Soil Engineers Ltd.
CONSULTING ENGINEERS
GEOTECHNICAL • ENVIRONMENTAL • HYDROGEOLOGICAL • BUILDING SCIENCE
90 WEST BEAVER CREEK ROAD, SUITE 100, RICHMOND HILL, ONTARIO L4B 1E7 · TEL: (416) 754-8515 · FAX: (905) 881-8335

BARRIE	MISSISSAUGA	OSHAWA	NEWMARKET	MUSKOKA	HAMILTON
TEL: (705) 721-7863	TEL: (905) 542-7605	TEL: (905) 440-2040	TEL: (905) 853-0647	TEL: (705) 684-4242	TEL: (905) 777-7956
FAX: (705) 721-7864	FAX: (905) 542-2769	FAX: (905) 725-1315	FAX: (905) 881-8335	FAX: (705) 684-8522	FAX: (905) 542-2769

A REPORT TO

DE ZEN REALTY COMPANY LIMITED

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

PROPOSED COMMERCIAL/INDUSTRIAL DEVELOPMENT

SOUTHWEST OF DERRYCREST DRIVE AND VICKSBURGH DRIVE

CITY OF MISSISSAUGA

Reference No. 1810-E083-2

April 10, 2025

DISTRIBUTION

3 Copies - De Zen Realty Company Limited
1 Copy - Soil Engineers Ltd.

LIMITATIONS OF LIABILITY

This report was prepared by Soil Engineers Ltd. for the account of De Zen Realty Company Limited and for review by their designated agents, financial institutions and government agencies. Use of the report is subject to the conditions and limitation of the contractual agreement. The material in it reflects the judgement of Madan K. Suwal, PhD, EIT, EPt., Simon Xian, P.Eng., QP_{ESA} and Arshad Shaikh, M.Sc., P.Eng., QP_{ESA} in light of the information available at the time of preparation. Any use which a Third Party makes of this report, and/or any reliance on decisions to be made based on it, is the responsibility of such Third Parties. Soil Engineers Ltd. accepts no responsibility for damages, if any, suffered by any Third Party as a result of decisions made or actions based on this report.

One must understand that the mandate of Soil Engineers Ltd. is to obtain readily available past and present information pertinent to the subject site and to analyze representative soil samples for a Phase Two Environmental Site Assessment only. No other warranty or representation, expressed or implied, as to the accuracy of the information is included or intended by this assessment. Site conditions, environmental or otherwise, are not static and this report documents site conditions observed at the time of the last sampling.

It should be noted that the information supplied in this report is not sufficient to obtain approval for disposal of excess soil or materials generated during construction.

TABLE OF CONTENTS

TABLES

DRAWINGS

APPENDICES

1.0 EXECUTIVE SUMMARY

Soil Engineers Ltd. (SEL) was retained by De Zen Realty Company Limited to carry out a Phase Two Environmental Site Assessment (Phase Two ESA), as defined by Ontario Regulation (O. Reg.) 153/04, as amended under Environmental Protection Act (EPA). The Phase Two ESA was conducted for a property located at southwest of Derrycrest Drive and Vicksburgh Drive, in the City of Mississauga (hereinafter referred to as "the subject site").

The purpose of the Phase Two ESA was to assess the soil quality at the subject site, as related to the Areas of Potential Environmental Concern (APECs) identified in SEL Phase One Environmental Site Assessment (Phase One ESA) and Phase One Environmental Site Assessment (Phase One ESA Update) for the subject site.

The Phase Two ESA field work was conducted at selected locations on the subject site. Soil samples were collected and submitted for chemical analyses. The analytical results of the soil samples were reviewed in accordance with the Ministry of the Environment, Conservation and Parks (MECP) Table 8, Generic Site Condition Standards for Use within 30 m of a Water Body in a Potable Groundwater Condition for Residential/ Parkland/ Institutional/ Industrial/ Commercial/ Community property use (Table 8 Standards), as published in the "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (EPA), dated April 15, 2011.

A review of the analytical test results of soil samples indicates the tested parameters at the test locations meet the Table 8 Standards. Consequently, there are no contaminants identified at the subject site at a concentration above the applicable site condition standards (Table 8 Standards) during the Phase Two ESA.

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

2.0 INTRODUCTION

Soil Engineers Ltd. (SEL) was retained by De Zen Realty Company Limited to carry out a Phase Two Environmental Site Assessment (Phase Two ESA), as defined by Ontario Regulation (O. Reg.) 153/04, as amended by O. Regs. 366/05, 66/08, 511/09, 245/10, 179/11, 269/11 and 333/13, herein referred to as O. Reg. 153/04, as amended under Environmental Protection Act (EPA). The Phase Two ESA was conducted for a property located at southwest of Derrycrest Drive and Vicksburgh Drive, in the City of Mississauga (hereinafter referred to as "subject site"). A legal description of the property is part of Lot 11 and 12, in Concession 1 West of Hurontario Street (WHS).

The purpose of the Phase Two ESA was to assess the soil quality at the subject site, as related to the potential environmental concerns identified in SEL Phase One Environmental Site Assessment (Phase One ESA) and Phase One Environmental Site Assessment Update (Phase One ESA Update) for the subject site.

2.1 Site Description

The subject site, irregular in shape, encompassing an approximate area of 10.61 hectares (ha) (26.21 acre (ac)). The Phase Two Property is located southwest of Derrycrest Drive and Vicksburgh Drive, in the City of Mississauga. The subject site is a part of Property Identification Numbers (PIN): 14080-2046 (LT) . The legal description of the parcel from the parcel register is "PT LT 11 & 12, CON 1 WHS (TOR TWP) DES PTS 4 & 6 PL 43R31437 SAVE AND EXCEPT PLAN 43M1874 ; S/T EASEMENT OVER PT 6, PL 43R31437 AS IN RO626587; CITY OF MISSISSAUGA.

At the time of the assessment, the subject site is comprised of a farm field and northeastern area is being used for commercial light show purpose. The neighbouring properties consist of farm fields to the north/northeast, vacant areas to the west, golf course to the south and commercial properties to the east. The ground surface at the subject site gently descends towards the southerly direction.

2.2 Property Ownership

This Phase Two ESA was commissioned to address any potential environmental concerns associated with the proposed commercial/industrial development. Our client can be contacted at:

De Zen Realty Company Limited
4890 Tomken Road, Units #1-4
Mississauga, Ontario
L4W 1J8

Attention : Mr. Mark Palmieri

2.3 Current and Proposed Future Uses

The majority subject site has been used for agricultural purposes with currently commercial use at northeast portion of the subject site. A commercial/industrial development is being proposed for the subject site. It is anticipated that the new development will be provided with municipal services meeting urban standards.

2.4 Applicable Site Condition Standards

SEL has selected the applicable regulatory standard from O. Reg. 153/04, as amended, made under the Environmental Protection Act (EPA), to assess the analytical data from the submitted soil samples. The following information was used to select the appropriate standard:

- The subject site is not considered to be environmentally sensitive based on the definition set forth in Ontario Regulation 153/04 as amended, as the property is not within/ adjacent/ part of an area of natural significance. The analytical testing indicated the pH of the tested surface soil sample is between 5 and 9 and subsurface

soil sample is between 5 and 11.

- The property is not a shallow soil property, as the bedrock was not encountered within 2.0 metres (m) below ground surface (mbgs) during the investigation.
- Watercourse is passing through at the subject site.
- Based on the information obtained from the Phase One ESA, water wells are documented at the subject site and neighbouring properties within the Phase One Study Area.
- Generic Site Condition Standards within 30 m of waterbody is to be used in this assessment.
- The intended property use of the subject site is commercial/industrial.
- No grain size analysis was performed during this Phase Two ESA.

Based on the above information, the Ministry of the Environment, Conservation and Parks (MECP) Table 8, Generic Site Condition Standards for Use within 30 m of a Water Body in a Potable Groundwater Condition for Residential/ Parkland/ Institutional/ Industrial/ Commercial/ Community property use (Table 8 Standards), as published in the "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (EPA), dated April 15, 2011 has been selected for evaluating the environmental conditions at the subject site.

3.0 BACKGROUND

3.1 Physical Setting

Based on the information obtained from the SEL Phase One ESA, the general physical setting of the subject site is summarized below:

The subject site is located within a mixed agricultural, residential, commercial, industrial area in the City of Mississauga. The neighbouring properties consist of farm fields to the north/northeast, vacant areas to the west, golf course to the south and commercial properties to the east.

According to the Surface Geology Map of the subject site area, the subject site is underlain by Halton Till with materials documented as silt to silty clay materials. The Bedrock Geology Map shows that the subject site is underlain by bedrock of Queenston formation with rock description documented as shale, limestone, dolostone and siltstone. According to the Bedrock Topography Series, depth to bedrock in general vicinity of the subject site is approximately 15 meters below ground surface (mbgs).

The subject site is adjacent to roadways (i.e. Derrycrest Drive and Vicksburgh Road) to the northeast directions. The overall grade of the subject site generally descends to southerly direction. A watershed map obtained from the Land Information Ontario (LIO), shows that the subject site is located within the Credit River Watershed.

Based on the review of the Ontario Ministry of the Natural Resources and Forestry (OMNRF) and the LIO for listings of various classes of natural areas within the vicinity of the subject site, watercourses are passing through eastern and southwestern portions the subject site.

3.2 Past Investigations

The following previous investigation reports prepared for the subject site and larger property

including the subject site were reviewed as part of this Phase Two ESA:

- Phase One Environmental Site Assessment, Proposed Commercial/Industrial Development, Derrycrest Drive and Vicksburgh Drive, City of Mississauga, SEL Reference No. 1810-E083-2, dated January 11, 2019 (Revision of report dated December 21, 2018)
- Phase One Environmental Site Assessment Update, Proposed Development, 7140 Hurontario Street, City of Mississauga, SEL Reference No. 1810-E083-1 & -2, dated January 31, 2025.

The SEL Phase One ESA and Phase One ESA Update identified Potentially Contaminating Activities (PCAs) at the subject site and in the Phase One Study Area that may contribute to Areas of Potential Environmental Concerns (APECs) at the subject site, based on records review, interviews and site reconnaissance. The findings of the SEL Phase One ESA and Phase One ESA Update revealed the following APEC:

APEC 1A: Potential use of pesticides during agricultural activities at majority of middle and western portion of the subject site.

APEC 1B: Potential use of pesticides during agricultural activities at northeastern portion of the subject site.

APEC 2: Presence of soil stockpile at northeastern portion of the subject site.

Please note that soil stockpile was removed at the time of Phase Two ESA investigation.

The locations of the PCAs and APECs are shown on Drawing Nos. 1 and 2, respectively.

4.0 SCOPE OF THE INVESTIGATION

4.1 Overview of Site Investigation

The purpose of this investigation (Phase Two ESA) is to assess the soil quality at the subject site, as related to the potential environmental concern raised in the findings of the Phase One ESA and Phase One ESA Update. This Phase Two ESA was conducted in general conformance with the CSA Standard Z769-00 (R2018) and O. Reg. 153/04, as amended.

The scope of work for this investigation includes:

- Locate the underground and overhead utilities.
- Advance ten (10) boreholes (designated as BH101 to BH106, BH203, BH204, BH205 and BH207) to a maximum depth of 3.0 meters below grade surface (mbgs) for sampling and soil profiling and carryout one (1) hand-dug test pit (designated as TP1) to the depth of 0.3 mbgs for soil sampling.
- Collect representative soil samples from the sampling locations.
- Undertake field examination of the retrieved soil samples for visual and olfactory evidence of potential contamination.
- Undertake soil vapour measurements for the retrieved soil samples using a combustible gas detector (RKI Eagle) in methane elimination mode.
- Carry out an analytical testing program on selected soil samples including quality assurance and quality control (QA/QC) samples for one or more of the following parameters: Organochlorine Pesticides (OCs), Metals, Arsenic (As), Antimony (Sb), Selenium (Se), Mercury (Hg), Chromium Hexavalent (Cr (VI)), Cyanides (CN^-), Boron-Hot Water Soluble (B-HWS), Electric Conductivity (EC), Sodium Adsorption Ratio (SAR) and pH parameters.
- Review analytical testing results of submitted soil samples using applicable Site Condition Standards.
- Prepare a Phase Two ESA report presenting the findings of the investigation.

The rationale for the selection of sampling locations is presented in the Sampling and Analysis Plan in Appendix 'A'.

4.2 Media Investigated

Based on the findings of the Phase One ESA and Phase One ESA Update, only soil medium was investigated during the Phase Two ESA in accordance with the Sampling and Analysis Plan provided in Appendix 'A'. Groundwater and sediment were not identified as potentially contaminated media in the Phase One ESA. Consequently, no groundwater and sediment investigation was conducted as a part of this Phase Two ESA.

Boreholes were advanced using Geoprobe equipped with shelby tube sampler (Thin-walled Open (TO)) and Pionjar equipped with split spoon sampler (Drive Open (DO)), and the hand-dug test pits using a steel spade and soil samples were retrieved continuously. Soil samples were logged in the field and headspace vapour screening was conducted for all retrieved soil samples using a combustible gas detector (RKI Eagle) in methane elimination mode, calibrated with hexane and having a minimum detection level of 2 parts per million by volume (ppmv).

4.3 Phase One Conceptual Site Model

A plan, illustrating the features of the subject site and surrounding areas within 250 m from the subject site boundaries including the locations of PCAs, is presented in Drawing No. 1 and APECs are presented in Drawing No. 2.

4.4 Deviations from Sampling and Analysis Plan

No deviations from the sampling and analysis plan were encountered.

4.5 Impediments

No impediments were encountered during the investigation for the Phase Two ESA.

5.0 INVESTIGATION METHOD

5.1 General

The Phase Two ESA was carried out in accordance with the Sampling and Analysis Plan provided in Appendix 'A' and in accordance with the SEL Standard Operating Procedures (SOPs).

The investigation of the Phase Two ESA consisted of advancing ten (10) boreholes (designated as BH101 to BH106, BH203, BH204, BH205 and BH207) and carrying out one (1) test pits (designated as TP1), field screening measurements, and collection of soil samples from the soil sampling locations for chemical analyses. Drilling of borehole BH101 and hand dug TP1 was completed in the area of the former soil stockpile. The soil samples were assessed for the potential contamination with respect to the APECs identified in the SEL Phase One ESA.

The sampling and decontamination procedures were conducted in accordance with the "Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario", May 1996, revised December 1996, as amended by O. Reg. 511/09.

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

5.2 Drilling and Excavating

Prior to the field work, the underground and overhead utilities were located and marked out by the representatives of the major utility companies as per Ontario One Call Program and a private locator (SL Sonic Soil Limited).

The field work for the Phase Two ESA was conducted on February 18 to 26, 2019 and March 12, 2025. The boreholes were advanced to a maximum depth of 3.0 mbgs by Kodiak Drilling and SL Soni Soil Limited, MECP approved licensed driller. The locations of the boreholes and test pits are shown in Drawing No. 2.

Boreholes were advanced using Geoprobe equipped with shelby tube sampler (Thin-walled Open (TO)) and Pionjar equipped with split spoon sampler (Drive Open (DO)) supplied by a specialist drilling contractor Kodiak Drilling and SL Sonic Soil Limited. Soil samples retrieved from boreholes were recovered continuously for soil vapour measurement, soil classification and visual and olfactory observations for potential contamination.

Drilling and sampling equipment such as drill rigs, augers, drill pipes, drilling rods, split spoon and spade were decontaminated prior to initial use, between borehole locations and at the completion of drilling activities. The drilling equipment was manually scrubbed with a brush using a phosphate-free solution, and power washed to remove any adhered soils, foreign material and potential contaminants. In addition, all sampling equipment were decontaminated prior to each usage.

The field work was monitored by SEL environmental personnel who recorded the findings and observations.

5.3 Soil: Sampling

Soil samples from the boreholes were retrieved at regular intervals, using shelby tube and split spoon sampler and the hand-dug test pits using a steel spade. Prior to recovering a sample, the sampling equipment was brushed clean using a solution of phosphate-free detergent and distilled water, and each discrete sample was handled by the sampler with new disposable gloves in order to avoid any risk of cross-contamination between the samples. Each soil sample was split with part of the sample sealed in a laboratory-prepared sampling media and stored in a cooler with ice, and the remainder of the sample sealed in a double sealable bag for vapour measurement and soil classification.

The subsoil conditions at the borehole locations indicated that beneath the topsoil, the subject site is underlain by silty clay/silty clay till deposits at various depths and borehole locations. No bedrock was encountered during the Phase Two ESA. Detailed descriptions of the encountered subsurface conditions are presented on the Borehole Logs provided in Appendix 'B'.

Generally the representative soil samples from each borehole to determine the maximum concentrations were selected and sent to the laboratory for chemical analyses, based on the soil vapour measurements and visual and olfactory observations. However, in absence of any evidence of elevated vapor or contamination/unusual observation, the soil samples were selected according to the contaminant of concerns (COCs) behavior (i.e. near the potential source for metals).

5.4 Field Screening Measurements

The headspace vapour concentrations were measured using a portable RKI Eagle gas detector, TYPE 101 (Serial Number: E091011) set to include combustible gases with the exception of methane (methane elimination mode), and having a minimum detection level of 2 ppmv. Prior to taking the measurements, the instrument was calibrated to hexane standards for both ppm and lower explosive limit (LEL) according to the instruction manual for the instrument. Our field personnel are trained by the supplier for the proper calibration procedure. The instrument is calibrated or tuned up by the supplier (Pine Environmental Services Inc.), seasonally.

The results of the soil vapour measurement are presented in the Borehole Logs attached in Appendix 'B'.

It is to be noted that that the soil vapour measurements alongside with the visual and olfactory observations and contaminant of concerns (COCs) behavior were used to select the representative soil samples from each sampling location for chemical analyses.

5.5 Groundwater: Monitoring Well Installation

Groundwater was not assessed as part of this investigation.

5.6 Groundwater: Field Measurement of Water Quality Parameters

Groundwater was not assessed as part of this investigation.

5.7 Groundwater: Sampling

Groundwater was not assessed as part of this investigation.

5.8 Sediment: Sampling

Sediment was not assessed as part of this investigation.

5.9 Analytical Testing

The soil samples were analysed by Bureau Veritas Laboratories (BV Labs) in Mississauga, Ontario. BV Labs are accredited by the Canadian Association for Laboratory Accreditation (CALA) in accordance with ISO/IEC 17025:2005, as amended – "General Requirements for the Competence of Testing and Calibration Laboratories" for all the parameters analysed during this investigation.

5.10 Residue Management Procedures

There was no significant volume of excess soil generated during the field investigation. Consequently, there was no residue management procedure required as part of this Phase Two ESA.

5.11 Elevation Surveying

The ground elevations of the borehole locations were surveyed using a hand-held (Trimble Geoexplorer 7000 series) Global Navigation Satellite System measurement equipment. The equipment is capable of having vertical and horizontal accuracy of 0.1± m.

The elevations at the borehole locations are presented in Borehole Logs in Appendix 'B'.

5.12 Quality Assurance/Quality Control (QA/QC) Measures

The Soil Sampling and Analysis Plan provided in Appendix 'A' was prepared and executed based on the findings of the Phase One ESA.

The Phase Two ESA was carried out in accordance with the Sampling and Analysis Plan and in accordance with the SEL Standard Operating Procedures.

