

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT UPDATE



**4243 SIXTH LINE
OAKVILLE, ONTARIO**

FOR

EAST & WEST INC.

BY



JUNE 2023

Distribution:

1 cc **Client**

1 cc **AiMS**

Report AR104-23



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June 30, 2023

Report AR104-23

Manoj Sharman
EAST & WEST INC.
4510 Eastgate Parkway
Mississauga, Ontario
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Dear Mr. Sharman:

Phase Two Environmental Site Assessment Update
4243 Sixth Line
Oakville, Ontario

We are pleased to present our Phase Two Environmental Site Assessment (ESA) Update report for the above-referenced property. This work was authorized on April 14, 2023.

It is understood that the Phase Two Property ("subject property" or "site") is contemplated for commercial redevelopment with office buildings. The Phase Two ESA Update was required to facilitate site redevelopment approvals with the *Town of Oakville* and the *Regional Municipality of Halton*. The findings presented in this report may be used for these purposes subject to the limitations mentioned herein.

We trust you will find this report to be complete within our terms of reference. Should you have any questions regarding the information contained in the report, or require further assistance, please contact our office.

Sincerely,

AiMS Environmental

A handwritten signature in blue ink, appearing to read 'M. Jagani', written over a white background.

Mohamed M. Jagani, P.Eng, PE, QP_(ESA)
Project Manager

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY	1
2.0 INTRODUCTION	2
2.1 SITE DESCRIPTION	2
2.2 PROPERTY OWNERSHIP	2
2.3 CURRENT AND PROPOSED FURTHER USES	3
2.4 APPLICABLE SITE CONDITION STANDARDS.....	3
3.0 BACKGROUND INFORMATION	3
3.1 PHYSICAL SETTING	4
3.2 PAST INVESTIGATIONS.....	4
4.0 SCOPE OF THE INVESTIGATION.....	6
4.1 OVERVIEW OF SITE INVESTIGATION	6
4.2 MEDIA INVESTIGATED	7
4.3 PHASE ONE CONCEPTUAL SITE MODEL	7
4.4 DEVIATIONS FROM SAMPLING AND ANALYSIS PLAN	8
4.5 IMPEDIMENTS.....	8
5.0 INVESTIGATION METHOD	8
5.1 GENERAL	8
5.2 DRILLING AND EXCAVATING.....	8
5.3 SOIL SAMPLING	8
5.4 FIELD SCREENING METHODS	9
5.5 GROUNDWATER: MONITORING WELL INSTALLATION	10
5.6 GROUNDWATER: FIELD MEASUREMENT OF WATER QUALITY PARAMETERS.....	11
5.7 GROUNDWATER SAMPLING	11
5.8 SEDIMENT SAMPLING.....	11
5.9 ANALYTICAL TESTING.....	11
5.10 RESIDUE MANAGEMENT PROCEDURES.....	11
5.11 ELEVATION SURVEYING	12
5.12 QUALITY ASSURANCE AND QUALITY CONTROL MEASURES	12
6.0 REVIEW AND EVALUATION.....	13
6.1 GEOLOGY.....	13
6.2 GROUNDWATER: ELEVATIONS AND FLOW DIRECTION.....	14
6.3 GROUNDWATER HYDRAULIC GRADIENTS	15
6.4 FINE-MEDIUM SOIL TEXTURE	15
6.5 SOIL: FIELD SCREENING	16
6.6 SOIL QUALITY	16
6.7 GROUNDWATER QUALITY.....	17
6.8 SEDIMENT QUALITY	17
6.9 QUALITY ASSURANCE AND QUALITY CONTROL RESULTS.....	18
6.10 PHASE TWO CONCEPTUAL SITE MODEL.....	19
7.0 CONCLUSIONS	25
8.0 LIMITATION OF LIABILITY, SCOPE OF REPORT AND THIRD PARTY RELIANCE	25
9.0 SIGNATURES	26
10.0 REFERENCES	26
STATEMENT OF ASSESSOR QUALIFICATIONS	26

TABLES

TABLE 1	MONITORING WELL INSTALLATION DETAILS
TABLE 2	WATER LEVELS
TABLE 3	NON-AQUEOUS PHASE LIQUID MEASUREMENTS
TABLE 4	SOIL ANALYTICAL RESULTS: PETROLEUM HYDROCARBONS (PHCS) & BENZENE, TOLUENE, ETHYLBENZENE, & XYLENES (BTEX)
TABLE 5	SOIL ANALYTICAL RESULTS: METALS
TABLE 6	SOIL ANALYTICAL RESULTS: POLYCYCLIC AROMATIC COMPOUNDS (PAHS)
TABLE 7	SOIL ANALYTICAL RESULTS: ORGANOCHLORINE (OC) PESTICIDES & POLYCHLORINATED BIPHENYLS (PCBS)
TABLE 8	SOIL ANALYTICAL RESULTS: VOLATILE ORGANIC COMPOUNDS (VOCS)
TABLE 9	GROUNDWATER ANALYTICAL RESULTS: METALS AND INORGANICS
TABLE 10	GROUNDWATER ANALYTICAL RESULTS: VOLATILE ORGANIC COMPOUNDS (VOCS), PETROLEUM HYDROCARBONS (PHCS) & BENZENE, TOLUENE, ETHYLBENZENE, & XYLENES (BTEX)

DRAWINGS

DRAWING 1	LOCATION MAP AND PHASE TWO STUDY AREA
DRAWING 2	ANSI AND WATER BODIES
DRAWING 3	SITE CONDITION STANDARDS
DRAWING 4	CSM – PHASE TWO STUDY AREA
DRAWING 5	CSM – PHASE TWO PROPERTY
DRAWING 6	BOREHOLE AND PROFILE LOCATIONS
DRAWING 7	CROSS SECTION PROFILES A-A' AND B-B'
DRAWING 8	GROUND WATER ELEVATIONS
DRAWING 9	ALL SOIL & GROUND WATER RESULTS

APPENDICES

APPENDIX A	SAMPLING AND ANALYSIS PLAN
APPENDIX B	BOREHOLE & TEST PIT LOGS
APPENDIX C	CERTIFICATES OF ANALYSIS

1.0 EXECUTIVE SUMMARY

Provide a brief summary of the report.

AiMS Environmental was retained by *EAST & WEST INC.* to conduct a Phase Two Environmental Site Assessment (ESA) Update on a property located at 4243 Sixth Line in Oakville, Ontario.

The Phase Two Property is 3.9 hectare (9.65-acre) in size, square in shape and located south of the Highway 407 Express Toll Route, on the east side of Sixth Line and north of Burnhamthorpe Road East in Oakville, Ontario. The Phase Two Property is immediately surrounded by Sixth Line to the west, the Highway 407 Express Toll Route to the north, and undeveloped lands to the east and south.

It is understood that a new prestige commercial project entailing office buildings is proposed for the Phase Two Property. The Phase Two ESA was required to support development approvals from the *Town of Oakville* and the *Regional Municipality of Halton*. A Record of Site Condition (RSC) is not required to be filed with the Ministry of the Environment, Conservation and Parks (MECP); however, this Phase Two ESA has been prepared in accordance with *Ontario Regulation 153/04*, as amended, per the requirements of the aforementioned municipalities.

Although a formal Phase One ESA was not required, a Phase I ESA study was previously conducted by others to identify any potentially contaminating activities (PCAs) located in the Phase One Study Area (i.e. within a 250 m radius of the Phase Two Property) and resulting areas of potential environmental concern (APECs) on the Phase Two Property.

The findings of that Phase I ESA identified five potentially contaminating activities (PCAs) on the site, which were investigated in a follow-up Phase II ESA. However, there was a subsequent fire in the central part of the property which affected most building structures, which were then demolished. The purpose of the updated Phase Two ESA Update was to investigate APECs A through E identified in the Phase I ESA, as well as any subsurface impacts resulting from the fire.

The fieldwork program comprised drilling of eleven sampled boreholes to a maximum depth of 7.0 m below grade, with sequential installation of four groundwater monitoring wells. Soil samples were screened for volatile hydrocarbons, following which selected samples of soils and groundwater were submitted to an accredited laboratory for analyses of various contaminants of concern (COCs), which included petroleum hydrocarbons (PHCs); polycyclic aromatic

	<p>hydrocarbons (PAHs); metals and inorganics; polychlorinated biphenyls (PCBs); benzene, toluene, ethylbenzene and xylene (BTEX); volatile organic compounds (VOCs); organochlorine (OC) pesticides, and pH.</p> <p>In summary, the measured contaminant concentrations in the soil and groundwater samples analyzed complied with applicable <i>Ontario Regulation 153/04</i> Table 2 site condition standards (SCS) for commercial lands having fine-textured soils in a potable groundwater condition.</p> <p>Based on these findings, no further environmental investigation is presently warranted. However, we note that there is a stockpile of locally dumped fill materials on the premises which will require testing and documentation in accordance with <i>Ontario Regulation 406/19</i> if the material is to be moved off the premises for reuse or disposal offsite.</p> <p>Finally, if the monitoring wells are not required for further testing, they should be decommissioned in accordance with <i>Ontario Regulation 903</i> provisions.</p>
<p>2.0 INTRODUCTION</p>	<p>AiMS Environmental was retained by <i>EAST & WEST INC.</i> to conduct a Phase Two ESA Update on the property located at 4243 Sixth Line in Oakville, Ontario. The purpose of the Updated Phase Two ESA was to investigate areas of potential environmental concerns (APECs) resulting from historical and current PCAs as well as to verify or refute the results of the previous Phase II ESA. This report presents the proceedings and findings of our Phase Two ESA study.</p>
<p>2.1 SITE DESCRIPTION</p> <p>i. municipal address and property identifier number, if any, of the phase two property, and</p>	<p>Municipal address: 4243 Sixth Line, Oakville.</p> <p>Property Identification Number (PIN): 24929-0012 (LT)</p> <p>Legal description: Part Lot 15, Concession 2, North of Dundas Street, (Trafalgar Township), Town of Oakville, Regional Municipality of Halton, Province of Ontario.</p>
<p>ii. size and boundaries of the phase two property.</p>	<p>The Phase Two Property is 9.65 acre in size, square in shape, and gently sloping to the northwest, as shown in <i>Drawing 1</i>.</p>
<p>2.2 PROPERTY OWNERSHIP</p> <p>Provide the name and address and other contact information for the owner of the phase two property and the name, status and other contact information for any other person who has engaged the qualified person to conduct the phase two ESA.</p>	<p>The Phase Two Property is currently owned by <i>EAST & WEST INC.</i>, headed by Mr. Manoj Sharman. His contact information is as follows:</p> <p>Manoj Sharman, EAST & WEST INC. 4510 Eastgate Parkway Mississauga, ON L4W 3W6 T: (905)-403-1250 manny@groupeastwest.com</p>

<p style="text-align: center;">2.3 CURRENT AND PROPOSED FURTHER USES</p> <p>Provide the identification of the current and proposed uses of the phase two property, and whether, if the proposed use is undertaken, section 168.3.1 of the Act would prohibit the new use unless a record of site condition is filed.</p>	<p>The Phase Two Property currently hosts one building structure, namely a two-and-a-half-storey Queen Anne Revival style brick farmhouse (built in 1898) in the northwest part of the site, which is listed on the Town of Oakville’s <i>Register of Properties of Cultural Heritage Value or Interest</i> (the Register) as having potential cultural heritage value, and a <i>Bell Canada</i> wireless communication tower (Bell Zone 3 W0034) on the east part of the site. The residence is currently unoccupied and secured by former owner <i>Bell Mobility</i>.</p> <p>It is understood that the property is contemplated for redevelopment with a prestige commercial project entailing office buildings. There is no requirement to file a Record of Site Condition as a condition of the development.</p>
<p style="text-align: center;">2.4 APPLICABLE SITE CONDITION STANDARDS</p> <p>Provide identification of and rationale for the choice of the applicable site condition standard for the phase two property, based on consideration of matters relevant to the choice, including sections 35, 41 and 43.1 of the regulation, the current and proposed use of the property, soil texture of the property and proposed grading of the property following adoption of the proposed use.</p>	<p>The Phase Two Property was assessed using the 2011 Ontario Table 2 Generic Site Condition Standards (SCS) for community/commercial/industrial (CCI) land uses in a potable groundwater condition from the MECP document <i>Soil, Groundwater and Sediment Standards for Use Under Part XV.1</i> of the 2011 EPA based on the following site-specific information:</p> <ul style="list-style-type: none"> • The site does not include, nor is within 30 m of, an area of natural significance; and there are no water bodies within 30 m of the subject site, as shown in <i>Drawing 2</i>. • The Phase Two Property was serviced by private drinking water supply derived from potable well. • Soils beneath the Site are near neutral in pH. • The depth of the soil exceeds 2 meters beneath the property. • A representative soil grain size analysis completed by <i>Bureau Veritas Laboratories</i> classified the native clayey silt till (loam) stratum underlying the site as fine-textured, and based on field observations of the subsurface stratigraphy, the QP has inferred that more than two-thirds of the soils investigated at the site were fine-textured. <p>Selection of the applicable SCS is also shown on <i>Drawing 3</i>.</p>
<p style="text-align: center;">3.0 BACKGROUND INFORMATION</p> <p>Provide a description of the general physical setting of the phase two property including,</p>	<p>The Phase Two Property is 3.9 hectare (9.65-acre) in size, square in shape and located south of the Highway 407 Express Toll Route, on the east side of Sixth Line and north of Burnhamthorpe Road East in Oakville, Ontario.</p> <p>The Phase Two Property is immediately surrounded by Sixth Line to the west, the Highway 407 Express Toll Route to the north, and undeveloped lands to the east and south.</p>

	<p>The Phase Two Property presently comprises agricultural fields and hosts one <i>Bell Mobility</i> communications tower and one residential dwelling. Fill materials of unknown origin have been locally dumped at various locations across the Phase Two Property. See <i>Drawings 1</i> and <i>5</i>.</p>
<p>3.1 PHYSICAL SETTING</p> <p>Provide a description of the general physical setting of the phase two property including,</p> <p>i. water bodies and areas of natural significance within the phase one study area, and</p>	<p>The Phase Two Property is located within the South Slope physiographic region which is the southernmost region between Lake Ontario and the Oak Ridges Moraine. The South Slope covers from the Niagara Escarpment in the south to the Trent River in the north. It consists of long and narrow drumlins which make the landscape having the rise and fall characteristics (Chapman and Putnam, 1984).</p> <p>The depth to groundwater is expected to be deeper than 4 mbgs. The groundwater flow direction is inferred to directed westwards to southwest toward East Sixteen Mile Creek.</p>
<p>ii. the topography and surface water drainage features on the phase two property.</p>	<p>The topography of the Phase Two Property is generally flat.</p> <p>There is a man-made pond present at the northwest corner of the Phase Two Property.</p> <p>Mounds of reddish soil are stockpiled on the northeast portion of the site, and two stockpiles of grey shale fill exist on the central portion of the site.</p>
<p>3.2 PAST INVESTIGATIONS</p> <p>Provide,</p> <p>i. a summary of any relevant past investigations of the phase two property, and</p>	<p>The client supplied a Heritage Impact Assessment (HIA) completed in October 2021 by Stantec Consulting Ltd., as well as Phase I and a Phase II ESA Reports completed in June and August 2020, respectively, by MTE Consultants.</p> <p>Historically, the property was owned by the Biggar Family and was used for residential and agricultural purposes since at least 1858. The site was organized into two distinct areas, the Victorian style farmhouse (built in 1898) with a one-and-a-half-storey frame tail (built in 1850s) and outbuilding area.</p> <p>The outbuilding area included a 19th century bank barn along with an aluminum sided barn, a drive shed, chicken coop, silos, an early to mid-20th century milk house and a store. A pond was located in the northwest corner of the site. There was a manure pit beside the side barn. The outbuildings used to be surrounded by rolling agricultural fields.</p> <p>In 1985, the property was sold to Gertrud Schulz. The Schulz family owned the property until 1992 during which part of the land was leased to <i>Bell Cellular Inc.</i> (now <i>Bell Mobility</i>) for its tower and compound.</p>

In 1992, the property was sold to *Bell Cellular Inc.* which subsequently owned the property until its recent transfer to *EAST & WEST INC.*

The site is listed with the Town of Oakville, as the property has potential cultural heritage value for its historic farmstead, including the Victorian style brick farmhouse, bank barn, milk house and aluminum sided barn.

In 2018, large quantities of soil were locally dumped on the site without *Bell's* knowledge. The former tenants were asked to vacate the site by January 2020. Trespassing and significant vandalism to the buildings on the site occurred in late March/April 2020. Following this incident, Bell secured all buildings and added locked gate access to the entrance of the Site, as well as a locked, chain link fence enclosure around the bank barn, drive shed, and aluminum sided barn, as they are considered unsafe to enter.

On July 14, 2020, a large fire took place at the Site. The bank barn, drive shed and chicken coop were destroyed. The milk house and the store remained during the fire. After that, all of outbuildings in the central north of the site were demolished and the Site was cleared. The two-and-half-storey residence was not impacted by the fire and is the only structure that still remains onsite .

Previous Phase I and Phase II ESAs

Previous Phase I and Phase II ESAs was conducted by *MTE Consultants* in June and August 2020, respectively, for the purposes of identification of actual or potential contamination on the property and investigation of potential impacts to soil and groundwater on the property.

A Heritage Impact Assessment (HIA) was completed in October 2021 by *Stantec Consulting Ltd.* for the purpose of determining the heritage value of a cultural heritage landscape (CHL) and recommending an overall approach to the conservation of resources of that landscape.

Previous reports reported elevated concentrations of SAR, barium, and hexavalent chromium.

Based on review of available information, five potential contaminating activities (PCAs) and corresponding APECs were identified that could potentially affect the soil and/or groundwater of the Phase Two Property, as summarized on *Drawings 4* and *5* and listed below:

	<p><u>PCA 1/APEC A</u> (Entire Phase Two Property):</p> <ul style="list-style-type: none"> Former used pesticides for agricultural purposes on the Phase Two Property. <p><u>PCA 2/APEC B</u> (Central, north central, and northeast part of Phase Two Property):</p> <ul style="list-style-type: none"> Former importation of three stockpiles of reddish soils and grey shale materials illegally dumped on the Phase Two Property. <p><u>PCA 3/APEC C</u> (Central part of the Phase Two Property):</p> <ul style="list-style-type: none"> Current active overhead transformer boxes on the hydro pole located at the central road of the Phase Two Property. <p><u>PCA 4/APEC D</u> (Central north part of the Phase Two Property):</p> <ul style="list-style-type: none"> Former fuel tank on the north edge of the pre-existing drive shed. <p><u>PCA 5/APEC E</u> (Southeast part of the Phase Two Property):</p> <ul style="list-style-type: none"> Currently present self-contained standby diesel generator located in the Bell tower compound. <p>In addition to the above PCAs, subsurface impacts by polyaromatic hydrocarbons (PAHs) can be expected from the 2020 fire in the central part of the property.</p>
<p>ii. Documentation of the steps taken to confirm that information or data which are to be used from previous investigations are of adequate quality such that it can be relied upon.</p>	<p>There was no reason to doubt the site background review presented in the MTE Phase I ESA, since the information was collated from publicly available sources. Furthermore, this investigation was undertaken to verify or refute the information presented in the MTE Phase II ESA.</p>
<p>4.0 SCOPE OF THE INVESTIGATION</p> <p>4.1 OVERVIEW OF SITE INVESTIGATION</p> <p>Provide an overview of the site investigation conducted with respect to the phase two property.</p>	<p>The Phase Two ESA Update was conducted in accordance with Schedule E of the amended <i>Ontario Regulation 153/04</i>, Record of Site Condition – Part XV.1 of the <u>EPA</u>. The scope of the investigation included the following:</p> <ul style="list-style-type: none"> Review of any previous environmental studies for the subject site and study area to identify actual or potential sources of environmental contamination; Creating a Sampling and Analysis Plan for the ESA (presented in <i>Appendix A</i>); Underground utility clearances and layout of boreholes on the Phase Two Property; Mobilizing, drilling, and logging of eleven sampled boreholes (BH101 through BH111) to a depth of 3.0 m (except for BH101 at 4.6m and BH106 at 7.0m) below

	<p>the existing grade, located across the Phase Two Property;</p> <ul style="list-style-type: none"> • Installation of groundwater monitoring wells (MW101, MW105, MW108, and MW111) in four of the boreholes (BH101, BH105, BH108, and BH111); • Screening of soil sample head-space for hydrocarbon vapours using a portable OVM; • Developing, measuring the static groundwater levels, purging, and collecting groundwater samples from the four newly installed monitoring wells (MW101, MW105, MW108, and MW111); • Conducting laboratory analyses on representative soil samples and groundwater samples at an accredited environmental laboratory; and • Preparation of this report of pertinent findings, conclusions, and our recommendations.
<p>4.2 MEDIA INVESTIGATED</p> <p>Provide,</p> <p>i. the rationale for whether to include in the field investigation sampling and analysis of each of ground water and sediment on, in or under the phase two property, and</p>	<p>The media investigated on the Phase Two Property were as follows:</p> <ul style="list-style-type: none"> • Soil beneath the Phase Two Property was investigated for APECs noted in the previous Phase I ESA. • Groundwater beneath the Site was investigated for APECs noted in the previous Phase I ESA.
<p>ii. an overview of the field investigation of each medium for which sampling and analysis were done.</p>	<p>Locations of representative samples of soil and groundwater media were based on the APECs identified in the previous Phase I ESA. The subsurface geological conditions were established from visual observations and soil samples collected during the borehole drilling program. Soil and groundwater quality data was obtained from visual and olfactory observations, field screening methods, and laboratory analytical data.</p>
<p>4.3 PHASE ONE CONCEPTUAL SITE MODEL</p> <p>Provide a description of the phase one conceptual site model prepared as part of the phase one environmental site assessment report and of relevant subsequently acquired information.</p>	<p>The Phase One Conceptual Site Model (CSM) was prepared based on historical records review, site reconnaissance, building inspection, and interviews with knowledgeable persons collected as part of the preliminary Phase I ESA.</p> <p>There were five on-site PCAs identified on the Phase Two Property of note within the Phase One Study Area. All five of the PCAs (PCAs 1 through 5) had corresponding APECs that could potentially affect the soil and groundwater of the Phase Two Property. Details of the PCAs and APECs are shown on <i>Drawings 4 and 5</i>.</p>

	<p>In addition to the above PCAs, subsurface impacts by polyaromatic hydrocarbons (PAHs) can be expected from the 2020 fire in the central part of the property.</p>
<p>4.4 DEVIATIONS FROM SAMPLING AND ANALYSIS PLAN</p> <p>Provide a description of any deviations from the sampling and analysis plan.</p>	<p>No deviations were necessary from the eleven borehole locations proposed in the Sampling and Analysis Plan (<i>Appendix A</i>).</p>
<p>4.5 IMPEDIMENTS</p> <p>Provide a description of any physical impediments and documentation of any denial of access.</p>	<p>No physical impediments or access restrictions were encountered.</p>
<p>5.0 INVESTIGATION METHOD</p> <p>5.1 GENERAL</p> <p>Provide a brief description of all methods as specified in the following sections. Where the method differs from the associated standard operating procedure, provide a detailed description of the method used, and a rationale for the change in method.</p>	<p>The samples were obtained through the completion of an intrusive subsurface investigation and sampling program that comprised drilling of boreholes and installation of groundwater monitoring wells.</p>
<p>5.2 DRILLING AND EXCAVATING</p> <p>Provide for each borehole drilled or test pit excavated,</p> <ol style="list-style-type: none"> i. the name of the contractor, ii. a description of the equipment used, iii. a description of the measures taken to minimize the potential for cross-contamination, and iv. the frequency of sample collection. 	<p>May 10, 2023: (BH101 – BH111)</p> <p>Contractor: <i>Strata Drilling Group</i></p> <p>Equipment Used: Geoprobe 6712DT track-mounted drill rig equipped with disposable liners 1.5 m in length.</p> <p>Decontamination Method: Augers were brushed down prior to each use.</p> <p>Sample Frequency: Soil samples were collected for screening on a regular basis at an interval of every 1.5 m or less to the termination depths of the boreholes.</p>
<p>5.3 SOIL SAMPLING</p> <p>Provide,</p> <ol style="list-style-type: none"> i. a description of all equipment used 	<p>Soil samples were collected from the boreholes at continuous intervals with sample liners to the desired depth.</p> <p>Upon collection, soils samples were retrieved from the samplers using disposable gloves that were changed for each sample. The samples were logged in the field for soil type,</p>

<p>to collect soil samples, and</p>	<p>moisture content, colour, and visual and olfactory evidence of impact (if any, including hydrocarbon staining and odours), and were split into portions that were divided for field logging in separate clear plastic bags or laboratory analysis. The selected soil samples were then placed in laboratory-prepared containers, including glass vials pre-charged with methanol preservative where appropriate, and kept cool prior to delivery to the laboratory.</p>
<p>ii. a geological description of soil and sediment cores and samples, based on the finalized field logs for each monitoring well, test hole or intrusive investigation point.</p>	<p>The observed stratigraphy from the ground surface to the deepest aquifer investigated during the Phase Two ESA generally comprised clayey silt fill (0 m to 5.3 m), which were underlain by clayey silt till (0 m to 7.0 m). Details of the soil stratigraphy are noted on the <i>Borehole Logs in Appendix B</i> and the Cross-Section Profiles in <i>Drawing 7</i>. Based upon a representative soil grain size analysis completed by <i>Bureau Veritas Laboratories</i> that classified the clayey silt till/loam stratum as fine-textured, as well as field observations, more than two-thirds of the soils investigated at the site were fine-textured.</p> <p>Please refer to <i>Drawing 7</i> and <i>Borehole Logs in Appendix B</i>.</p>
<p>5.4 FIELD SCREENING METHODS</p> <p>1. Provide a description of any equipment used to perform field screening measurements including,</p> <p>i. make and model number,</p>	<p>Field screening measurements were completed using a RKI Eagle 2 OVM. The RKI eagle 2 reads soil vapour concentrations in parts per million (ppm) by volume or as a lower explosive limit (LEL%) as a percentage of equivalent hexane calibrant gas.</p> <p>Head space hydrocarbon vapour concentrations were determined by allowing the bags to warm up to ambient temperature, probing into the partially opened bags using a monitoring probe, and measuring the sample head space with a portable OVM.</p>
<p>ii. chemicals the equipment can detect and associated detection limits,</p>	<p>The RKI Eagle 2 detects PHC vapours at concentrations ranging from 5 ppm to 100% LEL.</p> <p>In order to reduce the false positive readings that can occur with the presence of methane during soil sample screening, the RKI Eagle 2 was operating in methane elimination mode.</p>
<p>iii. precision of the measurements,</p>	<p>The RKI Eagle 2 is 5% of the span calibration.</p>
<p>iv. accuracy of the measurements,</p>	<p>The accuracy of the measurements in combustible gas mode in LEL is $\pm 5\%$ of reading or $\pm 2\%$ LEL, whichever is greater. For the ppm range, the accuracy is ± 25 ppm or $\pm 5\%$ of reading, whichever is greater, under ideal conditions.</p>

<p>v. calibration reference standards such as span gas, and</p>	<p>The RKI Eagle 2 was calibrated in combustible gas mode to known concentrations of 400 ppm of hexane.</p>
<p>vi. procedures for checking calibration of the equipment.</p>	<p>The RKI Eagle 2 was checked daily for calibration in the field using known concentrations of hexane. Detector was adjusted when required if the response was $\pm 10\%$.</p>
<p>2. Provide a description of how field screening measurements were used to select samples for laboratory analysis, if applicable.</p>	<p>“Worse-case” soil samples were selected for laboratory analysis based on the highest OVM reading, as well as visual and olfactory indications of contamination such as hydrocarbon staining and odours.</p>
<p>3. Where a field screening method was different from what was proposed as a standard operating procedure in the sampling and analysis plan, provide a description of, and rationale for, the difference.</p>	<p>During the fieldwork, AiMS Environmental followed the QA/QC measures which adhere to the AiMS Environmental SOPs and the collection of samples as noted in the Sampling and Analysis Plan. The QA/QC protocols were developed to meet or exceed those defined in the MECP documents entitled <i>Guide for Completing Phase Two Environmental Site Assessments under Ontario Regulation 153/04</i> (June 2011) and <i>Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the EPA</i> (March 9, 2004, amended as of July 1, 2011).</p>
<p style="text-align: center;">5.5 GROUNDWATER: MONITORING WELL INSTALLATION</p> <p>1. For each monitoring well installed provide,</p> <p>i. the name of the contractor, ii. a description of the equipment used iii. a description of the measures taken to minimize the potential for cross-contamination, and iv. the frequency of sample collection during drilling, if any.</p>	<p>May 10, 2023: (MW101, MW105, MW108, and MW111)</p> <p>Contractor: <i>Strata Drilling Group Inc.</i></p> <p>Equipment Used: Geoprobe 6712DT direct push</p> <p>Measures taken to minimize the potential for cross-contamination: Continuous representative soil samples of the subsurface materials were collected with single-use disposable dual-tube liners. Well materials consisted of pre-cleaned and wrapped PVC materials, which were installed directly into the completed hole. Filter pack sand and bentonite grout were used from commercially-supplied, unopened bags. No glue was used in the construction of the monitoring wells.</p> <p>Sampling Frequency: Soil samples were collected during drilling of each borehole, as discussed above in Subsection 5.3. At least one ground water sample was selected for analysis from each monitoring well location.</p>
<p>2. Provide a description of the methods used to develop monitoring wells.</p>	<p>All four groundwater monitoring wells (MW101, MW105, MW108 and MW111) were instrumented with dedicated polyethylene tubing and <i>Waterra</i>[®] inertial pump foot valves to facilitate well development and purging requirements. Following the installation, water level depths were measured and each monitoring well was developed by purging the well to waste or a minimum of three well casing volumes to remove any fluids that could have been introduced into the well during drilling, to remove particulates that could have</p>

	<p>become entrained in the well and filter pack, to stabilize and grade the filter pack, improve connectivity between the well and the formation, and restore groundwater that could have been disturbed or altered during the drilling process to ensure the samples to be representative of true formation waters. The purging activities were also carried out using the dedicated tubing and foot valves.</p>
<p>5.6 GROUNDWATER: FIELD MEASUREMENT OF WATER QUALITY PARAMETERS</p> <p>Provide a description of the methods used to measure water quality parameters such as pH, specific conductance and temperature.</p>	<p>Since this investigation was not required to support filing of a Record of Site Condition, field quality parameter measurements were not considered necessary.</p>
<p>5.7 GROUNDWATER SAMPLING</p> <p>Provide a description of the methods used to conduct ground water sampling.</p>	<p>The groundwater samples were collected using <i>Waterra</i>[®] tubing installed in each of the monitoring wells.</p>
<p>5.8 SEDIMENT SAMPLING</p> <p>Provide a description of the methods used to collect sediment samples.</p>	<p>Not applicable – No sediment exists on the Phase Two Property, and therefore, no sediment samples were collected during this investigation.</p>
<p>5.9 ANALYTICAL TESTING</p> <p>Provide the names of all laboratories used for analysis of soil, sediments or groundwater samples</p>	<p>Soil and groundwater samples collected during the investigation were submitted for laboratory analysis to <i>Bureau Veritas Laboratories</i> of Mississauga, Ontario. <i>Bureau Veritas</i> is a Standards Council of Canada certified laboratory in accordance with ISO/IEC 17025: 1999 – “<i>General Requirements for the Competence of Testing and Calibration Laboratories</i>” for the tested parameters set out in the Soil, Ground Water, and Sediment Standards.</p>
<p>5.10 RESIDUE MANAGEMENT PROCEDURES</p> <p>i. soil cuttings from drilling and excavations</p>	<p>Since the site is a development site, excess soil cuttings from augering that were generated were left on the premises, as they will be dealt with during site grading activities.</p>
<p>ii. water from well development and purging</p>	<p>As previous testing by MTE indicated no appreciable impacts in the groundwater, no special measures were required for handling the purge water which was simply drained onsite.</p>

<p>iii. fluids from equipment cleaning</p>	<p>No fluids were deployed as the driller used dedicated plastic tubes to recover soil samples and the augers were simply brushed down after each sample was collected.</p>
<p>5.11 ELEVATION SURVEYING</p> <p>Provide the description of the benchmark location used for surveying</p>	<p>Ground Surface elevations as shown on the <i>Borehole Logs</i> were determined at the borehole locations using a surveyor's level and metric rod and referenced to geodetic elevation of 188.50 metres above mean sea level (mamsl) located at the west invert of a corrugate steel culvert as indicated on a 2018 surveyor's Real Property Report certified by <i>J.D.Barnes</i> (Ref. No. 18-15-291-w). This benchmark is shown on <i>Drawing 6</i>.</p>
<p>5.12 QUALITY ASSURANCE AND QUALITY CONTROL MEASURES</p> <p>i. a description of sample containers, preservations, labelling, handling and custody for samples submitted for laboratory analysis including any deviations from the sampling and analysis plan</p>	<p>All soil samples collected during the Phase Two investigation were placed in glass jars with Teflon lids supplied by the lab. For soil samples requiring VOCs and PHC fraction F1 analyses, the samples were also placed in 60 mL glass vials with methanol preservative.</p> <p>All groundwater samples collected during the Phase Two investigation were discharged directly from the dedicated tubing into containers supplied by the lab that were specific to each analysis required. Groundwater samples requiring PHC, BTEX and VOC analyses were placed in containers pre-charged with sodium bisulfate preservative.</p> <p>The soil and groundwater samples were labeled according to the sample location and placed in coolers with ice immediately to preserve them at temperatures less than 10°C, then signed custody seals were placed on the cooler to be delivered to the laboratory along with a chain of custody from within the laboratory-specified holding times.</p>
<p>ii. a description of equipment cleaning procedures followed during all sampling</p>	<p>All soil samples were collected with single-use disposable dual-tube liners. Augers were brushed clean prior to each use.</p> <p>All non-dedicated groundwater level and water quality measuring equipment was also cleaned with a biodegradable detergent and distilled water.</p>
<p>iii. a description of how the field quality control measures referred to in subsection 3(3) were carried out. Specifically, subsection 3(3) requires that:</p>	<p>During the fieldwork, AiMS Environmental followed the QA/QC measures which adhere to the AiMS Environmental Standard Operating Procedures (SOPs) and the collection of samples as noted in the Sampling and Analysis Plan. The QA/QC protocols were developed to meet or exceed those defined in the MECP documents entitled <i>Guide for Completing Phase Two Environmental Site Assessments under Ontario Regulation 153/04</i> (June 2011) and <i>Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the EPA</i> (March 9, 2004, amended as of July 1, 2011).</p>

	<p>The SOPs detail field screening, data collection, note taking, decontamination procedures, sampling procedures and sample shipment, and can be made available upon request.</p>
<p>iv. a description of, and rationale for, any deviations from the procedures set out in the quality assurance and quality control program set out in the sampling and analysis plan.</p>	<p>No deviations were necessary from the QA/QC program set out in the Sampling and Analysis Plan.</p>
<p style="text-align: center;">6.0 REVIEW AND EVALUATION</p> <p style="text-align: center;">6.1 GEOLOGY</p> <p>i. estimated thickness of each geologic unit</p>	<p>The observed stratigraphy from the ground surface to the deepest aquifer investigated during the Phase Two ESA generally comprised clayey silt fill materials with some shale fragments (0 m to 5.3 m), which were underlain by a major clayey silt till stratum that extended to the maximum exploration depth of 7.0 m. Details of the soil stratigraphy are noted on the <i>Borehole Logs</i> in <i>Appendix B</i> and the Cross-Section Profiles in <i>Drawing 7</i>.</p>
<p>ii. elevations, relative to a geodetic benchmark or other permanent and recoverable benchmark, of the top and bottom of each geologic unit,</p>	<p>Please refer to <i>Borehole Logs</i> in <i>Appendix B</i>.</p> <p>Ground Surface elevations as shown on the <i>Borehole Logs</i> were determined at the borehole locations using a surveyor’s level and metric rod and referenced to geodetic elevation of 188.50 mamsl located at the west invert of a corrugate steel culvert as indicates on a 2018 surveyor’s Real Property Report certified by J.D.Barnes (Ref. No. 18-15-291-w). This benchmark is shown on <i>Drawing 6</i>.</p>
<p>iii. geological and other material in each geological unit,</p>	<p>Please refer to <i>Borehole Logs</i> in <i>Appendix B</i>.</p>
<p>iv. the properties of each aquifer and aquitard, and</p>	<p>The results of the ground water monitoring indicated that the primary near surface water table resides within the clayey silt till/loam stratum at depths less than 5 m below ground surface. It is inferred that the very shallow depths to groundwater observed of less than 1 m below ground surface represent locally perched conditions from pockets within the till or seepage from its sand seams, and not necessarily representative of a true groundwater table. Depths to ground water and the stratigraphy within the near surface aquifer are also noted on the <i>Borehole Logs</i> in <i>Appendix B</i> and the Cross-Section Profiles in <i>Drawing 7</i>.</p>
<p>v. the rationale for the choice of aquifers and aquitards investigated as it relates to identification of the location, presence, release, concentration, migration or retention of a contaminant.</p>	<p>Based on the APECs and PCAs identified in the previous Phase I ESA, any impacts from the PCAs would need to migrate through the shallow soils and the near surface aquifer to reach deeper aquifers.</p> <p>No visual, olfactory or analytical evidence of impact was noted in the shallow soil or the groundwater collected from</p>

	the near surface aquifer, therefore only the near surface aquifer warranted investigation.
<p>6.2 GROUNDWATER: ELEVATIONS AND FLOW DIRECTION</p> <p>i. a discussion of, and rationale for, locations and screened intervals of monitoring wells used for interpretations of ground water flow direction,</p>	<p>The four newly installed monitoring wells (MW101, MW105, MW108 and MW111) were used to interpret groundwater elevations and the groundwater flow direction and to evaluate groundwater quality across the site. Well installation details are presented in <i>Table 1</i> and the locations are shown on <i>Drawing 6</i> and <i>8</i>.</p> <p>Screened intervals were chosen based on the observations of the soil stratigraphy during borehole drilling (refer to <i>Borehole Logs</i> in <i>Appendix B</i>) and the measured depths to groundwater recorded in each borehole on completion of drilling. It was noted that the native clayey silt till/loam stratum became saturated and grey in colour (typical of soils under prolonged saturation) at an average depth of approximately 3.0 m below ground surface in all four boreholes (geodetic elevation of approximately 184.85 mamsl or greater).</p>
<p>ii. results of any measurements taken using an interface probe during water level measurements, and</p>	<p>Monitoring of the four newly installed monitoring wells (MW101, MW105, MW108 and MW111) on May 25, 2023 identified the static groundwater table at depths between 0.65 m and 5.01 m below ground surface (geodetic elevations of between 184.85 mamsl and 190.94 mamsl). Please refer to <i>Drawing 8</i> and <i>Table 2</i>.</p>
<p>iii. measurements of the thickness of any free flowing product present in monitoring wells.</p>	<p>No free-phase or flowing product was encountered during the Phase Two ESA investigation. Please refer to <i>Table 3</i>.</p>
<p>A description of the method used to calculate ground water elevation in the monitoring well, including,</p> <p>i. a description of the ground water elevations from all monitoring events in any aquifer investigated,</p>	<p>The groundwater elevation at each well was calculated by subtracting the depth to groundwater measurement in metres below the top of the well casing from the surveyed elevation of the top of the well casing. The results of the groundwater monitoring indicated that the nearest surface water table resides within the clayey silt till/loam stratum. Please refer to Subsections 6.2.1 and 6.2.2 above; as well as <i>Table 2</i> and <i>Drawing 8</i>.</p>
<p>ii. a description of the interpreted direction of ground water flow at the phase two property,</p>	<p>Based on the measured ground water elevations in the monitoring wells installed at the site, the local ground water flow is inferred in a westerly or southwestward direction across the Phase Two Property.</p> <p>The directions of the inferred local groundwater flow on the date of measurement are shown on <i>Drawing 8</i>.</p>
<p>iii. assessment of the potential for temporal variability in ground water</p>	<p>Based on the surrounding topography and the influence of the East Sixteen Mile Creek, the regional ground water flow</p>

