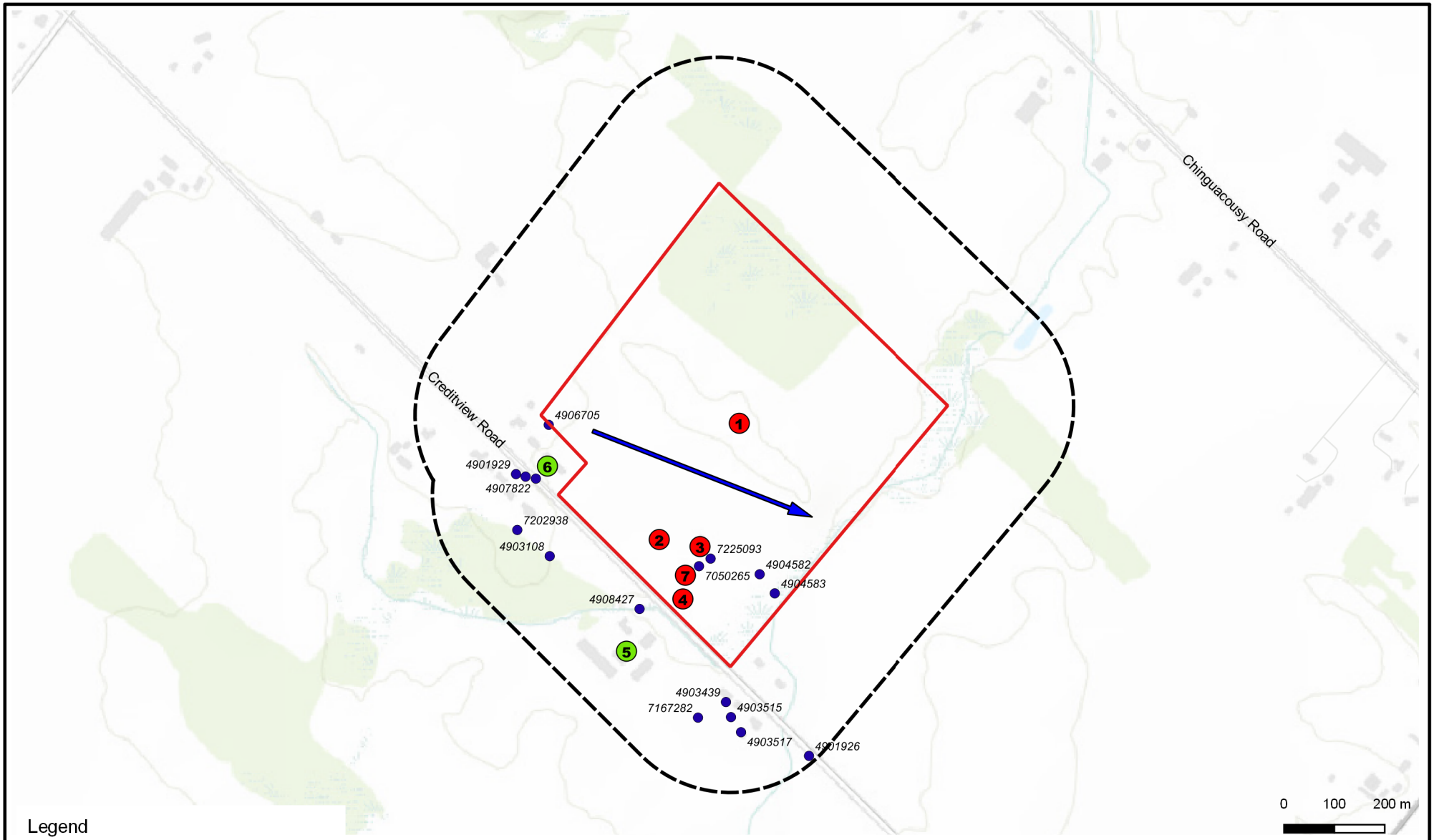
N

Client: ARGO ALLOA (BT) CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	E.K.	P.P	February 2023
Rev: 0	Scale: As Shown	Project No.: 22-390-100	Figure No.: 3

Image/Map Source: *Google Satellite Image*

J:\-GIS\2022 PROJECTS\22-390-100 - 12455 Creditview Road, Caledon, ON\1-QGIS\Phase Two\Figure 4 - PCAs within Phase One Study Area.qgs Feb-07 10:04



Legend

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

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Project: PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
12455 Creditview Road, Caledon, ON

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

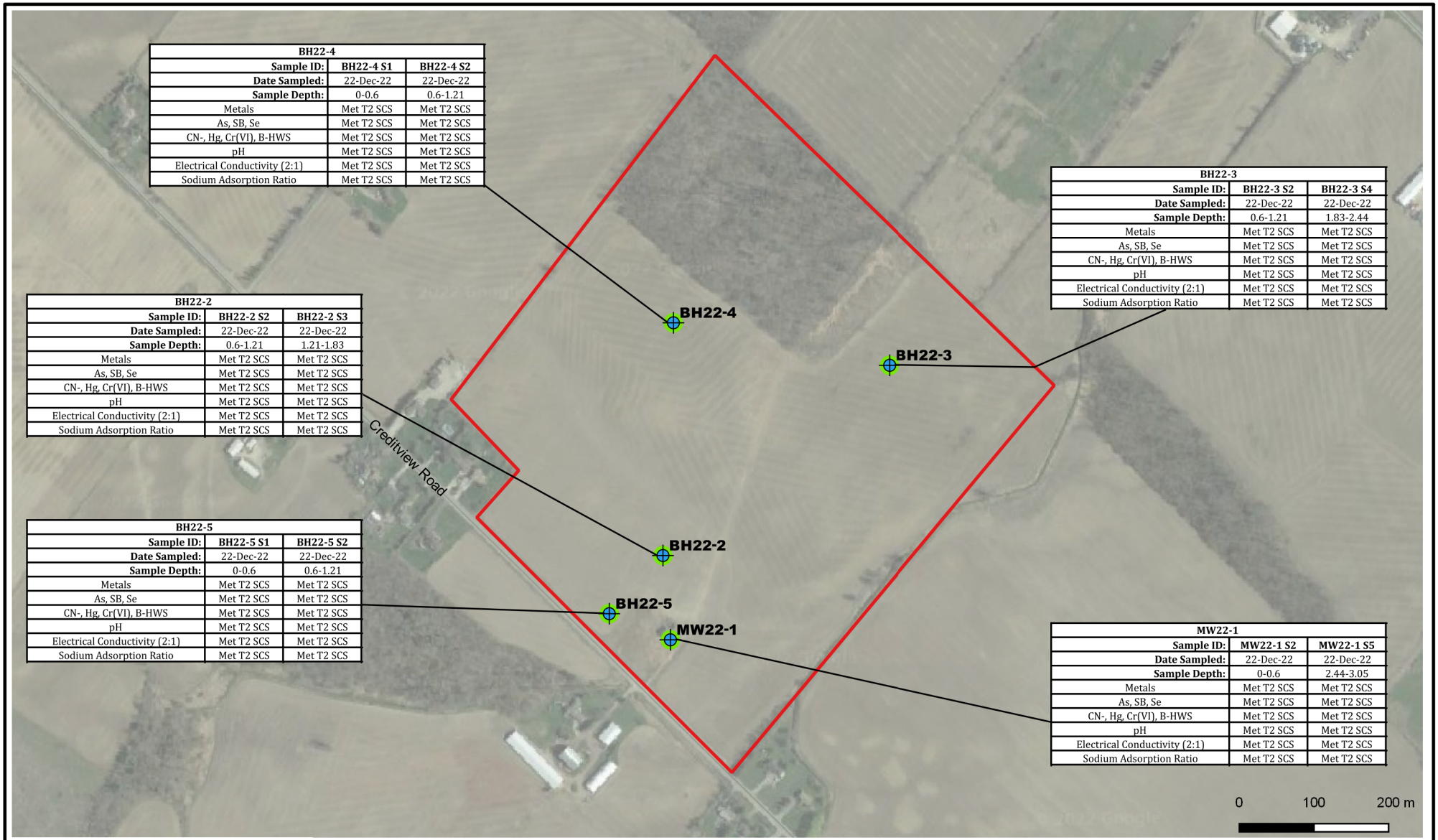
N

Client: ARGO ALLOA (BT) CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	E.K.	P.P	February 2023
Rev: 0	Scale: As Shown	Project No.: 22-390-100	Figure No.: 4

Image/Map Source: *Esri Topo Image*

J:\-GIS\2022 PROJECTS\22-390-100 - 12455 Creditview Road, Caledon, ON\1-QGIS\Phase Two\Figure 7A - Soil Characterization - Metals and ORPs.qgs May-17 10:21



BH22-4		
Sample ID:	**BH22-4 S1**	**BH22-4 S2**
Date Sampled:	22-Dec-22	22-Dec-22
Sample Depth:	0-0.6	0.6-1.21
Metals	Met T2 SCS	Met T2 SCS
As, SB, Se	Met T2 SCS	Met T2 SCS
CN-, Hg, Cr(VI), B-HWS	Met T2 SCS	Met T2 SCS
pH	Met T2 SCS	Met T2 SCS
Electrical Conductivity (2:1)	Met T2 SCS	Met T2 SCS
Sodium Adsorption Ratio	Met T2 SCS	Met T2 SCS

BH22-3		
Sample ID:	**BH22-3 S2**	**BH22-3 S4**
Date Sampled:	22-Dec-22	22-Dec-22
Sample Depth:	0.6-1.21	1.83-2.44
Metals	Met T2 SCS	Met T2 SCS
As, SB, Se	Met T2 SCS	Met T2 SCS
CN-, Hg, Cr(VI), B-HWS	Met T2 SCS	Met T2 SCS
pH	Met T2 SCS	Met T2 SCS
Electrical Conductivity (2:1)	Met T2 SCS	Met T2 SCS
Sodium Adsorption Ratio	Met T2 SCS	Met T2 SCS

BH22-2		
Sample ID:	**BH22-2 S2**	**BH22-2 S3**
Date Sampled:	22-Dec-22	22-Dec-22
Sample Depth:	0.6-1.21	1.21-1.83
Metals	Met T2 SCS	Met T2 SCS
As, SB, Se	Met T2 SCS	Met T2 SCS
CN-, Hg, Cr(VI), B-HWS	Met T2 SCS	Met T2 SCS
pH	Met T2 SCS	Met T2 SCS
Electrical Conductivity (2:1)	Met T2 SCS	Met T2 SCS
Sodium Adsorption Ratio	Met T2 SCS	Met T2 SCS

BH22-5		
Sample ID:	**BH22-5 S1**	**BH22-5 S2**
Date Sampled:	22-Dec-22	22-Dec-22
Sample Depth:	0-0.6	0.6-1.21
Metals	Met T2 SCS	Met T2 SCS
As, SB, Se	Met T2 SCS	Met T2 SCS
CN-, Hg, Cr(VI), B-HWS	Met T2 SCS	Met T2 SCS
pH	Met T2 SCS	Met T2 SCS
Electrical Conductivity (2:1)	Met T2 SCS	Met T2 SCS
Sodium Adsorption Ratio	Met T2 SCS	Met T2 SCS

MW22-1		
Sample ID:	**MW22-1 S2**	**MW22-1 S5**
Date Sampled:	22-Dec-22	22-Dec-22
Sample Depth:	0-0.6	2.44-3.05
Metals	Met T2 SCS	Met T2 SCS
As, SB, Se	Met T2 SCS	Met T2 SCS
CN-, Hg, Cr(VI), B-HWS	Met T2 SCS	Met T2 SCS
pH	Met T2 SCS	Met T2 SCS
Electrical Conductivity (2:1)	Met T2 SCS	Met T2 SCS
Sodium Adsorption Ratio	Met T2 SCS	Met T2 SCS

Legend

- Property Boundary
- Borehole Location
- Sample Met Applicable Standards

DS CONSULTANTS LTD.
6221 Highway 7, UNIT 16
Vaughan, Ontario L4H 0K8
Telephone: (905) 264-9393
www.dsconsultants.ca

Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
12455 Creditview Road, Caledon, ON

Title: **SOIL CHARACTERIZATION - METALS AND ORPs**

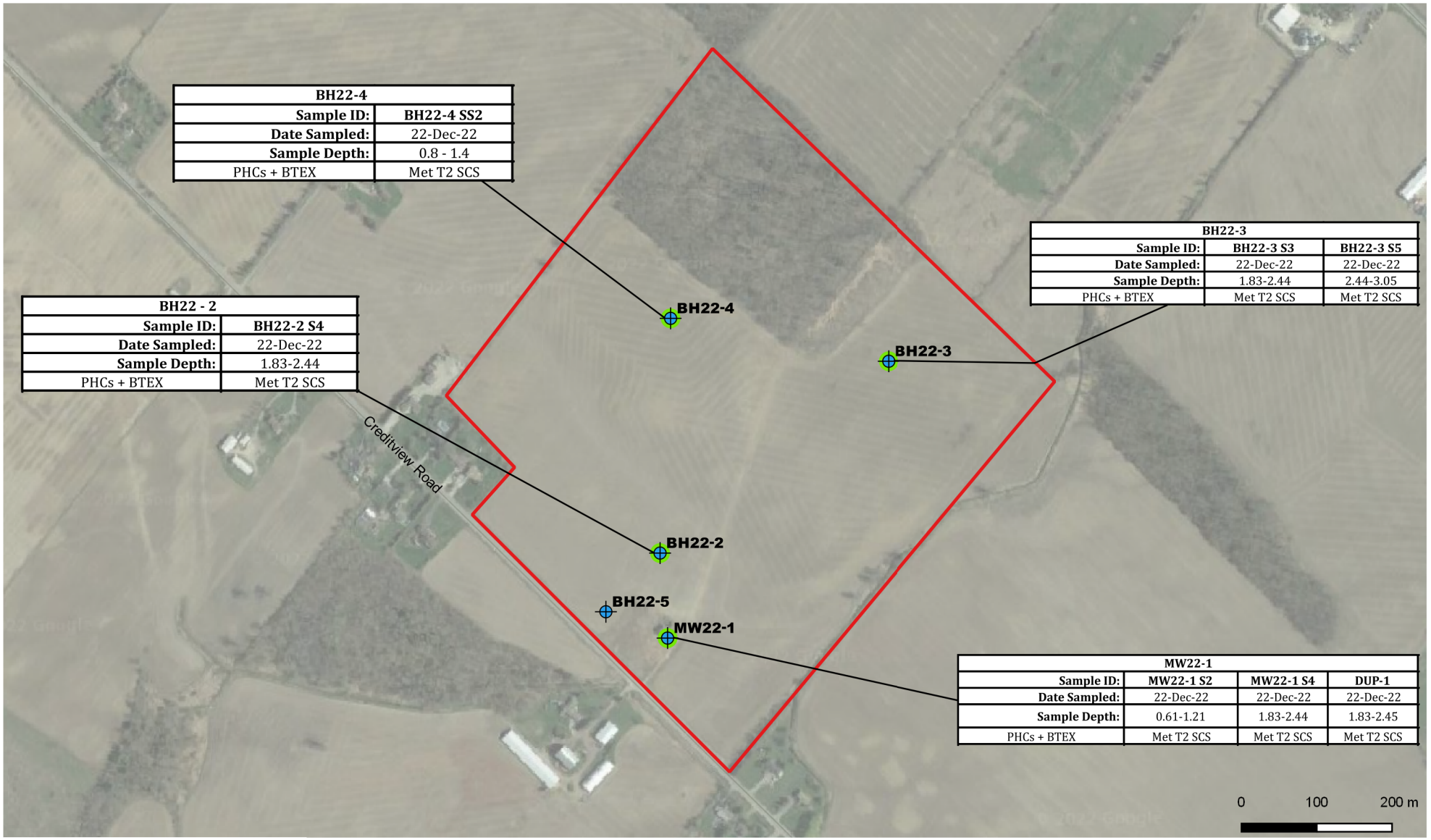
N

Client: ARGO ALLOA (BT) CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	E.K.	P.P	May 2023
Rev: 0	Scale: As Shown	Project No.: 22-390-100	Figure No.: **7A**

Image/Map Source: *Google Satellite Image*

J:\-GIS\2022 PROJECTS\22-390-100 - 12455 Creditview Road, Caledon, ON\1-QGIS\Phase Two\Figure 7B - Soil Characterization - PHCs & BTEX.qgs May-17 11:13



BH22-4	
Sample ID:	BH22-4 SS2
Date Sampled:	22-Dec-22
Sample Depth:	0.8 - 1.4
PHCs + BTEX	Met T2 SCS

BH22 - 2	
Sample ID:	BH22-2 S4
Date Sampled:	22-Dec-22
Sample Depth:	1.83-2.44
PHCs + BTEX	Met T2 SCS

BH22-3		
Sample ID:	BH22-3 S3	BH22-3 S5
Date Sampled:	22-Dec-22	22-Dec-22
Sample Depth:	1.83-2.44	2.44-3.05
PHCs + BTEX	Met T2 SCS	Met T2 SCS

MW22-1			
Sample ID:	MW22-1 S2	MW22-1 S4	DUP-1
Date Sampled:	22-Dec-22	22-Dec-22	22-Dec-22
Sample Depth:	0.61-1.21	1.83-2.44	1.83-2.45
PHCs + BTEX	Met T2 SCS	Met T2 SCS	Met T2 SCS

Legend

- Property Boundary
- Borehole Location
- Sample Met Applicable Standards

DS CONSULTANTS LTD.
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Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
12455 Creditview Road, Caledon, ON

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

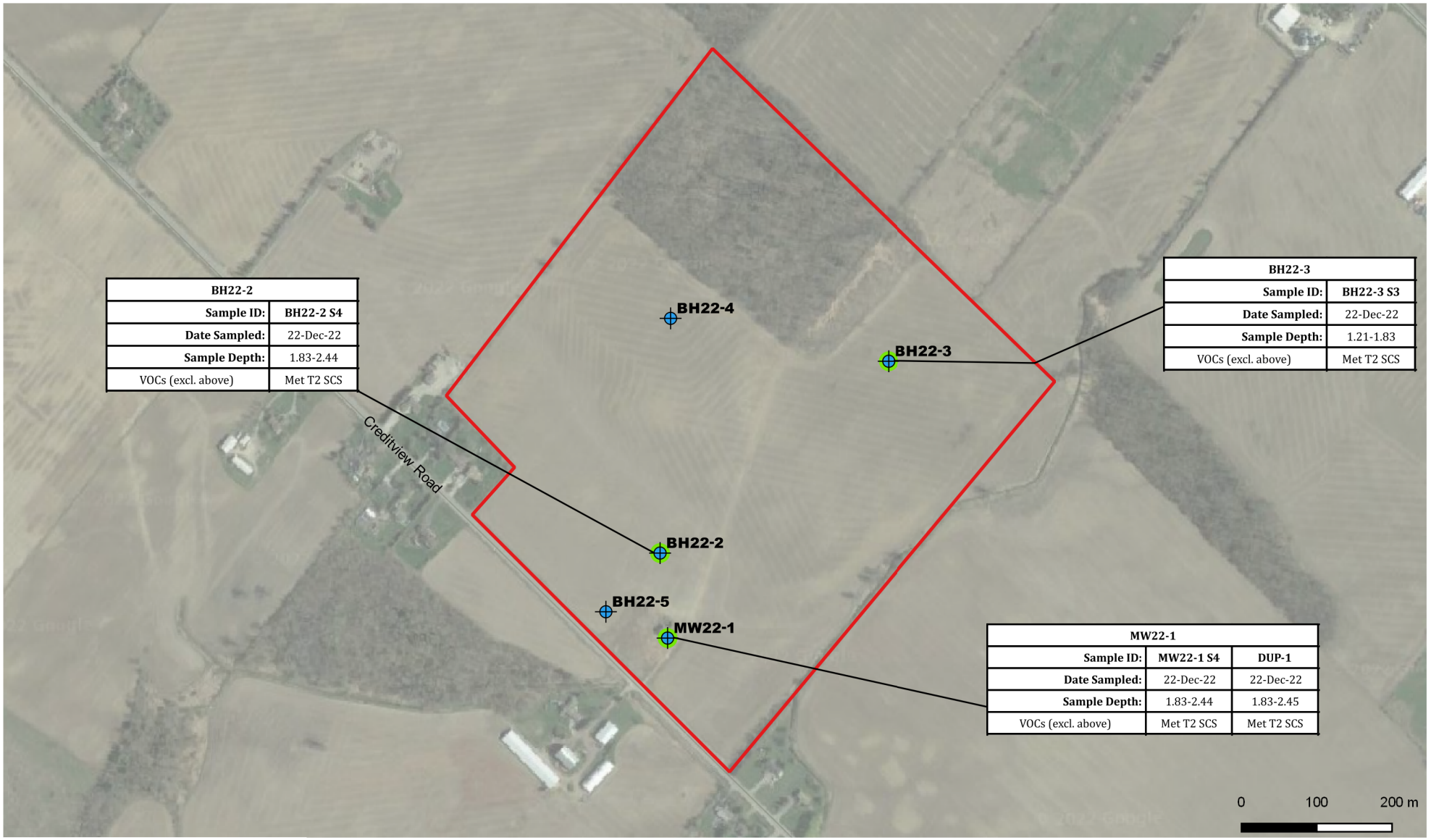
N

Client: ARGO ALLOA (BT) CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	E.K.	P.P	May 2023
Rev: 0	Scale: As Shown	Project No.: 22-390-100	Figure No.: **7B**

Image/Map Source: *Google Satellite Image*

J:\-GIS\2022 PROJECTS\22-390-100 - 12455 Creditview Road, Caledon, ON\1-QGIS\Phase Two\Figure 7C - Soil Characterization - VOCs.qgs May-17 09:12



BH22-2	
Sample ID:	BH22-2 S4
Date Sampled:	22-Dec-22
Sample Depth:	1.83-2.44
VOCs (excl. above)	Met T2 SCS

BH22-3	
Sample ID:	BH22-3 S3
Date Sampled:	22-Dec-22
Sample Depth:	1.21-1.83
VOCs (excl. above)	Met T2 SCS

MW22-1		
Sample ID:	MW22-1 S4	DUP-1
Date Sampled:	22-Dec-22	22-Dec-22
Sample Depth:	1.83-2.44	1.83-2.45
VOCs (excl. above)	Met T2 SCS	Met T2 SCS

Legend

- Property Boundary
- Borehole Location
- Sample Met Applicable Standards

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Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
12455 Creditview Road, Caledon, ON

Title: **SOIL CHARACTERIZATION - VOCs**

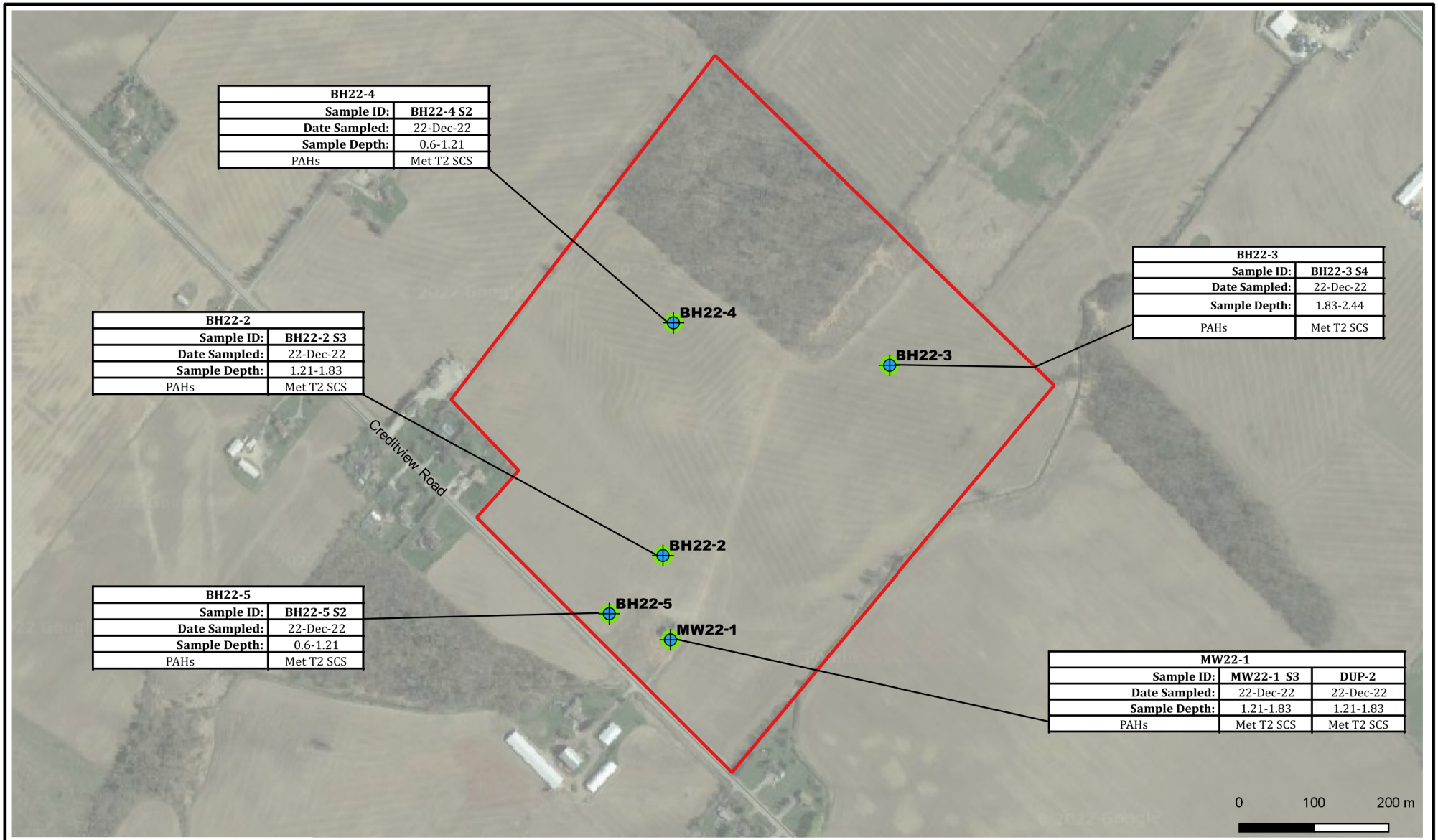
N

Client: ARGO ALLOA (BT) CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	E.K.	P.P	May 2023
Rev: 0	Scale: As Shown	Project No.: 22-390-100	Figure No.: **7C**

Image/Map Source: *Google Satellite Image*

J:\-GIS\2022 PROJECTS\22-390-100 - 12455 Creditview Road, Caledon, ON\1-QGIS\Phase Two\Figure 7D - Soil Characterization - PAHs.qgs May-17 09:13



Legend

- Property Boundary
- Borehole Location
- Sample Met Applicable Standards

DS CONSULTANTS LTD.
6221 Highway 7, UNIT 16
Vaughan, Ontario L4H 0K8
Telephone: (905) 264-9393
www.dsconsultants.ca

Client: ARGO ALLOA (BT) CORPORATION

Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
12455 Creditview Road, Caledon, ON