The sampling and decontamination procedures were conducted in accordance with the "Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario", May 1996, revised December 1996, as amended by O. Reg. 511/09.

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

Field observations were made and documented in a field book in accordance with generally accepted practices and with the procedures developed and utilized by SEL.

SEL field sampling QA/QC protocols, applied to the investigation, are as follows:

- The collection of at least one field duplicate sample per ten (10) samples for every

sampling medium (where three or more such samples are collected).

- Where volatile organic chemical analysis is required, the collection of discrete samples directly into laboratory-prepared sample vials and immediate placement into a cooler with ice to maintain the temperature at less than 10 °C for transport to the laboratory.
- If trace organics in the collected samples are anticipated (organic chemicals with a concentration of less than 1 μg/g), precautions are made to avoid any possible cross-contamination (eliminating bare hand or latex glove contacts with the soil); soil sampling equipment used for the collection of trace organics are cleaned using a phosphate-free detergent and water, followed by a distilled water rinse and a methanol rinse between sampling locations.

The results of the QA/QC samples (i.e. field duplicate samples) are discussed in Section 6.9 of this report.

6.0 REVIEW AND EVALUATION

6.1 Geology

Detailed descriptions of the encountered subsoil conditions are presented on the Borehole Logs provided in Appendix 'B'. The subsoil conditions at the borehole locations indicated that beneath the topsoil, the subject site is underlain by silty clay/silty clay till deposits at various depths and locations. No bedrock was encountered during the Phase Two ESA. The location of cross sections for soil stratigraphy at the subject site is presented on Drawing No. 3. Geological Cross Sections, A-A' and B-B' are presented on Drawing No. 4.

The descriptions of the strata, encountered at the borehole locations, are briefly discussed below.

Topsoil

A layer of topsoil, approximately 0.3 to 0.4 m in thickness, was encountered all the borehole locations.

Silty Clay/Silty Clay Till

Silty clay/silty clay till deposits were encountered at all borehole locations underneath topsoil to the depth termination depths of 1.5 to 3.0 mbgs.

Hydrogeology

On completion of the drilling activities, no groundwater was detected in any of the boreholes carried out at the subject site.

6.2 Groundwater: Elevations and Flow Direction

Groundwater was not assessed as part of this investigation.

6.3 Groundwater: Hydraulic Gradients

Groundwater was not assessed as part of this investigation.

6.4 Fine-Medium Soil Texture

No grain size analysis was performed as part of this investigation.

6.5 Soil: Field Screening

Headspace vapour screening was conducted for all retrieved soil samples using a combustible gas detector (RKI Eagle) in methane elimination mode, calibrated with hexane and having a minimum detection level of 2 ppmv.

Nondetectable to 30 ppm soil vapour readings were recorded for the collected soil samples.

6.6 Soil Quality

A representative soil sample from each sampling location was selected based on the soil vapour measurements and visual and olfactory observations. The selected soil samples were submitted to the laboratory for chemical analyses of OCs, Metals, As, Sb, Se, B-HWS, Cr (VI), Hg, CN^-EC, SAR and pH parameters.

The soil test results were reviewed using the MECP Table 8, Generic Site Condition Standards for Use within 30 m of a Water Body in a Potable Groundwater Condition for Residential/ Parkland/ Institutional/ Industrial/ Commercial/ Community property use (Table 8 Standards), as published in the "Soil, Ground Water and Sediment Standards for Use Under

Part XV.1 of the Environmental Protection Act" (EPA), dated April 15, 2011.

Soil quality data containing results of the chemical analyses for the tested soil samples are presented in Table I. Maximum concentrations of the tested parameters in soil are presented in Table II.

A copy of the Certificate of Analysis for the soil samples is presented in Appendix 'C'.
The findings of the soil sampling results are summarized below.

Organochlorine Pesticides (OCs)

Eight (8) original soil samples and two (2) field duplicate sample were submitted for analyses of OCs. The test results indicated that the tested parameters in the soil samples at tested locations met the Table 8 Standards.

Metals As, Sb, Se, B-HWS, Hg, Cr (VI), B-HWS, CN^-, EC, SAR, pH

Nine (9) original soil samples and one (1) field duplicate samples were submitted for analyses of Metals, As, Sb, Se, B-HWS, Hg, Cr (VI), CN^-, EC, SAR and/or pH parameters. The test results indicate that the tested parameters in the soil samples at tested locations met the Table 8 Standards.

6.7 Groundwater Quality

Groundwater was not assessed as part of this investigation.

6.8 Sediment Quality

Sediment was not assessed as part of this investigation.

6.9 Quality Assurance and Quality Control (QA/QC) Results

The Phase Two ESA was carried out in accordance with the Sampling and Analysis Plan and in accordance with the SEL SOPs.

The sampling and decontamination procedures were conducted in accordance with the "Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario", May 1996, revised December 1996, as amended by O. Reg. 511/09.

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

6.9.1 Field Quality Assurance and Quality Control (QA/QC) Samples

As part of the QA/QC program for the Phase Two ESA, QC sample in the form of field duplicate sample was analysed. Field duplicate sample was collected in the field for the analyses of OCs and Metals in soil.

Field Duplicate

Three (3) sets of field duplicate soil samples were collected and submitted for chemical analyses. Details of the duplicate sampling and analyses are presented in the table below:

Duplicate Sample ID	Original Sample ID	Media	Test Conducted
DUPS1	BH105/1	Soil	OCs
DUPS2	BH105/4A	Soil	Metals
DUPS201	BH203/1A	Soil	OCs

The results of the analyses of the field duplicate sample is similar to the results for the original

samples or within acceptable limits of relative percentage differences (RPDs). The RPDs between the primary and duplicate samples were not calculated considering that the analytical results were below the laboratory minimum method detection limits or lesser than 5 times of the method detection limits in both samples.

The Certificates of Analysis for the QA/QC samples are included in Appendices 'C'.

6.9.2 Sample Handling in Accordance with the Analytical Protocol

The samples analyzed as part of the Phase Two ESA were handled in accordance with the Analytical Protocol as per O. Reg. 153/04 with respect to holding time, preservation method, storage requirement and sample container type.

6.9.3 Certification of Results

Based on the review of the QA/QC sample result for the soil sample in this investigation, the Chain of Custody forms and the laboratory Certificate of Analysis, it is certified that:

- All Certificates of Analysis or Analytical Reports received pursuant to Section 47(2) of O. Reg. 153/04, as amended, comply with Section 47(3) of O. Reg. 153/04, as amended.
- A Certificate of Analysis or Analytical Report was received for each sample submitted for analysis.
- Copies of all Certificates of Analysis are included in Appendix 'C'.

6.9.4 Data Validation

The Analytical Protocol establishes acceptance limits for use when assessing the reliability of data reported by analytical laboratories, including maximum holding times for the storage of samples/sample extracts between collection and analysis, analytical methods, field and/or laboratory quality assurance samples, recovery ranges for spiked samples and surrogates,

Reporting Detection Limits (RDLs), mandatory maximum method detection limits and precision required when analyzing laboratory replicate and spiked samples.

The review of the data in the Certificate of Analysis indicates:

- All samples/sample extracts were analyzed within their applicable holding times using approved analytical methods.
- No tested parameters were detected in any laboratory blank samples.
- The RDLs were met for all tested parameters.
- The results of the laboratory duplicate samples are similar to the results for the original samples and relative percent differences for the detectable tested parameters are within the acceptable range.
- The matrix spike recovery for Chromium (VI) (QC Batch 6000083 and 9893355) was below the lower control limit, which might be due in part to the reducing environment of the sample. The sample was reanalyzed with the same results. All the analyzed soil samples reported below detection limit.
- Matrix spike exceeds acceptance limits for Hexachloroethane OC parameter (QC Batch 9894402), probable matrix interference. All the analyzed soil samples reported below detection limit.

6.9.5 **Data Quality Objectives**

In conclusion, the overall quality of field data did not affect decision making and the overall objectives of the investigation were met.

6.10 **Phase Two Conceptual Site Model**

This Phase Two Conceptual Site Model has been prepared as a part of Phase Two Environmental Site Assessment (Phase Two ESA) for the Record of Site Condition (RSC) Property that is located southwest of Derrycrest Drive and Vicksburgh Drive, in the City of Mississauga, Ontario (hereafter referred to as the "subject site").

The Phase Two Conceptual Site Model was prepared based on the findings of the Phase One Environmental Site Assessment (Phase One ESA, dated January 19, 2019), Phase One Environmental Site Assessment Update (Phase One ESA Update, dated January 31, 2025) and this Phase Two Environmental Site Assessment (Phase Two ESA).

6.10.1 **Description and Assessment**

The subject site, irregular in shape, encompassing an approximate area of 10.61 hectares (ha) (26.21 acre (ac)). The Phase Two Property is located at southwest of Derrycrest Drive and Vicksburgh Drive, in the City of Mississauga. The subject site is a part of Property Identification Numbers (PIN): 14080-2046 (LT). The legal description of the subject site from the parcel register is "PT LT 11 & 12, CON 1 WHS (TOR TWP) DES PTS 4 & 6 PL 43R31437 SAVE AND EXCEPT PLAN 43M1874 ; S/T EASEMENT OVER PT 6, PL 43R31437 AS IN RO626587; CITY OF MISSISSAUGA".

6.10.1.1 Areas where Potentially Contaminating Activity Has Occurred

Potentially Contaminating Activities (PCAs) were identified at the subject site and the Phase One Study Area, based on the records review, the interview and the site reconnaissance. The location of PCA along with the corresponding list in Table 8 Schedule D of O. Reg. 153/04 are summarized below:

On-Site PCA

- Possible use of pesticides during agricultural activities at majority middle and western portions of the subject site. #40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications.
- Possible presence of pesticides during agricultural activities at soil stockpile located at northeastern portion of the subject site. #40 – Pesticides (including Herbicides,

Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications.

- Presence of a soil stockpile at northeast portion of the subject site. #30 – Importation of Fill Material of Unknown Quality

Off-Site PCAs

- Possible application of pesticide on farm field located to the north/northeast of the subject site. #40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications
- Possible application of pesticide on golf course located to the south of the subject site. #40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications
- Presence of Hydro One transformer station approximately 220 m to the north/northwest of the subject site. #55 – Transformer Manufacturing, Processing and Use

The on-site PCAs are considered to have contributed to the Areas of Potential Environmental Concerns (APECs) at the subject site. However, taking account of relative distance, down gradient location, type/nature of the contaminants and localized impact of the off-site PCAs, these PCAs (i.e. pesticides use, Hydro One transformer station) were not considered to have contributed to the Areas of Potential Environmental Concerns (APECs) at the subject site

The location of the PCA is shown on Drawing No. 1.

6.10.1.2 Areas of Potential Environmental Concern

The following Area of Potential Environmental Concerns (APECs) were identified at the subject site.

APEC 1A: Potential use of pesticides during agricultural activities at majority of

middle and western portion of the subject site.

APEC 1B: Potential use of pesticides during agricultural activities at northeastern portion of the subject site.

APEC 2: Presence a soil stockpile at northeastern portion of the subject site.

The locations of the APEC is shown on Drawing No. 2.

Please note that soil stockpile was removed at the time of Phase Two ESA investigation and therefore APEC 2 was investigated at footprint of the former soil stockpile.

6.10.1.3 Subsurface Structures and Utilities

At the time of the assessment, the subject site is comprised of farm field at majority of middle and western portion of the subject site and commercial light show structures at the northeast portion of the subject site. Since no contaminants were identified at the subject site at a concentration above the applicable Site Condition Standard (Table 8 Standards), no subsurface structures or utilities with the potential to affect contaminants distribution or transport are identified at the subject site.

6.10.2 **Physical Setting**

6.10.2.1 Stratigraphy

According to the Surface Geology Map of the subject site area, the subject site is underlain by Halton Till with materials documented as silt to silty clay materials. The Bedrock Geology Map shows that the subject site is underlain by bedrock of Queenston formation with rock description documented as shale, limestone, dolostone and siltstone.

The field investigation for the Phase Two ESA consisted of advancing ten (10) boreholes (designated as BH101 to BH106 (carried out during February 18 to 26, 2019), BH203, BH204, BH205 and BH207 (carried out during March 12, 2025)) to a maximum depth of 3.0

mbgs and one (1) hand dug test pits (designated as TP1, carried out on March 26, 2025) to the depth of 0.3 mbgs. Drilling of BH101 and hand dug TP1 was completed in the area of the former soil stockpile. The subsoil conditions at the borehole locations indicated that beneath the topsoil, the subject site is underlain by silty clay deposits to the termination depth of 1.5 to 3.0 mbgs at various depths and locations. No bedrock was encountered during the Phase Two ESA.

The Sampling Location Plan is shown in Drawing No. 2. The locations of cross-sections for soil stratigraphy at the subject site are presented in Drawing No. 3. Geological Cross-sections A-A' and B-B' are presented in Drawing No. 4.

6.10.2.2 Hydrogeological Characteristics

The subject site is located in a larger hydrogeological region known as the Southern Ontario Lowlands. A Watershed Map provided by the Land Information Ontario (LIO), shows the subject site is located within the Credit River Watershed.

The ground surface at the subject site gently descends towards the southerly direction.

6.10.2.3 Approximate Depth to Bedrock

Bedrock was not encountered at the subject site during the field investigation within the maximum drilling depth of 3.0 mbgs. According to the Bedrock Topography Series, depth to bedrock in general vicinity of the subject site is approximately 15 mbgs.

6.10.2.4 Approximate Depth to Water Table

Groundwater was not investigated as part of the Phase Two ESA.

6.10.2.5 Section 35 and Section 41 or 43.1 of the Regulation

Based on the records review, water wells are documented at the subject site and within the Phase One Study Area. Therefore, Section 35 of the Regulation (Non-Potable Site Condition Standards) does not apply to the subject site.

The subject site is not within/adjacent/part of an area of natural significance. The analytical testing indicated that pH of the tested surface soil samples was between 5 and 9 and subsurface soil samples are between 5 and 11. Section 41 of the regulation (Site Condition Standards, Environmental Sensitive Areas) does not apply to the subject site.

The property is not a shallow soil property, as the bedrock was not encountered within 2.0 mbgs during the investigation. Watercourses are passing through the subject site. Therefore, Section 43.1 of the O. Reg. 153/04 (Site Condition Standards, Shallow Soil Property or Water Body) applies to the subject site.

6.10.2.6 Areas On, In or Under the Phase Two Property Where Excess Soil Is Finally Placed

No soil material was brought to the subject site as part of the Phase Two ESA.

6.10.2.7 Proposed Building and Other Structures

A commercial/industrial development is being proposed for the subject site. The locations of proposed structures were not known at the time of preparation of this Phase Two Conceptual Site Model.

6.10.3 **Contamination In or Under the Phase Two Property**

Based on the findings of the Phase One ESA, contaminants of potential concern (COPCs) in soil with respect to the identified Areas of Potential Environmental Concern (APECs) at the

subject site were assessed during the Phase Two ESA. The samples were selected from the locations and depths, where potentially the maximum concentration is expected, and to be representative of the full extents of the APECs at the subject site.

Based on the information obtained from the Phase One ESA, Phase One ESA Update and Phase Two ESA, the Ministry of the Environment, Conservation and Parks (MECP) Table 8, Generic Site Condition Standards for Use within 30 m of a Water Body in a Potable Groundwater Condition for Residential/ Parkland/ Institutional/ Industrial/ Commercial/ Community property use (Table 8 Standards), as published in the "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (EPA), dated April 15, 2011, was selected for evaluating the environmental condition at the subject site.

6.10.3.1 Area Where Contaminants are Present

Soil samples were collected during the Phase Two ESA and submitted for chemical analyses of the following parameters:

APEC 1A: Soil samples were submitted for chemical analyses of OCs, Metals, As, Sb, Se, Hg, Cr (VI) and CN^- parameters. Surface soil samples to the depth of 0.3 mbgs to 0.4 mbgs and from the depth of 0.6 – 1.1 mbgs, 1.1 – 1.5 mbgs were submitted for chemical analyses from seven different locations.

APEC 1B: Soil samples were submitted for chemical analyses of OCs, Metals, As, Sb, Se, Hg, Cr (VI) and CN^- parameters. Surface soil samples to the depth of 0.3 to 0.4 mbgs and from the depth of 0.3 – 0.6 mbgs were submitted for chemical analyses from three different locations.

APEC 2: Soil samples were submitted for chemical analyses of OCs, Metals, As, Sb, Se, Cr(VI), CN-, Hg, EC, SAR, B-HWS and pH parameters. Surface soil samples to the depth of 0.3 mbgs and from the depth of 0.3 to 0.6 mbgs were submitted for chemical analyses from two different location.

A review of the analytical test results of soil samples indicated that the tested samples for the tested parameters at tested locations met the Table 8 Standards.

Consequently, there are no contaminants identified at the test locations at a concentration above the applicable site condition standards (Table 8 Standards) during the Phase Two ESA.

6.10.3.2 Distribution of Contaminants

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

6.10.3.3 Contaminant Medium

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

6.10.3.4 Reasons for Discharge

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

6.10.3.5 Migration of Contaminants

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

6.10.4 Potential Exposure Pathways and Receptors

Since no contaminants are identified at the subject site at a concentration above the applicable site condition standard (Table 8 Standards), no potential exposure pathways and receptors are identified.

7.0 CONCLUSIONS

The purpose of the Phase Two Environmental Site Assessment (Phase Two ESA) was to assess the soil quality at the subject site, as related to the following Area of Potential Environmental Concerns (APECs) identified in SEL Phase One Environmental Site Assessment (Phase One ESA), Phase One Environmental Site Assessment Update (Phase One ESA Update) and this Phase Two Environmental Site Assessment (Phase two ESA):

APEC 1A: Potential use of pesticides during agricultural activities at majority of middle and western portion of the subject site.

APEC 1B: Potential use of pesticides during agricultural activities at northeastern portion of the subject site.

APEC 2: Presence a soil stockpile at northeastern portion of the subject site.

The findings of the field investigation and analytical results of the Phase Two ESA summarized below:

- The field investigation for this Phase Two ESA consisted of advancing ten (10) boreholes (designated as BH101 to BH106, BH203, BH204, BH205 and BH207) to a maximum depth of 3.0 meters below grade surface (mbgs) and carrying out one (1) hand dug test pit (designated as TP1) to the depth of 0.3 mbgs for sampling.
- The subsoil conditions at the borehole locations indicated that beneath the topsoil, the subject site is underlain by silty clay/silty clay till deposits at various depths and locations.
- The soil samples were examined for visual and olfactory evidence of potential contamination. No evidence of potential contamination was documented in any of the retrieved soil samples.
- Headspace vapour screening was conducted for all retrieved soil samples using a combustible gas detector (RKI Eagle) in methane elimination mode, calibrated with hexane and having a minimum detection level of 2 parts per million by volume (ppmv). Nondetectable to 30 ppm soil vapour readings were recorded for the collected soil

samples.