<p>flow direction, and</p>	<p>direction was inferred to be directed northwestward in the MTE Phase I ESA.</p> <p>Based on the measured ground water elevations in the monitoring wells installed at the site on May 11, 2023, the local ground water flow is inferred in a westerly direction across the Phase Two Property.</p> <p>Seasonal fluctuations in groundwater levels can occur. Therefore, a conservative approach was taken to assume APECs could result on the Phase Two Property from PCAs located within the Phase One Study Area based on a northwestwards or southwestly ground water flow direction.</p>
<p>iv. an evaluation and description of the potential interaction between any buried utilities in or under the phase two property and the water table.</p>	<p>No buried utilities were located in or under the Phase Two Property. Therefore, the presence of buried utilities is very unlikely to interact with the water table.</p>
<p>6.3 GROUNDWATER HYDRAULIC GRADIENTS</p> <p>i. a description of the horizontal hydraulic gradient for each aquifer investigated, including minimum, maximum and average horizontal hydraulic gradients, and</p>	<p>The results of the ground water monitoring indicated that the primary near surface water table resides within the clayey silt till/loam stratum.</p> <p>Please refer to <i>Drawings 7 and 8</i>.</p> <p>No visual, olfactory or analytical evidence of impact was noted in the ground water, therefore only the shallow aquifer warranted investigation.</p> <p>The average lateral hydraulic gradient is 0.035 m/m. Based on grain size analyses, the hydraulic conductivity of the native loam soil in which the water table resides is estimated to be of the order of 10^{-6} m/s.</p>
<p>ii. a description of vertical hydraulic gradients in aquifers where a contaminant is present at a concentration greater than the applicable site condition standard for the contaminant, including minimum, maximum and average vertical hydraulic gradients.</p>	<p>Not applicable – no groundwater impact was noted.</p>
<p>6.4 FINE-MEDIUM SOIL TEXTURE</p> <p>Where fine-medium soil texture is to be used in determining the applicable site condition standards, provide,</p> <p>i. a rationale for the use of the fine-</p>	<p>The Site has been classified as fine-textured for the purposes of this investigation.</p>

medium soil texture category,	
ii. a description of the results of the required grain size analysis, and	A representative soil grain size analysis completed by <i>Bureau Veritas Laboratories</i> classified the native clayey silt till (loam) stratum underlying the site as fine-textured.
iii. a description and rationale for the number of samples collected and analyzed.	Based upon the representative soil grain size analysis, as well as field observations of the subsurface stratigraphy, the QP inferred that more than two-thirds of the soils investigated at the site were fine-textured.
<p style="text-align: center;">6.5 SOIL: FIELD SCREENING</p> <p>Provide a discussion of soil field screening results.</p>	Field screening of the soil samples included measurement of hydrocarbon vapours using an RKI Eagle 2 portable OVM. The OVM readings ranged from non-detect to a relatively low maximum 15 ppm equivalent of a hexane calibrant gas. There was no indication of PHC staining or odours. It should be noted that high OVM readings could also result from moisture and/or temperature of the soil sample.
<p style="text-align: center;">6.6 SOIL QUALITY</p> <p>Provide a discussion and analysis of the laboratory analytical results for all soil samples analyzed including,</p> <p>i. locations and depths of samples,</p>	A total of twenty-seven soil samples (including QA/QC duplicates) were submitted for laboratory analysis of the identified COCs in soil in order to fully investigate the identified APECs on the Phase Two Property. The locations and depths of the analyzed soil samples are shown on <i>Drawing 9</i> , and summarized in <i>Tables 4 to 8</i> and in the <i>Borehole Logs</i> in <i>Appendix B</i> .
ii. comparison of analytical results to applicable site conditions standards,	<p>All soil samples met the Ontario 2011 Table 2 SCS for community/commercial/industrial land uses having fine-textured soils in a potable groundwater condition for the COCs analyzed.</p> <p>It should be noted that preliminary test results indicated an anomalously elevated arsenic concentration of 20 ug/g in a shallow soil sample from Borehole 101. Additional testing was conducted on three samples taken within a 2 m radius at the same depth around Borehole 101, all of which had arsenic concentrations which complied with the applicable standard. Therefore, no exceedence of the standards was inferred.</p> <p>The analytical results can be found in <i>Tables 4 to 8</i>.</p>
iii. contaminants of concern,	COCs in soil on the Phase Two property included PHCs, PAHs, metals and inorganics, PCBs, BTEX, VOCs, OC pesticides, and pH.
iv. contaminants related to chemical and biological transformations that	Not applicable.

have or may have occurred,	
v. whether the results indicate soil serves as a source of contaminant mass contributing to ground water or sediment, and	Not applicable.
vi. whether the results indicate the presence of light or dense non-aqueous phase liquids.	No free-phase or flowing product was encountered during the Phase Two ESA investigation. Furthermore, no foreign odours or evidence of hydrocarbon staining were noted in any of the soil samples collected from the Phase Two Property.
<p>6.7 GROUNDWATER QUALITY</p> <p>Provide a discussion and analysis of the laboratory analytical results for all ground water samples analyzed including,</p> <p>i. locations and sample depth interval of samples,</p>	A total of four groundwater samples (including QA/QC duplicates) were submitted for laboratory analysis of the identified COCs in groundwater in order to fully investigate the identified APECs on the Phase Two Property. The locations of the groundwater samples are shown on <i>Drawing 9</i> , and summarized in <i>Tables 9 and 10</i> and in the <i>Borehole Logs</i> in <i>Appendix B</i> .
ii. documentation of any field filtering,	See attached Certificates of Analysis in <i>Appendix C</i> .
iii. comparison of analytical results to applicable site conditions standards,	All groundwater samples met applicable Ontario 2011 Table 2 SCS for all types of property use having fine-textured soils in a potable groundwater condition for the COCs analyzed.
iv. contaminants of concern,	COCs in ground water on the Phase Two property included VOCs, BTEX, PHCs, and metals.
v. contaminants related to chemical and biological transformations that have or may have occurred,	Not applicable.
vi. whether the results indicate soil serves as a source of contaminant mass contributing to ground water or sediment, and	Not applicable.
vii. whether the results indicate the presence of light or dense non-aqueous phase liquids.	No free-phase or flowing product was encountered during the Phase Two ESA investigation. Furthermore, no foreign odours or evidence of hydrocarbon sheen/impact were noted in any of the ground water samples collected from the Phase Two Property.
<p>6.8 SEDIMENT QUALITY</p> <p>Provide a discussion and analysis of the laboratory analytical results for all sediment samples analyzed including,</p>	Not applicable – No sediment exists on the Phase Two Property, and therefore, no sediment samples were necessary during this investigation.

<p>i. locations and depths of samples, ii. comparison of analytical results to applicable site conditions standards, iii. contaminants of concern, iv. contaminants related to chemical and biological transformations that have or may have occurred, and v. whether the results indicate the presence of light or dense non-aqueous phase liquids.</p>	
<p>6.9 QUALITY ASSURANCE AND QUALITY CONTROL RESULTS</p> <p>1. Provide a description of the types of quality control samples collected and results of any other quality assurance and quality control measures taken during the field investigation, including the types of quality control samples, the media sampled, and the importance of the results with respect to ensuring the data are useful, appropriate and accurate in the determination of whether the phase two property, or any RSC property within it, meets the applicable site condition standards and any standards specified in a risk assessment.</p>	<p><i>Chain-of-Custody</i> forms which included details of sample identification, location, sampling date and the analyses prescribed were also completed and delivered to the laboratory with the cooled samples within the laboratory-specified holding times.</p> <p>Quality control samples collected during the previous subsurface investigation and this Phase Two ESA included blind field duplicates in which one duplicate sample was collected for every 10 samples for each parameter analyzed. The results of the field duplicate samples can be found in <i>Tables 4 to 10</i>.</p> <p>Laboratory QA/QC measures included Matrix Spike, Spiked Blank, relative percent difference (RPD), QC Standard, and laboratory duplicate samples.</p> <p>The analytical results were reviewed and found to be of acceptable quality with no discrepancies noted. The laboratory certificates of analyses are presented in <i>Appendix C</i>.</p>
<p>2. Provide a description of each instance where a sample was not handled in accordance with the Analytical Protocol with respect to,</p> <p>i. holding time, ii. preservation method, iii. storage requirement, or iv. container type.</p>	<p>All sample glass jars were laboratory-prepared, pre-cleaned and inspected. The jars were clearly labelled and any preservatives included.</p> <p>All samples were handled within accordance with the laboratory's standard analytical protocols.</p>
<p>3. Provide a statement, with respect to subsection 47 (3) of the regulation that,</p> <p>i. all certificates of analysis or analytical reports received pursuant to clause 47 (2) (b) of the regulation comply with subsection 47 (3),</p>	<ul style="list-style-type: none"> • The QP for this study certifies that: All certificates of analysis or analytical reports received pursuant to clause 47 (2) (b) of the regulation comply with subsection 47 (3); • A certificate of analysis or analytical report has been received for each sample submitted for analysis; and,

<p>ii. a certificate of analysis or analytical report has been received for each sample submitted for analysis, and</p> <p>iii. all certificates of analysis or analytical reports received have been included in full in an appendix to the phase two environmental site assessment report.</p>	<ul style="list-style-type: none"> All certificates of analysis or analytical reports received have been included in full in an appendix to the Phase Two Environmental Site Assessment report. Please see <i>Appendix C</i>.
<p>4. Provide a description of each instance where a laboratory qualified any results or made remarks in a certificate of analysis or analytical report about a sample and include a discussion of the validity of any results qualified.</p>	<p>Laboratory remarks within the certificates regarding the soil and groundwater analytical results were related to the laboratory QA/QC measures only. No remarks were noted in any of the laboratory certificates of analysis that qualified any of the results used in order to determine if an applicable SCS was met, and the remarks mentioned in the certificates of analysis do not affect the integrity of the analytical results. The remarks can be found in the Certificates of Analyses in <i>Appendix C</i>.</p>
<p>5. Provide a discussion of the overall quality of the field data from the investigation with respect to the data quality objectives, to demonstrate that,</p> <p>i. decision-making was not affected, and</p> <p>ii. the overall objectives of the investigation and the assessment were met.</p>	<p>The field and laboratory data were considered to be of sufficient quality and met the overall objectives of the investigation.</p>
<p>6.10 PHASE TWO CONCEPTUAL SITE MODEL</p> <p>1. Provide a narrative description and assessment of,</p> <p>i. areas where potentially contaminating activity has occurred,</p>	<p>There were five on-site PCAs of note identified on the Phase Two Property and within the Phase Two Study Area, as follows:</p> <p><u>PCA 1/APEC A</u> (Entire Phase Two Property):</p> <ul style="list-style-type: none"> Former used pesticides for agricultural purposes on the Phase Two Property. <p><u>PCA 2/APEC B</u> (Central, north central, and northeast part of Phase Two Property):</p> <ul style="list-style-type: none"> Former importation of three stockpiles of reddish soils and grey shale materials illegally dumped on the Phase Two Property. <p><u>PCA 3/APEC C</u> (Central part of the Phase Two Property):</p> <ul style="list-style-type: none"> Current active overhead transformer boxes on the hydro pole located at the central road of the Phase Two Property.

	<p><u>PCA 4/APEC D</u> (Central north part of the Phase Two Property):</p> <ul style="list-style-type: none"> Former fuel tank on the north edge of the pre-existing drive shed. <p><u>PCA 5/APEC E</u> (Southeast part of the Phase Two Property):</p> <ul style="list-style-type: none"> Currently present self-contained standby diesel generator located in the Bell tower compound. <p>Please refer to <i>Drawings 4</i> and <i>5</i>.</p> <p>In addition to the above PCAs, subsurface impacts by polyaromatic hydrocarbons (PAHs) could be expected from the 2020 fire in the central part of the property.</p>
<p>ii. areas of potential environmental concern, and</p>	<p>There are five APECs where PCAs may have affected the soil and/or groundwater at the subject site:</p> <p><u>PCA 1/APEC A</u> (Entire Phase Two Property):</p> <ul style="list-style-type: none"> Former used pesticides for agricultural purposes on the Phase Two Property. <p><u>PCA 2/APEC B</u> (Central, north central and northeast part of Phase Two Property):</p> <ul style="list-style-type: none"> Former importation of three stockpiles of reddish soils and grey shale materials illegally dumped on the Phase Two Property. <p><u>PCA 3/APEC C</u> (Central part of the Phase Two Property):</p> <ul style="list-style-type: none"> Current active overhead transformer boxes on the hydro pole located at the central road of the Phase Two Property. <p><u>PCA 4/APEC D</u> (Central north part of the Phase Two Property):</p> <ul style="list-style-type: none"> Former fuel tank on the north edge of the pre-existing drive shed. <p><u>PCA 5/APEC E</u> (Southeast part of the Phase Two Property):</p> <ul style="list-style-type: none"> Currently present self-contained standby diesel generator located in the Bell tower compound. <p>Please refer to <i>Drawing 5</i>.</p>
<p>iii. any subsurface structures and utilities on, in or under the phase two property that may affect contaminant</p>	<p>The Phase Two Property is not currently serviced by any known buried utilities.</p>

<p>distribution and transport.</p>	<p>Therefore, the presence of utilities is unlikely to affect contaminant distribution and transport.</p>
<p>2. Provide a narrative description of and, as appropriate, figures illustrating, the physical setting of the phase two property and any areas under it including,</p>	<p>The Phase Two Property is 3.9 hectare (9.65-acre) in size, square in shape and located south of the Highway 407 Express Toll Route, on the east side of Sixth Line and north of Burnhamthorpe Road East in Oakville, Ontario. The Phase Two Property is immediately surrounded by Sixth Line to the west, the Highway 407 Express Toll Route to the north, and undeveloped lands to the east and south. The topography of the Phase Two Property is generally flat. The Phase Two Property presently comprises agricultural fields, one <i>Bell Mobility</i> communications tower, and one residential dwelling. Fill materials of unknown origin have been locally dumped at various locations across the Phase Two Property.</p> <p>See <i>Drawings 1 and 5</i>.</p> <p>The nearest waterbody is the <i>East Sixteen Mile Creek</i>. The regional groundwater flow direction was inferred to be directed northwestward in the Phase Two CSM based on the surrounding topography and the influence of the <i>East Sixteen Mile Creek</i>.</p>
<p>i. stratigraphy from ground surface to the deepest aquifer or aquitard investigated,</p>	<p>The observed stratigraphy from the ground surface to the deepest aquifer investigated during the Phase Two ESA generally comprised clayey silt fill with some shale (0 m to 5.3 m), which were underlain by clayey silt till (0 m to 7.0 m). Details of the soil stratigraphy are noted on the <i>Borehole Logs</i> in <i>Appendix B</i> and the Cross-Section Profiles in <i>Drawing 7</i>. Based upon a representative soil grain size analysis completed by <i>Bureau Veritas Laboratories</i> that classified the clayey silt till/loam stratum as fine-textured, as well as field observations, more than two-thirds of the soils investigated at the site were fine-textured.</p> <p>Please refer to <i>Drawing 7</i> and <i>Borehole Logs</i> in <i>Appendix B</i>.</p>
<p>ii. hydrogeological characteristics, including aquifers, aquitards and, in each hydrostratigraphic unit where one or more contaminants are present at concentrations above the applicable site condition standards, lateral and vertical hydraulic gradients,</p>	<p>Not applicable – All groundwater samples complied with applicable Ontario Table 2 SCS.</p>
<p>iii. approximate depth to bedrock,</p>	<p>No bedrock was encountered during this investigation.</p>

<p>iv. approximate depth to water table,</p>	<p>Based on inspection of the soil samples collected during drilling, the near surface water table was estimated to lie at an average depth of approximately 3.0 m below ground surface, although shallow groundwater due to locally perched conditions from pockets within the till or seepage from its sand seams was also observed.</p> <p>Please refer to <i>Drawings 7 and 8</i>.</p>
<p>v. any respect in which section 41 or 43.1 of the regulation applies to the property,</p>	<p>Sections 41 does not apply to the Phase Two Property due to the following:</p> <ul style="list-style-type: none"> • The site does not include, nor is it within 30 m of, an area of natural significance. • Soils beneath the Site are near neutral in pH. <p>Section 43.1 does not apply to the Phase Two Property due to the following:</p> <ul style="list-style-type: none"> • The depth of the soil exceeds 2 meters beneath the property. • There are no water bodies within 30 m of the subject site.
<p>vi. areas where soil has been brought from another property and placed on, in or under the phase two property, and</p>	<p>Large piles of soils and shale materials from unknown origin were illegally dumped on the north-west part of the Phase Two Property.</p>
<p>vii. approximate locations, if known, of any proposed buildings and other structures.</p>	<p>The Phase Two Property is contemplated for development with a new prestige commercial project entailing office buildings. The footprint of the proposed building would encompass the central part of the Phase Two Property.</p>
<p>3. Where a contaminant is present, in or under the Phase Two Property at a concentration greater than the applicable site condition standard, identification of,</p> <p>i. each area where a contaminant is present on, in or under the phase two property at a concentration greater than the applicable site condition standard,</p>	<p>The Phase Two Property was assessed using the 2011 MECP Table 2 Full Depth Generic SCS for CCI land uses with fine-textured soils in a potable groundwater condition.</p> <p>A total of eleven boreholes (BH101 through BH111) were advanced within the Phase Two Property to address the five APECs noted in the preliminary Phase I ESA. A total of twenty-seven soil samples and sixteen groundwater samples (including QA/QC duplicates) were submitted for laboratory analysis of PHCs, PAHs, metals, VOCs, OC pesticides and pH. The analytical results of all soil and groundwater samples analyzed complied with applicable Ontario Table 2 CCI SCS.</p>
<p>ii. the contaminants associated with each of the areas referred to in subparagraph i,</p>	<p>All soil and groundwater samples analyzed complied with applicable Ontario Table 2 CCI SCS.</p>
<p>iii. each medium in which a</p>	<p>Not applicable.</p>

<p>contaminant associated with an area referred to in subparagraph i is present,</p>	
<p>iv. a description and assessment of what is known about each of the areas referred to in subparagraph i,</p>	<p>Not applicable.</p>
<p>v. the distribution, in each of the areas referred to in subparagraph i, of each contaminant present in the area at a concentration greater than the applicable site condition standard, for each medium in which the contaminant is present, together with figures showing the distribution,</p>	<p>Not applicable.</p>
<p>vi. anything known about the reason for the discharge of the contaminants present on, in or under the phase two property at a concentration greater than the applicable site condition standard into the natural environment,</p>	<p>Not applicable.</p>
<p>vii. anything known about migration of the contaminants present on, in or under the phase two property at a concentration greater than the applicable site condition standard away from any area of potential environmental concern, including the identification of any preferential pathways,</p>	<p>Not applicable.</p>
<p>viii. climatic or meteorological conditions that may have influenced distribution and migration of the contaminants, such as temporal fluctuations in ground water levels,</p>	<p>Not likely, as no groundwater impacts noted.</p>
<p>ix. if applicable, information concerning soil vapour intrusion of the contaminants into buildings including, A. relevant construction features of a building, such as a basement or crawl space, B. building heating, ventilating and air conditioning design and operation, and</p>	<p>Not applicable.</p>

C. subsurface utilities.	
<p>4. Provide, where contaminants on, in or under the phase two property are present at concentrations greater than the applicable site condition standard, one or more cross-sections showing,</p> <p>i. the lateral and vertical distribution of a contaminant in each area where the contaminant is present at a concentration greater than the applicable site condition standard in soil, ground water and sediment,</p>	Not applicable.
<p>ii. approximate depth to water table in each area referred to in subparagraph i,</p>	Please refer to <i>Drawings 7 and 8</i> .
<p>iii. stratigraphy from ground surface to the deepest aquifer or aquitard investigated, and</p>	<p>The observed stratigraphy from the ground surface to the deepest aquifer investigated during the Phase Two ESA generally comprised clayey silt fill with some shale (0 m to 5.3 m), which were underlain by sandy silt till (0 m to 7.0 m). Details of the soil stratigraphy are noted on the <i>Borehole Logs</i> in <i>Appendix B</i> and the Cross-Section Profiles in <i>Drawing 7</i>.</p>
<p>iv. any subsurface structures and utilities that may affect contaminant distribution and transport in each area referred to in subparagraph i.</p>	Not Applicable.
<p>5. Provide, for each area where a contaminant is present on, in or under the property at a concentration greater than the applicable site condition standard for the contaminant, a diagram identifying, with narrative explanatory notes,</p> <p>i. the release mechanisms,</p> <p>ii. contaminant transport pathway,</p> <p>iii. the human and ecological receptors located on, in or under the phase two property,</p> <p>iv. receptor exposure points, and</p> <p>v. routes of exposure.</p>	Not applicable.

<p>7.0 CONCLUSIONS</p> <p>Provide a summary of the information about the following:</p> <p>i. the location and concentration of contaminants in the land or water on, in or under the phase two property,</p>	<p>In summary, the measured contaminant concentrations in the soil and groundwater samples analyzed complied with applicable <i>Ontario Regulation 153/04</i> Table 2 site condition standards (SCS) for commercial lands having fine-textured soils in a potable groundwater condition.</p> <p>Based on these findings, no further environmental investigation is presently warranted. However, we note that there is a stockpile of locally dumped fill materials on the premises which will require testing and documentation in accordance with <i>Ontario Regulation 406/19</i> if the material is to be moved off the premises for reuse or disposal offsite.</p> <p>Finally, if the monitoring wells are not required for further testing, they should be decommissioned in accordance with <i>Ontario Regulation 903</i> provisions.</p>
<p>ii. environmental conditions in the land or water on, in or under the phase two property where it is necessary to undertake a risk assessment with respect to one or more contaminants of concern, and</p>	<p>A risk assessment will not be necessary as there was no evidence of contaminants of concern.</p>
<p>iii. whether applicable site condition standards and standards specified in a risk assessment for contaminants on, in or under the phase two property were met as of the certification date.</p>	<p>As of the last date of sampling, all soil and groundwater samples met the Table 2 SCS.</p>
<p>8.0 LIMITATION OF LIABILITY, SCOPE OF REPORT AND THIRD PARTY RELIANCE</p>	<p>Services performed by AiMS Environmental were conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the environmental engineering and consulting profession. This report does not exhaustively cover and investigation of all possible environmental conditions or circumstances that may exist on the subject property. If a service is not expressly indicated, it should not be assumed that it was provided.</p> <p>In evaluating the subject site, AiMS Environmental has relied in good faith on information provided by any individuals noted in the reports referenced. We assumed that the information provided is factual, accurate, and we accept no responsibility for any deficiency, misstatements, or inaccuracies contained in this report as a result of omissions, misrepresentation, or fraudulent acts of any persons interviewed or contacted.</p>

	<p>This report has been prepared for the sole use of the addressee. No third parties are entitled to rely on its findings and conclusions without the express written consent of AiMS Environmental. It should be recognized that the passage of time affects the information provided in this report. Environmental conditions of a site can change.</p> <p>Opinions relating to the site conditions are based upon information that existed at the time the conclusions were formulated. It should also be noted that current environmental guidelines and regulations are subject to change, and such changes, when put into effect, could alter the conclusions and recommendations noted in this report.</p>
<p style="text-align: center;">9.0 SIGNATURES</p> <p>Provide,</p> <p>i. original signatures of the qualified person who conducted or supervised the phase two environmental site assessment, and</p> <p>ii. a statement by the qualified person confirming the carrying out of the phase two environmental site assessment and the findings and conclusions of the report.</p>	<p>i.</p> <p>AiMS Environmental</p>  <p>Mohamed M. Jagani, P.Eng, PE, QP^(ESA) Project Manager</p> <p>ii. Please refer to the Statement of Qualifications.</p>
<p style="text-align: center;">10.0 REFERENCES</p>	<p>MTE, <i>Phase I ESA Report, Bell Zone 3 W0034, 4243 Sixth Line, Oakville, Ontario. (MTE File No.: 40170-186 dated June 10, 2020).</i></p> <p>MTE, <i>Phase II ESA Report, Bell Zone 3 W0034, 4243 Sixth Line, Oakville, Ontario. (MTE File No.: 40170-188 dated August 12, 2020).</i></p> <p>Stantec, <i>Heritage Impact Assessment, 4243 Sixth Line, Town of Oakville, Ontario. (Project Number: 160940563 dated October 21, 2021).</i></p> <p>Ontario Ministry of the Environment, <i>Environmental Protection Act, Ontario Regulation 153/04, Records of Site Condition - Part XV.1 of the Act</i>, March 9, 2004, amended as of July 1, 2011.</p> <p>Ontario Ministry of the Environment, <i>Guide for Completing Phase Two Environmental Site Assessments Under O. Reg. 153/04</i>, June 1, 2011.</p>

STATEMENT OF ASSESSOR QUALIFICATIONS

Mohamedarif M. Jagani, M.S., P. Eng., PE

Mr. Jagani is a graduate of the University of Toledo, Ohio, and the University of Nairobi, Kenya with Bachelor and Master of Science Degrees in Civil Engineering. He became a Professional Engineer in 1990 and has been designated as a “Qualified Person” with the Ministry of the Environment and Climate Change under *Ontario Regulation 153/04*.

Mr. Jagani has been working in the environmental field for over 20 years and has since conducted and managed over 1,000 environmental projects including Phase I and II environmental site assessments (ESAs); geo-environmental subsurface investigations; site characterizations, decommissioning and remediations; environmental building inspections, including asbestos insulation material and lead-based paint surveys; and overseeing the filing of Record of Site Conditions with the MECP.

His recent accomplishments include brownfields consulting, innovative technical solutions for site remediation; consulting for civil litigation involving property owners, stakeholder financial institutions and oil companies. In addition, he is involved in remediation management of underground tank removals, drycleaning facilities, gasoline service stations; and sites with groundwater contamination.

Mr. Jagani ensures that *AiMS Environmental* professional services are provided to the highest engineering standards and that our environmental projects fully comply with all relevant environmental guidelines and ministry regulations.

rev. January 2020

STATEMENT OF ASSESSOR QUALIFICATIONS

Enqi Xiang, M.Sc. E.Pt.

Phase I & II Environmental Site Assessments (ESAs)

This Phase I/II ESA or environmental investigation report was written by Enqi Xiang under the direction of Mr. Sidney Joseph, Mr. Mohamed Jagani and/or Mr. Forry Fong, P.Eng., all Designated Consulting Engineers with *AiMS Environmental*.

Miss Xiang is a graduate of the University of Toronto, with a Master of Science and an Honours Bachelor of Science, Specialist in Environmental Chemistry. She is also an Environmental Professional in Training with ECO Canada. She has experience in the environmental consulting field conducting Phase I and II ESAs in accordance with the *Canadian Standards Association (CSA) Z768-01* environmental protocols, the Consulting Engineers of Ontario's *Generally Accepted Standards for Environmental Investigations*, and the *Canadian Mortgage & Housing Corporation (CMHC)* environmental site investigation procedures for mortgage loan insurance.

Miss Xiang has also gained experience conducting Designated Hazardous Materials Inspections (specifically – the identification of asbestos-containing materials), and air, groundwater, surface water, and soil sampling and monitoring.

April 2023

TABLES

TABLE 1 – Monitoring Well Installation Details

MONITORING WELL	GROUND SURFACE ELEVATION (m)	TOP OF RISER ELEVATION (m)	MONITORING WELL CONSTRUCTION DETAILS	ASSOCIATED ELEVATIONS (m)
MW101	189.40	190.40	51-mm PVC Solid Riser Pipe 51-mm PVC Slotted Intake Screen	190.40 to 187.27 187.27 to 184.22
MW105	192.84	193.74	51-mm PVC Solid Riser Pipe 51-mm PVC Slotted Intake Screen	193.74 to 189.49 189.49 to 186.44
MW108	191.59	192.49	51-mm PVC Solid Riser Pipe 51-mm PVC Slotted Intake Screen	192.49 to 188.24 188.24 to 185.19
MW111	189.86	190.74	51-mm PVC Solid Riser Pipe 51-mm PVC Slotted Intake Screen	190.74 to 186.81 186.81 to 183.76

NOTE: All elevations relate to geodetic datum

TABLE 2 – Water Levels

MONITORING WELL	MONITORING DATE	GROUND WATER LEVEL (m bgs)	GROUNDWATER ELEVATION (m)
MW101	25-May-2023	4.19	185.21
MW105	25-May-2023	2.09	190.75
MW108	25-May-2023	0.65	190.94
MW111	25-May-2023	5.01	184.85

NOTE: All elevations relate to geodetic datum

TABLE 3 – Non-Aqueous Phase Liquid Measurements

MONITORING WELL	MONITORING DATE	LIGHT NONAQUEOUS PHASE LIQUID (LNAPL)	DENSE NONAQUEOUS PHASE LIQUID (DNAPL)	VISUAL OBSERVATIONS AND OTHER REMARKS
MW101	25-May-2023	None Detected	None Detected	No Odour or Dissolved Phase Hydrocarbons
MW105	25-May-2023	None Detected	None Detected	No Odour or Dissolved Phase Hydrocarbons
MW108	25-May-2023	None Detected	None Detected	No Odour or Dissolved Phase Hydrocarbons
MW111	25-May-2023	None Detected	None Detected	No Odour or Dissolved Phase Hydrocarbons

NOTE: All elevations relate to geodetic datum

TABLE 4 – Soil Analytical Results: PHCs & BTEX

**Site Condition Standard (SCS): O.Reg. 153/04 Table 2 (ICC) Standards - Fine & Medium Textured Soils			Sample ID:	BH105-1	BH107-1	BH106-1	BH106-3	BH106-5	BH106-7
			Bureau Veritas ID:	VUN227	VUN229	VUN287	VUN288	VUN289	VUN290
			Sample Date:	10-May-2023	10-May-2023	10-May-2023	10-May-2023	10-May-2023	10-May-2023
			Sample Time:	12:00	13:00	12:30	12:30	12:30	12:30
			Depth (mbgs):	0-0.9	0-0.8	0-0.8	1.5-2.3	3.4-4.0	4.6-5.3
PARAMETERS	SCS**	Units							
BTEX & F1 Hydrocarbons									
Benzene	0.4	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Toluene	9	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Ethylbenzene	1.6	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
o-Xylene	-	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
p+m-Xylene	-	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Total Xylenes	30	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
F1 (C6-C10)	65	ug/g	<10	<10	<10	<10	<10	<10	<10
F1 (C6-C10) - BTEX	65	ug/g	<10	<10	<10	<10	<10	<10	<10
F2-F4 Hydrocarbons									
F2 (C10-C16 Hydrocarbons)	250	ug/g	<10	<10	<10	<10	<10	<10	<10
F3 (C16-C34 Hydrocarbons)	2500	ug/g	<50	<50	<50	<50	<50	<50	<50
F4 (C34-C50 Hydrocarbons)	6600	ug/g	<50	<50	<50	<50	<50	<50	<50
Reached Baseline at C50	-	ug/g	Yes	Yes	Yes	Yes	Yes	Yes	Yes
**Site Condition Standard (SCS): O.Reg. 153/04 Table 2 (ICC) Standards - Fine & Medium Textured Soils			Sample ID:	BH102-4	BH108-1				
			Bureau Veritas ID:	VUN224	VUN230				
			Sample Date:	10-May-2023	10-May-2023				
			Sample Time:	10:45	14:00				
			Depth (mbgs):	2.3-3.0	0.1-0.8				
PARAMETERS	SCS**	Units							
BTEX & F1 Hydrocarbons									
Benzene	0.4	ug/g	-	-					
Toluene	9	ug/g	-	-					
Ethylbenzene	1.6	ug/g	-	-					
o-Xylene	-	ug/g	-	-					
p+m-Xylene	-	ug/g	-	-					
Total Xylenes	30	ug/g	-	-					
F1 (C6-C10)	65	ug/g	-	-					
F1 (C6-C10) - BTEX	65	ug/g	-	-					
F2-F4 Hydrocarbons									
F2 (C10-C16 Hydrocarbons)	250	ug/g	<10	<10					
F3 (C16-C34 Hydrocarbons)	2500	ug/g	<50	<50					
F4 (C34-C50 Hydrocarbons)	6600	ug/g	<50	<50					
Reached Baseline at C50	-	ug/g	Yes	Yes					

EXCEEDANCE OF SCS

ICC = Standards shown are for an Industrial/Commercial/Community property use
 Analysis by Bureau Veritas ND = Not Detected
 All results in ppm (ug/g) on dry weight basis; '-' = not analysed mbgs = metres below ground surface
 < value = less than reportable detection limit

TABLE 5 – Soil Analytical Results: Metals and Inorganics

**Site Condition Standard (SCS): O.Reg. 153/04 Table 2 (ICC) Standards - Fine & Medium Textured Soils	Sample ID:		BH101-1	101-N	101-SE	101-SW	BH104-1	BH105-1	BH105-1 Lab-Dup	BH109-1	BH111-1
	Bureau Veritas ID:		VUN221	VXC767	VXC768	VXC769	VUN226	VUN227	VUN227	VUN231	VUN286
	Sample Date:		10-May-2023	25-May-2023	25-May-2023	25-May-2023	10-May-2023	10-May-2023	10-May-2023	10-May-2023	10-May-2023
	Sample Time:		10:15	08:40	08:50	09:10	11:40	12:00	12:00	14:30	15:20
	Depth (mbgs):		0.1-0.8	0-0.8	0-0.8	0-0.8	0-0.6	0-0.9	0-0.9	0-0.3	0-0.8
PARAMETERS	SCS**	Units									
Metals											
Acid Extractable Antimony (Sb)	50	ug/g	0.31	-	-	-	<0.20	0.23	0.23	<0.20	<0.20
Acid Extractable Arsenic (As)	18	ug/g	20	5.1	5.4	7.0	5.9	5.1	4.7	6.6	5.3
Acid Extractable Barium (Ba)	670	ug/g	130	-	-	-	41	120	110	38	68
Acid Extractable Beryllium (Be)	10	ug/g	0.75	-	-	-	0.98	0.69	0.66	0.91	0.83
Acid Extractable Boron (B)	120	ug/g	13	-	-	-	14	9.7	9.7	12	9.6
Acid Extractable Cadmium (Cd)	1.9	ug/g	0.32	-	-	-	<0.10	0.11	0.13	<0.10	0.18
Acid Extractable Chromium (Cr)	160	ug/g	22	-	-	-	28	20	19	27	24
Acid Extractable Cobalt (Co)	100	ug/g	10	-	-	-	20	12	12	18	14
Acid Extractable Copper (Cu)	300	ug/g	47	-	-	-	27	28	28	31	26
Acid Extractable Lead (Pb)	120	ug/g	55	-	-	-	4.8	11	11	7.2	13
Acid Extractable Molybdenum (Mo)	40	ug/g	0.65	-	-	-	<0.50	0.62	0.63	<0.50	0.54
Acid Extractable Nickel (Ni)	340	ug/g	21	-	-	-	38	27	26	38	28
Acid Extractable Selenium (Se)	5.5	ug/g	<0.50	-	-	-	<0.50	<0.50	<0.50	<0.50	<0.50
Acid Extractable Silver (Ag)	50	ug/g	<0.20	-	-	-	<0.20	<0.20	<0.20	<0.20	<0.20
Acid Extractable Thallium (Tl)	3.3	ug/g	0.14	-	-	-	0.094	0.11	0.10	0.086	0.12
Acid Extractable Uranium (U)	33	ug/g	0.47	-	-	-	0.60	0.56	0.55	0.58	0.61
Acid Extractable Vanadium (V)	86	ug/g	31	-	-	-	33	26	26	31	32
Acid Extractable Zinc (Zn)	340	ug/g	120	-	-	-	76	62	58	74	80
Acid Extractable Mercury (Hg)	20	ug/g	0.11	-	-	-	<0.050	<0.050	<0.050	<0.050	<0.050
Inorganics											
Chromium (VI)	10	ug/g	-	-	-	-	-	<0.18	-	-	-
Metals											
Hot Water Ext. Boron (B)	2	ug/g	-	-	-	-	-	0.19	-	-	-
**Site Condition Standard (SCS): O.Reg. 153/04 Table 2 (ICC) Standards - Fine & Medium Textured Soils	Sample ID:		BH106-1	BH106-1 Lab-Dup	BH106-3	BH106-5	BH106-7				
	Bureau Veritas ID:		VUN287	VUN287	VUN288	VUN289	VUN290				
	Sample Date:		10-May-2023	10-May-2023	10-May-2023	10-May-2023	10-May-2023				
	Sample Time:		12:30	12:30	12:30	12:30	12:30				
	Depth (mbgs):		0-0.8	0-0.8	1.5-2.3	3.4-4.0	4.6-5.3				
PARAMETERS	SCS**	Units									
Metals											
Acid Extractable Antimony (Sb)	50	ug/g	0.29	-	<0.20	0.23	0.23				
Acid Extractable Arsenic (As)	18	ug/g	4.7	-	4.7	2.4	4.8				
Acid Extractable Barium (Ba)	670	ug/g	90	-	110	44	90				
Acid Extractable Beryllium (Be)	10	ug/g	0.73	-	0.75	0.28	0.69				
Acid Extractable Boron (B)	120	ug/g	11	-	13	<5.0	10				
Acid Extractable Cadmium (Cd)	1.9	ug/g	0.11	-	<0.10	0.15	0.15				
Acid Extractable Chromium (Cr)	160	ug/g	20	-	20	12	20				
Acid Extractable Cobalt (Co)	100	ug/g	12	-	12	4.1	12				
Acid Extractable Copper (Cu)	300	ug/g	30	-	22	13	28				

Acid Extractable Lead (Pb)	120	ug/g	12	-	12	17	12				
Acid Extractable Molybdenum (Mo)	40	ug/g	0.62	-	0.55	<0.50	0.60				
Acid Extractable Nickel (Ni)	340	ug/g	27	-	25	8.9	26				
Acid Extractable Selenium (Se)	5.5	ug/g	<0.50	-	<0.50	<0.50	<0.50				
Acid Extractable Silver (Ag)	50	ug/g	<0.20	-	<0.20	<0.20	<0.20				
Acid Extractable Thallium (Tl)	3.3	ug/g	0.12	-	0.11	0.062	0.12				
Acid Extractable Uranium (U)	33	ug/g	0.64	-	0.60	0.37	0.61				
Acid Extractable Vanadium (V)	86	ug/g	27	-	28	20	29				
Acid Extractable Zinc (Zn)	340	ug/g	60	-	60	38	67				
Acid Extractable Mercury (Hg)	20	ug/g	<0.050	-	<0.050	<0.050	<0.050				
Inorganics											
Chromium (VI)	10	ug/g	<0.18		<0.18	<0.18	<0.18				
Metals											
Hot Water Ext. Boron (B)	2	ug/g	0.24	0.22	0.24	0.53	0.23				

EXCEEDANCE OF SCS

ICC = Standards shown are for an Industrial/Commercial/Community property use
 Analysis by Bureau Veritas ND = Not Detected
 All results in ppm (ug/g) on dry weight basis; '-' = not analysed mbgs = metres below ground surface
 < value = less than reportable detection limit