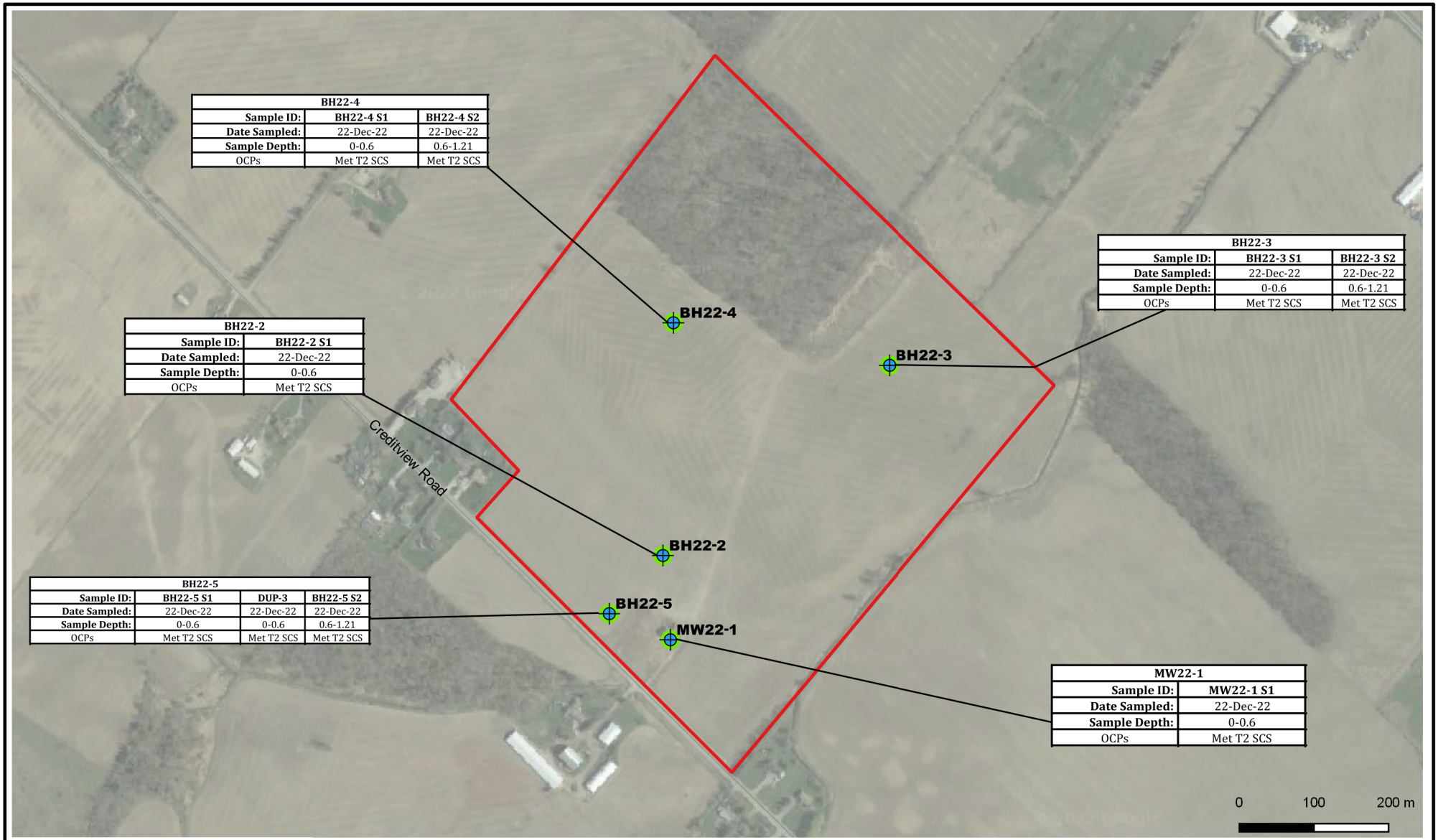
Title: **SOIL CHARACTERIZATION - PAHs**

N

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	E.K.	P.P	May 2023
Rev: 0	Scale: As Shown	Project No.: 22-390-100	Figure No.: **7D**

Image/Map Source: *Google Satellite Image*

J:\-GIS\2022 PROJECTS\22-390-100 - 12455 Creditview Road, Caledon, ON\1-QGIS\Phase Two\Figure 7E - Soil Characterization - OCPs.qgs May-17 09:14



Legend

- Property Boundary
- Borehole Location
- Sample Met Applicable Standards

DS CONSULTANTS LTD.
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www.dsconsultants.ca

Client: ARGO ALLOA (BT) CORPORATION

Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
12455 Creditview Road, Caledon, ON

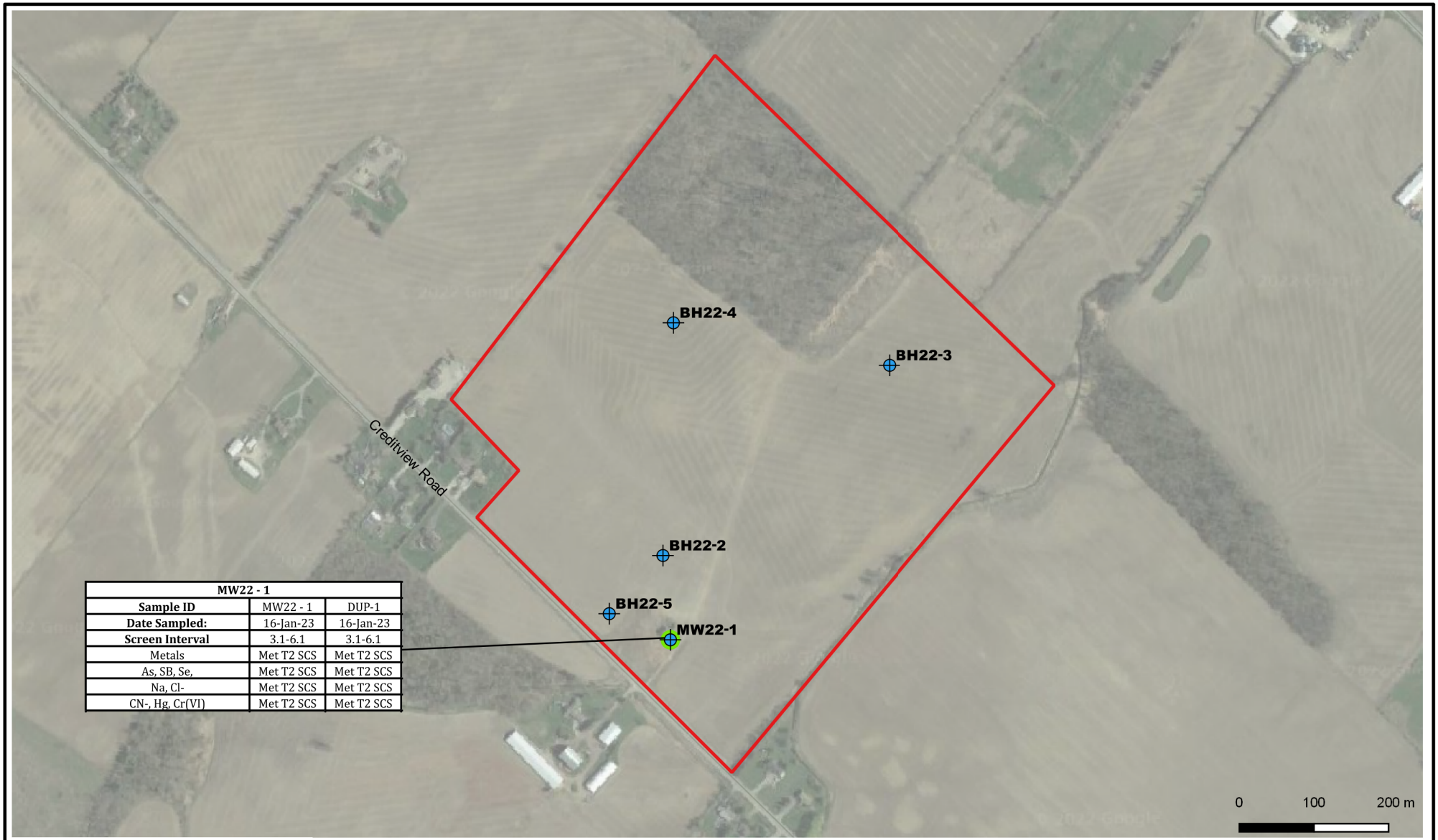
Title: **SOIL CHARACTERIZATION - OCPs**

N

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	E.K.	P.P	May 2023
Rev: 0	Scale: As Shown	Project No.: 22-390-100	Figure No.: **7E**

Image/Map Source: *Google Satellite Image*

J:\-GIS\2022 PROJECTS\22-390-100 - 12455 Creditview Road, Caledon, ON\1-QGIS\Phase Two\Figure 8A - Groundwater Characterization - Metals and ORPs.qgs May-17 09:15



MW22 - 1		
Sample ID	MW22 - 1	DUP-1
Date Sampled:	16-Jan-23	16-Jan-23
Screen Interval	3.1-6.1	3.1-6.1
Metals	Met T2 SCS	Met T2 SCS
As, SB, Se,	Met T2 SCS	Met T2 SCS
Na, Cl-	Met T2 SCS	Met T2 SCS
CN-, Hg, Cr(VI)	Met T2 SCS	Met T2 SCS

Legend

- Property Boundary
- Borehole Location
- Sample Met Applicable Standards

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Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
12455 Creditview Road, Caledon, ON

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

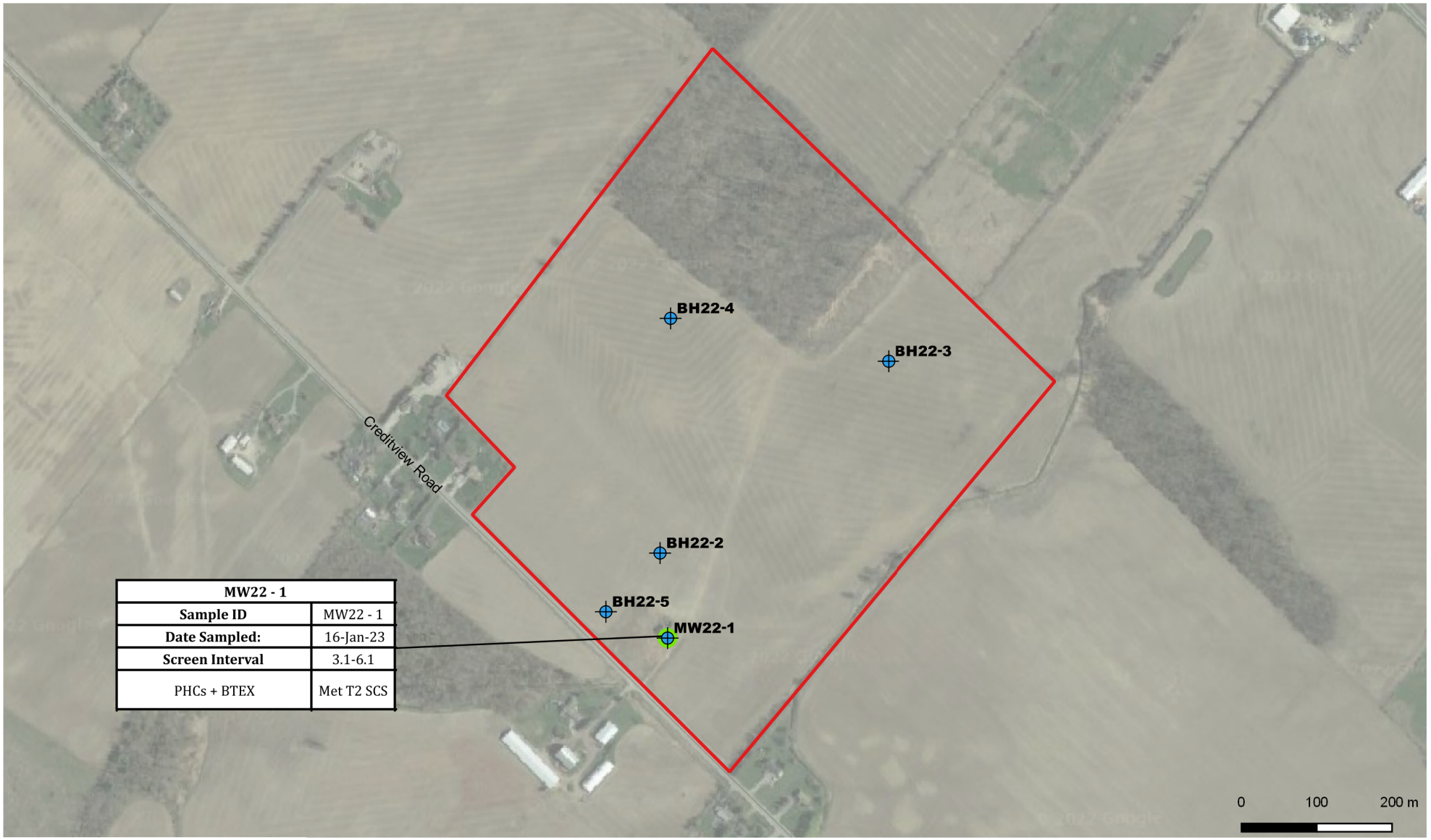
N

Client: ARGO ALLOA (BT) CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	E.K.	P.P	May 2023
Rev: 0	Scale: As Shown	Project No.: 22-390-100	Figure No.: **8A**

Image/Map Source: *Google Satellite Image*

J:\-GIS\2022 PROJECTS\22-390-100 - 12455 Creditview Road, Caledon, ON\1-QGIS\Phase Two\Figure 8B - Groundwater Characterization - PHCs & BTEX.qgs May-17 09:15



Legend

- Property Boundary
- Borehole Location
- Sample Met Applicable Standards

DS CONSULTANTS LTD.
6221 Highway 7, UNIT 16
Vaughan, Ontario L4H 0K8
Telephone: (905) 264-9393
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Client: ARGO ALLOA (BT) CORPORATION

Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
12455 Creditview Road, Caledon, ON

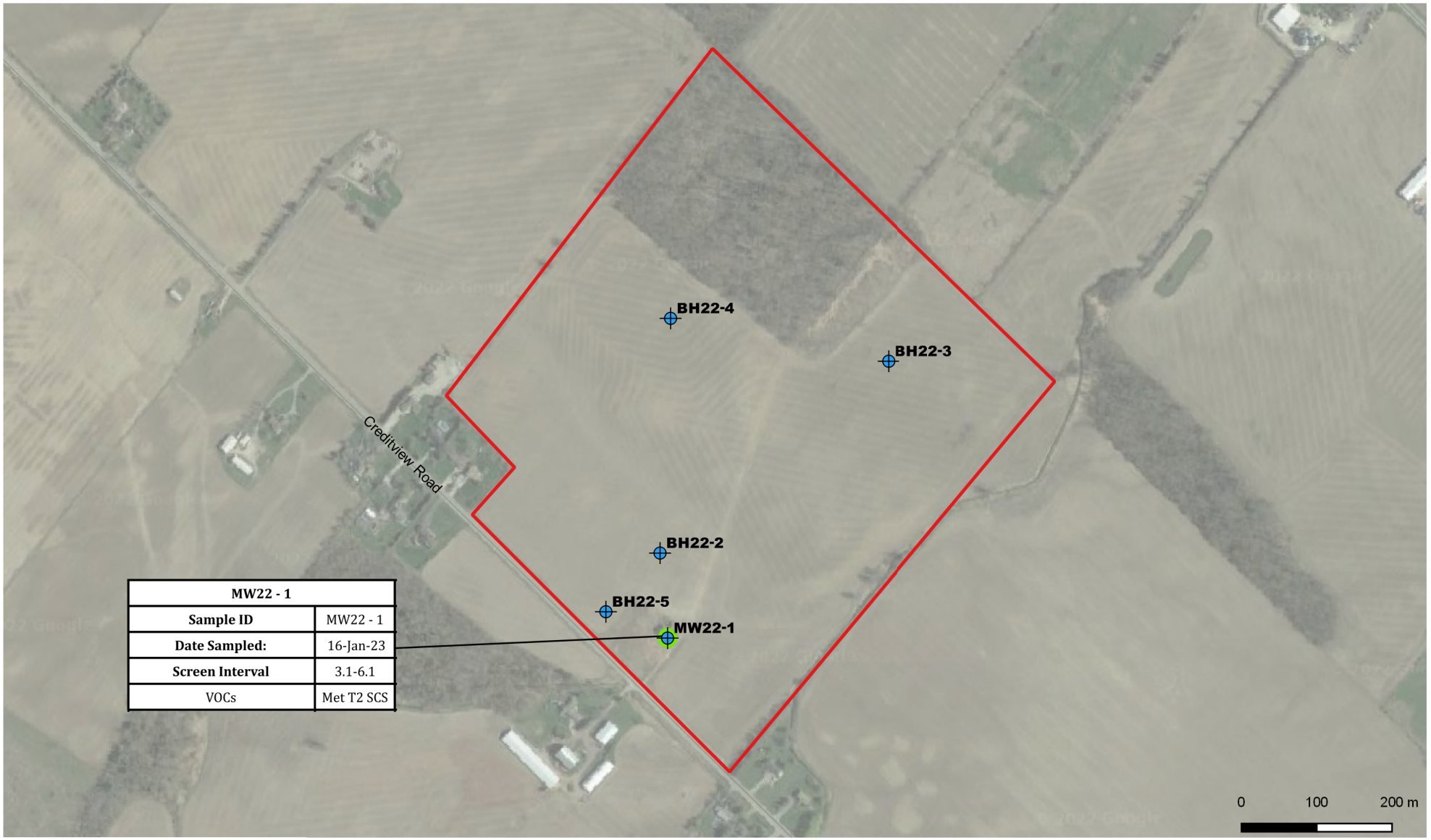
Title: **GROUNDWATER CHARACTERIZATION - PHCs & BTEX**

N

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	E.K.	P.P	May 2023
Rev: 0	Scale: As Shown	Project No.: 22-390-100	Figure No.: **8B**

Image/Map Source: *Google Satellite Image*

J:\-GIS\2022 PROJECTS\22-390-100 - 12455 Creditview Road, Caledon, ON\1-QGIS\Phase Two\Figure 8C - Groundwater Characterization - VOCs.qgs May-17 09:16



Legend

- Property Boundary
- Borehole Location
- Sample Met Applicable Standards

DS CONSULTANTS LTD.
6221 Highway 7, UNIT 16
Vaughan, Ontario L4H 0K8
Telephone: (905) 264-9393
www.dsconsultants.ca

Client: ARGO ALLOA (BT) CORPORATION

Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
12455 Creditview Road, Caledon, ON

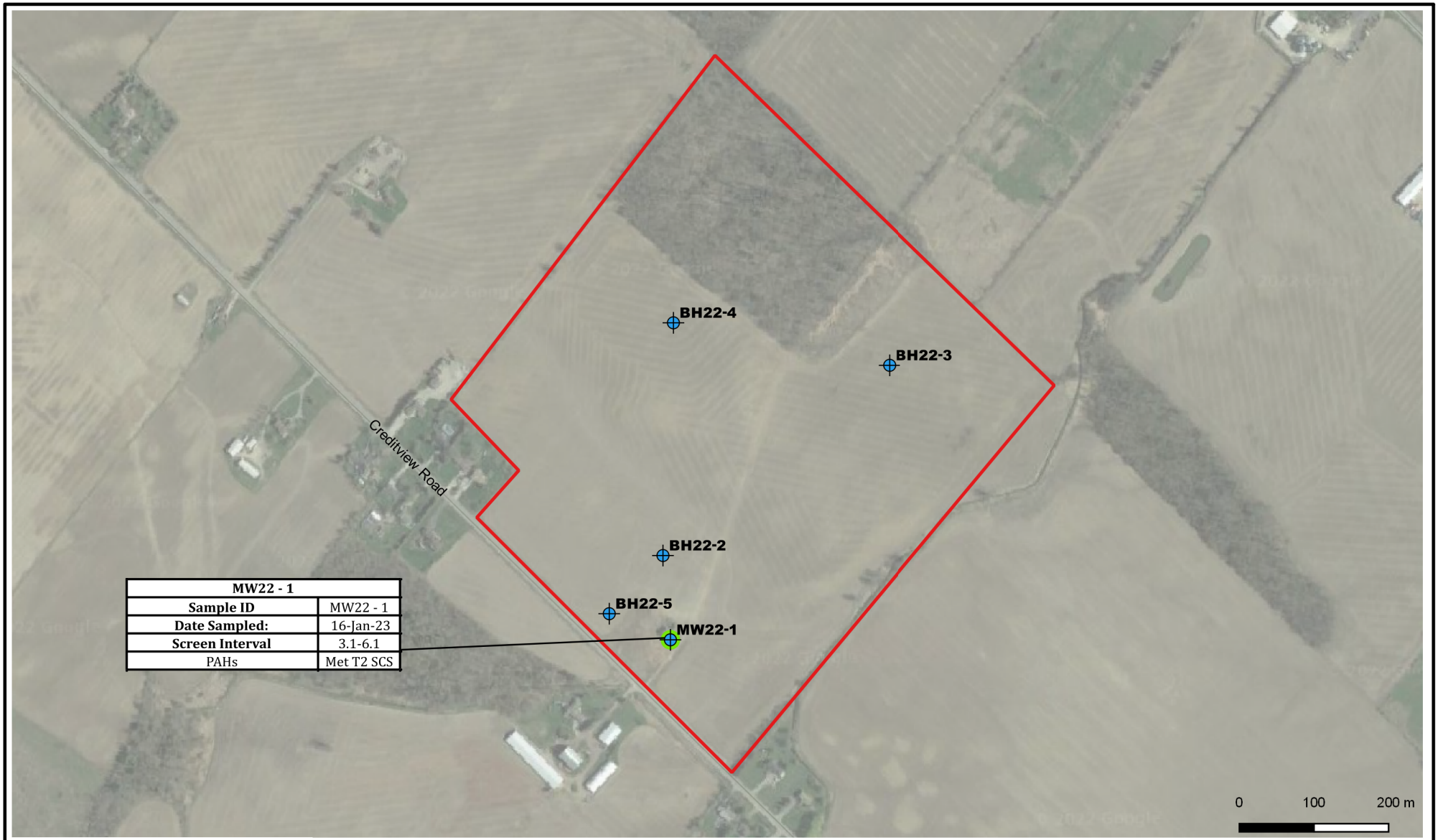
Title: **GROUNDWATER CHARACTERIZATION - VOCs**

N

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	E.K.	P.P	May 2023
Rev: 0	Scale: As Shown	Project No.: 22-390-100	Figure No.: **8C**

Image/Map Source: *Google Satellite Image*

J:\-GIS\2022 PROJECTS\22-390-100 - 12455 Creditview Road, Caledon, ON\1-QGIS\Phase Two\Figure 8D - Groundwater Characterization - PAHs.qgs May-17 09:17



Legend

- Property Boundary
- Borehole Location
- Sample Met Applicable Standards

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Vaughan, Ontario L4H 0K8
Telephone: (905) 264-9393
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Project: PHASE TWO ENVIRONMENTAL SITE ASSESSMENT
12455 Creditview Road, Caledon, ON

Title: **GROUNDWATER CHARACTERIZATION - PAHs**

N

Client: ARGO ALLOA (BT) CORPORATION

Size:	Approved By:	Drawn By:	Date:
8.5 x 11	E.K.	P.P	May 2023
Rev: 0	Scale: As Shown	Project No.: 22-390-100	Figure No.: **8D**

Image/Map Source: *Google Satellite Image*

Appendix A

I REQUIRE THIS PLAN TO BE DEPOSITED UNDER THE LAND TITLES ACT.

DATE APRIL 7th, 2022

A. U. KUMARANAYAKE O.L.S.

PLAN 43R-40186

RECEIVED AND DEPOSITED

DATE Sept 14, 2022

"Tyson Giroux"

REPRESENTATIVE FOR LAND REGISTRAR FOR THE LAND TITLES DIVISION OF PEEL (No.43)

SCHEDULE

PART	LOT	CONCESSION	P.I.N.
1	PART OF 20	3, WEST OF HURONTARIO STREET	ALL OF 14252-0021

PLAN OF SURVEY OF PART OF LOT 20, CONCESSION 3 WEST OF HURONTARIO STREET (GEOGRAPHIC TOWNSHIP OF CHINGUACOUSY) TOWN OF CALEDON REGIONAL MUNICIPALITY OF PEEL

SCALE 1:1000

10m 0m 10m 20m 30m 40m 50m 60m 70m 80m 90m 100 metres

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

METRIC

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

NOTES

□	DENOTES MONUMENT SET
■	DENOTES MONUMENT FOUND
SSIB	DENOTES SHORT STANDARD IRON BAR
SIB	DENOTES STANDARD IRON BAR
IB	DENOTES IRON BAR
P.I.N.	DENOTES PROPERTY IDENTIFIER NUMBER
PL1	DENOTES PLAN 43R-1311
PL2	DENOTES PLAN 43R-25708
PL3	DENOTES PLAN 43R-37043
PL4	DENOTES PLAN OF SURVEY BY McLEAN, McMURCHY & BIASON, O.L.S. DATED SEPTEMBER 25, 1967, AMENDED DECEMBER 22, 1967
PL5	DENOTES PLAN 43R-9458
PL6	DENOTES PLAN OF SURVEY BY McLEAN, McMURCHY & BIASON, O.L.S., DATED DECEMBER 10, 1970
PL7	DENOTES PLAN 43R-9074
PL8	DENOTES SKETCH SHOWING BUILDING LOCATION BY B. I. McMURCHY, DATED 1980 (79-8506)
PL9	DENOTES PLAN 43R-19559
PL10	DENOTES PLAN 43R-10208
D2	DENOTES INSTRUMENT No. RO924322
D3	DENOTES INSTRUMENT No. RO904373
D4	DENOTES INSTRUMENT No. RO1031959
CALC	DENOTES CALCULATED FROM PL2 & PL7
CALC2	DENOTES CALCULATED FROM PL4 & PL5
(769)	DENOTES I. L. THOMPSON, O.L.S.
(865)	DENOTES D. P. McLEAN, O.L.S.
(1109)	DENOTES B. I. McMURCHY, O.L.S.
(1184)	DENOTES E. BIASON, O.L.S.
(1253)	DENOTES D. J. CULLEN, O.L.S.
(1254)	DENOTES R. E. CLIPSHAM, O.L.S.
(1515)	DENOTES T. V. LANKVELD, O.L.S.
(1521)	DENOTES DOLLIVER SURVEYING INC, O.L.S.
(NI)	DENOTES NOT IDENTIFIED
ORP	DENOTES OBSERVED REFERENCE POINT
W.H.S.	DENOTES WEST OF HURONTARIO STREET
GA	DENOTES GUY ANCHOR
BXB	DENOTES BELL BOX

INTEGRATION NOTE

BEARINGS ARE GRID, UTM, NAD83 (CSRS:CBN-V6:2010.0), DERIVED FROM OBSERVED REFERENCE POINTS Ⓐ AND Ⓑ USING REAL TIME NETWORK (RTN) No. PRS402698094688 (NORTHING 4854714.46, EASTING 598022.52).