- Based on the soil vapour measurements and visual and/or olfactory observations, representative soil samples were selected from each sampling location for chemical analyses Organochlorine Pesticides (OCs), Metals, Arsenic (As), Antimony (Sb), Selenium (Se), Mercury (Hg), Chromium Hexavalent (Cr (VI)), Cyanides (CN^-), Boron-Hot Water Soluble (B-HWS), Electrical Conductivity (EC) and pH parameters.
- As part of the quality assurance/quality control (QA/QC) program for the investigation, QC sample in the form of field duplicate sample was analysed. Field duplicate sample was collected in the field for the analysis of OCs and Metals in soil.
- The analytical test results were reviewed using the Table 8, Generic Site Condition Standards for Use within 30 m of a Water Body in a Potable Groundwater Condition for Residential/ Parkland/ Institutional/ Industrial/ Commercial/ Community property use (Table 8 Standards), as published in the "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (EPA), dated April 15, 2011.
- The results of the analysis of the duplicate sample is in general similar to the results for the original sample. The RPDs could not be calculated between the original and duplicate samples in the situation where the original and/or duplicate samples were below the reported laboratory detection limit.
- The overall QA/QC result is considered reliable.
- A review of the analytical test results of soil samples indicated that the tested parameters at the test locations met the Table 8 Standards. Consequently, there are no contaminants identified at the subject site at a concentration above the applicable site condition standards (Table 8 Standards) during the Phase Two ESA

8.0 REFERENCES

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

MECP. "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act", dated March 9, 2004, amended as of July 1, 2011, in accordance with O. Reg. 511/09 and O. Reg. 269/11.

MECP. "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (EPA), April 15, 2011.

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

SOIL ENGINEERS LTD.

Madan K. Suwal, PhD, EIT, EPt.

Simon Xian, P.Eng., QP$_{ESA}$

Arshad Shaikh, M.Sc., P.Eng., QP$_{ESA}$

MKS/SX/AS: mks

Soil Engineers Ltd.
CONSULTING ENGINEERS
GEOTECHNICAL • ENVIRONMENTAL • HYDROGEOLOGICAL • BUILDING SCIENCE
90 WEST BEAVER CREEK ROAD, SUITE 100, RICHMOND HILL, ONTARIO L4B 1E7 · TEL: (416) 754-8515 · FAX: (905) 881-8335

BARRIE	MISSISSAUGA	OSHAWA	NEWMARKET	MUSKOKA	HAMILTON
TEL: (705) 721-7863	TEL: (905) 542-7605	TEL: (905) 440-2040	TEL: (905) 853-0647	TEL: (705) 721-7863	TEL: (905) 777-7956
FAX: (705) 721-7864	FAX: (905) 542-2769	FAX: (905) 725-1315	FAX: (905) 881-8335	FAX: (705) 721-7864	FAX: (905) 542-2769

TABLES

Reference No. 1810-E083-2

Soil Engineers Ltd.

SOIL CHEMICAL ANALYSIS - Inorganics Parameters

Project No. 1810-E083-1

Sample ID	RDL*	BH101/2	BH103/3	BH105/4A	DUP S2	TP1	BH203/1A	BH204/1A	BH205/1A	BH207/1A	BH207/3	Ontario Regulation 153/04 Table 8 Standard**
Sample Date		25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	26-Feb-2019	12-Mar-2025	12-Mar-2025	12-Mar-2025	12-Mar-2025	12-Mar-2025	
Laboratory ID		JCB312	JCB315	JCB318	JCB322	JCB320	AOWY62	AOWY63	AOWY64	AOWY66	AOWY72	
Bore Hole/TP No.		BH101	BH103	BH105	BH105	TP1	BH203	BH204	BH205	BH207	BH207	
Depth (mbgs)		0.3 - 0.6	0.6 - 1.1	1.1 - 1.5	1.1 - 1.5	0.0 - 0.3	0.0 - 0.3	0.0 - 0.3	0.0 - 0.35	0.0 - 0.3	1.5 - 1.8	
Antimony	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-	1.3
Arsenic	1	4	3.1	6	6.3	3.7	3	3.4	3.1	2.9	-	18
Barium	0.5	38	68	69	72	59	47	52	41	56	-	220
Beryllium	0.2	0.53	0.53	0.85	0.92	0.64	0.52	0.62	0.49	0.56	-	2.5
Boron (Hot Water Soluble)	0.05	<0.050	0.23	0.075	-	0.64	0.088	0.13	0.067	0.15	-	1.5
Cadmium	0.1	<0.10	0.11	<0.10	<0.10	0.24	0.11	0.14	<0.10	0.15	-	1.2
Chromium	1	15	16	24	25	19	15	17	14	17	-	70
Chromium VI	0.2	<0.2	<0.2	<0.2	-	<0.2	<0.18	<0.18	<0.18	<0.18	-	0.66
Cobalt	0.1	8.7	8.3	18	18	8.5	7.3	7.5	6.8	6.7	-	22
Copper	0.5	23	17	43	47	17	15	15	18	16	-	92
Lead	1	6.8	7.5	12	11	15	8.5	12	8.2	11	-	120
Mercury	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	-	0.27
Molybdenum	0.5	<0.50	<0.50	<0.50	<0.50	0.54	<0.50	<0.50	<0.50	<0.50	-	2
Nickel	0.5	18	18	33	35	17	15	16	15	16	-	82
Selenium	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	-	1.5
Silver	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	-	0.5
Thallium	0.05	0.093	0.1	0.13	0.15	0.12	0.11	0.11	0.1	0.11	-	1
Vanadium	5	24	25	32	34	28	28	27	22	23	-	86
Zinc	5	43	49	72	74	58	49	51	40	57	-	290
pH (pH Units)		7.69	7.89	7.76	-	7.29	7.58	7.59	7.67	7.55	7.46	-
Conductivity (ms/cm)	0.002	0.17	0.28	0.18	-	0.25	-	-	-	-	-	0.7
Sodium Adsorption Ratio		0.26	0.41	0.25	-	0.2	-	-	-	-	-	5
Cyanide, Free	0.01	<0.01	<0.01	<0.01	-	0.02	<0.01	-	-	-	-	0.051
Boron (Total)	5	6.8	7.8	10	12	5.8	<5.0	<5.0	<5.0	<5.0	-	36
Uranium	0.05	0.45	0.6	0.67	0.68	0.63	0.51	0.46	0.49	0.45	-	2.5

Analysis by Bureau Veritas, all results in ppm (µg/g) unless otherwise stated

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

** Standards shown are for Generic Site Condition Standards in a Potable Ground Water Condition within 30m of Water Body for Residential/Parkland/Institutional/Industrial/Commercial/Community property use for

Soil Engineers Ltd.

SOIL CHEMICAL ANALYSIS - Organochlorine Pesticides (OCs) Parameters

Project No. 1810-E083-1

Sample ID	RDL*	BH101/1	BH102/1	BH103/1	BH104/1	BH105/1	DUP S1	BH106/1	BH203/1A	DUPS201	BH205/1A	Ontario Regulation 153/04 Table 8 Standard**
Sample Date		25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	12-Mar-2025	12-Mar-2025	12-Mar-2025	
Laboratory ID		JCB311	JCB313	JCB314	JCB316	JCB317	JCB321	JCB319	AOWY62	AOWY69	AOWY64	
Bore Hole No.		BH101	BH102	BH103	BH104	BH105	BH105	BH106	BH203	BH203	BH205	
Depth (mbgs)		0.0 - 0.3	0.0 - 0.3	0.0 - 0.35	0.0 - 0.4	0.0 - 0.35	0.0 - 0.35	0.0 - 0.4	0.0 - 0.3	0.0 - 0.3	0.0 - 0.35	
Aldrin	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.05
Chlordane (alpha)	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	-
Chlordane (gamma)	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	-
Chlordane (total)	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.05
o,p DDD	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	-
p,p-DDD	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	-
DDD (total)	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.05
o,p DDE	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	-
p,p-DDE	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	-
DDE (total)	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.05
op-DDT	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	-
pp-DDT	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	-
DDT (total)	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	1.4
Dieldrin	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.05
Endosulphan I	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	-
Endosulphan II	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	-
Total Endosulphan	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.04
Endrin	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.04
Heptachlor	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.05
Heptachlor Epoxide	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.05
Lindane	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.01
Methoxychlor	0.005	<0.0050	<0.0075	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.05
Hexachlorobenzene	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.02
Hexachlorobutadiene	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.01
Hexachloroethane	0.002	<0.0020	<0.0030	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.01

Analysis by Bureau Veritas, all results in ppm (µg/g) unless otherwise stated

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

** Standards shown are for Generic Site Condition Standards in a Potable Ground Water Condition within 30m of Water Body for Residential/Parkland/Institutional/Industrial/Commercial/Community property use for coarse grain soil

Project No. 1810-E083-1

Table II – Maximum Concentration (Soil)

Summary of Metals and Inorganics

Parameter	Unit	Maximum Concentration	Sample ID	Sampling Depth (m)
Antimony	ug/g	<0.2	-	-
Arsenic	ug/g	6.3	DUP S2	1.1 - 1.5
Barium	ug/g	72	DUP S2	1.1 - 1.5
Beryllium	ug/g	0.92	DUP S2	1.1 - 1.5
Boron (Hot Water Soluble)	ug/g	0.64	TP1	0.0 - 0.3
Cadmium	ug/g	0.24	TP1	0.0 - 0.3
Chromium	ug/g	25	DUP S2	1.1 - 1.5
Chromium VI	ug/g	<0.2	-	-
Cobalt	ug/g	18	BH105/4A	1.1 - 1.5
Copper	ug/g	47	DUP S2	1.1 - 1.5
Lead	ug/g	15	TP1	0.0 - 0.3
Mercury	ug/g	<0.05	-	-
Molybdenum	ug/g	0.54	TP1	0.0 - 0.3
Nickel	ug/g	35	DUP S2	1.1 - 1.5
Selenium	ug/g	<0.5	-	-
Silver	ug/g	<0.2	-	-
Thallium	ug/g	0.15	DUP S2	1.1 - 1.5
Vanadium	ug/g	34	DUP S2	1.1 - 1.5
Zinc	ug/g	74	DUP S2	1.1 - 1.5
pH (pH Units)	-	7.89	BH103/3	0.6 - 1.1
Conductivity (ms/cm)	ms/cm	0.28	BH103/3	0.6 - 1.1
Sodium Adsorption Ratio	-	0.41	BH103/3	0.6 - 1.1
Cyanide, Free	ug/g	0.02	TP1	0.0 - 0.3
Boron (Total)	ug/g	12	DUP S2	1.1 - 1.5
Uranium	ug/g	0.68	DUP S2	1.1 - 1.5

Project No. 1810-E083-1

Table II – Maximum Concentration (Soil)

Summary of OCs

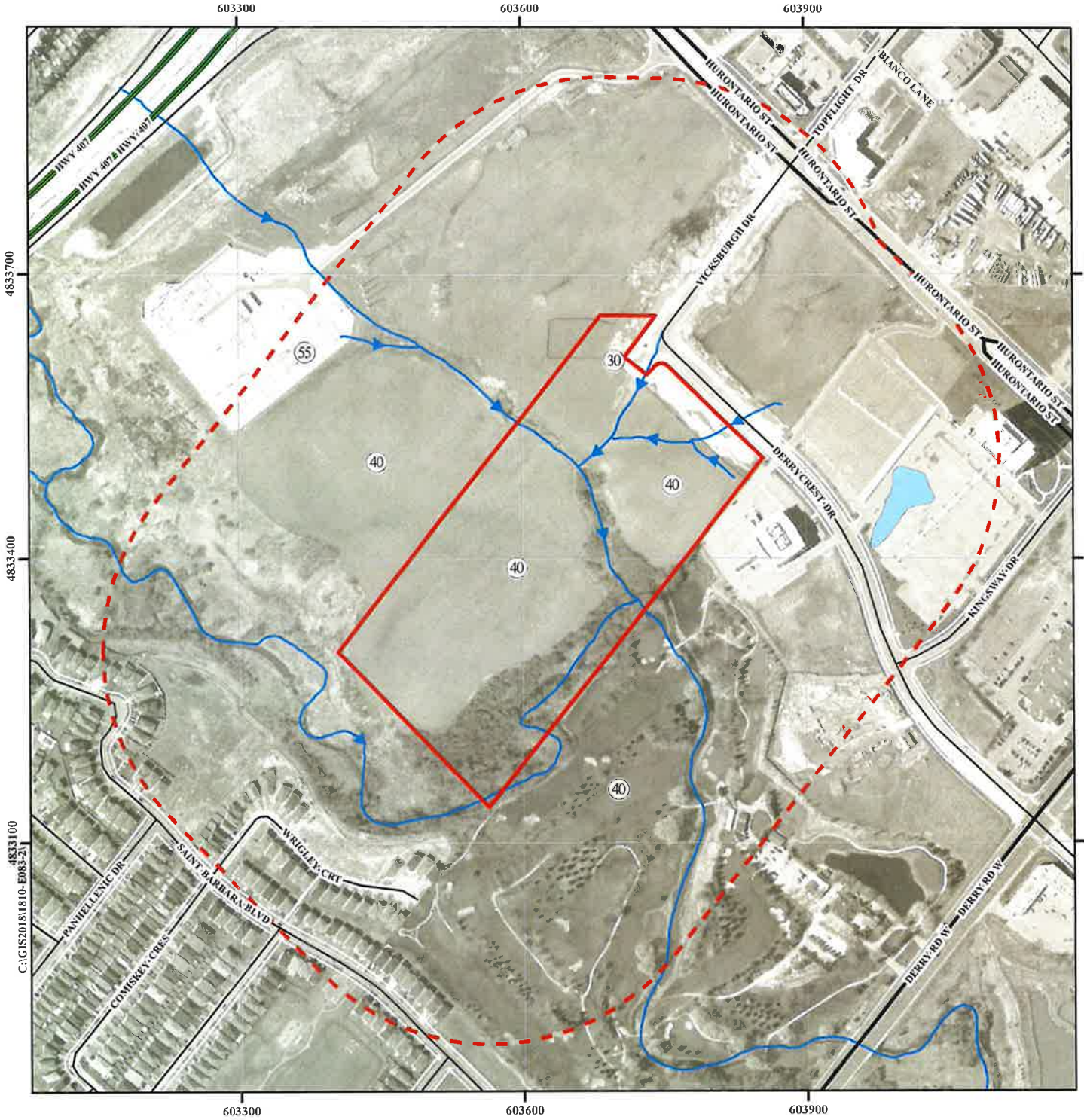
Parameter	Unit	Maximum Concentration	Sample ID	Sampling Depth (m)
Aldrin	ug/g	<0.002	-	-
Chlordane (alpha)	ug/g	<0.002	-	-
Chlordane (gamma)	ug/g	<0.002	-	-
Chlordane (total)	ug/g	<0.002	-	-
o,p DDD	ug/g	<0.002	-	-
p,p-DDD	ug/g	<0.002	-	-
DDD (total)	ug/g	<0.002	-	-
o,p DDE	ug/g	<0.002	-	-
p,p-DDE	ug/g	<0.002	-	-
DDE (total)	ug/g	<0.002	-	-
op-DDT	ug/g	<0.002	-	-
pp-DDT	ug/g	<0.002	-	-
DDT (total)	ug/g	<0.002	-	-
Dieldrin	ug/g	<0.002	-	-
Endosulphan I	ug/g	<0.002	-	-
Endosulphan II	ug/g	<0.002	-	-
Total Endosulphan	ug/g	<0.002	-	-
Endrin	ug/g	<0.002	-	-
Heptachlor	ug/g	<0.002	-	-
Heptachlor Epoxide	ug/g	<0.002	-	-
Lindane	ug/g	<0.002	-	-
Methoxychlor	ug/g	<0.005	-	-
Hexachlorobenzene	ug/g	<0.002	-	-
Hexachlorobutadiene	ug/g	<0.002	-	-
Hexachloroethane	ug/g	<0.002	-	-

Soil Engineers Ltd.
CONSULTING ENGINEERS
GEOTECHNICAL • ENVIRONMENTAL • HYDROGEOLOGICAL • BUILDING SCIENCE
90 WEST BEAVER CREEK ROAD, SUITE 100, RICHMOND HILL, ONTARIO L4B 1E7 · TEL: (416) 754-8515 · FAX: (905) 881-8335

BARRIE	MISSISSAUGA	OSHAWA	NEWMARKET	MUSKOKA	HAMILTON
TEL: (705) 721-7863	TEL: (905) 542-7605	TEL: (905) 440-2040	TEL: (905) 853-0647	TEL: (705) 721-7863	TEL: (905) 777-7956
FAX: (705) 721-7864	FAX: (905) 542-2769	FAX: (905) 725-1315	FAX: (905) 881-8335	FAX: (705) 721-7864	FAX: (905) 542-2769

DRAWINGS

Reference No. 1810-E083-2



N

Subject Site

Phase One Study Area

Waterbody

Expressway/Freeway

Major Road

Local Road

Potentially Contaminating Activities (PCAs)

(30) Importation of Fill Material of Unknown Quality

(40) Pesticides Manufacturing, Processing, Bulk Storage, and Applications

(55) Transformer Manufacturing, Processing, and Use

Soil Engineers Ltd.