TABLE 6 – Soil Analytical Results: PAHs

**Site Condition Standard (SCS): O.Reg. 153/04 Table 2 (ICC) Standards - Fine & Medium Textured Soils	Sample ID:		BH102-1	BH103-1	BH107-1
	Bureau Veritas ID:		VUN223	VUN225	VUN229
	Sample Date:		10-May-2023	10-May-2023	10-May-2023
	Sample Time:		10:45	11:15	13:00
	Depth (mbgs):		0-0.8	0-0.8	0-0.8
PARAMETERS	SCS**	Units			
Calculated Parameters					
Methylnaphthalene, 2-(1-)	-	ug/g	<0.0071	<0.0071	<0.0071
Polyaromatic Hydrocarbons					
Acenaphthene	29	ug/g	<0.0050	<0.0050	<0.0050
Acenaphthylene	0.17	ug/g	<0.0050	<0.0050	<0.0050
Anthracene	0.74	ug/g	<0.0050	<0.0050	<0.0050
Benzo(a)anthracene	0.96	ug/g	<0.0050	<0.0050	<0.0050
Benzo(a)pyrene	0.3	ug/g	<0.0050	<0.0050	<0.0050
Benzo(b/j)fluoranthene	0.96	ug/g	<0.0050	<0.0050	<0.0050
Benzo(g,h,i)perylene	9.6	ug/g	<0.0050	<0.0050	<0.0050
Benzo(k)fluoranthene	0.96	ug/g	<0.0050	<0.0050	<0.0050
Chrysene	9.6	ug/g	<0.0050	<0.0050	<0.0050
Dibenzo(a,h)anthracene	0.1	ug/g	<0.0050	<0.0050	<0.0050
Fluoranthene	9.6	ug/g	<0.0050	<0.0050	<0.0050
Fluorene	69	ug/g	<0.0050	<0.0050	<0.0050
Indeno(1,2,3-cd)pyrene	0.95	ug/g	<0.0050	<0.0050	<0.0050
1-Methylnaphthalene	42	ug/g	<0.0050	0.0067	<0.0050
2-Methylnaphthalene	42	ug/g	<0.0050	<0.0050	<0.0050
Naphthalene	28	ug/g	<0.0050	<0.0050	<0.0050
Phenanthrene	16	ug/g	<0.0050	<0.0050	<0.0050
Pyrene	96	ug/g	<0.0050	<0.0050	<0.0050
Biphenyl	210	ug/g	<0.0050	<0.0050	<0.0050

EXCEEDANCE OF SCS

ICC = Standards shown are for an Industrial/Commercial/Community property use
 Analysis by Bureau Veritas ND = Not Detected
 All results in ppm (ug/g) on dry weight basis; '-' = not analysed mbgs = metres below ground surface
 < value = less than reportable detection limit

TABLE 7 – Soil Analytical Results: OC Pesticides & PCBs

**Site Condition Standard (SCS): O.Reg. 153/04 Table 2 (ICC) Standards - Fine & Medium Textured Soils	Sample ID:		BH102-1	BH108-1	BH110-1
	Bureau Veritas ID:		VUN223	VUN230	VUN232
	Sample Date:		10-May-2023	10-May-2023	10-May-2023
	Sample Time:		10:45	14:00	14:45
	Depth (mbgs):		0-0.8	0.1-0.8	0-0.8
PARAMETERS	SCS**	Units			
Calculated Parameters					
Aldrin + Dieldrin	-	ug/g	-	-	<0.0020
Chlordane (Total)	0.05	ug/g	-	-	<0.0020
DDT+ Metabolites	-	ug/g	-	-	<0.0020
o,p-DDD + p,p-DDD	-	ug/g	-	-	<0.0020
o,p-DDE + p,p-DDE	-	ug/g	-	-	<0.0020
o,p-DDT + p,p-DDT	-	ug/g	-	-	<0.0020
Total Endosulfan	-	ug/g	-	-	<0.0020
Total PCB	1.1	ug/g	<0.010	<0.010	<0.015
Pesticides & Herbicides					
Aldrin	0.11	ug/g	-	-	<0.0020
a-Chlordane	0.05	ug/g	-	-	<0.0020
g-Chlordane	0.05	ug/g	-	-	<0.0020
o,p-DDD	4.6	ug/g	-	-	<0.0020
p,p-DDD	4.6	ug/g	-	-	<0.0020
o,p-DDE	0.65	ug/g	-	-	<0.0020
p,p-DDE	0.65	ug/g	-	-	<0.0020
o,p-DDT	1.4	ug/g	-	-	<0.0020
p,p-DDT	1.4	ug/g	-	-	<0.0020
Dieldrin	0.11	ug/g	-	-	<0.0020
Lindane	0.063	ug/g	-	-	<0.0020
Endosulfan I (alpha)	0.38	ug/g	-	-	<0.0020
Endosulfan II (beta)	0.38	ug/g	-	-	<0.0020
Endrin	0.04	ug/g	-	-	<0.0020
Heptachlor	0.19	ug/g	-	-	<0.0020
Hexachlorobenzene	0.66	ug/g	-	-	<0.0020
Hexachlorobutadiene	0.095	ug/g	-	-	<0.0020
Hexachloroethane	0.43	ug/g	-	-	<0.0020
Methoxychlor	1.6	ug/g	-	-	<0.0050
Aroclor 1242	-	ug/g	<0.010	<0.010	<0.015
Aroclor 1248	-	ug/g	<0.010	<0.010	<0.015
Aroclor 1254	-	ug/g	<0.010	<0.010	<0.015
Aroclor 1260	-	ug/g	<0.010	<0.010	<0.015
Endosulfan sulfate	-	ug/g	-	-	<0.0020

EXCEEDANCE OF SCS

ICC = Standards shown are for an Industrial/Commercial/Community property use
 Analysis by Bureau Veritas ND = Not Detected
 All results in ppm (ug/g) on dry weight basis; '-' = not analysed mbgs = metres below ground surface
 < value = less than reportable detection limit

TABLE 8 – Soil Analytical Results: VOCs

**Site Condition Standard (SCS): O.Reg. 153/04 Table 2 (ICC) Standards - Fine & Medium Textured Soils	Sample ID:		BH105-4
	Bureau Veritas ID:		VUN228
	Sample Date:		10-May-2023
	Sample Time:		12:00
	Depth (mbgs):		2.4-2.7
PARAMETERS	SCS**	Units	
Calculated Parameters			
1,3-Dichloropropene (cis+trans)	0.081	ug/g	<0.050
Volatile Organics			
Acetone (2-Propanone)	28	ug/g	<0.49
Benzene	0.4	ug/g	<0.0060
Bromodichloromethane	1.9	ug/g	<0.040
Bromoform	1.7	ug/g	<0.040
Bromomethane	0.05	ug/g	<0.040
Carbon Tetrachloride	0.71	ug/g	<0.040
Chlorobenzene	2.7	ug/g	<0.040
Chloroform	0.18	ug/g	<0.040
Dibromochloromethane	2.9	ug/g	<0.040
1,2-Dichlorobenzene	1.7	ug/g	<0.040
1,3-Dichlorobenzene	12	ug/g	<0.040
1,4-Dichlorobenzene	0.57	ug/g	<0.040
Dichlorodifluoromethane (FREON 12)	25	ug/g	<0.040
1,1-Dichloroethane	0.6	ug/g	<0.040
1,2-Dichloroethane	0.05	ug/g	<0.049
1,1-Dichloroethylene	0.48	ug/g	<0.040
cis-1,2-Dichloroethylene	2.5	ug/g	<0.040
trans-1,2-Dichloroethylene	2.5	ug/g	<0.040
1,2-Dichloropropane	0.68	ug/g	<0.040
cis-1,3-Dichloropropene	0.081	ug/g	<0.030
trans-1,3-Dichloropropene	0.081	ug/g	<0.040
Ethylbenzene	1.6	ug/g	<0.010
Ethylene Dibromide	0.05	ug/g	<0.040
Hexane	88	ug/g	<0.040
Methylene Chloride(Dichloromethane)	2	ug/g	<0.049
Methyl Ethyl Ketone (2-Butanone)	88	ug/g	<0.40
Methyl Isobutyl Ketone	210	ug/g	<0.40
Methyl t-butyl ether (MTBE)	2.3	ug/g	<0.040
Styrene	43	ug/g	<0.040
1,1,1,2-Tetrachloroethane	0.11	ug/g	<0.040
1,1,2,2-Tetrachloroethane	0.094	ug/g	<0.040
Tetrachloroethylene	2.5	ug/g	<0.040
Toluene	9	ug/g	<0.020
1,1,1-Trichloroethane	12	ug/g	<0.040
1,1,2-Trichloroethane	0.11	ug/g	<0.040
Trichloroethylene	0.61	ug/g	<0.010
Trichlorofluoromethane (FREON 11)	5.8	ug/g	<0.040
Vinyl Chloride	0.25	ug/g	<0.019
p+m-Xylene	-	ug/g	<0.020
o-Xylene	-	ug/g	<0.020

Total Xylenes	30	ug/g	<0.020
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EXCEEDANCE OF SCS

ICC = Standards shown are for an Industrial/Commercial/Community property use
Analysis by Bureau Veritas ND = Not Detected
All results in ppm (ug/g) on dry weight basis; '-' = not analysed mbgs = metres below ground surface
< value = less than reportable detection limit

TABLE 9 – Groundwater Analytical Results: Metals

**Site Condition Standard (SCS): O.Reg. 153/04 Table 2 (ICC) Standards - Fine & Medium Textured Soils	Sample ID:		MW101	MW105	MW108	MW111	MW111 Lab-Dup
	Bureau Veritas ID:		VXC763	VXC764	VXC765	VXC766	VXC766
	Sample Date:		25-May-2023	25-May-2023	25-May-2023	25-May-2023	25-May-2023
	Sample Time:		08:30	09:15	09:30	09:50	09:50
	Screened Depth (mbgs):		2.1-5.2	3.4-6.4	3.4-6.4	3.4-6.4	3.4-6.4
PARAMETERS	SCS**	Units					
Metals							
Dissolved Antimony (Sb)	6.0	ug/L	2.1	<0.50	<0.50	0.88	0.92
Dissolved Arsenic (As)	25	ug/L	2.0	<1.0	1.1	<1.0	<1.0
Dissolved Barium (Ba)	1000	ug/L	110	47	60	55	54
Dissolved Beryllium (Be)	4.0	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40
Dissolved Boron (B)	5000	ug/L	320	620	520	590	580
Dissolved Cadmium (Cd)	2.7	ug/L	<0.090	<0.090	<0.090	<0.090	<0.090
Dissolved Chromium (Cr)	50	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0
Dissolved Cobalt (Co)	3.8	ug/L	2.3	3.4	2.3	1.8	2.0
Dissolved Copper (Cu)	87	ug/L	<0.90	<0.90	6.8	<0.90	<0.90
Dissolved Lead (Pb)	10	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50
Dissolved Molybdenum (Mo)	70	ug/L	20	2.5	3.6	12	12
Dissolved Nickel (Ni)	100	ug/L	8.7	9.2	5.0	8.8	9.5
Dissolved Selenium (Se)	10	ug/L	3.3	<2.0	<2.0	2.6	2.6
Dissolved Silver (Ag)	1.5	ug/L	<0.090	<0.090	<0.090	<0.090	<0.090
Dissolved Sodium (Na)	490000	ug/L	75000	160000	110000	160000	160000
Dissolved Thallium (Tl)	2.0	ug/L	<0.050	0.056	<0.050	<0.050	<0.050
Dissolved Uranium (U)	20	ug/L	13	18	12	19	19
Dissolved Vanadium (V)	6.2	ug/L	0.86	1.0	0.66	0.59	<0.50
Dissolved Zinc (Zn)	1100	ug/L	17	<5.0	<5.0	15	17

EXCEEDANCE OF SCS

ICC = Standards shown are for an Industrial/Commercial/Community property use
 Analysis by Bureau Veritas ND = Not Detected
 All results in ppm (ug/g) on dry weight basis; '-' = not analysed mbgs = metres below ground surface
 < value = less than reportable detection limit

TABLE 10 – Groundwater Analytical Results: VOCs, PHCs & BTEX

**Site Condition Standard (SCS): O.Reg. 153/04 Table 2 (ICC) Standards - Fine & Medium Textured Soils	Sample ID:		MW101	MW105	MW108	MW111
	Bureau Veritas ID:		VXC763	VXC764	VXC765	VXC766
	Sample Date:		25-May-2023	25-May-2023	25-May-2023	25-May-2023
	Sample Time:		08:30	09:15	09:30	09:50
	Screened Depth (mbgs):		2.1-5.2	3.4-6.4	3.4-6.4	3.4-6.4
PARAMETERS	SCS**	Units				
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	0.5	ug/L	<0.50	<0.50	<0.50	<0.50
Volatile Organics		ug/L				
Acetone (2-Propanone)	2700	ug/L	<10	<10	<10	29
Benzene	5.0	ug/L	<0.17	<0.17	<0.17	<0.17
Bromodichloromethane	16.0	ug/L	<0.50	<0.50	<0.50	<0.50
Bromoform	25.0	ug/L	<1.0	<1.0	<1.0	<1.0
Bromomethane	0.89	ug/L	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	5.0	ug/L	<0.20	<0.20	<0.20	<0.20
Chlorobenzene	30	ug/L	<0.20	<0.20	<0.20	<0.20
Chloroform	22	ug/L	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane	25.0	ug/L	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	3.0	ug/L	<0.50	<0.50	<0.50	<0.50
1,3-Dichlorobenzene	59	ug/L	<0.50	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	1.0	ug/L	<0.50	<0.50	<0.50	<0.50
Dichlorodifluoromethane (FREON 12)	590	ug/L	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	5	ug/L	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	5	ug/L	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	14	ug/L	<0.20	<0.20	<0.20	<0.20
cis-1,2-Dichloroethylene	17	ug/L	<0.50	<0.50	<0.50	<0.50
trans-1,2-Dichloroethylene	17	ug/L	<0.50	<0.50	<0.50	<0.50
1,2-Dichloropropane	5.0	ug/L	<0.20	<0.20	<0.20	<0.20
cis-1,3-Dichloropropene	0.5	ug/L	<0.30	<0.30	<0.30	<0.30
trans-1,3-Dichloropropene	0.5	ug/L	<0.40	<0.40	<0.40	<0.40
Ethylbenzene	2.4	ug/L	<0.20	<0.20	<0.20	<0.20
Ethylene Dibromide	0.2	ug/L	<0.20	<0.20	<0.20	<0.20
Hexane	520	ug/L	<1.0	<1.0	<1.0	<1.0
Methylene Chloride(Dichloromethane)	50	ug/L	<2.0	<2.0	<2.0	<2.0
Methyl Ethyl Ketone (2-Butanone)	1800	ug/L	<10	<10	<10	<10
Methyl Isobutyl Ketone	640	ug/L	<5.0	<5.0	<5.0	<5.0
Methyl t-butyl ether (MTBE)	15	ug/L	<0.50	<0.50	<0.50	<0.50
Styrene	5.4	ug/L	<0.50	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	1.1	ug/L	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	1.0	ug/L	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	17	ug/L	<0.20	<0.20	<0.20	<0.20
Toluene	24	ug/L	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	200	ug/L	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane	5	ug/L	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	5	ug/L	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane (FREON 11)	150	ug/L	<0.50	<0.50	<0.50	<0.50
Vinyl Chloride	1.7	ug/L	<0.20	<0.20	<0.20	<0.20
p+m-Xylene	-	ug/L	<0.20	<0.20	<0.20	<0.20
o-Xylene	-	ug/L	<0.20	<0.20	<0.20	<0.20

Total Xylenes	300	ug/L	<0.20	<0.20	<0.20	<0.20
F1 (C6-C10)	750	ug/L	<25	<25	<25	<25
F1 (C6-C10) - BTEX	750	ug/L	<25	<25	<25	<25
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	150	ug/L	<100	<100	<100	<100
F3 (C16-C34 Hydrocarbons)	500	ug/L	<200	<200	<200	<200
F4 (C34-C50 Hydrocarbons)	500	ug/L	<200	<200	<200	<200
Reached Baseline at C50	-	ug/L	Yes	Yes	Yes	Yes

EXCEEDANCE OF SCS

ICC = Standards shown are for an Industrial/Commercial/Community property use
 Analysis by Bureau Veritas ND = Not Detected
 All results in ppm (ug/g) on dry weight basis; '-' = not analysed mbgs = metres below ground surface
 < value = less than reportable detection limit

DRAWINGS



LEGEND

— Phase Two Property

- - - Phase Two Study Area



Drawing Title:
**LOCATION MAP AND
PHASE TWO STUDY AREA**

Address:
4243 Sixth Line
Oakville, Ontario

File Name:
AR104-23 D001

Project No.:
AR104-23

Scale:



1 : 4000

Paper Size:
8.5 x 11 in

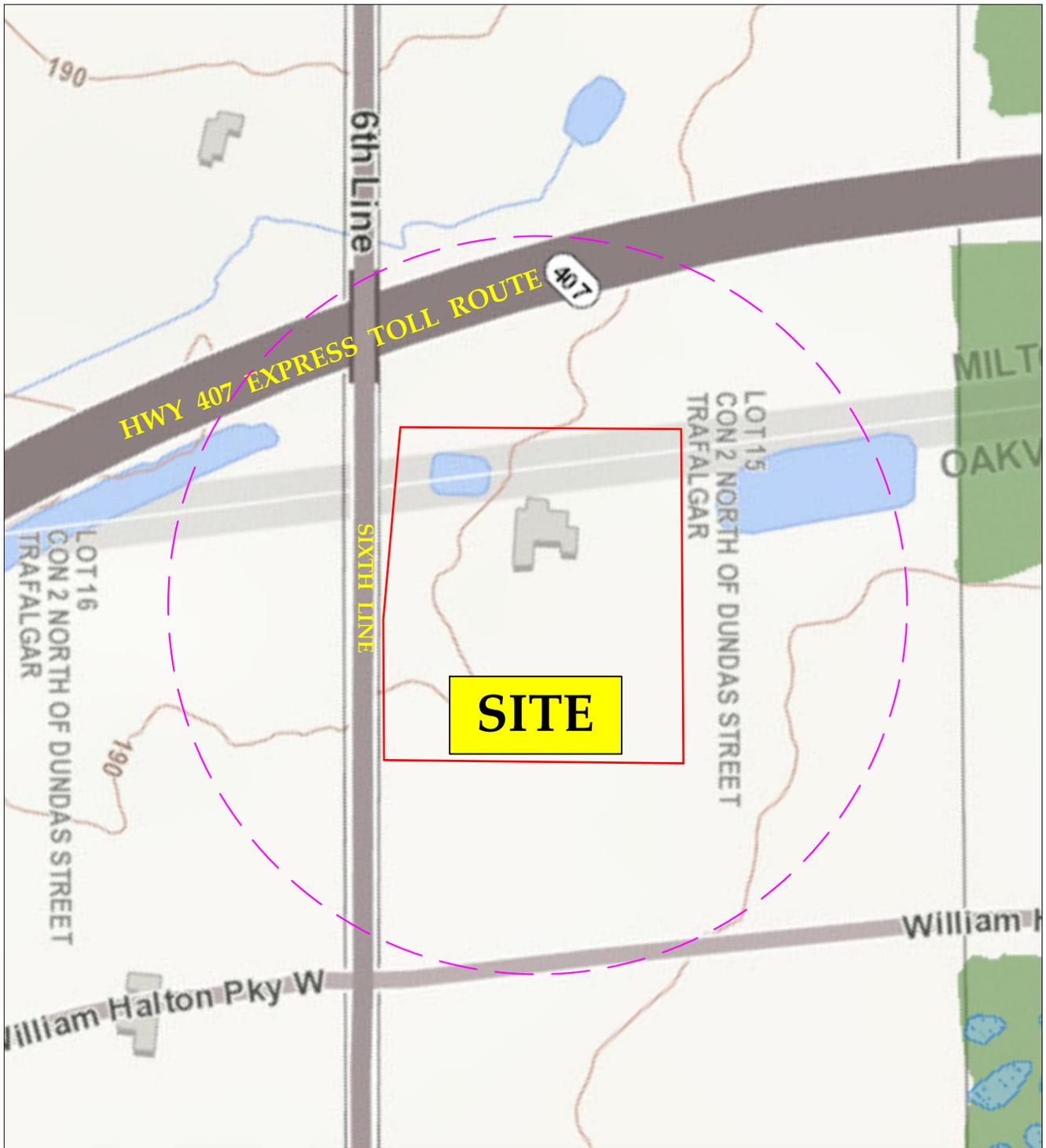
Completed by:
EX

Drawing No.:

Date:
2023/06/21

Reviewed by:
MJ

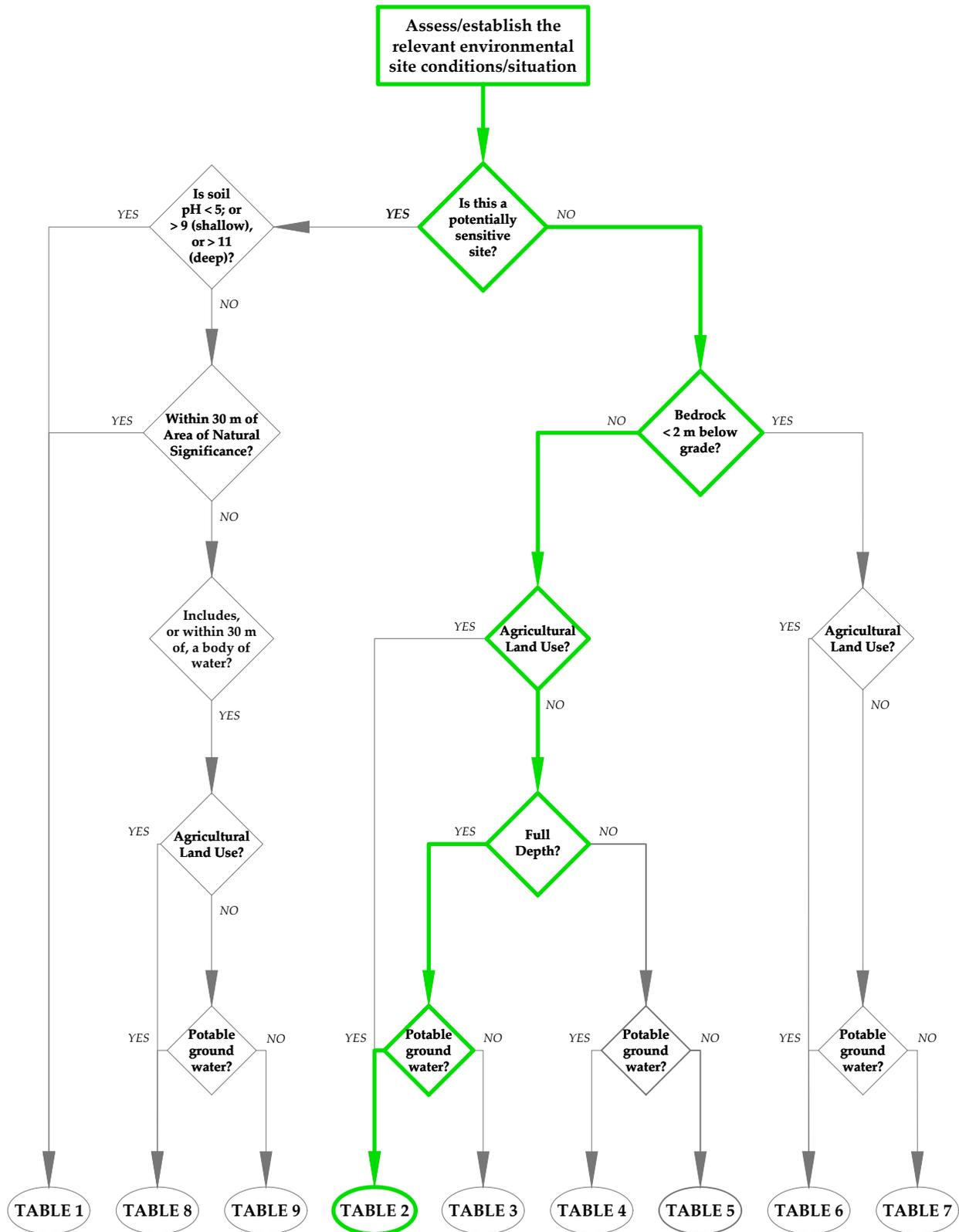
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LEGEND		
Phase Two Property	Phase Two Study Area	Creek
Woodland	Provincially Significant Life Science ANSI	Provincially Significant Wetland Evaluated
Conservation Reserve	Provincially Significant Earth Science ANSI	Non - Provincially Significant Wetland Evaluated
Provincial Park	Unevaluated Wetland	



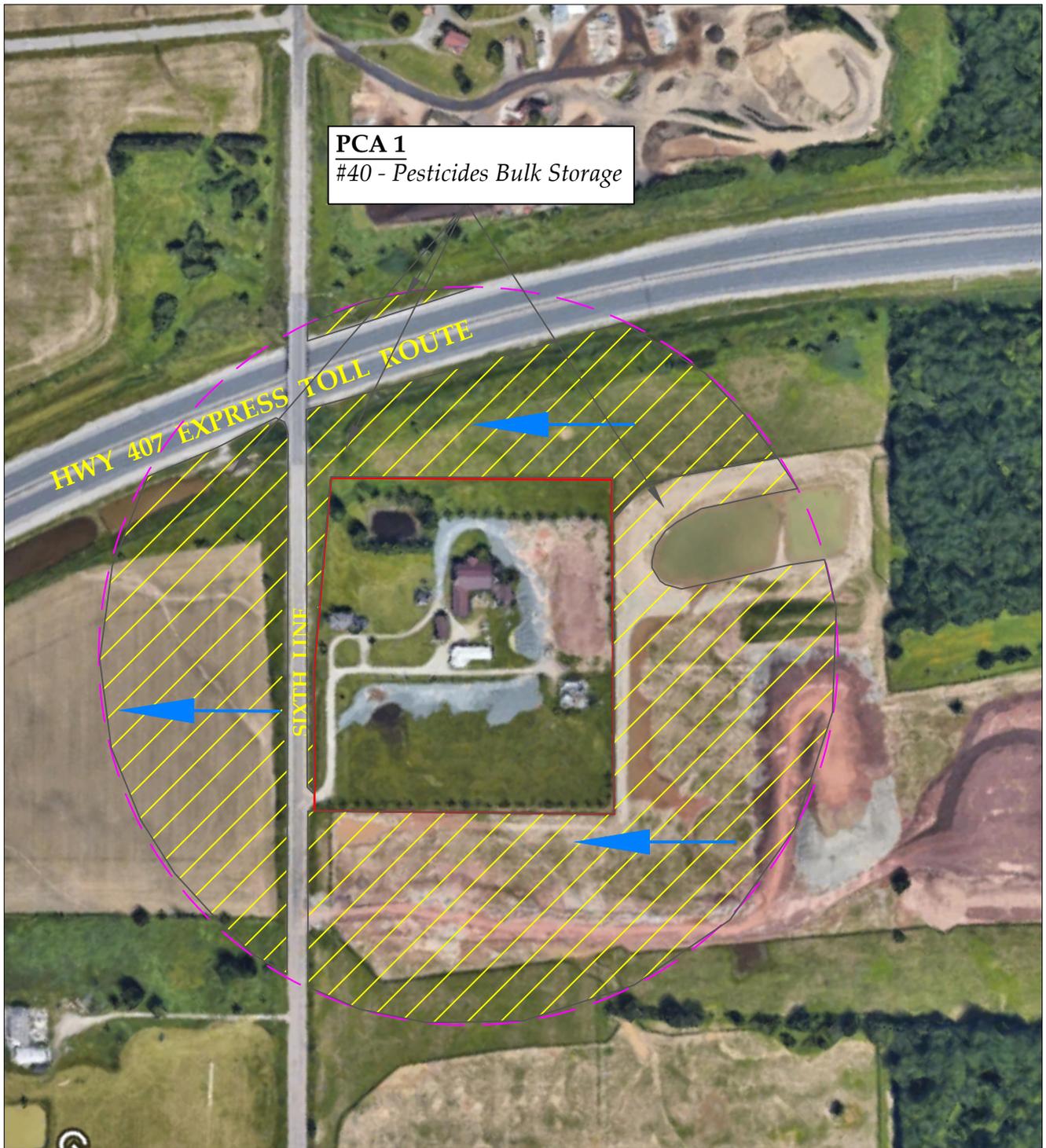
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File Name:	AR104-23 D002	Project No.:	AR104-23	Date:	2023/06/22	Reviewed by:	MJ
						Drawing No.:	2



In accordance with Part IX, Sections 34 to 43.1, of Ontario Regulation 153/04 (as amended) under the Environmental Protection Act

	Drawing Title: SITE CONDITION STANDARDS		Scale: NOT TO SCALE		
	Address: 4243 Sixth Line Oakville, Ontario		Paper Size: 8.5 x 11 in	Completed by: EX	Figure No.: 3
	File Name: AR104-23 D003	Project No.: AR104-23	Date: 2023/06/27	Reviewed by: MJ	

AIMS DRAWING TEMPLATE 85x11 R- OCTOBER 2017



PCA 1
#40 - Pesticides Bulk Storage

LEGEND

- Phase Two Property
- Phase Two Study Area
- Agricultural Land Use
- ← Inferred Direction of Ground Water Flow



Drawing Title:
**CSM - PHASE TWO
STUDY AREA**

Address:
**4243 Sixth Line
Oakville, Ontario**

File Name:
AR104-23 D004

Project No.:
AR104-23

Scale:
0 50 100 200 m



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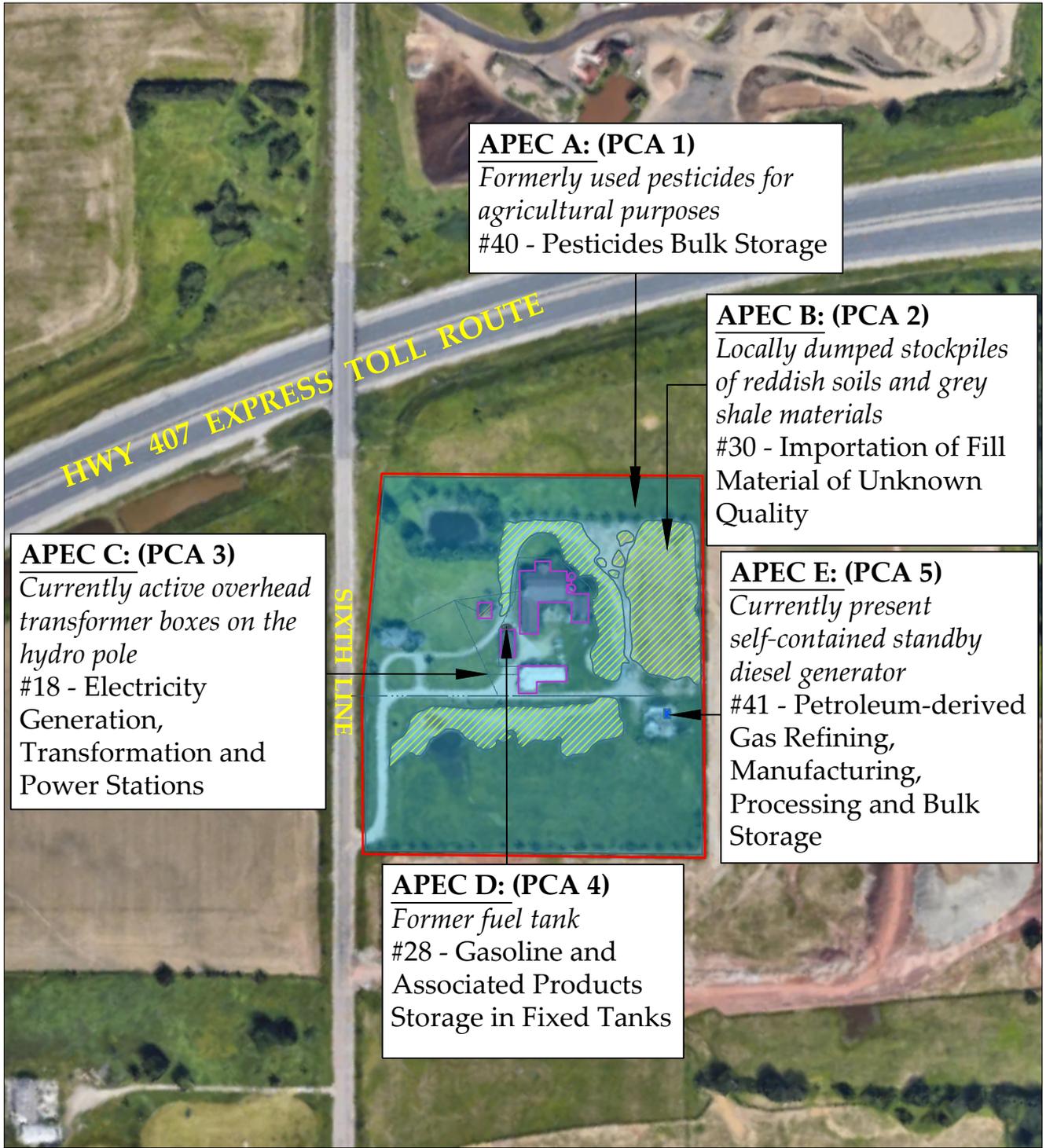
Completed by:
EX

Drawing No.:

Date:
2023/06/22

Reviewed by:
MJ

4



APEC A: (PCA 1)
Formerly used pesticides for agricultural purposes
 #40 - Pesticides Bulk Storage

APEC B: (PCA 2)
Locally dumped stockpiles of reddish soils and grey shale materials
 #30 - Importation of Fill Material of Unknown Quality

APEC C: (PCA 3)
Currently active overhead transformer boxes on the hydro pole
 #18 - Electricity Generation, Transformation and Power Stations

APEC E: (PCA 5)
Currently present self-contained standby diesel generator
 #41 - Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage

APEC D: (PCA 4)
Former fuel tank
 #28 - Gasoline and Associated Products Storage in Fixed Tanks

LEGEND

- Phase Two Property
- Overhead Hydro Wires
- Former Fuel Tank
- APEC A (Entire Phase Two Property)
- APEC B (Central, north central and northeast part of the Phase Two Property)
- Demolished Buildings
- APEC C (Central part of the Phase Two Property)
- APEC D (Central north part of the Phase Two Property)
- APEC E (Southeast part of the Phase Two Property)



Drawing Title:
CSM - PHASE TWO PROPERTY

Address:
**4243 Sixth Line
 Oakville, Ontario**

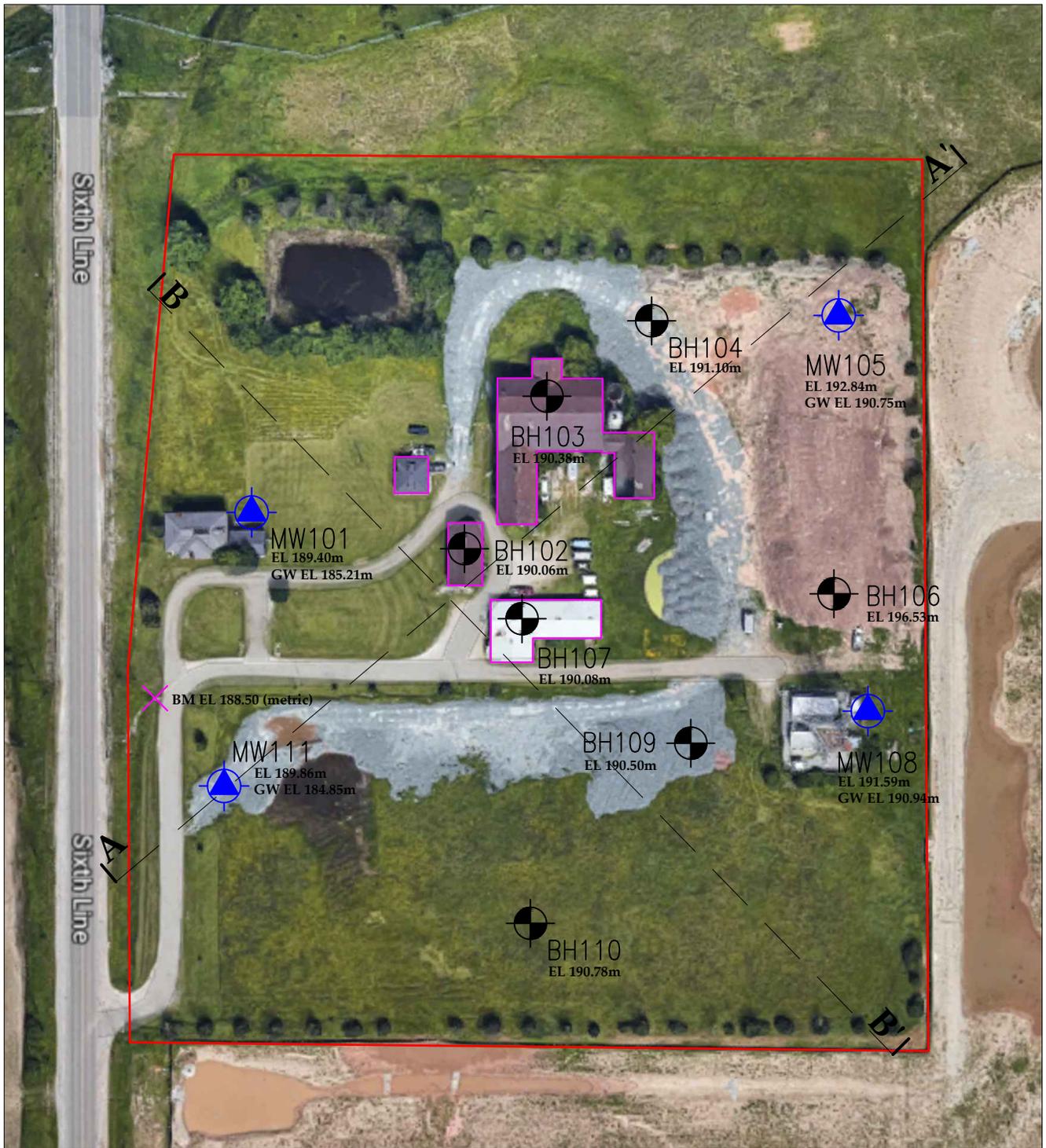
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Scale:
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 1 : 3500

Paper Size: 8.5 x 11 in Completed by: EX
 Date: 2023/06/22 Reviewed by: MJ

Drawing No.:
5



LEGEND

- Phase Two Property
- Demolished Buildings
- Sampled Borehole
- Groundwater Monitoring Well

- Cross-Section Profile
- Borehole Elevation (MASL)
- Groundwater Elevation (MASL)

