GeoPro Consulting Limited

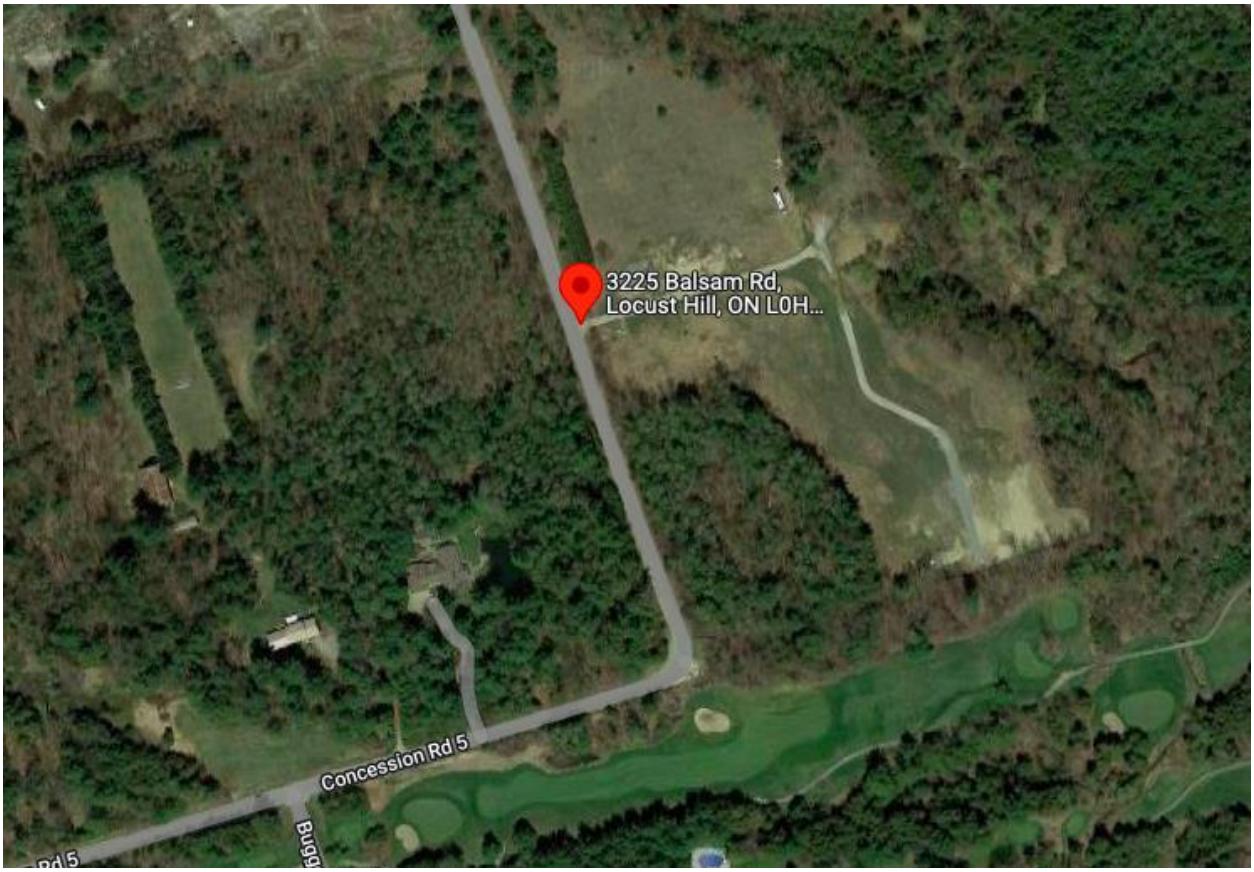
Geotechnical-Hydrogeology-Environmental-Materials-Inspection

Soil Characterization Report

3225 Balsam Road (Concession 5 Road), Pickering, ON

Prepared For:

869547 Ontario Inc.



GeoPro Project No.: 17-1780GHE3

Report Date: December 28, 2022

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LIMITATIONS OF THE REPORT

1.0 EXECUTIVE SUMMARY

GeoPro Consulting Limited ("GeoPro") was retained by 869547 Ontario Inc. (the "Client") to prepare a Soil Characterization Report for the property located at 3225 Balsam Road (Concession 5 Road), Pickering, ON (the "Site" or "Project Area").