Title: Site Location Plan

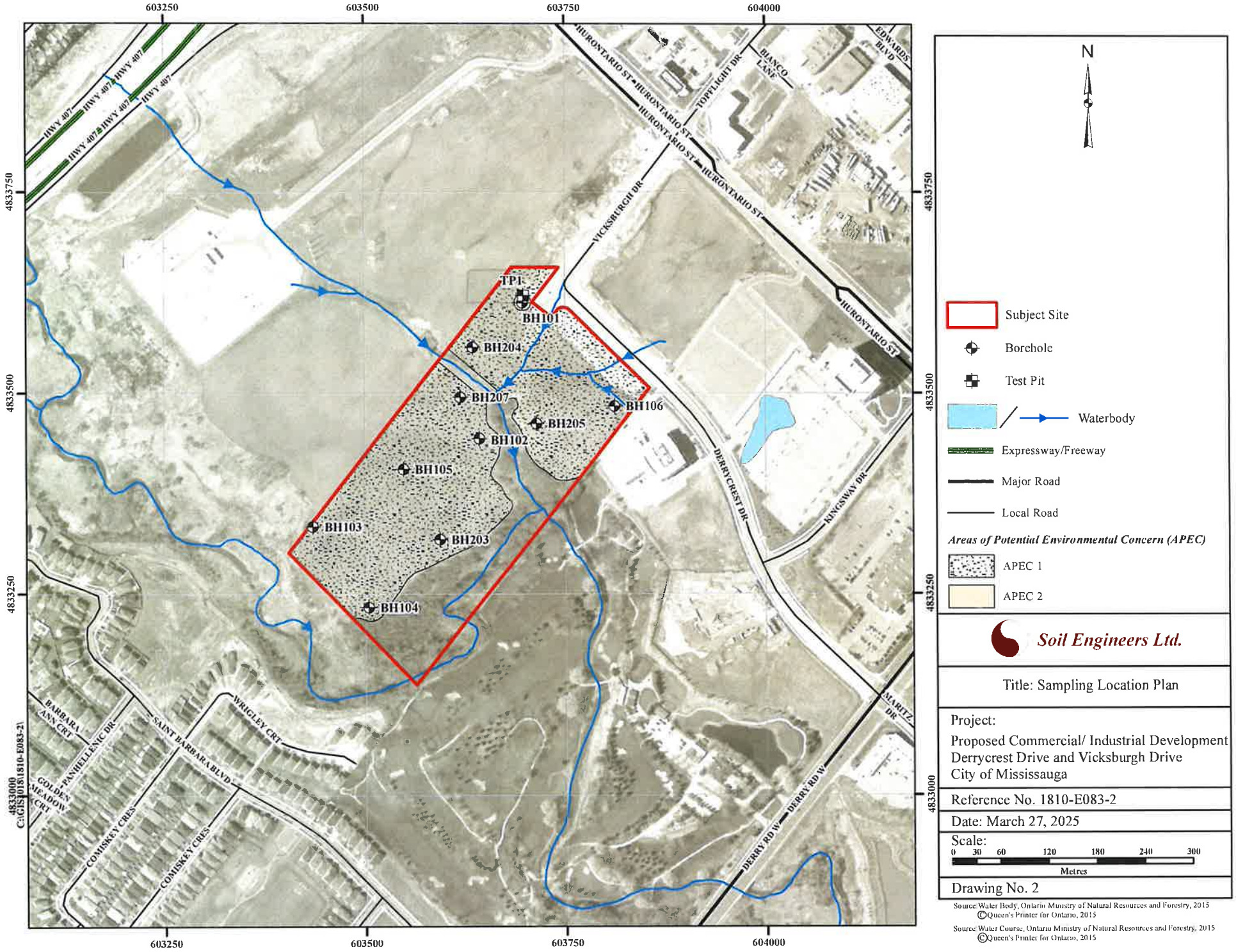
Project:
Proposed Commercial/ Industrial Development
Derrycrest Drive and Vicksburgh Drive
City of Mississauga

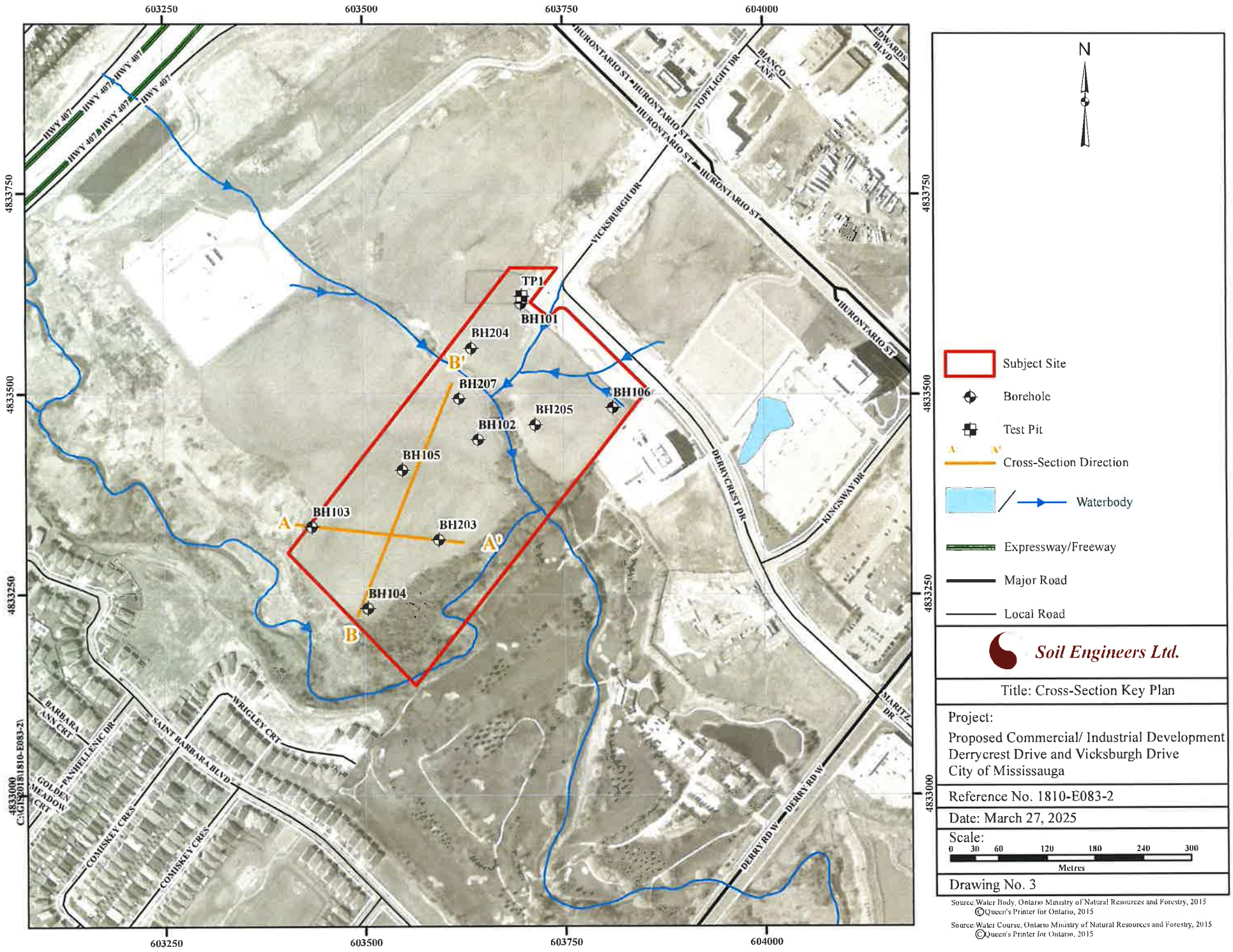
Reference No. 1810-E083-2

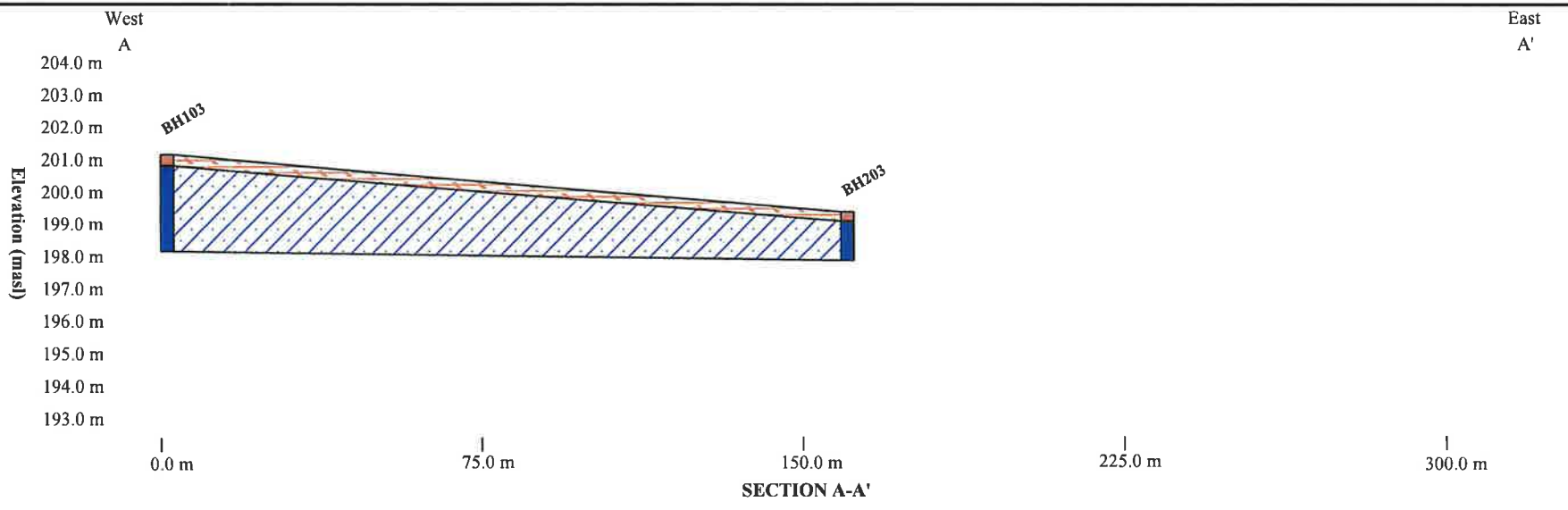
Date: March 27, 2025

Scale:
0 30 60 120 180 240 300
Metres

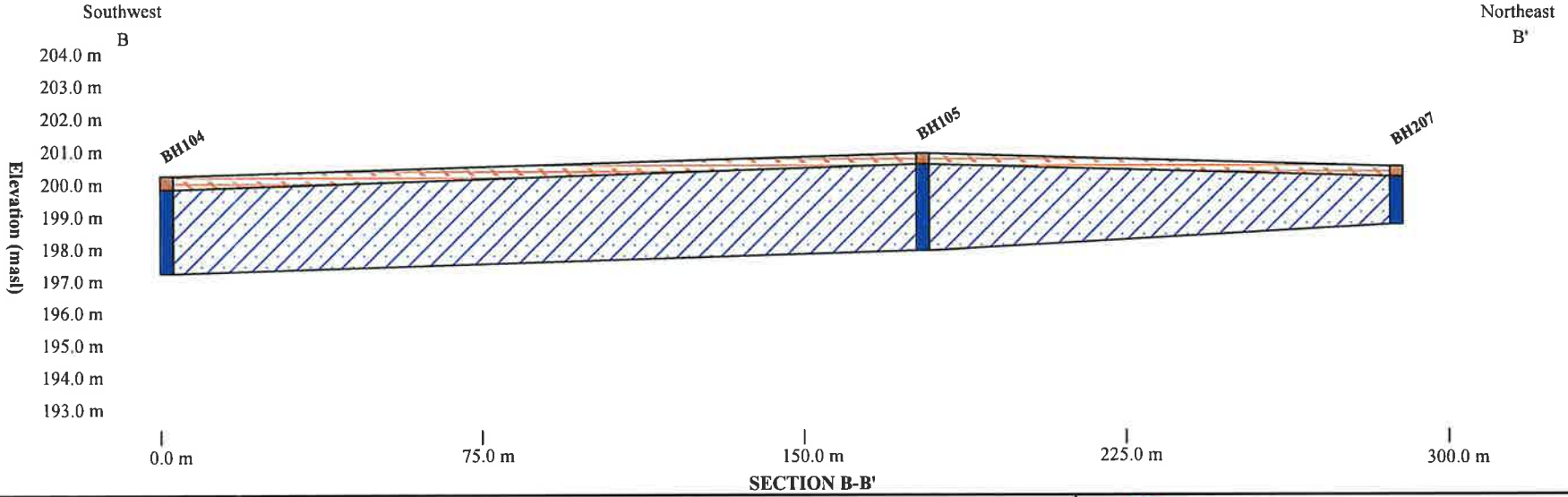
Drawing No. 1


603250
603500
603750
604000
4833750
4833500
4833250
4833000
HWY 407
HURONTARIO ST
TOPFLIGHT DR
BIANCO LANE
EDWARDS BLVD
VICKSBURGH DR
DERRYCREST DR
KINGSWAY DR
MARITZ DR
DERRY RD W
WRIGLEY CRT
SAINT BARBARA BLVD
PANHELLENIC DR
BARBARA ANN CRT
GOLDEN MEADOW CRT
COMISKEY CRES
TP1
BH101
BH204
BH207
BH106
BH205
BH102
BH105
BH103
BH203
BH104
N
Subject Site
Borehole
Test Pit
Waterbody
Expressway/Freeway
Major Road
Local Road
Areas of Potential Environmental Concern (APEC)
APEC 1
APEC 2
Soil Engineers Ltd.
Title: Sampling Location Plan
Project:
Proposed Commercial/ Industrial Development
Derrycrest Drive and Vicksburgh Drive
City of Mississauga
Reference No. 1810-E083-2
Date: March 27, 2025
Scale:
0 30 60 120 180 240 300
Metres
Drawing No. 2
Source: Water Body, Ontario Ministry of Natural Resources and Forestry, 2015
©Queen's Printer for Ontario, 2015
Source: Water Course, Ontario Ministry of Natural Resources and Forestry, 2015
©Queen's Printer for Ontario, 2015


603250
603500
603750
604000
4833750
4833500
4833250
4833000
HWY 407
HURONTARIO ST
TOPFLIGHT DR
BIANCO LANE
EDWARDS BLVD
VICKSBURGH DR
DERRYCREST DR
KINGSWAY DR
MARITZ DR
DERRY RD W
WRIGLEY CRT
SAINT BARBARA BLVD
BARBARA ANN CRT
PANHELLENIC DR
GOLDEN MEADOW CRT
COMISKEY CRES
TP1
BH101
BH204
BH207
BH106
BH205
BH102
BH105
BH103
BH203
BH104
A
A'
B
B'
N
Subject Site
Borehole
Test Pit
Cross-Section Direction
Waterbody
Expressway/Freeway
Major Road
Local Road
Soil Engineers Ltd.
Title: Cross-Section Key Plan
Project:
Proposed Commercial/ Industrial Development
Derrycrest Drive and Vicksburgh Drive
City of Mississauga
Reference No. 1810-E083-2
Date: March 27, 2025
Scale:
0 30 60 120 180 240 300
Metres
Drawing No. 3
Source Water Body, Ontario Ministry of Natural Resources and Forestry, 2015
©Queen's Printer for Ontario, 2015
Source Water Course, Ontario Ministry of Natural Resources and Forestry, 2015
©Queen's Printer for Ontario, 2015



SECTION A-A'



SECTION B-B'

Soil Engineers Ltd.
CONSULTING SOIL, FOUNDATION & ENVIRONMENTAL ENGINEERS

Title:	Geological Cross-Sections A-A' and B-B'
Project:	Proposed Commercial/Industrial Development Derrycrest Drive and Vicksburgh Drive City of Mississauga

Reference No:	Date:	Scale: V	Scale: H	Drawing No.
1810-E083-2	March 31, 2025	1:200	1:1500	4

Soil Engineers Ltd.
CONSULTING ENGINEERS
GEOTECHNICAL • ENVIRONMENTAL • HYDROGEOLOGICAL • BUILDING SCIENCE
90 WEST BEAVER CREEK ROAD, SUITE 100, RICHMOND HILL, ONTARIO L4B 1E7 · TEL: (416) 754-8515 · FAX: (905) 881-8335

BARRIE	MISSISSAUGA	OSHAWA	NEWMARKET	MUSKOKA	HAMILTON
TEL: (705) 721-7863	TEL: (905) 542-7605	TEL: (905) 440-2040	TEL: (905) 853-0647	TEL: (705) 721-7863	TEL: (905) 777-7956
FAX: (705) 721-7864	FAX: (905) 542-2769	FAX: (905) 725-1315	FAX: (905) 881-8335	FAX: (705) 721-7864	FAX: (905) 542-2769

APPENDIX 'A'

SAMPLING AND ANALYSIS PLAN

Reference No. 1810-E083-2

This Sampling and Analysis Plan is prepared for the Phase Two Environmental Site Assessment (Phase Two ESA), as defined by Ontario Regulation (O. Reg.) 153/04, as amended under Environmental Protection Act (EPA). The Phase Two ESA was conducted for a property located at southwest of Derrycrest Drive and Vicksburgh Drive, in the City of Mississauga (hereinafter referred to as the 'subject site'). A legal description of the property is part of Lot 11 and 12, in Concession 1 West of Hurontario Street (WHS). The Sampling and Analysis Plan is based on the findings of SEL Phase One Environmental Site Assessment (Phase One ESA), Phase One Environmental Site Assessment Update (Phase One ESA Update) and Phase Two ESA.

1) OBJECTIVE

The objective of the Phase Two ESA is to assess the soil quality at the subject site, as related to the following Area of Potential Environmental Concern (APEC) at the subject site:

APEC 1A: Potential use of pesticides during agricultural activities at majority of middle and western portion of the subject site.

APEC 1B: Potential use of pesticides during agricultural activities at northeastern portion of the subject site.

APEC 2: Presence a soil stockpile at northeastern portion of the subject site.

2) SCOPE OF WORK

The scope of work for the Phase Two ESA includes:

- Locate the underground and overhead utilities.
- Advance ten (10) boreholes (designated as BH101 to BH106, BH203, BH204, BH205 and BH207) to a maximum depth of 3.0 meters below grade surface (mbgs) for sampling and soil profiling and carryout one (1) hand-dug test pit (TP1) soil sampling.
- Collect representative soil samples from the sampling locations.

- Undertake field examination of the retrieved soil samples for visual and olfactory evidence of potential contamination.
- Undertake soil vapour measurements for the retrieved soil samples using a combustible gas detector (RKI Eagle) in methane elimination mode.
- Carry out an analytical testing program on selected soil samples including quality assurance and quality control (QA/QC) samples for one or more of the following parameters: Organochlorine Pesticides (OCs), Metals, Arsenic (As), Antimony (Sb), Selenium (Se), Mercury (Hg), Chromium Hexavalent (Cr (VI)), Cyanides (CN^-), Boron-Hot Water Soluble (B-HWS), Electric Conductivity (EC), Sodium Adsorption Ratio (SAR) and pH parameters.
- Review analytical testing results of submitted soil samples using applicable Site Condition Standards.
- Prepare a Phase Two ESA report presenting the findings of the investigation.

3) RATIONALE FOR BOREHOLE LOCATIONS

The rationale for the selection of the borehole and test pit locations are presented in the table below:

Areas of Potential Environmental Concerns (APECs)	Borehole /Test pit ID.
APEC 1A: Potential use of pesticides during agricultural activities at majority of middle and western portion of the subject site.	BH102, BH103, BH104, BH105, BH203, BH207
APEC 1B: Potential use of pesticides during agricultural activities at northeastern portion of the subject site.	BH101, BH106, BH204, BH205, TP1
APEC 2: Presence a soil stockpile at northeastern portion of the subject site.	BH101, TP1

Location of proposed sampling locations for the Phase Two ESA is shown in Drawing No. 2.

4) SOIL SAMPLES (INCLUDING QA/QC SAMPLES) ANALYTICAL SCHEDULE

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

	OCs	M &/or I
Soil Samples (Boreholes/ Testpit) (QA/QC Samples)		
TP1	-	1
BH101	1	1
BH102	1	-
BH103	1	1
BH104	1	-
BH105	1	1
BH106	1	-
BH203	1	1
BH204	-	1
BH205	1	1
BH207	-	2
DUPS1	1	-
DUPS2	-	1
DUPS201	1	-

It should be noted that based on the analytical results of the submitted soil samples, if further activities of Phase Two ESA such as re-sampling and testing is required, additional samples from the area of interest will be submitted for analysis of contaminants of concern.

5) SOIL SAMPLING PROCEDURES

Soil Engineers Ltd.'s (SEL) Standard Operation Procedures (SOPs) will be followed throughout the field investigation (sampling, decontamination of equipment, observation and documentation) including the field QA/QC program. SEL SOPs are presented in Section 7 of this sampling and analysis plan.

6) DATA QUALITY OBJECTIVES

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

- SEL SOPs, as presented in Section 7.
- The "Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario", May 1996, revised December 1996, as amended by O. Reg. 511/09.