- Benchmark - Invert of CSP as per J.D.Barnes 2018 Property Survey

Groundwater levels measured on 2023/05/25
MASL = metres above sea level



Drawing Title:
**BOREHOLE AND
PROFILE LOCATIONS**

Address: **4243 Sixth Line
Oakville, Ontario**

File Name: **AR104-23 D006**

Project No.: **AR104-23**



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Paper Size:
8.5 x 11 in

Completed by:
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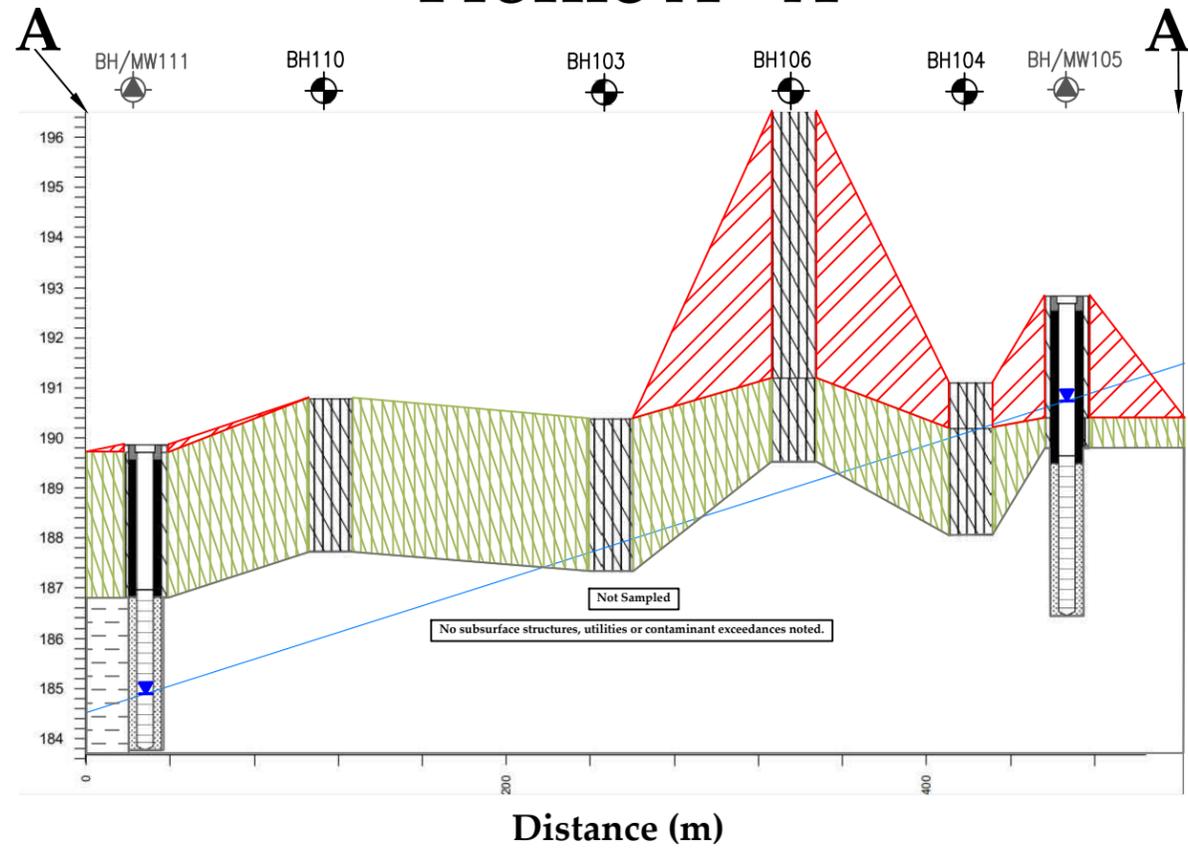
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Date:
2023/06/22

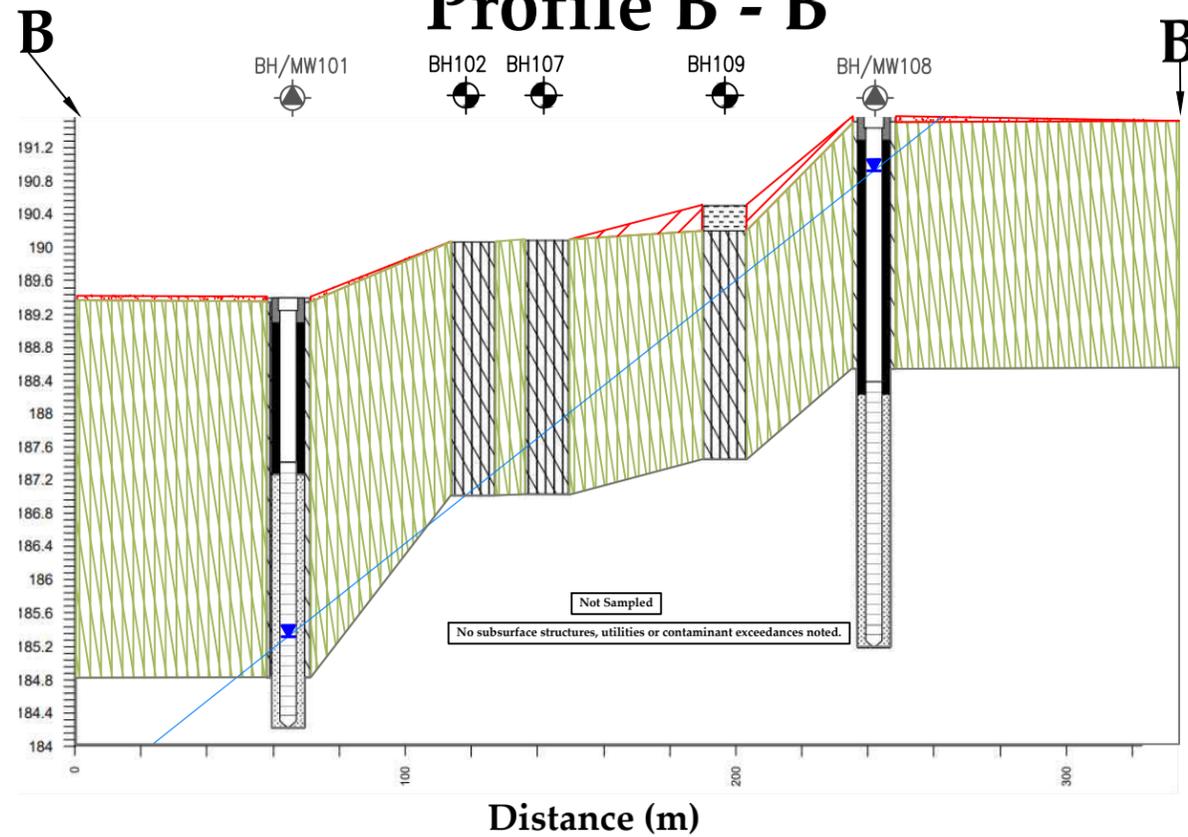
Reviewed by:
MJ

6

Profile A - A'



Profile B - B'



LEGEND

- Property Limits
- Demolished Buildings
- Sampled Borehole
- Sampled Borehole with Monitoring Well
- Locally Dumped Stockpile of Reddish Soil and Shale
- Topsoil
- Clayey Silt Till
- Inferred Groundwater Level
- ▼ Measured Groundwater Level
- Monitoring Well Construction

Groundwater levels based on monitoring data obtained on May 25, 2023.



Scale:

AS SHOWN

Drawing Title:

**CROSS SECTION
PROFILES A-A' AND B-B'**

Address:

4243 Sixth Line
Oakville, Ontario

File Name:

AR104-23 D007

Project No.:

AR104-23

Paper Size:

11 x 17 in

Date:

2023/06/27

Completed by:

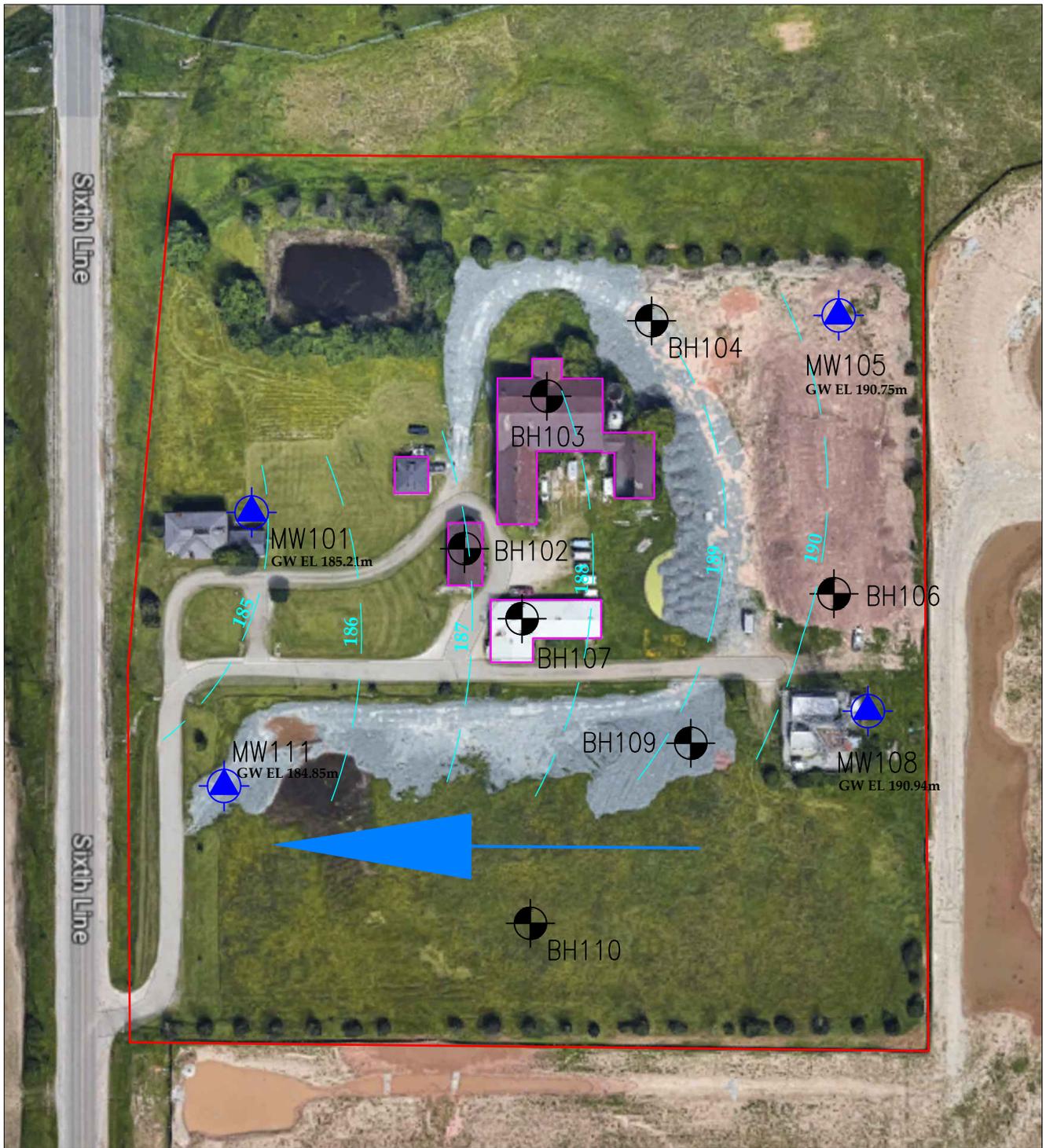
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Drawing No.:

7

Reviewed by:

MJ



LEGEND

- Phase Two Property
- Demolished Buildings
- - - Ground Water Elevation Contours
- Groundwater Elevation (MASL)

GW EL 184.85m
Groundwater levels measured on 2023/05/25
 MASL - metres above sea level

- Sampled Borehole
- Groundwater Monitoring Well
- Inferred Direction of Ground Water Flow



Drawing Title:
GROUND WATER ELEVATIONS

Address:
 4243 Sixth Line
 Oakville, Ontario

File Name:
 AR104-23 D008

Project No.:
 AR104-23

Scale:

1 : 1500

Paper Size:
 8.5 x 11 in

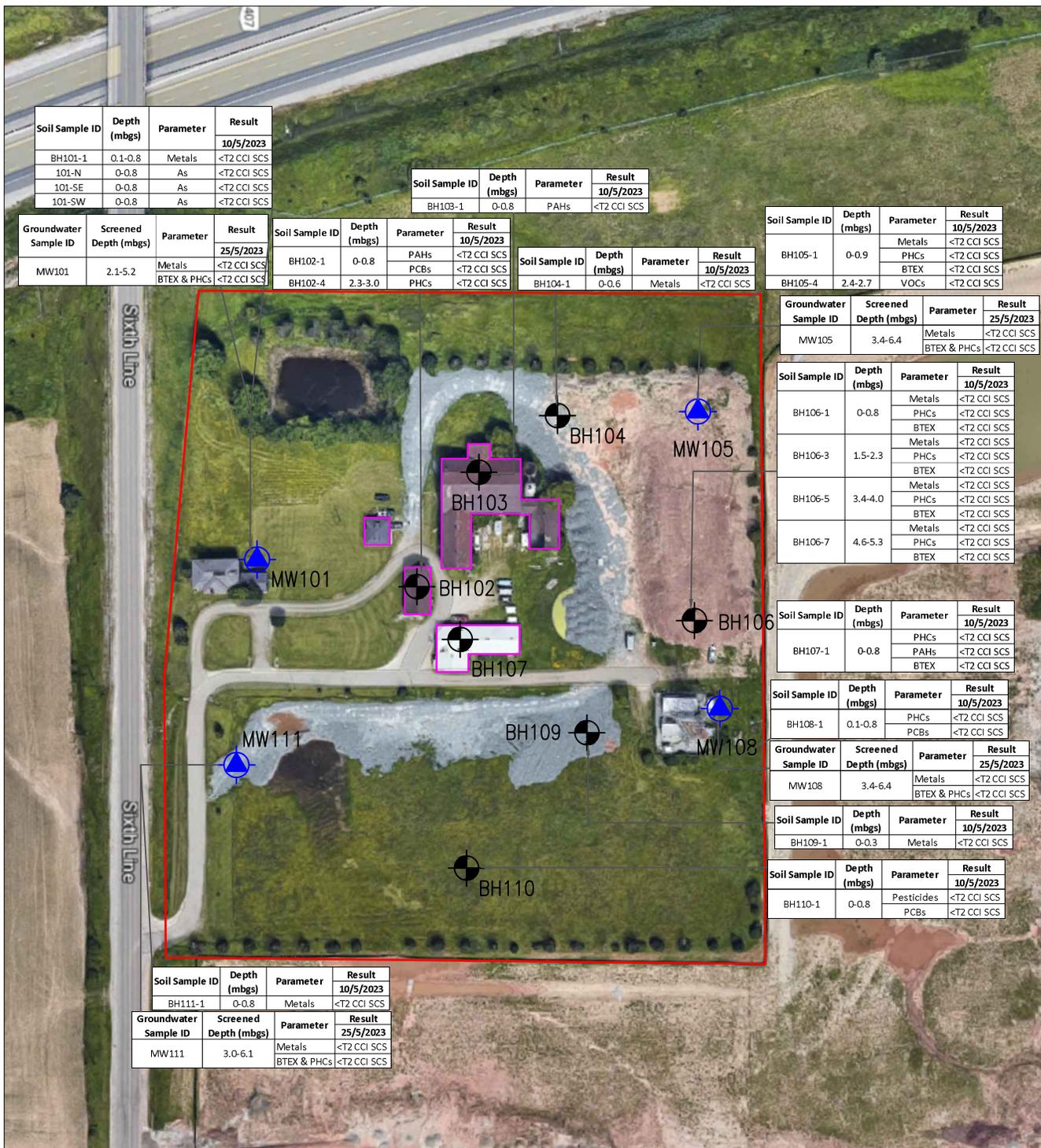
Completed by:
 EX

Drawing No.:

Date:
 2023/06/22

Reviewed by:
 MJ

8



Soil Sample ID	Depth (mbgs)	Parameter	Result
BH101-1	0.1-0.8	Metals	<T2 CCI SCS 10/5/2023
101-N	0-0.8	As	<T2 CCI SCS
101-SE	0-0.8	As	<T2 CCI SCS
101-SW	0-0.8	As	<T2 CCI SCS

Soil Sample ID	Depth (mbgs)	Parameter	Result
BH103-1	0-0.8	PAHs	<T2 CCI SCS

Groundwater Sample ID	Screened Depth (mbgs)	Parameter	Result
MW101	2.1-5.2	Metals BTEX & PHCs	<T2 CCI SCS <T2 CCI SCS 25/5/2023

Soil Sample ID	Depth (mbgs)	Parameter	Result
BH102-1	0-0.8	PAHs	<T2 CCI SCS
BH102-4	2.3-3.0	PCBs	<T2 CCI SCS
BH102-4	2.3-3.0	PHCs	<T2 CCI SCS

Soil Sample ID	Depth (mbgs)	Parameter	Result
BH104-1	0-0.6	Metals	<T2 CCI SCS

Soil Sample ID	Depth (mbgs)	Parameter	Result
BH105-1	0-0.9	Metals	<T2 CCI SCS
BH105-4	2.4-2.7	PHCs	<T2 CCI SCS
BH105-4	2.4-2.7	BTEX	<T2 CCI SCS
BH105-4	2.4-2.7	VOCs	<T2 CCI SCS

Groundwater Sample ID	Screened Depth (mbgs)	Parameter	Result
MW105	3.4-6.4	Metals BTEX & PHCs	<T2 CCI SCS <T2 CCI SCS 25/5/2023

Soil Sample ID	Depth (mbgs)	Parameter	Result
BH106-1	0-0.8	Metals	<T2 CCI SCS
BH106-1	0-0.8	PHCs	<T2 CCI SCS
BH106-1	0-0.8	BTEX	<T2 CCI SCS
BH106-3	1.5-2.3	Metals	<T2 CCI SCS
BH106-3	1.5-2.3	PHCs	<T2 CCI SCS
BH106-3	1.5-2.3	BTEX	<T2 CCI SCS
BH106-5	3.4-4.0	Metals	<T2 CCI SCS
BH106-5	3.4-4.0	PHCs	<T2 CCI SCS
BH106-5	3.4-4.0	BTEX	<T2 CCI SCS
BH106-7	4.6-5.3	Metals	<T2 CCI SCS
BH106-7	4.6-5.3	PHCs	<T2 CCI SCS
BH106-7	4.6-5.3	BTEX	<T2 CCI SCS

Soil Sample ID	Depth (mbgs)	Parameter	Result
BH107-1	0-0.8	PHCs	<T2 CCI SCS
BH107-1	0-0.8	PAHs	<T2 CCI SCS
BH107-1	0-0.8	BTEX	<T2 CCI SCS

Soil Sample ID	Depth (mbgs)	Parameter	Result
BH108-1	0.1-0.8	PHCs	<T2 CCI SCS
BH108-1	0.1-0.8	PCBs	<T2 CCI SCS

Groundwater Sample ID	Screened Depth (mbgs)	Parameter	Result
MW108	3.4-6.4	Metals BTEX & PHCs	<T2 CCI SCS <T2 CCI SCS 25/5/2023

Soil Sample ID	Depth (mbgs)	Parameter	Result
BH109-1	0-0.3	Metals	<T2 CCI SCS

Soil Sample ID	Depth (mbgs)	Parameter	Result
BH110-1	0-0.8	Pesticides	<T2 CCI SCS
BH110-1	0-0.8	PCBs	<T2 CCI SCS

Soil Sample ID	Depth (mbgs)	Parameter	Result
BH111-1	0-0.8	Metals	<T2 CCI SCS 10/5/2023

Groundwater Sample ID	Screened Depth (mbgs)	Parameter	Result
MW111	3.0-6.1	Metals BTEX & PHCs	<T2 CCI SCS <T2 CCI SCS 25/5/2023

LEGEND

- Phase Two Property
- Demolished Buildings

- Sample Borehole
- Groundwater Monitoring Well

T2 CCI SCS MECP Table 2 Site Condition Standards for Community/Commercial/Industrial Land Uses with Fine-Textured Soils in a Potable Ground Water Condition



Drawing Title: **ALL SOIL & GROUND WATER RESULTS**

Address: **4243 Sixth Line Oakville, Ontario**

File Name: **AR104-23 D009** Project No.: **AR104-23**

Scale: 1 : 2000

Paper Size: **8.5 x 11 in** Completed by: **EX** Drawing No.: **9**

Date: **2023/06/22** Reviewed by: **MJ**

APPENDIX A
SAMPLING AND ANALYSIS PLAN

SAMPLING AND ANALYSIS PLAN



4243 SIXTH LINE
OAKVILLE, ONTARIO

FOR

EAST & WEST INC.

BY



JUNE 2023

Distribution:

1 cc **Client**

1cc **AiMS**

Report AR104-23

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	OBJECTIVES.....	1
3.0	WORK PROPOSED.....	2
4.0	QUALITY ASSURANCE.....	4
5.0	SAMPLING METHODS.....	5
5.1	SAMPLE HANDLING AND CUSTODY.....	5
6.0	INSTRUMENTATION.....	5
6.1	INSTRUMENT/EQUIPMENT TESTING, INSPECTION AND MAINTENANCE.....	5
7.0	QUALITY CONTROL.....	6
7.1	VERIFICATION AND VALIDATION METHODS.....	6

1.0 INTRODUCTION

The following document is a Sampling and Analysis Plan for fieldwork proposed at the Phase Two Property (the “site”) which consists of a 3.9 hectare (9.65-acre), square shaped parcel of land located south of the Highway 407 Express Toll Route, on the east side of Sixth Line and north of Burnhamthorpe Road East in Oakville, Ontario. This Sampling and Analysis Plan includes: the proposed scope of work, a quality assurance and quality control (QA/QC) program, data quality objectives, standard operating procedures, and a description of physical impediments that may limit the ability to conduct sampling and analysis.

2.0 OBJECTIVES

AiMS Environmental has conducted a review of a Phase I Environmental Site Assessment (ESA) Conceptual Site Model (CSM) for the site. Based on the presence of on- and off-site Potentially Contaminating Activities (PCAs), Areas of Potential Environmental Concern (APECs) have been identified within the Phase Two Property. A Phase Two ESA is therefore required to:

- Investigate the APECs identified during the Phase One investigation, through the drilling of boreholes, installation of monitoring wells, and collection of soil and ground water samples; and
- Identify maximum concentrations of any contaminants and delineate the contaminants of concern, if present, for the purpose of calculating a volume estimate for a remediation plan.

The potential contaminants of concern identified in the Phase I ESA comprise: metals and inorganics; petroleum hydrocarbons (PHCs); benzene, toluene, ethylbenzene and total xylenes (BTEX); polychlorinated biphenyls (PCBs); polycyclic aromatic hydrocarbons (PAHs); volatile organic compounds (VOCs); and organochlorine (OC) pesticides. The investigation locations comprise the following new boreholes and monitoring wells to be constructed at the site:

Location ID	Purpose
BH110	Determination of quality of subsurface soils; and interception of impacts in soil, if any, from formerly used pesticides for agricultural purposes on the Phase Two Property
BH104; BH105/MW105; BH106; BH109; BH111/MW111	Determination of quality of fill materials placed over central, north central and northeast part of the Phase Two Property; and interception of impacts in soil and groundwater, if any, from locally imported three stockpiles of reddish soils and

Location ID	Purpose
	grey shale materials
BH102; BH107	Determination of quality of subsurface soils at central part of the Phase Two Property; and interception of impacts in soil, if any, from currently active overhead transformer boxes on the hydro pole located at the central road of the Phase Two Property
BH102; BH107	Determination of quality of subsurface soils at central north part of the Phase Two Property; and interception of impacts in soil, if any, from former fuel tank on the north edge of the pre-existing drive shed
BH108/MW108	Determination of quality of subsurface soils at southeast part of the Phase Two Property; and interception of impacts in soil and groundwater, if any, from currently present self-contained standby diesel generator located in the Bell tower compound
BH102; BH103; BH107	Determination of quality of subsurface soils at central part of the Phase Two Property; and interception of impacts in soil, if any, from the fire took place in 2020
BH101/MW101; BH104; BH105/MW105; BH106; BH108/MW108;BH109; BH111/MW111	Determination of quality of subsurface soils and groundwater over the entire Phase Two Property for site coverage purpose

The overall objective of the work is to determine the soil and groundwater conditions and to quantify environmental impacts (if any) within the footprint of a new prestige commercial project entailing office buildings proposed for the site to facilitate development approvals from the *Town of Oakville* and the *Regional Municipality of Halton*.

All work should meet the requirements of O. Reg. 153/04, as amended.

3.0 WORK PROPOSED

The proposed borehole and monitoring well locations described below were selected to collect soil and ground water samples to address potential impacts associated with the on-site APECs identified in the Phase One ESA:

	APECs	Location ID	Contaminants of Concern	
			Soil	Ground Water
A	<u>Entire Phase Two Property</u> Formerly used pesticides for agricultural purposes	BH110	• OC Pesticides	N/A

APECs		Location ID	Contaminants of Concern	
			Soil	Ground Water
B	<u>Central, North Central, and Northeast Part of Phase Two Property</u> Formerly illegally imported three stockpiles of reddish soils and grey shale materials	BH104; BH105/MW105; BH106; BH109; BH111/MW111	<ul style="list-style-type: none"> • Metals and inorganics • VOCs 	<ul style="list-style-type: none"> • PHCs • BTEX • VOCs • Metals
C	<u>Central Part of Phase Two Property</u> Currently active overhead transformer boxes on the hydro pole located at the central road of the Phase Two Property	BH102	<ul style="list-style-type: none"> • PCBs 	N/A
D	<u>Central North Part of Phase Two Property</u> Former fuel tank on the north edge of the pre-existing drive shed	BH102; BH107	<ul style="list-style-type: none"> • PHCs 	N/A
E	<u>Southeast Part of Phase Two Property</u> Currently present self-contained standby diesel generator located in the Bell tower compound	BH108/MW108	<ul style="list-style-type: none"> • PHCs • PCBs 	<ul style="list-style-type: none"> • PHCs • BTEX • VOCs • Metals
*	2020 fire	BH102; BH103; BH107	<ul style="list-style-type: none"> • PAHs 	N/A
*	Site coverage	BH101/MW101; BH104; BH105/MW105; BH106; BH108/MW108; BH109; BH111/MW111	<ul style="list-style-type: none"> • Metals and inorganics 	<ul style="list-style-type: none"> • PHCs • BTEX • VOCs • Metals

At least one sample of each potentially impacted media from each APEC will be selected and analyzed for the respective contaminants of concerns. Soil samples will be selected for laboratory analyses based on “worst-case” organic vapour measurements, as well as visual and olfactory indications of contamination such as hydrocarbon staining and odours.

In addition to the above, the following additional chemical analyses are to be commissioned:

- pH
- Grain Size Analysis

Additional locations may be added if the proposed locations do not provide enough information to meet the objectives.

To meet the objectives noted above, the work generally consists of the following:

1. Advance eleven boreholes (BH101 through BH111) to maximum depth of up to 7.0 m (23 ft) below ground surface to intercept native soils.
2. Complete four of the above eleven boreholes with ground water monitoring wells (MW101, MW105, MW108 and MW 111), designed to permit the collection of ground water samples and to model the nearest surface water table.
3. Collect soil samples for analysis of parameters in accordance with the table above.
4. Collect ground water samples for analysis of parameters in accordance with the table above, after the wells have been adequately developed.
5. Submit soil and ground water samples for chemical analysis ensuring fully completed Chains of Custody records.

4.0 QUALITY ASSURANCE

AiMS Environmental will conduct the following quality control as part of this sampling work program:

- All non-dedicated sampling and monitoring equipment will be cleaned following each use.
- One duplicate sample will be collected for every ten samples of soil tested per parameter group.
- Sufficient volume will be collected from a second sample for the laboratory to complete a laboratory duplicate analysis.
- One trip and one field blank will be submitted with each cooler containing samples for laboratory analyses of VOCs.

The laboratory will complete additional quality control testing (i.e., duplicates and method spikes) as required by its certification.

AiMS Environmental will review analytical data for issues with quality control and data reproducibility. If unacceptable variance in the data is found, **AiMS Environmental** will resample if required.

5.0 SAMPLING METHODS

Boreholes will be advanced using disposable liners sampling methods to collect samples of the overburden materials. Soil samples for screening and sampling purposes will be collected from the disposable liners. Samples retrieved from the disposable liners will be placed in bags for field screening purposes or jarred accordingly for lab analysis. Nitrile gloves will be worn during sampling to prevent cross-contamination between samples.

Soil samples are to be logged and screened with a portable OVM (RKI Eagle 2 organic vapour monitor). Soil samples for analytical submission will be jarred in laboratory-supplied containers as soon as possible after sampling, labelled, and kept cold until transported to the laboratory. Soil samples submitted for VOC and PHC F₁ will be field-preserved using the laboratory-supplied bottles precharged with methanol.

5.1 Sample Handling and Custody

Sample handling will be conducted according to the **AiMS Environmental** Standard Operating Procedures. In general, samples will be collected in laboratory-supplied sample containers, containing preservatives as required. Samples will be stored on ice until transported to the laboratory, ideally within 24 hours of sample collection.

Samples will be labelled with the sample number, sample date, project location, and project number. Sample shipment to the laboratory will be arranged as required. **AiMS Environmental** will complete the Chain of Custody as per laboratory requirements and retain a copy on file.

6.0 INSTRUMENTATION

6.1 Instrument/Equipment Testing, Inspection and Maintenance

To complete the field work program, we will use an OVM gas detector. In general, the equipment will be examined daily for defects, which will be recorded and addressed before the start of fieldwork.

7.0 QUALITY CONTROL

7.1 Verification and Validation Methods

Analytical data from this work program will be verified and validated by **AiMS Environmental** by determining the relative percent difference (RPD) for duplicate samples collected in the field. **AiMS Environmental** will also review the analysis of field and trip blanks, laboratory-completed duplicates, and matrix spikes to verify that these are within laboratory-specified acceptable ranges.

To calculate RPDs, **AiMS Environmental** will use the following formula:

$$RPD = \frac{|S - D|}{0.5(S + D)} \times 100$$

Where S = sample value
 D = duplicate or replicate value

Notes:

- RPD is calculated only for result pairs with concentrations greater than 5x the method detection limit in both samples.
- RPDs are not calculated where results are below the laboratory detection limits for sample pairs.

The acceptable guideline limits for various analysis groups are noted below:

Parameter Category	Recommended RPD at concentrations exceeding 5 times the Method Detection Limit
Organics in soil	
• VOCs	50%
• PAHs	40%
• PCBs	40%
• PHCs	30%
Organics in water	30%
Metals in soil	30%
Metals in water	20%
General inorganics in solids	30%
General inorganics in water	20%

Source: Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act, March 9, 2004, amended as of July 1, 2011

Where the target RPD is exceeded, **AiMS Environmental** will investigate to assess whether the cause can be determined. We will also assess whether the RPD exceedance affects the use of the data and if it impacts all data in that category.

Where detectable concentrations are found in a trip blank or field blank, **AiMS Environmental** will evaluate the possible causes of the result and impacts on data.

Where laboratory QA/QC results indicate issues with data quality, **AiMS Environmental** will also evaluate the impacts of this information and report on our findings and conclusions.

**APPENDIX B
BOREHOLE LOGS**

Log of Borehole No. BH101/MW101

SUBSURFACE PROFILE				SAMPLE				LABORATORY		WELL DATA	
Depth	Symbol	Lithographic Description	Geodetic Elevation (m asl)	Number	Type	Vapour Screening (ppm or %LEL)	Remarks	Laboratory Analysis		Well Construction	Monitoring Data
								Soil	GW		
ft m		Ground Surface	189.40			OVM		Soil	GW		
0	0	Sod & Topsoil									
1		Clayey Silt Till brown; traces sand and gravel Organic matter	-189	1	DT	85	No odour	Metals			
2											
3	1	Oxidation	-188.5	2	DT	80	No odour				
4											
5			-188								
6	2		-187.5	3	DT	90	No odour				
7											
8			-187								
9				4	DT	85	No odour				
10	3		-186.5								
11		Grey	-186	5	DT	460	No odour				
12											
13	4		-185.5								
14		Sampling terminated at 4.57 m bgs	-185	6	DT	200	No odour	pH & Grain Size	Metals, VOCs, PHCs and BTEX		4.19 m bgs on May 25, 2023
15											
16	5		-184.5								
17											

Drill Date: 05/10/2023

AiMS Field Supervisor: CW

Approved By: FF

Contractor: Strata Drilling Group

Borehole Ø: 50 mm

Equipment: Geoprobe 6712DT Direct Push

Well Ø: 51 mm

Log of Borehole No. BH102

SUBSURFACE PROFILE				SAMPLE				LABORATORY		WELL DATA	
Depth	Symbol	Lithographic Description	Geodetic Elevation (m asl)	Number	Type	Vapour Screening (ppm or %LEL)	Remarks	Laboratory Analysis		Well Construction	Monitoring Data
								Soil	GW		
ft m		Ground Surface	190.06			OVM		Soil	GW		
0	0	Clayey Silt Till brown; traces sand and gravel	190								
0.5		Construction debris		1	DT	90	No odour	PAHs, PCBs			
1		Reworked native									
1.5		Low recovery	189.5								
2											
2.5											
3											
3.5	1	Low recovery	189	2	DT	90	No odour				
4											
4.5											
5											
5.5											
6											
6.5	2			3	DT	95	No odour				
7											
7.5											
8											
8.5											
9											
9.5											
10	3	Borehole terminated at 3.05 m bgs	187.5	4	DT	100	No odour	PHCs (F2-F4)			

Drill Date: 05/10/2023

AiMS Field Supervisor: CW

Approved By: FF

Contractor: Strata Drilling Group

Borehole Ø: 50 mm

Equipment: Geoprobe 6712DT Direct Push

Well Ø: 0 mm

Log of Borehole No. BH103

SUBSURFACE PROFILE				SAMPLE				LABORATORY		WELL DATA	
Depth	Symbol	Lithographic Description	Geodetic Elevation (m asl)	Number	Type	Vapour Screening (ppm or %LEL)	Remarks	Laboratory Analysis		Well Construction	Monitoring Data
								Soil	GW		
ft m		Ground Surface	190.38			OVM		Soil	GW		
0	0	Clayey Silt Till brown; traces sand and gravel									
0.5											
1		<i>Reworked native</i>	190	1	DT	100	No odour	PAHs			
1.5											
2											
2.5											
3			189.5								
3.5	1			2	DT	100	No odour				
4											
4.5			189								
5											
5.5											
6											
6.5	2	<i>Organic matter</i>	188.5	3	DT	95	No odour				
7											
7.5											
8			188								
8.5		<i>Cobble layer</i>									
9				4	DT	95	No odour				
9.5			187.5								
10	3	<i>Borehole terminated at 3.05 m bgs</i>									

Drill Date: 05/10/2023

AiMS Field Supervisor: CW

Approved By: FF

Contractor: Strata Drilling Group

Borehole Ø: 50 mm

Equipment: Geoprobe 6712DT Direct Push

Well Ø: 0 mm

Log of Borehole No. BH104

SUBSURFACE PROFILE				SAMPLE				LABORATORY		WELL DATA	
Depth	Symbol	Lithographic Description	Geodetic Elevation (m asl)	Number	Type	Vapour Screening (ppm or %LEL)	Remarks	Laboratory Analysis		Well Construction	Monitoring Data
								Soil	GW		
ft m		Ground Surface	191.10			OVM		Soil	GW		
0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5 6 6.5 7 7.5 8 8.5 9 9.5 10		Clayey Silt Fill grey; some shale fragments	191	1	DT	90	No odour	Metals			
		Organic matter	190.5	2	DT	130	No odour				
		Clayey Silt Till dark grey to brown; traces sand and gravel	190	3	DT	390	No odour				
			189.5	4	DT	115	No odour				
			189								
			188.5	5	DT	135	No odour				
		Borehole terminated at 3.05 m bgs									

Drill Date: 05/10/2023

AiMS Field Supervisor: CW

Approved By: FF

Contractor: Strata Drilling Group

Borehole Ø: 50 mm

Equipment: Geoprobe 6712DT Direct Push

Well Ø: 0 mm

Log of Borehole No. BH105/MW105

SUBSURFACE PROFILE				SAMPLE				LABORATORY		WELL DATA	
Depth	Symbol	Lithographic Description	Geodetic Elevation (m asl)	Number	Type	Vapour Screening (ppm or %LEL)	Remarks	Laboratory Analysis		Well Construction	Monitoring Data
								Soil	GW		
ft m		Ground Surface	192.84			OVM		Soil	GW		
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21		Clayey Silt Fill red to reddish brown; some cobbles; trace sand	192.5 192 191.5 191 190.5	1 2 3	DT DT DT	80 100 100	No odour No odour No odour	Metals & Inorganics	Metals, VOCs, PHCs & BTEX		2.09 m bgs on May 25, 2023
		Clayey Silt Till dark brown to black	190	4	DT	1150	manure smell	VOCs			
		Sampling terminated at 3.05 m bgs	190	5	DT	400	No odour				
			189.5								
			189								

Drill Date: 05/10/2023

AiMS Field Supervisor: CW

Approved By: FF

Contractor: Strata Drilling Group

Borehole Ø: 50 mm

Equipment: Geoprobe 6712DT Direct Push

Well Ø: 51 mm

Log of Borehole No. BH106

SUBSURFACE PROFILE				SAMPLE				LABORATORY		WELL DATA	
Depth	Symbol	Lithographic Description	Geodetic Elevation (m asl)	Number	Type	Vapour Screening (ppm or %LEL)	Remarks	Laboratory Analysis		Well Construction	Monitoring Data
								Soil	GW		
ft m		Ground Surface	196.53			OVM		Soil	GW		
0	0	Clayey Silt Fill reddish brown; trace sand <i>low recovery</i>	196.5	1	DT	100	No odour	Metals & Inorganics			
2			196								
	1	<i>low recovery</i>	195.5	2	DT	115	No odour				
4			195								
	2	<i>low recovery</i>	194.5	3	DT	100	No odour	Metals & Inorganics			
6			194								
	3	<i>low recovery</i>	193.5	4	DT	95	No odour				
8			193								
	4	<i>low recovery</i>	192.5	5	DT	115	No odour	Metals & Inorganics			
10			192								
	5	<i>low recovery</i>	191.5	6	DT	85	No odour				
12			191								
	6	Clayey Silt Till dark brown ; traces sand and gravel	191	7	DT	220	No odour	Metals & Inorganics , mSPLP			
14			190.5								
	7	<i>concrete at 17.5ft, low recovery</i>	190	8	DT	90	manure smell				
16			190								
	7	<i>Borehole terminated at 7.01 m bgs</i>		9	DT	270	No odour				

Drill Date: 05/10/2023

AiMS Field Supervisor: CW

Approved By: FF

Contractor: Strata Drilling Group

Borehole Ø: 50 mm

Equipment: Geoprobe 6712DT Direct Push

Well Ø: 0 mm

Log of Borehole No. BH108/MW108

SUBSURFACE PROFILE				SAMPLE				LABORATORY		WELL DATA	
Depth	Symbol	Lithographic Description	Geodetic Elevation (m asl)	Number	Type	Vapour Screening (ppm or %LEL)	Remarks	Laboratory Analysis		Well Construction	Monitoring Data
								Soil	GW		
ft m		Ground Surface	191.59			OVM		Soil	GW		
0 0		Sod & Topsoil	191.5		DT						
1 1		Clayey Silt Till brown; traces sand and gravel	191	1	DT	65	No odour	PHCs (F2-F4), PCBs	Metals, VOCs, PHCs & BTEX		0.65m bgs on May 25, 2023
2 2			190.5	2	DT	60	No odour				
3 1			190	3	DT	55	No odour				
4 2			189.5	4	DT	50	No odour				
5 3			189								
6 3		Sampling terminated at 3.05 m bgs	188.5								
7 3			188								
8 4			187.5								
9 4			187								
10 5			186.5								
11 5			186								
12 6			185.5								
13 6											
14 6											
15 6											
16 6											
17 6											
18 6											
19 6											
20 6											
21 6											

Drill Date: 05/10/2023

AiMS Field Supervisor: CW

Approved By: FF

Contractor: Strata Drilling Group

Borehole Ø: 50 mm

Equipment: Geoprobe 6712DT Direct Push

Well Ø: 51 mm

Log of Borehole No. BH109

SUBSURFACE PROFILE				SAMPLE				LABORATORY		WELL DATA				
Depth	Symbol	Lithographic Description	Geodetic Elevation (m asl)	Number	Type	Vapour Screening (ppm or %LEL)	Remarks	Laboratory Analysis		Well Construction	Monitoring Data			
								Soil	GW					
ft m		Ground Surface	190.50			OVM		Soil	GW					
0	0	Shale Fill light grey; shale pieces and fragments	190.5	1	DT	70	No odour	Metals						
0.5		Clayey Silt Till dark brown; some sand and trace of gravel	190	2	DT	90	No odour							
1				189.5	3	DT	60	No odour						
1.5					189	4	DT	65	No odour					
2						188.5	5	DT	65	No odour				
2.5							188							
3			187.5											
3.5	1													
4														
4.5														
5														
5.5														
6														
6.5	2													
7														
7.5														
8														
8.5														
9														
9.5														
10	3	Borehole terminated at 3.05 m bgs												