COORDINATES ARE UTM, ZONE 17, NAD83 (CSRS:CBN-V6:2010.0), TO URBAN ACCURACY PER SEC. 14 (2) OF O.REG. 216/10, AND CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES

POINT	NORTHING	EASTING
ORP Ⓐ	4841534.59	591211.14
ORP Ⓑ	4840575.73	591234.49

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999670.

SURVEYOR'S CERTIFICATE

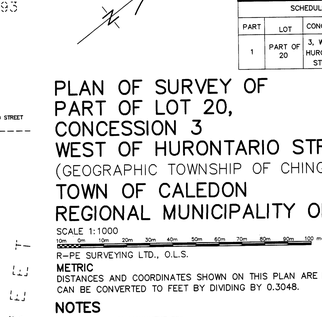
I CERTIFY THAT:

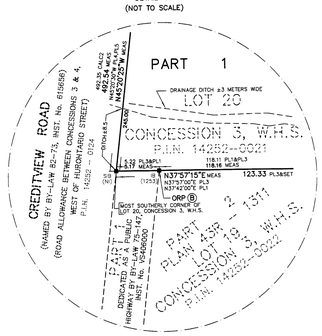
1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE LAND TITLES ACT AND THE REGULATIONS MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON THE 11th DAY OF MARCH 2022.

DATE APRIL 7th 2022

A. U. KUMARANAYAKE
ONTARIO LAND SURVEYOR

THIS PLAN OF SURVEY RELATES TO AOLS PLAN SUBMISSION FORM NUMBER 2196760.





R-PE SURVEYING LTD.
ONTARIO LAND SURVEYORS
643 Chrisdeo Road, Suite 7
Woodbridge, Ontario L4L 8A3
Tel:(416)635-5000 Fax (416)635-5001
Tel:(905)264-0881 Fax (905)264-2099
Website: www.r-pe.ca
DRAWN: S.L. CHECKED: A.K.
JOB No. 21-367 CAD FILE No.21-367R01

Appendix B

22-390-100 **January 25, 2023**

Argo Alloa (BT) Corporation
4900 Palladium Way, Unit 105
Burlington, ON
L7M 0W7
via email: anil@argoland.com

Attention: Anil Datt
Development Coordinator

Re: Sampling and Analysis Plan – Phase Two Environmental Site Assessment
12455 Creditview Road, Caledon, 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 12455 Creditview Road, Caledon, ON , (the Site).The purpose of the proposed Phase Two ESA program is to assess the current subsurface environmental conditions in support of the proposed redevelopment of the Site.

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 in January 2023, it is DS's understanding that the Site is a 40.44 hectare (99.3 acres) parcel of land which is currently used for agricultural 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 seven (7) potentially contaminating activities 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

Area of Potential Environmental Concern	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Ground water, soil and/or sediment)
APEC-1	Entire Site	#40 - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	On-Site PCA-1	Metals, OC Pesticides	Soil
APEC-2	West- Central portion of the Phase One Property	#40 - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	On-Site PCA-2	Metals, OC Pesticides	Soil
APEC 3	West- Central portion of the Phase One Property	#30 - Importation of Fill Material of Unknown Quality	On-Site PCA-3	Metals, As, Sb, Se, B-HWS, CN-,EC, Cr (IV), Hg, Low or high pH, SAR, PAHs, PHC, VOC, PCBs	Soil
APEC- 4	West- Central portion of the Phase One Property	#Others - Seasonal application of de-icing salts	On-Site PCA-4	EC, SAR,	Soil
				Na, Cl-,	Groundwater
APEC- 5	West- Central portion of the Phase One Property	#28 Gasoline and Associated Products Storage in Fixed Tanks	On-Site PCA-7	PHC, BTEX	Soil & Groundwater

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. PCBs = Polychlorinated Biphenyls

3. Site Investigation Program

The proposed field investigation will involve the advancement of boreholes, the installation of monitoring wells, and periodic monitoring of the installed wells. A total of 5 borehole locations have been identified. 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
MW22-1	6.1 mbgs	Y	6.1 mbgs	Investigate soil and shallow groundwater quality for APEC 1, 4 and 5
BH22-2	3 mbgs	N	NA	Investigate soil groundwater quality for APEC 1, 2, and 3
BH22-3	3 mbgs	N	NA	Investigate soil groundwater quality for APEC 1
BH22-4	1 mbgs	N	NA	Investigate soil groundwater quality for APEC 1
BH22-5	1 mbgs	N	NA	Investigate soil groundwater quality for APEC 1, 2, and 3

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/track mounted continuous flight auger machine and portable drilling equipment. 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 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:

- 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;

- Advancement of boreholes as specified in Table 3-1. 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;
- 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;
- Submit soil samples from the newly advanced boreholes as follows:

Table 3-2: Summary of proposed soil chemical analyses

Borehole	Sample No	Sample Depth (mbgs)	Lab Analysis	Purpose
MW22-1	S1	0 - 0.61	OCPs	Assess soil conditions (APEC-1, APEC-4, APEC-5)
	S2	0.61 - 1.21	M&I, PHCs	Assess soil conditions (APEC-1, APEC-4, APEC-5)
	S3	1.21 – 1.83	PAHs	Assess soil conditions (APEC-1, APEC-4, APEC-5)
	S4	1.83 – 2.44	PHCs, VOCs	Assess soil conditions (APEC-1, APEC-4, APEC-5)
	S5	2.44 – 3.05	M&I	Assess soil conditions (APEC-1, APEC-4, APEC-5)
BH22-2	S1	0 – 0.61	OCPs	Assess soil conditions (APEC-1, APEC-2, APEC-3)
	S2	0.61 – 1.21	M&I	Assess soil conditions (APEC-1, APEC-2, APEC-3)
	S3	1.21 – 1.83	M&I, PAHs	Assess soil conditions (APEC-1, APEC-2, APEC-3)
	S4	1.83 – 2.44	PHCs, VOCs	Assess soil conditions (APEC-1, APEC-2, APEC-3)
	S5	2.44 – 3.05	M&I	Assess soil conditions (APEC-1, APEC-2, APEC-3)
BH22-3	S1	0 – 0.61	OCPs	Assess soil conditions (APEC-1)
	S2	0.61 – 1.21	M&I, OCPs	Assess soil conditions (APEC-1)
	S3	1.21 – 1.83	PHCs, VOCs	Assess soil conditions (APEC-1)
	S4	1.83 – 2.44	M&I, PAHs	Assess soil conditions (APEC-1)

Borehole	Sample No	Sample Depth (mbgs)	Lab Analysis	Purpose
	S5	2.44 – 3.05	M&I, PHCs	Assess soil conditions (APEC-1)
BH22-4	S1	0 – 0.61	M&I, OCPs	Assess soil conditions (APEC-1)
	S2	0.61 – 1.21	M&I, PAHs, OCPs	Assess soil conditions (APEC-1)
BH22-5	S1	0 – 0.61	M&I, OCPs	Assess soil conditions (APEC-1, APEC-2, APEC-3)
	S2	0.61 – 1.21	M&I, PAHs, OCPs	Assess soil conditions (APEC-1, APEC-2, APEC-3)
Duplicates	DUP-1	-	PHCs, VOCs	QA/QC
	DUP-2	-	PAHs	QA/QC
	DUP-3	-	OCPs	QA/QC
	DUP-4	-	M&I	QA/QC

- Submit groundwater samples from the monitoring wells as follows:

Table 3-3: Summary of proposed groundwater analyses

Well ID	Well Depth	Lab Analysis	Purpose
MW22-1	6.1 mbgs	M&I, PHCs, VOCs, PAHs	Assess shallow groundwater quality within APEC 4 and 5
Duplicate	DUP-1	M&I	QA/QC
Trip Blank		VOCs	QA/QC

A summary of the proposed soil and groundwater analytical program is presented in the following table:

Table 3-4: Summary of Soil and Groundwater Analytical Program

Soil	Groundwater
• 12 Samples for analysis of metals and inorganics • 5 Samples for analysis of PHCs • 3 Samples for analysis of VOCs • 5 Samples for analysis of PAHs • 8 Samples for analysis of OCPs	• 1 Samples for analysis of metals and inorganics • 1 Samples for analysis of PHCs • 1 Samples for analysis of VOCs • 1 Samples for analysis of PAHs • 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

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

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.

Manager – Environmental Services
Efuange Khumbah, M.Sc. P.Eng., QP_{ESA}

Appendix C

DS CONSULTANTS LTD.
Geotechnical ◆ Environmental ◆ Materials ◆ Hydrogeology

LOG OF BOREHOLE BH22-2

PROJECT: Phase Two Site Assessment
CLIENT: Argo Alloa (BT) Corporation
PROJECT LOCATION: 12455 Creditview Road, Caledon
DATUM: Geodetic
BH LOCATION: See Figure 5 N 4840864.739 E 591131.254

DRILLING DATA
Method: Hollow Stem Auger / Direct Push
Diameter: 200mm
Date: Dec/22/2022

REF. NO.: 22-390-100
ENCL NO.: 2

(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
262.3													
0.0	**TOPSOIL** Trace rootlets & organics		1	SS			262						OCPs
261.7													
0.6	**SILTY SAND** Grey-brown, moist, gravel, some red spots		2	SS									Metals & ORPs
1													
260.8			3	SS			261						Metals & ORPs, PAHs
1.5	**SANDY SILT TILL** Grey, moist, trace gravel, some cobbles												
2			4	SS									PHCs, VOCs
							260						
			5	SS									Metals & ORPs, DUP-4 (Metals & ORPs)
259.2													
3.1	**END OF BOREHOLE**												

DS ENVIRO 0-50 PPM-2021 22-390-100.GPJ DS.GDT 1/26/23

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

DS CONSULTANTS LTD.
Geotechnical ◆ Environmental ◆ Materials ◆ Hydrogeology

LOG OF BOREHOLE BH22-3

PROJECT: Phase Two Site Assessment
CLIENT: Argo Alloa (BT) Corporation
PROJECT LOCATION: 12455 Creditview Road, Caledon
DATUM: Geodetic
BH LOCATION: See Figure 5 N 4841119.816 E 591435.258

DRILLING DATA
Method: Hollow Stem Auger / Direct Push
Diameter: 200mm
Date: Dec/22/2022

REF. NO.: 22-390-100
ENCL NO.: 3

(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
260.6													
0.0	**TOPSOIL** Trace rootlets & organics		1	SS									OCPs
260.0							260						
0.6	**SILTY SAND** Grey-brown, moist, trace clay, gravel, some red spots & cobbles		2	SS									Metals & ORPs, OCPs
1													
			3	SS									PHCs, VOCs
259.1							259						
1.5	**SANDY SILT TILL** Grey, trace gravel, some cobbles												
2			4	SS									Metals & ORPs, PAHs
							258						Metals & ORPs, PHCs
257.5			5	SS									
3.1	**END OF BOREHOLE**												

DS ENVIRO 0-50 PPM-2021 22-390-100.GPJ DS.GDT 1/26/23

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 BH22-4

PROJECT: Phase Two Site Assessment
CLIENT: Argo Alloa (BT) Corporation
PROJECT LOCATION: 12455 Creditview Road, Caledon
DATUM: Geodetic
BH LOCATION: See Figure 5 N 4841176.861 E 591145.247

DRILLING DATA
Method: Hollow Stem Auger / Direct Push
Diameter: 200mm
Date: Dec/22/2022

REF. NO.: 22-390-100
ENCL NO.: 4

(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
262.7													
0.0	**TOPSOIL** Trace rootlets & organics		1	SS									Metals & ORPs, OCPs
262.1													
0.6	**SILTY SAND** Grey-brown, trace clay, gravel		2	SS			262						Metals & ORPs, PAHs, OCPs
1													
261.5													
1.2	**END OF BOREHOLE**												

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

DS CONSULTANTS LTD.
Geotechnical ◆ Environmental ◆ Materials ◆ Hydrogeology

LOG OF BOREHOLE BH22-5

PROJECT: Phase Two Site Assessment
CLIENT: Argo Alloa (BT) Corporation
PROJECT LOCATION: 12455 Creditview Road, Caledon
DATUM: Geodetic
BH LOCATION: See Figure 5 N 4840786.337 E 591059.39

DRILLING DATA
Method: Hollow Stem Auger / Direct Push
Diameter: 200mm
Date: Dec/22/2022

REF. NO.: 22-390-100
ENCL NO.: 5

(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)	Soil Head Space Vapors 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
262.1								10 20 30 40	10 20 30 40	10 20 30			
0.0	**TOPSOIL** Trace rootlets & organics		1	SS			262						Metals & ORPs, OCPs, DUP-3 (OCPs)
261.5													
0.6	**SANDY SILT TILL** Grey-brown, trace clay, gravel, some cobbles		2	SS									Metals & ORPs, PAHs, OCPs
1													
260.9							261						
1.2	**END OF BOREHOLE**												

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

DS CONSULTANTS LTD.
Geotechnical ◆ Environmental ◆ Materials ◆ Hydrogeology

LOG OF BOREHOLE MW22-1

PROJECT: Phase Two Site Assessment
CLIENT: Argo Alloa (BT) Corporation
PROJECT LOCATION: 12455 Creditview Road, Caledon
DATUM: Geodetic
BH LOCATION: See Figure 5 N 4840746.85 E 591150.993

DRILLING DATA
Method: Hollow Stem Auger / Direct Push
Diameter: 200mm
Date: Dec/22/2022

REF. NO.: 22-390-100
ENCL NO.: 1

(m) ELEV / DEPTH	DESCRIPTION	NUMBER	TYPE	"N" BLOWS/0.3 m	ELEVATION	REMARKS AND GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
261.6						
0.0	**TOPSOIL** Trace rootlets & organics	1	SS			OCPs
261.0						
0.6	**SILTY SAND** Grey-brown, trace clay	2	SS			Metals & ORPs, PHCs
260.4						
1.2	**SANDY SILT TILL** Grey-brown, moist, trace gravel, some cobbles	3	SS			PAHs, DUP-2 (PAHs)
		4	SS			PHCs, VOCs, DUP-1 (PHCs, VOCs)
		5	SS			Metals & ORPs
258.0		6	SS			
3.7	**SANDY SILT TILL** Grey, moist, sandy silt, gravel, cobbles, rock encountered (4").	7A	SS			
		7B	SS			
		8	SS			
256.7						
4.9	**SANDY SILT TILL** Grey-brown, moist, trace gravel, some cobbles	9	SS			
		10	SS			
255.5						
6.1	**END OF BOREHOLE**					

Notes
1) 50mm dia. monitoring well installed upon completion.
2) Water Level Readings.

Date: Dec 22, 2022
Water Level (mbgs): Inaccessible

GROUND WATER CONDITIONS: W. L. 261.0 masl Jan 13, 2023; W. L. 260.0 masl Jan 16, 2023

Soil Head Space Vapors: PID (ppm) 10 20 30 40; 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)

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

Appendix D

www.BVNA.com

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

CHAIN OF CUSTODY RECORD

ENV COC - 00014v2

Invoice Information		Report Information (if differs from invoice)		Project Information	
Company:	DS Consultants Ltd.	Company:	DS Consultants Ltd	Quotation #:	
Contact Name:	Bindu Goel	Contact Name:	Efrange Khumbah	P.O. #/ AFE#:	
Street Address:	6221 Hwy 7, Unit 16	Street Address:	6221 Hwy 7, Unit 16	Project #:	22-390-100
City: Vaughan Prov: ON Postal Code: L4H0K8		City: Vaughan Prov: ON Postal Code: L4H0K8		Site #:	12455 Creditview Rd
Phone:	905-264-9393	Phone:	905-264-9393	Site Location:	Caledon
Email:	accounting@dsconsultants.ca	Email:	ekhumbah@dsconsultants.ca	Site Location Province:	Ontario
Copies:		Copies:	ojaffer@dsconsultants.ca	Sampled By:	Omar J

23-Dec-22 08:00
Ashton Gibson
C2AR265
SPJ ENV-916

Regulatory Criteria

REG 153: ☐ Table 1 ☐ Table 2 ☐ Table 3 ☐ Table ____ ☐ Res/Park ☐ Ind/Comm ☐ Agri/other ☐ Med/Fine ☐ Course ☐ For RSC

OTHER: ☐ CCME ☐ Reg 406, Table: ____ ☐ Reg 558* ☐ Sanitary Sewer Bylaw *min 3 day TAT ☐ Storm Sewer Bylaw ☐ MISA Municipality ____ ☐ PWQO ☐ Other:

Include Criteria on Certificate of Analysis (check if yes): ☑

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

Regular Turnaround Time (TAT): ☑ 5 to 7 Day ☐ 10 Day

Rush Turnaround Time (TAT) Surcharges apply: ☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 4 Day

Date Required: YY ____ MM ____ DD ____

	Sample Identification	Date Sampled YY	MM	DD	Time (24hr) HH	MM	Matrix	1 FIELD FILTERED	2 FIELD PRESERVED	3 LAB FILTRATION REQUIRED	4 BTEX/ F1	5 F2 - F4	6 VOCs	7 Reg 153 metals and inorganics	8 Reg 153 ICPMS metals	9 Reg 153 metals (Hg, Cr VI, ICPMS metals, HWS - B)	10 PAHs	11 OCPs	12 SPLP Metals and Hydrides	13 PCBs	14	15	16	17	18	19	20	21 # OF CONTAINERS SUBMITTED	22 HOLD - DO NOT ANALYZE	Comments
1	MW22-1 S1	22	12	22	AM	PM	Soil							X				X										1	
2	MW22-1 S2										X	X		X														4	
3	MW22-1 S3																X											1	
4	MW22-1 S4										X	X	X															3	
5	MW22-1 S5													X														1	
6	BH22-2 S1																	X										1	
7	BH22-2 S2													X														1	
8	BH22-2 S3													X			X											2	
9	BH22-2 S4										X	X	X															4	
10	BH22-2 S5													X				X										1	only MAHs
11	BH22-3 S1																	X										1	only OCPs
12	BH22-3 S2													X				X										2	

*UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS AND CONDITIONS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/TERMS-AND-CONDITIONS OR BY CALLING THE LABORATORY LISTED ABOVE TO OBTAIN A COPY

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present	✓					
Seal intact	✓					
Cooling media present	✓					

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present	✓					
Seal intact	✓					
Cooling media present	✓					

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present						
Seal intact						
Cooling media present						

Temperature reading by:

Relinquished by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Received by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Special Instructions
1 Omar J.	22	12	22			1	2022	12	23	08	00	
2						2						

AH

www.BVNA.com

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

CHAIN OF CUSTODY RECORD

ENV COC - 00014v2

Invoice Information		Invoice to (requires report) ☐
Company :	DS Consultants Ltd.	
Contact Name:	Bindu Goel	
Street Address:	6221 Hwy 7, Unit 16	
City:	Vaughan	Prov: ON Postal Code: L4H0K8
Phone:	905-264-9393	
Email:	accounting@dsconsultants.ca	
Copies:		

Report Information (if differs from invoice)				
Company:	DS Consultants Ltd			
Contact Name:	Efunye Khumbah			
Street Address:	6221 Hwy 7, Unit 16			
City:	Vaughan	Prov: ON	Postal Code:	L4H0K8
Phone:	905-264-9393			
Email:	ekhumbah@dsconsultants.ca			
Copies:	omar.jaffer@dsconsultants.ca			

Project Information	
Quotation #:	
P.O. #/ AFE#:	
Project #:	22-390-100
Site #:	12455 Coleraine Rd.
Site Location:	Caledon.
Site Location Province:	Ontario
Sampled By:	Omar J

23-Dec-22 08:00
Ashton Gibson
C2AR265
SPJ ENV-916

Regulatory Criteria

REG 153: ☐ Table 1 ☑ Table 2 ☐ Table 3 ☐ Table ____ ☑ Res/Park ☑ Ind/Comm ☐ Agri/other ☐ Med/Fine ☑ Course ☐ For RSC

OTHER: ☐ CCME ☐ Reg 558* *min 3 day TAT ☐ MISA ☐ PWQO ☐ Reg 406, Table: ____ ☐ Sanitary Sewer Bylaw ☐ Storm Sewer Bylaw Municipality ____ ☐ Other:

Include Criteria on Certificate of Analysis (check if yes): ☑

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

	Sample Identification	Date Sampled YY	MM	DD	Time (24hr) HH	MM	Matrix	1 FIELD FILTERED	2 FIELD PRESERVED	3 LAB FILTRATION REQUIRED	4 BTEX/ F1	5 F2 - F4	6 VOCs	7 Reg 153 metals and inorganics	8 Reg 153 ICPMS metals	9 Reg 153 metals (Inc. Cr VI, ICPMS metals, HWS - B)	10 PAHs	11 OCPs	12 SPLP Metals and Hydrides	13 PCBs	14	15	16	17	18	19	20 # OF CONTAINERS SUBMITTED	21 HOLD - DO NOT ANALYZE	22
1	BH22-2055	22	12	22			Soil							✔															
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Regular Turnaround Time (TAT)
☐ 5 to 7 Day ☐ 10 Day

Rush Turnaround Time (TAT) Surcharges apply
☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 4 Day

Date Required: YY MM DD

Comments
Please reference Bundle
BV job # C2AR265

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LAB USE ONLY	Yes	No	°C	1	2	3
Seal present	✓					
Seal intact	✓					
Cooling media present				3	3	3

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present						
Seal intact						
Cooling media present						

LAB USE ONLY	Yes	No	°C	1	2	3	Temperature reading by:
Seal present							
Seal intact							
Cooling media present							

	Relinquished by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Received by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Special Instructions
1	Omar J	22	12	29			1 ANMOL	2022	12	29	15	00	
2							2						

Your Project #: 22-390-100
Site Location: 12455 CREDITVIEW RD, CALEDON
Your C.O.C. #: n/a

Attention: Efuange Khumbah

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

Report Date: 2023/01/05
Report #: R7455550
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2AR265
Received: 2022/12/23, 08:00

Sample Matrix: Soil
Samples Received: 23

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum	6	N/A	2023/01/05	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron	12	2023/01/03	2023/01/04	CAM SOP-00408	R153 Ana. Prot. 2011
Hot Water Extractable Boron	1	2023/01/04	2023/01/04	CAM SOP-00408	R153 Ana. Prot. 2011
1,3-Dichloropropene Sum	4	N/A	2023/01/04		EPA 8260C m
Free (WAD) Cyanide	2	2023/01/03	2023/01/03	CAM SOP-00457	OMOE E3015 m
Free (WAD) Cyanide	11	2023/01/04	2023/01/04	CAM SOP-00457	OMOE E3015 m
Conductivity	12	2023/01/03	2023/01/03	CAM SOP-00414	OMOE E3530 v1 m
Conductivity	1	2023/01/04	2023/01/04	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1)	1	2023/01/03	2023/01/03	CAM SOP-00436	EPA 3060/7199 m
Hexavalent Chromium in Soil by IC (1)	2	2023/01/03	2023/01/04	CAM SOP-00436	EPA 3060/7199 m
Hexavalent Chromium in Soil by IC (1)	10	2023/01/04	2023/01/05	CAM SOP-00436	EPA 3060/7199 m
Petroleum Hydro. CCME F1 & BTEX in Soil (2)	2	N/A	2023/01/02	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Soil (3)	4	2023/01/03	2023/01/03	CAM SOP-00316	CCME CWS m
Petroleum Hydrocarbons F2-F4 in Soil (3)	2	2023/01/03	2023/01/04	CAM SOP-00316	CCME CWS m
Acid Extractable Metals by ICPMS	12	2023/01/03	2023/01/03	CAM SOP-00447	EPA 6020B m
Acid Extractable Metals by ICPMS	1	2023/01/04	2023/01/04	CAM SOP-00447	EPA 6020B m
Moisture	23	N/A	2022/12/30	CAM SOP-00445	Carter 2nd ed 51.2 m
OC Pesticides (Selected) & PCB (4)	2	2023/01/03	2023/01/04	CAM SOP-00307	SW846 8081, 8082
OC Pesticides (Selected) & PCB (4)	7	2023/01/04	2023/01/05	CAM SOP-00307	SW846 8081, 8082
OC Pesticides Summed Parameters	9	N/A	2022/12/31	CAM SOP-00307	EPA 8081/8082 m
PAH Compounds in Soil by GC/MS (SIM)	6	2023/01/03	2023/01/04	CAM SOP-00318	EPA 8270D m
pH CaCl2 EXTRACT	3	2023/01/03	2023/01/03	CAM SOP-00413	EPA 9045 D m
pH CaCl2 EXTRACT	10	2023/01/04	2023/01/04	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR)	13	N/A	2023/01/04	CAM SOP-00102	EPA 6010C
Volatile Organic Compounds and F1 PHCs	4	N/A	2023/01/03	CAM SOP-00230	EPA 8260C m

Remarks:

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

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession

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Your Project #: 22-390-100
Site Location: 12455 CREDITVIEW RD, CALEDON
Your C.O.C. #: n/a

Attention: Efuange Khumbah

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

Report Date: 2023/01/05
Report #: R7455550
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2AR265
Received: 2022/12/23, 08:00

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

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

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

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) 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.
(4) Chlordane (Total) = Alpha Chlordane + Gamma Chlordane

Encryption Key

Ashton Gibson
Project Manager
06 Jan 2023 18:07:48

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		URC914			URC917			URC917		
Sampling Date		2022/12/22			2022/12/22			2022/12/22		
COC Number		n/a			n/a			n/a		
	UNITS	MW22-1 S2	RDL	QC Batch	MW22-1 S5	RDL	QC Batch	MW22-1 S5 Lab-Dup	RDL	QC Batch
Calculated Parameters										
Sodium Adsorption Ratio	N/A	0.29 (1)		8422581	0.31 (1)		8422581			
Inorganics										
Conductivity	mS/cm	0.15	0.002	8429945	0.13	0.002	8429945			
Moisture	%				9.2	1.0	8427958			
Available (CaCl2) pH	pH	7.67		8431789	8.03		8429952			
WAD Cyanide (Free)	ug/g	<0.01	0.01	8431533	<0.01	0.01	8431536	<0.01	0.01	8431536
Chromium (VI)	ug/g	<0.18	0.18	8431686	<0.18	0.18	8429918			
Metals										
Hot Water Ext. Boron (B)	ug/g	0.18	0.050	8429920	0.15	0.050	8429920			
Acid Extractable Antimony (Sb)	ug/g	<0.20	0.20	8429860	<0.20	0.20	8429860			
Acid Extractable Arsenic (As)	ug/g	4.6	1.0	8429860	3.3	1.0	8429860			
Acid Extractable Barium (Ba)	ug/g	61	0.50	8429860	67	0.50	8429860			
Acid Extractable Beryllium (Be)	ug/g	0.49	0.20	8429860	0.40	0.20	8429860			
Acid Extractable Boron (B)	ug/g	6.2	5.0	8429860	7.8	5.0	8429860			
Acid Extractable Cadmium (Cd)	ug/g	<0.10	0.10	8429860	<0.10	0.10	8429860			
Acid Extractable Chromium (Cr)	ug/g	16	1.0	8429860	14	1.0	8429860			
Acid Extractable Cobalt (Co)	ug/g	9.2	0.10	8429860	7.6	0.10	8429860			
Acid Extractable Copper (Cu)	ug/g	29	0.50	8429860	17	0.50	8429860			
Acid Extractable Lead (Pb)	ug/g	8.7	1.0	8429860	6.5	1.0	8429860			
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	0.50	8429860	<0.50	0.50	8429860			
Acid Extractable Nickel (Ni)	ug/g	19	0.50	8429860	15	0.50	8429860			
Acid Extractable Selenium (Se)	ug/g	<0.50	0.50	8429860	<0.50	0.50	8429860			
Acid Extractable Silver (Ag)	ug/g	<0.20	0.20	8429860	<0.20	0.20	8429860			
Acid Extractable Thallium (Tl)	ug/g	0.097	0.050	8429860	0.077	0.050	8429860			
Acid Extractable Uranium (U)	ug/g	0.45	0.050	8429860	0.41	0.050	8429860			
Acid Extractable Vanadium (V)	ug/g	24	5.0	8429860	21	5.0	8429860			
Acid Extractable Zinc (Zn)	ug/g	41	5.0	8429860	35	5.0	8429860			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(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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Bureau Veritas Job #: C2AR265
Report Date: 2023/01/05