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

7) STANDARD OPERATING PROCEDURES (SOPs)

7.1) Borehole Drilling

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

7.1.1) Underground Utilities

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

7.1.2) Drilling Methods

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

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

Flight-Auger Drilling

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

Hand Dug Test Pit

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

7.1.3) Occupational Health and Safety

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

7.1.4) Drilling Spoils

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

7.1.5) Borehole Abandonment

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

- Bentonite is thoroughly mixed into the grout within the specified percentage range. The tremie grout is usually placed into the hole; however, for selected boreholes (e.g., shallow borings well above the water table) at certain sites, the grout may be allowed to free fall, taking care to ensure the grout does not bridge and form gaps or voids in the grout column.
- The volume of the borehole is calculated and compared to the grout volume used during grouting to aid in verifying that bridging did not occur.
- When using a tremie to place grout in the borehole, the bottom of the tremie is submerged into the grout column and withdrawn slowly as the hole fills with grout. If allowing the grout to free fall (and not using a tremie), the grout is poured slowly into the boring. The rise of the grout column is visually monitored or sounded with a weighted tape.
- If the method used to drill the boring utilized a drive casing, the casing is slowly extracted during grouting such that the bottom of the casing does not come above the top of the grout column.
- During the grouting process, no contaminating material (oil, grease, or fuels from gloves, pumps, hoses, et. al) is permitted to enter the grout mix and personnel wear personal protective equipment as specified in the Project Health and Safety Plan.
- Following grouting, barriers are placed over grouted boreholes as the grout is likely to settle in time, creating a physical hazard. Grouted boreholes typically require at least a second visit to 'top off' the hole.
- The surface hole condition should match the pre-drilling condition (asphalt, concrete, or smoothed flush with native surface), unless otherwise specified in the project work plans.

7.1.6) Subsurface Obstruction

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

7.2) Soil Sampling

7.2.1) Introduction

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

Drilling Rig Decontamination

Geoprobe

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

CME 55

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

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

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

7.2.2) Sample Logging and Field Screening

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

7.2.3) Field Screening and Calibration Procedures

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

The organic vapour readings are measured using a portable RKI Eagle gas detector, TYPE 101 (Serial Number: E091011) set to include all gases, and having a minimum detection of 2 ppm. Prior to measurement, the detector is calibrated using a Hexane 40% LEL gas. The allowable range of calibration is 38% to 42%.

7.2.4) Soil Sampling

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

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

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

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

Soil Engineers Ltd.
CONSULTING ENGINEERS
GEOTECHNICAL • ENVIRONMENTAL • HYDROGEOLOGICAL • BUILDING SCIENCE
90 WEST BEAVER CREEK ROAD, SUITE 100, RICHMOND HILL, ONTARIO L4B 1E7 · TEL: (416) 754-8515 · FAX: (905) 881-8335

BARRIE	MISSISSAUGA	OSHAWA	NEWMARKET	MUSKOKA	HAMILTON
TEL: (705) 721-7863	TEL: (905) 542-7605	TEL: (905) 440-2040	TEL: (905) 853-0647	TEL: (705) 721-7863	TEL: (905) 777-7956
FAX: (705) 721-7864	FAX: (905) 542-2769	FAX: (905) 725-1315	FAX: (905) 881-8335	FAX: (705) 721-7864	FAX: (905) 542-2769

APPENDIX 'B'

BOREHOLE LOGS

Reference No. 1810-E083-2

JOB NO.: 1810-E083-2

LOG OF BOREHOLE NO.: 101

FIGURE NO.: 1

PROJECT DESCRIPTION: Proposed Commerical/Industrial Development

METHOD OF BORING: Geoprobe

PROJECT LOCATION: Derrycrest Drive and Vicksburgh Drive
City of Mississauga

DRILLING DATE: February 25, 2019

El. (masl) Depth (mbgs)	SOIL DESCRIPTION	SAMPLES Number	Type	Gas Reading	Depth Scale (mbgs)	● Gas Reading (ppm) 20 60 100 140 180	REMARKS	WATER LEVEL
201.02	Ground Surface							
0.0	**30 cm TOPSOIL**	1	TO	5	0	●	BH101/1: OC	
0.3	**SILTY CLAY, Till** some organics a trace of gravel	2	TO	5		●	BH101/2: Metals and Inorganics	
		3	TO	25	1	●		
	moist some gravel	4	TO	25		●		
	brown reddish-brown	5	TO	25	2	●		
		6	TO	20		●		
198.0 3.0	END OF BOREHOLE				3			
					4			
					5			
					6			

Soil Engineers Ltd.

JOB NO.: 1810-E083-2

LOG OF BOREHOLE NO.: 102

FIGURE NO.: 2

PROJECT DESCRIPTION: Proposed Commerical/Industrial Development

METHOD OF BORING: Geoprobe

PROJECT LOCATION: Derrycrest Drive and Vicksburgh Drive
City of Mississauga

DRILLING DATE: February 25, 2019

El. (masl) / Depth (mbgs)	SOIL DESCRIPTION	SAMPLES Number	Type	Gas Reading	Depth Scale (mbgs)	● Gas Reading (ppm) 20 60 100 140 180	REMARKS	WATER LEVEL
200.81	Ground Surface							
0.0	**30 cm TOPSOIL**	1	TO	5	0		BH102/1: OC	
0.3	Brown **SILTY CLAY, Till** some gravel _some organics_	2	TO	5				
		3	TO	15	1			
		4	TO	10				
		5	TO	5	2			
		6	TO	5				
197.8					3			
3.0	END OF BOREHOLE							
					4			
					5			
					6			

Soil Engineers Ltd.

JOB NO.: 1810-E083-2

LOG OF BOREHOLE NO.: 103

FIGURE NO.: 3

PROJECT DESCRIPTION: Proposed Commerical/Industrial Development

METHOD OF BORING: Geoprobe

PROJECT LOCATION: Derrycrest Drive and Vicksburgh Drive
City of Mississauga

DRILLING DATE: February 25, 2019

El. (masl) / Depth (mbgs)	SOIL DESCRIPTION	SAMPLES Number	Type	Gas Reading	Depth Scale (mbgs)	Gas Reading (ppm) 20 60 100 140 180	REMARKS	WATER LEVEL
201.23	Ground Surface							
0.0	**35 cm TOPSOIL**	1	TO	30	0		BH103/1: OC	
0.3	**SILTY CLAY, Till** some gravel some organics	2	TO	20				
		3	TO	15	1		BH103/3: Metals and Inorganics	
		4	TO	20				
		5	TO	20	2			
		6	TO	20				
198.2					3			
3.0	END OF BOREHOLE							
					4			
					5			
					6			

Soil Engineers Ltd.

JOB NO.: 1810-E083-2

LOG OF BOREHOLE NO.: 104

FIGURE NO.: 4

PROJECT DESCRIPTION: Proposed Commerical/Industrial Development

METHOD OF BORING: Geoprobe

PROJECT LOCATION: Derrycrest Drive and Vicksburgh Drive
City of Mississauga

DRILLING DATE: February 25, 2019

El. (masl) / Depth (mbgs)	SOIL DESCRIPTION	SAMPLES Number	Type	Gas Reading	Depth Scale (mbgs)	Gas Reading (ppm) 20 60 100 140 180	REMARKS	WATER LEVEL
200.31	Ground Surface							
0.0	**40 cm TOPSOIL**	1	TO	25	0		BH104/1: OC	
	some organics							
0.4	**SILTY CLAY, Till** a trace of sand and gravel	2	TO	15				
		3	TO	10	1			
	brown reddish-brown	4	TO	25	2			
		5	TO	20				
197.3					3			
3.0	END OF BOREHOLE							
					4			
					5			
					6			

Soil Engineers Ltd.

JOB NO.: 1810-E083-2

LOG OF BOREHOLE NO.: 105

FIGURE NO.: 5

PROJECT DESCRIPTION: Proposed Commerical/Industrial Development

METHOD OF BORING: Geoprobe

PROJECT LOCATION: Derrycrest Drive and Vicksburgh Drive
City of Mississauga

DRILLING DATE: February 25, 2019

El. (masl) / Depth (mbgs)	SOIL DESCRIPTION	SAMPLES Number	Type	Gas Reading	Depth Scale (mbgs)	● Gas Reading (ppm) 20 60 100 140 180	REMARKS	WATER LEVEL
201.03	Ground Surface							
0.0	**35 cm TOPSOIL**	1	TO	30	0		BH105/1 and Dup-S1: OC	
0.3	Brown some organics **SILTY CLAY, Till** a trace to some sand and gravel	2	TO	15				
		3	TO	15	1			
		4A	TO	15			BH105/4A and Dup-S2: Metals and Inorganics	
		4B	TO	10				
		5	TO	30	2			
		6	TO	20				
198.0 3.0	END OF BOREHOLE				3			
					4			
					5			
					6			

Soil Engineers Ltd.

JOB NO.: 1810-E083-2

LOG OF BOREHOLE NO.: 106

FIGURE NO.: 6

PROJECT DESCRIPTION: Proposed Commerical/Industrial Development

METHOD OF BORING: Geoprobe

PROJECT LOCATION: Derrycrest Drive and Vicksburgh Drive
City of Mississauga

DRILLING DATE: February 25, 2019

El. (masl) / Depth (mbgs)	SOIL DESCRIPTION	SAMPLES Number	Type	Gas Reading	Depth Scale (mbgs)	● Gas Reading (ppm) 20 60 100 140 180	REMARKS	WATER LEVEL
202.09	Ground Surface							
0.0	**40 cm TOPSOIL**	1	TO	25	0	●	BH106/1: OC	
0.4	Reddish-brown **SILTY CLAY, Till** some sand	2	TO	25		●		
	brown / reddish-brown	3	TO	25	1	●		
		4	TO	25	2	●		
		5	TO	10		●		
199.0					3			
3.0	END OF BOREHOLE							
					4			
					5			
					6			

Soil Engineers Ltd.

JOB NO.: 1810-E083-2

LOG OF BOREHOLE NO.: 203

FIGURE NO.: 3

PROJECT DESCRIPTION: Proposed Commercial/ Industrial Development

METHOD OF BORING: Pionjar

PROJECT LOCATION: Derrycrest Drive and Vicksburgh Drive
City of Mississauga

DRILLING DATE: March 12, 2025

El. (masl) / Depth (mbgs)	SOIL DESCRIPTION	SAMPLES: Number	SAMPLES: Type	SAMPLES: Combustible Headspace Reading (ppm)	Depth Scale (mbgs)	Combustible Headspace Reading (ppm) (20 60 100 140 180)	REMARKS	WATER LEVEL
199.4	Ground Surface							
0.0	**30 cm TOPSOIL**	1A	DO	10	0	●	BH203/1A: Metals, pH, OCs, DUPS201	
0.3	Brown **SILTY CLAY**	1B	DO	5		●		
		2	DO	10	1	●		
197.9								
1.5	END OF BOREHOLE				2			
					3			
					4			
					5			
					6			
					7			
					8			

Soil Engineers Ltd.

JOB NO.: 1810-E083-2

LOG OF BOREHOLE NO.: 204

FIGURE NO.: 4

PROJECT DESCRIPTION: Proposed Commercial/ Industrial Development

METHOD OF BORING: Pionjar

PROJECT LOCATION: Derrycrest Drive and Vicksburgh Drive
City of Mississauga

DRILLING DATE: March 12, 2025

El. (masl) / Depth (mbgs)	SOIL DESCRIPTION	SAMPLES: Number	SAMPLES: Type	SAMPLES: Combustible Headspace Reading (ppm)	Depth Scale (mbgs)	Combustible Headspace Reading (ppm) (20 60 100 140 180)	REMARKS	WATER LEVEL
200.3 / 0.0	Ground Surface **30 cm TOPSOIL**	1A	DO	5	0		BH204/1A: Metals, pH, OCs	
0.3	Brown **SILTY CLAY**	1B	DO	10				
		2	DO	5	1			
198.8 / 1.5	END OF BOREHOLE				2			
					3			
					4			
					5			
					6			
					7			
					8			

Soil Engineers Ltd.

JOB NO.: 1810-E083-2

LOG OF BOREHOLE NO.: 205

FIGURE NO.: 5

PROJECT DESCRIPTION: Proposed Commercial/ Industrial Development

METHOD OF BORING: Pionjar

PROJECT LOCATION: Derrycrest Drive and Vicksburgh Drive
City of Mississauga

DRILLING DATE: March 12, 2025

El. (masl) / Depth (mbgs)	SOIL DESCRIPTION	SAMPLES Number	Type	Combustible Headspace Reading (ppm)	Depth Scale (mbgs)	Combustible Headspace Reading (ppm) (20 60 100 140 180)	REMARKS	WATER LEVEL
200.0	Ground Surface							
0.0	**35 cm TOPSOIL**	1A	DO	5	0	●	BH205/1A: Metals, pH, OCs	
0.3	Brown **SILTY CLAY**	1B	DO	5		●		
		2	DO	10	1	●		
198.4								
1.5	END OF BOREHOLE				2			
					3			
					4			
					5			
					6			
					7			
					8			

Soil Engineers Ltd.

JOB NO.: 1810-E083-2

LOG OF BOREHOLE NO.: 207

FIGURE NO.: 7

PROJECT DESCRIPTION: Proposed Commercial/ Industrial Development

METHOD OF BORING: Pionjar

PROJECT LOCATION: Derrycrest Drive and Vicksburgh Drive
City of Mississauga

DRILLING DATE: March 12, 2025

El. (masl) / Depth (mbgs)	SOIL DESCRIPTION	SAMPLES Number	SAMPLES Type	SAMPLES Combustible Headspace Reading (ppm)	Depth Scale (mbgs)	Combustible Headspace Reading (ppm) (20 60 100 140 180)	REMARKS	WATER LEVEL
200.6	Ground Surface							
0.0	**30 cm TOPSOIL**	1A	DO	10	0	●	BH207/1A: Metals, pH	
0.3	Brown **SILTY CLAY**	1B	DO	10		●		
		2	DO	5	1	●		
198.8		3	DO	5		●	BH207/3: pH	
1.8	END OF BOREHOLE				2			
					3			
					4			
					5			
					6			
					7			
					8			

Soil Engineers Ltd.

Soil Engineers Ltd.
CONSULTING ENGINEERS
GEOTECHNICAL • ENVIRONMENTAL • HYDROGEOLOGICAL • BUILDING SCIENCE
90 WEST BEAVER CREEK ROAD, SUITE 100, RICHMOND HILL, ONTARIO L4B 1E7 · TEL: (416) 754-8515 · FAX: (905) 881-8335

BARRIE	MISSISSAUGA	OSHAWA	NEWMARKET	MUSKOKA	HAMILTON
TEL: (705) 721-7863	TEL: (905) 542-7605	TEL: (905) 440-2040	TEL: (905) 853-0647	TEL: (705) 721-7863	TEL: (905) 777-7956
FAX: (705) 721-7864	FAX: (905) 542-2769	FAX: (905) 725-1315	FAX: (905) 881-8335	FAX: (705) 721-7864	FAX: (905) 542-2769

APPENDIX 'C'

CERTIFICATE OF ANALYSIS
(SOIL SAMPLES)

Reference No. 1810-E083-2

Maxxam
A Bureau Veritas Group Company

Your Project #: 1810-E083-2
Your C.O.C. #: 701561-02-01

Attention: Reza Moslemi

Soil Engineers Ltd
90 West Beaver Creek Road
Unit 100
Richmond Hill, ON
CANADA L4B 1E7

Report Date: 2019/03/06
Report #: R5618201
Version: 2 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B953628
Received: 2019/02/28, 16:49

Sample Matrix: Soil
Samples Received: 12

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Hot Water Extractable Boron	4	2019/03/04	2019/03/04	CAM SOP-00408	R153 Ana. Prot. 2011
Free (WAD) Cyanide	4	2019/03/04	2019/03/05	CAM SOP-00457	OMOE E3015 m
Conductivity	4	2019/03/05	2019/03/05	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1)	4	2019/03/04	2019/03/04	CAM SOP-00436	EPA 3060/7199 m
Strong Acid Leachable Metals by ICPMS	5	2019/03/04	2019/03/04	CAM SOP-00447	EPA 6020B m
Moisture	11	N/A	2019/03/02	CAM SOP-00445	Carter 2nd ed 51.2 m
OC Pesticides (Selected) & PCB (2)	7	2019/03/04	2019/03/05	CAM SOP-00307	SW846 8081, 8082
OC Pesticides Summed Parameters	7	N/A	2019/03/04	CAM SOP-00307	EPA 8081/8082 m
pH CaCl2 EXTRACT	4	2019/03/04	2019/03/04	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR)	4	N/A	2019/03/06	CAM SOP-00102	EPA 6010C

Remarks:

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam 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.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam 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 Maxxam, unless otherwise agreed in writing. Maxxam 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 Maxxam, results relate to the supplied samples tested.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Soils are reported on a dry weight basis unless otherwise specified.

Maxxam
A Bureau Veritas Group Company

Your Project #: 1810-E083-2
Your C.O.C. #: 701561-02-01

Attention: Reza Moslemi

Soil Engineers Ltd
90 West Beaver Creek Road
Unit 100
Richmond Hill, ON
CANADA L4B 1E7

Report Date: 2019/03/06
Report #: R5618201
Version: 2 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B953628
Received: 2019/02/28, 16:49
(2) Chlordane (Total) = Alpha Chlordane + Gamma Chlordane

Encryption Key

Maxxam
06 Mar 2019 13:53:55

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Antonella Brasil, Senior Project Manager
Email: ABrasil@maxxam.ca
Phone# (905)817-5817

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B953628
Report Date: 2019/03/06

Soil Engineers Ltd
Client Project #: 1810-E083-2
Sampler Initials: OG

O.REG 153 ICPMS METALS (SOIL)

Maxxam ID		JCB322	JCB322		
Sampling Date					
COC Number		701561-02-01	701561-02-01		
	UNITS	DUP S2	DUP S2 Lab-Dup	RDL	QC Batch
Metals					
Acid Extractable Antimony (Sb)	ug/g	<0.20	<0.20	0.20	6000439
Acid Extractable Arsenic (As)	ug/g	6.3	6.2	1.0	6000439
Acid Extractable Barium (Ba)	ug/g	72	70	0.50	6000439
Acid Extractable Beryllium (Be)	ug/g	0.92	0.93	0.20	6000439
Acid Extractable Boron (B)	ug/g	12	12	5.0	6000439
Acid Extractable Cadmium (Cd)	ug/g	<0.10	<0.10	0.10	6000439
Acid Extractable Chromium (Cr)	ug/g	25	25	1.0	6000439
Acid Extractable Cobalt (Co)	ug/g	18	18	0.10	6000439
Acid Extractable Copper (Cu)	ug/g	47	46	0.50	6000439
Acid Extractable Lead (Pb)	ug/g	11	11	1.0	6000439
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	<0.50	0.50	6000439
Acid Extractable Nickel (Ni)	ug/g	35	34	0.50	6000439
Acid Extractable Selenium (Se)	ug/g	<0.50	<0.50	0.50	6000439
Acid Extractable Silver (Ag)	ug/g	<0.20	<0.20	0.20	6000439
Acid Extractable Thallium (Tl)	ug/g	0.15	0.15	0.050	6000439
Acid Extractable Uranium (U)	ug/g	0.68	0.70	0.050	6000439
Acid Extractable Vanadium (V)	ug/g	34	33	5.0	6000439
Acid Extractable Zinc (Zn)	ug/g	74	74	5.0	6000439
Acid Extractable Mercury (Hg)	ug/g	<0.050	<0.050	0.050	6000439

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

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam Job #: B953628
Report Date: 2019/03/06

Soil Engineers Ltd
Client Project #: 1810-E083-2
Sampler Initials: OG

O.REG 153 METALS & INORGANICS PKG (SOIL)