Drill Date: 05/10/2023

AiMS Field Supervisor: CW

Approved By: FF

Contractor: Strata Drilling Group

Borehole Ø: 50 mm

Equipment: Geoprobe 6712DT Direct Push

Well Ø: 0 mm

Log of Borehole No. BH110

SUBSURFACE PROFILE				SAMPLE				LABORATORY		WELL DATA	
Depth	Symbol	Lithographic Description	Geodetic Elevation (m asl)	Number	Type	Vapour Screening (ppm or %LEL)	Remarks	Laboratory Analysis		Well Construction	Monitoring Data
								Soil	GW		
ft m		Ground Surface	190.78			OVM		Soil	GW		
0	0	Clayey Silt Till brown; traces sand and gravel									
0.5											
1			190.5	1	DT	105	No odour	Pesticides			
1.5		organic matter									
2											
2.5			190								
3											
3.5	1			2	DT	90	No odour				
4			189.5								
4.5											
5											
5.5			189								
6				3	DT	85	No odour				
6.5	2										
7											
7.5			188.5								
8											
8.5											
9			188	4	DT	95	No odour				
9.5											
10	3	Borehole terminated at 3.05 m bgs									

Drill Date: 05/10/2023

AiMS Field Supervisor: CW

Approved By: FF

Contractor: Strata Drilling Group

Borehole Ø: 50 mm

Equipment: Geoprobe 6712DT Direct Push

Well Ø: 0 mm

Log of Borehole No. BH111/MW111

SUBSURFACE PROFILE				SAMPLE				LABORATORY		WELL DATA	
Depth	Symbol	Lithographic Description	Geodetic Elevation (m asl)	Number	Type	Vapour Screening (ppm or %LEL)	Remarks	Laboratory Analysis		Well Construction	Monitoring Data
								Soil	GW		
ft m		Ground Surface	189.86			OVM		Soil	GW		
0 0		Shale Fill light grey		1	DT	95	No odour	Metals			
1 1		Clayey Silt Till brown; traces sand and gravel	189.5	2	DT	60	No odour				
2 2			189								
3 1			188.5	3	DT	40	No odour				
4 1			188	4	DT	40	No odour				
5 2			187.5								
6 2			187	5	DT	30	No odour				
7 2			186.5								
8 3		Sampling terminated at 3.05 m bgs	186								
9 3			185.5								
10 3			185								
11 3			184.5								
12 4			184								
13 4											
14 4											
15 5											
16 5											
17 5											
18 6											
19 6											
20 6											

Drill Date: 05/10/2023 **AiMS Field Supervisor:** CW **Approved By:** FF
Contractor: Strata Drilling Group **Borehole Ø:** 50 mm
Equipment: Geoprobe 6712DT Direct Push **Well Ø:** 51 mm

APPENDIX C
CERTIFICATES OF ANALYSIS



Your Project #: AR104-23
 Site Location: 4243 SIXTH LINE, OAKVILLE, ON
 Your C.O.C. #: n/a

Attention: Curtis Weaver

AiMS Consulting Environmental Services
 1020 Denison St
 Suite 111
 Markham, ON
 CANADA L3R 3W5

Report Date: 2023/06/29
 Report #: R7694097
 Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C3D6624

Received: 2023/05/12, 14:36

Sample Matrix: Soil
 # Samples Received: 17

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Methylnaphthalene Sum	3	N/A	2023/05/18	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron	5	2023/05/17	2023/05/17	CAM SOP-00408	R153 Ana. Prot. 2011
1,3-Dichloropropene Sum	1	N/A	2023/05/18		EPA 8260C m
Hexavalent Chromium in Soil by IC (1)	1	2023/05/16	2023/05/16	CAM SOP-00436	EPA 3060A/7199 m
Hexavalent Chromium in Soil by IC (1)	4	2023/05/17	2023/05/17	CAM SOP-00436	EPA 3060A/7199 m
Petroleum Hydro. CCME F1 & BTEX in Soil (2)	6	N/A	2023/05/17	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Soil (3)	8	2023/05/16	2023/05/16	CAM SOP-00316	CCME CWS m
Acid Extractable Metals by ICPMS	9	2023/05/17	2023/05/18	CAM SOP-00447	EPA 6020B m
Moisture	7	N/A	2023/05/15	CAM SOP-00445	Carter 2nd ed 51.2 m
Moisture	5	N/A	2023/05/16	CAM SOP-00445	Carter 2nd ed 51.2 m
OC Pesticides (Selected) & PCB (4)	1	2023/05/16	2023/05/17	CAM SOP-00307	EPA 8081B/ 8082A
OC Pesticides Summed Parameters	1	N/A	2023/05/16	CAM SOP-00307	EPA 8081B/ 8082A
PAH Compounds in Soil by GC/MS (SIM)	2	2023/05/16	2023/05/18	CAM SOP-00318	EPA 8270E
PAH Compounds in Soil by GC/MS (SIM)	1	2023/05/17	2023/05/17	CAM SOP-00318	EPA 8270E
Polychlorinated Biphenyl in Soil	2	2023/05/15	2023/05/16	CAM SOP-00309	EPA 8082A m
pH CaCl2 EXTRACT	6	2023/05/17	2023/05/17	CAM SOP-00413	EPA 9045 D m
Sieve, 75um	1	N/A	2023/05/17	CAM SOP-00467	ASTM D1140 -17 m
Volatile Organic Compounds in Soil	1	N/A	2023/05/16	CAM SOP-00228	EPA 8260D

Remarks:

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

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

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



Your Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Your C.O.C. #: n/a

Attention: Curtis Weaver

AiMS Consulting Environmental Services
1020 Denison St
Suite 111
Markham, ON
CANADA L3R 3W5

Report Date: 2023/06/29
Report #: R7694097
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C3D6624

Received: 2023/05/12, 14:36

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

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

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

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

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

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

(1) 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

Please direct all questions regarding this Certificate of Analysis to:

Patricia Legette, Project Manager

Email: Patricia.Legette@bureauveritas.com

Phone# (905)817-5799

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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 406 EXCESS SOIL BULK ICPMS METALS (SOIL)

Bureau Veritas ID				VUN221	VUN226	VUN227	VUN227	VUN231		
Sampling Date				2023/05/10 10:15	2023/05/10 11:40	2023/05/10 12:00	2023/05/10 12:00	2023/05/10 14:30		
COC Number				n/a	n/a	n/a	n/a	n/a		
	UNITS	Criteria	Criteria-2	BH101/1	BH104/1	BH105/1	BH105/1 Lab-Dup	BH109/1	RDL	QC Batch

Metals										
Acid Extractable Antimony (Sb)	ug/g	50	7.5	0.31	<0.20	0.23	0.23	<0.20	0.20	8669344
Acid Extractable Arsenic (As)	ug/g	18	18	20	5.9	5.1	4.7	6.6	1.0	8669344
Acid Extractable Barium (Ba)	ug/g	670	390	130	41	120	110	38	0.50	8669344
Acid Extractable Beryllium (Be)	ug/g	10	4	0.75	0.98	0.69	0.66	0.91	0.20	8669344
Acid Extractable Boron (B)	ug/g	120	120	13	14	9.7	9.7	12	5.0	8669344
Acid Extractable Cadmium (Cd)	ug/g	1.9	1.2	0.32	<0.10	0.11	0.13	<0.10	0.10	8669344
Acid Extractable Chromium (Cr)	ug/g	160	160	22	28	20	19	27	1.0	8669344
Acid Extractable Cobalt (Co)	ug/g	100	22	10	20	12	12	18	0.10	8669344
Acid Extractable Copper (Cu)	ug/g	300	140	47	27	28	28	31	0.50	8669344
Acid Extractable Lead (Pb)	ug/g	120	120	55	4.8	11	11	7.2	1.0	8669344
Acid Extractable Molybdenum (Mo)	ug/g	40	6.9	0.65	<0.50	0.62	0.63	<0.50	0.50	8669344
Acid Extractable Nickel (Ni)	ug/g	340	100	21	38	27	26	38	0.50	8669344
Acid Extractable Selenium (Se)	ug/g	5.5	2.4	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	8669344
Acid Extractable Silver (Ag)	ug/g	50	20	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	8669344
Acid Extractable Thallium (Tl)	ug/g	3.3	1	0.14	0.094	0.11	0.10	0.086	0.050	8669344
Acid Extractable Uranium (U)	ug/g	33	23	0.47	0.60	0.56	0.55	0.58	0.050	8669344
Acid Extractable Vanadium (V)	ug/g	86	86	31	33	26	26	31	5.0	8669344
Acid Extractable Zinc (Zn)	ug/g	340	340	120	76	62	58	74	5.0	8669344
Acid Extractable Mercury (Hg)	ug/g	20	0.27	0.11	<0.050	<0.050	<0.050	<0.050	0.050	8669344

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

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Soil - Industrial/Commercial/Community Property Use - Medium and Fine Textured Soil
Criteria-2: Ont. Reg. 406/19 Excess Soil Quality Standards, Table 2.1, Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition, Residential/ Parkland/ Institutional Property Use



BUREAU VERITAS

Bureau Veritas Job #: C3D6624
Report Date: 2023/06/29

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: CW

O.REG 406 EXCESS SOIL BULK ICPMS METALS (SOIL)

Bureau Veritas ID				VUN286		VUN287		VUN288		
Sampling Date				2023/05/10 15:20		2023/05/10 12:30		2023/05/10 12:30		
COC Number				n/a		n/a		n/a		
	UNITS	Criteria	Criteria-2	BH111/1	QC Batch	BH106/1	QC Batch	BH106/3	RDL	QC Batch
Metals										
Acid Extractable Antimony (Sb)	ug/g	50	7.5	<0.20	8669344	0.29	8669142	<0.20	0.20	8669344
Acid Extractable Arsenic (As)	ug/g	18	18	5.3	8669344	4.7	8669142	4.7	1.0	8669344
Acid Extractable Barium (Ba)	ug/g	670	390	68	8669344	90	8669142	110	0.50	8669344
Acid Extractable Beryllium (Be)	ug/g	10	4	0.83	8669344	0.73	8669142	0.75	0.20	8669344
Acid Extractable Boron (B)	ug/g	120	120	9.6	8669344	11	8669142	13	5.0	8669344
Acid Extractable Cadmium (Cd)	ug/g	1.9	1.2	0.18	8669344	0.11	8669142	<0.10	0.10	8669344
Acid Extractable Chromium (Cr)	ug/g	160	160	24	8669344	20	8669142	20	1.0	8669344
Acid Extractable Cobalt (Co)	ug/g	100	22	14	8669344	12	8669142	12	0.10	8669344
Acid Extractable Copper (Cu)	ug/g	300	140	26	8669344	30	8669142	22	0.50	8669344
Acid Extractable Lead (Pb)	ug/g	120	120	13	8669344	12	8669142	12	1.0	8669344
Acid Extractable Molybdenum (Mo)	ug/g	40	6.9	0.54	8669344	0.62	8669142	0.55	0.50	8669344
Acid Extractable Nickel (Ni)	ug/g	340	100	28	8669344	27	8669142	25	0.50	8669344
Acid Extractable Selenium (Se)	ug/g	5.5	2.4	<0.50	8669344	<0.50	8669142	<0.50	0.50	8669344
Acid Extractable Silver (Ag)	ug/g	50	20	<0.20	8669344	<0.20	8669142	<0.20	0.20	8669344
Acid Extractable Thallium (Tl)	ug/g	3.3	1	0.12	8669344	0.12	8669142	0.11	0.050	8669344
Acid Extractable Uranium (U)	ug/g	33	23	0.61	8669344	0.64	8669142	0.60	0.050	8669344
Acid Extractable Vanadium (V)	ug/g	86	86	32	8669344	27	8669142	28	5.0	8669344
Acid Extractable Zinc (Zn)	ug/g	340	340	80	8669344	60	8669142	60	5.0	8669344
Acid Extractable Mercury (Hg)	ug/g	20	0.27	<0.050	8669344	<0.050	8669142	<0.050	0.050	8669344
No Fill	No Exceedance									
Grey	Exceeds 1 criteria policy/level									
Black	Exceeds both criteria/levels									
RDL = Reportable Detection Limit										
QC Batch = Quality Control Batch										
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)										
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition										
Soil - Industrial/Commercial/Community Property Use - Medium and Fine Textured Soil										
Criteria-2: Ont. Reg. 406/19 Excess Soil Quality Standards, Table 2.1, Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition, Residential/ Parkland/ Institutional Property Use										



O.REG 406 EXCESS SOIL BULK ICPMS METALS (SOIL)

Bureau Veritas ID				VUN289		VUN290		
Sampling Date				2023/05/10 12:30		2023/05/10 12:30		
COC Number				n/a		n/a		
	UNITS	Criteria	Criteria-2	BH106/5	QC Batch	BH106/7	RDL	QC Batch
Metals								
Acid Extractable Antimony (Sb)	ug/g	50	7.5	0.23	8669142	0.23	0.20	8669344
Acid Extractable Arsenic (As)	ug/g	18	18	2.4	8669142	4.8	1.0	8669344
Acid Extractable Barium (Ba)	ug/g	670	390	44	8669142	90	0.50	8669344
Acid Extractable Beryllium (Be)	ug/g	10	4	0.28	8669142	0.69	0.20	8669344
Acid Extractable Boron (B)	ug/g	120	120	<5.0	8669142	10	5.0	8669344
Acid Extractable Cadmium (Cd)	ug/g	1.9	1.2	0.15	8669142	0.15	0.10	8669344
Acid Extractable Chromium (Cr)	ug/g	160	160	12	8669142	20	1.0	8669344
Acid Extractable Cobalt (Co)	ug/g	100	22	4.1	8669142	12	0.10	8669344
Acid Extractable Copper (Cu)	ug/g	300	140	13	8669142	28	0.50	8669344
Acid Extractable Lead (Pb)	ug/g	120	120	17	8669142	12	1.0	8669344
Acid Extractable Molybdenum (Mo)	ug/g	40	6.9	<0.50	8669142	0.60	0.50	8669344
Acid Extractable Nickel (Ni)	ug/g	340	100	8.9	8669142	26	0.50	8669344
Acid Extractable Selenium (Se)	ug/g	5.5	2.4	<0.50	8669142	<0.50	0.50	8669344
Acid Extractable Silver (Ag)	ug/g	50	20	<0.20	8669142	<0.20	0.20	8669344
Acid Extractable Thallium (Tl)	ug/g	3.3	1	0.062	8669142	0.12	0.050	8669344
Acid Extractable Uranium (U)	ug/g	33	23	0.37	8669142	0.61	0.050	8669344
Acid Extractable Vanadium (V)	ug/g	86	86	20	8669142	29	5.0	8669344
Acid Extractable Zinc (Zn)	ug/g	340	340	38	8669142	67	5.0	8669344
Acid Extractable Mercury (Hg)	ug/g	20	0.27	<0.050	8669142	<0.050	0.050	8669344
No Fill	No Exceedance							
Grey	Exceeds 1 criteria policy/level							
Black	Exceeds both criteria/levels							
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)								
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition								
Soil - Industrial/Commercial/Community Property Use - Medium and Fine Textured Soil								
Criteria-2: Ont. Reg. 406/19 Excess Soil Quality Standards, Table 2.1, Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition, Residential/ Parkland/ Institutional Property Use								



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624
Report Date: 2023/06/29

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: CW

O.REG 406 EXCESS SOIL BULK OCS & PCBS (SOIL)

Bureau Veritas ID				VUN232		
Sampling Date				2023/05/10 14:45		
COC Number				n/a		
	UNITS	Criteria	Criteria-2	BH110/1	RDL	QC Batch
Calculated Parameters						
Aldrin + Dieldrin	ug/g	-	-	<0.0020	0.0020	8665142
Chlordane (Total)	ug/g	0.05	0.05	<0.0020	0.0020	8665142
DDT+ Metabolites	ug/g	-	-	<0.0020	0.0020	8665142
o,p-DDD + p,p-DDD	ug/g	-	3.3	<0.0020	0.0020	8665142
o,p-DDE + p,p-DDE	ug/g	-	0.26	<0.0020	0.0020	8665142
o,p-DDT + p,p-DDT	ug/g	-	1.4	<0.0020	0.0020	8665142
Total Endosulfan	ug/g	-	0.04	<0.0020	0.0020	8665142
Total PCB	ug/g	1.1	0.35	<0.015	0.015	8665142
Pesticides & Herbicides						
Aldrin	ug/g	0.11	0.05	<0.0020	0.0020	8667986
a-Chlordane	ug/g	0.05	0.05	<0.0020	0.0020	8667986
g-Chlordane	ug/g	0.05	0.05	<0.0020	0.0020	8667986
o,p-DDD	ug/g	4.6	3.3	<0.0020	0.0020	8667986
p,p-DDD	ug/g	4.6	3.3	<0.0020	0.0020	8667986
o,p-DDE	ug/g	0.65	0.26	<0.0020	0.0020	8667986
p,p-DDE	ug/g	0.65	0.26	<0.0020	0.0020	8667986
o,p-DDT	ug/g	1.4	1.4	<0.0020	0.0020	8667986
p,p-DDT	ug/g	1.4	1.4	<0.0020	0.0020	8667986
Dieldrin	ug/g	0.11	0.05	<0.0020	0.0020	8667986
Lindane	ug/g	0.063	0.01	<0.0020	0.0020	8667986
Endosulfan I (alpha)	ug/g	0.38	0.04	<0.0020	0.0020	8667986
Endosulfan II (beta)	ug/g	0.38	0.04	<0.0020	0.0020	8667986
Endrin	ug/g	0.04	0.04	<0.0020	0.0020	8667986
Heptachlor	ug/g	0.19	0.072	<0.0020	0.0020	8667986
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)						
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition Soil - Industrial/Commercial/Community Property Use - Medium and Fine Textured Soil						
Criteria-2: Ont. Reg. 406/19 Excess Soil Quality Standards, Table 2.1, Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition, Residential/ Parkland/ Institutional Property Use						



O.REG 406 EXCESS SOIL BULK OCS & PCBS (SOIL)

Bureau Veritas ID				VUN232		
Sampling Date				2023/05/10 14:45		
COC Number				n/a		
	UNITS	Criteria	Criteria-2	BH110/1	RDL	QC Batch
Hexachlorobenzene	ug/g	0.66	0.034	<0.0020	0.0020	8667986
Hexachlorobutadiene	ug/g	0.095	0.01	<0.0020	0.0020	8667986
Hexachloroethane	ug/g	0.43	0.01	<0.0020	0.0020	8667986
Methoxychlor	ug/g	1.6	0.13	<0.0050	0.0050	8667986
Aroclor 1242	ug/g	-	-	<0.015	0.015	8667986
Aroclor 1248	ug/g	-	-	<0.015	0.015	8667986
Aroclor 1254	ug/g	-	-	<0.015	0.015	8667986
Aroclor 1260	ug/g	-	-	<0.015	0.015	8667986
Endosulfan sulfate	ug/g	-	-	<0.0020	0.0020	8667986
Surrogate Recovery (%)						
2,4,5,6-Tetrachloro-m-xylene	%	-	-	75		8667986
Decachlorobiphenyl	%	-	-	87		8667986
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)						
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition Soil - Industrial/Commercial/Community Property Use - Medium and Fine Textured Soil						
Criteria-2: Ont. Reg. 406/19 Excess Soil Quality Standards, Table 2.1, Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition, Residential/ Parkland/ Institutional Property Use						



O.REG 406 EXCESS SOIL BULK PAHS (SOIL)

Bureau Veritas ID				VUN223		VUN225		VUN229		
Sampling Date				2023/05/10 10:45		2023/05/10 11:15		2023/05/10 13:00		
COC Number				n/a		n/a		n/a		
	UNITS	Criteria	Criteria-2	BH102/1	QC Batch	BH103/1	QC Batch	BH107/1	RDL	QC Batch
Calculated Parameters										
Methylnaphthalene, 2-(1-)	ug/g	-	0.59	<0.0071	8665042	<0.0071	8665042	<0.0071	0.0071	8665042
Polyaromatic Hydrocarbons										
Acenaphthene	ug/g	29	2.5	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Acenaphthylene	ug/g	0.17	0.093	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Anthracene	ug/g	0.74	0.16	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Benzo(a)anthracene	ug/g	0.96	0.5	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Benzo(a)pyrene	ug/g	0.3	0.31	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Benzo(b/j)fluoranthene	ug/g	0.96	3.2	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Benzo(g,h,i)perylene	ug/g	9.6	6.6	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Benzo(k)fluoranthene	ug/g	0.96	3.1	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Chrysene	ug/g	9.6	7	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Dibenzo(a,h)anthracene	ug/g	0.1	0.57	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Fluoranthene	ug/g	9.6	0.69	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Fluorene	ug/g	69	6.8	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Indeno(1,2,3-cd)pyrene	ug/g	0.95	0.38	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
1-Methylnaphthalene	ug/g	42	0.59	<0.0050	8668934	0.0067	8669087	<0.0050	0.0050	8668934
2-Methylnaphthalene	ug/g	42	0.59	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Naphthalene	ug/g	28	0.2	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Phenanthrene	ug/g	16	6.2	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Pyrene	ug/g	96	28	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Biphenyl	ug/g	210	0.05	<0.0050	8668934	<0.0050	8669087	<0.0050	0.0050	8668934
Surrogate Recovery (%)										
D10-Anthracene	%	-	-	90	8668934	108	8669087	90		8668934
D14-Terphenyl (FS)	%	-	-	86	8668934	90	8669087	85		8668934
D8-Acenaphthylene	%	-	-	82	8668934	83	8669087	79		8668934
No Fill	No Exceedance									
Grey	Exceeds 1 criteria policy/level									
Black	Exceeds both criteria/levels									
RDL = Reportable Detection Limit										
QC Batch = Quality Control Batch										
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)										
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition										
Soil - Industrial/Commercial/Community Property Use - Medium and Fine Textured Soil										
Criteria-2: Ont. Reg. 406/19 Excess Soil Quality Standards, Table 2.1, Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition, Residential/ Parkland/ Institutional Property Use										



O.REG 406 EXCESS SOIL BULK PCBS (SOIL)

Bureau Veritas ID				VUN223	VUN230		
Sampling Date				2023/05/10 10:45	2023/05/10 14:00		
COC Number				n/a	n/a		
	UNITS	Criteria	Criteria-2	BH102/1	BH108/1	RDL	QC Batch
PCBs							
Aroclor 1242	ug/g	-	-	<0.010	<0.010	0.010	8666262
Aroclor 1248	ug/g	-	-	<0.010	<0.010	0.010	8666262
Aroclor 1254	ug/g	-	-	<0.010	<0.010	0.010	8666262
Aroclor 1260	ug/g	-	-	<0.010	<0.010	0.010	8666262
Total PCB	ug/g	1.1	0.35	<0.010	<0.010	0.010	8666262
Surrogate Recovery (%)							
Decachlorobiphenyl	%	-	-	103	95		8666262
No Fill	No Exceedance						
Grey	Exceeds 1 criteria policy/level						
Black	Exceeds both criteria/levels						
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)							
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition							
Soil - Industrial/Commercial/Community Property Use - Medium and Fine Textured Soil							
Criteria-2: Ont. Reg. 406/19 Excess Soil Quality Standards, Table 2.1, Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition, Residential/ Parkland/ Institutional Property Use							



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624
Report Date: 2023/06/29

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: CW

O.REG 406 EXCESS SOIL BULK BTEX/F1-F4 (SOIL)

Bureau Veritas ID				VUN227	VUN229	VUN287	VUN288	VUN289		
Sampling Date				2023/05/10 12:00	2023/05/10 13:00	2023/05/10 12:30	2023/05/10 12:30	2023/05/10 12:30		
COC Number				n/a	n/a	n/a	n/a	n/a		
	UNITS	Criteria	Criteria-2	BH105/1	BH107/1	BH106/1	BH106/3	BH106/5	RDL	QC Batch
BTEX & F1 Hydrocarbons										
Benzene	ug/g	0.4	0.02	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8668290
Toluene	ug/g	9	0.2	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8668290
Ethylbenzene	ug/g	1.6	0.05	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8668290
o-Xylene	ug/g	-	-	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	8668290
p+m-Xylene	ug/g	-	-	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8668290
Total Xylenes	ug/g	30	0.091	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	8668290
F1 (C6-C10)	ug/g	65	25	<10	<10	<10	<10	<10	10	8668290
F1 (C6-C10) - BTEX	ug/g	65	25	<10	<10	<10	<10	<10	10	8668290
F2-F4 Hydrocarbons										
F2 (C10-C16 Hydrocarbons)	ug/g	250	10	<10	<10	<10	<10	<10	10	8666506
F3 (C16-C34 Hydrocarbons)	ug/g	2500	240	<50	<50	<50	<50	<50	50	8666506
F4 (C34-C50 Hydrocarbons)	ug/g	6600	2800	<50	<50	<50	<50	<50	50	8666506
Reached Baseline at C50	ug/g	-	-	Yes	Yes	Yes	Yes	Yes		8666506
Surrogate Recovery (%)										
1,4-Difluorobenzene	%	-	-	128	122	125	87	84		8668290
4-Bromofluorobenzene	%	-	-	84	76	103	75	78		8668290
D10-o-Xylene	%	-	-	97	103	124	88	107		8668290
D4-1,2-Dichloroethane	%	-	-	127	112	116	82	81		8668290
o-Terphenyl	%	-	-	92	89	87	88	84		8666506
No Fill	No Exceedance									
Grey	Exceeds 1 criteria policy/level									
Black	Exceeds both criteria/levels									
RDL = Reportable Detection Limit										
QC Batch = Quality Control Batch										
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)										
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition										
Soil - Industrial/Commercial/Community Property Use - Medium and Fine Textured Soil										
Criteria-2: Ont. Reg. 406/19 Excess Soil Quality Standards, Table 2.1, Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition, Residential/ Parkland/ Institutional Property Use										



O.REG 406 EXCESS SOIL BULK BTEX/F1-F4 (SOIL)

Bureau Veritas ID				VUN290		
Sampling Date				2023/05/10 12:30		
COC Number				n/a		
	UNITS	Criteria	Criteria-2	BH106/7	RDL	QC Batch
BTEX & F1 Hydrocarbons						
Benzene	ug/g	0.4	0.02	<0.020	0.020	8668290
Toluene	ug/g	9	0.2	<0.020	0.020	8668290
Ethylbenzene	ug/g	1.6	0.05	<0.020	0.020	8668290
o-Xylene	ug/g	-	-	<0.020	0.020	8668290
p+m-Xylene	ug/g	-	-	<0.040	0.040	8668290
Total Xylenes	ug/g	30	0.091	<0.040	0.040	8668290
F1 (C6-C10)	ug/g	65	25	<10	10	8668290
F1 (C6-C10) - BTEX	ug/g	65	25	<10	10	8668290
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/g	250	10	<10	10	8666506
F3 (C16-C34 Hydrocarbons)	ug/g	2500	240	<50	50	8666506
F4 (C34-C50 Hydrocarbons)	ug/g	6600	2800	<50	50	8666506
Reached Baseline at C50	ug/g	-	-	Yes		8666506
Surrogate Recovery (%)						
1,4-Difluorobenzene	%	-	-	104		8668290
4-Bromofluorobenzene	%	-	-	81		8668290
D10-o-Xylene	%	-	-	102		8668290
D4-1,2-Dichloroethane	%	-	-	107		8668290
o-Terphenyl	%	-	-	86		8666506
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)						
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition						
Soil - Industrial/Commercial/Community Property Use - Medium and Fine Textured Soil						
Criteria-2: Ont. Reg. 406/19 Excess Soil Quality Standards, Table 2.1, Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition, Residential/ Parkland/ Institutional Property Use						



O.REG 406 EXCESS SOIL BULK VOCS (SOIL)

Bureau Veritas ID				VUN228		
Sampling Date				2023/05/10 12:00		
COC Number				n/a		
	UNITS	Criteria	Criteria-2	BH105/4	RDL	QC Batch
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/g	0.081	0.05	<0.050	0.050	8664671
Volatile Organics						
Acetone (2-Propanone)	ug/g	28	0.5	<0.49	0.49	8666862
Benzene	ug/g	0.4	0.02	<0.0060	0.0060	8666862
Bromodichloromethane	ug/g	1.9	0.05	<0.040	0.040	8666862
Bromoform	ug/g	1.7	0.05	<0.040	0.040	8666862
Bromomethane	ug/g	0.05	0.05	<0.040	0.040	8666862
Carbon Tetrachloride	ug/g	0.71	0.05	<0.040	0.040	8666862
Chlorobenzene	ug/g	2.7	0.083	<0.040	0.040	8666862
Chloroform	ug/g	0.18	0.05	<0.040	0.040	8666862
Dibromochloromethane	ug/g	2.9	0.05	<0.040	0.040	8666862
1,2-Dichlorobenzene	ug/g	1.7	3.4	<0.040	0.040	8666862
1,3-Dichlorobenzene	ug/g	12	0.26	<0.040	0.040	8666862
1,4-Dichlorobenzene	ug/g	0.57	0.05	<0.040	0.040	8666862
Dichlorodifluoromethane (FREON 12)	ug/g	25	1.5	<0.040	0.040	8666862
1,1-Dichloroethane	ug/g	0.6	0.05	<0.040	0.040	8666862
1,2-Dichloroethane	ug/g	0.05	0.05	<0.049	0.049	8666862
1,1-Dichloroethylene	ug/g	0.48	0.05	<0.040	0.040	8666862
cis-1,2-Dichloroethylene	ug/g	2.5	0.05	<0.040	0.040	8666862
trans-1,2-Dichloroethylene	ug/g	2.5	0.05	<0.040	0.040	8666862
1,2-Dichloropropane	ug/g	0.68	0.05	<0.040	0.040	8666862
cis-1,3-Dichloropropene	ug/g	0.081	0.05	<0.030	0.030	8666862
trans-1,3-Dichloropropene	ug/g	0.081	0.05	<0.040	0.040	8666862
Ethylbenzene	ug/g	1.6	0.05	<0.010	0.010	8666862
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)						
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition						
Soil - Industrial/Commercial/Community Property Use - Medium and Fine Textured Soil						
Criteria-2: Ont. Reg. 406/19 Excess Soil Quality Standards, Table 2.1, Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition, Residential/ Parkland/ Institutional Property Use						



O.REG 406 EXCESS SOIL BULK VOCS (SOIL)

Bureau Veritas ID					VUN228	
Sampling Date					2023/05/10 12:00	
COC Number					n/a	
		UNITS	Criteria	Criteria-2	BH105/4	RDL
		QC Batch				
Ethylene Dibromide	ug/g	0.05	0.05	<0.040	0.040	8666862
Hexane	ug/g	88	2.5	<0.040	0.040	8666862
Methylene Chloride(Dichloromethane)	ug/g	2	0.05	<0.049	0.049	8666862
Methyl Ethyl Ketone (2-Butanone)	ug/g	88	0.5	<0.40	0.40	8666862
Methyl Isobutyl Ketone	ug/g	210	0.5	<0.40	0.40	8666862
Methyl t-butyl ether (MTBE)	ug/g	2.3	0.05	<0.040	0.040	8666862
Styrene	ug/g	43	0.05	<0.040	0.040	8666862
1,1,1,2-Tetrachloroethane	ug/g	0.11	0.05	<0.040	0.040	8666862
1,1,2,2-Tetrachloroethane	ug/g	0.094	0.05	<0.040	0.040	8666862
Tetrachloroethylene	ug/g	2.5	0.05	<0.040	0.040	8666862
Toluene	ug/g	9	0.2	<0.020	0.020	8666862
1,1,1-Trichloroethane	ug/g	12	0.11	<0.040	0.040	8666862
1,1,2-Trichloroethane	ug/g	0.11	0.05	<0.040	0.040	8666862
Trichloroethylene	ug/g	0.61	0.05	<0.010	0.010	8666862
Trichlorofluoromethane (FREON 11)	ug/g	5.8	0.25	<0.040	0.040	8666862
Vinyl Chloride	ug/g	0.25	0.02	<0.019	0.019	8666862
p+m-Xylene	ug/g	-	-	<0.020	0.020	8666862
o-Xylene	ug/g	-	-	<0.020	0.020	8666862
Total Xylenes	ug/g	30	0.091	<0.020	0.020	8666862
Surrogate Recovery (%)						
4-Bromofluorobenzene	%	-	-	100		8666862
D10-o-Xylene	%	-	-	106		8666862
D4-1,2-Dichloroethane	%	-	-	102		8666862
D8-Toluene	%	-	-	95		8666862
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)						
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition						
Soil - Industrial/Commercial/Community Property Use - Medium and Fine Textured Soil						
Criteria-2: Ont. Reg. 406/19 Excess Soil Quality Standards, Table 2.1, Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition, Residential/ Parkland/ Institutional Property Use						



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624
Report Date: 2023/06/29

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: CW

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		VUN222			VUN223			VUN224		VUN225		
Sampling Date		2023/05/10 10:15			2023/05/10 10:45			2023/05/10 10:45		2023/05/10 11:15		
COC Number		n/a			n/a			n/a		n/a		
		UNITS	BH101/6	RDL	QC Batch	BH102/1	QC Batch	BH102/4	QC Batch	BH103/1	RDL	QC Batch
Inorganics												
Moisture	%				14	8666162		12	8666653	19	1.0	8665770
Available (CaCl ₂) pH	pH	7.74			8669579							
Miscellaneous Parameters												
Grain Size	%	FINE	N/A	8667575								
Sieve - #200 (<0.075mm)	%	82	1	8667575								
Sieve - #200 (>0.075mm)	%	18	1	8667575								
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable												

Bureau Veritas ID		VUN227			VUN228			VUN229		VUN230		
Sampling Date		2023/05/10 12:00			2023/05/10 12:00			2023/05/10 13:00		2023/05/10 14:00		
COC Number		n/a			n/a			n/a		n/a		
		UNITS	BH105/1	QC Batch	BH105/4	QC Batch	BH107/1	QC Batch	BH108/1	RDL	QC Batch	
Inorganics												
Moisture	%	14	8665770		24	8665770		22	8666653	20	1.0	8666162
Available (CaCl ₂) pH	pH	7.69	8669579									
RDL = Reportable Detection Limit QC Batch = Quality Control Batch												

Bureau Veritas ID		VUN232			VUN287	VUN288	VUN289		VUN289			
Sampling Date		2023/05/10 14:45			2023/05/10 12:30	2023/05/10 12:30	2023/05/10 12:30		2023/05/10 12:30			
COC Number		n/a			n/a	n/a	n/a		n/a			
		UNITS	BH110/1	QC Batch	BH106/1	BH106/3	BH106/5	QC Batch	BH106/5 Lab-Dup	RDL	QC Batch	
Inorganics												
Moisture	%	21	8665770		14	14	17	8666653	17	1.0	8666653	
Available (CaCl ₂) pH	pH				7.65	7.71	7.59	8669522				
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate												



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624
Report Date: 2023/06/29

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: CW

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		VUN290		
Sampling Date		2023/05/10 12:30		
COC Number		n/a		
	UNITS	BH106/7	RDL	QC Batch
Inorganics				
Moisture	%	14	1.0	8665770
Available (CaCl2) pH	pH	7.17		8669579
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624
Report Date: 2023/06/29

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: CW

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID				VUN227		VUN287			VUN287		
Sampling Date				2023/05/10 12:00		2023/05/10 12:30			2023/05/10 12:30		
COC Number				n/a		n/a			n/a		
	UNITS	Criteria	Criteria-2	BH105/1	QC Batch	BH106/1	RDL	QC Batch	BH106/1 Lab-Dup	RDL	QC Batch
Inorganics											
Chromium (VI)	ug/g	10	8	<0.18	8667150	<0.18	0.18	8669419			
Metals											
Hot Water Ext. Boron (B)	ug/g	2	1.5	0.19	8669173	0.24	0.050	8669173	0.22	0.050	8669173
No Fill	No Exceedance										
Grey	Exceeds 1 criteria policy/level										
Black	Exceeds both criteria/levels										
RDL = Reportable Detection Limit											
QC Batch = Quality Control Batch											
Lab-Dup = Laboratory Initiated Duplicate											
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)											
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition											
Soil - Industrial/Commercial/Community Property Use - Medium and Fine Textured Soil											
Criteria-2: Ont. Reg. 406/19 Excess Soil Quality Standards, Table 2.1, Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition, Residential/ Parkland/ Institutional Property Use											

Bureau Veritas ID				VUN288	VUN289	VUN290		
Sampling Date				2023/05/10 12:30	2023/05/10 12:30	2023/05/10 12:30		
COC Number				n/a	n/a	n/a		
	UNITS	Criteria	Criteria-2	BH106/3	BH106/5	BH106/7	RDL	QC Batch
Inorganics								
Chromium (VI)	ug/g	10	8	<0.18	<0.18	<0.18	0.18	8669419
Metals								
Hot Water Ext. Boron (B)	ug/g	2	1.5	0.24	0.53	0.23	0.050	8669173
No Fill	No Exceedance							
Grey	Exceeds 1 criteria policy/level							
Black	Exceeds both criteria/levels							
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)								
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition								
Soil - Industrial/Commercial/Community Property Use - Medium and Fine Textured Soil								
Criteria-2: Ont. Reg. 406/19 Excess Soil Quality Standards, Table 2.1, Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition, Residential/ Parkland/ Institutional Property Use								



PETROLEUM HYDROCARBONS (CCME)

Bureau Veritas ID				VUN224		VUN230		
Sampling Date				2023/05/10 10:45		2023/05/10 14:00		
COC Number				n/a		n/a		
	UNITS	Criteria	Criteria-2	BH102/4	QC Batch	BH108/1	RDL	QC Batch
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/g	250	10	<10	8666506	<10	10	8667245
F3 (C16-C34 Hydrocarbons)	ug/g	2500	240	<50	8666506	<50	50	8667245
F4 (C34-C50 Hydrocarbons)	ug/g	6600	2800	<50	8666506	<50	50	8667245
Reached Baseline at C50	ug/g	-	-	Yes	8666506	Yes		8667245
Surrogate Recovery (%)								
o-Terphenyl	%	-	-	93	8666506	83		8667245
No Fill	No Exceedance							
Grey	Exceeds 1 criteria policy/level							
Black	Exceeds both criteria/levels							
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)								
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition								
Soil - Industrial/Commercial/Community Property Use - Medium and Fine Textured Soil								
Criteria-2: Ont. Reg. 406/19 Excess Soil Quality Standards, Table 2.1, Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition, Residential/ Parkland/ Institutional Property Use								



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624
Report Date: 2023/06/29

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: CW

TEST SUMMARY

Bureau Veritas ID: VUN221
Sample ID: BH101/1
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractable Metals by ICPMS	ICP/MS	8669344	2023/05/17	2023/05/18	Indira HarryPaul

Bureau Veritas ID: VUN222
Sample ID: BH101/6
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH CaCl2 EXTRACT	AT	8669579	2023/05/17	2023/05/17	Gurpartee K AUR
Sieve, 75um	SIEV	8667575	N/A	2023/05/17	Muhammad Chhaidan