DS Consultants Limited
Client Project #: 22-390-100
Site Location: 12455 CREDITVIEW RD, CALEDON
Sampler Initials: OJ

O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		URC914			URC917			URC917		
Sampling Date		2022/12/22			2022/12/22			2022/12/22		
COC Number		n/a			n/a			n/a		
	UNITS	**MW22-1 S2**	**RDL**	**QC Batch**	**MW22-1 S5**	**RDL**	**QC Batch**	**MW22-1 S5 Lab-Dup**	**RDL**	**QC Batch**
Acid Extractable Mercury (Hg)	ug/g	<0.050	0.050	8429860	<0.050	0.050	8429860			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

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O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		URC919			URC920		URC923		
Sampling Date		2022/12/22			2022/12/22		2022/12/22		
COC Number		n/a			n/a		n/a		
	UNITS	BH22-2 S2	RDL	QC Batch	BH22-2 S3	QC Batch	BH22-3 S2	RDL	QC Batch
Calculated Parameters									
Sodium Adsorption Ratio	N/A	0.30		8422581	0.27 (1)	8422581	0.24 (1)		8422581
Inorganics									
Conductivity	mS/cm	0.19	0.002	8429945	0.17	8429945	0.21	0.002	8429945
Moisture	%	14	1.0	8427958					
Available (CaCl2) pH	pH	7.79		8429952	7.95	8431789	7.59		8431789
WAD Cyanide (Free)	ug/g	<0.01	0.01	8429695	<0.01	8431533	<0.01	0.01	8431533
Chromium (VI)	ug/g	<0.18	0.18	8429918	<0.18	8431677	<0.18	0.18	8431686
Metals									
Hot Water Ext. Boron (B)	ug/g	0.10	0.050	8429920	0.15	8429920	0.083	0.050	8429920
Acid Extractable Antimony (Sb)	ug/g	<0.20	0.20	8429860	<0.20	8429860	<0.20	0.20	8429860
Acid Extractable Arsenic (As)	ug/g	4.2	1.0	8429860	6.0	8429860	3.0	1.0	8429860
Acid Extractable Barium (Ba)	ug/g	72	0.50	8429860	46	8429860	49	0.50	8429860
Acid Extractable Beryllium (Be)	ug/g	0.57	0.20	8429860	0.36	8429860	0.53	0.20	8429860
Acid Extractable Boron (B)	ug/g	7.4	5.0	8429860	5.6	8429860	<5.0	5.0	8429860
Acid Extractable Cadmium (Cd)	ug/g	<0.10	0.10	8429860	<0.10	8429860	<0.10	0.10	8429860
Acid Extractable Chromium (Cr)	ug/g	18	1.0	8429860	14	8429860	15	1.0	8429860
Acid Extractable Cobalt (Co)	ug/g	10	0.10	8429860	6.4	8429860	6.5	0.10	8429860
Acid Extractable Copper (Cu)	ug/g	31	0.50	8429860	20	8429860	23	0.50	8429860
Acid Extractable Lead (Pb)	ug/g	8.7	1.0	8429860	6.7	8429860	6.9	1.0	8429860
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	0.50	8429860	<0.50	8429860	<0.50	0.50	8429860
Acid Extractable Nickel (Ni)	ug/g	21	0.50	8429860	14	8429860	15	0.50	8429860
Acid Extractable Selenium (Se)	ug/g	<0.50	0.50	8429860	<0.50	8429860	<0.50	0.50	8429860
Acid Extractable Silver (Ag)	ug/g	<0.20	0.20	8429860	<0.20	8429860	<0.20	0.20	8429860
Acid Extractable Thallium (Tl)	ug/g	0.11	0.050	8429860	0.076	8429860	0.083	0.050	8429860
Acid Extractable Uranium (U)	ug/g	0.38	0.050	8429860	0.46	8429860	0.45	0.050	8429860
Acid Extractable Vanadium (V)	ug/g	25	5.0	8429860	21	8429860	26	5.0	8429860
Acid Extractable Zinc (Zn)	ug/g	45	5.0	8429860	33	8429860	32	5.0	8429860
Acid Extractable Mercury (Hg)	ug/g	<0.050	0.050	8429860	<0.050	8429860	<0.050	0.050	8429860

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(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		URC923			URC925	URC926	URC927	URC928		
Sampling Date		2022/12/22			2022/12/22	2022/12/22	2022/12/22	2022/12/22		
COC Number		n/a			n/a	n/a	n/a	n/a		
	UNITS	BH22-3 S2 Lab-Dup	RDL	QC Batch	BH22-3 S4	BH22-3 S5	BH22-4 S1	BH22-4 S2	RDL	QC Batch
Calculated Parameters										
Sodium Adsorption Ratio	N/A				0.29 (1)	0.29 (1)	0.22 (1)	0.27		8422581
Inorganics										
Conductivity	mS/cm				0.15	0.15	0.23	0.20	0.002	8429945
Available (CaCl2) pH	pH	7.67		8431789	7.90	7.93	7.61	7.67		8431789
WAD Cyanide (Free)	ug/g	<0.01	0.01	8431533	<0.01	<0.01	<0.01	<0.01	0.01	8431533
Chromium (VI)	ug/g	<0.18	0.18	8431686	<0.18	<0.18	<0.18	<0.18	0.18	8431686
Metals										
Hot Water Ext. Boron (B)	ug/g				0.20	0.23	0.17	0.13	0.050	8429920
Acid Extractable Antimony (Sb)	ug/g				<0.20	<0.20	<0.20	<0.20	0.20	8429860
Acid Extractable Arsenic (As)	ug/g				4.0	4.2	4.4	4.8	1.0	8429860
Acid Extractable Barium (Ba)	ug/g				98	93	86	120	0.50	8429860
Acid Extractable Beryllium (Be)	ug/g				0.58	0.50	0.59	0.61	0.20	8429860
Acid Extractable Boron (B)	ug/g				9.9	8.4	8.9	9.2	5.0	8429860
Acid Extractable Cadmium (Cd)	ug/g				<0.10	<0.10	0.11	<0.10	0.10	8429860
Acid Extractable Chromium (Cr)	ug/g				18	17	18	18	1.0	8429860
Acid Extractable Cobalt (Co)	ug/g				13	11	9.7	12	0.10	8429860
Acid Extractable Copper (Cu)	ug/g				26	26	25	29	0.50	8429860
Acid Extractable Lead (Pb)	ug/g				11	9.9	9.1	10	1.0	8429860
Acid Extractable Molybdenum (Mo)	ug/g				0.63	0.60	0.58	1.0	0.50	8429860
Acid Extractable Nickel (Ni)	ug/g				24	22	19	23	0.50	8429860
Acid Extractable Selenium (Se)	ug/g				<0.50	<0.50	<0.50	<0.50	0.50	8429860
Acid Extractable Silver (Ag)	ug/g				<0.20	<0.20	<0.20	<0.20	0.20	8429860
Acid Extractable Thallium (Tl)	ug/g				0.13	0.15	0.11	0.13	0.050	8429860
Acid Extractable Uranium (U)	ug/g				0.54	0.46	0.62	0.44	0.050	8429860
Acid Extractable Vanadium (V)	ug/g				26	25	28	27	5.0	8429860
Acid Extractable Zinc (Zn)	ug/g				50	46	43	46	5.0	8429860
Acid Extractable Mercury (Hg)	ug/g				<0.050	<0.050	<0.050	<0.050	0.050	8429860

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(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		URC929	URC930			URC934			URC934		
Sampling Date		2022/12/22	2022/12/22			2022/12/22			2022/12/22		
COC Number		n/a	n/a			n/a			n/a		
	UNITS	BH22-5 S1	BH22-5 S2	RDL	QC Batch	DUP-4	RDL	QC Batch	DUP-4 Lab-Dup	RDL	QC Batch
Calculated Parameters											
Sodium Adsorption Ratio	N/A	0.34	0.27 (1)		8422581	0.28 (1)		8422581			
Inorganics											
Conductivity	mS/cm	0.21	0.17	0.002	8429945	0.17	0.002	8429945			
Moisture	%					9.6	1.0	8427958			
Available (CaCl2) pH	pH	7.50	7.86		8431789	7.84		8429952			
WAD Cyanide (Free)	ug/g	<0.01	<0.01	0.01	8431533	<0.01	0.01	8429693			
Chromium (VI)	ug/g	<0.18	<0.18	0.18	8431686	<0.18	0.18	8429742			
Metals											
Hot Water Ext. Boron (B)	ug/g	0.28	0.12	0.050	8429920	0.15	0.050	8429920			
Acid Extractable Antimony (Sb)	ug/g	<0.20	<0.20	0.20	8429860	<0.20	0.20	8429860	<0.20	0.20	8429860
Acid Extractable Arsenic (As)	ug/g	3.7	3.1	1.0	8429860	4.7	1.0	8429860	4.6	1.0	8429860
Acid Extractable Barium (Ba)	ug/g	79	60	0.50	8429860	49	0.50	8429860	48	0.50	8429860
Acid Extractable Beryllium (Be)	ug/g	0.46	0.37	0.20	8429860	0.37	0.20	8429860	0.36	0.20	8429860
Acid Extractable Boron (B)	ug/g	5.8	<5.0	5.0	8429860	5.2	5.0	8429860	<5.0	5.0	8429860
Acid Extractable Cadmium (Cd)	ug/g	<0.10	<0.10	0.10	8429860	<0.10	0.10	8429860	<0.10	0.10	8429860
Acid Extractable Chromium (Cr)	ug/g	17	13	1.0	8429860	15	1.0	8429860	14	1.0	8429860
Acid Extractable Cobalt (Co)	ug/g	7.4	6.9	0.10	8429860	7.3	0.10	8429860	7.1	0.10	8429860
Acid Extractable Copper (Cu)	ug/g	22	23	0.50	8429860	24	0.50	8429860	23	0.50	8429860
Acid Extractable Lead (Pb)	ug/g	7.9	6.5	1.0	8429860	6.2	1.0	8429860	6.2	1.0	8429860
Acid Extractable Molybdenum (Mo)	ug/g	0.54	<0.50	0.50	8429860	<0.50	0.50	8429860	<0.50	0.50	8429860
Acid Extractable Nickel (Ni)	ug/g	15	14	0.50	8429860	16	0.50	8429860	15	0.50	8429860
Acid Extractable Selenium (Se)	ug/g	<0.50	<0.50	0.50	8429860	<0.50	0.50	8429860	<0.50	0.50	8429860
Acid Extractable Silver (Ag)	ug/g	<0.20	<0.20	0.20	8429860	<0.20	0.20	8429860	<0.20	0.20	8429860
Acid Extractable Thallium (Tl)	ug/g	0.11	0.080	0.050	8429860	0.088	0.050	8429860	0.077	0.050	8429860
Acid Extractable Uranium (U)	ug/g	0.48	0.38	0.050	8429860	0.50	0.050	8429860	0.50	0.050	8429860
Acid Extractable Vanadium (V)	ug/g	26	21	5.0	8429860	21	5.0	8429860	21	5.0	8429860
Acid Extractable Zinc (Zn)	ug/g	40	33	5.0	8429860	38	5.0	8429860	36	5.0	8429860

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
(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		URC929	URC930			URC934			URC934		
Sampling Date		2022/12/22	2022/12/22			2022/12/22			2022/12/22		
COC Number		n/a	n/a			n/a			n/a		
	UNITS	**BH22-5 S1**	**BH22-5 S2**	**RDL**	**QC Batch**	**DUP-4**	**RDL**	**QC Batch**	**DUP-4 Lab-Dup**	**RDL**	**QC Batch**
Acid Extractable Mercury (Hg)	ug/g	<0.050	<0.050	0.050	8429860	<0.050	0.050	8429860	<0.050	0.050	8429860

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

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O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		URT925		
Sampling Date		2022/12/22		
COC Number		n/a		
	UNITS	BH22-2 S5	RDL	QC Batch
Calculated Parameters				
Sodium Adsorption Ratio	N/A	0.27 (1)		8425707
Inorganics				
Conductivity	mS/cm	0.16	0.002	8431537
Moisture	%	11	1.0	8428232
Available (CaCl2) pH	pH	7.94		8431789
WAD Cyanide (Free)	ug/g	<0.01	0.01	8431533
Chromium (VI)	ug/g	<0.18	0.18	8431677
Metals				
Hot Water Ext. Boron (B)	ug/g	0.17	0.050	8431580
Acid Extractable Antimony (Sb)	ug/g	<0.20	0.20	8431569
Acid Extractable Arsenic (As)	ug/g	3.1	1.0	8431569
Acid Extractable Barium (Ba)	ug/g	51	0.50	8431569
Acid Extractable Beryllium (Be)	ug/g	0.34	0.20	8431569
Acid Extractable Boron (B)	ug/g	6.6	5.0	8431569
Acid Extractable Cadmium (Cd)	ug/g	<0.10	0.10	8431569
Acid Extractable Chromium (Cr)	ug/g	14	1.0	8431569
Acid Extractable Cobalt (Co)	ug/g	6.3	0.10	8431569
Acid Extractable Copper (Cu)	ug/g	20	0.50	8431569
Acid Extractable Lead (Pb)	ug/g	6.2	1.0	8431569
Acid Extractable Molybdenum (Mo)	ug/g	0.56	0.50	8431569
Acid Extractable Nickel (Ni)	ug/g	13	0.50	8431569
Acid Extractable Selenium (Se)	ug/g	<0.50	0.50	8431569
Acid Extractable Silver (Ag)	ug/g	<0.20	0.20	8431569
Acid Extractable Thallium (Tl)	ug/g	0.085	0.050	8431569
Acid Extractable Uranium (U)	ug/g	0.50	0.050	8431569
Acid Extractable Vanadium (V)	ug/g	20	5.0	8431569
Acid Extractable Zinc (Zn)	ug/g	33	5.0	8431569

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(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		URT925		
Sampling Date		2022/12/22		
COC Number		n/a		
	UNITS	**BH22-2 S5**	**RDL**	**QC Batch**
Acid Extractable Mercury (Hg)	ug/g	<0.050	0.050	8431569
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

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O.REG 153 OC PESTICIDES (SOIL)

Bureau Veritas ID		URC913		URC918			URC918		
Sampling Date		2022/12/22		2022/12/22			2022/12/22		
COC Number		n/a		n/a			n/a		
	UNITS	MW22-1 S1	RDL	BH22-2 S1	RDL	QC Batch	BH22-2 S1 Lab-Dup	RDL	QC Batch
Inorganics									
Moisture	%	14	1.0	16	1.0	8428063			
Calculated Parameters									
Chlordane (Total)	ug/g	<0.010	0.010	<0.0020	0.0020	8421571			
o,p-DDD + p,p-DDD	ug/g	<0.010	0.010	<0.0020	0.0020	8421571			
o,p-DDE + p,p-DDE	ug/g	<0.010	0.010	<0.0020	0.0020	8421571			
o,p-DDT + p,p-DDT	ug/g	<0.010	0.010	<0.0020	0.0020	8421571			
Total Endosulfan	ug/g	<0.010	0.010	<0.0020	0.0020	8421571			
Total PCB	ug/g	<0.075	0.075	<0.015	0.015	8421571			
Pesticides & Herbicides									
Aldrin	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
a-Chlordane	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
g-Chlordane	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
o,p-DDD	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
p,p-DDD	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
o,p-DDE	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
p,p-DDE	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
o,p-DDT	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
p,p-DDT	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Dieldrin	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Lindane	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Endosulfan I (alpha)	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Endosulfan II (beta)	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Endrin	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Heptachlor	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Heptachlor epoxide	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Hexachlorobenzene	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Hexachlorobutadiene	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Hexachloroethane	ug/g	<0.010	0.010	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Methoxychlor	ug/g	<0.025	0.025	<0.0050	0.0050	8432992	<0.0050	0.0050	8432992
Aroclor 1242	ug/g	<0.075	0.075	<0.015	0.015	8432992	<0.015	0.015	8432992

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

O.REG 153 OC PESTICIDES (SOIL)

Bureau Veritas ID		URC913		URC918			URC918		
Sampling Date		2022/12/22		2022/12/22			2022/12/22		
COC Number		n/a		n/a			n/a		
	UNITS	MW22-1 S1	RDL	BH22-2 S1	RDL	QC Batch	BH22-2 S1 Lab-Dup	RDL	QC Batch
Aroclor 1248	ug/g	<0.075	0.075	<0.015	0.015	8432992	<0.015	0.015	8432992
Aroclor 1254	ug/g	<0.075	0.075	<0.015	0.015	8432992	<0.015	0.015	8432992
Aroclor 1260	ug/g	<0.075	0.075	<0.015	0.015	8432992	<0.015	0.015	8432992
Surrogate Recovery (%)									
2,4,5,6-Tetrachloro-m-xylene	%	91		75		8432992	100		8432992
Decachlorobiphenyl	%	82		84		8432992	122		8432992

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

O.REG 153 OC PESTICIDES (SOIL)

Bureau Veritas ID		URC922		URC923		URC927		
Sampling Date		2022/12/22		2022/12/22		2022/12/22		
COC Number		n/a		n/a		n/a		
	UNITS	BH22-3 S1	QC Batch	BH22-3 S2	QC Batch	BH22-4 S1	RDL	QC Batch
Inorganics								
Moisture	%	19	8428063	16	8428063	17	1.0	8428063
Calculated Parameters								
Chlordane (Total)	ug/g	<0.0020	8421571	<0.0020	8421571	<0.0020	0.0020	8421571
o,p-DDD + p,p-DDD	ug/g	<0.0020	8421571	<0.0020	8421571	<0.0020	0.0020	8421571
o,p-DDE + p,p-DDE	ug/g	<0.0020	8421571	<0.0020	8421571	<0.0020	0.0020	8421571
o,p-DDT + p,p-DDT	ug/g	<0.0020	8421571	<0.0020	8421571	<0.0020	0.0020	8421571
Total Endosulfan	ug/g	<0.0020	8421571	<0.0020	8421571	<0.0020	0.0020	8421571
Total PCB	ug/g	<0.015	8421571	<0.015	8421571	<0.015	0.015	8421571
Pesticides & Herbicides								
Aldrin	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
a-Chlordane	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
g-Chlordane	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
o,p-DDD	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
p,p-DDD	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
o,p-DDE	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
p,p-DDE	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
o,p-DDT	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
p,p-DDT	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
Dieldrin	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
Lindane	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
Endosulfan I (alpha)	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
Endosulfan II (beta)	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
Endrin	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
Heptachlor	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
Heptachlor epoxide	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
Hexachlorobenzene	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
Hexachlorobutadiene	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
Hexachloroethane	ug/g	<0.0020	8432992	<0.0020	8430889	<0.0020	0.0020	8432992
Methoxychlor	ug/g	<0.0050	8432992	<0.0050	8430889	<0.0050	0.0050	8432992
Aroclor 1242	ug/g	<0.015	8432992	<0.015	8430889	<0.015	0.015	8432992
Aroclor 1248	ug/g	<0.015	8432992	<0.015	8430889	<0.015	0.015	8432992

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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O.REG 153 OC PESTICIDES (SOIL)

Bureau Veritas ID		URC922		URC923		URC927		
Sampling Date		2022/12/22		2022/12/22		2022/12/22		
COC Number		n/a		n/a		n/a		
	UNITS	BH22-3 S1	QC Batch	BH22-3 S2	QC Batch	BH22-4 S1	RDL	QC Batch
Aroclor 1254	ug/g	<0.015	8432992	<0.015	8430889	<0.015	0.015	8432992
Aroclor 1260	ug/g	<0.015	8432992	<0.015	8430889	<0.015	0.015	8432992
Surrogate Recovery (%)								
2,4,5,6-Tetrachloro-m-xylene	%	93	8432992	66	8430889	91		8432992
Decachlorobiphenyl	%	96	8432992	107	8430889	97		8432992

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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O.REG 153 OC PESTICIDES (SOIL)

Bureau Veritas ID		URC928			URC929			URC930		
Sampling Date		2022/12/22			2022/12/22			2022/12/22		
COC Number		n/a			n/a			n/a		
	UNITS	BH22-4 S2	RDL	QC Batch	BH22-5 S1	RDL	QC Batch	BH22-5 S2	RDL	QC Batch
Inorganics										
Moisture	%				17	1.0	8428063			
Calculated Parameters										
Chlordane (Total)	ug/g	<0.0020	0.0020	8421571	<0.0020	0.0020	8421571	<0.0020	0.0020	8421571
o,p-DDD + p,p-DDD	ug/g	<0.0020	0.0020	8421571	<0.0020	0.0020	8421571	<0.0020	0.0020	8421571
o,p-DDE + p,p-DDE	ug/g	<0.0020	0.0020	8421571	<0.0020	0.0020	8421571	<0.0020	0.0020	8421571
o,p-DDT + p,p-DDT	ug/g	<0.0020	0.0020	8421571	<0.0020	0.0020	8421571	<0.0020	0.0020	8421571
Total Endosulfan	ug/g	<0.0020	0.0020	8421571	<0.0020	0.0020	8421571	<0.0020	0.0020	8421571
Total PCB	ug/g	<0.015	0.015	8421571	<0.015	0.015	8421571	<0.015	0.015	8421571
Pesticides & Herbicides										
Aldrin	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
a-Chlordane	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
g-Chlordane	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
o,p-DDD	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
p,p-DDD	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
o,p-DDE	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
p,p-DDE	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
o,p-DDT	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
p,p-DDT	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Dieldrin	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Lindane	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Endosulfan I (alpha)	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Endosulfan II (beta)	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Endrin	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Heptachlor	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Heptachlor epoxide	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Hexachlorobenzene	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Hexachlorobutadiene	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Hexachloroethane	ug/g	<0.0020	0.0020	8430889	<0.0020	0.0020	8432992	<0.0020	0.0020	8432992
Methoxychlor	ug/g	<0.0050	0.0050	8430889	<0.0050	0.0050	8432992	<0.0050	0.0050	8432992
Aroclor 1242	ug/g	<0.015	0.015	8430889	<0.015	0.015	8432992	<0.015	0.015	8432992
Aroclor 1248	ug/g	<0.015	0.015	8430889	<0.015	0.015	8432992	<0.015	0.015	8432992

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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O.REG 153 OC PESTICIDES (SOIL)

Bureau Veritas ID		URC928			URC929			URC930		
Sampling Date		2022/12/22			2022/12/22			2022/12/22		
COC Number		n/a			n/a			n/a		
	UNITS	BH22-4 S2	RDL	QC Batch	BH22-5 S1	RDL	QC Batch	BH22-5 S2	RDL	QC Batch
Aroclor 1254	ug/g	<0.015	0.015	8430889	<0.015	0.015	8432992	<0.015	0.015	8432992
Aroclor 1260	ug/g	<0.015	0.015	8430889	<0.015	0.015	8432992	<0.015	0.015	8432992
Surrogate Recovery (%)										
2,4,5,6-Tetrachloro-m-xylene	%	71		8430889	91		8432992	93		8432992
Decachlorobiphenyl	%	106		8430889	100		8432992	100		8432992

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

O.REG 153 OC PESTICIDES (SOIL)

Bureau Veritas ID		URC933		
Sampling Date		2022/12/22		
COC Number		n/a		
	UNITS	DUP-3	RDL	QC Batch
Inorganics				
Moisture	%	19	1.0	8428063
Calculated Parameters				
Chlordane (Total)	ug/g	<0.0020	0.0020	8421571
o,p-DDD + p,p-DDD	ug/g	<0.0020	0.0020	8421571
o,p-DDE + p,p-DDE	ug/g	<0.0020	0.0020	8421571
o,p-DDT + p,p-DDT	ug/g	<0.0020	0.0020	8421571
Total Endosulfan	ug/g	<0.0020	0.0020	8421571
Total PCB	ug/g	<0.015	0.015	8421571
Pesticides & Herbicides				
Aldrin	ug/g	<0.0020	0.0020	8432992
a-Chlordane	ug/g	<0.0020	0.0020	8432992
g-Chlordane	ug/g	<0.0020	0.0020	8432992
o,p-DDD	ug/g	<0.0020	0.0020	8432992
p,p-DDD	ug/g	<0.0020	0.0020	8432992
o,p-DDE	ug/g	<0.0020	0.0020	8432992
p,p-DDE	ug/g	<0.0020	0.0020	8432992
o,p-DDT	ug/g	<0.0020	0.0020	8432992
p,p-DDT	ug/g	<0.0020	0.0020	8432992
Dieldrin	ug/g	<0.0020	0.0020	8432992
Lindane	ug/g	<0.0020	0.0020	8432992
Endosulfan I (alpha)	ug/g	<0.0020	0.0020	8432992
Endosulfan II (beta)	ug/g	<0.0020	0.0020	8432992
Endrin	ug/g	<0.0020	0.0020	8432992
Heptachlor	ug/g	<0.0020	0.0020	8432992
Heptachlor epoxide	ug/g	<0.0020	0.0020	8432992
Hexachlorobenzene	ug/g	<0.0020	0.0020	8432992
Hexachlorobutadiene	ug/g	<0.0020	0.0020	8432992
Hexachloroethane	ug/g	<0.0020	0.0020	8432992
Methoxychlor	ug/g	<0.0050	0.0050	8432992
Aroclor 1242	ug/g	<0.015	0.015	8432992
Aroclor 1248	ug/g	<0.015	0.015	8432992

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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O.REG 153 OC PESTICIDES (SOIL)

Bureau Veritas ID		URC933		
Sampling Date		2022/12/22		
COC Number		n/a		
	UNITS	DUP-3	RDL	QC Batch
Aroclor 1254	ug/g	<0.015	0.015	8432992
Aroclor 1260	ug/g	<0.015	0.015	8432992
Surrogate Recovery (%)				
2,4,5,6-Tetrachloro-m-xylene	%	92		8432992
Decachlorobiphenyl	%	103		8432992

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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O.REG 153 PAHS (SOIL)