Maxxam ID		JCB312	JCB315	JCB318			JCB318		
Sampling Date		2019/02/25	2019/02/25	2019/02/25			2019/02/25		
COC Number		701561-02-01	701561-02-01	701561-02-01			701561-02-01		
	UNITS	BH101/2	BH103/3	BH105/4A	RDL	QC Batch	BH105/4A Lab-Dup	RDL	QC Batch
Calculated Parameters									
Sodium Adsorption Ratio	N/A	0.26	0.41	0.25		5997408			
Inorganics									
Conductivity	mS/cm	0.17	0.28	0.18	0.002	6000676			
Moisture	%	14	14	13	1.0	5999713			
Available (CaCl2) pH	pH	7.69	7.89	7.76		6000465			
WAD Cyanide (Free)	ug/g	<0.01	<0.01	<0.01	0.01	6000391			
Chromium (VI)	ug/g	<0.2	<0.2	<0.2	0.2	6000083			
Metals									
Hot Water Ext. Boron (B)	ug/g	<0.050	0.23	0.075	0.050	6000239			
Acid Extractable Antimony (Sb)	ug/g	<0.20	<0.20	<0.20	0.20	6000265	<0.20	0.20	6000265
Acid Extractable Arsenic (As)	ug/g	4.0	3.1	6.0	1.0	6000265	6.1	1.0	6000265
Acid Extractable Barium (Ba)	ug/g	38	68	69	0.50	6000265	70	0.50	6000265
Acid Extractable Beryllium (Be)	ug/g	0.53	0.53	0.85	0.20	6000265	0.88	0.20	6000265
Acid Extractable Boron (B)	ug/g	6.8	7.8	10	5.0	6000265	11	5.0	6000265
Acid Extractable Cadmium (Cd)	ug/g	<0.10	0.11	<0.10	0.10	6000265	<0.10	0.10	6000265
Acid Extractable Chromium (Cr)	ug/g	15	16	24	1.0	6000265	24	1.0	6000265
Acid Extractable Cobalt (Co)	ug/g	8.7	8.3	18	0.10	6000265	18	0.10	6000265
Acid Extractable Copper (Cu)	ug/g	23	17	43	0.50	6000265	43	0.50	6000265
Acid Extractable Lead (Pb)	ug/g	6.8	7.5	12	1.0	6000265	12	1.0	6000265
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	<0.50	<0.50	0.50	6000265	<0.50	0.50	6000265
Acid Extractable Nickel (Ni)	ug/g	18	18	33	0.50	6000265	34	0.50	6000265
Acid Extractable Selenium (Se)	ug/g	<0.50	<0.50	<0.50	0.50	6000265	<0.50	0.50	6000265
Acid Extractable Silver (Ag)	ug/g	<0.20	<0.20	<0.20	0.20	6000265	<0.20	0.20	6000265
Acid Extractable Thallium (Tl)	ug/g	0.093	0.10	0.13	0.050	6000265	0.14	0.050	6000265
Acid Extractable Uranium (U)	ug/g	0.45	0.60	0.67	0.050	6000265	0.64	0.050	6000265
Acid Extractable Vanadium (V)	ug/g	24	25	32	5.0	6000265	32	5.0	6000265
Acid Extractable Zinc (Zn)	ug/g	43	49	72	5.0	6000265	72	5.0	6000265
Acid Extractable Mercury (Hg)	ug/g	<0.050	<0.050	<0.050	0.050	6000265	<0.050	0.050	6000265

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

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B953628
Report Date: 2019/03/06

Soil Engineers Ltd
Client Project #: 1810-E083-2
Sampler Initials: OG

O.REG 153 METALS & INORGANICS PKG (SOIL)

Maxxam ID		JCB320		
Sampling Date		2019/02/26		
COC Number		701561-02-01		
	UNITS	TP1	RDL	QC Batch
Calculated Parameters				
Sodium Adsorption Ratio	N/A	0.20		5997408
Inorganics				
Conductivity	mS/cm	0.25	0.002	6000676
Moisture	%	29	1.0	5999713
Available (CaCl2) pH	pH	7.29		6000465
WAD Cyanide (Free)	ug/g	0.02	0.01	6000391
Chromium (VI)	ug/g	<0.2	0.2	6000083
Metals				
Hot Water Ext. Boron (B)	ug/g	0.64	0.050	6000239
Acid Extractable Antimony (Sb)	ug/g	<0.20	0.20	6000265
Acid Extractable Arsenic (As)	ug/g	3.7	1.0	6000265
Acid Extractable Barium (Ba)	ug/g	59	0.50	6000265
Acid Extractable Beryllium (Be)	ug/g	0.64	0.20	6000265
Acid Extractable Boron (B)	ug/g	5.8	5.0	6000265
Acid Extractable Cadmium (Cd)	ug/g	0.24	0.10	6000265
Acid Extractable Chromium (Cr)	ug/g	19	1.0	6000265
Acid Extractable Cobalt (Co)	ug/g	8.5	0.10	6000265
Acid Extractable Copper (Cu)	ug/g	17	0.50	6000265
Acid Extractable Lead (Pb)	ug/g	15	1.0	6000265
Acid Extractable Molybdenum (Mo)	ug/g	0.54	0.50	6000265
Acid Extractable Nickel (Ni)	ug/g	17	0.50	6000265
Acid Extractable Selenium (Se)	ug/g	<0.50	0.50	6000265
Acid Extractable Silver (Ag)	ug/g	<0.20	0.20	6000265
Acid Extractable Thallium (Tl)	ug/g	0.12	0.050	6000265
Acid Extractable Uranium (U)	ug/g	0.63	0.050	6000265
Acid Extractable Vanadium (V)	ug/g	28	5.0	6000265
Acid Extractable Zinc (Zn)	ug/g	58	5.0	6000265
Acid Extractable Mercury (Hg)	ug/g	<0.050	0.050	6000265

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B953628
Report Date: 2019/03/06

Soil Engineers Ltd
Client Project #: 1810-E083-2
Sampler Initials: OG

O.REG 153 OC PESTICIDES (SOIL)

Maxxam ID		JCB311		JCB313		JCB314	JCB316	JCB317		
Sampling Date		2019/02/25		2019/02/25		2019/02/25	2019/02/25	2019/02/25		
COC Number		701561-02-01		701561-02-01		701561-02-01	701561-02-01	701561-02-01		
	UNITS	BH101/1	RDL	BH102/1	RDL	BH103/1	BH104/1	BH105/1	RDL	QC Batch
Inorganics										
Moisture	%	22	1.0	30	1.0	27	20	25	1.0	5999713
Calculated Parameters										
Chlordane (Total)	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	5997407
o,p-DDD + p,p-DDD	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	5997407
o,p-DDE + p,p-DDE	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	5997407
o,p-DDT + p,p-DDT	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	5997407
Total Endosulfan	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	5997407
Pesticides & Herbicides										
Aldrin	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
a-Chlordane	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
g-Chlordane	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
o,p-DDD	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
p,p-DDD	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
o,p-DDE	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
p,p-DDE	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
o,p-DDT	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
p,p-DDT	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
Dieldrin	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
Lindane	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
Endosulfan I (alpha)	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
Endosulfan II (beta)	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
Endrin	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
Heptachlor	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
Heptachlor epoxide	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
Hexachlorobenzene	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
Hexachlorobutadiene	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
Hexachloroethane	ug/g	<0.0020	0.0020	<0.0030	0.0030	<0.0020	<0.0020	<0.0020	0.0020	6000701
Methoxychlor	ug/g	<0.0050	0.0050	<0.0075	0.0075	<0.0050	<0.0050	<0.0050	0.0050	6000701
Surrogate Recovery (%)										
2,4,5,6-Tetrachloro-m-xylene	%	81		89		75	99	79		6000701
Decachlorobiphenyl	%	95		111		96	125	90		6000701

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B953628
Report Date: 2019/03/06

Soil Engineers Ltd
Client Project #: 1810-E083-2
Sampler Initials: OG

O.REG 153 OC PESTICIDES (SOIL)

Maxxam ID		JCB319			JCB319			JCB321		
Sampling Date		2019/02/25			2019/02/25					
COC Number		701561-02-01			701561-02-01			701561-02-01		
	UNITS	BH106/1	RDL	QC Batch	BH106/1 Lab-Dup	RDL	QC Batch	DUP S1	RDL	QC Batch
Inorganics										
Moisture	%	25	1.0	5999713				25	1.0	5999713
Calculated Parameters										
Chlordane (Total)	ug/g	<0.0020	0.0020	5997407				<0.0020	0.0020	5997407
o,p-DDD + p,p-DDD	ug/g	<0.0020	0.0020	5997407				<0.0020	0.0020	5997407
o,p-DDE + p,p-DDE	ug/g	<0.0020	0.0020	5997407				<0.0020	0.0020	5997407
o,p-DDT + p,p-DDT	ug/g	<0.0020	0.0020	5997407				<0.0020	0.0020	5997407
Total Endosulfan	ug/g	<0.0020	0.0020	5997407				<0.0020	0.0020	5997407
Pesticides & Herbicides										
Aldrin	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
a-Chlordane	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
g-Chlordane	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
o,p-DDD	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
p,p-DDD	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
o,p-DDE	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
p,p-DDE	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
o,p-DDT	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
p,p-DDT	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
Dieldrin	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
Lindane	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
Endosulfan I (alpha)	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
Endosulfan II (beta)	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
Endrin	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
Heptachlor	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
Heptachlor epoxide	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
Hexachlorobenzene	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
Hexachlorobutadiene	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
Hexachloroethane	ug/g	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701	<0.0020	0.0020	6000701
Methoxychlor	ug/g	<0.0050	0.0050	6000701	<0.0050	0.0050	6000701	<0.0050	0.0050	6000701
Surrogate Recovery (%)										
2,4,5,6-Tetrachloro-m-xylene	%	87		6000701	76		6000701	90		6000701
Decachlorobiphenyl	%	105		6000701	99		6000701	110		6000701

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

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B953628
Report Date: 2019/03/06

Soil Engineers Ltd
Client Project #: 1810-E083-2
Sampler Initials: OG

TEST SUMMARY

Maxxam ID: JCB311
Sample ID: BH101/1
Matrix: Soil

Collected: 2019/02/25
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	5999713	N/A	2019/03/02	Min Yang
OC Pesticides (Selected) & PCB	GC/ECD	6000701	2019/03/04	2019/03/05	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	5997407	N/A	2019/03/04	Automated Statchk

Maxxam ID: JCB312
Sample ID: BH101/2
Matrix: Soil

Collected: 2019/02/25
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	6000239	2019/03/04	2019/03/04	Suban Kanapathippllai
Free (WAD) Cyanide	TECH	6000391	2019/03/04	2019/03/05	Barbara Kalbasi Esfahani
Conductivity	AT	6000676	2019/03/05	2019/03/05	Kazzandra Adeva
Hexavalent Chromium in Soil by IC	IC/SPEC	6000083	2019/03/04	2019/03/04	Sally Norouz
Strong Acid Leachable Metals by ICPMS	ICP/MS	6000265	2019/03/04	2019/03/04	Daniel Teclu
Moisture	BAL	5999713	N/A	2019/03/02	Min Yang
pH CaCl2 EXTRACT	AT	6000465	2019/03/04	2019/03/04	Gnana Thomas
Sodium Adsorption Ratio (SAR)	CALC/MET	5997408	N/A	2019/03/06	Automated Statchk

Maxxam ID: JCB313
Sample ID: BH102/1
Matrix: Soil

Collected: 2019/02/25
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	5999713	N/A	2019/03/02	Min Yang
OC Pesticides (Selected) & PCB	GC/ECD	6000701	2019/03/04	2019/03/05	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	5997407	N/A	2019/03/04	Automated Statchk

Maxxam ID: JCB314
Sample ID: BH103/1
Matrix: Soil

Collected: 2019/02/25
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	5999713	N/A	2019/03/02	Min Yang
OC Pesticides (Selected) & PCB	GC/ECD	6000701	2019/03/04	2019/03/05	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	5997407	N/A	2019/03/04	Automated Statchk

Maxxam ID: JCB315
Sample ID: BH103/3
Matrix: Soil

Collected: 2019/02/25
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	6000239	2019/03/04	2019/03/04	Suban Kanapathippllai
Free (WAD) Cyanide	TECH	6000391	2019/03/04	2019/03/05	Barbara Kalbasi Esfahani
Conductivity	AT	6000676	2019/03/05	2019/03/05	Kazzandra Adeva
Hexavalent Chromium in Soil by IC	IC/SPEC	6000083	2019/03/04	2019/03/04	Sally Norouz
Strong Acid Leachable Metals by ICPMS	ICP/MS	6000265	2019/03/04	2019/03/04	Daniel Teclu
Moisture	BAL	5999713	N/A	2019/03/02	Min Yang

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam Job #: B953628
Report Date: 2019/03/06

Soil Engineers Ltd
Client Project #: 1810-E083-2
Sampler Initials: OG

TEST SUMMARY

Maxxam ID: JCB315
Sample ID: BH103/3
Matrix: Soil

Collected: 2019/02/25
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH CaCl2 EXTRACT	AT	6000465	2019/03/04	2019/03/04	Gnana Thomas
Sodium Adsorption Ratio (SAR)	CALC/MET	5997408	N/A	2019/03/06	Automated Statchk

Maxxam ID: JCB316
Sample ID: BH104/1
Matrix: Soil

Collected: 2019/02/25
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	5999713	N/A	2019/03/02	Min Yang
OC Pesticides (Selected) & PCB	GC/ECD	6000701	2019/03/04	2019/03/05	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	5997407	N/A	2019/03/04	Automated Statchk

Maxxam ID: JCB317
Sample ID: BH105/1
Matrix: Soil

Collected: 2019/02/25
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	5999713	N/A	2019/03/02	Min Yang
OC Pesticides (Selected) & PCB	GC/ECD	6000701	2019/03/04	2019/03/05	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	5997407	N/A	2019/03/04	Automated Statchk

Maxxam ID: JCB318
Sample ID: BH105/4A
Matrix: Soil

Collected: 2019/02/25
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	6000239	2019/03/04	2019/03/04	Suban Kanapathippllai
Free (WAD) Cyanide	TECH	6000391	2019/03/04	2019/03/05	Barbara Kalbasi Esfahani
Conductivity	AT	6000676	2019/03/05	2019/03/05	Kazzandra Adeva
Hexavalent Chromium in Soil by IC	IC/SPEC	6000083	2019/03/04	2019/03/04	Sally Norouz
Strong Acid Leachable Metals by ICPMS	ICP/MS	6000265	2019/03/04	2019/03/04	Daniel Teclu
Moisture	BAL	5999713	N/A	2019/03/02	Min Yang
pH CaCl2 EXTRACT	AT	6000465	2019/03/04	2019/03/04	Gnana Thomas
Sodium Adsorption Ratio (SAR)	CALC/MET	5997408	N/A	2019/03/06	Automated Statchk

Maxxam ID: JCB318 Dup
Sample ID: BH105/4A
Matrix: Soil

Collected: 2019/02/25
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Strong Acid Leachable Metals by ICPMS	ICP/MS	6000265	2019/03/04	2019/03/04	Daniel Teclu

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B953628
Report Date: 2019/03/06

Soil Engineers Ltd
Client Project #: 1810-E083-2
Sampler Initials: OG

TEST SUMMARY

Maxxam ID: JCB319
Sample ID: BH106/1
Matrix: Soil

Collected: 2019/02/25
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	5999713	N/A	2019/03/02	Min Yang
OC Pesticides (Selected) & PCB	GC/ECD	6000701	2019/03/04	2019/03/05	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	5997407	N/A	2019/03/04	Automated Statchk

Maxxam ID: JCB319 Dup
Sample ID: BH106/1
Matrix: Soil

Collected: 2019/02/25
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
OC Pesticides (Selected) & PCB	GC/ECD	6000701	2019/03/04	2019/03/05	Mahmudul Khan

Maxxam ID: JCB320
Sample ID: TP1
Matrix: Soil

Collected: 2019/02/26
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	6000239	2019/03/04	2019/03/04	Suban Kanapathippllai
Free (WAD) Cyanide	TECH	6000391	2019/03/04	2019/03/05	Barbara Kalbasi Esfahani
Conductivity	AT	6000676	2019/03/05	2019/03/05	Kazzandra Adeva
Hexavalent Chromium in Soil by IC	IC/SPEC	6000083	2019/03/04	2019/03/04	Sally Norouz
Strong Acid Leachable Metals by ICPMS	ICP/MS	6000265	2019/03/04	2019/03/04	Daniel Teclu
Moisture	BAL	5999713	N/A	2019/03/02	Min Yang
pH CaCl2 EXTRACT	AT	6000465	2019/03/04	2019/03/04	Gnana Thomas
Sodium Adsorption Ratio (SAR)	CALC/MET	5997408	N/A	2019/03/06	Automated Statchk

Maxxam ID: JCB321
Sample ID: DUP S1
Matrix: Soil

Collected:
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	5999713	N/A	2019/03/02	Min Yang
OC Pesticides (Selected) & PCB	GC/ECD	6000701	2019/03/04	2019/03/05	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	5997407	N/A	2019/03/04	Automated Statchk

Maxxam ID: JCB322
Sample ID: DUP S2
Matrix: Soil

Collected:
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Strong Acid Leachable Metals by ICPMS	ICP/MS	6000439	2019/03/04	2019/03/04	Daniel Teclu

Maxxam ID: JCB322 Dup
Sample ID: DUP S2
Matrix: Soil

Collected:
Shipped:
Received: 2019/02/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Strong Acid Leachable Metals by ICPMS	ICP/MS	6000439	2019/03/04	2019/03/04	Daniel Teclu

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam Job #: B953628
Report Date: 2019/03/06

Soil Engineers Ltd
Client Project #: 1810-E083-2
Sampler Initials: OG

GENERAL COMMENTS

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

Package 1	0.0°C

Sample JCB312 [BH101/2] : SAR Analysis: Sodium was not detected. To report SAR the sodium detection limit was used in the calculation. This value represents a maximum ratio.

Sample JCB313 [BH102/1] : OC Pesticide Analysis: Detection limits were adjusted for high moisture content.

Sample JCB315 [BH103/3] : SAR Analysis: Sodium was not detected. To report SAR the sodium detection limit was used in the calculation. This value represents a maximum ratio.

Sample JCB318 [BH105/4A] : SAR Analysis: Sodium was not detected. To report SAR the sodium detection limit was used in the calculation. This value represents a maximum ratio.

Sample JCB320 [TP1] : SAR Analysis: Sodium was not detected. To report SAR the sodium detection limit was used in the calculation. This value represents a maximum ratio.