Bureau Veritas ID: VUN223
Sample ID: BH102/1
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8665042	N/A	2023/05/18	Automated Statchk
Moisture	BAL	8666162	N/A	2023/05/15	Rajkumar Patel
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8668934	2023/05/16	2023/05/18	Jonghan Yoon
Polychlorinated Biphenyl in Soil	GC/ECD	8666262	2023/05/15	2023/05/16	Farag Mansour

Bureau Veritas ID: VUN224
Sample ID: BH102/4
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8666506	2023/05/16	2023/05/16	Anna Stuglik-Rolland
Moisture	BAL	8666653	N/A	2023/05/16	Rajkumar Patel

Bureau Veritas ID: VUN225
Sample ID: BH103/1
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8665042	N/A	2023/05/18	Automated Statchk
Moisture	BAL	8665770	N/A	2023/05/15	Rajkumar Patel
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8669087	2023/05/17	2023/05/17	Jonghan Yoon

Bureau Veritas ID: VUN226
Sample ID: BH104/1
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractable Metals by ICPMS	ICP/MS	8669344	2023/05/17	2023/05/18	Indira HarryPaul



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624
Report Date: 2023/06/29

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: CW

TEST SUMMARY

Bureau Veritas ID: VUN227
Sample ID: BH105/1
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8669173	2023/05/17	2023/05/17	Gagandeep Rai
Hexavalent Chromium in Soil by IC	IC/SPEC	8667150	2023/05/16	2023/05/16	Violeta Porcila
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	8668290	N/A	2023/05/17	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8666506	2023/05/16	2023/05/16	Anna Stuglik-Rolland
Acid Extractable Metals by ICPMS	ICP/MS	8669344	2023/05/17	2023/05/18	Indira HarryPaul
Moisture	BAL	8665770	N/A	2023/05/15	Rajkumar Patel
pH CaCl2 EXTRACT	AT	8669579	2023/05/17	2023/05/17	Gurpartee Kaur

Bureau Veritas ID: VUN227 Dup
Sample ID: BH105/1
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractable Metals by ICPMS	ICP/MS	8669344	2023/05/17	2023/05/18	Indira HarryPaul

Bureau Veritas ID: VUN228
Sample ID: BH105/4
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8664671	N/A	2023/05/18	Automated Statchk
Moisture	BAL	8665770	N/A	2023/05/15	Rajkumar Patel
Volatile Organic Compounds in Soil	GC/MS	8666862	N/A	2023/05/16	Hai Son Tran

Bureau Veritas ID: VUN229
Sample ID: BH107/1
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8665042	N/A	2023/05/18	Automated Statchk
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	8668290	N/A	2023/05/17	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8666506	2023/05/16	2023/05/16	Anna Stuglik-Rolland
Moisture	BAL	8666653	N/A	2023/05/16	Rajkumar Patel
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	8668934	2023/05/16	2023/05/18	Jonghan Yoon

Bureau Veritas ID: VUN230
Sample ID: BH108/1
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8667245	2023/05/16	2023/05/16	Agnieszka Brzuzy-Snopko
Moisture	BAL	8666162	N/A	2023/05/15	Rajkumar Patel
Polychlorinated Biphenyl in Soil	GC/ECD	8666262	2023/05/15	2023/05/16	Farag Mansour



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624
Report Date: 2023/06/29

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: CW

TEST SUMMARY

Bureau Veritas ID: VUN231
Sample ID: BH109/1
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractable Metals by ICPMS	ICP/MS	8669344	2023/05/17	2023/05/18	Indira HarryPaul

Bureau Veritas ID: VUN232
Sample ID: BH110/1
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	8665770	N/A	2023/05/15	Rajkumar Patel
OC Pesticides (Selected) & PCB	GC/ECD	8667986	2023/05/16	2023/05/17	Joy Zhang
OC Pesticides Summed Parameters	CALC	8665142	N/A	2023/05/16	Automated Statchk

Bureau Veritas ID: VUN286
Sample ID: BH111/1
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractable Metals by ICPMS	ICP/MS	8669344	2023/05/17	2023/05/18	Indira HarryPaul

Bureau Veritas ID: VUN287
Sample ID: BH106/1
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8669173	2023/05/17	2023/05/17	Gagandeep Rai
Hexavalent Chromium in Soil by IC	IC/SPEC	8669419	2023/05/17	2023/05/17	Violeta Porcila
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	8668290	N/A	2023/05/17	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8666506	2023/05/16	2023/05/16	Anna Stuglik-Rolland
Acid Extractable Metals by ICPMS	ICP/MS	8669142	2023/05/17	2023/05/18	Indira HarryPaul
Moisture	BAL	8666653	N/A	2023/05/16	Rajkumar Patel
pH CaCl2 EXTRACT	AT	8669522	2023/05/17	2023/05/17	Gurpartee K AUR

Bureau Veritas ID: VUN287 Dup
Sample ID: BH106/1
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8669173	2023/05/17	2023/05/17	Gagandeep Rai

Bureau Veritas ID: VUN288
Sample ID: BH106/3
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8669173	2023/05/17	2023/05/17	Gagandeep Rai
Hexavalent Chromium in Soil by IC	IC/SPEC	8669419	2023/05/17	2023/05/17	Violeta Porcila



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624
Report Date: 2023/06/29

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: CW

TEST SUMMARY

Bureau Veritas ID: VUN288
Sample ID: BH106/3
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	8668290	N/A	2023/05/17	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8666506	2023/05/16	2023/05/16	Anna Stuglik-Rolland
Acid Extractable Metals by ICPMS	ICP/MS	8669344	2023/05/17	2023/05/18	Indira HarryPaul
Moisture	BAL	8666653	N/A	2023/05/16	Rajkumar Patel
pH CaCl2 EXTRACT	AT	8669522	2023/05/17	2023/05/17	Gurpartee K AUR

Bureau Veritas ID: VUN289
Sample ID: BH106/5
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8669173	2023/05/17	2023/05/17	Gagandeep Rai
Hexavalent Chromium in Soil by IC	IC/SPEC	8669419	2023/05/17	2023/05/17	Violeta Porcila
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	8668290	N/A	2023/05/17	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8666506	2023/05/16	2023/05/16	Anna Stuglik-Rolland
Acid Extractable Metals by ICPMS	ICP/MS	8669142	2023/05/17	2023/05/18	Indira HarryPaul
Moisture	BAL	8666653	N/A	2023/05/16	Rajkumar Patel
pH CaCl2 EXTRACT	AT	8669522	2023/05/17	2023/05/17	Gurpartee K AUR

Bureau Veritas ID: VUN289 Dup
Sample ID: BH106/5
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	8666653	N/A	2023/05/16	Rajkumar Patel

Bureau Veritas ID: VUN290
Sample ID: BH106/7
Matrix: Soil

Collected: 2023/05/10
Shipped:
Received: 2023/05/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	8669173	2023/05/17	2023/05/17	Gagandeep Rai
Hexavalent Chromium in Soil by IC	IC/SPEC	8669419	2023/05/17	2023/05/17	Violeta Porcila
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	8668290	N/A	2023/05/17	Georgeta Rusu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	8666506	2023/05/16	2023/05/16	Anna Stuglik-Rolland
Acid Extractable Metals by ICPMS	ICP/MS	8669344	2023/05/17	2023/05/18	Indira HarryPaul
Moisture	BAL	8665770	N/A	2023/05/15	Rajkumar Patel
pH CaCl2 EXTRACT	AT	8669579	2023/05/17	2023/05/17	Gurpartee K AUR



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624
Report Date: 2023/06/29

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: CW

GENERAL COMMENTS

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

Package 1	19.0°C
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Revised Report [2023/06/28]: Additional parameter has been reported in Metals as requested by Enqi Xiang.

F1 BTEX analysis : Soil weight exceeds the protocol specification of approximately 5g in the field preserved vial. Additional methanol was added to the vial to ensure extraction efficiency

Results relate only to the items tested.



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Bureau Veritas Job #: C3D6624

Report Date: 2023/06/29

QUALITY ASSURANCE REPORT

AiMS Consulting Environmental Services

Client Project #: AR104-23

Site Location: 4243 SIXTH LINE, OAKVILLE, ON

Sampler Initials: CW

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8666262	Decachlorobiphenyl	2023/05/16	91	60 - 130	95	60 - 130	112	%				
8666506	o-Terphenyl	2023/05/16	84	60 - 130	79	60 - 130	89	%				
8666862	4-Bromofluorobenzene	2023/05/16	102	60 - 140	104	60 - 140	103	%				
8666862	D10-o-Xylene	2023/05/16	113	60 - 130	112	60 - 130	108	%				
8666862	D4-1,2-Dichloroethane	2023/05/16	96	60 - 140	102	60 - 140	97	%				
8666862	D8-Toluene	2023/05/16	103	60 - 140	98	60 - 140	94	%				
8667245	o-Terphenyl	2023/05/16	92	60 - 130	93	60 - 130	94	%				
8667986	2,4,5,6-Tetrachloro-m-xylene	2023/05/17	72	50 - 130	83	50 - 130	80	%				
8667986	Decachlorobiphenyl	2023/05/17	78	50 - 130	90	50 - 130	91	%				
8668290	1,4-Difluorobenzene	2023/05/17	102	60 - 140	101	60 - 140	106	%				
8668290	4-Bromofluorobenzene	2023/05/17	99	60 - 140	97	60 - 140	72	%				
8668290	D10-o-Xylene	2023/05/17	102	60 - 140	94	60 - 140	91	%				
8668290	D4-1,2-Dichloroethane	2023/05/17	101	60 - 140	99	60 - 140	105	%				
8668934	D10-Anthracene	2023/05/17	94	50 - 130	100	50 - 130	96	%				
8668934	D14-Terphenyl (FS)	2023/05/17	91	50 - 130	97	50 - 130	93	%				
8668934	D8-Acenaphthylene	2023/05/17	88	50 - 130	88	50 - 130	85	%				
8669087	D10-Anthracene	2023/05/17	106	50 - 130	114	50 - 130	117	%				
8669087	D14-Terphenyl (FS)	2023/05/17	92	50 - 130	87	50 - 130	89	%				
8669087	D8-Acenaphthylene	2023/05/17	88	50 - 130	85	50 - 130	85	%				
8665770	Moisture	2023/05/15							8.3 (1)	20		
8666162	Moisture	2023/05/15							0.86 (1)	20		
8666262	Aroclor 1242	2023/05/16					<0.010	ug/g	NC (1)	50		
8666262	Aroclor 1248	2023/05/16					<0.010	ug/g	NC (1)	50		
8666262	Aroclor 1254	2023/05/16					<0.010	ug/g	NC (1)	50		
8666262	Aroclor 1260	2023/05/16	94	30 - 130	104	30 - 130	<0.010	ug/g	NC (1)	50		
8666262	Total PCB	2023/05/16	94	30 - 130	104	30 - 130	<0.010	ug/g	NC (1)	50		
8666506	F2 (C10-C16 Hydrocarbons)	2023/05/16	95	60 - 130	88	80 - 120	<10	ug/g	NC (1)	30		
8666506	F3 (C16-C34 Hydrocarbons)	2023/05/16	94	60 - 130	88	80 - 120	<50	ug/g	NC (1)	30		
8666506	F4 (C34-C50 Hydrocarbons)	2023/05/16	97	60 - 130	91	80 - 120	<50	ug/g	NC (1)	30		
8666653	Moisture	2023/05/16							2.3 (2)	20		
8666862	1,1,1,2-Tetrachloroethane	2023/05/16	94	60 - 140	97	60 - 130	<0.040	ug/g	NC (1)	50		



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624

Report Date: 2023/06/29

QUALITY ASSURANCE REPORT(CONT'D)

AiMS Consulting Environmental Services

Client Project #: AR104-23

Site Location: 4243 SIXTH LINE, OAKVILLE, ON

Sampler Initials: CW

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8666862	1,1,1-Trichloroethane	2023/05/16	100	60 - 140	102	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	1,1,2,2-Tetrachloroethane	2023/05/16	83	60 - 140	92	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	1,1,2-Trichloroethane	2023/05/16	93	60 - 140	96	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	1,1-Dichloroethane	2023/05/16	90	60 - 140	93	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	1,1-Dichloroethylene	2023/05/16	98	60 - 140	98	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	1,2-Dichlorobenzene	2023/05/16	90	60 - 140	92	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	1,2-Dichloroethane	2023/05/16	86	60 - 140	92	60 - 130	<0.049	ug/g	NC (1)	50		
8666862	1,2-Dichloropropane	2023/05/16	92	60 - 140	97	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	1,3-Dichlorobenzene	2023/05/16	92	60 - 140	97	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	1,4-Dichlorobenzene	2023/05/16	109	60 - 140	111	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	Acetone (2-Propanone)	2023/05/16	84	60 - 140	91	60 - 140	<0.49	ug/g	NC (1)	50		
8666862	Benzene	2023/05/16	88	60 - 140	92	60 - 130	<0.0060	ug/g	NC (1)	50		
8666862	Bromodichloromethane	2023/05/16	94	60 - 140	100	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	Bromoform	2023/05/16	86	60 - 140	95	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	Bromomethane	2023/05/16	94	60 - 140	96	60 - 140	<0.040	ug/g	NC (1)	50		
8666862	Carbon Tetrachloride	2023/05/16	98	60 - 140	98	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	Chlorobenzene	2023/05/16	91	60 - 140	94	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	Chloroform	2023/05/16	93	60 - 140	97	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	cis-1,2-Dichloroethylene	2023/05/16	93	60 - 140	97	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	cis-1,3-Dichloropropene	2023/05/16	94	60 - 140	96	60 - 130	<0.030	ug/g	NC (1)	50		
8666862	Dibromochloromethane	2023/05/16	92	60 - 140	94	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	Dichlorodifluoromethane (FREON 12)	2023/05/16	96	60 - 140	95	60 - 140	<0.040	ug/g	NC (1)	50		
8666862	Ethylbenzene	2023/05/16	91	60 - 140	92	60 - 130	<0.010	ug/g	NC (1)	50		
8666862	Ethylene Dibromide	2023/05/16	86	60 - 140	90	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	Hexane	2023/05/16	97	60 - 140	96	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	Methyl Ethyl Ketone (2-Butanone)	2023/05/16	83	60 - 140	92	60 - 140	<0.40	ug/g	NC (1)	50		
8666862	Methyl Isobutyl Ketone	2023/05/16	89	60 - 140	96	60 - 130	<0.40	ug/g	NC (1)	50		
8666862	Methyl t-butyl ether (MTBE)	2023/05/16	85	60 - 140	91	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	Methylene Chloride(Dichloromethane)	2023/05/16	98	60 - 140	104	60 - 130	<0.049	ug/g	NC (1)	50		
8666862	o-Xylene	2023/05/16	89	60 - 140	91	60 - 130	<0.020	ug/g	NC (1)	50		
8666862	p+m-Xylene	2023/05/16	94	60 - 140	94	60 - 130	<0.020	ug/g	NC (1)	50		



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624

Report Date: 2023/06/29

QUALITY ASSURANCE REPORT(CONT'D)

AiMS Consulting Environmental Services

Client Project #: AR104-23

Site Location: 4243 SIXTH LINE, OAKVILLE, ON

Sampler Initials: CW

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8666862	Styrene	2023/05/16	97	60 - 140	101	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	Tetrachloroethylene	2023/05/16	95	60 - 140	91	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	Toluene	2023/05/16	89	60 - 140	88	60 - 130	<0.020	ug/g	NC (1)	50		
8666862	Total Xylenes	2023/05/16					<0.020	ug/g	NC (1)	50		
8666862	trans-1,2-Dichloroethylene	2023/05/16	97	60 - 140	98	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	trans-1,3-Dichloropropene	2023/05/16	97	60 - 140	89	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	Trichloroethylene	2023/05/16	101	60 - 140	103	60 - 130	<0.010	ug/g	NC (1)	50		
8666862	Trichlorofluoromethane (FREON 11)	2023/05/16	98	60 - 140	97	60 - 130	<0.040	ug/g	NC (1)	50		
8666862	Vinyl Chloride	2023/05/16	97	60 - 140	96	60 - 130	<0.019	ug/g	NC (1)	50		
8667150	Chromium (VI)	2023/05/16	89	70 - 130	91	80 - 120	<0.18	ug/g	NC (1)	35		
8667245	F2 (C10-C16 Hydrocarbons)	2023/05/16	107	60 - 130	105	80 - 120	<10	ug/g	NC (1)	30		
8667245	F3 (C16-C34 Hydrocarbons)	2023/05/16	106	60 - 130	104	80 - 120	<50	ug/g	NC (1)	30		
8667245	F4 (C34-C50 Hydrocarbons)	2023/05/16	107	60 - 130	104	80 - 120	<50	ug/g	NC (1)	30		
8667575	Sieve - #200 (<0.075mm)	2023/05/17							15 (1)	20	56	53 - 58
8667575	Sieve - #200 (>0.075mm)	2023/05/17							0.35 (1)	20	44	42 - 47
8667986	a-Chlordane	2023/05/17	68	50 - 130	76	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	Aldrin	2023/05/17	70	50 - 130	79	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	Aroclor 1242	2023/05/17					<0.015	ug/g	NC (1)	40		
8667986	Aroclor 1248	2023/05/17					<0.015	ug/g	NC (1)	40		
8667986	Aroclor 1254	2023/05/17					<0.015	ug/g	NC (1)	40		
8667986	Aroclor 1260	2023/05/17					<0.015	ug/g	NC (1)	40		
8667986	Dieldrin	2023/05/17	67	50 - 130	81	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	Endosulfan I (alpha)	2023/05/17	66	50 - 130	84	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	Endosulfan II (beta)	2023/05/17	67	50 - 130	72	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	Endosulfan sulfate	2023/05/17	63	30 - 130	75	30 - 130	<0.0020	ug/g	1.0 (1)	50		
8667986	Endrin	2023/05/17	65	50 - 130	73	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	g-Chlordane	2023/05/17	64	50 - 130	78	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	Heptachlor	2023/05/17	68	50 - 130	76	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	Hexachlorobenzene	2023/05/17	71	50 - 130	84	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	Hexachlorobutadiene	2023/05/17	60	50 - 130	105	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	Hexachloroethane	2023/05/17	47 (3)	50 - 130	79	50 - 130	<0.0020	ug/g	NC (1)	40		



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624

Report Date: 2023/06/29

QUALITY ASSURANCE REPORT(CONT'D)

AiMS Consulting Environmental Services

Client Project #: AR104-23

Site Location: 4243 SIXTH LINE, OAKVILLE, ON

Sampler Initials: CW

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8667986	Lindane	2023/05/17	61	50 - 130	72	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	Methoxychlor	2023/05/17	55	50 - 130	65	50 - 130	<0.0050	ug/g	NC (1)	40		
8667986	o,p-DDD	2023/05/17	67	50 - 130	81	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	o,p-DDE	2023/05/17	74	50 - 130	84	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	o,p-DDT	2023/05/17	70	50 - 130	81	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	p,p-DDD	2023/05/17	67	50 - 130	80	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	p,p-DDE	2023/05/17	76	50 - 130	95	50 - 130	<0.0020	ug/g	NC (1)	40		
8667986	p,p-DDT	2023/05/17	63	50 - 130	76	50 - 130	<0.0020	ug/g	NC (1)	40		
8668290	Benzene	2023/05/17	93	50 - 140	87	50 - 140	<0.020	ug/g	NC (1)	50		
8668290	Ethylbenzene	2023/05/17	101	50 - 140	97	50 - 140	<0.020	ug/g	NC (1)	50		
8668290	F1 (C6-C10) - BTEX	2023/05/17					<10	ug/g	NC (1)	30		
8668290	F1 (C6-C10)	2023/05/17	97	60 - 140	94	80 - 120	<10	ug/g	NC (1)	30		
8668290	o-Xylene	2023/05/17	98	50 - 140	91	50 - 140	<0.020	ug/g	NC (1)	50		
8668290	p+m-Xylene	2023/05/17	97	50 - 140	92	50 - 140	<0.040	ug/g	NC (1)	50		
8668290	Toluene	2023/05/17	94	50 - 140	87	50 - 140	<0.020	ug/g	NC (1)	50		
8668290	Total Xylenes	2023/05/17					<0.040	ug/g	NC (1)	50		
8668934	1-Methylnaphthalene	2023/05/17	93	50 - 130	101	50 - 130	<0.0050	ug/g	NC (1)	40		
8668934	2-Methylnaphthalene	2023/05/17	86	50 - 130	91	50 - 130	<0.0050	ug/g	NC (1)	40		
8668934	Acenaphthene	2023/05/17	96	50 - 130	104	50 - 130	<0.0050	ug/g	NC (1)	40		
8668934	Acenaphthylene	2023/05/17	92	50 - 130	96	50 - 130	<0.0050	ug/g	NC (1)	40		
8668934	Anthracene	2023/05/17	97	50 - 130	104	50 - 130	<0.0050	ug/g	NC (1)	40		
8668934	Benzo(a)anthracene	2023/05/17	99	50 - 130	98	50 - 130	<0.0050	ug/g	23 (1)	40		
8668934	Benzo(a)pyrene	2023/05/17	92	50 - 130	99	50 - 130	<0.0050	ug/g	24 (1)	40		
8668934	Benzo(b,j)fluoranthene	2023/05/17	95	50 - 130	110	50 - 130	<0.0050	ug/g	27 (1)	40		
8668934	Benzo(g,h,i)perylene	2023/05/17	97	50 - 130	108	50 - 130	<0.0050	ug/g	28 (1)	40		
8668934	Benzo(k)fluoranthene	2023/05/17	93	50 - 130	105	50 - 130	<0.0050	ug/g	22 (1)	40		
8668934	Biphenyl	2023/05/17	87	50 - 130	96	50 - 130	<0.0050	ug/g				
8668934	Chrysene	2023/05/17	100	50 - 130	110	50 - 130	<0.0050	ug/g	24 (1)	40		
8668934	Dibenzo(a,h)anthracene	2023/05/17	90	50 - 130	91	50 - 130	<0.0050	ug/g	NC (1)	40		
8668934	Fluoranthene	2023/05/17	100	50 - 130	109	50 - 130	<0.0050	ug/g	25 (1)	40		
8668934	Fluorene	2023/05/17	96	50 - 130	103	50 - 130	<0.0050	ug/g	NC (1)	40		



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624

Report Date: 2023/06/29

QUALITY ASSURANCE REPORT(CONT'D)

AiMS Consulting Environmental Services

Client Project #: AR104-23

Site Location: 4243 SIXTH LINE, OAKVILLE, ON

Sampler Initials: CW

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8668934	Indeno(1,2,3-cd)pyrene	2023/05/17	93	50 - 130	102	50 - 130	<0.0050	ug/g	27 (1)	40		
8668934	Naphthalene	2023/05/17	90	50 - 130	99	50 - 130	<0.0050	ug/g	NC (1)	40		
8668934	Phenanthrene	2023/05/17	95	50 - 130	106	50 - 130	<0.0050	ug/g	23 (1)	40		
8668934	Pyrene	2023/05/17	101	50 - 130	110	50 - 130	<0.0050	ug/g	24 (1)	40		
8669087	1-Methylnaphthalene	2023/05/17	100	50 - 130	107	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	2-Methylnaphthalene	2023/05/17	87	50 - 130	88	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Acenaphthene	2023/05/17	96	50 - 130	99	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Acenaphthylene	2023/05/17	97	50 - 130	96	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Anthracene	2023/05/17	110	50 - 130	117	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Benzo(a)anthracene	2023/05/17	101	50 - 130	98	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Benzo(a)pyrene	2023/05/17	97	50 - 130	104	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Benzo(b/j)fluoranthene	2023/05/17	99	50 - 130	113	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Benzo(g,h,i)perylene	2023/05/17	106	50 - 130	125	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Benzo(k)fluoranthene	2023/05/17	97	50 - 130	103	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Biphenyl	2023/05/17	92	50 - 130	93	50 - 130	<0.0050	ug/g				
8669087	Chrysene	2023/05/17	102	50 - 130	111	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Dibenzo(a,h)anthracene	2023/05/17	109	50 - 130	128	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Fluoranthene	2023/05/17	106	50 - 130	106	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Fluorene	2023/05/17	97	50 - 130	98	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Indeno(1,2,3-cd)pyrene	2023/05/17	105	50 - 130	121	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Naphthalene	2023/05/17	88	50 - 130	95	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Phenanthrene	2023/05/17	102	50 - 130	101	50 - 130	<0.0050	ug/g	NC (1)	40		
8669087	Pyrene	2023/05/17	111	50 - 130	113	50 - 130	<0.0050	ug/g	NC (1)	40		
8669142	Acid Extractable Antimony (Sb)	2023/05/18	99	75 - 125	96	80 - 120	<0.20	ug/g	NC (1)	30		
8669142	Acid Extractable Arsenic (As)	2023/05/18	101	75 - 125	98	80 - 120	<1.0	ug/g	12 (1)	30		
8669142	Acid Extractable Barium (Ba)	2023/05/18	NC	75 - 125	95	80 - 120	<0.50	ug/g	1.7 (1)	30		
8669142	Acid Extractable Beryllium (Be)	2023/05/18	103	75 - 125	96	80 - 120	<0.20	ug/g	5.4 (1)	30		
8669142	Acid Extractable Boron (B)	2023/05/18	99	75 - 125	95	80 - 120	<5.0	ug/g	NC (1)	30		
8669142	Acid Extractable Cadmium (Cd)	2023/05/18	99	75 - 125	94	80 - 120	<0.10	ug/g	0.34 (1)	30		
8669142	Acid Extractable Chromium (Cr)	2023/05/18	104	75 - 125	97	80 - 120	<1.0	ug/g	1.4 (1)	30		
8669142	Acid Extractable Cobalt (Co)	2023/05/18	100	75 - 125	96	80 - 120	<0.10	ug/g	1.4 (1)	30		



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624

Report Date: 2023/06/29

QUALITY ASSURANCE REPORT(CONT'D)

AiMS Consulting Environmental Services

Client Project #: AR104-23

Site Location: 4243 SIXTH LINE, OAKVILLE, ON

Sampler Initials: CW

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8669142	Acid Extractable Copper (Cu)	2023/05/18	101	75 - 125	99	80 - 120	<0.50	ug/g	1.5 (1)	30		
8669142	Acid Extractable Lead (Pb)	2023/05/18	99	75 - 125	102	80 - 120	<1.0	ug/g	1.5 (1)	30		
8669142	Acid Extractable Mercury (Hg)	2023/05/18	99	75 - 125	102	80 - 120	<0.050	ug/g	NC (1)	30		
8669142	Acid Extractable Molybdenum (Mo)	2023/05/18	103	75 - 125	99	80 - 120	<0.50	ug/g	2.5 (1)	30		
8669142	Acid Extractable Nickel (Ni)	2023/05/18	99	75 - 125	99	80 - 120	<0.50	ug/g	0.017 (1)	30		
8669142	Acid Extractable Selenium (Se)	2023/05/18	102	75 - 125	101	80 - 120	<0.50	ug/g	NC (1)	30		
8669142	Acid Extractable Silver (Ag)	2023/05/18	102	75 - 125	97	80 - 120	<0.20	ug/g	NC (1)	30		
8669142	Acid Extractable Thallium (Tl)	2023/05/18	99	75 - 125	97	80 - 120	<0.050	ug/g	8.8 (1)	30		
8669142	Acid Extractable Uranium (U)	2023/05/18	102	75 - 125	98	80 - 120	<0.050	ug/g	8.0 (1)	30		
8669142	Acid Extractable Vanadium (V)	2023/05/18	104	75 - 125	98	80 - 120	<5.0	ug/g	1.9 (1)	30		
8669142	Acid Extractable Zinc (Zn)	2023/05/18	NC	75 - 125	98	80 - 120	<5.0	ug/g	1.2 (1)	30		
8669173	Hot Water Ext. Boron (B)	2023/05/17	107 (4)	75 - 125	102	75 - 125	<0.050	ug/g	8.9 (5)	40		
8669344	Acid Extractable Antimony (Sb)	2023/05/18	91 (6)	75 - 125	98	80 - 120	<0.20	ug/g	1.1 (7)	30		
8669344	Acid Extractable Arsenic (As)	2023/05/18	96 (6)	75 - 125	94	80 - 120	<1.0	ug/g	7.4 (7)	30		
8669344	Acid Extractable Barium (Ba)	2023/05/18	NC (6)	75 - 125	94	80 - 120	<0.50	ug/g	2.7 (7)	30		
8669344	Acid Extractable Beryllium (Be)	2023/05/18	99 (6)	75 - 125	96	80 - 120	<0.20	ug/g	4.5 (7)	30		
8669344	Acid Extractable Boron (B)	2023/05/18	94 (6)	75 - 125	95	80 - 120	<5.0	ug/g	0.43 (7)	30		
8669344	Acid Extractable Cadmium (Cd)	2023/05/18	100 (6)	75 - 125	95	80 - 120	<0.10	ug/g	13 (7)	30		
8669344	Acid Extractable Chromium (Cr)	2023/05/18	103 (6)	75 - 125	96	80 - 120	<1.0	ug/g	1.4 (7)	30		
8669344	Acid Extractable Cobalt (Co)	2023/05/18	97 (6)	75 - 125	93	80 - 120	<0.10	ug/g	2.1 (7)	30		
8669344	Acid Extractable Copper (Cu)	2023/05/18	NC (6)	75 - 125	97	80 - 120	<0.50	ug/g	0.66 (7)	30		
8669344	Acid Extractable Lead (Pb)	2023/05/18	97 (6)	75 - 125	95	80 - 120	<1.0	ug/g	1.2 (7)	30		
8669344	Acid Extractable Mercury (Hg)	2023/05/18	97 (6)	75 - 125	97	80 - 120	<0.050	ug/g	NC (7)	30		
8669344	Acid Extractable Molybdenum (Mo)	2023/05/18	100 (6)	75 - 125	96	80 - 120	<0.50	ug/g	0.78 (7)	30		
8669344	Acid Extractable Nickel (Ni)	2023/05/18	NC (6)	75 - 125	95	80 - 120	<0.50	ug/g	2.3 (7)	30		
8669344	Acid Extractable Selenium (Se)	2023/05/18	97 (6)	75 - 125	98	80 - 120	<0.50	ug/g	NC (7)	30		
8669344	Acid Extractable Silver (Ag)	2023/05/18	99 (6)	75 - 125	95	80 - 120	<0.20	ug/g	NC (7)	30		
8669344	Acid Extractable Thallium (Tl)	2023/05/18	96 (6)	75 - 125	94	80 - 120	<0.050	ug/g	4.7 (7)	30		
8669344	Acid Extractable Uranium (U)	2023/05/18	100 (6)	75 - 125	95	80 - 120	<0.050	ug/g	2.1 (7)	30		
8669344	Acid Extractable Vanadium (V)	2023/05/18	NC (6)	75 - 125	94	80 - 120	<5.0	ug/g	2.6 (7)	30		
8669344	Acid Extractable Zinc (Zn)	2023/05/18	NC (6)	75 - 125	92	80 - 120	<5.0	ug/g	6.4 (7)	30		



BUREAU
VERITAS

Bureau Veritas Job #: C3D6624

Report Date: 2023/06/29

QUALITY ASSURANCE REPORT(CONT'D)

AiMS Consulting Environmental Services

Client Project #: AR104-23

Site Location: 4243 SIXTH LINE, OAKVILLE, ON

Sampler Initials: CW

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
8669419	Chromium (VI)	2023/05/17	0.68 (8)	70 - 130	91	80 - 120	<0.18	ug/g	NC (1)	35		
8669522	Available (CaCl2) pH	2023/05/17			100	97 - 103			0.97 (1)	N/A		
8669579	Available (CaCl2) pH	2023/05/17			100	97 - 103			1.9 (1)	N/A		

N/A = Not Applicable

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

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

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

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) Duplicate Parent ID

(2) Duplicate Parent ID [VUN289-02]

(3) Matrix spike exceeds acceptance limits, probable matrix interference.

(4) Matrix Spike Parent ID [VUN287-01]

(5) Duplicate Parent ID [VUN287-01]

(6) Matrix Spike Parent ID [VUN227-01]

(7) Duplicate Parent ID [VUN227-01]

(8) The matrix spike recovery was below the lower control limit. This may be due in part to the reducing environment of the sample. The matrix spike was reanalyzed to confirm result.



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Bureau Veritas Job #: C3D6624
Report Date: 2023/06/29

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: CW

VALIDATION SIGNATURE PAGE

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

Anastassia Hamanov, Scientific Specialist

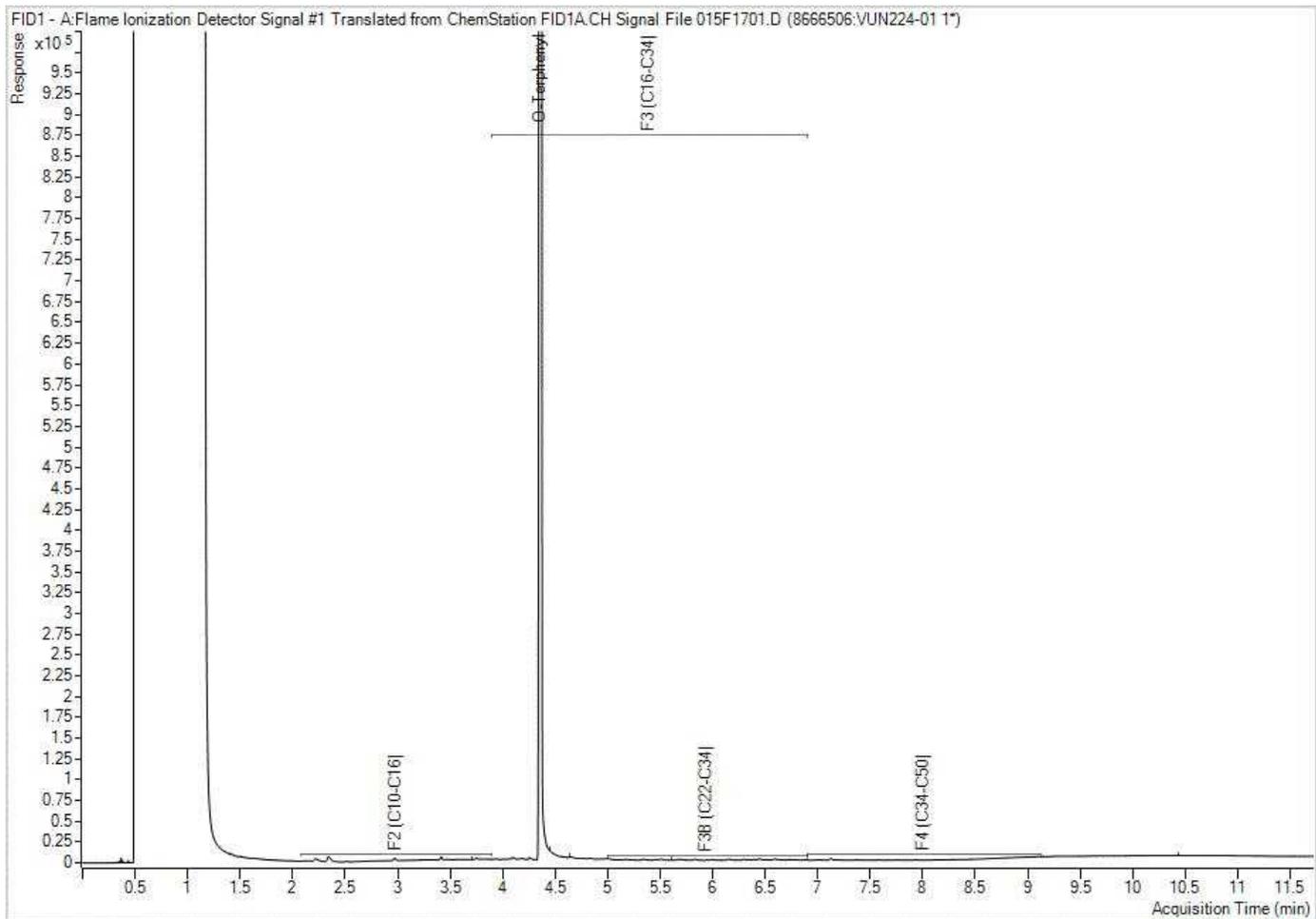
Cristina Carriere, Senior Scientific Specialist

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.