Bureau Veritas ID		URC915			URC915			URC920	URC925		
Sampling Date		2022/12/22			2022/12/22			2022/12/22	2022/12/22		
COC Number		n/a			n/a			n/a	n/a		
	UNITS	MW22-1 S3	RDL	QC Batch	MW22-1 S3 Lab-Dup	RDL	QC Batch	BH22-2 S3	BH22-3 S4	RDL	QC Batch
Inorganics											
Moisture	%	15	1.0	8428063				12	9.4	1.0	8428063
Calculated Parameters											
Methylnaphthalene, 2-(1-)	ug/g	<0.0071	0.0071	8424171				<0.0071	<0.0071	0.0071	8424171
Polyaromatic Hydrocarbons											
Acenaphthene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Acenaphthylene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Anthracene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Benzo(a)anthracene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Benzo(a)pyrene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Benzo(b/j)fluoranthene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Benzo(g,h,i)perylene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Benzo(k)fluoranthene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Chrysene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Dibenzo(a,h)anthracene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Fluoranthene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Fluorene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Indeno(1,2,3-cd)pyrene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
1-Methylnaphthalene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
2-Methylnaphthalene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Naphthalene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Phenanthrene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Pyrene	ug/g	<0.0050	0.0050	8430714	<0.0050	0.0050	8430714	<0.0050	<0.0050	0.0050	8430714
Surrogate Recovery (%)											
D10-Anthracene	%	105		8430714	107		8430714	109	108		8430714
D14-Terphenyl (FS)	%	98		8430714	102		8430714	101	103		8430714
D8-Acenaphthylene	%	83		8430714	81		8430714	80	83		8430714

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

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O.REG 153 PAHS (SOIL)

Bureau Veritas ID		URC928	URC930	URC932			URC932		
Sampling Date		2022/12/22	2022/12/22	2022/12/22			2022/12/22		
COC Number		n/a	n/a	n/a			n/a		
	UNITS	BH22-4 S2	BH22-5 S2	DUP-2	RDL	QC Batch	DUP-2 Lab-Dup	RDL	QC Batch
Inorganics									
Moisture	%	16	12	13	1.0	8428063	12	1.0	8428063
Calculated Parameters									
Methylnaphthalene, 2-(1-)	ug/g	<0.0071	<0.0071	<0.0071	0.0071	8422364			
Polyaromatic Hydrocarbons									
Acenaphthene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Acenaphthylene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Anthracene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Benzo(a)anthracene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Benzo(a)pyrene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Benzo(b/j)fluoranthene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Benzo(g,h,i)perylene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Benzo(k)fluoranthene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Chrysene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Dibenzo(a,h)anthracene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Fluoranthene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Fluorene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Indeno(1,2,3-cd)pyrene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
1-Methylnaphthalene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
2-Methylnaphthalene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Naphthalene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Phenanthrene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Pyrene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	8430714			
Surrogate Recovery (%)									
D10-Anthracene	%	110	112	102		8430714			
D14-Terphenyl (FS)	%	107	108	94		8430714			
D8-Acenaphthylene	%	91	85	84		8430714			

RDL = Reportable Detection Limit
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Lab-Dup = Laboratory Initiated Duplicate

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

Bureau Veritas ID		URC914			URC914			URC926		
Sampling Date		2022/12/22			2022/12/22			2022/12/22		
COC Number		n/a			n/a			n/a		
	UNITS	MW22-1 S2	RDL	QC Batch	MW22-1 S2 Lab-Dup	RDL	QC Batch	BH22-3 S5	RDL	QC Batch
Inorganics										
Moisture	%	12	1.0	8428063				10	1.0	8428063
BTEX & F1 Hydrocarbons										
Benzene	ug/g	<0.020	0.020	8429197	<0.020	0.020	8429197	<0.020	0.020	8429197
Toluene	ug/g	<0.020	0.020	8429197	<0.020	0.020	8429197	<0.020	0.020	8429197
Ethylbenzene	ug/g	<0.020	0.020	8429197	<0.020	0.020	8429197	<0.020	0.020	8429197
o-Xylene	ug/g	<0.020	0.020	8429197	<0.020	0.020	8429197	<0.020	0.020	8429197
p+m-Xylene	ug/g	<0.040	0.040	8429197	<0.040	0.040	8429197	<0.040	0.040	8429197
Total Xylenes	ug/g	<0.040	0.040	8429197	<0.040	0.040	8429197	<0.040	0.040	8429197
F1 (C6-C10)	ug/g	<10	10	8429197	<10	10	8429197	<10	10	8429197
F1 (C6-C10) - BTEX	ug/g	<10	10	8429197	<10	10	8429197	<10	10	8429197
F2-F4 Hydrocarbons										
F2 (C10-C16 Hydrocarbons)	ug/g	<10	10	8429699				<10	10	8429699
F3 (C16-C34 Hydrocarbons)	ug/g	<50	50	8429699				<50	50	8429699
F4 (C34-C50 Hydrocarbons)	ug/g	<50	50	8429699				<50	50	8429699
Reached Baseline at C50	ug/g	Yes		8429699				Yes		8429699
Surrogate Recovery (%)										
1,4-Difluorobenzene	%	112		8429197	108		8429197	109		8429197
4-Bromofluorobenzene	%	78		8429197	80		8429197	82		8429197
D10-o-Xylene	%	92		8429197	98		8429197	96		8429197
D4-1,2-Dichloroethane	%	94		8429197	101		8429197	95		8429197
o-Terphenyl	%	97		8429699				97		8429699

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

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

Bureau Veritas ID		URC916	URC921			URC921		
Sampling Date		2022/12/22	2022/12/22			2022/12/22		
COC Number		n/a	n/a			n/a		
	UNITS	MW22-1 S4	BH22-2 S4	RDL	QC Batch	BH22-2 S4 Lab-Dup	RDL	QC Batch
Inorganics								
Moisture	%	15	12	1.0	8428063			
Calculated Parameters								
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	<0.050	0.050	8424012			
Volatile Organics								
Acetone (2-Propanone)	ug/g	<0.49	<0.49	0.49	8426617			
Benzene	ug/g	<0.0060	<0.0060	0.0060	8426617			
Bromodichloromethane	ug/g	<0.040	<0.040	0.040	8426617			
Bromoform	ug/g	<0.040	<0.040	0.040	8426617			
Bromomethane	ug/g	<0.040	<0.040	0.040	8426617			
Carbon Tetrachloride	ug/g	<0.040	<0.040	0.040	8426617			
Chlorobenzene	ug/g	<0.040	<0.040	0.040	8426617			
Chloroform	ug/g	<0.040	<0.040	0.040	8426617			
Dibromochloromethane	ug/g	<0.040	<0.040	0.040	8426617			
1,2-Dichlorobenzene	ug/g	<0.040	<0.040	0.040	8426617			
1,3-Dichlorobenzene	ug/g	<0.040	<0.040	0.040	8426617			
1,4-Dichlorobenzene	ug/g	<0.040	<0.040	0.040	8426617			
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	<0.040	0.040	8426617			
1,1-Dichloroethane	ug/g	<0.040	<0.040	0.040	8426617			
1,2-Dichloroethane	ug/g	<0.049	<0.049	0.049	8426617			
1,1-Dichloroethylene	ug/g	<0.040	<0.040	0.040	8426617			
cis-1,2-Dichloroethylene	ug/g	<0.040	<0.040	0.040	8426617			
trans-1,2-Dichloroethylene	ug/g	<0.040	<0.040	0.040	8426617			
1,2-Dichloropropane	ug/g	<0.040	<0.040	0.040	8426617			
cis-1,3-Dichloropropene	ug/g	<0.030	<0.030	0.030	8426617			
trans-1,3-Dichloropropene	ug/g	<0.040	<0.040	0.040	8426617			
Ethylbenzene	ug/g	<0.010	<0.010	0.010	8426617			
Ethylene Dibromide	ug/g	<0.040	<0.040	0.040	8426617			
Hexane	ug/g	<0.040	<0.040	0.040	8426617			
Methylene Chloride(Dichloromethane)	ug/g	<0.049	0.063	0.049	8426617			
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	<0.40	0.40	8426617			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

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

Bureau Veritas ID		URC916	URC921			URC921		
Sampling Date		2022/12/22	2022/12/22			2022/12/22		
COC Number		n/a	n/a			n/a		
	UNITS	MW22-1 S4	BH22-2 S4	RDL	QC Batch	BH22-2 S4 Lab-Dup	RDL	QC Batch
Methyl Isobutyl Ketone	ug/g	<0.40	<0.40	0.40	8426617			
Methyl t-butyl ether (MTBE)	ug/g	<0.040	<0.040	0.040	8426617			
Styrene	ug/g	<0.040	<0.040	0.040	8426617			
1,1,1,2-Tetrachloroethane	ug/g	<0.040	<0.040	0.040	8426617			
1,1,2,2-Tetrachloroethane	ug/g	<0.040	<0.040	0.040	8426617			
Tetrachloroethylene	ug/g	<0.040	<0.040	0.040	8426617			
Toluene	ug/g	<0.020	<0.020	0.020	8426617			
1,1,1-Trichloroethane	ug/g	<0.040	<0.040	0.040	8426617			
1,1,2-Trichloroethane	ug/g	<0.040	<0.040	0.040	8426617			
Trichloroethylene	ug/g	<0.010	<0.010	0.010	8426617			
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	<0.040	0.040	8426617			
Vinyl Chloride	ug/g	<0.019	<0.019	0.019	8426617			
p+m-Xylene	ug/g	<0.020	<0.020	0.020	8426617			
o-Xylene	ug/g	<0.020	<0.020	0.020	8426617			
Total Xylenes	ug/g	<0.020	<0.020	0.020	8426617			
F1 (C6-C10)	ug/g	<10	<10	10	8426617			
F1 (C6-C10) - BTEX	ug/g	<10	<10	10	8426617			
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/g	<10	<10	10	8429699	<10	10	8429699
F3 (C16-C34 Hydrocarbons)	ug/g	<50	<50	50	8429699	<50	50	8429699
F4 (C34-C50 Hydrocarbons)	ug/g	<50	<50	50	8429699	<50	50	8429699
Reached Baseline at C50	ug/g	Yes	Yes		8429699	Yes		8429699
Surrogate Recovery (%)								
o-Terphenyl	%	98	104		8429699	96		8429699
4-Bromofluorobenzene	%	98	97		8426617			
D10-o-Xylene	%	105	109		8426617			
D4-1,2-Dichloroethane	%	94	96		8426617			
D8-Toluene	%	97	99		8426617			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

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

Bureau Veritas ID		URC924	URC931		
Sampling Date		2022/12/22	2022/12/22		
COC Number		n/a	n/a		
	UNITS	BH22-3 S3	DUP-1	RDL	QC Batch
Inorganics					
Moisture	%	11	14	1.0	8428063
Calculated Parameters					
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	<0.050	0.050	8424012
Volatile Organics					
Acetone (2-Propanone)	ug/g	<0.49	0.51	0.49	8426617
Benzene	ug/g	<0.0060	<0.0060	0.0060	8426617
Bromodichloromethane	ug/g	<0.040	<0.040	0.040	8426617
Bromoform	ug/g	<0.040	<0.040	0.040	8426617
Bromomethane	ug/g	<0.040	<0.040	0.040	8426617
Carbon Tetrachloride	ug/g	<0.040	<0.040	0.040	8426617
Chlorobenzene	ug/g	<0.040	<0.040	0.040	8426617
Chloroform	ug/g	<0.040	<0.040	0.040	8426617
Dibromochloromethane	ug/g	<0.040	<0.040	0.040	8426617
1,2-Dichlorobenzene	ug/g	<0.040	<0.040	0.040	8426617
1,3-Dichlorobenzene	ug/g	<0.040	<0.040	0.040	8426617
1,4-Dichlorobenzene	ug/g	<0.040	<0.040	0.040	8426617
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	<0.040	0.040	8426617
1,1-Dichloroethane	ug/g	<0.040	<0.040	0.040	8426617
1,2-Dichloroethane	ug/g	<0.049	<0.049	0.049	8426617
1,1-Dichloroethylene	ug/g	<0.040	<0.040	0.040	8426617
cis-1,2-Dichloroethylene	ug/g	<0.040	<0.040	0.040	8426617
trans-1,2-Dichloroethylene	ug/g	<0.040	<0.040	0.040	8426617
1,2-Dichloropropane	ug/g	<0.040	<0.040	0.040	8426617
cis-1,3-Dichloropropene	ug/g	<0.030	<0.030	0.030	8426617
trans-1,3-Dichloropropene	ug/g	<0.040	<0.040	0.040	8426617
Ethylbenzene	ug/g	<0.010	<0.010	0.010	8426617
Ethylene Dibromide	ug/g	<0.040	<0.040	0.040	8426617
Hexane	ug/g	<0.040	<0.040	0.040	8426617
Methylene Chloride(Dichloromethane)	ug/g	<0.049	0.097	0.049	8426617
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	<0.40	0.40	8426617
Methyl Isobutyl Ketone	ug/g	<0.40	<0.40	0.40	8426617

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

Bureau Veritas ID		URC924	URC931		
Sampling Date		2022/12/22	2022/12/22		
COC Number		n/a	n/a		
	UNITS	BH22-3 S3	DUP-1	RDL	QC Batch
Methyl t-butyl ether (MTBE)	ug/g	<0.040	<0.040	0.040	8426617
Styrene	ug/g	<0.040	<0.040	0.040	8426617
1,1,1,2-Tetrachloroethane	ug/g	<0.040	<0.040	0.040	8426617
1,1,2,2-Tetrachloroethane	ug/g	<0.040	<0.040	0.040	8426617
Tetrachloroethylene	ug/g	<0.040	<0.040	0.040	8426617
Toluene	ug/g	<0.020	<0.020	0.020	8426617
1,1,1-Trichloroethane	ug/g	<0.040	<0.040	0.040	8426617
1,1,2-Trichloroethane	ug/g	<0.040	<0.040	0.040	8426617
Trichloroethylene	ug/g	<0.010	<0.010	0.010	8426617
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	<0.040	0.040	8426617
Vinyl Chloride	ug/g	<0.019	<0.019	0.019	8426617
p+m-Xylene	ug/g	<0.020	<0.020	0.020	8426617
o-Xylene	ug/g	<0.020	<0.020	0.020	8426617
Total Xylenes	ug/g	<0.020	<0.020	0.020	8426617
F1 (C6-C10)	ug/g	<10	<10	10	8426617
F1 (C6-C10) - BTEX	ug/g	<10	<10	10	8426617
F2-F4 Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	ug/g	<10	<10	10	8429699
F3 (C16-C34 Hydrocarbons)	ug/g	<50	<50	50	8429699
F4 (C34-C50 Hydrocarbons)	ug/g	<50	<50	50	8429699
Reached Baseline at C50	ug/g	Yes	Yes		8429699
Surrogate Recovery (%)					
o-Terphenyl	%	97	97		8429699
4-Bromofluorobenzene	%	97	98		8426617
D10-o-Xylene	%	107	107		8426617
D4-1,2-Dichloroethane	%	95	96		8426617
D8-Toluene	%	98	98		8426617

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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TEST SUMMARY

Bureau Veritas ID: URC913 **Collected:** 2022/12/22
Sample ID: MW22-1 S1 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
OC Pesticides (Selected) & PCB	GC/ECD	8432992	2023/01/04	2023/01/05	Li Peng
OC Pesticides Summed Parameters	CALC	8421571	N/A	2022/12/31	Automated Statchk

Bureau Veritas ID: URC914 **Collected:** 2022/12/22
Sample ID: MW22-1 S2 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8429920	2023/01/03	2023/01/04	Jaswinder Kaur
Free (WAD) Cyanide	TECH	8431533	2023/01/04	2023/01/04	Prgya Panchal
Conductivity	AT	8429945	2023/01/03	2023/01/03	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8431686	2023/01/04	2023/01/05	Surleen Kaur Romana
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	8429197	N/A	2023/01/02	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8429699	2023/01/03	2023/01/03	Jeevaraj Jeevaratrnam
Acid Extractable Metals by ICPMS	ICP/MS	8429860	2023/01/03	2023/01/03	Viviana Canzonieri
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
pH CaCl2 EXTRACT	AT	8431789	2023/01/04	2023/01/04	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8422581	N/A	2023/01/04	Automated Statchk

Bureau Veritas ID: URC914 Dup **Collected:** 2022/12/22
Sample ID: MW22-1 S2 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	8429197	N/A	2023/01/02	Domnica Andronescu

Bureau Veritas ID: URC915 **Collected:** 2022/12/22
Sample ID: MW22-1 S3 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8424171	N/A	2023/01/05	Automated Statchk
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8430714	2023/01/03	2023/01/04	Mitesh Raj

Bureau Veritas ID: URC915 Dup **Collected:** 2022/12/22
Sample ID: MW22-1 S3 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8430714	2023/01/03	2023/01/04	Mitesh Raj

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TEST SUMMARY

Bureau Veritas ID: URC916 **Collected:** 2022/12/22
Sample ID: MW22-1 S4 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8424012	N/A	2023/01/04	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8429699	2023/01/03	2023/01/03	Jeevaraj Jeevaratrnam
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8426617	N/A	2023/01/03	Blair Gannon

Bureau Veritas ID: URC917 **Collected:** 2022/12/22
Sample ID: MW22-1 S5 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8429920	2023/01/03	2023/01/04	Jaswinder Kaur
Free (WAD) Cyanide	TECH	8431536	2023/01/04	2023/01/04	Prgya Panchal
Conductivity	AT	8429945	2023/01/03	2023/01/03	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8429918	2023/01/03	2023/01/04	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	8429860	2023/01/03	2023/01/03	Viviana Canzonieri
Moisture	BAL	8427958	N/A	2022/12/30	Joe Thomas
pH CaCl2 EXTRACT	AT	8429952	2023/01/03	2023/01/03	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8422581	N/A	2023/01/04	Automated Statchk

Bureau Veritas ID: URC917 Dup **Collected:** 2022/12/22
Sample ID: MW22-1 S5 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	TECH	8431536	2023/01/04	2023/01/04	Prgya Panchal

Bureau Veritas ID: URC918 **Collected:** 2022/12/22
Sample ID: BH22-2 S1 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
OC Pesticides (Selected) & PCB	GC/ECD	8432992	2023/01/04	2023/01/05	Li Peng
OC Pesticides Summed Parameters	CALC	8421571	N/A	2022/12/31	Automated Statchk

Bureau Veritas ID: URC918 Dup **Collected:** 2022/12/22
Sample ID: BH22-2 S1 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
OC Pesticides (Selected) & PCB	GC/ECD	8432992	2023/01/04	2023/01/05	Li Peng

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TEST SUMMARY

Bureau Veritas ID: URC919
Sample ID: BH22-2 S2
Matrix: Soil

Collected: 2022/12/22
Shipped:
Received: 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8429920	2023/01/03	2023/01/04	Jaswinder Kaur
Free (WAD) Cyanide	TECH	8429695	2023/01/03	2023/01/03	Prgya Panchal
Conductivity	AT	8429945	2023/01/03	2023/01/03	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8429918	2023/01/03	2023/01/04	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	8429860	2023/01/03	2023/01/03	Viviana Canzonieri
Moisture	BAL	8427958	N/A	2022/12/30	Joe Thomas
pH CaCl2 EXTRACT	AT	8429952	2023/01/03	2023/01/03	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8422581	N/A	2023/01/04	Automated Statchk

Bureau Veritas ID: URC920
Sample ID: BH22-2 S3
Matrix: Soil

Collected: 2022/12/22
Shipped:
Received: 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8424171	N/A	2023/01/05	Automated Statchk
Hot Water Extractable Boron	ICP	8429920	2023/01/03	2023/01/04	Jaswinder Kaur
Free (WAD) Cyanide	TECH	8431533	2023/01/04	2023/01/04	Prgya Panchal
Conductivity	AT	8429945	2023/01/03	2023/01/03	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8431677	2023/01/04	2023/01/05	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	8429860	2023/01/03	2023/01/03	Viviana Canzonieri
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8430714	2023/01/03	2023/01/04	Mitesh Raj
pH CaCl2 EXTRACT	AT	8431789	2023/01/04	2023/01/04	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8422581	N/A	2023/01/04	Automated Statchk

Bureau Veritas ID: URC921
Sample ID: BH22-2 S4
Matrix: Soil

Collected: 2022/12/22
Shipped:
Received: 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8424012	N/A	2023/01/04	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8429699	2023/01/03	2023/01/03	Jeevaraj Jeevaratrnam
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8426617	N/A	2023/01/03	Blair Gannon

Bureau Veritas ID: URC921 Dup
Sample ID: BH22-2 S4
Matrix: Soil

Collected: 2022/12/22
Shipped:
Received: 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8429699	2023/01/03	2023/01/03	Jeevaraj Jeevaratrnam

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TEST SUMMARY

Bureau Veritas ID: URC922 **Collected:** 2022/12/22
Sample ID: BH22-3 S1 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
OC Pesticides (Selected) & PCB	GC/ECD	8432992	2023/01/04	2023/01/05	Li Peng
OC Pesticides Summed Parameters	CALC	8421571	N/A	2022/12/31	Automated Statchk

Bureau Veritas ID: URC923 **Collected:** 2022/12/22
Sample ID: BH22-3 S2 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8429920	2023/01/03	2023/01/04	Jaswinder Kaur
Free (WAD) Cyanide	TECH	8431533	2023/01/04	2023/01/04	Prgya Panchal
Conductivity	AT	8429945	2023/01/03	2023/01/03	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8431686	2023/01/04	2023/01/05	Surleen Kaur Romana
Acid Extractable Metals by ICPMS	ICP/MS	8429860	2023/01/03	2023/01/03	Viviana Canzonieri
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
OC Pesticides (Selected) & PCB	GC/ECD	8430889	2023/01/03	2023/01/04	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	8421571	N/A	2022/12/31	Automated Statchk
pH CaCl2 EXTRACT	AT	8431789	2023/01/04	2023/01/04	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8422581	N/A	2023/01/04	Automated Statchk

Bureau Veritas ID: URC923 Dup **Collected:** 2022/12/22
Sample ID: BH22-3 S2 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	TECH	8431533	2023/01/04	2023/01/04	Prgya Panchal
Hexavalent Chromium in Soil by IC	IC/SPEC	8431686	2023/01/04	2023/01/05	Surleen Kaur Romana
pH CaCl2 EXTRACT	AT	8431789	2023/01/04	2023/01/04	Taslima Aktar

Bureau Veritas ID: URC924 **Collected:** 2022/12/22
Sample ID: BH22-3 S3 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8424012	N/A	2023/01/04	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8429699	2023/01/03	2023/01/03	Jeevaraj Jeevaratrnam
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8426617	N/A	2023/01/03	Blair Gannon

Bureau Veritas ID: URC925 **Collected:** 2022/12/22
Sample ID: BH22-3 S4 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8424171	N/A	2023/01/05	Automated Statchk

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TEST SUMMARY

Bureau Veritas ID: URC925
Sample ID: BH22-3 S4
Matrix: Soil

Collected: 2022/12/22
Shipped:
Received: 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8429920	2023/01/03	2023/01/04	Jaswinder Kaur
Free (WAD) Cyanide	TECH	8431533	2023/01/04	2023/01/04	Prgya Panchal
Conductivity	AT	8429945	2023/01/03	2023/01/03	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8431686	2023/01/04	2023/01/05	Surleen Kaur Romana
Acid Extractable Metals by ICPMS	ICP/MS	8429860	2023/01/03	2023/01/03	Viviana Canzonieri
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8430714	2023/01/03	2023/01/04	Mitesh Raj
pH CaCl2 EXTRACT	AT	8431789	2023/01/04	2023/01/04	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8422581	N/A	2023/01/04	Automated Statchk

Bureau Veritas ID: URC926
Sample ID: BH22-3 S5
Matrix: Soil

Collected: 2022/12/22
Shipped:
Received: 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8429920	2023/01/03	2023/01/04	Jaswinder Kaur
Free (WAD) Cyanide	TECH	8431533	2023/01/04	2023/01/04	Prgya Panchal
Conductivity	AT	8429945	2023/01/03	2023/01/03	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8431686	2023/01/04	2023/01/05	Surleen Kaur Romana
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	8429197	N/A	2023/01/02	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8429699	2023/01/03	2023/01/04	Jeevaraj Jeevaratrnam
Acid Extractable Metals by ICPMS	ICP/MS	8429860	2023/01/03	2023/01/03	Viviana Canzonieri
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
pH CaCl2 EXTRACT	AT	8431789	2023/01/04	2023/01/04	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8422581	N/A	2023/01/04	Automated Statchk

Bureau Veritas ID: URC927
Sample ID: BH22-4 S1
Matrix: Soil

Collected: 2022/12/22
Shipped:
Received: 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8429920	2023/01/03	2023/01/04	Jaswinder Kaur
Free (WAD) Cyanide	TECH	8431533	2023/01/04	2023/01/04	Prgya Panchal
Conductivity	AT	8429945	2023/01/03	2023/01/03	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8431686	2023/01/04	2023/01/05	Surleen Kaur Romana
Acid Extractable Metals by ICPMS	ICP/MS	8429860	2023/01/03	2023/01/03	Viviana Canzonieri
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
OC Pesticides (Selected) & PCB	GC/ECD	8432992	2023/01/04	2023/01/05	Li Peng
OC Pesticides Summed Parameters	CALC	8421571	N/A	2022/12/31	Automated Statchk
pH CaCl2 EXTRACT	AT	8431789	2023/01/04	2023/01/04	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8422581	N/A	2023/01/04	Automated Statchk

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TEST SUMMARY

Bureau Veritas ID: URC928
Sample ID: BH22-4 S2
Matrix: Soil

Collected: 2022/12/22
Shipped:
Received: 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8422364	N/A	2023/01/05	Automated Statchk
Hot Water Extractable Boron	ICP	8429920	2023/01/03	2023/01/04	Jaswinder Kaur
Free (WAD) Cyanide	TECH	8431533	2023/01/04	2023/01/04	Prgya Panchal
Conductivity	AT	8429945	2023/01/03	2023/01/03	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8431686	2023/01/04	2023/01/05	Surleen Kaur Romana
Acid Extractable Metals by ICPMS	ICP/MS	8429860	2023/01/03	2023/01/03	Viviana Canzonieri
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
OC Pesticides (Selected) & PCB	GC/ECD	8430889	2023/01/03	2023/01/04	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	8421571	N/A	2022/12/31	Automated Statchk
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8430714	2023/01/03	2023/01/04	Mitesh Raj
pH CaCl2 EXTRACT	AT	8431789	2023/01/04	2023/01/04	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8422581	N/A	2023/01/04	Automated Statchk

Bureau Veritas ID: URC929
Sample ID: BH22-5 S1
Matrix: Soil

Collected: 2022/12/22
Shipped:
Received: 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8429920	2023/01/03	2023/01/04	Jaswinder Kaur
Free (WAD) Cyanide	TECH	8431533	2023/01/04	2023/01/04	Prgya Panchal
Conductivity	AT	8429945	2023/01/03	2023/01/03	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8431686	2023/01/04	2023/01/05	Surleen Kaur Romana
Acid Extractable Metals by ICPMS	ICP/MS	8429860	2023/01/03	2023/01/03	Viviana Canzonieri
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
OC Pesticides (Selected) & PCB	GC/ECD	8432992	2023/01/04	2023/01/05	Li Peng
OC Pesticides Summed Parameters	CALC	8421571	N/A	2022/12/31	Automated Statchk
pH CaCl2 EXTRACT	AT	8431789	2023/01/04	2023/01/04	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8422581	N/A	2023/01/04	Automated Statchk