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B953628
Report Date: 2019/03/06

QUALITY ASSURANCE REPORT

Soil Engineers Ltd
Client Project #: 1810-E083-2
Sampler Initials: OG

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
6000701	2,4,5,6-Tetrachloro-m-xylene	2019/03/05	81	50 - 130	75	50 - 130	77	%		
6000701	Decachlorobiphenyl	2019/03/05	107	50 - 130	103	50 - 130	102	%		
5999713	Moisture	2019/03/02							2.1	20
6000083	Chromium (VI)	2019/03/04	68 (1)	70 - 130	84	80 - 120	<0.2	ug/g	NC	35
6000239	Hot Water Ext. Boron (B)	2019/03/04	103	75 - 125	95	75 - 125	<0.050	ug/g	3.6	40
6000265	Acid Extractable Antimony (Sb)	2019/03/04	87	75 - 125	103	80 - 120	<0.20	ug/g	NC	30
6000265	Acid Extractable Arsenic (As)	2019/03/04	105	75 - 125	100	80 - 120	<1.0	ug/g	0.55	30
6000265	Acid Extractable Barium (Ba)	2019/03/04	NC	75 - 125	99	80 - 120	<0.50	ug/g	1.8	30
6000265	Acid Extractable Beryllium (Be)	2019/03/04	105	75 - 125	99	80 - 120	<0.20	ug/g	3.0	30
6000265	Acid Extractable Boron (B)	2019/03/04	101	75 - 125	101	80 - 120	<5.0	ug/g	0.83	30
6000265	Acid Extractable Cadmium (Cd)	2019/03/04	105	75 - 125	101	80 - 120	<0.10	ug/g	NC	30
6000265	Acid Extractable Chromium (Cr)	2019/03/04	105	75 - 125	99	80 - 120	<1.0	ug/g	0.078	30
6000265	Acid Extractable Cobalt (Co)	2019/03/04	103	75 - 125	99	80 - 120	<0.10	ug/g	0.20	30
6000265	Acid Extractable Copper (Cu)	2019/03/04	NC	75 - 125	99	80 - 120	<0.50	ug/g	0.075	30
6000265	Acid Extractable Lead (Pb)	2019/03/04	108	75 - 125	102	80 - 120	<1.0	ug/g	0.22	30
6000265	Acid Extractable Mercury (Hg)	2019/03/04	99	75 - 125	96	80 - 120	<0.050	ug/g	NC	30
6000265	Acid Extractable Molybdenum (Mo)	2019/03/04	102	75 - 125	99	80 - 120	<0.50	ug/g	NC	30
6000265	Acid Extractable Nickel (Ni)	2019/03/04	NC	75 - 125	99	80 - 120	<0.50	ug/g	1.1	30
6000265	Acid Extractable Selenium (Se)	2019/03/04	106	75 - 125	103	80 - 120	<0.50	ug/g	NC	30
6000265	Acid Extractable Silver (Ag)	2019/03/04	103	75 - 125	102	80 - 120	<0.20	ug/g	NC	30
6000265	Acid Extractable Thallium (Tl)	2019/03/04	104	75 - 125	101	80 - 120	<0.050	ug/g	4.3	30
6000265	Acid Extractable Uranium (U)	2019/03/04	113	75 - 125	106	80 - 120	<0.050	ug/g	3.7	30
6000265	Acid Extractable Vanadium (V)	2019/03/04	NC	75 - 125	96	80 - 120	<5.0	ug/g	1.7	30
6000265	Acid Extractable Zinc (Zn)	2019/03/04	NC	75 - 125	100	80 - 120	<5.0	ug/g	0.60	30
6000391	WAD Cyanide (Free)	2019/03/05	95	75 - 125	97	80 - 120	<0.01	ug/g	NC	35
6000439	Acid Extractable Antimony (Sb)	2019/03/04	91	75 - 125	106	80 - 120	<0.20	ug/g	NC	30
6000439	Acid Extractable Arsenic (As)	2019/03/04	111	75 - 125	103	80 - 120	<1.0	ug/g	1.1	30
6000439	Acid Extractable Barium (Ba)	2019/03/04	NC	75 - 125	102	80 - 120	<0.50	ug/g	3.0	30
6000439	Acid Extractable Beryllium (Be)	2019/03/04	112	75 - 125	104	80 - 120	<0.20	ug/g	0.88	30
6000439	Acid Extractable Boron (B)	2019/03/04	110	75 - 125	106	80 - 120	<5.0	ug/g	2.9	30
6000439	Acid Extractable Cadmium (Cd)	2019/03/04	110	75 - 125	105	80 - 120	<0.10	ug/g	NC	30
6000439	Acid Extractable Chromium (Cr)	2019/03/04	NC	75 - 125	101	80 - 120	<1.0	ug/g	0.50	30

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B953628
Report Date: 2019/03/06

QUALITY ASSURANCE REPORT(CONT'D)

Soil Engineers Ltd
Client Project #: 1810-E083-2
Sampler Initials: OG

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
6000439	Acid Extractable Cobalt (Co)	2019/03/04	110	75 - 125	103	80 - 120	<0.10	ug/g	1.7	30
6000439	Acid Extractable Copper (Cu)	2019/03/04	NC	75 - 125	100	80 - 120	<0.50	ug/g	1.7	30
6000439	Acid Extractable Lead (Pb)	2019/03/04	115	75 - 125	109	80 - 120	<1.0	ug/g	0.41	30
6000439	Acid Extractable Mercury (Hg)	2019/03/04	100	75 - 125	99	80 - 120	<0.050	ug/g	NC	30
6000439	Acid Extractable Molybdenum (Mo)	2019/03/04	107	75 - 125	102	80 - 120	<0.50	ug/g	NC	30
6000439	Acid Extractable Nickel (Ni)	2019/03/04	NC	75 - 125	101	80 - 120	<0.50	ug/g	1.2	30
6000439	Acid Extractable Selenium (Se)	2019/03/04	113	75 - 125	108	80 - 120	<0.50	ug/g	NC	30
6000439	Acid Extractable Silver (Ag)	2019/03/04	111	75 - 125	103	80 - 120	<0.20	ug/g	NC	30
6000439	Acid Extractable Thallium (Tl)	2019/03/04	111	75 - 125	108	80 - 120	<0.050	ug/g	1.7	30
6000439	Acid Extractable Uranium (U)	2019/03/04	123	75 - 125	112	80 - 120	<0.050	ug/g	3.8	30
6000439	Acid Extractable Vanadium (V)	2019/03/04	NC	75 - 125	98	80 - 120	<5.0	ug/g	1.0	30
6000439	Acid Extractable Zinc (Zn)	2019/03/04	NC	75 - 125	106	80 - 120	<5.0	ug/g	0.71	30
6000465	Available (CaCl2) pH	2019/03/04			100	97 - 103			0.21	N/A
6000676	Conductivity	2019/03/05			102	90 - 110	<0.002	mS/cm	3.4	10
6000701	a-Chlordane	2019/03/05	101	50 - 130	81	50 - 130	<0.0020	ug/g	NC	40
6000701	Aldrin	2019/03/05	81	50 - 130	78	50 - 130	<0.0020	ug/g	NC	40
6000701	Dieldrin	2019/03/05	90	50 - 130	89	50 - 130	<0.0020	ug/g	NC	40
6000701	Endosulfan I (alpha)	2019/03/05	82	50 - 130	88	50 - 130	<0.0020	ug/g	NC	40
6000701	Endosulfan II (beta)	2019/03/05	81	50 - 130	74	50 - 130	<0.0020	ug/g	NC	40
6000701	Endrin	2019/03/05	83	50 - 130	73	50 - 130	<0.0020	ug/g	NC	40
6000701	g-Chlordane	2019/03/05	81	50 - 130	81	50 - 130	<0.0020	ug/g	NC	40
6000701	Heptachlor epoxide	2019/03/05	77	50 - 130	74	50 - 130	<0.0020	ug/g	NC	40
6000701	Heptachlor	2019/03/05	79	50 - 130	79	50 - 130	<0.0020	ug/g	NC	40
6000701	Hexachlorobenzene	2019/03/05	79	50 - 130	79	50 - 130	<0.0020	ug/g	NC	40
6000701	Hexachlorobutadiene	2019/03/05	72	50 - 130	94	50 - 130	<0.0020	ug/g	NC	40
6000701	Hexachloroethane	2019/03/05	54	50 - 130	81	50 - 130	<0.0020	ug/g	NC	40
6000701	Lindane	2019/03/05	77	50 - 130	77	50 - 130	<0.0020	ug/g	NC	40
6000701	Methoxychlor	2019/03/05	99	50 - 130	107	50 - 130	<0.0050	ug/g	NC	40
6000701	o,p-DDD	2019/03/05	104	50 - 130	87	50 - 130	<0.0020	ug/g	NC	40
6000701	o,p-DDE	2019/03/05	87	50 - 130	86	50 - 130	<0.0020	ug/g	NC	40
6000701	o,p-DDT	2019/03/05	99	50 - 130	97	50 - 130	<0.0020	ug/g	NC	40
6000701	p,p-DDD	2019/03/05	89	50 - 130	86	50 - 130	<0.0020	ug/g	NC	40

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B953628
Report Date: 2019/03/06

QUALITY ASSURANCE REPORT(CONT'D)

Soil Engineers Ltd
Client Project #: 1810-E083-2
Sampler Initials: OG

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
6000701	p,p-DDE	2019/03/05	97	50 - 130	95	50 - 130	<0.0020	ug/g	NC	40
6000701	p,p-DDT	2019/03/05	85	50 - 130	84	50 - 130	<0.0020	ug/g	NC	40

N/A = Not Applicable

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

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

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

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

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

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

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

(1) The matrix spike recovery was below the lower control limit. This may be due in part to the reducing environment of the sample. The sample was reanalyzed with the same results.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam Job #: B953628
Report Date: 2019/03/06

Soil Engineers Ltd
Client Project #: 1810-E083-2
Sampler Initials: OG

VALIDATION SIGNATURE PAGE

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

Anastassia Hamanov, Scientific Specialist

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Your Project #: 1810-E082-2
Site Location: MISSISSAUGA
Your C.O.C. #: N/A

Attention: Madan K. Suwal

Soil Engineers Ltd
90 West Beaver Creek Road
Unit 100
Richmond Hill, ON
CANADA L4B 1E7

Report Date: 2025/03/31
Report #: R8511957
Version: 4 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C527401
Received: 2025/03/13, 15:40

Sample Matrix: Soil
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Hot Water Extractable Boron	1	2025/03/18	2025/03/18	CAM SOP-00408	R153 Ana. Prot. 2011
Hot Water Extractable Boron	3	2025/03/19	2025/03/19	CAM SOP-00408	R153 Ana. Prot. 2011
Free (WAD) Cyanide	1	2025/03/18	2025/03/18	CAM SOP-00457	OMOE E3015 m
Hexavalent Chromium in Soil by IC (1)	2	2025/03/18	2025/03/18	CAM SOP-00436	EPA 3060A/7199 m
Hexavalent Chromium in Soil by IC (1)	2	2025/03/19	2025/03/19	CAM SOP-00436	EPA 3060A/7199 m
Acid Extractable Metals by ICPMS	3	2025/03/18	2025/03/18	CAM SOP-00447	EPA 6020B m
Acid Extractable Metals by ICPMS	1	2025/03/19	2025/03/19	CAM SOP-00447	EPA 6020B m
Moisture	2	N/A	2025/03/17	CAM SOP-00445	Carter 2nd ed 70.2 m
Moisture	3	N/A	2025/03/18	CAM SOP-00445	Carter 2nd ed 70.2 m
OC Pesticides (Selected) & PCB (2)	3	2025/03/20	2025/03/20	CAM SOP-00307	EPA 8081B/ 8082A
OC Pesticides Summed Parameters	3	N/A	2025/03/18	CAM SOP-00307	EPA 8081B/ 8082A
pH CaCl2 EXTRACT	5	2025/03/19	2025/03/19	CAM SOP-00413	EPA 9045 D 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, EPA, APHA or the Quebec Ministry of Environment.

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

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

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

Your Project #: 1810-E082-2
Site Location: MISSISSAUGA
Your C.O.C. #: N/A

Attention: Madan K. Suwal

Soil Engineers Ltd
90 West Beaver Creek Road
Unit 100
Richmond Hill, ON
CANADA L4B 1E7

Report Date: 2025/03/31
Report #: R8511957
Version: 4 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C527401
Received: 2025/03/13, 15:40

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) Chlordane (Total) = Alpha Chlordane + Gamma Chlordane

Encryption Key

Keshani Vijh
Sr. Project Manager
31 Mar 2025 13:22:07

Please direct all questions regarding this Certificate of Analysis to:
Keshani Vijh, Sr. Project Manager
Email: keshani.vijh@bureauveritas.com
Phone# (905) 817-5700

==========

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

Bureau Veritas Job #: C527401
Report Date: 2025/03/31

Soil Engineers Ltd
Client Project #: 1810-E082-2
Site Location: MISSISSAUGA
Sampler Initials: CG

O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		AOWY62				AOWY62			
Sampling Date		2025/03/12				2025/03/12			
COC Number		N/A				N/A			
	UNITS	BH203/1A	RDL	MDL	QC Batch	BH203/1A Lab-Dup	RDL	MDL	QC Batch
Inorganics									
Available (CaCl2) pH	pH	7.58			9893481				
WAD Cyanide (Free)	ug/g	<0.01	0.01	0.0019	9892527				
Chromium (VI)	ug/g	<0.18	0.18	0.050	9893355	<0.18	0.18	0.050	9893355
Metals									
Hot Water Ext. Boron (B)	ug/g	0.088	0.050	0.030	9893561				
Acid Extractable Antimony (Sb)	ug/g	<0.20	0.20	0.10	9893465				
Acid Extractable Arsenic (As)	ug/g	3.0	1.0	0.10	9893465				
Acid Extractable Barium (Ba)	ug/g	47	0.50	0.30	9893465				
Acid Extractable Beryllium (Be)	ug/g	0.52	0.20	0.020	9893465				
Acid Extractable Boron (B)	ug/g	<5.0	5.0	1.0	9893465				
Acid Extractable Cadmium (Cd)	ug/g	0.11	0.10	0.030	9893465				
Acid Extractable Chromium (Cr)	ug/g	15	1.0	0.20	9893465				
Acid Extractable Cobalt (Co)	ug/g	7.3	0.10	0.020	9893465				
Acid Extractable Copper (Cu)	ug/g	15	0.50	0.20	9893465				
Acid Extractable Lead (Pb)	ug/g	8.5	1.0	0.10	9893465				
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	0.50	0.10	9893465				
Acid Extractable Nickel (Ni)	ug/g	15	0.50	0.20	9893465				
Acid Extractable Selenium (Se)	ug/g	<0.50	0.50	0.10	9893465				
Acid Extractable Silver (Ag)	ug/g	<0.20	0.20	0.040	9893465				
Acid Extractable Thallium (Tl)	ug/g	0.11	0.050	0.010	9893465				
Acid Extractable Uranium (U)	ug/g	0.51	0.050	0.030	9893465				
Acid Extractable Vanadium (V)	ug/g	28	5.0	0.50	9893465				
Acid Extractable Zinc (Zn)	ug/g	49	5.0	0.50	9893465				
Acid Extractable Mercury (Hg)	ug/g	<0.050	0.050	0.030	9893465				

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

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

Bureau Veritas Job #: C527401
Report Date: 2025/03/31

Soil Engineers Ltd
Client Project #: 1810-E082-2
Site Location: MISSISSAUGA
Sampler Initials: CG

O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		AOWY63		AOWY64		AOWY66			
Sampling Date		2025/03/12		2025/03/12		2025/03/12			
COC Number		N/A		N/A		N/A			
	UNITS	BH204/1A	QC Batch	BH205/1A	QC Batch	BH207/1A	RDL	MDL	QC Batch
Inorganics									
Available (CaCl2) pH	pH	7.59	9893481	7.67	9893481	7.55			9893481
Chromium (VI)	ug/g	<0.18	9892840	<0.18	9893355	<0.18	0.18	0.050	9892840
Metals									
Hot Water Ext. Boron (B)	ug/g	0.13	9893561	0.067	9893109	0.15	0.050	0.030	9893561
Acid Extractable Antimony (Sb)	ug/g	<0.20	9893143	<0.20	9893143	<0.20	0.20	0.10	9893149
Acid Extractable Arsenic (As)	ug/g	3.4	9893143	3.1	9893143	2.9	1.0	0.10	9893149
Acid Extractable Barium (Ba)	ug/g	52	9893143	41	9893143	56	0.50	0.30	9893149
Acid Extractable Beryllium (Be)	ug/g	0.62	9893143	0.49	9893143	0.56	0.20	0.020	9893149
Acid Extractable Boron (B)	ug/g	<5.0	9893143	<5.0	9893143	<5.0	5.0	1.0	9893149
Acid Extractable Cadmium (Cd)	ug/g	0.14	9893143	<0.10	9893143	0.15	0.10	0.030	9893149
Acid Extractable Chromium (Cr)	ug/g	17	9893143	14	9893143	17	1.0	0.20	9893149
Acid Extractable Cobalt (Co)	ug/g	7.5	9893143	6.8	9893143	6.7	0.10	0.020	9893149
Acid Extractable Copper (Cu)	ug/g	15	9893143	18	9893143	16	0.50	0.20	9893149
Acid Extractable Lead (Pb)	ug/g	12	9893143	8.2	9893143	11	1.0	0.10	9893149
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	9893143	<0.50	9893143	<0.50	0.50	0.10	9893149
Acid Extractable Nickel (Ni)	ug/g	16	9893143	15	9893143	16	0.50	0.20	9893149
Acid Extractable Selenium (Se)	ug/g	<0.50	9893143	<0.50	9893143	<0.50	0.50	0.10	9893149
Acid Extractable Silver (Ag)	ug/g	<0.20	9893143	<0.20	9893143	<0.20	0.20	0.040	9893149
Acid Extractable Thallium (Tl)	ug/g	0.11	9893143	0.10	9893143	0.11	0.050	0.010	9893149
Acid Extractable Uranium (U)	ug/g	0.46	9893143	0.49	9893143	0.45	0.050	0.030	9893149
Acid Extractable Vanadium (V)	ug/g	27	9893143	22	9893143	23	5.0	0.50	9893149
Acid Extractable Zinc (Zn)	ug/g	51	9893143	40	9893143	57	5.0	0.50	9893149
Acid Extractable Mercury (Hg)	ug/g	<0.050	9893143	<0.050	9893143	<0.050	0.050	0.030	9893149

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

O.REG 153 OC PESTICIDES (SOIL)

Bureau Veritas ID		AOWY62	AOWY64	AOWY69			
Sampling Date		2025/03/12	2025/03/12	2025/03/12			
COC Number		N/A	N/A	N/A			
	UNITS	BH203/1A	BH205/1A	DUPS201	RDL	MDL	QC Batch
Calculated Parameters							
Chlordane (Total)	ug/g	<0.0020	<0.0020	<0.0020	0.0020	N/A	9891076
o,p-DDD + p,p-DDD	ug/g	<0.0020	<0.0020	<0.0020	0.0020	N/A	9891076
o,p-DDE + p,p-DDE	ug/g	<0.0020	<0.0020	<0.0020	0.0020	N/A	9891076
o,p-DDT + p,p-DDT	ug/g	<0.0020	<0.0020	<0.0020	0.0020	N/A	9891076
Total Endosulfan	ug/g	<0.0020	<0.0020	<0.0020	0.0020	N/A	9891076
Pesticides & Herbicides							
Aldrin	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
a-Chlordane	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
g-Chlordane	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
o,p-DDD	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
p,p-DDD	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
o,p-DDE	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
p,p-DDE	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
o,p-DDT	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
p,p-DDT	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
Dieldrin	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
Lindane	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
Endosulfan I (alpha)	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
Endosulfan II (beta)	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
Endrin	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
Heptachlor	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
Heptachlor epoxide	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
Hexachlorobenzene	ug/g	<0.0020	<0.0020	<0.0020	0.0020	0.00040	9894402
Hexachlorobutadiene	ug/g	<0.0020	<0.0020	<0.0020	0.0020	N/A	9894402
Hexachloroethane	ug/g	<0.0020	<0.0020	<0.0020	0.0020	N/A	9894402
Methoxychlor	ug/g	<0.0050	<0.0050	<0.0050	0.0050	0.0016	9894402
Surrogate Recovery (%)							
2,4,5,6-Tetrachloro-m-xylene	%	107	102	100			9894402
Decachlorobiphenyl	%	116	107	104			9894402