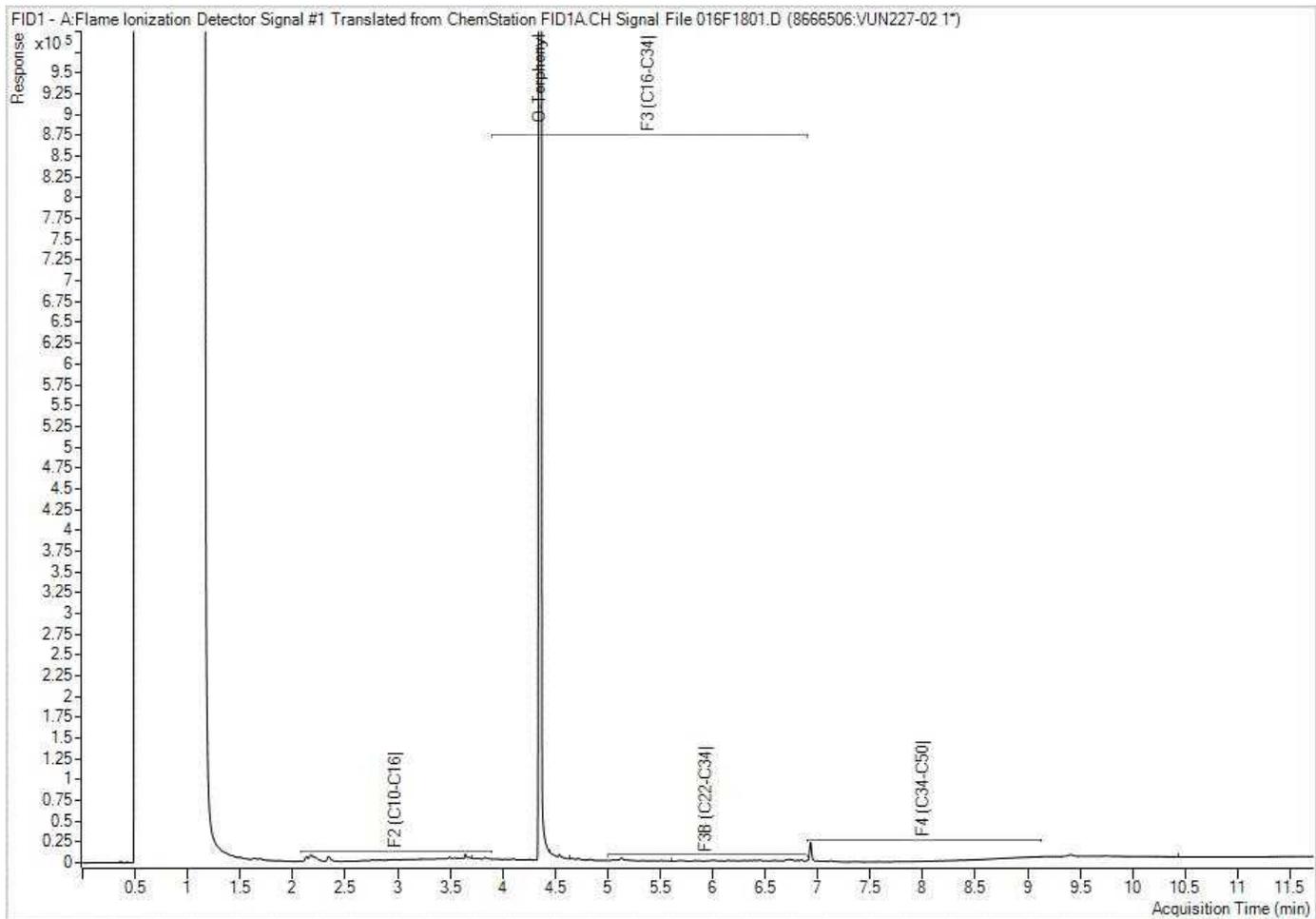
Invoice Information				Report Information (if differs from invoice)				Project Information				LAB USE ONLY - PLACE STICKER HERE																		
Company: AiMS Environmental				Company: [Signature]				Quotation #: _____				LAB USE ONLY - PLACE STICKER HERE																		
Contact Name: Ferry Fong				Contact Name: Curtis Weaver				P.O. #/ A/E #: _____																						
Street Address: 10200 Denison St. Unit 111				Street Address: [Signature]				Project #: AR104-23																						
City: Markham Prov: ON Postal Code: _____				City: [Signature] Prov: _____ Postal Code: _____				Site #: _____																						
Phone: 905-474-0058 ext. 102				Phone: ext. 109				Site Location: 4243 Sixth Line, Oakville																						
Email: ffong@aimsconsulting.com				Email: cweaver@aimsconsulting.com				Site Location Province: _____																						
Copies: cweaver@aimsconsulting.com				Copies: _____				Sampled By: Curtis Weaver				Rush Confirmation #: _____																		
Regulatory Criteria <input type="checkbox"/> Table 1 <input type="checkbox"/> Reg/Park <input type="checkbox"/> Med/Fine <input type="checkbox"/> CME <input type="checkbox"/> Reg 406, Table 2-1 <input type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Course <input type="checkbox"/> Reg 558* <input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/other <input type="checkbox"/> For RSC <input type="checkbox"/> *min 3 day TAT <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> Table _____ <input type="checkbox"/> MISA <input type="checkbox"/> Municipality <input type="checkbox"/> PWQO <input type="checkbox"/> Other: _____												Include Criteria on Certificate of Analysis (check if yes): <input checked="" type="checkbox"/>																		
SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS																														
Sample Identification			Date Sampled		Time (24hr)		Matrix	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
			YY		MM DD			FIELD FILTERED	FIELD PRESERVED	LAB FILTRATION REQUIRED	BTEX/P1	F2/F4	VOCs	Reg. 153 metals and inorganics	Reg. 153 ICPMS metals	Reg. 153 metals	Reg. 153 ICPMS metals (HHS-B)													
1 BH111/1			23 05		10 15 20		Soil																							
2 BH106/1					12 30																									
3 BH106/3					12 30																									
4 BH106/5					12 30																									
5 BH106/7					12 30																									
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*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				LAB USE ONLY				LAB USE ONLY				LAB USE ONLY																		
Seal present <input checked="" type="checkbox"/>				Seal present <input checked="" type="checkbox"/>				Seal present <input checked="" type="checkbox"/>				Seal present <input checked="" type="checkbox"/>																		
Seal intact <input checked="" type="checkbox"/>				Seal intact <input checked="" type="checkbox"/>				Seal intact <input checked="" type="checkbox"/>				Seal intact <input checked="" type="checkbox"/>																		
Cooling media present <input checked="" type="checkbox"/>				Cooling media present <input checked="" type="checkbox"/>				Cooling media present <input checked="" type="checkbox"/>				Cooling media present <input checked="" type="checkbox"/>																		
Temperature reading by: _____				Temperature reading by: _____				Temperature reading by: _____				Temperature reading by: _____																		
Relinquished by: (Signature/Print)				Date				Time				Received by: (Signature/Print)				Date				Time				Special Instructions						
1 Curtis Weaver				23 05				12 14 30				[Signature]				05 12 14 30														
2 [Signature]																														

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



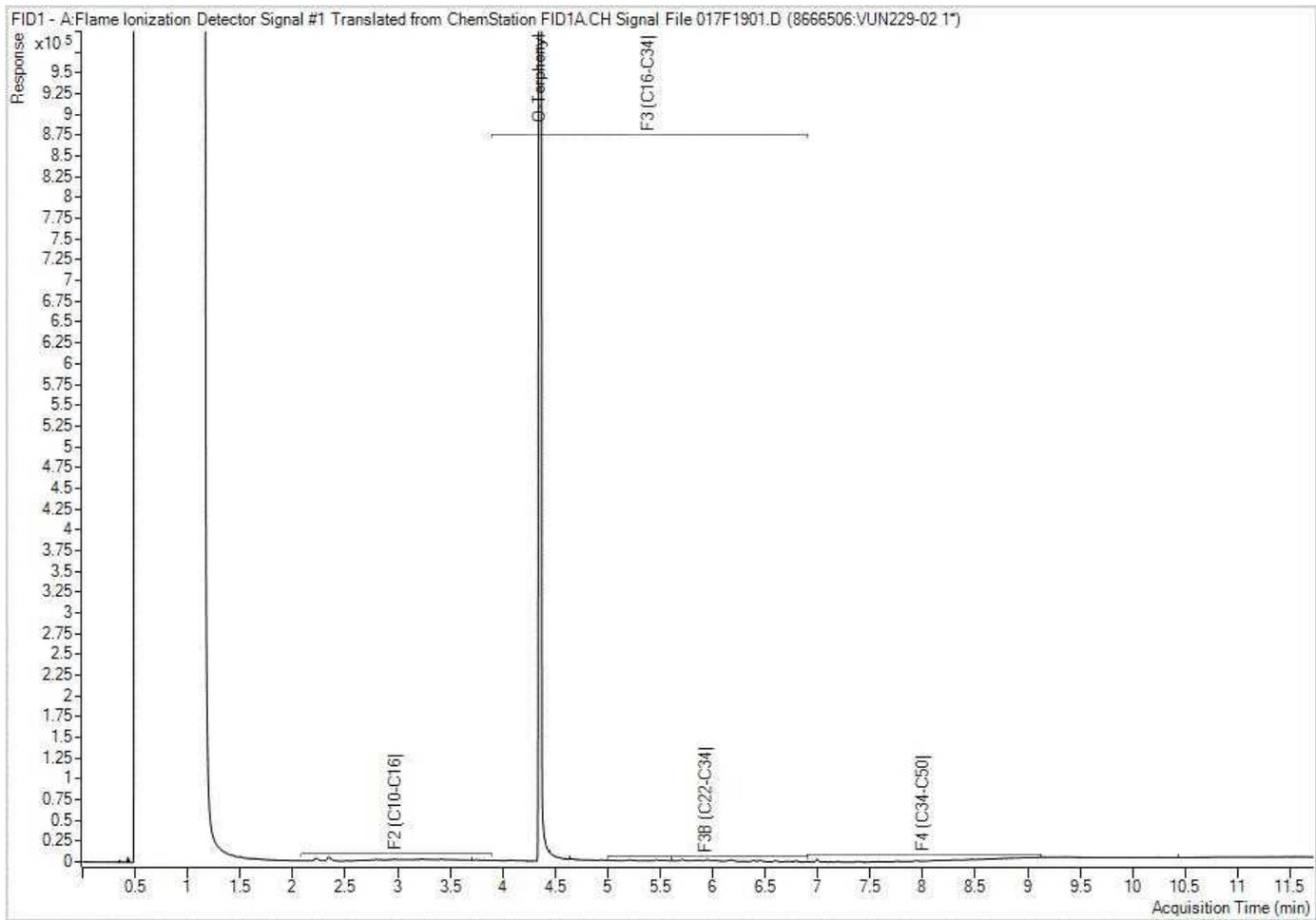
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



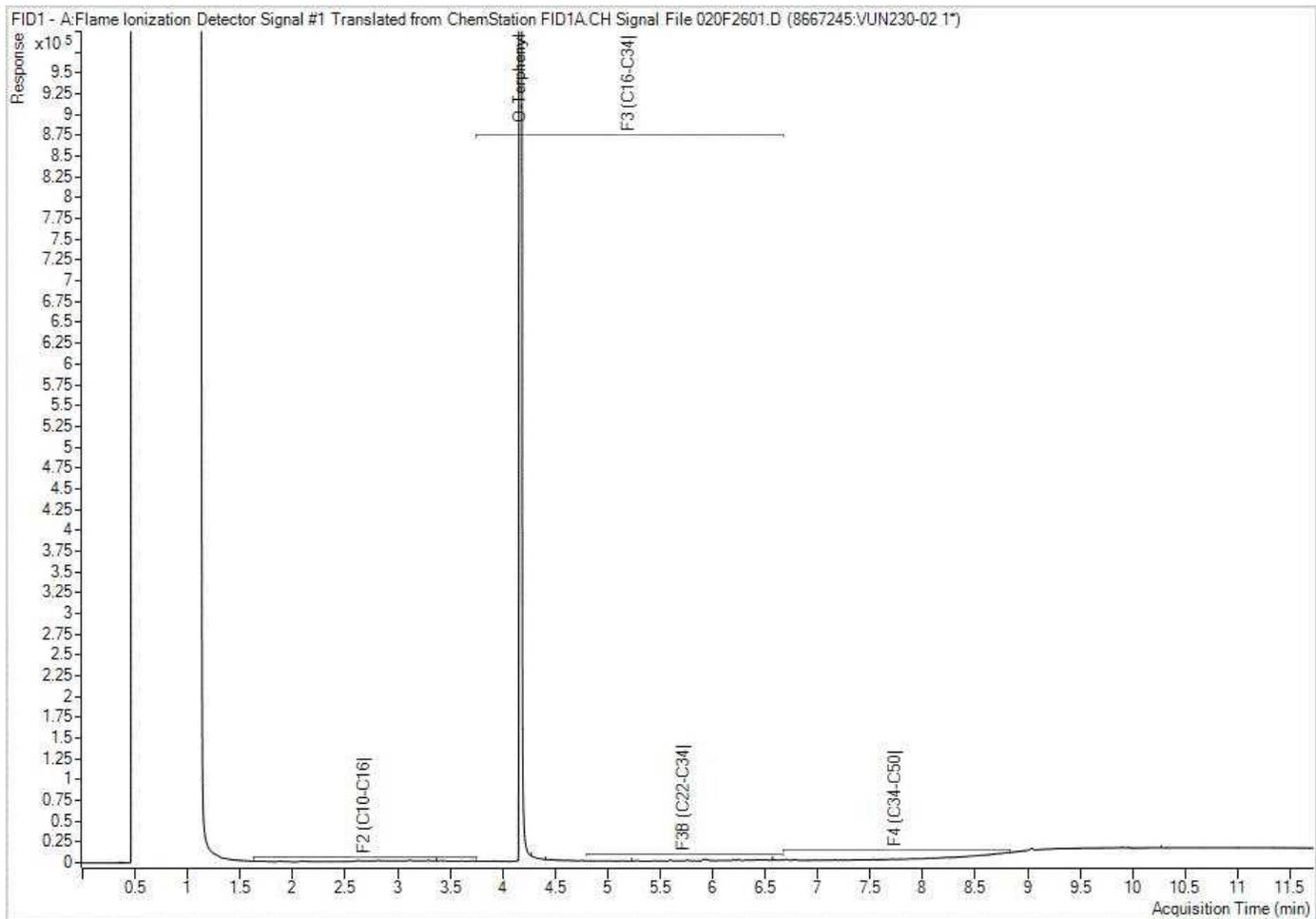
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



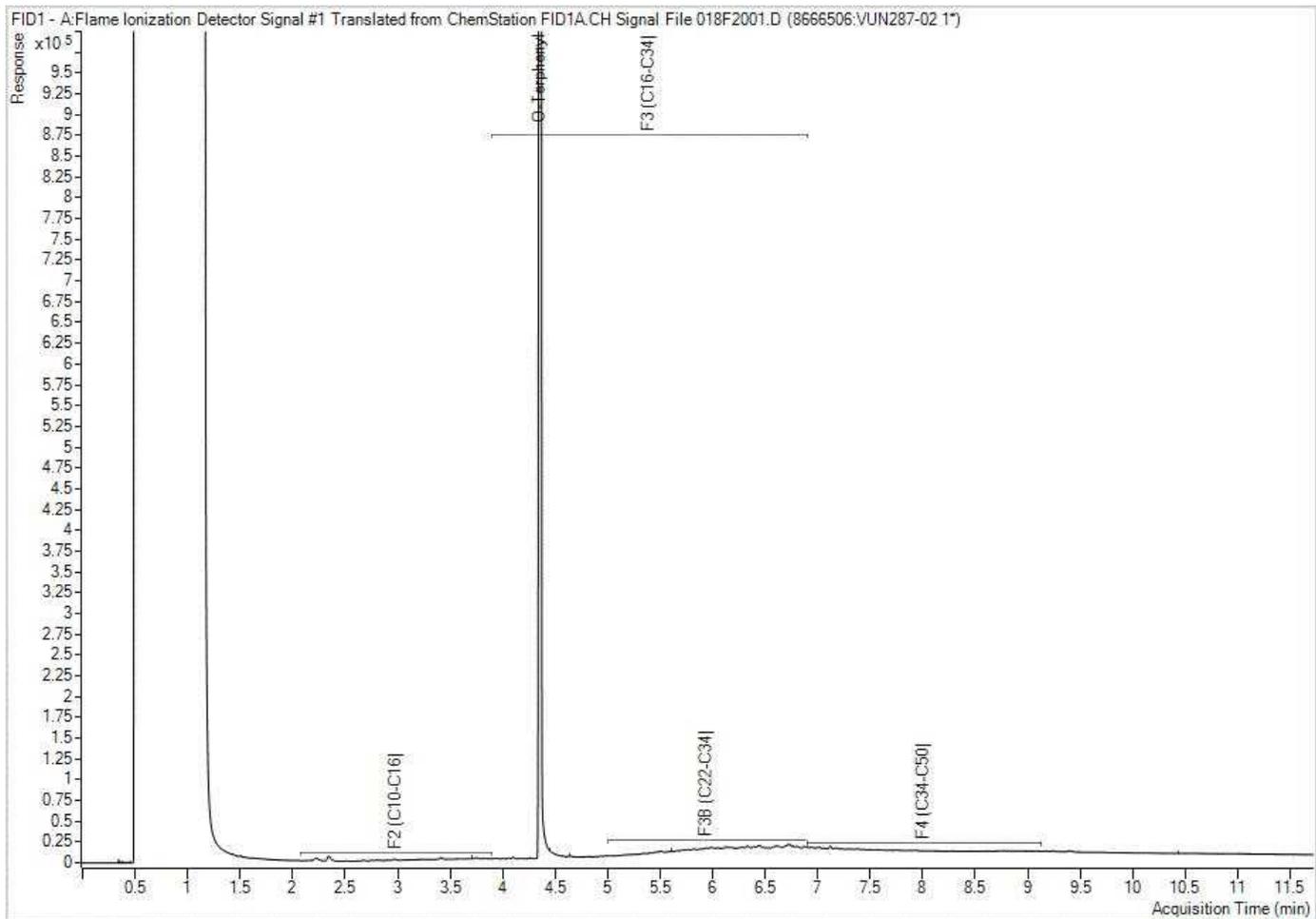
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



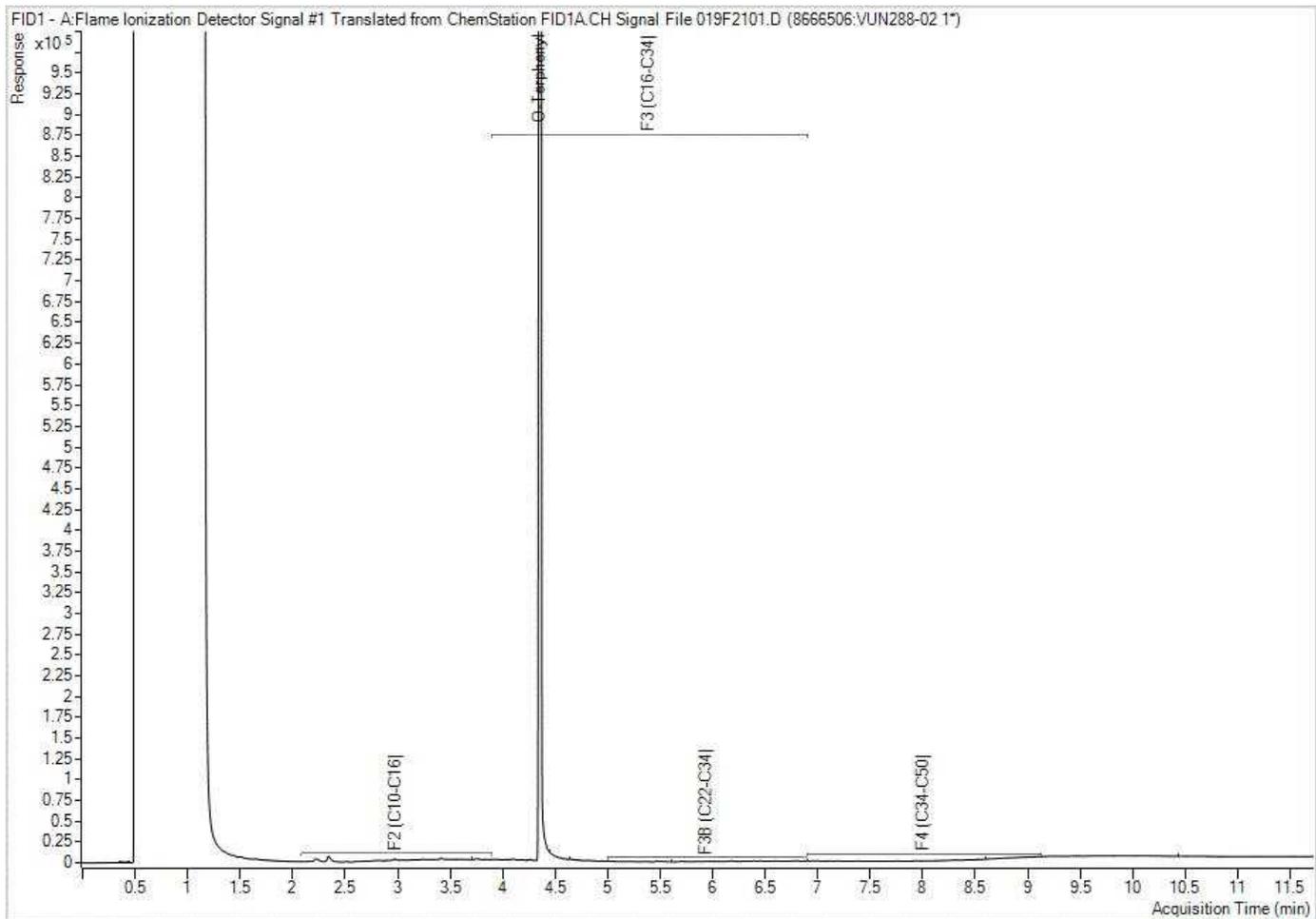
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



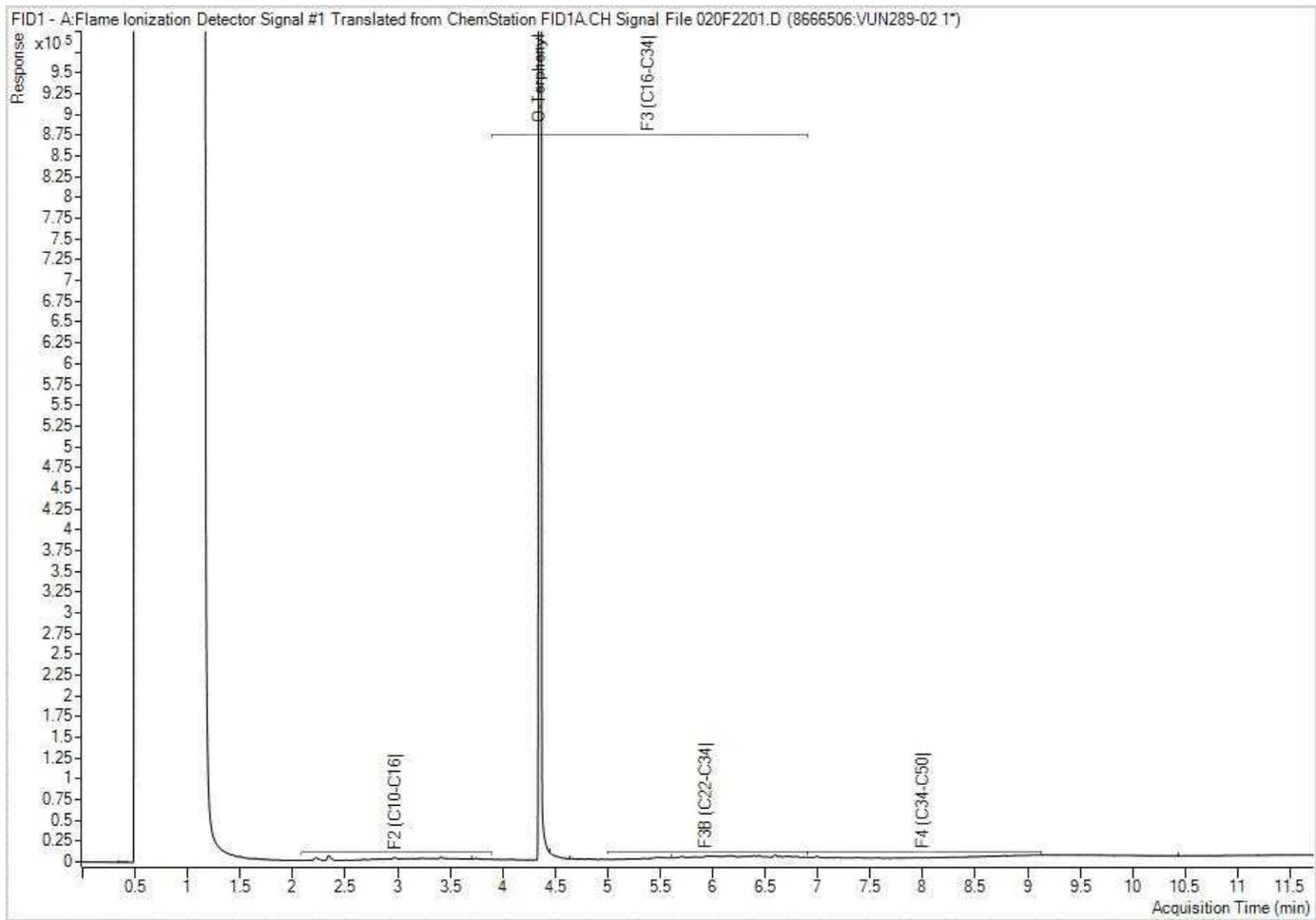
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



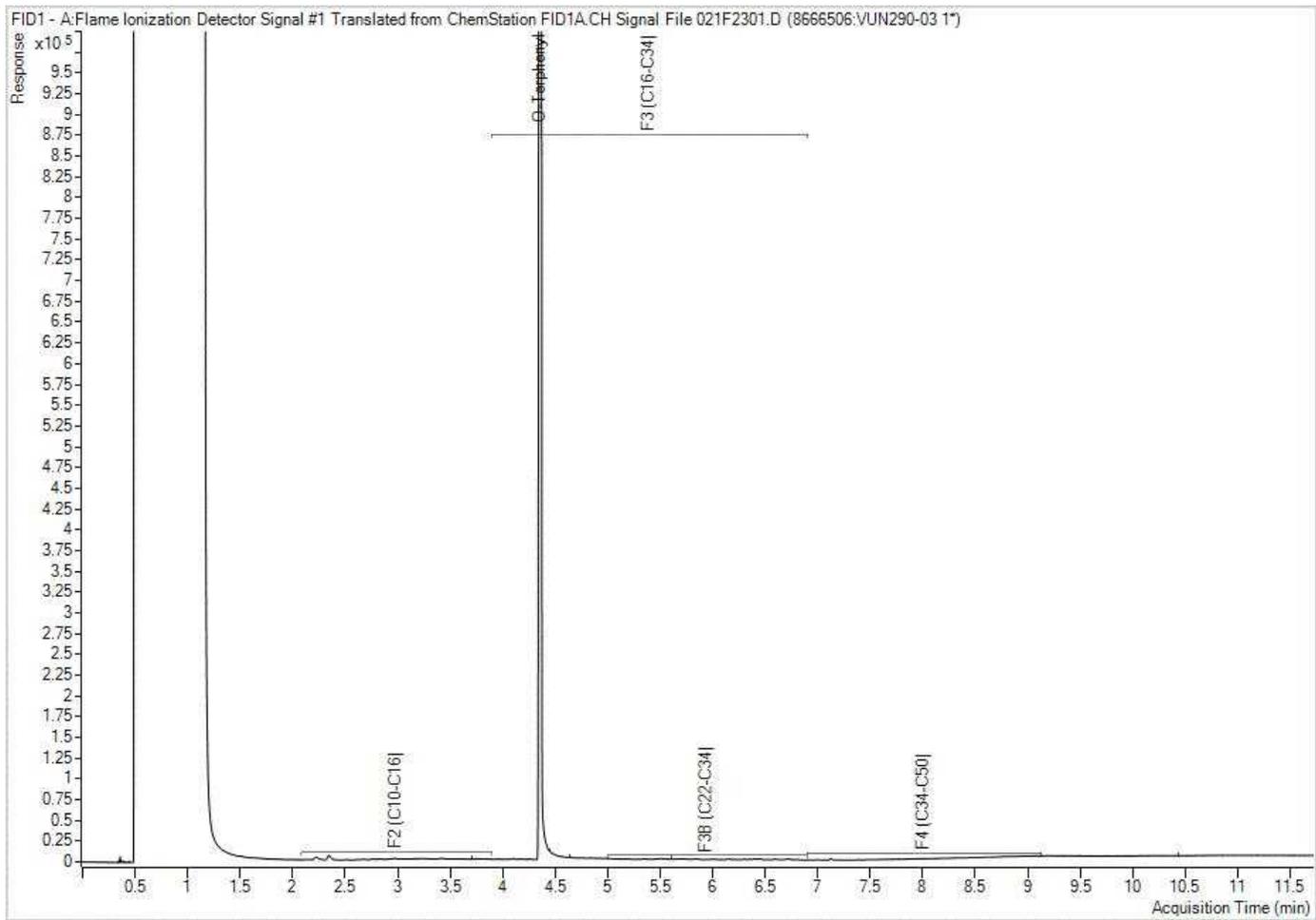
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



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

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



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



**BUREAU
VERITAS**

Bureau Veritas Job #: C3D6624
Report Date: 2023/06/29

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: CW

Exceedance Summary Table – Reg153/04 T2-Soil/Ind-F/M
Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
BH101/1	VUN221-01	Acid Extractable Arsenic (As)	18	20	1.0	ug/g
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.						

Exceedance Summary Table – Reg 406 T2.1 Res (S)
Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
BH101/1	VUN221-01	Acid Extractable Arsenic (As)	18	20	1.0	ug/g
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.						



Your Project #: AR104-23
 Site Location: 4243 SIXTH LINE, OAKVILLE, ON
 Your C.O.C. #: NA, N/A

Attention: Curtis Weaver

AiMS Consulting Environmental Services
 1020 Denison St
 Suite 111
 Markham, ON
 CANADA L3R 3W5

Report Date: 2023/05/31
 Report #: R7651550
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3E9081

Received: 2023/05/25, 11:45

Sample Matrix: Soil
 # Samples Received: 3

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Acid Extractable Metals by ICPMS	3	2023/05/29	2023/05/30	CAM SOP-00447	EPA 6020B m

Sample Matrix: Water
 # Samples Received: 4

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
1,3-Dichloropropene Sum	4	N/A	2023/05/30		EPA 8260C m
Petroleum Hydrocarbons F2-F4 in Water (1)	4	2023/05/29	2023/05/29	CAM SOP-00316	CCME PHC-CWS m
Lab Filtered Metals by ICPMS	1	2023/05/26	2023/05/29	CAM SOP-00447	EPA 6020B m
Lab Filtered Metals by ICPMS	3	2023/05/29	2023/05/30	CAM SOP-00447	EPA 6020B m
Volatile Organic Compounds and F1 PHCs	4	N/A	2023/05/29	CAM SOP-00230	EPA 8260C m

Remarks:

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

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

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

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

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested. This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

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



Your Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Your C.O.C. #: NA, N/A

Attention: Curtis Weaver

AiMS Consulting Environmental Services
1020 Denison St
Suite 111
Markham, ON
CANADA L3R 3W5

Report Date: 2023/05/31
Report #: R7651550
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3E9081

Received: 2023/05/25, 11:45

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

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

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Patricia Legette, Project Manager
Email: Patricia.Legette@bureauveritas.com
Phone# (905)817-5799

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

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



BUREAU
VERITAS

Bureau Veritas Job #: C3E9081
Report Date: 2023/05/31

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: EX

ELEMENTS BY ATOMIC SPECTROSCOPY (SOIL)

Bureau Veritas ID		VXG767	VXG768	VXG769		
Sampling Date		2023/05/25 08:40	2023/05/25 08:50	2023/05/25 09:10		
COC Number		N/A	N/A	N/A		
	UNITS	101-N	101-SE	101-SW	RDL	QC Batch
Metals						
Acid Extractable Arsenic (As)	ug/g	5.1	5.4	7.0	1.0	8689872
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						



BUREAU VERITAS

Bureau Veritas Job #: C3E9081
Report Date: 2023/05/31

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: EX

O.REG 153 ICPMS METALS (LAB FILTERED)

Bureau Veritas ID			VXG763	VXG764		VXG765		VXG766		
Sampling Date			2023/05/25 08:30	2023/05/25 09:15		2023/05/25 09:30		2023/05/25 09:50		
COC Number			N/A	N/A		N/A		N/A		
	UNITS	Criteria	MW 101	MW 105	QC Batch	MW 108	QC Batch	MW 111	RDL	QC Batch

Metals										
Dissolved Antimony (Sb)	ug/L	6.0	2.1	<0.50	8690673	<0.50	8690614	0.88	0.50	8687934
Dissolved Arsenic (As)	ug/L	25	2.0	<1.0	8690673	1.1	8690614	<1.0	1.0	8687934
Dissolved Barium (Ba)	ug/L	1000	110	47	8690673	60	8690614	55	2.0	8687934
Dissolved Beryllium (Be)	ug/L	4.0	<0.40	<0.40	8690673	<0.40	8690614	<0.40	0.40	8687934
Dissolved Boron (B)	ug/L	5000	320	620	8690673	520	8690614	590	10	8687934
Dissolved Cadmium (Cd)	ug/L	2.7	<0.090	<0.090	8690673	<0.090	8690614	<0.090	0.090	8687934
Dissolved Chromium (Cr)	ug/L	50	<5.0	<5.0	8690673	<5.0	8690614	<5.0	5.0	8687934
Dissolved Cobalt (Co)	ug/L	3.8	2.3	3.4	8690673	2.3	8690614	1.8	0.50	8687934
Dissolved Copper (Cu)	ug/L	87	<0.90	<0.90	8690673	6.8	8690614	<0.90	0.90	8687934
Dissolved Lead (Pb)	ug/L	10	<0.50	<0.50	8690673	<0.50	8690614	<0.50	0.50	8687934
Dissolved Molybdenum (Mo)	ug/L	70	20	2.5	8690673	3.6	8690614	12	0.50	8687934
Dissolved Nickel (Ni)	ug/L	100	8.7	9.2	8690673	5.0	8690614	8.8	1.0	8687934
Dissolved Selenium (Se)	ug/L	10	3.3	<2.0	8690673	<2.0	8690614	2.6	2.0	8687934
Dissolved Silver (Ag)	ug/L	1.5	<0.090	<0.090	8690673	<0.090	8690614	<0.090	0.090	8687934
Dissolved Sodium (Na)	ug/L	490000	75000	160000	8690673	110000	8690614	160000	100	8687934
Dissolved Thallium (Tl)	ug/L	2.0	<0.050	0.056	8690673	<0.050	8690614	<0.050	0.050	8687934
Dissolved Uranium (U)	ug/L	20	13	18	8690673	12	8690614	19	0.10	8687934
Dissolved Vanadium (V)	ug/L	6.2	0.86	1.0	8690673	0.66	8690614	0.59	0.50	8687934
Dissolved Zinc (Zn)	ug/L	1100	17	<5.0	8690673	<5.0	8690614	15	5.0	8687934

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 - Medium and Fine Textured Soil



O.REG 153 ICPMS METALS (LAB FILTERED)

Bureau Veritas ID			VXG766		
Sampling Date			2023/05/25 09:50		
COC Number			N/A		
	UNITS	Criteria	MW 111 Lab-Dup	RDL	QC Batch
Metals					
Dissolved Antimony (Sb)	ug/L	6.0	0.92	0.50	8687934
Dissolved Arsenic (As)	ug/L	25	<1.0	1.0	8687934
Dissolved Barium (Ba)	ug/L	1000	54	2.0	8687934
Dissolved Beryllium (Be)	ug/L	4.0	<0.40	0.40	8687934
Dissolved Boron (B)	ug/L	5000	580	10	8687934
Dissolved Cadmium (Cd)	ug/L	2.7	<0.090	0.090	8687934
Dissolved Chromium (Cr)	ug/L	50	<5.0	5.0	8687934
Dissolved Cobalt (Co)	ug/L	3.8	2.0	0.50	8687934
Dissolved Copper (Cu)	ug/L	87	<0.90	0.90	8687934
Dissolved Lead (Pb)	ug/L	10	<0.50	0.50	8687934
Dissolved Molybdenum (Mo)	ug/L	70	12	0.50	8687934
Dissolved Nickel (Ni)	ug/L	100	9.5	1.0	8687934
Dissolved Selenium (Se)	ug/L	10	2.6	2.0	8687934
Dissolved Silver (Ag)	ug/L	1.5	<0.090	0.090	8687934
Dissolved Sodium (Na)	ug/L	490000	160000	100	8687934
Dissolved Thallium (Tl)	ug/L	2.0	<0.050	0.050	8687934
Dissolved Uranium (U)	ug/L	20	19	0.10	8687934
Dissolved Vanadium (V)	ug/L	6.2	<0.50	0.50	8687934
Dissolved Zinc (Zn)	ug/L	1100	17	5.0	8687934
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 - Medium and Fine Textured Soil					



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

Bureau Veritas ID			VXG763	VXG764	VXG765	VXG766		
Sampling Date			2023/05/25 08:30	2023/05/25 09:15	2023/05/25 09:30	2023/05/25 09:50		
COC Number			N/A	N/A	N/A	N/A		
	UNITS	Criteria	MW 101	MW 105	MW 108	MW 111	RDL	QC Batch
Calculated Parameters								
1,3-Dichloropropene (cis+trans)	ug/L	0.5	<0.50	<0.50	<0.50	<0.50	0.50	8683728
Volatile Organics								
Acetone (2-Propanone)	ug/L	2700	<10	<10	<10	29	10	8687664
Benzene	ug/L	5.0	<0.17	<0.17	<0.17	<0.17	0.17	8687664
Bromodichloromethane	ug/L	16.0	<0.50	<0.50	<0.50	<0.50	0.50	8687664
Bromoform	ug/L	25.0	<1.0	<1.0	<1.0	<1.0	1.0	8687664
Bromomethane	ug/L	0.89	<0.50	<0.50	<0.50	<0.50	0.50	8687664
Carbon Tetrachloride	ug/L	5.0	<0.20	<0.20	<0.20	<0.20	0.20	8687664
Chlorobenzene	ug/L	30	<0.20	<0.20	<0.20	<0.20	0.20	8687664
Chloroform	ug/L	22	<0.20	<0.20	<0.20	<0.20	0.20	8687664
Dibromochloromethane	ug/L	25.0	<0.50	<0.50	<0.50	<0.50	0.50	8687664
1,2-Dichlorobenzene	ug/L	3.0	<0.50	<0.50	<0.50	<0.50	0.50	8687664
1,3-Dichlorobenzene	ug/L	59	<0.50	<0.50	<0.50	<0.50	0.50	8687664
1,4-Dichlorobenzene	ug/L	1.0	<0.50	<0.50	<0.50	<0.50	0.50	8687664
Dichlorodifluoromethane (FREON 12)	ug/L	590	<1.0	<1.0	<1.0	<1.0	1.0	8687664
1,1-Dichloroethane	ug/L	5	<0.20	<0.20	<0.20	<0.20	0.20	8687664
1,2-Dichloroethane	ug/L	5	<0.50	<0.50	<0.50	<0.50	0.50	8687664
1,1-Dichloroethylene	ug/L	14	<0.20	<0.20	<0.20	<0.20	0.20	8687664
cis-1,2-Dichloroethylene	ug/L	17	<0.50	<0.50	<0.50	<0.50	0.50	8687664
trans-1,2-Dichloroethylene	ug/L	17	<0.50	<0.50	<0.50	<0.50	0.50	8687664
1,2-Dichloropropane	ug/L	5.0	<0.20	<0.20	<0.20	<0.20	0.20	8687664
cis-1,3-Dichloropropene	ug/L	0.5	<0.30	<0.30	<0.30	<0.30	0.30	8687664
trans-1,3-Dichloropropene	ug/L	0.5	<0.40	<0.40	<0.40	<0.40	0.40	8687664
Ethylbenzene	ug/L	2.4	<0.20	<0.20	<0.20	<0.20	0.20	8687664
Ethylene Dibromide	ug/L	0.2	<0.20	<0.20	<0.20	<0.20	0.20	8687664
Hexane	ug/L	520	<1.0	<1.0	<1.0	<1.0	1.0	8687664
Methylene Chloride(Dichloromethane)	ug/L	50	<2.0	<2.0	<2.0	<2.0	2.0	8687664
Methyl Ethyl Ketone (2-Butanone)	ug/L	1800	<10	<10	<10	<10	10	8687664
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 - Medium and Fine Textured Soil								



BUREAU
VERITAS

Bureau Veritas Job #: C3E9081
Report Date: 2023/05/31

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: EX

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

Bureau Veritas ID			VXG763	VXG764	VXG765	VXG766		
Sampling Date			2023/05/25 08:30	2023/05/25 09:15	2023/05/25 09:30	2023/05/25 09:50		
COC Number			N/A	N/A	N/A	N/A		
	UNITS	Criteria	MW 101	MW 105	MW 108	MW 111	RDL	QC Batch
Methyl Isobutyl Ketone	ug/L	640	<5.0	<5.0	<5.0	<5.0	5.0	8687664
Methyl t-butyl ether (MTBE)	ug/L	15	<0.50	<0.50	<0.50	<0.50	0.50	8687664
Styrene	ug/L	5.4	<0.50	<0.50	<0.50	<0.50	0.50	8687664
1,1,1,2-Tetrachloroethane	ug/L	1.1	<0.50	<0.50	<0.50	<0.50	0.50	8687664
1,1,2,2-Tetrachloroethane	ug/L	1.0	<0.50	<0.50	<0.50	<0.50	0.50	8687664
Tetrachloroethylene	ug/L	17	<0.20	<0.20	<0.20	<0.20	0.20	8687664
Toluene	ug/L	24	<0.20	<0.20	<0.20	<0.20	0.20	8687664
1,1,1-Trichloroethane	ug/L	200	<0.20	<0.20	<0.20	<0.20	0.20	8687664
1,1,2-Trichloroethane	ug/L	5	<0.50	<0.50	<0.50	<0.50	0.50	8687664
Trichloroethylene	ug/L	5	<0.20	<0.20	<0.20	<0.20	0.20	8687664
Trichlorofluoromethane (FREON 11)	ug/L	150	<0.50	<0.50	<0.50	<0.50	0.50	8687664
Vinyl Chloride	ug/L	1.7	<0.20	<0.20	<0.20	<0.20	0.20	8687664
p+m-Xylene	ug/L	-	<0.20	<0.20	<0.20	<0.20	0.20	8687664
o-Xylene	ug/L	-	<0.20	<0.20	<0.20	<0.20	0.20	8687664
Total Xylenes	ug/L	300	<0.20	<0.20	<0.20	<0.20	0.20	8687664
F1 (C6-C10)	ug/L	750	<25	<25	<25	<25	25	8687664
F1 (C6-C10) - BTEX	ug/L	750	<25	<25	<25	<25	25	8687664
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/L	150	<100	<100	<100	<100	100	8689966
F3 (C16-C34 Hydrocarbons)	ug/L	500	<200	<200	<200	<200	200	8689966
F4 (C34-C50 Hydrocarbons)	ug/L	500	<200	<200	<200	<200	200	8689966
Reached Baseline at C50	ug/L	-	Yes	Yes	Yes	Yes		8689966
Surrogate Recovery (%)								
o-Terphenyl	%	-	90	90	99	98		8689966
4-Bromofluorobenzene	%	-	99	99	99	100		8687664
D4-1,2-Dichloroethane	%	-	105	107	105	105		8687664
D8-Toluene	%	-	91	90	90	91		8687664
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 - Medium and Fine Textured Soil								



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Bureau Veritas Job #: C3E9081
Report Date: 2023/05/31

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: EX

TEST SUMMARY

Bureau Veritas ID: VXG763
Sample ID: MW 101
Matrix: Water

Collected: 2023/05/25
Shipped:
Received: 2023/05/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8683728	N/A	2023/05/30	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8689966	2023/05/29	2023/05/29	Emir Danisman
Lab Filtered Metals by ICPMS	ICP/MS	8690673	2023/05/29	2023/05/30	Azita Fazaeli
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8687664	N/A	2023/05/29	Denis Reid

Bureau Veritas ID: VXG764
Sample ID: MW 105
Matrix: Water

Collected: 2023/05/25
Shipped:
Received: 2023/05/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8683728	N/A	2023/05/30	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8689966	2023/05/29	2023/05/29	Emir Danisman
Lab Filtered Metals by ICPMS	ICP/MS	8690673	2023/05/29	2023/05/30	Azita Fazaeli
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8687664	N/A	2023/05/29	Denis Reid

Bureau Veritas ID: VXG765
Sample ID: MW 108
Matrix: Water

Collected: 2023/05/25
Shipped:
Received: 2023/05/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8683728	N/A	2023/05/30	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8689966	2023/05/29	2023/05/29	Emir Danisman
Lab Filtered Metals by ICPMS	ICP/MS	8690614	2023/05/29	2023/05/30	Prempal Bhatti
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8687664	N/A	2023/05/29	Denis Reid

Bureau Veritas ID: VXG766
Sample ID: MW 111
Matrix: Water

Collected: 2023/05/25
Shipped:
Received: 2023/05/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	8683728	N/A	2023/05/30	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	8689966	2023/05/29	2023/05/29	Emir Danisman
Lab Filtered Metals by ICPMS	ICP/MS	8687934	2023/05/26	2023/05/29	Azita Fazaeli
Volatile Organic Compounds and F1 PHCs	GC/MSFD	8687664	N/A	2023/05/29	Denis Reid

Bureau Veritas ID: VXG766 Dup
Sample ID: MW 111
Matrix: Water

Collected: 2023/05/25
Shipped:
Received: 2023/05/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Lab Filtered Metals by ICPMS	ICP/MS	8687934	2023/05/26	2023/05/29	Azita Fazaeli



BUREAU
VERITAS

Bureau Veritas Job #: C3E9081
Report Date: 2023/05/31

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: EX

TEST SUMMARY

Bureau Veritas ID: VXG767
Sample ID: 101-N
Matrix: Soil

Collected: 2023/05/25
Shipped:
Received: 2023/05/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractable Metals by ICPMS	ICP/MS	8689872	2023/05/29	2023/05/30	Daniel Teclu

Bureau Veritas ID: VXG768
Sample ID: 101-SE
Matrix: Soil

Collected: 2023/05/25
Shipped:
Received: 2023/05/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractable Metals by ICPMS	ICP/MS	8689872	2023/05/29	2023/05/30	Daniel Teclu

Bureau Veritas ID: VXG769
Sample ID: 101-SW
Matrix: Soil

Collected: 2023/05/25
Shipped:
Received: 2023/05/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractable Metals by ICPMS	ICP/MS	8689872	2023/05/29	2023/05/30	Daniel Teclu



BUREAU
VERITAS

Bureau Veritas Job #: C3E9081
Report Date: 2023/05/31

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: EX

GENERAL COMMENTS

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

Package 1	12.0°C
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Results relate only to the items tested.