Bureau Veritas ID: URC930
Sample ID: BH22-5 S2
Matrix: Soil

Collected: 2022/12/22
Shipped:
Received: 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8422364	N/A	2023/01/05	Automated Statchk
Hot Water Extractable Boron	ICP	8429920	2023/01/03	2023/01/04	Jaswinder Kaur
Free (WAD) Cyanide	TECH	8431533	2023/01/04	2023/01/04	Prgya Panchal
Conductivity	AT	8429945	2023/01/03	2023/01/03	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8431686	2023/01/04	2023/01/05	Surleen Kaur Romana
Acid Extractable Metals by ICPMS	ICP/MS	8429860	2023/01/03	2023/01/03	Viviana Canzonieri
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
OC Pesticides (Selected) & PCB	GC/ECD	8432992	2023/01/04	2023/01/05	Li Peng
OC Pesticides Summed Parameters	CALC	8421571	N/A	2022/12/31	Automated Statchk
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8430714	2023/01/03	2023/01/04	Mitesh Raj

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TEST SUMMARY

Bureau Veritas ID: URC930 **Collected:** 2022/12/22
Sample ID: BH22-5 S2 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH CaCl2 EXTRACT	AT	8431789	2023/01/04	2023/01/04	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8422581	N/A	2023/01/04	Automated Statchk

Bureau Veritas ID: URC931 **Collected:** 2022/12/22
Sample ID: DUP-1 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8424012	N/A	2023/01/04	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8429699	2023/01/03	2023/01/04	Jeevaraj Jeevaratrnam
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8426617	N/A	2023/01/03	Blair Gannon

Bureau Veritas ID: URC932 **Collected:** 2022/12/22
Sample ID: DUP-2 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8422364	N/A	2023/01/05	Automated Statchk
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8430714	2023/01/03	2023/01/04	Mitesh Raj

Bureau Veritas ID: URC932 Dup **Collected:** 2022/12/22
Sample ID: DUP-2 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas

Bureau Veritas ID: URC933 **Collected:** 2022/12/22
Sample ID: DUP-3 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	8428063	N/A	2022/12/30	Joe Thomas
OC Pesticides (Selected) & PCB	GC/ECD	8432992	2023/01/04	2023/01/05	Li Peng
OC Pesticides Summed Parameters	CALC	8421571	N/A	2022/12/31	Automated Statchk

Bureau Veritas ID: URC934 **Collected:** 2022/12/22
Sample ID: DUP-4 **Shipped:**
Matrix: Soil **Received:** 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8429920	2023/01/03	2023/01/04	Jaswinder Kaur
Free (WAD) Cyanide	TECH	8429693	2023/01/03	2023/01/03	Prgya Panchal

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TEST SUMMARY

Bureau Veritas ID: URC934
Sample ID: DUP-4
Matrix: Soil

Collected: 2022/12/22
Shipped:
Received: 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	8429945	2023/01/03	2023/01/03	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8429742	2023/01/03	2023/01/03	Surleen Kaur Romana
Acid Extractable Metals by ICPMS	ICP/MS	8429860	2023/01/03	2023/01/03	Viviana Canzonieri
Moisture	BAL	8427958	N/A	2022/12/30	Joe Thomas
pH CaCl2 EXTRACT	AT	8429952	2023/01/03	2023/01/03	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8422581	N/A	2023/01/04	Automated Statchk

Bureau Veritas ID: URC934 Dup
Sample ID: DUP-4
Matrix: Soil

Collected: 2022/12/22
Shipped:
Received: 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractable Metals by ICPMS	ICP/MS	8429860	2023/01/03	2023/01/03	Viviana Canzonieri

Bureau Veritas ID: URT925
Sample ID: BH22-2 S5
Matrix: Soil

Collected: 2022/12/22
Shipped:
Received: 2022/12/23

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8431580	2023/01/04	2023/01/04	Gagandeep Rai
Free (WAD) Cyanide	TECH	8431533	2023/01/04	2023/01/04	Prgya Panchal
Conductivity	AT	8431537	2023/01/04	2023/01/04	Gurparteek KAUR
Hexavalent Chromium in Soil by IC	IC/SPEC	8431677	2023/01/04	2023/01/05	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	8431569	2023/01/04	2023/01/04	Viviana Canzonieri
Moisture	BAL	8428232	N/A	2022/12/30	Muhammad Chhaidan
pH CaCl2 EXTRACT	AT	8431789	2023/01/04	2023/01/04	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	8425707	N/A	2023/01/04	Automated Statchk

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GENERAL COMMENTS

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

Package 1	2.3°C
Package 2	2.0°C
Package 3	3.0°C

Sample URC913 [MW22-1 S1] : 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
8426617	4-Bromofluorobenzene	2023/01/03	99	60 - 140	99	60 - 140	98	%		
8426617	D10-o-Xylene	2023/01/03	108	60 - 130	101	60 - 130	103	%		
8426617	D4-1,2-Dichloroethane	2023/01/03	96	60 - 140	98	60 - 140	95	%		
8426617	D8-Toluene	2023/01/03	100	60 - 140	99	60 - 140	97	%		
8429197	1,4-Difluorobenzene	2023/01/02	103	60 - 140	103	60 - 140	108	%		
8429197	4-Bromofluorobenzene	2023/01/02	94	60 - 140	94	60 - 140	81	%		
8429197	D10-o-Xylene	2023/01/02	97	60 - 140	87	60 - 140	82	%		
8429197	D4-1,2-Dichloroethane	2023/01/02	92	60 - 140	88	60 - 140	93	%		
8429699	o-Terphenyl	2023/01/03	94	60 - 130	93	60 - 130	98	%		
8430714	D10-Anthracene	2023/01/04	112	50 - 130	117	50 - 130	119	%		
8430714	D14-Terphenyl (FS)	2023/01/04	105	50 - 130	114	50 - 130	112	%		
8430714	D8-Acenaphthylene	2023/01/04	88	50 - 130	105	50 - 130	101	%		
8430889	2,4,5,6-Tetrachloro-m-xylene	2023/01/04	84	50 - 130	85	50 - 130	93	%		
8430889	Decachlorobiphenyl	2023/01/04	100	50 - 130	109	50 - 130	115	%		
8432992	2,4,5,6-Tetrachloro-m-xylene	2023/01/05	93	50 - 130	82	50 - 130	97	%		
8432992	Decachlorobiphenyl	2023/01/05	114	50 - 130	99	50 - 130	100	%		
8426617	1,1,1,2-Tetrachloroethane	2023/01/03	96	60 - 140	99	60 - 130	<0.040	ug/g		
8426617	1,1,1-Trichloroethane	2023/01/03	99	60 - 140	103	60 - 130	<0.040	ug/g		
8426617	1,1,2,2-Tetrachloroethane	2023/01/03	91	60 - 140	96	60 - 130	<0.040	ug/g		
8426617	1,1,2-Trichloroethane	2023/01/03	93	60 - 140	97	60 - 130	<0.040	ug/g		
8426617	1,1-Dichloroethane	2023/01/03	84	60 - 140	88	60 - 130	<0.040	ug/g		
8426617	1,1-Dichloroethylene	2023/01/03	88	60 - 140	91	60 - 130	<0.040	ug/g		
8426617	1,2-Dichlorobenzene	2023/01/03	97	60 - 140	99	60 - 130	<0.040	ug/g		
8426617	1,2-Dichloroethane	2023/01/03	85	60 - 140	90	60 - 130	<0.049	ug/g		
8426617	1,2-Dichloropropane	2023/01/03	86	60 - 140	91	60 - 130	<0.040	ug/g		
8426617	1,3-Dichlorobenzene	2023/01/03	99	60 - 140	100	60 - 130	<0.040	ug/g		
8426617	1,4-Dichlorobenzene	2023/01/03	113	60 - 140	115	60 - 130	<0.040	ug/g		
8426617	Acetone (2-Propanone)	2023/01/03	86	60 - 140	90	60 - 140	<0.49	ug/g		
8426617	Benzene	2023/01/03	84	60 - 140	88	60 - 130	<0.0060	ug/g	NC	50
8426617	Bromodichloromethane	2023/01/03	94	60 - 140	99	60 - 130	<0.040	ug/g		
8426617	Bromoform	2023/01/03	91	60 - 140	96	60 - 130	<0.040	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
8426617	Bromomethane	2023/01/03	89	60 - 140	94	60 - 140	<0.040	ug/g		
8426617	Carbon Tetrachloride	2023/01/03	94	60 - 140	98	60 - 130	<0.040	ug/g		
8426617	Chlorobenzene	2023/01/03	96	60 - 140	100	60 - 130	<0.040	ug/g		
8426617	Chloroform	2023/01/03	92	60 - 140	96	60 - 130	<0.040	ug/g		
8426617	cis-1,2-Dichloroethylene	2023/01/03	99	60 - 140	104	60 - 130	<0.040	ug/g		
8426617	cis-1,3-Dichloropropene	2023/01/03	75	60 - 140	81	60 - 130	<0.030	ug/g		
8426617	Dibromochloromethane	2023/01/03	94	60 - 140	98	60 - 130	<0.040	ug/g		
8426617	Dichlorodifluoromethane (FREON 12)	2023/01/03	91	60 - 140	94	60 - 140	<0.040	ug/g		
8426617	Ethylbenzene	2023/01/03	83	60 - 140	86	60 - 130	<0.010	ug/g	NC	50
8426617	Ethylene Dibromide	2023/01/03	94	60 - 140	98	60 - 130	<0.040	ug/g		
8426617	F1 (C6-C10) - BTEX	2023/01/03					<10	ug/g	NC	30
8426617	F1 (C6-C10)	2023/01/03	85	60 - 140	89	80 - 120	<10	ug/g	NC	30
8426617	Hexane	2023/01/03	85	60 - 140	88	60 - 130	<0.040	ug/g		
8426617	Methyl Ethyl Ketone (2-Butanone)	2023/01/03	83	60 - 140	88	60 - 140	<0.40	ug/g		
8426617	Methyl Isobutyl Ketone	2023/01/03	79	60 - 140	84	60 - 130	<0.40	ug/g		
8426617	Methyl t-butyl ether (MTBE)	2023/01/03	81	60 - 140	86	60 - 130	<0.040	ug/g		
8426617	Methylene Chloride(Dichloromethane)	2023/01/03	94	60 - 140	100	60 - 130	<0.049	ug/g		
8426617	o-Xylene	2023/01/03	87	60 - 140	90	60 - 130	<0.020	ug/g	NC	50
8426617	p+m-Xylene	2023/01/03	87	60 - 140	90	60 - 130	<0.020	ug/g	NC	50
8426617	Styrene	2023/01/03	96	60 - 140	100	60 - 130	<0.040	ug/g		
8426617	Tetrachloroethylene	2023/01/03	91	60 - 140	94	60 - 130	<0.040	ug/g		
8426617	Toluene	2023/01/03	90	60 - 140	92	60 - 130	<0.020	ug/g	NC	50
8426617	Total Xylenes	2023/01/03					<0.020	ug/g	NC	50
8426617	trans-1,2-Dichloroethylene	2023/01/03	96	60 - 140	101	60 - 130	<0.040	ug/g		
8426617	trans-1,3-Dichloropropene	2023/01/03	77	60 - 140	81	60 - 130	<0.040	ug/g		
8426617	Trichloroethylene	2023/01/03	102	60 - 140	106	60 - 130	<0.010	ug/g		
8426617	Trichlorofluoromethane (FREON 11)	2023/01/03	96	60 - 140	99	60 - 130	<0.040	ug/g		
8426617	Vinyl Chloride	2023/01/03	79	60 - 140	82	60 - 130	<0.019	ug/g		
8427958	Moisture	2022/12/30							9.1	20
8428063	Moisture	2022/12/30							8.6	20
8428232	Moisture	2022/12/30							4.7	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
8429197	Benzene	2023/01/02	85	50 - 140	77	50 - 140	<0.020	ug/g	NC	50
8429197	Ethylbenzene	2023/01/02	97	50 - 140	87	50 - 140	<0.020	ug/g	NC	50
8429197	F1 (C6-C10) - BTEX	2023/01/02					<10	ug/g	NC	30
8429197	F1 (C6-C10)	2023/01/02	94	60 - 140	86	80 - 120	<10	ug/g	NC	30
8429197	o-Xylene	2023/01/02	96	50 - 140	86	50 - 140	<0.020	ug/g	NC	50
8429197	p+m-Xylene	2023/01/02	92	50 - 140	83	50 - 140	<0.040	ug/g	NC	50
8429197	Toluene	2023/01/02	85	50 - 140	77	50 - 140	<0.020	ug/g	NC	50
8429197	Total Xylenes	2023/01/02					<0.040	ug/g	NC	50
8429693	WAD Cyanide (Free)	2023/01/03	114	75 - 125	103	80 - 120	<0.01	ug/g	NC	35
8429695	WAD Cyanide (Free)	2023/01/03	99	75 - 125	103	80 - 120	<0.01	ug/g	NC	35
8429699	F2 (C10-C16 Hydrocarbons)	2023/01/03	93	60 - 130	92	80 - 120	<10	ug/g	NC	30
8429699	F3 (C16-C34 Hydrocarbons)	2023/01/03	97	60 - 130	97	80 - 120	<50	ug/g	NC	30
8429699	F4 (C34-C50 Hydrocarbons)	2023/01/03	98	60 - 130	97	80 - 120	<50	ug/g	NC	30
8429742	Chromium (VI)	2023/01/03	89	70 - 130	93	80 - 120	<0.18	ug/g	NC	35
8429860	Acid Extractable Antimony (Sb)	2023/01/03	89	75 - 125	100	80 - 120	<0.20	ug/g	NC	30
8429860	Acid Extractable Arsenic (As)	2023/01/03	95	75 - 125	102	80 - 120	<1.0	ug/g	2.0	30
8429860	Acid Extractable Barium (Ba)	2023/01/03	NC	75 - 125	106	80 - 120	<0.50	ug/g	1.4	30
8429860	Acid Extractable Beryllium (Be)	2023/01/03	94	75 - 125	100	80 - 120	<0.20	ug/g	3.8	30
8429860	Acid Extractable Boron (B)	2023/01/03	91	75 - 125	95	80 - 120	<5.0	ug/g	4.4	30
8429860	Acid Extractable Cadmium (Cd)	2023/01/03	94	75 - 125	100	80 - 120	<0.10	ug/g	NC	30
8429860	Acid Extractable Chromium (Cr)	2023/01/03	95	75 - 125	102	80 - 120	<1.0	ug/g	3.8	30
8429860	Acid Extractable Cobalt (Co)	2023/01/03	93	75 - 125	102	80 - 120	<0.10	ug/g	3.0	30
8429860	Acid Extractable Copper (Cu)	2023/01/03	89	75 - 125	102	80 - 120	<0.50	ug/g	4.0	30
8429860	Acid Extractable Lead (Pb)	2023/01/03	95	75 - 125	101	80 - 120	<1.0	ug/g	0.21	30
8429860	Acid Extractable Mercury (Hg)	2023/01/03	88	75 - 125	92	80 - 120	<0.050	ug/g	NC	30
8429860	Acid Extractable Molybdenum (Mo)	2023/01/03	97	75 - 125	101	80 - 120	<0.50	ug/g	NC	30
8429860	Acid Extractable Nickel (Ni)	2023/01/03	92	75 - 125	104	80 - 120	<0.50	ug/g	2.7	30
8429860	Acid Extractable Selenium (Se)	2023/01/03	94	75 - 125	102	80 - 120	<0.50	ug/g	NC	30
8429860	Acid Extractable Silver (Ag)	2023/01/03	94	75 - 125	101	80 - 120	<0.20	ug/g	NC	30
8429860	Acid Extractable Thallium (Tl)	2023/01/03	94	75 - 125	101	80 - 120	<0.050	ug/g	14	30
8429860	Acid Extractable Uranium (U)	2023/01/03	95	75 - 125	99	80 - 120	<0.050	ug/g	1.1	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
8429860	Acid Extractable Vanadium (V)	2023/01/03	98	75 - 125	103	80 - 120	<5.0	ug/g	3.1	30
8429860	Acid Extractable Zinc (Zn)	2023/01/03	NC	75 - 125	98	80 - 120	<5.0	ug/g	5.5	30
8429918	Chromium (VI)	2023/01/04	86	70 - 130	91	80 - 120	<0.18	ug/g	NC	35
8429920	Hot Water Ext. Boron (B)	2023/01/04	104	75 - 125	106	75 - 125	<0.050	ug/g	4.2	40
8429945	Conductivity	2023/01/03			107	90 - 110	<0.002	mS/cm	0.12	10
8429952	Available (CaCl2) pH	2023/01/03			100	97 - 103			1.1	N/A
8430714	1-Methylnaphthalene	2023/01/04	105	50 - 130	109	50 - 130	<0.0050	ug/g	NC	40
8430714	2-Methylnaphthalene	2023/01/04	95	50 - 130	99	50 - 130	<0.0050	ug/g	NC	40
8430714	Acenaphthene	2023/01/04	99	50 - 130	105	50 - 130	<0.0050	ug/g	NC	40
8430714	Acenaphthylene	2023/01/04	93	50 - 130	101	50 - 130	<0.0050	ug/g	NC	40
8430714	Anthracene	2023/01/04	98	50 - 130	104	50 - 130	<0.0050	ug/g	NC	40
8430714	Benzo(a)anthracene	2023/01/04	97	50 - 130	100	50 - 130	<0.0050	ug/g	NC	40
8430714	Benzo(a)pyrene	2023/01/04	95	50 - 130	100	50 - 130	<0.0050	ug/g	NC	40
8430714	Benzo(b/j)fluoranthene	2023/01/04	98	50 - 130	104	50 - 130	<0.0050	ug/g	NC	40
8430714	Benzo(g,h,i)perylene	2023/01/04	108	50 - 130	121	50 - 130	<0.0050	ug/g	NC	40
8430714	Benzo(k)fluoranthene	2023/01/04	92	50 - 130	97	50 - 130	<0.0050	ug/g	NC	40
8430714	Chrysene	2023/01/04	99	50 - 130	104	50 - 130	<0.0050	ug/g	NC	40
8430714	Dibenzo(a,h)anthracene	2023/01/04	92	50 - 130	102	50 - 130	<0.0050	ug/g	NC	40
8430714	Fluoranthene	2023/01/04	94	50 - 130	102	50 - 130	<0.0050	ug/g	NC	40
8430714	Fluorene	2023/01/04	94	50 - 130	101	50 - 130	<0.0050	ug/g	NC	40
8430714	Indeno(1,2,3-cd)pyrene	2023/01/04	105	50 - 130	117	50 - 130	<0.0050	ug/g	NC	40
8430714	Naphthalene	2023/01/04	91	50 - 130	99	50 - 130	<0.0050	ug/g	NC	40
8430714	Phenanthrene	2023/01/04	98	50 - 130	103	50 - 130	<0.0050	ug/g	NC	40
8430714	Pyrene	2023/01/04	95	50 - 130	102	50 - 130	<0.0050	ug/g	NC	40
8430889	a-Chlordane	2023/01/04	102	50 - 130	93	50 - 130	<0.0020	ug/g	NC	40
8430889	Aldrin	2023/01/04	97	50 - 130	90	50 - 130	<0.0020	ug/g	NC	40
8430889	Aroclor 1242	2023/01/04					<0.015	ug/g	NC	40
8430889	Aroclor 1248	2023/01/04					<0.015	ug/g	NC	40
8430889	Aroclor 1254	2023/01/04					<0.015	ug/g	NC	40
8430889	Aroclor 1260	2023/01/04					<0.015	ug/g	NC	40
8430889	Dieldrin	2023/01/04	NC	50 - 130	102	50 - 130	<0.0020	ug/g	58 (1)	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
8430889	Endosulfan I (alpha)	2023/01/04	99	50 - 130	94	50 - 130	<0.0020	ug/g	NC	40
8430889	Endosulfan II (beta)	2023/01/04	71	50 - 130	87	50 - 130	<0.0020	ug/g	NC	40
8430889	Endrin	2023/01/04	60	50 - 130	92	50 - 130	<0.0020	ug/g	NC	40
8430889	g-Chlordane	2023/01/04	112	50 - 130	75	50 - 130	<0.0020	ug/g	NC	40
8430889	Heptachlor epoxide	2023/01/04	95	50 - 130	99	50 - 130	<0.0020	ug/g	20	40
8430889	Heptachlor	2023/01/04	87	50 - 130	93	50 - 130	<0.0020	ug/g	NC	40
8430889	Hexachlorobenzene	2023/01/04	96	50 - 130	89	50 - 130	<0.0020	ug/g	8.1	40
8430889	Hexachlorobutadiene	2023/01/04	90	50 - 130	89	50 - 130	<0.0020	ug/g	NC	40
8430889	Hexachloroethane	2023/01/04	65	50 - 130	70	50 - 130	<0.0020	ug/g	NC	40
8430889	Lindane	2023/01/04	84	50 - 130	90	50 - 130	<0.0020	ug/g	NC	40
8430889	Methoxychlor	2023/01/04	77	50 - 130	68	50 - 130	<0.0050	ug/g	NC	40
8430889	o,p-DDD	2023/01/04	91	50 - 130	117	50 - 130	<0.0020	ug/g	NC	40
8430889	o,p-DDE	2023/01/04	93	50 - 130	94	50 - 130	<0.0020	ug/g	NC	40
8430889	o,p-DDT	2023/01/04	95	50 - 130	120	50 - 130	<0.0020	ug/g	NC	40
8430889	p,p-DDD	2023/01/04	86	50 - 130	122	50 - 130	<0.0020	ug/g	NC	40
8430889	p,p-DDE	2023/01/04	121	50 - 130	90	50 - 130	<0.0020	ug/g	3.8	40
8430889	p,p-DDT	2023/01/04	118	50 - 130	127	50 - 130	<0.0020	ug/g	NC	40
8431533	WAD Cyanide (Free)	2023/01/04	102	75 - 125	107	80 - 120	<0.01	ug/g	NC	35
8431536	WAD Cyanide (Free)	2023/01/04	101	75 - 125	103	80 - 120	<0.01	ug/g	NC	35
8431537	Conductivity	2023/01/04			105	90 - 110	<0.002	mS/cm	1.8	10
8431569	Acid Extractable Antimony (Sb)	2023/01/04	93	75 - 125	103	80 - 120	<0.20	ug/g	5.4	30
8431569	Acid Extractable Arsenic (As)	2023/01/04	100	75 - 125	99	80 - 120	<1.0	ug/g	4.8	30
8431569	Acid Extractable Barium (Ba)	2023/01/04	NC	75 - 125	95	80 - 120	<0.50	ug/g	0.016	30
8431569	Acid Extractable Beryllium (Be)	2023/01/04	101	75 - 125	104	80 - 120	<0.20	ug/g	5.7	30
8431569	Acid Extractable Boron (B)	2023/01/04	101	75 - 125	103	80 - 120	<5.0	ug/g	2.6	30
8431569	Acid Extractable Cadmium (Cd)	2023/01/04	99	75 - 125	99	80 - 120	<0.10	ug/g	7.6	30
8431569	Acid Extractable Chromium (Cr)	2023/01/04	99	75 - 125	98	80 - 120	<1.0	ug/g		
8431569	Acid Extractable Cobalt (Co)	2023/01/04	96	75 - 125	98	80 - 120	<0.10	ug/g	2.6	30
8431569	Acid Extractable Copper (Cu)	2023/01/04	NC	75 - 125	101	80 - 120	<0.50	ug/g	2.2	30
8431569	Acid Extractable Lead (Pb)	2023/01/04	NC	75 - 125	106	80 - 120	<1.0	ug/g	4.0	30
8431569	Acid Extractable Mercury (Hg)	2023/01/04	92	75 - 125	93	80 - 120	<0.050	ug/g	4.5	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
8431569	Acid Extractable Molybdenum (Mo)	2023/01/04	99	75 - 125	100	80 - 120	<0.50	ug/g	5.3	30
8431569	Acid Extractable Nickel (Ni)	2023/01/04	NC	75 - 125	100	80 - 120	<0.50	ug/g	2.2	30
8431569	Acid Extractable Selenium (Se)	2023/01/04	97	75 - 125	101	80 - 120	<0.50	ug/g	4.3	30
8431569	Acid Extractable Silver (Ag)	2023/01/04	100	75 - 125	102	80 - 120	<0.20	ug/g	7.9	30
8431569	Acid Extractable Thallium (Tl)	2023/01/04	102	75 - 125	110	80 - 120	<0.050	ug/g		
8431569	Acid Extractable Uranium (U)	2023/01/04	102	75 - 125	106	80 - 120	<0.050	ug/g	1.5	30
8431569	Acid Extractable Vanadium (V)	2023/01/04	91	75 - 125	95	80 - 120	<5.0	ug/g	3.3	30
8431569	Acid Extractable Zinc (Zn)	2023/01/04	NC	75 - 125	98	80 - 120	<5.0	ug/g	2.2	30
8431580	Hot Water Ext. Boron (B)	2023/01/04	106	75 - 125	106	75 - 125	<0.050	ug/g	4.7	40
8431677	Chromium (VI)	2023/01/05	89	70 - 130	92	80 - 120	<0.18	ug/g	NC	35
8431686	Chromium (VI)	2023/01/05	80	70 - 130	88	80 - 120	<0.18	ug/g	NC	35
8431789	Available (CaCl2) pH	2023/01/04			100	97 - 103			1.1	N/A
8432992	a-Chlordane	2023/01/05	97	50 - 130	94	50 - 130	<0.0020	ug/g	NC	40
8432992	Aldrin	2023/01/05	86	50 - 130	81	50 - 130	<0.0020	ug/g	NC	40
8432992	Aroclor 1242	2023/01/05					<0.015	ug/g	NC	40
8432992	Aroclor 1248	2023/01/05					<0.015	ug/g	NC	40
8432992	Aroclor 1254	2023/01/05					<0.015	ug/g	NC	40
8432992	Aroclor 1260	2023/01/05					<0.015	ug/g	NC	40
8432992	Dieldrin	2023/01/05	124	50 - 130	117	50 - 130	<0.0020	ug/g	NC	40
8432992	Endosulfan I (alpha)	2023/01/05	112	50 - 130	117	50 - 130	<0.0020	ug/g	NC	40
8432992	Endosulfan II (beta)	2023/01/05	109	50 - 130	101	50 - 130	<0.0020	ug/g	NC	40
8432992	Endrin	2023/01/05	119	50 - 130	110	50 - 130	<0.0020	ug/g	NC	40
8432992	g-Chlordane	2023/01/05	102	50 - 130	100	50 - 130	<0.0020	ug/g	NC	40
8432992	Heptachlor epoxide	2023/01/05	108	50 - 130	103	50 - 130	<0.0020	ug/g	NC	40
8432992	Heptachlor	2023/01/05	98	50 - 130	88	50 - 130	<0.0020	ug/g	NC	40
8432992	Hexachlorobenzene	2023/01/05	90	50 - 130	88	50 - 130	<0.0020	ug/g	NC	40
8432992	Hexachlorobutadiene	2023/01/05	87	50 - 130	87	50 - 130	<0.0020	ug/g	NC	40
8432992	Hexachloroethane	2023/01/05	65	50 - 130	66	50 - 130	<0.0020	ug/g	NC	40
8432992	Lindane	2023/01/05	96	50 - 130	96	50 - 130	<0.0020	ug/g	NC	40
8432992	Methoxychlor	2023/01/05	126	50 - 130	120	50 - 130	<0.0050	ug/g	NC	40
8432992	o,p-DDD	2023/01/05	119	50 - 130	109	50 - 130	<0.0020	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
8432992	o,p-DDE	2023/01/05	99	50 - 130	89	50 - 130	<0.0020	ug/g	NC	40
8432992	o,p-DDT	2023/01/05	117	50 - 130	103	50 - 130	<0.0020	ug/g	NC	40
8432992	p,p-DDD	2023/01/05	116	50 - 130	106	50 - 130	<0.0020	ug/g	NC	40
8432992	p,p-DDE	2023/01/05	99	50 - 130	96	50 - 130	<0.0020	ug/g	NC	40
8432992	p,p-DDT	2023/01/05	129	50 - 130	116	50 - 130	<0.0020	ug/g	NC	40