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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

Bureau Veritas Job #: C527401
Report Date: 2025/03/31

Soil Engineers Ltd
Client Project #: 1810-E082-2
Site Location: MISSISSAUGA
Sampler Initials: CG

RESULTS OF ANALYSES OF SOIL

Bureau Veritas ID		AOWY62		AOWY63		AOWY64		AOWY66			
Sampling Date		2025/03/12		2025/03/12		2025/03/12		2025/03/12			
COC Number		N/A		N/A		N/A		N/A			
	UNITS	BH203/1A	QC Batch	BH204/1A	QC Batch	BH205/1A	QC Batch	BH207/1A	RDL	MDL	QC Batch
Inorganics											
Moisture	%	16	9892752	20	9892474	19	9892752	22	1.0	0.50	9892474

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		AOWY69				AOWY72	AOWY72		
Sampling Date		2025/03/12				2025/03/12	2025/03/12		
COC Number		N/A				N/A	N/A		
	UNITS	DUPS201	RDL	MDL	QC Batch	BH207/3	BH207/3 Lab-Dup	MDL	QC Batch
Inorganics									
Moisture	%	23	1.0	0.50	9892752				
Available (CaCl2) pH	pH					7.46	7.49		9893481

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

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

Bureau Veritas Job #: C527401
Report Date: 2025/03/31

Soil Engineers Ltd
Client Project #: 1810-E082-2
Site Location: MISSISSAUGA
Sampler Initials: CG

TEST SUMMARY

Bureau Veritas ID: AOWY62
Sample ID: BH203/1A
Matrix: Soil

Collected: 2025/03/12
Shipped:
Received: 2025/03/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	9893561	2025/03/19	2025/03/19	Medhat Nasr
Free (WAD) Cyanide	TECH	9892527	2025/03/18	2025/03/18	Jency Sara Johnson
Hexavalent Chromium in Soil by IC	IC/SPEC	9893355	2025/03/19	2025/03/19	Rupinder Sihota
Acid Extractable Metals by ICPMS	ICP/MS	9893465	2025/03/19	2025/03/19	Viviana Canzonieri
Moisture	BAL	9892752	N/A	2025/03/18	Raj Patel
OC Pesticides (Selected) & PCB	GC/ECD	9894402	2025/03/20	2025/03/20	Harish Patel
OC Pesticides Summed Parameters	CALC	9891076	N/A	2025/03/18	Automated Statchk
pH CaCl2 EXTRACT	AT	9893481	2025/03/19	2025/03/19	Surinder Rai

Bureau Veritas ID: AOWY62 Dup
Sample ID: BH203/1A
Matrix: Soil

Collected: 2025/03/12
Shipped:
Received: 2025/03/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hexavalent Chromium in Soil by IC	IC/SPEC	9893355	2025/03/19	2025/03/19	Rupinder Sihota

Bureau Veritas ID: AOWY63
Sample ID: BH204/1A
Matrix: Soil

Collected: 2025/03/12
Shipped:
Received: 2025/03/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	9893561	2025/03/19	2025/03/19	Medhat Nasr
Hexavalent Chromium in Soil by IC	IC/SPEC	9892840	2025/03/18	2025/03/18	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	9893143	2025/03/18	2025/03/18	Daniel Teclu
Moisture	BAL	9892474	N/A	2025/03/17	Raj Patel
pH CaCl2 EXTRACT	AT	9893481	2025/03/19	2025/03/19	Surinder Rai

Bureau Veritas ID: AOWY64
Sample ID: BH205/1A
Matrix: Soil

Collected: 2025/03/12
Shipped:
Received: 2025/03/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	9893109	2025/03/18	2025/03/18	Aswathy Neduveli Suresh
Hexavalent Chromium in Soil by IC	IC/SPEC	9893355	2025/03/19	2025/03/19	Rupinder Sihota
Acid Extractable Metals by ICPMS	ICP/MS	9893143	2025/03/18	2025/03/18	Daniel Teclu
Moisture	BAL	9892752	N/A	2025/03/18	Raj Patel
OC Pesticides (Selected) & PCB	GC/ECD	9894402	2025/03/20	2025/03/20	Harish Patel
OC Pesticides Summed Parameters	CALC	9891076	N/A	2025/03/18	Automated Statchk
pH CaCl2 EXTRACT	AT	9893481	2025/03/19	2025/03/19	Surinder Rai

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

Bureau Veritas Job #: C527401
Report Date: 2025/03/31

Soil Engineers Ltd
Client Project #: 1810-E082-2
Site Location: MISSISSAUGA
Sampler Initials: CG

TEST SUMMARY

Bureau Veritas ID: AOWY66
Sample ID: BH207/1A
Matrix: Soil

Collected: 2025/03/12
Shipped:
Received: 2025/03/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	9893561	2025/03/19	2025/03/19	Medhat Nasr
Hexavalent Chromium in Soil by IC	IC/SPEC	9892840	2025/03/18	2025/03/18	Sousan Besharatlou
Acid Extractable Metals by ICPMS	ICP/MS	9893149	2025/03/18	2025/03/18	Thuy Linh Nguyen
Moisture	BAL	9892474	N/A	2025/03/17	Raj Patel
pH CaCl2 EXTRACT	AT	9893481	2025/03/19	2025/03/19	Surinder Rai

Bureau Veritas ID: AOWY69
Sample ID: DUPS201
Matrix: Soil

Collected: 2025/03/12
Shipped:
Received: 2025/03/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	9892752	N/A	2025/03/18	Raj Patel
OC Pesticides (Selected) & PCB	GC/ECD	9894402	2025/03/20	2025/03/20	Harish Patel
OC Pesticides Summed Parameters	CALC	9891076	N/A	2025/03/18	Automated Statchk

Bureau Veritas ID: AOWY72
Sample ID: BH207/3
Matrix: Soil

Collected: 2025/03/12
Shipped:
Received: 2025/03/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH CaCl2 EXTRACT	AT	9893481	2025/03/19	2025/03/19	Surinder Rai

Bureau Veritas ID: AOWY72 Dup
Sample ID: BH207/3
Matrix: Soil

Collected: 2025/03/12
Shipped:
Received: 2025/03/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH CaCl2 EXTRACT	AT	9893481	2025/03/19	2025/03/19	Surinder Rai

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

GENERAL COMMENTS

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

Package 1	3.0°C

Revised Report [2025/03/31]: Split report as per request.

Results relate only to the items tested.

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

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9894402	2,4,5,6-Tetrachloro-m-xylene	2025/03/20	107	50 - 130	90	50 - 130	101	%		
9894402	Decachlorobiphenyl	2025/03/20	111	50 - 130	96	50 - 130	109	%		
9892474	Moisture	2025/03/17							0	20
9892527	WAD Cyanide (Free)	2025/03/18	99	75 - 125	108	80 - 120	<0.01	ug/g	NC	35
9892752	Moisture	2025/03/18							5.5	20
9892840	Chromium (VI)	2025/03/18	87	70 - 130	91	80 - 120	<0.18	ug/g	NC	35
9893109	Hot Water Ext. Boron (B)	2025/03/18	101	75 - 125	94	75 - 125	<0.050	ug/g	2.9	40
9893143	Acid Extractable Antimony (Sb)	2025/03/18	80	75 - 125	119	80 - 120	<0.20	ug/g	NC	30
9893143	Acid Extractable Arsenic (As)	2025/03/18	105	75 - 125	104	80 - 120	<1.0	ug/g	1.0	30
9893143	Acid Extractable Barium (Ba)	2025/03/18	NC	75 - 125	98	80 - 120	<0.50	ug/g	2.5	30
9893143	Acid Extractable Beryllium (Be)	2025/03/18	107	75 - 125	99	80 - 120	<0.20	ug/g	4.0	30
9893143	Acid Extractable Boron (B)	2025/03/18	95	75 - 125	92	80 - 120	<5.0	ug/g	2.1	30
9893143	Acid Extractable Cadmium (Cd)	2025/03/18	110	75 - 125	102	80 - 120	<0.10	ug/g	10	30
9893143	Acid Extractable Chromium (Cr)	2025/03/18	NC	75 - 125	100	80 - 120	<1.0	ug/g	0.79	30
9893143	Acid Extractable Cobalt (Co)	2025/03/18	102	75 - 125	102	80 - 120	<0.10	ug/g	0.98	30
9893143	Acid Extractable Copper (Cu)	2025/03/18	NC	75 - 125	99	80 - 120	<0.50	ug/g	0.32	30
9893143	Acid Extractable Lead (Pb)	2025/03/18	108	75 - 125	104	80 - 120	<1.0	ug/g	0.46	30
9893143	Acid Extractable Mercury (Hg)	2025/03/18	110	75 - 125	104	80 - 120	<0.050	ug/g		
9893143	Acid Extractable Molybdenum (Mo)	2025/03/18	104	75 - 125	100	80 - 120	<0.50	ug/g	15	30
9893143	Acid Extractable Nickel (Ni)	2025/03/18	NC	75 - 125	103	80 - 120	<0.50	ug/g	0.72	30
9893143	Acid Extractable Selenium (Se)	2025/03/18	100	75 - 125	99	80 - 120	<0.50	ug/g	NC	30
9893143	Acid Extractable Silver (Ag)	2025/03/18	106	75 - 125	98	80 - 120	<0.20	ug/g	NC	30
9893143	Acid Extractable Thallium (Tl)	2025/03/18	110	75 - 125	104	80 - 120	<0.050	ug/g	1.3	30
9893143	Acid Extractable Uranium (U)	2025/03/18	117	75 - 125	110	80 - 120	<0.050	ug/g	0.25	30
9893143	Acid Extractable Vanadium (V)	2025/03/18	NC	75 - 125	103	80 - 120	<5.0	ug/g	1.2	30
9893143	Acid Extractable Zinc (Zn)	2025/03/18	NC	75 - 125	105	80 - 120	<5.0	ug/g	1.8	30
9893149	Acid Extractable Antimony (Sb)	2025/03/18	93	75 - 125	102	80 - 120	<0.20	ug/g	NC	30
9893149	Acid Extractable Arsenic (As)	2025/03/18	96	75 - 125	100	80 - 120	<1.0	ug/g	NC	30
9893149	Acid Extractable Barium (Ba)	2025/03/18	NC	75 - 125	98	80 - 120	<0.50	ug/g	9.5	30
9893149	Acid Extractable Beryllium (Be)	2025/03/18	95	75 - 125	95	80 - 120	<0.20	ug/g	0.39	30
9893149	Acid Extractable Boron (B)	2025/03/18	90	75 - 125	93	80 - 120	<5.0	ug/g	NC	30

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

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9893149	Acid Extractable Cadmium (Cd)	2025/03/18	97	75 - 125	102	80 - 120	<0.10	ug/g	NC	30
9893149	Acid Extractable Chromium (Cr)	2025/03/18	93	75 - 125	94	80 - 120	<1.0	ug/g	5.7	30
9893149	Acid Extractable Cobalt (Co)	2025/03/18	92	75 - 125	96	80 - 120	<0.10	ug/g	7.1	30
9893149	Acid Extractable Copper (Cu)	2025/03/18	92	75 - 125	99	80 - 120	<0.50	ug/g	5.5	30
9893149	Acid Extractable Lead (Pb)	2025/03/18	95	75 - 125	97	80 - 120	<1.0	ug/g	6.7	30
9893149	Acid Extractable Mercury (Hg)	2025/03/18	98	75 - 125	101	80 - 120	<0.050	ug/g	NC	30
9893149	Acid Extractable Molybdenum (Mo)	2025/03/18	92	75 - 125	97	80 - 120	<0.50	ug/g	9.1	30
9893149	Acid Extractable Nickel (Ni)	2025/03/18	94	75 - 125	96	80 - 120	<0.50	ug/g	3.2	30
9893149	Acid Extractable Selenium (Se)	2025/03/18	96	75 - 125	100	80 - 120	<0.50	ug/g	NC	30
9893149	Acid Extractable Silver (Ag)	2025/03/18	94	75 - 125	101	80 - 120	<0.20	ug/g	NC	30
9893149	Acid Extractable Thallium (Tl)	2025/03/18	97	75 - 125	101	80 - 120	<0.050	ug/g	NC	30
9893149	Acid Extractable Uranium (U)	2025/03/18	95	75 - 125	98	80 - 120	<0.050	ug/g	8.9	30
9893149	Acid Extractable Vanadium (V)	2025/03/18	NC	75 - 125	93	80 - 120	<5.0	ug/g	3.5	30
9893149	Acid Extractable Zinc (Zn)	2025/03/18	97	75 - 125	99	80 - 120	<5.0	ug/g	6.3	30
9893355	Chromium (VI)	2025/03/19	68 (1)	70 - 130	90	80 - 120	<0.18	ug/g	NC	35
9893465	Acid Extractable Antimony (Sb)	2025/03/19	100	75 - 125	106	80 - 120	<0.20	ug/g	NC	30
9893465	Acid Extractable Arsenic (As)	2025/03/19	98	75 - 125	102	80 - 120	<1.0	ug/g	4.2	30
9893465	Acid Extractable Barium (Ba)	2025/03/19	NC	75 - 125	100	80 - 120	<0.50	ug/g	5.6	30
9893465	Acid Extractable Beryllium (Be)	2025/03/19	98	75 - 125	100	80 - 120	<0.20	ug/g	1.4	30
9893465	Acid Extractable Boron (B)	2025/03/19	96	75 - 125	98	80 - 120	<5.0	ug/g	6.6	30
9893465	Acid Extractable Cadmium (Cd)	2025/03/19	103	75 - 125	105	80 - 120	<0.10	ug/g	NC	30
9893465	Acid Extractable Chromium (Cr)	2025/03/19	99	75 - 125	99	80 - 120	<1.0	ug/g	3.4	30
9893465	Acid Extractable Cobalt (Co)	2025/03/19	96	75 - 125	101	80 - 120	<0.10	ug/g	3.1	30
9893465	Acid Extractable Copper (Cu)	2025/03/19	90	75 - 125	101	80 - 120	<0.50	ug/g	3.1	30
9893465	Acid Extractable Lead (Pb)	2025/03/19	93	75 - 125	99	80 - 120	<1.0	ug/g	3.8	30
9893465	Acid Extractable Mercury (Hg)	2025/03/19	98	75 - 125	103	80 - 120	<0.050	ug/g		
9893465	Acid Extractable Molybdenum (Mo)	2025/03/19	99	75 - 125	98	80 - 120	<0.50	ug/g	NC	30
9893465	Acid Extractable Nickel (Ni)	2025/03/19	97	75 - 125	100	80 - 120	<0.50	ug/g	3.1	30
9893465	Acid Extractable Selenium (Se)	2025/03/19	100	75 - 125	105	80 - 120	<0.50	ug/g	NC	30
9893465	Acid Extractable Silver (Ag)	2025/03/19	100	75 - 125	104	80 - 120	<0.20	ug/g	NC	30
9893465	Acid Extractable Thallium (Tl)	2025/03/19	93	75 - 125	99	80 - 120	<0.050	ug/g	7.2	30

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

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9893465	Acid Extractable Uranium (U)	2025/03/19	100	75 - 125	102	80 - 120	<0.050	ug/g	3.5	30
9893465	Acid Extractable Vanadium (V)	2025/03/19	NC	75 - 125	96	80 - 120	<5.0	ug/g	2.1	30
9893465	Acid Extractable Zinc (Zn)	2025/03/19	96	75 - 125	104	80 - 120	<5.0	ug/g	7.2	30
9893481	Available (CaCl2) pH	2025/03/19			100	97 - 103			0.41	N/A
9893561	Hot Water Ext. Boron (B)	2025/03/19	104	75 - 125	105	75 - 125	<0.050	ug/g	NC	40
9894402	a-Chlordane	2025/03/20	95	50 - 130	81	50 - 130	<0.0020	ug/g	NC	40
9894402	Aldrin	2025/03/20	92	50 - 130	77	50 - 130	<0.0020	ug/g	NC	40
9894402	Dieldrin	2025/03/20	104	50 - 130	89	50 - 130	<0.0020	ug/g	NC	40
9894402	Endosulfan I (alpha)	2025/03/20	102	50 - 130	94	50 - 130	<0.0020	ug/g	NC	40
9894402	Endosulfan II (beta)	2025/03/20	89	50 - 130	76	50 - 130	<0.0020	ug/g	NC	40
9894402	Endrin	2025/03/20	106	50 - 130	89	50 - 130	<0.0020	ug/g	NC	40
9894402	g-Chlordane	2025/03/20	94	50 - 130	80	50 - 130	<0.0020	ug/g	NC	40
9894402	Heptachlor epoxide	2025/03/20	94	50 - 130	80	50 - 130	<0.0020	ug/g	NC	40
9894402	Heptachlor	2025/03/20	86	50 - 130	74	50 - 130	<0.0020	ug/g	NC	40
9894402	Hexachlorobenzene	2025/03/20	97	50 - 130	79	50 - 130	<0.0020	ug/g	NC	40
9894402	Hexachlorobutadiene	2025/03/20	61	50 - 130	85	50 - 130	<0.0020	ug/g	NC	40
9894402	Hexachloroethane	2025/03/20	41 (2)	50 - 130	65	50 - 130	<0.0020	ug/g	NC	40
9894402	Lindane	2025/03/20	92	50 - 130	80	50 - 130	<0.0020	ug/g	NC	40
9894402	Methoxychlor	2025/03/20	103	50 - 130	103	50 - 130	<0.0050	ug/g	NC	40
9894402	o,p-DDD	2025/03/20	105	50 - 130	89	50 - 130	<0.0020	ug/g	NC	40
9894402	o,p-DDE	2025/03/20	99	50 - 130	83	50 - 130	<0.0020	ug/g	NC	40
9894402	o,p-DDT	2025/03/20	102	50 - 130	85	50 - 130	<0.0020	ug/g	NC	40
9894402	p,p-DDD	2025/03/20	111	50 - 130	95	50 - 130	<0.0020	ug/g	NC	40
9894402	p,p-DDE	2025/03/20	113	50 - 130	102	50 - 130	<0.0020	ug/g	NC	40

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

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9894402	p,p-DDT	2025/03/20	102	50 - 130	92	50 - 130	<0.0020	ug/g	NC	40

N/A = Not Applicable

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

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

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

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

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

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

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

(1) The matrix spike recovery was below the lower control limit .This may be due in part to the reducing environment of the sample. The sample was re-analyzed with the same results

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

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

Bureau Veritas Job #: C527401
Report Date: 2025/03/31

Soil Engineers Ltd
Client Project #: 1810-E082-2
Site Location: MISSISSAUGA
Sampler Initials: CG

VALIDATION SIGNATURE PAGE

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

Louise Harding, 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 Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

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