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Bureau Veritas Job #: C3E9081

Report Date: 2023/05/31

QUALITY ASSURANCE REPORT

AiMS Consulting Environmental Services

Client Project #: AR104-23

Site Location: 4243 SIXTH LINE, OAKVILLE, ON

Sampler Initials: EX

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8687664	4-Bromofluorobenzene	2023/05/29	103	70 - 130	101	70 - 130	99	%		
8687664	D4-1,2-Dichloroethane	2023/05/29	100	70 - 130	105	70 - 130	109	%		
8687664	D8-Toluene	2023/05/29	101	70 - 130	99	70 - 130	88	%		
8689966	o-Terphenyl	2023/05/29	101	60 - 130	97	60 - 130	97	%		
8687664	1,1,1,2-Tetrachloroethane	2023/05/29	93	70 - 130	92	70 - 130	<0.50	ug/L	NC (1)	30
8687664	1,1,1-Trichloroethane	2023/05/29	101	70 - 130	100	70 - 130	<0.20	ug/L	NC (1)	30
8687664	1,1,2,2-Tetrachloroethane	2023/05/29	92	70 - 130	97	70 - 130	<0.50	ug/L	NC (1)	30
8687664	1,1,2-Trichloroethane	2023/05/29	97	70 - 130	99	70 - 130	<0.50	ug/L	NC (1)	30
8687664	1,1-Dichloroethane	2023/05/29	97	70 - 130	97	70 - 130	<0.20	ug/L	NC (1)	30
8687664	1,1-Dichloroethylene	2023/05/29	101	70 - 130	100	70 - 130	<0.20	ug/L	NC (1)	30
8687664	1,2-Dichlorobenzene	2023/05/29	90	70 - 130	91	70 - 130	<0.50	ug/L	NC (1)	30
8687664	1,2-Dichloroethane	2023/05/29	94	70 - 130	98	70 - 130	<0.50	ug/L	NC (1)	30
8687664	1,2-Dichloropropane	2023/05/29	100	70 - 130	103	70 - 130	<0.20	ug/L	NC (1)	30
8687664	1,3-Dichlorobenzene	2023/05/29	91	70 - 130	89	70 - 130	<0.50	ug/L	NC (1)	30
8687664	1,4-Dichlorobenzene	2023/05/29	102	70 - 130	103	70 - 130	<0.50	ug/L	NC (1)	30
8687664	Acetone (2-Propanone)	2023/05/29	100	60 - 140	108	60 - 140	<10	ug/L	NC (1)	30
8687664	Benzene	2023/05/29	95	70 - 130	97	70 - 130	<0.17	ug/L	NC (1)	30
8687664	Bromodichloromethane	2023/05/29	101	70 - 130	105	70 - 130	<0.50	ug/L	NC (1)	30
8687664	Bromoform	2023/05/29	88	70 - 130	92	70 - 130	<1.0	ug/L	NC (1)	30
8687664	Bromomethane	2023/05/29	101	60 - 140	99	60 - 140	<0.50	ug/L	NC (1)	30
8687664	Carbon Tetrachloride	2023/05/29	96	70 - 130	95	70 - 130	<0.20	ug/L	NC (1)	30
8687664	Chlorobenzene	2023/05/29	92	70 - 130	93	70 - 130	<0.20	ug/L	NC (1)	30
8687664	Chloroform	2023/05/29	99	70 - 130	100	70 - 130	<0.20	ug/L	4.3 (1)	30
8687664	cis-1,2-Dichloroethylene	2023/05/29	102	70 - 130	103	70 - 130	<0.50	ug/L	NC (1)	30
8687664	cis-1,3-Dichloropropene	2023/05/29	101	70 - 130	103	70 - 130	<0.30	ug/L	NC (1)	30
8687664	Dibromochloromethane	2023/05/29	90	70 - 130	91	70 - 130	<0.50	ug/L	NC (1)	30
8687664	Dichlorodifluoromethane (FREON 12)	2023/05/29	97	60 - 140	98	60 - 140	<1.0	ug/L	NC (1)	30
8687664	Ethylbenzene	2023/05/29	83	70 - 130	83	70 - 130	<0.20	ug/L	NC (1)	30
8687664	Ethylene Dibromide	2023/05/29	89	70 - 130	92	70 - 130	<0.20	ug/L	NC (1)	30
8687664	F1 (C6-C10) - BTEX	2023/05/29					<25	ug/L	NC (1)	30
8687664	F1 (C6-C10)	2023/05/29	91	60 - 140	85	60 - 140	<25	ug/L	NC (1)	30



BUREAU
VERITAS

Bureau Veritas Job #: C3E9081

Report Date: 2023/05/31

QUALITY ASSURANCE REPORT(CONT'D)

AiMS Consulting Environmental Services

Client Project #: AR104-23

Site Location: 4243 SIXTH LINE, OAKVILLE, ON

Sampler Initials: EX

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8687664	Hexane	2023/05/29	103	70 - 130	101	70 - 130	<1.0	ug/L	NC (1)	30
8687664	Methyl Ethyl Ketone (2-Butanone)	2023/05/29	106	60 - 140	119	60 - 140	<10	ug/L	NC (1)	30
8687664	Methyl Isobutyl Ketone	2023/05/29	99	70 - 130	114	70 - 130	<5.0	ug/L	NC (1)	30
8687664	Methyl t-butyl ether (MTBE)	2023/05/29	92	70 - 130	95	70 - 130	<0.50	ug/L	NC (1)	30
8687664	Methylene Chloride(Dichloromethane)	2023/05/29	101	70 - 130	102	70 - 130	<2.0	ug/L	NC (1)	30
8687664	o-Xylene	2023/05/29	88	70 - 130	89	70 - 130	<0.20	ug/L	NC (1)	30
8687664	p+m-Xylene	2023/05/29	87	70 - 130	87	70 - 130	<0.20	ug/L	NC (1)	30
8687664	Styrene	2023/05/29	98	70 - 130	99	70 - 130	<0.50	ug/L	NC (1)	30
8687664	Tetrachloroethylene	2023/05/29	88	70 - 130	83	70 - 130	<0.20	ug/L	NC (1)	30
8687664	Toluene	2023/05/29	88	70 - 130	87	70 - 130	<0.20	ug/L	NC (1)	30
8687664	Total Xylenes	2023/05/29					<0.20	ug/L	NC (1)	30
8687664	trans-1,2-Dichloroethylene	2023/05/29	102	70 - 130	100	70 - 130	<0.50	ug/L	NC (1)	30
8687664	trans-1,3-Dichloropropene	2023/05/29	101	70 - 130	99	70 - 130	<0.40	ug/L	NC (1)	30
8687664	Trichloroethylene	2023/05/29	103	70 - 130	102	70 - 130	<0.20	ug/L	NC (1)	30
8687664	Trichlorofluoromethane (FREON 11)	2023/05/29	99	70 - 130	96	70 - 130	<0.50	ug/L	NC (1)	30
8687664	Vinyl Chloride	2023/05/29	103	70 - 130	103	70 - 130	<0.20	ug/L	NC (1)	30
8687934	Dissolved Antimony (Sb)	2023/05/29	103 (2)	80 - 120	100	80 - 120	<0.50	ug/L	5.3 (3)	20
8687934	Dissolved Arsenic (As)	2023/05/29	99 (2)	80 - 120	97	80 - 120	<1.0	ug/L	NC (3)	20
8687934	Dissolved Barium (Ba)	2023/05/29	95 (2)	80 - 120	97	80 - 120	<2.0	ug/L	2.3 (3)	20
8687934	Dissolved Beryllium (Be)	2023/05/29	98 (2)	80 - 120	99	80 - 120	<0.40	ug/L	NC (3)	20
8687934	Dissolved Boron (B)	2023/05/29	NC (2)	80 - 120	105	80 - 120	<10	ug/L	0.43 (3)	20
8687934	Dissolved Cadmium (Cd)	2023/05/29	96 (2)	80 - 120	97	80 - 120	<0.090	ug/L	NC (3)	20
8687934	Dissolved Chromium (Cr)	2023/05/29	97 (2)	80 - 120	95	80 - 120	<5.0	ug/L	NC (3)	20
8687934	Dissolved Cobalt (Co)	2023/05/29	95 (2)	80 - 120	95	80 - 120	<0.50	ug/L	7.4 (3)	20
8687934	Dissolved Copper (Cu)	2023/05/29	94 (2)	80 - 120	96	80 - 120	<0.90	ug/L	NC (3)	20
8687934	Dissolved Lead (Pb)	2023/05/29	93 (2)	80 - 120	94	80 - 120	<0.50	ug/L	NC (3)	20
8687934	Dissolved Molybdenum (Mo)	2023/05/29	106 (2)	80 - 120	101	80 - 120	<0.50	ug/L	3.0 (3)	20
8687934	Dissolved Nickel (Ni)	2023/05/29	94 (2)	80 - 120	95	80 - 120	<1.0	ug/L	7.7 (3)	20
8687934	Dissolved Selenium (Se)	2023/05/29	101 (2)	80 - 120	100	80 - 120	<2.0	ug/L	0.54 (3)	20
8687934	Dissolved Silver (Ag)	2023/05/29	96 (2)	80 - 120	98	80 - 120	<0.090	ug/L	NC (3)	20
8687934	Dissolved Sodium (Na)	2023/05/29	NC (2)	80 - 120	95	80 - 120	<100	ug/L	0.14 (3)	20



BUREAU
VERITAS

Bureau Veritas Job #: C3E9081

Report Date: 2023/05/31

QUALITY ASSURANCE REPORT(CONT'D)

AiMS Consulting Environmental Services

Client Project #: AR104-23

Site Location: 4243 SIXTH LINE, OAKVILLE, ON

Sampler Initials: EX

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8687934	Dissolved Thallium (Tl)	2023/05/29	94 (2)	80 - 120	95	80 - 120	<0.050	ug/L	NC (3)	20
8687934	Dissolved Uranium (U)	2023/05/29	102 (2)	80 - 120	101	80 - 120	<0.10	ug/L	0.24 (3)	20
8687934	Dissolved Vanadium (V)	2023/05/29	101 (2)	80 - 120	97	80 - 120	<0.50	ug/L	16 (3)	20
8687934	Dissolved Zinc (Zn)	2023/05/29	94 (2)	80 - 120	98	80 - 120	<5.0	ug/L	12 (3)	20
8689872	Acid Extractable Arsenic (As)	2023/05/30	97	75 - 125	97	80 - 120	<1.0	ug/g	3.1 (1)	30
8689966	F2 (C10-C16 Hydrocarbons)	2023/05/29	121	60 - 130	106	60 - 130	<100	ug/L	NC (1)	30
8689966	F3 (C16-C34 Hydrocarbons)	2023/05/29	123	60 - 130	111	60 - 130	<200	ug/L	NC (1)	30
8689966	F4 (C34-C50 Hydrocarbons)	2023/05/29	122	60 - 130	109	60 - 130	<200	ug/L	NC (1)	30
8690614	Dissolved Antimony (Sb)	2023/05/30	104	80 - 120	102	80 - 120	<0.50	ug/L	0.80 (1)	20
8690614	Dissolved Arsenic (As)	2023/05/30	101	80 - 120	98	80 - 120	<1.0	ug/L	1.1 (1)	20
8690614	Dissolved Barium (Ba)	2023/05/30	99	80 - 120	98	80 - 120	<2.0	ug/L	0.64 (1)	20
8690614	Dissolved Beryllium (Be)	2023/05/30	100	80 - 120	99	80 - 120	<0.40	ug/L	NC (1)	20
8690614	Dissolved Boron (B)	2023/05/30	99	80 - 120	98	80 - 120	<10	ug/L	0.19 (1)	20
8690614	Dissolved Cadmium (Cd)	2023/05/30	100	80 - 120	99	80 - 120	<0.090	ug/L	NC (1)	20
8690614	Dissolved Chromium (Cr)	2023/05/30	100	80 - 120	98	80 - 120	<5.0	ug/L	NC (1)	20
8690614	Dissolved Cobalt (Co)	2023/05/30	99	80 - 120	97	80 - 120	<0.50	ug/L	NC (1)	20
8690614	Dissolved Copper (Cu)	2023/05/30	99	80 - 120	99	80 - 120	<0.90	ug/L	NC (1)	20
8690614	Dissolved Lead (Pb)	2023/05/30	101	80 - 120	100	80 - 120	<0.50	ug/L	NC (1)	20
8690614	Dissolved Molybdenum (Mo)	2023/05/30	104	80 - 120	103	80 - 120	<0.50	ug/L	2.8 (1)	20
8690614	Dissolved Nickel (Ni)	2023/05/30	99	80 - 120	98	80 - 120	<1.0	ug/L	NC (1)	20
8690614	Dissolved Selenium (Se)	2023/05/30	100	80 - 120	100	80 - 120	<2.0	ug/L	NC (1)	20
8690614	Dissolved Silver (Ag)	2023/05/30	101	80 - 120	101	80 - 120	<0.090	ug/L	NC (1)	20
8690614	Dissolved Sodium (Na)	2023/05/30	99	80 - 120	99	80 - 120	<100	ug/L	0.99 (1)	20
8690614	Dissolved Thallium (Tl)	2023/05/30	103	80 - 120	100	80 - 120	<0.050	ug/L	NC (1)	20
8690614	Dissolved Uranium (U)	2023/05/30	104	80 - 120	102	80 - 120	<0.10	ug/L	1.0 (1)	20
8690614	Dissolved Vanadium (V)	2023/05/30	101	80 - 120	99	80 - 120	<0.50	ug/L	NC (1)	20
8690614	Dissolved Zinc (Zn)	2023/05/30	100	80 - 120	98	80 - 120	<5.0	ug/L	NC (1)	20
8690673	Dissolved Antimony (Sb)	2023/05/30	99	80 - 120	101	80 - 120	<0.50	ug/L		
8690673	Dissolved Arsenic (As)	2023/05/30	99	80 - 120	98	80 - 120	<1.0	ug/L		
8690673	Dissolved Barium (Ba)	2023/05/30	99	80 - 120	98	80 - 120	<2.0	ug/L		
8690673	Dissolved Beryllium (Be)	2023/05/30	99	80 - 120	99	80 - 120	<0.40	ug/L		



BUREAU
VERITAS

Bureau Veritas Job #: C3E9081

Report Date: 2023/05/31

QUALITY ASSURANCE REPORT(CONT'D)

AiMS Consulting Environmental Services

Client Project #: AR104-23

Site Location: 4243 SIXTH LINE, OAKVILLE, ON

Sampler Initials: EX

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8690673	Dissolved Boron (B)	2023/05/30	102	80 - 120	102	80 - 120	<10	ug/L		
8690673	Dissolved Cadmium (Cd)	2023/05/30	97	80 - 120	98	80 - 120	<0.090	ug/L		
8690673	Dissolved Chromium (Cr)	2023/05/30	96	80 - 120	97	80 - 120	<5.0	ug/L		
8690673	Dissolved Cobalt (Co)	2023/05/30	96	80 - 120	95	80 - 120	<0.50	ug/L		
8690673	Dissolved Copper (Cu)	2023/05/30	97	80 - 120	98	80 - 120	<0.90	ug/L		
8690673	Dissolved Lead (Pb)	2023/05/30	93	80 - 120	94	80 - 120	<0.50	ug/L		
8690673	Dissolved Molybdenum (Mo)	2023/05/30	100	80 - 120	101	80 - 120	<0.50	ug/L		
8690673	Dissolved Nickel (Ni)	2023/05/30	97	80 - 120	96	80 - 120	<1.0	ug/L		
8690673	Dissolved Selenium (Se)	2023/05/30	101	80 - 120	102	80 - 120	<2.0	ug/L		
8690673	Dissolved Silver (Ag)	2023/05/30	96	80 - 120	98	80 - 120	<0.090	ug/L		
8690673	Dissolved Sodium (Na)	2023/05/30	97	80 - 120	97	80 - 120	<100	ug/L	11 (1)	20
8690673	Dissolved Thallium (Tl)	2023/05/30	95	80 - 120	95	80 - 120	<0.050	ug/L		
8690673	Dissolved Uranium (U)	2023/05/30	101	80 - 120	103	80 - 120	<0.10	ug/L		
8690673	Dissolved Vanadium (V)	2023/05/30	97	80 - 120	98	80 - 120	<0.50	ug/L		
8690673	Dissolved Zinc (Zn)	2023/05/30	97	80 - 120	98	80 - 120	<5.0	ug/L		

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) Duplicate Parent ID

(2) Matrix Spike Parent ID [VXG766-01]

(3) Duplicate Parent ID [VXG766-01]



BUREAU
VERITAS

Bureau Veritas Job #: C3E9081
Report Date: 2023/05/31

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: EX

VALIDATION SIGNATURE PAGE

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

Anastassia Hamanov, Scientific Specialist

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



Invoice Information				Report Information (if differs from invoice)				Project Information			
Invoice to (requires report) <input type="checkbox"/>				Company: AIMS Environmental				Quotation #:			
Company: AIMS Environmental				Contact Name: Engi Xiang				P.O. #/ AFER:			
Contact Name: Mohamed Jagani				Street Address: 1020 Denison Street				Project #: AR104-23			
City: Markham Prov: ON Postal Code: L3R 3W5				City: Markham Prov: ON Postal Code: L3R 3W5				Site #:			
Phone: (905)474-0058 ext.103				Phone: (905)474-0058				Site Location: 4243 Sixth Line, Oakville			
Email: MMJAGANI@AIMSCONSULTING.COM				Email: cweaver@aimsconsulting.com				Site Location Province: ON			
Copies:				Copies:				Sampled By: Engi Xiang / Kevin Chen			



Mont-05-523

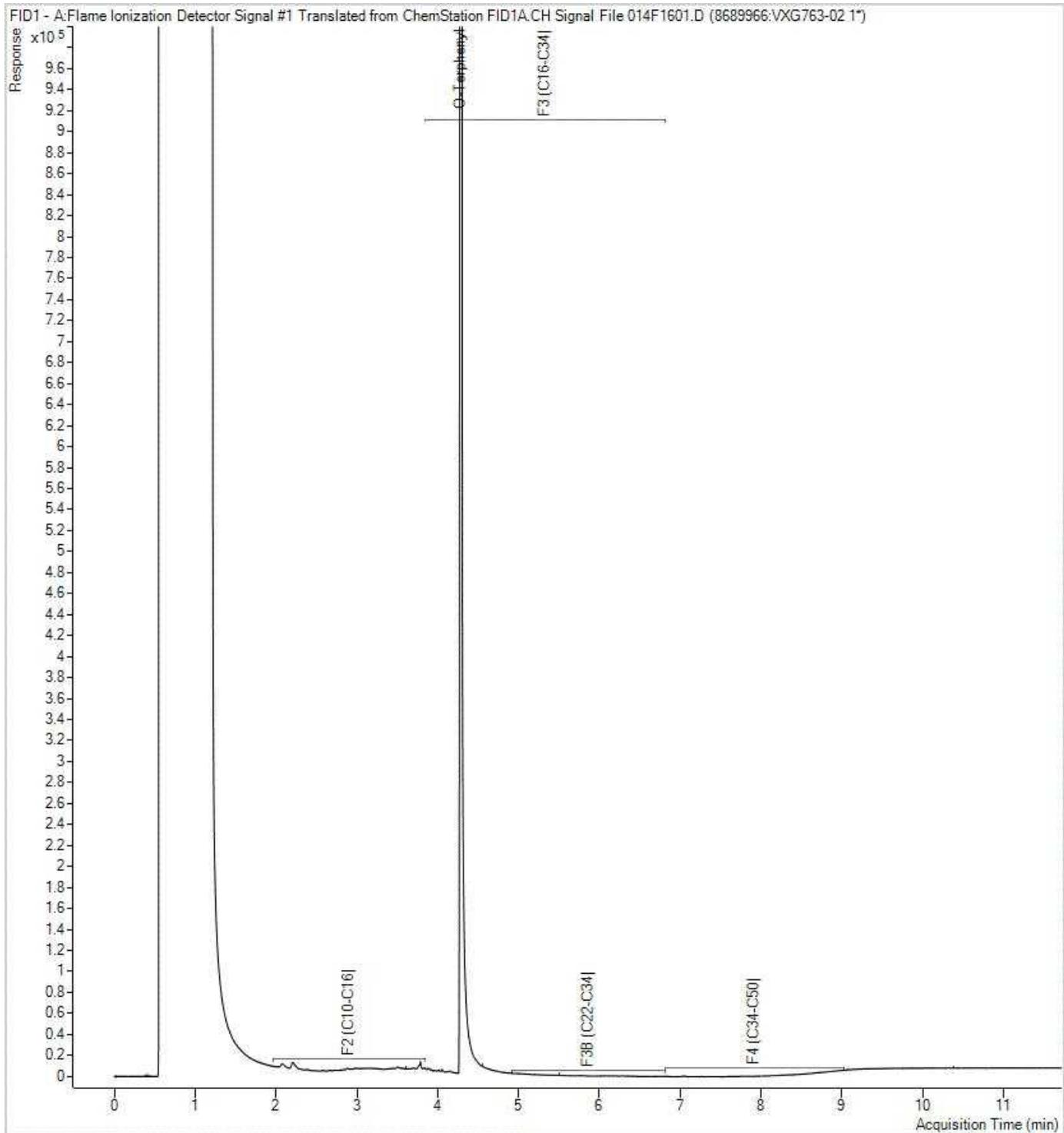
Regulatory Criteria										Regular Turnaround Time (TAT)																			
REG 153: <input checked="" type="checkbox"/> Table 1, <input checked="" type="checkbox"/> Table 2, <input type="checkbox"/> Table 3, <input type="checkbox"/> Table <input type="checkbox"/> Res/Park, <input checked="" type="checkbox"/> Ind/Comm, <input type="checkbox"/> Agri/other <input checked="" type="checkbox"/> Med/Fine, <input type="checkbox"/> Course, <input type="checkbox"/> For RSC OTHER: <input type="checkbox"/> LCME, <input type="checkbox"/> Reg 558*, <input type="checkbox"/> Reg 406, Table: <input type="checkbox"/> *min 3 day TAT, <input type="checkbox"/> Sanitary Sewer Bylaw, <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> MISA, <input type="checkbox"/> Other: Municipality <input type="checkbox"/> PWQO										<input checked="" type="checkbox"/> 5 to 7 Day <input type="checkbox"/> 10 Day Rush Turnaround Time (TAT) Surcharges apply <input type="checkbox"/> Same Day <input type="checkbox"/> 1 Day <input type="checkbox"/> 2 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> 4 Day																			
Include Criteria on Certificate of Analysis (check if yes): <input checked="" type="checkbox"/>										# OF CONTAINERS SUBMITTED																			
SAMPLES MUST BE KEPT COOL (<10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS										HOLD - DO NOT ANALYZE																			
Sample Identification	Date Sampled			Time (24hr)		Matrix	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
	YY	MM	DD	HH	MM																								
1 MW101	23	05	25	08	30	ground water																							
2 MW105	23	05	25	09	15	ground water																							
3 MW108	23	05	25	09	30	ground water																							
4 MW111	23	05	25	09	50	ground water																							
5 101-N	23	05	25	08	40	Soil																							
6 101-SE	23	05	25	08	50	soil																							
7 101-SW	23	05	25	09	10	soil																							

* 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				LAB USE ONLY				LAB USE ONLY				Temperature reading by:	
Yes	No	°C		Yes	No	°C		Yes	No	°C			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12	12	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	2		
<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>				
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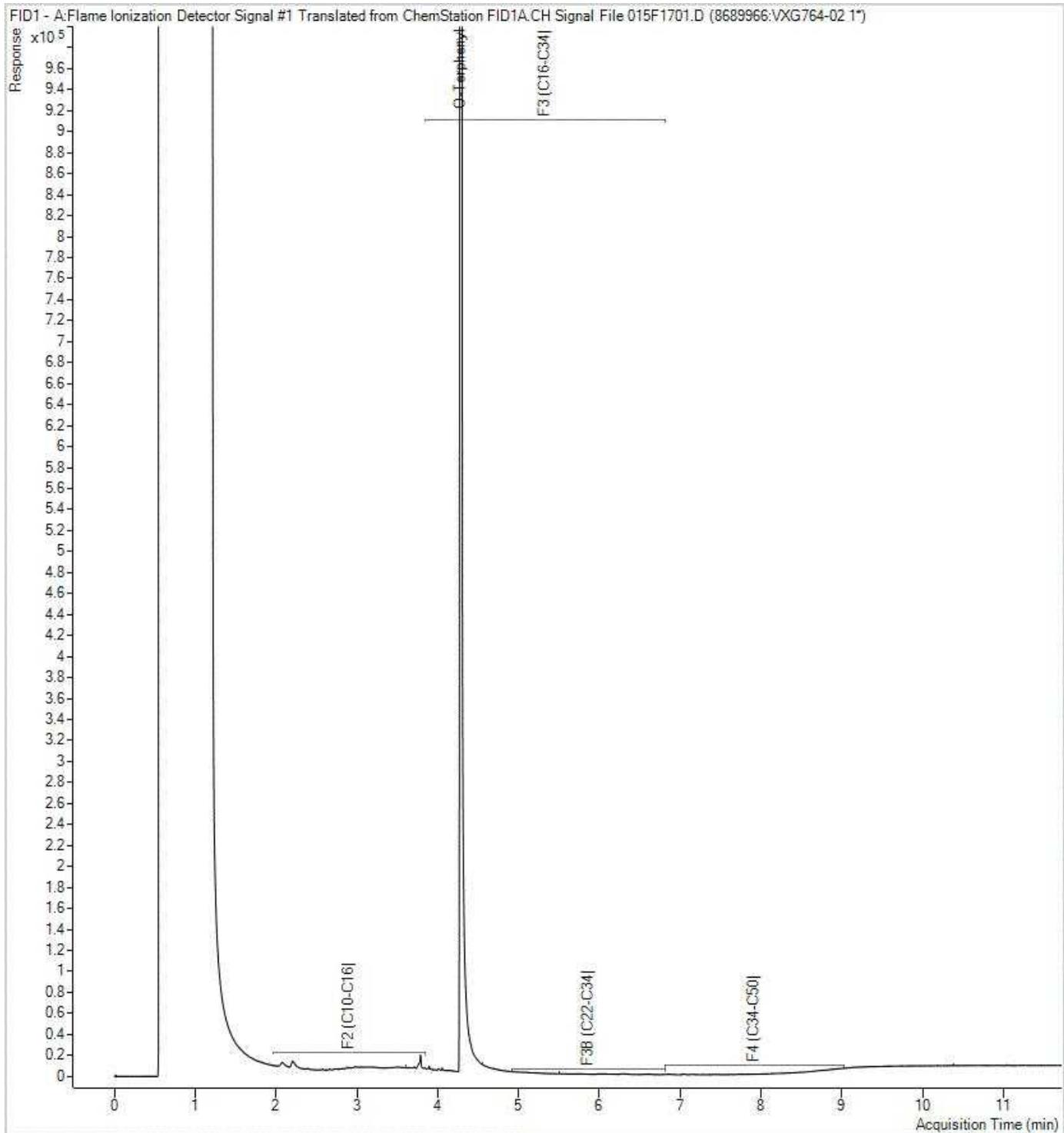
Relinquished by: (Signature/Print)	Date					Received by: (Signature/Print)	Date					Special instructions
	YY	MM	DD	HH	MM		YY	MM	DD	HH	MM	
1 Engi Xiang	23	05	25	11	30	Kevin Chen	2023	05	25	11	45	
2												

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



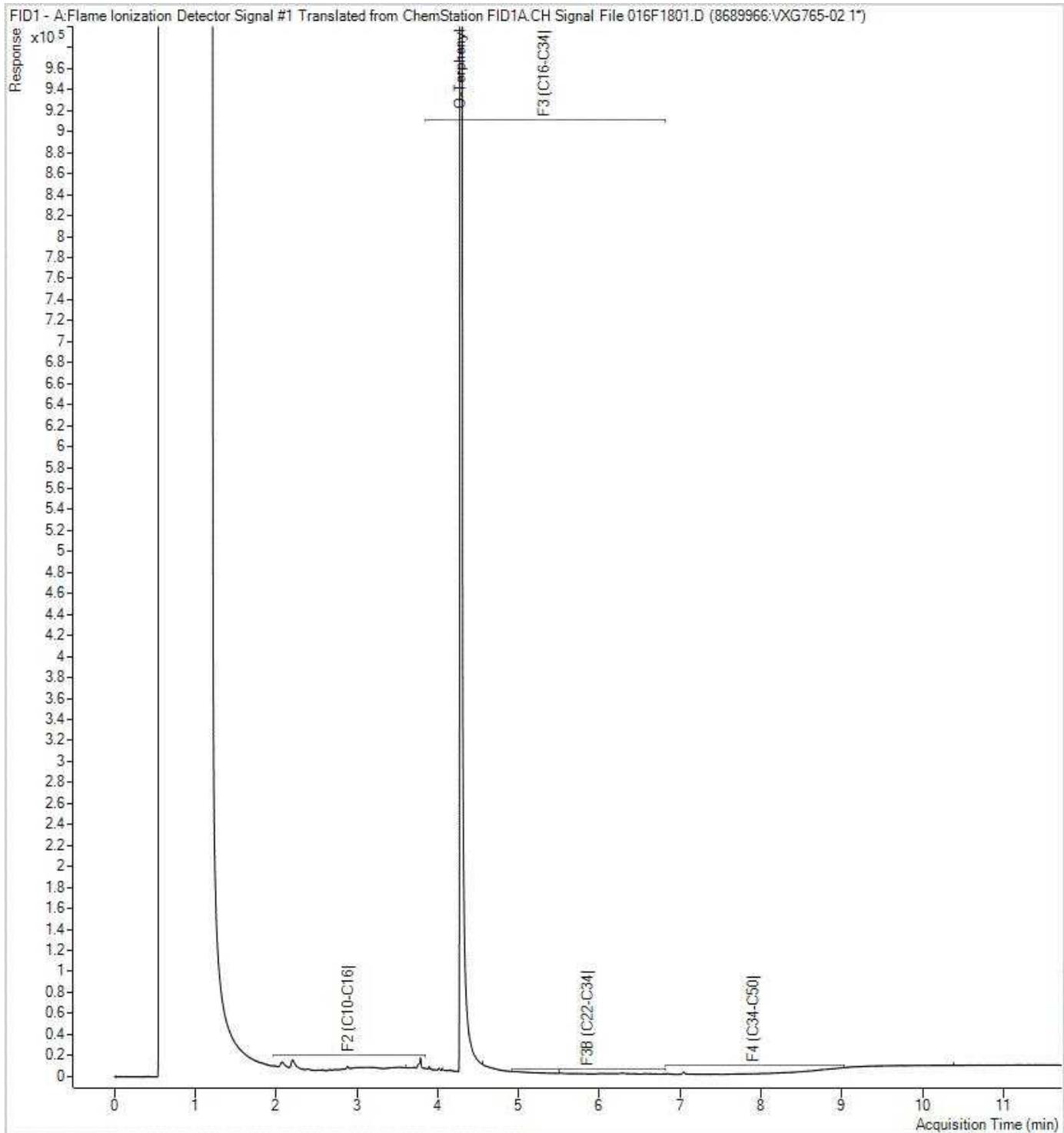
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



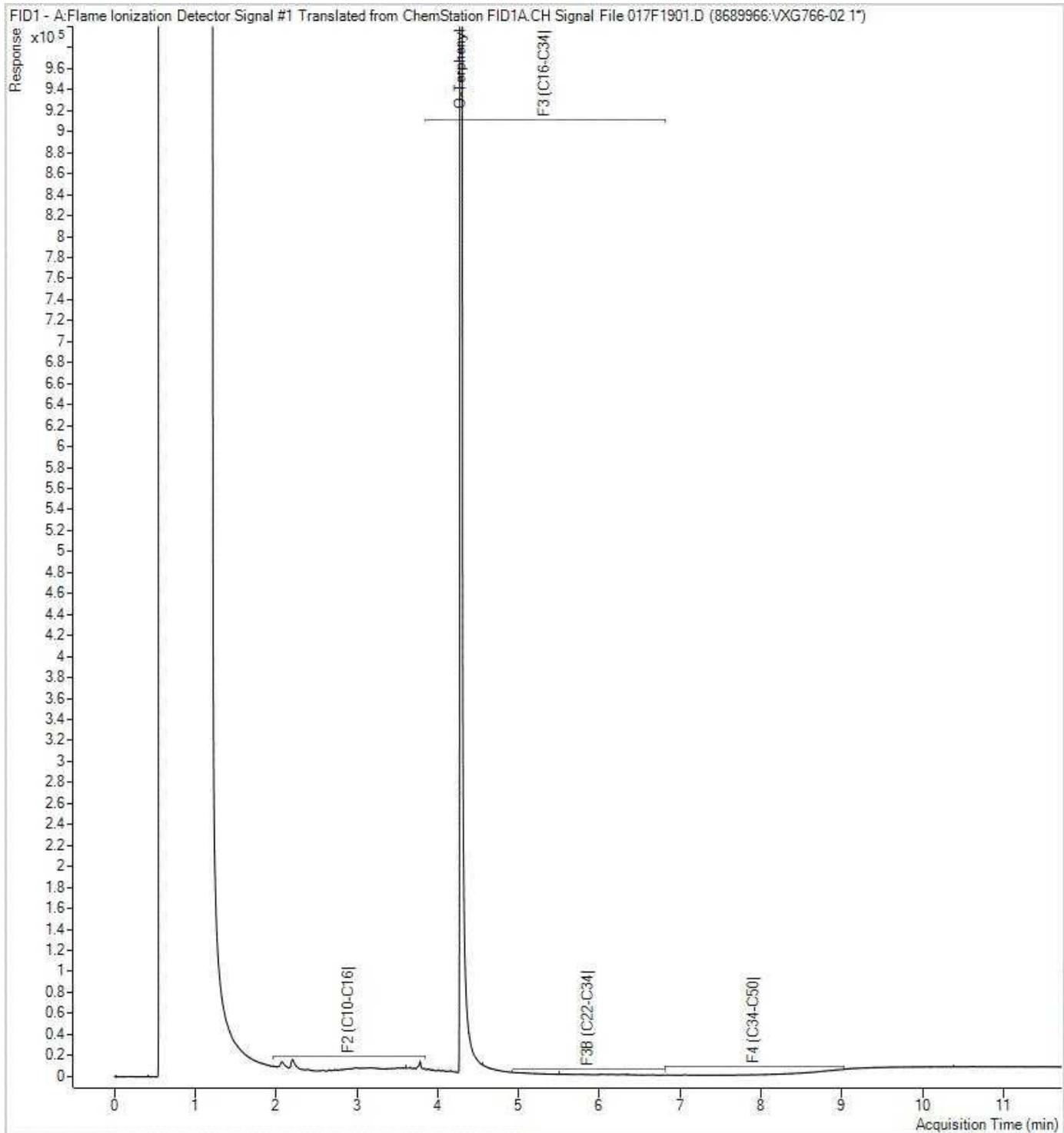
Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



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Petroleum Hydrocarbons F2-F4 in Water Chromatogram



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**BUREAU
VERITAS**

Bureau Veritas Job #: C3E9081
Report Date: 2023/05/31

AiMS Consulting Environmental Services
Client Project #: AR104-23
Site Location: 4243 SIXTH LINE, OAKVILLE, ON
Sampler Initials: EX

Exceedance Summary Table – Reg153/04 T2-GW-F/M
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.						