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

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

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Phone: 905-817-5700 Fax: 905-817-5779 Toll Free: 800-563-6266

CHAIN OF CUSTODY RECORD

ENV COC - 00014v2

16-Jan-23 12:09
Ashton Gibson
C313303

SWP ENV-726

Invoice Information		Report Information (if differs from invoice)		Project Information	
Invoice to (requires report) ☐					
Company :	DS Consultants Ltd.	Company:	DS Consultants Ltd	Quotation #:	
Contact Name:	Bindu Goel	Contact Name:	Efrange Khumbah	P.O. #/ AFE#:	
Street Address:	6221 Hwy 7, Unit 16	Street Address:	6221 Hwy 7, Unit 16	Project #:	22-390-100
City: Vaughan Prov: ON Postal Code: L4H0K8		City: Vaughan Prov: ON Postal Code: L4H0K8		Site #:	12455 Creditview Rd
Phone:	905-264-9393	Phone:	905-264-9393	Site Location:	Caledon
Email:	accounting@dsconsultants.ca	Email:	ekhumbah@dsconsultants.ca	Site Location Province:	Ontario
Copies:		Copies:	omar.jaffer@dsconsultants.ca	Sampled By:	Omar J

Regulatory Criteria

REG 153: ☐ Table 1 ☑ Table 2 ☐ Table 3 ☐ Table ____ | ☑ Res/Park ☐ Ind/Comm ☐ Agri/other | ☐ Med/Fine ☑ Course ☐ For RSC

OTHER: ☐ CCME ☐ Reg 558* *min 3 day TAT ☐ MISA ☐ PWQO | ☐ Reg 406, Table: ____ ☐ Sanitary Sewer Bylaw ☐ Storm Sewer Bylaw Municipality ____ ☐ Other:

Include Criteria on Certificate of Analysis (check if yes): ☑

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

	Sample Identification	Date Sampled YY	MM	DD	Time (24hr) HH	MM	Matrix	1 FIELD FILTERED	2 FIELD PRESERVED	3 LAB FILTRATION REQUIRED	4 BTEX/ F1	5 F2 - F4	6 VOCs	7 Reg 153 metals and inorganics	8 Reg 153 ICPMS metals	9 Reg 153 metals (Hg, Cr VI, ICPMS metals, HWS - B)	10 PAHs	11 OCPs	12 SPLP Metals and Hydrides	13 PCBs	14	15	16	17	18	19	20	21 # OF CONTAINERS SUBMITTED	22 HOLD - DO NOT ANALYZE
1	MW22-1	23	01	16	AM		GW	X			X	X	X	X			X											9	
2	DUP-1	↓	↓	↓	↓		↓	X						X														5	
3	Trip Blank	↓	↓	↓	↓		↓						X															2	
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Regular Turnaround Time (TAT)
☑ 5 to 7 Day ☐ 10 Day

Rush Turnaround Time (TAT) Surcharges apply
☐ Same Day ☐ 1 Day ☐ 2 Day ☐ 3 Day ☐ 4 Day

Date Required: YY MM DD

Comments

*UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS AND CONDITIONS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/TERMS-AND-CONDITIONS OR BY CALLING THE LABORATORY LISTED ABOVE TO OBTAIN A COPY

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present	✓					
Seal intact	✓					
Cooling media present	✓			11	11	11

LAB USE ONLY	Yes	No	°C	1	2	3
Seal present						
Seal intact						
Cooling media present						

LAB USE ONLY	Yes	No	°C	1	2	3	Temperature reading by:
Seal present							
Seal intact							
Cooling media present							

	Relinquished by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Received by: (Signature/ Print)	Date YY	MM	DD	Time HH	MM	Special Instructions
1	Omar J	23	01	16	12	07							
2													

Your Project #: 22-390-100
Site#: CALEDON
Site Location: 12455 CREDITVIEW RD
Your C.O.C. #: n/a

Attention: Efuange Khumbah

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

Report Date: 2023/01/23
Report #: R7481414
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C313303
Received: 2023/01/16, 12:09

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Methylnaphthalene Sum	1	N/A	2023/01/18	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum	2	N/A	2023/01/19		EPA 8260C m
Chloride by Automated Colourimetry	2	N/A	2023/01/19	CAM SOP-00463	SM 23 4500-Cl E m
Chromium (VI) in Water	2	N/A	2023/01/18	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	2	N/A	2023/01/16	CAM SOP-00457	OMOE E3015 m
Petroleum Hydrocarbons F2-F4 in Water (1)	1	2023/01/17	2023/01/18	CAM SOP-00316	CCME PHC-CWS m
Mercury	2	2023/01/17	2023/01/17	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	2	N/A	2023/01/17	CAM SOP-00447	EPA 6020B m
PAH Compounds in Water by GC/MS (SIM)	1	2023/01/17	2023/01/18	CAM SOP-00318	EPA 8270E
Volatile Organic Compounds and F1 PHCs	1	N/A	2023/01/19	CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds in Water	1	N/A	2023/01/18	CAM SOP-00228	EPA 8260C m

Remarks:

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

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

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

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

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

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Your Project #: 22-390-100
Site#: CALEDON
Site Location: 12455 CREDITVIEW RD
Your C.O.C. #: n/a

Attention: Efuange Khumbah

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

Report Date: 2023/01/23
Report #: R7481414
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C313303

Received: 2023/01/16, 12:09

* 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

Bureau Veritas
23 Jan 2023 17:42:02

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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Bureau Veritas Job #: C313303
Report Date: 2023/01/23

DS Consultants Limited
Client Project #: 22-390-100
Site Location: 12455 CREDITVIEW RD
Sampler Initials: OJ

O.REG 153 METALS & INORGANICS PKG (WTR)

Bureau Veritas ID			UUT659	UUT660			UUT660		
Sampling Date			2023/01/16	2023/01/16			2023/01/16		
COC Number			n/a	n/a			n/a		
	UNITS	Criteria	MW 22-1	DUP-1	RDL	QC Batch	DUP-1 Lab-Dup	RDL	QC Batch
Inorganics									
WAD Cyanide (Free)	ug/L	66	<1	<1	1	8450838			
Dissolved Chloride (Cl-)	mg/L	790	15	15	1.0	8453915			
Metals									
Chromium (VI)	ug/L	25	<0.50	<0.50	0.50	8456252			
Mercury (Hg)	ug/L	0.29	<0.10	<0.10	0.10	8453334	<0.10	0.10	8453334
Dissolved Antimony (Sb)	ug/L	6.0	<0.50	<0.50	0.50	8453410			
Dissolved Arsenic (As)	ug/L	25	5.5	6.0	1.0	8453410			
Dissolved Barium (Ba)	ug/L	1000	140	150	2.0	8453410			
Dissolved Beryllium (Be)	ug/L	4.0	<0.40	<0.40	0.40	8453410			
Dissolved Boron (B)	ug/L	5000	51	49	10	8453410			
Dissolved Cadmium (Cd)	ug/L	2.7	<0.090	<0.090	0.090	8453410			
Dissolved Chromium (Cr)	ug/L	50	<5.0	<5.0	5.0	8453410			
Dissolved Cobalt (Co)	ug/L	3.8	<0.50	<0.50	0.50	8453410			
Dissolved Copper (Cu)	ug/L	87	<0.90	<0.90	0.90	8453410			
Dissolved Lead (Pb)	ug/L	10	<0.50	<0.50	0.50	8453410			
Dissolved Molybdenum (Mo)	ug/L	70	0.73	0.79	0.50	8453410			
Dissolved Nickel (Ni)	ug/L	100	<1.0	48	1.0	8453410			
Dissolved Selenium (Se)	ug/L	10	<2.0	<2.0	2.0	8453410			
Dissolved Silver (Ag)	ug/L	1.5	<0.090	<0.090	0.090	8453410			
Dissolved Sodium (Na)	ug/L	490000	6900	6800	100	8453410			
Dissolved Thallium (Tl)	ug/L	2.0	<0.050	<0.050	0.050	8453410			
Dissolved Uranium (U)	ug/L	20	<0.10	<0.10	0.10	8453410			
Dissolved Vanadium (V)	ug/L	6.2	<0.50	<0.50	0.50	8453410			
Dissolved Zinc (Zn)	ug/L	1100	<5.0	<5.0	5.0	8453410			

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 #: C313303
Report Date: 2023/01/23

DS Consultants Limited
Client Project #: 22-390-100
Site Location: 12455 CREDITVIEW RD
Sampler Initials: OJ

O.REG 153 PAHS (WATER)

Bureau Veritas ID			UUT659		
Sampling Date			2023/01/16		
COC Number			n/a		
	UNITS	Criteria	MW 22-1	RDL	QC Batch
Calculated Parameters					
Methylnaphthalene, 2-(1-)	ug/L	3.2	<0.071	0.071	8451566
Polyaromatic Hydrocarbons					
Acenaphthene	ug/L	4.1	<0.050	0.050	8453912
Acenaphthylene	ug/L	1	<0.050	0.050	8453912
Anthracene	ug/L	2.4	<0.050	0.050	8453912
Benzo(a)anthracene	ug/L	1.0	<0.050	0.050	8453912
Benzo(a)pyrene	ug/L	0.01	<0.0090	0.0090	8453912
Benzo(b/j)fluoranthene	ug/L	0.1	<0.050	0.050	8453912
Benzo(g,h,i)perylene	ug/L	0.2	<0.050	0.050	8453912
Benzo(k)fluoranthene	ug/L	0.1	<0.050	0.050	8453912
Chrysene	ug/L	0.1	<0.050	0.050	8453912
Dibenzo(a,h)anthracene	ug/L	0.2	<0.050	0.050	8453912
Fluoranthene	ug/L	0.41	<0.050	0.050	8453912
Fluorene	ug/L	120	<0.050	0.050	8453912
Indeno(1,2,3-cd)pyrene	ug/L	0.2	<0.050	0.050	8453912
1-Methylnaphthalene	ug/L	3.2	<0.050	0.050	8453912
2-Methylnaphthalene	ug/L	3.2	<0.050	0.050	8453912
Naphthalene	ug/L	11	<0.050	0.050	8453912
Phenanthrene	ug/L	1	<0.030	0.030	8453912
Pyrene	ug/L	4.1	<0.050	0.050	8453912
Surrogate Recovery (%)					
D10-Anthracene	%	-	100		8453912
D14-Terphenyl (FS)	%	-	100		8453912
D8-Acenaphthylene	%	-	105		8453912

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			UUT659			UUT659		
Sampling Date			2023/01/16			2023/01/16		
COC Number			n/a			n/a		
	UNITS	Criteria	MW 22-1	RDL	QC Batch	MW 22-1 Lab-Dup	RDL	QC Batch
Calculated Parameters								
1,3-Dichloropropene (cis+trans)	ug/L	0.5	<0.50	0.50	8451426			
Volatile Organics								
Acetone (2-Propanone)	ug/L	2700	<10	10	8453264	<10	10	8453264
Benzene	ug/L	5.0	<0.17	0.17	8453264	<0.17	0.17	8453264
Bromodichloromethane	ug/L	16.0	<0.50	0.50	8453264	<0.50	0.50	8453264
Bromoform	ug/L	25.0	<1.0	1.0	8453264	<1.0	1.0	8453264
Bromomethane	ug/L	0.89	<0.50	0.50	8453264	<0.50	0.50	8453264
Carbon Tetrachloride	ug/L	0.79	<0.20	0.20	8453264	<0.20	0.20	8453264
Chlorobenzene	ug/L	30	<0.20	0.20	8453264	<0.20	0.20	8453264
Chloroform	ug/L	2.4	<0.20	0.20	8453264	<0.20	0.20	8453264
Dibromochloromethane	ug/L	25.0	<0.50	0.50	8453264	<0.50	0.50	8453264
1,2-Dichlorobenzene	ug/L	3.0	<0.50	0.50	8453264	<0.50	0.50	8453264
1,3-Dichlorobenzene	ug/L	59	<0.50	0.50	8453264	<0.50	0.50	8453264
1,4-Dichlorobenzene	ug/L	1.0	<0.50	0.50	8453264	<0.50	0.50	8453264
Dichlorodifluoromethane (FREON 12)	ug/L	590	<1.0	1.0	8453264	<1.0	1.0	8453264
1,1-Dichloroethane	ug/L	5	<0.20	0.20	8453264	<0.20	0.20	8453264
1,2-Dichloroethane	ug/L	1.6	<0.50	0.50	8453264	<0.50	0.50	8453264
1,1-Dichloroethylene	ug/L	1.6	<0.20	0.20	8453264	<0.20	0.20	8453264
cis-1,2-Dichloroethylene	ug/L	1.6	<0.50	0.50	8453264	<0.50	0.50	8453264
trans-1,2-Dichloroethylene	ug/L	1.6	<0.50	0.50	8453264	<0.50	0.50	8453264
1,2-Dichloropropane	ug/L	5.0	<0.20	0.20	8453264	<0.20	0.20	8453264
cis-1,3-Dichloropropene	ug/L	0.5	<0.30	0.30	8453264	<0.30	0.30	8453264
trans-1,3-Dichloropropene	ug/L	0.5	<0.40	0.40	8453264	<0.40	0.40	8453264
Ethylbenzene	ug/L	2.4	<0.20	0.20	8453264	<0.20	0.20	8453264
Ethylene Dibromide	ug/L	0.2	<0.20	0.20	8453264	<0.20	0.20	8453264
Hexane	ug/L	51	<1.0	1.0	8453264	<1.0	1.0	8453264
Methylene Chloride(Dichloromethane)	ug/L	50	<2.0	2.0	8453264	<2.0	2.0	8453264

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

Bureau Veritas ID			UUT659			UUT659		
Sampling Date			2023/01/16			2023/01/16		
COC Number			n/a			n/a		
	UNITS	Criteria	MW 22-1	RDL	QC Batch	MW 22-1 Lab-Dup	RDL	QC Batch
Methyl Ethyl Ketone (2-Butanone)	ug/L	1800	<10	10	8453264	<10	10	8453264
Methyl Isobutyl Ketone	ug/L	640	<5.0	5.0	8453264	<5.0	5.0	8453264
Methyl t-butyl ether (MTBE)	ug/L	15	<0.50	0.50	8453264	<0.50	0.50	8453264
Styrene	ug/L	5.4	<0.50	0.50	8453264	<0.50	0.50	8453264
1,1,1,2-Tetrachloroethane	ug/L	1.1	<0.50	0.50	8453264	<0.50	0.50	8453264
1,1,2,2-Tetrachloroethane	ug/L	1.0	<0.50	0.50	8453264	<0.50	0.50	8453264
Tetrachloroethylene	ug/L	1.6	<0.20	0.20	8453264	<0.20	0.20	8453264
Toluene	ug/L	24	0.48	0.20	8453264	0.44	0.20	8453264
1,1,1-Trichloroethane	ug/L	200	<0.20	0.20	8453264	<0.20	0.20	8453264
1,1,2-Trichloroethane	ug/L	4.7	<0.50	0.50	8453264	<0.50	0.50	8453264
Trichloroethylene	ug/L	1.6	<0.20	0.20	8453264	<0.20	0.20	8453264
Trichlorofluoromethane (FREON 11)	ug/L	150	<0.50	0.50	8453264	<0.50	0.50	8453264
Vinyl Chloride	ug/L	0.5	<0.20	0.20	8453264	<0.20	0.20	8453264
p+m-Xylene	ug/L	-	<0.20	0.20	8453264	<0.20	0.20	8453264
o-Xylene	ug/L	-	<0.20	0.20	8453264	<0.20	0.20	8453264
Total Xylenes	ug/L	300	<0.20	0.20	8453264	<0.20	0.20	8453264
F1 (C6-C10)	ug/L	750	<25	25	8453264	<25	25	8453264
F1 (C6-C10) - BTEX	ug/L	750	<25	25	8453264	<25	25	8453264
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/L	150	<100	100	8453921			
F3 (C16-C34 Hydrocarbons)	ug/L	500	<200	200	8453921			
F4 (C34-C50 Hydrocarbons)	ug/L	500	<200	200	8453921			
Reached Baseline at C50	ug/L	-	Yes		8453921			
Surrogate Recovery (%)								
o-Terphenyl	%	-	97		8453921			
4-Bromofluorobenzene	%	-	95		8453264	96		8453264
D4-1,2-Dichloroethane	%	-	100		8453264	103		8453264
D8-Toluene	%	-	95		8453264	94		8453264

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

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

Bureau Veritas Job #: C313303
Report Date: 2023/01/23

DS Consultants Limited
Client Project #: 22-390-100
Site Location: 12455 CREDITVIEW RD
Sampler Initials: OJ

O.REG 153 VOCS BY HS (WATER)

Bureau Veritas ID			UUT661		
Sampling Date			2023/01/16		
COC Number			n/a		
	UNITS	Criteria	TRIP BLANK	RDL	QC Batch
Calculated Parameters					
1,3-Dichloropropene (cis+trans)	ug/L	0.5	<0.50	0.50	8451426
Volatile Organics					
Acetone (2-Propanone)	ug/L	2700	<10	10	8453082
Benzene	ug/L	5.0	<0.20	0.20	8453082
Bromodichloromethane	ug/L	16.0	<0.50	0.50	8453082
Bromoform	ug/L	25.0	<1.0	1.0	8453082
Bromomethane	ug/L	0.89	<0.50	0.50	8453082
Carbon Tetrachloride	ug/L	0.79	<0.19	0.19	8453082
Chlorobenzene	ug/L	30	<0.20	0.20	8453082
Chloroform	ug/L	2.4	<0.20	0.20	8453082
Dibromochloromethane	ug/L	25.0	<0.50	0.50	8453082
1,2-Dichlorobenzene	ug/L	3.0	<0.40	0.40	8453082
1,3-Dichlorobenzene	ug/L	59	<0.40	0.40	8453082
1,4-Dichlorobenzene	ug/L	1.0	<0.40	0.40	8453082
Dichlorodifluoromethane (FREON 12)	ug/L	590	<1.0	1.0	8453082
1,1-Dichloroethane	ug/L	5	<0.20	0.20	8453082
1,2-Dichloroethane	ug/L	1.6	<0.49	0.49	8453082
1,1-Dichloroethylene	ug/L	1.6	<0.20	0.20	8453082
cis-1,2-Dichloroethylene	ug/L	1.6	<0.50	0.50	8453082
trans-1,2-Dichloroethylene	ug/L	1.6	<0.50	0.50	8453082
1,2-Dichloropropane	ug/L	5.0	<0.20	0.20	8453082
cis-1,3-Dichloropropene	ug/L	0.5	<0.30	0.30	8453082
trans-1,3-Dichloropropene	ug/L	0.5	<0.40	0.40	8453082
Ethylbenzene	ug/L	2.4	<0.20	0.20	8453082
Ethylene Dibromide	ug/L	0.2	<0.19	0.19	8453082
Hexane	ug/L	51	<1.0	1.0	8453082
Methylene Chloride(Dichloromethane)	ug/L	50	<2.0	2.0	8453082

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 (WATER)

Bureau Veritas ID			UUT661		
Sampling Date			2023/01/16		
COC Number			n/a		
	UNITS	Criteria	TRIP BLANK	RDL	QC Batch
Methyl Ethyl Ketone (2-Butanone)	ug/L	1800	<10	10	8453082
Methyl Isobutyl Ketone	ug/L	640	<5.0	5.0	8453082
Methyl t-butyl ether (MTBE)	ug/L	15	<0.50	0.50	8453082
Styrene	ug/L	5.4	<0.40	0.40	8453082
1,1,1,2-Tetrachloroethane	ug/L	1.1	<0.50	0.50	8453082
1,1,2,2-Tetrachloroethane	ug/L	1.0	<0.40	0.40	8453082
Tetrachloroethylene	ug/L	1.6	<0.20	0.20	8453082
Toluene	ug/L	24	<0.20	0.20	8453082
1,1,1-Trichloroethane	ug/L	200	<0.20	0.20	8453082
1,1,2-Trichloroethane	ug/L	4.7	<0.40	0.40	8453082
Trichloroethylene	ug/L	1.6	<0.20	0.20	8453082
Trichlorofluoromethane (FREON 11)	ug/L	150	<0.50	0.50	8453082
Vinyl Chloride	ug/L	0.5	<0.20	0.20	8453082
p+m-Xylene	ug/L	-	<0.20	0.20	8453082
o-Xylene	ug/L	-	<0.20	0.20	8453082
Total Xylenes	ug/L	300	<0.20	0.20	8453082
Surrogate Recovery (%)					
4-Bromofluorobenzene	%	-	93		8453082
D4-1,2-Dichloroethane	%	-	101		8453082
D8-Toluene	%	-	99		8453082

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 #: C313303
Report Date: 2023/01/23

DS Consultants Limited
Client Project #: 22-390-100
Site Location: 12455 CREDITVIEW RD
Sampler Initials: OJ

TEST SUMMARY

Bureau Veritas ID: UUT659
Sample ID: MW 22-1
Matrix: Water

Collected: 2023/01/16
Shipped:
Received: 2023/01/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8451566	N/A	2023/01/18	Automated Statchk
1,3-Dichloropropene Sum	CALC	8451426	N/A	2023/01/19	Automated Statchk
Chloride by Automated Colourimetry	KONE	8453915	N/A	2023/01/19	Samuel Law
Chromium (VI) in Water	IC	8456252	N/A	2023/01/18	Theodora Luck
Free (WAD) Cyanide	SKAL/CN	8450838	N/A	2023/01/16	Prgya Panchal
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8453921	2023/01/17	2023/01/18	Emir Danisman
Mercury	CV/AA	8453334	2023/01/17	2023/01/17	Indira HarryPaul
Dissolved Metals by ICPMS	ICP/MS	8453410	N/A	2023/01/17	Azita Fazaeli
PAH Compounds in Water by GC/MS (SIM)	GC/MS	8453912	2023/01/17	2023/01/18	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8453264	N/A	2023/01/19	Xueming Jiang

Bureau Veritas ID: UUT659 Dup
Sample ID: MW 22-1
Matrix: Water

Collected: 2023/01/16
Shipped:
Received: 2023/01/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8453264	N/A	2023/01/19	Xueming Jiang

Bureau Veritas ID: UUT660
Sample ID: DUP-1
Matrix: Water

Collected: 2023/01/16
Shipped:
Received: 2023/01/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	KONE	8453915	N/A	2023/01/19	Samuel Law
Chromium (VI) in Water	IC	8456252	N/A	2023/01/18	Theodora Luck
Free (WAD) Cyanide	SKAL/CN	8450838	N/A	2023/01/16	Prgya Panchal
Mercury	CV/AA	8453334	2023/01/17	2023/01/17	Indira HarryPaul
Dissolved Metals by ICPMS	ICP/MS	8453410	N/A	2023/01/17	Azita Fazaeli

Bureau Veritas ID: UUT660 Dup
Sample ID: DUP-1
Matrix: Water

Collected: 2023/01/16
Shipped:
Received: 2023/01/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8453334	2023/01/17	2023/01/17	Indira HarryPaul

Bureau Veritas ID: UUT661
Sample ID: TRIP BLANK
Matrix: Water

Collected: 2023/01/16
Shipped:
Received: 2023/01/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8451426	N/A	2023/01/19	Automated Statchk
Volatile Organic Compounds in Water	GC/MS	8453082	N/A	2023/01/18	Narayan Ghimire

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GENERAL COMMENTS

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

Package 1	11.0°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
8453082	4-Bromofluorobenzene	2023/01/18	93	70 - 130	94	70 - 130	92	%		
8453082	D4-1,2-Dichloroethane	2023/01/18	103	70 - 130	98	70 - 130	99	%		
8453082	D8-Toluene	2023/01/18	99	70 - 130	100	70 - 130	100	%		
8453264	4-Bromofluorobenzene	2023/01/18	100	70 - 130	100	70 - 130	96	%		
8453264	D4-1,2-Dichloroethane	2023/01/18	101	70 - 130	96	70 - 130	101	%		
8453264	D8-Toluene	2023/01/18	99	70 - 130	102	70 - 130	95	%		
8453912	D10-Anthracene	2023/01/17	101	50 - 130	102	50 - 130	103	%		
8453912	D14-Terphenyl (FS)	2023/01/17	99	50 - 130	108	50 - 130	107	%		
8453912	D8-Acenaphthylene	2023/01/17	107	50 - 130	109	50 - 130	109	%		
8453921	o-Terphenyl	2023/01/17	98	60 - 130	99	60 - 130	96	%		
8450838	WAD Cyanide (Free)	2023/01/16	101	80 - 120	102	80 - 120	<1	ug/L	NC	20
8453082	1,1,1,2-Tetrachloroethane	2023/01/18	93	70 - 130	93	70 - 130	<0.50	ug/L	NC	30
8453082	1,1,1-Trichloroethane	2023/01/18	95	70 - 130	97	70 - 130	<0.20	ug/L	NC	30
8453082	1,1,2,2-Tetrachloroethane	2023/01/18	96	70 - 130	91	70 - 130	<0.40	ug/L	NC	30
8453082	1,1,2-Trichloroethane	2023/01/18	97	70 - 130	93	70 - 130	<0.40	ug/L	NC	30
8453082	1,1-Dichloroethane	2023/01/18	89	70 - 130	88	70 - 130	<0.20	ug/L	NC	30
8453082	1,1-Dichloroethylene	2023/01/18	94	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
8453082	1,2-Dichlorobenzene	2023/01/18	96	70 - 130	92	70 - 130	<0.40	ug/L	NC	30
8453082	1,2-Dichloroethane	2023/01/18	93	70 - 130	89	70 - 130	<0.49	ug/L	NC	30
8453082	1,2-Dichloropropane	2023/01/18	92	70 - 130	91	70 - 130	<0.20	ug/L	NC	30
8453082	1,3-Dichlorobenzene	2023/01/18	95	70 - 130	92	70 - 130	<0.40	ug/L	NC	30
8453082	1,4-Dichlorobenzene	2023/01/18	109	70 - 130	106	70 - 130	<0.40	ug/L	NC	30
8453082	Acetone (2-Propanone)	2023/01/18	100	60 - 140	90	60 - 140	<10	ug/L	NC	30
8453082	Benzene	2023/01/18	87	70 - 130	87	70 - 130	<0.20	ug/L	NC	30
8453082	Bromodichloromethane	2023/01/18	97	70 - 130	96	70 - 130	<0.50	ug/L	NC	30
8453082	Bromoform	2023/01/18	98	70 - 130	94	70 - 130	<1.0	ug/L	NC	30
8453082	Bromomethane	2023/01/18	99	60 - 140	95	60 - 140	<0.50	ug/L	NC	30
8453082	Carbon Tetrachloride	2023/01/18	93	70 - 130	95	70 - 130	<0.19	ug/L	NC	30
8453082	Chlorobenzene	2023/01/18	95	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
8453082	Chloroform	2023/01/18	96	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
8453082	cis-1,2-Dichloroethylene	2023/01/18	100	70 - 130	99	70 - 130	<0.50	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
8453082	cis-1,3-Dichloropropene	2023/01/18	95	70 - 130	88	70 - 130	<0.30	ug/L	NC	30
8453082	Dibromochloromethane	2023/01/18	96	70 - 130	93	70 - 130	<0.50	ug/L	NC	30
8453082	Dichlorodifluoromethane (FREON 12)	2023/01/18	108	60 - 140	112	60 - 140	<1.0	ug/L	NC	30
8453082	Ethylbenzene	2023/01/18	87	70 - 130	88	70 - 130	<0.20	ug/L	NC	30
8453082	Ethylene Dibromide	2023/01/18	94	70 - 130	90	70 - 130	<0.19	ug/L	NC	30
8453082	Hexane	2023/01/18	90	70 - 130	92	70 - 130	<1.0	ug/L	NC	30
8453082	Methyl Ethyl Ketone (2-Butanone)	2023/01/18	100	60 - 140	91	60 - 140	<10	ug/L	NC	30
8453082	Methyl Isobutyl Ketone	2023/01/18	92	70 - 130	86	70 - 130	<5.0	ug/L	NC	30
8453082	Methyl t-butyl ether (MTBE)	2023/01/18	89	70 - 130	88	70 - 130	<0.50	ug/L	NC	30
8453082	Methylene Chloride(Dichloromethane)	2023/01/18	100	70 - 130	97	70 - 130	<2.0	ug/L	NC	30
8453082	o-Xylene	2023/01/18	85	70 - 130	86	70 - 130	<0.20	ug/L	NC	30
8453082	p+m-Xylene	2023/01/18	90	70 - 130	91	70 - 130	<0.20	ug/L	NC	30
8453082	Styrene	2023/01/18	96	70 - 130	96	70 - 130	<0.40	ug/L	NC	30
8453082	Tetrachloroethylene	2023/01/18	87	70 - 130	89	70 - 130	<0.20	ug/L	1.8	30
8453082	Toluene	2023/01/18	90	70 - 130	90	70 - 130	<0.20	ug/L	NC	30
8453082	Total Xylenes	2023/01/18					<0.20	ug/L	NC	30
8453082	trans-1,2-Dichloroethylene	2023/01/18	94	70 - 130	95	70 - 130	<0.50	ug/L	NC	30
8453082	trans-1,3-Dichloropropene	2023/01/18	109	70 - 130	97	70 - 130	<0.40	ug/L	NC	30
8453082	Trichloroethylene	2023/01/18	99	70 - 130	101	70 - 130	<0.20	ug/L	NC	30
8453082	Trichlorofluoromethane (FREON 11)	2023/01/18	96	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
8453082	Vinyl Chloride	2023/01/18	85	70 - 130	86	70 - 130	<0.20	ug/L	NC	30
8453264	1,1,1,2-Tetrachloroethane	2023/01/19	92	70 - 130	97	70 - 130	<0.50	ug/L	NC	30
8453264	1,1,1-Trichloroethane	2023/01/19	97	70 - 130	103	70 - 130	<0.20	ug/L	NC	30
8453264	1,1,2,2-Tetrachloroethane	2023/01/19	93	70 - 130	92	70 - 130	<0.50	ug/L	NC	30
8453264	1,1,2-Trichloroethane	2023/01/19	99	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
8453264	1,1-Dichloroethane	2023/01/19	99	70 - 130	103	70 - 130	<0.20	ug/L	NC	30
8453264	1,1-Dichloroethylene	2023/01/19	99	70 - 130	106	70 - 130	<0.20	ug/L	NC	30
8453264	1,2-Dichlorobenzene	2023/01/19	89	70 - 130	92	70 - 130	<0.50	ug/L	NC	30
8453264	1,2-Dichloroethane	2023/01/19	96	70 - 130	94	70 - 130	<0.50	ug/L	NC	30
8453264	1,2-Dichloropropane	2023/01/19	99	70 - 130	101	70 - 130	<0.20	ug/L	NC	30
8453264	1,3-Dichlorobenzene	2023/01/19	87	70 - 130	91	70 - 130	<0.50	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
8453264	1,4-Dichlorobenzene	2023/01/19	100	70 - 130	103	70 - 130	<0.50	ug/L	NC	30
8453264	Acetone (2-Propanone)	2023/01/19	101	60 - 140	91	60 - 140	<10	ug/L	NC	30
8453264	Benzene	2023/01/19	95	70 - 130	99	70 - 130	<0.17	ug/L	NC	30
8453264	Bromodichloromethane	2023/01/19	96	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
8453264	Bromoform	2023/01/19	90	70 - 130	90	70 - 130	<1.0	ug/L	NC	30
8453264	Bromomethane	2023/01/19	105	60 - 140	108	60 - 140	<0.50	ug/L	NC	30
8453264	Carbon Tetrachloride	2023/01/19	95	70 - 130	103	70 - 130	<0.20	ug/L	NC	30
8453264	Chlorobenzene	2023/01/19	91	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
8453264	Chloroform	2023/01/19	99	70 - 130	102	70 - 130	<0.20	ug/L	NC	30
8453264	cis-1,2-Dichloroethylene	2023/01/19	105	70 - 130	107	70 - 130	<0.50	ug/L	NC	30
8453264	cis-1,3-Dichloropropene	2023/01/19	80	70 - 130	76	70 - 130	<0.30	ug/L	NC	30
8453264	Dibromochloromethane	2023/01/19	90	70 - 130	91	70 - 130	<0.50	ug/L	NC	30
8453264	Dichlorodifluoromethane (FREON 12)	2023/01/19	122	60 - 140	134	60 - 140	<1.0	ug/L	NC	30
8453264	Ethylbenzene	2023/01/19	79	70 - 130	85	70 - 130	<0.20	ug/L	NC	30
8453264	Ethylene Dibromide	2023/01/19	93	70 - 130	92	70 - 130	<0.20	ug/L	NC	30
8453264	F1 (C6-C10) - BTEX	2023/01/19					<25	ug/L	NC	30
8453264	F1 (C6-C10)	2023/01/19	95	60 - 140	97	60 - 140	<25	ug/L	NC	30
8453264	Hexane	2023/01/19	99	70 - 130	108	70 - 130	<1.0	ug/L	NC	30
8453264	Methyl Ethyl Ketone (2-Butanone)	2023/01/19	98	60 - 140	91	60 - 140	<10	ug/L	NC	30
8453264	Methyl Isobutyl Ketone	2023/01/19	83	70 - 130	80	70 - 130	<5.0	ug/L	NC	30
8453264	Methyl t-butyl ether (MTBE)	2023/01/19	87	70 - 130	87	70 - 130	<0.50	ug/L	NC	30
8453264	Methylene Chloride(Dichloromethane)	2023/01/19	112	70 - 130	112	70 - 130	<2.0	ug/L	NC	30
8453264	o-Xylene	2023/01/19	78	70 - 130	84	70 - 130	<0.20	ug/L	NC	30
8453264	p+m-Xylene	2023/01/19	78	70 - 130	84	70 - 130	<0.20	ug/L	NC	30
8453264	Styrene	2023/01/19	84	70 - 130	89	70 - 130	<0.50	ug/L	NC	30
8453264	Tetrachloroethylene	2023/01/19	94	70 - 130	100	70 - 130	<0.20	ug/L	NC	30
8453264	Toluene	2023/01/19	87	70 - 130	93	70 - 130	<0.20	ug/L	8.8	30
8453264	Total Xylenes	2023/01/19					<0.20	ug/L	NC	30
8453264	trans-1,2-Dichloroethylene	2023/01/19	102	70 - 130	106	70 - 130	<0.50	ug/L	NC	30
8453264	trans-1,3-Dichloropropene	2023/01/19	79	70 - 130	76	70 - 130	<0.40	ug/L	NC	30
8453264	Trichloroethylene	2023/01/19	104	70 - 130	110	70 - 130	<0.20	ug/L	NC	30

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8453264	Trichlorofluoromethane (FREON 11)	2023/01/19	102	70 - 130	110	70 - 130	<0.50	ug/L	NC	30
8453264	Vinyl Chloride	2023/01/19	99	70 - 130	105	70 - 130	<0.20	ug/L	NC	30
8453334	Mercury (Hg)	2023/01/17	101	75 - 125	88	80 - 120	<0.10	ug/L	NC	20
8453410	Dissolved Antimony (Sb)	2023/01/18	100	80 - 120	100	80 - 120	<0.50	ug/L	NC	20
8453410	Dissolved Arsenic (As)	2023/01/18	98	80 - 120	99	80 - 120	<1.0	ug/L	6.5	20
8453410	Dissolved Barium (Ba)	2023/01/18	95	80 - 120	99	80 - 120	<2.0	ug/L	2.4	20
8453410	Dissolved Beryllium (Be)	2023/01/18	94	80 - 120	97	80 - 120	<0.40	ug/L	NC	20
8453410	Dissolved Boron (B)	2023/01/18	100	80 - 120	104	80 - 120	<10	ug/L	1.1	20
8453410	Dissolved Cadmium (Cd)	2023/01/18	93	80 - 120	97	80 - 120	<0.090	ug/L	NC	20
8453410	Dissolved Chromium (Cr)	2023/01/18	96	80 - 120	97	80 - 120	<5.0	ug/L	NC	20
8453410	Dissolved Cobalt (Co)	2023/01/18	92	80 - 120	96	80 - 120	<0.50	ug/L	3.3	20
8453410	Dissolved Copper (Cu)	2023/01/18	96	80 - 120	98	80 - 120	<0.90	ug/L	NC	20
8453410	Dissolved Lead (Pb)	2023/01/18	86	80 - 120	94	80 - 120	<0.50	ug/L	NC	20
8453410	Dissolved Molybdenum (Mo)	2023/01/18	105	80 - 120	100	80 - 120	<0.50	ug/L	5.7	20
8453410	Dissolved Nickel (Ni)	2023/01/18	91	80 - 120	96	80 - 120	<1.0	ug/L	8.5	20
8453410	Dissolved Selenium (Se)	2023/01/18	95	80 - 120	99	80 - 120	<2.0	ug/L	NC	20
8453410	Dissolved Silver (Ag)	2023/01/18	81	80 - 120	98	80 - 120	<0.090	ug/L	NC	20
8453410	Dissolved Sodium (Na)	2023/01/18	NC	80 - 120	101	80 - 120	<100	ug/L	0.69	20
8453410	Dissolved Thallium (Tl)	2023/01/18	86	80 - 120	94	80 - 120	<0.050	ug/L	NC	20
8453410	Dissolved Uranium (U)	2023/01/18	95	80 - 120	99	80 - 120	<0.10	ug/L	3.6	20
8453410	Dissolved Vanadium (V)	2023/01/18	99	80 - 120	98	80 - 120	<0.50	ug/L	NC	20
8453410	Dissolved Zinc (Zn)	2023/01/18	89	80 - 120	97	80 - 120	<5.0	ug/L	NC	20
8453912	1-Methylnaphthalene	2023/01/17	90	50 - 130	92	50 - 130	<0.050	ug/L	NC	30
8453912	2-Methylnaphthalene	2023/01/17	98	50 - 130	98	50 - 130	<0.050	ug/L	NC	30
8453912	Acenaphthene	2023/01/17	106	50 - 130	107	50 - 130	<0.050	ug/L	NC	30
8453912	Acenaphthylene	2023/01/17	114	50 - 130	114	50 - 130	<0.050	ug/L	NC	30
8453912	Anthracene	2023/01/17	99	50 - 130	100	50 - 130	<0.050	ug/L	NC	30
8453912	Benzo(a)anthracene	2023/01/17	106	50 - 130	106	50 - 130	<0.050	ug/L	NC	30
8453912	Benzo(a)pyrene	2023/01/17	100	50 - 130	100	50 - 130	<0.0090	ug/L	NC	30
8453912	Benzo(b/j)fluoranthene	2023/01/17	98	50 - 130	97	50 - 130	<0.050	ug/L	NC	30
8453912	Benzo(g,h,i)perylene	2023/01/17	97	50 - 130	100	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
8453912	Benzo(k)fluoranthene	2023/01/17	91	50 - 130	91	50 - 130	<0.050	ug/L	NC	30
8453912	Chrysene	2023/01/17	103	50 - 130	102	50 - 130	<0.050	ug/L	NC	30
8453912	Dibenzo(a,h)anthracene	2023/01/17	92	50 - 130	94	50 - 130	<0.050	ug/L	NC	30
8453912	Fluoranthene	2023/01/17	101	50 - 130	110	50 - 130	<0.050	ug/L	NC	30
8453912	Fluorene	2023/01/17	108	50 - 130	108	50 - 130	<0.050	ug/L	NC	30
8453912	Indeno(1,2,3-cd)pyrene	2023/01/17	95	50 - 130	98	50 - 130	<0.050	ug/L	NC	30
8453912	Naphthalene	2023/01/17	102	50 - 130	102	50 - 130	<0.050	ug/L	NC	30
8453912	Phenanthrene	2023/01/17	105	50 - 130	106	50 - 130	<0.030	ug/L	NC	30
8453912	Pyrene	2023/01/17	100	50 - 130	108	50 - 130	<0.050	ug/L	NC	30
8453915	Dissolved Chloride (Cl-)	2023/01/19	NC	80 - 120	105	80 - 120	<1.0	mg/L	3.4	20
8453921	F2 (C10-C16 Hydrocarbons)	2023/01/18	89	60 - 130	87	60 - 130	<100	ug/L	NC	30
8453921	F3 (C16-C34 Hydrocarbons)	2023/01/18	88	60 - 130	93	60 - 130	<200	ug/L	NC	30
8453921	F4 (C34-C50 Hydrocarbons)	2023/01/18	88	60 - 130	91	60 - 130	<200	ug/L	NC	30
8456252	Chromium (VI)	2023/01/18	100	80 - 120	102	80 - 120	<0.50	ug/L	5.2	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 #: C313303
Report Date: 2023/01/23

DS Consultants Limited
Client Project #: 22-390-100
Site Location: 12455 CREDITVIEW RD
Sampler Initials: OJ

VALIDATION SIGNATURE PAGE

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

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

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

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Bureau Veritas Job #: C313303
Report Date: 2023/01/23

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Client Project #: 22-390-100
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Exceedance Summary Table – Reg153/04 T2-GW-C

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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Appendix E

Phase Two Conceptual Site Model

This Phase Two Conceptual Site Model (CSM) has been prepared for the lands associated with the municipal addresses of 12455 Creditview Road, Caledon, Ontario, hereafter referred as the "Site" or the "Phase Two Property". This Phase Two CSM was developed through a synthesis of 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 One Property Site Plan
Figure 3 – Phase One Study Area
Figure 4 – PCA within Phase One Study Area
Figure 5 – Borehole Locations Plan with APECs
Figure 6 – Groundwater Flow Direction
Figure 7A – Soil Characterization – Metals and ORPs
Figure 7B – Soil Characterization – PHCs and BTEX
Figure 7C – Soil Characterization – VOCs
Figure 7D – Soil Characterization – PAHs
Figure 7E– 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

The Phase Two Property is a 40.44-hectare (99.3 acres) parcel of land situated within a agricultural and residential neighbourhood in the Town of Caledon, Ontario. The Phase Two Property is located approximately 1.3 km (south) of the intersection of Creditview Road and Old School Road and was vacant at the time of this investigation.

The property west-central portion of the Site was occupied by a two (2) storey residential dwelling with a basement which was built in 1897. A parking garage is attached to the east wall of the building. A forested area of approximately 8.16 Hectares (20.17 Acres) is located on the north-eastern portion of the Site. The remainder of the property consisted primarily of agricultural farmland.

A Site Plan depicting the orientation of the buildings on-site and property is provided in Figure 1.

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	Part Lot 20, Concession 3 West of Hurontario Street Chinguacousy, Part 1, Plan 43r-40486; Town of Caledon	Land Registry Office
Property Identification Number (PIN)	14252-1959 (LT)	Land Registry Office
Current Site Occupants	Vacant Home- Heritage House Agricultural Land- Farmer Tenant	Phase One Site Reconnaissance Email Questionnaire
Site Area	40.44 hectares (99.93 acres)	Land Registry Office

A total of seven (7) Potentially Contaminating Activities (PCAs) were identified in the Phase One ESA, which were considered to be contributing to five (5) APECs on the Phase Two Property.

The Phase Two ESA involved the advancement of five (5) boreholes. The boreholes were advanced to a maximum depth of 6.1 metres below ground surface (mbgs) under the supervision of DS personnel. Groundwater monitoring wells were installed in one (1) of the boreholes to facilitate the collection of groundwater samples.

Soil samples were collected and submitted for analysis of all COPCs as follows:

<u>Soil Samples Submitted for Analysis:</u>

- A total of twelve (12) samples were submitted for analysis of metals and ORPs.
- A total of five (5) samples were submitted for analysis of PHCs (incl. BTEX).

- A total of three (3) samples were submitted for analysis of VOCs.
- A total of five (5) samples were submitted for analysis of PAHs.
- A total of eight (8) samples were submitted for analysis of PAHs.

Groundwater Samples Submitted for Analysis:

- A total of one (1) samples were submitted for analysis of metals and ORPs.
- A total of one (1) samples, were submitted for analysis of PHCs.
- A total of one (1) samples were submitted for analysis of VOCs.
- A total of one (1) samples were submitted for analysis of PAHs.

The analytical results of the soil and groundwater samples were compared to the Table 8 SCS: Generic Site Condition Standards for Use within 30 m of a Water Body in a Potable Ground Water Condition for Residential/Parkland/Institutional Use as contained in the April 15, 2011 Ontario Ministry of Environment, Conservation and Parks (MECP) document entitled "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act", herein referred to as the "Table 8 Standards"

The results of the chemical analyses conducted on soil samples identified exceedances of acetone and methylene chloride in soil sample DUP 1 (MW22-1 S4) and methylene Chloride in soil sample BH22-4 S4. DS recommends that additional testing be conducted to confirm the presence/absence of acetone and methylene chloride exceedances in soil sample DUP 1 (MW22-1 S4) and methylene chloride in soil sample BH22-4 S4.

The results of the chemical analyses conducted on groundwater samples indicate that the applicable Site Condition Standards have been met;

Based on the findings of this Phase Two ESA, a Record of Site Condition may be filed for the Phase Two Property if additional sampling and testing is conducted

This Phase Two Conceptual Site Model was developed through a synthesis of the information obtained through the completion of the Phase One ESA, and the data collected as part of the Phase Two ESA.

I. Description and Assessment of:

A. Areas where potentially contaminating activity has occurred

A total of seven (7) Potentially Contaminating Activities (PCAs) were identified in the Phase One study area. All PCAs identified within the Phase One Study Area are presented on **Error! Reference source not found.**

Five (5) of the PCAs were considered to be contributing to five (5) APECs on the Phase Two Property. A summary of the PCAs considered to be contributing to APECs on the Phase Two Property is provided in the table below.

PCA Item.	PCA Description (Per. Table 2, Schedule D of O.Reg. 153/04)	Description	Rationale
PCA-1	#40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	Application of pesticides on the Phase One Property for agricultural purposes.	PCA is on-Site
PCA-2	#40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	Historic presence of an Orchard (1880) on the Phase One Property and adjacent neighbouring properties	PCA is on-Site
PCA-3	#30 - Importation of Fill Material of Unknown Quality	Fill material of unknown quality is inferred to have been used for grading purposes after the barn was demolished in 2015 at the Site.	PCA is on-Site
PCA-4	#N/S – Application of de-icing agents[1]	De-icing salt may have been applied to the unpaved driveway and road along Creditview Road during winter months.	PCA is on-Site
PCA-7	#28 - Gasoline and Associated Products Storage in Fixed Tanks	Former presence of oil tank in the basement of the Site building	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 five (5) 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.

Area of Potential Environmental Concern	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Ground water, soil and/or sediment)
APEC-1	Entire Site	#40 - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	On-Site PCA-1	Metals, OC Pesticides	Soil
APEC-2	West- Central portion of the Phase One Property	#40 - Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	On-Site PCA-2	Metals, OC Pesticides	Soil
APEC 3	West- Central portion of the Phase One Property	#30 - Importation of Fill Material of Unknown Quality	On-Site PCA-3	Metals, As, Sb, Se, B-HWS, CN-,EC, Cr (IV), Hg, Low or high pH, SAR, PAHs, PHC, VOC, PCBs	Soil & Groundwater
APEC- 4	West- Central portion of the Phase One Property	#Others - Seasonal application of de-icing salts	On-Site PCA-4	EC, SAR,	Soil
				Na, Cl-,	Groundwater
APEC- 5	West- Central portion of the Phase One Property	#28 Gasoline and Associated Products Storage in Fixed Tanks	On-Site PCA-7	PHC, BTEX	Soil & Groundwater

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

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

The groundwater levels of MW22-1 were found to range between 0.61 to 1.65 mbgs, with corresponding elevations of 259.97 to 261.00 meters above sea level (masl). Buried utility services are expected to be present on the Phase Two Property and are inferred to be situated at depths ranging between 2 and 3 mbgs. The potential for preferential migration of contaminants is 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>

Topsoil material consisting of trace rootlets and organics was encountered in all boreholes advanced from the ground surface to an approximate depth of 0.6 mbgs. The material below the topsoil consisted of silty sand with trace gravel that extended to a depth of approximately 1.0 mbgs except for BH22-5. The native overburden material encountered was sandy silt till that extended to approximate depths ranging from 1.2 to 6.1 mbgs. Bedrock was not encountered during the investigation. Based on a review of "Bedrock Topography and Overburden Thickness Mapping, Southern Ontario, prepared by Ontario Geological Survey, published 2006," the bedrock in the vicinity of the Site is anticipated to be encountered at a depth of approximately 20 to 25 mbgs

The borehole locations are depicted on Figure 5.

The more stringent coarse textured soil was used to assess the soil the groundwater quality of the Site.

B. <u>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</u>

According to the Phase One ESA conducted in January 2023, the groundwater flow direction is inferred to the south towards the Etobicoke Creek, located approximately 2 km from the Site. An additional of two (2) monitoring well would need to be installed on the Phase Two Property to determine the seasonal groundwater flow direction.

C. <u>Depth to bedrock</u>

Based on a review of "Bedrock Topography and Overburden Thickness Mapping, Southern Ontario, prepared by Ontario Geological Survey, published 2006," the bedrock in the vicinity of the Site is anticipated to be encountered at a depth of approximately 20 to 25 mbgs.

D. <u>Approximate depth to water table</u>

The groundwater levels of MW22-1 were found to range between 0.61 to 1.65 mbgs, with corresponding elevations of 259.97 to 261.00 masl.

E. Any respect in which sections 35, 41 or 43.1 of the regulation applies to the property

Section 35

Section 35 is not applicable, the Site Condition Standards for potable groundwater use have been applied.

Section 41

The pH values measured for both surface and sub-surface soil samples were within the acceptable limits for non-sensitive sites. There are no areas of natural significance on the Phase Two Property, or within 30 m of the Phase Two Property. As such the Phase Two Property is not considered to be environmentally sensitive as defined by Section 41.

Section 43.1

The Phase Two Property is not considered a shallow soil property. However, there is a creek on the south portion of the Phase Two Property. Section 43.1 is applicable.

F. Areas on, in or under the Phase Two Property where excess soil is finally placed

Fill material consisting of sandy silt and clayey silt with trace amounts of gravel was encountered below the surficial layer in all the boreholes. The fill material was generally heterogeneous and ranged in thickness from 0.8 to 1.5 metres.

Chemical test conducted on the fill material did not identify any exceedances to the MECP Table 8 Standards

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

It is our understanding that redevelopment of the Site for residential purposes has been proposed. It is further understood that the proposed development will occupy a major portion of the Phase Two Property.

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

A. <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>

The results of the chemical analyses conducted on soil samples identified the following exceedances

- Acetone and methylene chloride in soil sample DUP 1 (MW22-1 S4) at a depths of 1.83 to 2.44 on the west-central portion of the Phase Two Property
- Methylene Chloride in soil sample BH22-4 S4 at depths of 1.83 to 2.44 on the north-central portion of the Phase Two Property.

A visual representation of the location of the impacts identified are presented on Figure 7C.

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

The concentration of acetone and methylene chloride exceeding the applicable Table 8 Standards was identified in a borehole (MW22-1) on the west-central portion of the Phase Two Property and the concentration of methylene chloride exceeded the applicable Table 8 Standards in a borehole (BH22-4) at the north central portion of the Phase Two Property.

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

Contaminants were identified at concentrations greater than the applicable Table 8 Standards in soil.

D. <u>Description and assessment of what is know about each of the areas</u>

The results of the chemical analyses conducted on soil samples identified the following exceedances

- Acetone and methylene chloride in soil sample DUP 1 (MW22-1 S4) at a depths of 1.83 to 2.44 on the west-central portion of the Phase Two Property

- Methylene Chloride in soil sample BH22-4 S4 at depths of 1.83 to 2.44 on the north-central portion of the Phase Two Property.

A visual representation of the location of the impacts identified are presented on Figure 7C.

E. <u>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</u>

The horizontal distribution of the impacts identified are presented on figures 7C.

F. <u>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</u>

The is potential that fill material of unknow quality is responsible for the contamination. However, the exceedance of acetone and methylene chloride identified in soil sample DUP 1 is contradictory with its duplicate MW22-1 S4, which indicates that the concentration of acetone and methylene chloride concentrations are below laboratory detection limit.

DS recommends that additional testing be conducted to confirm the presence/ absence of acetone and methylene chloride exceedances in soil sample DUP 1 (MW22-1 S4) and methylene chloride in soil sample BH22-4 S4.

G. <u>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</u>

Fluctuation in the groundwater depth and flow direction have a potential to influence the migration of the identified contaminants..

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

Based on groundwater records there are relatively minor temporal variations in groundwater levels. As such the effect of temporal fluctuations on contaminant distribution is expected to be minor.

I. **Information concerning soil vapour intrusion of the contaminants into buildings**

Due to the nature of the contaminants identified, vapour intrusion may be a concern for the proposed Site Building. Additional, sampling may be required to confirm the presence/absence of contaminants. If contamination is confirmed, the impacted soils will require remediation through excavation and off-site disposal. Alternatively, a Risk Assessment may be conducted to further assess the potential for soil intrusion and the potential risk to the future site occupants. Risk Management Measures (RMMs) may be required in order to address the potential risks associated with vapour intrusion.

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IV. **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. **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**
   - B. **Approximate depth to water table**
   - C. **Stratigraphy from ground surface to the deepest aquifer or aquitard investigated**
   - D. **Any subsurface structures and utilities that may affect contaminants distribution and transport**

Cross-sections depicting this content is pending, as additional sampling and testing is recommended

V. **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

A contaminant transport diagram is pending.