The Site consists of one (1) rectangular parcel of land. At the time of preparing this Soil Characterization Report, the Site was vacant. However, remnants of a residential house were observed. Thus, the current land use of the Site is considered residential use. The Site is currently owned by the Client. We understood that the Client intends to develop the Site with residential houses and 2000 m^3 of excess soil is estimated for the proposed excavation. Considering the excavation of soil at the Site, excess soil management studies are required in accordance with Ontario Regulation 406/19 (O. Reg. 406/19).

In support of filing with the Environmental Registry of Ontario, a Phase One Environmental Site Assessment ("ESA") was conducted at the Site on September 10, 2021 by GeoPro. As per section 11. (2) of O. Reg. 406/19, Assessment of Past Uses is not required if a Phase One ESA has been prepared for the project area within the meaning of O. Reg. 153/04. Based on the results of the Phase One ESA, three (3) Areas of Potential Environmental Concern ("APECs") were identified at the Project Area in the soil and/or crushed rock to be excavated.

The purpose of the Soil Characterization Report was to characterize the subsurface soil conditions at the Site and assess areas where contaminants may be present in the soil and/or crushed rock to be excavated. The Soil Characterization Report, which includes a Sampling and Analysis Plan, was conducted in general accordance with the On-Site and Excess Soil Regulation (O.Reg.406/19) under the Environmental Protection Act ("EPA").

The Soil Characterization Report was completed based on the requirements of O. Reg. 406/19 and the findings of the Phase One ESA. The soil samples tested in this report were analyzed for one or more parameters including metals and inorganics, petroleum hydrocarbons ("PHCs"), volatile organic compounds ("VOCs"), polycyclic aromatic hydrocarbons ("PAHs"), polychlorinated biphenyls ("PCBs"), and organochlorine pesticides ("OCs"). Toxicity Characteristic Leaching Procedure ("TCLP") was conducted for parameters including metals and inorganics, PAHs, VOCs, PCBs, and ignitability.

The soil analytical results were compared with the Ontario Ministry of the Environment, Conservation and Parks (MECP) "Generic Excess Soil Quality Standards", December 2020, Table 1: Full Depth Background Site Condition Standards for Residential/Parkland/Institutional/Industrial/Community/Commercial Property Use ("MECP Table 1 Standards"); Table 2.1: Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional ("R/P/I") Property Use ("MECP Table 2.1 Standards"); and Table 3.1: Full Depth Excess Soil Quality Standards in a Non-Potable Ground Water

Condition for Residential/Parkland/Institutional Property Use ("MECP Table 3.1 Standards").

The TCLP leachate results were compared with "Schedule 4 – Leachate Quality Criteria" outlined in the Ontario Regulation 347, R.R.O. 1990, made under the Environmental Protection Act.

Based on the findings of the Soil Characterization Report, the following conclusions were made:

- The soil stratigraphy at the Site generally consists of fill materials or reworked soil below topsoil, underlain by fine sandy/clayey silt and silty fine sand. Fill materials which consist mainly of silty fine sand were encountered in BH101, BH105, and BH106, and extended to depths ranging from approximately 0.1 to 1.8 meters below ground surface ("mBGS"). No bedrock was encountered at the maximum drilled depth of approximately 5 mBGS.
- Based on the Site conditions, materials to be reused on Site should meet the MECP Table 1 Standards. Additional comparisons to the MECP Table 2.1, and Table 3.1 R/P/I Standards were carried out for reuse purposes.
- Based on the soil analytical results, no exceedances of the applicable standards were found for metals and inorganics, petroleum hydrocarbons ("PHCs"), volatile organic compounds ("VOCs"), polycyclic aromatic hydrocarbons ("PAHs"), polychlorinated biphenyls ("PCBs"), and organochlorine pesticides ("OCs") in the soil samples analyzed.
- Based on the analytical results of TCLP testing, no exceedances of the applicable standards were found for the leachate samples analyzed.

Based on the findings of the Soil Characterization Report, GeoPro provides the following recommendations.

- The groundwater table at the Site is anticipated to be shallow. Should the proposed excavation depth be deeper than the groundwater table, additional considerations should be made.
- The soils generated at the Site can be reused at the Site or at a receiving site that would accept the soils as per the test results. Further comparison and testing of the soil may be required to satisfy the requirements of the receiving Site.
- Conduct leachate testing using modified Synthetic Precipitation Leaching Procedure (mSPLP) as per O. Reg. 406/19 before the transport of excess soil.
- An Excess Soil Destination Assessment Report should be conducted in accordance with O. Reg. 406/19.
- All excess soil management, transportation, storage, disposal, and reuse should be done in accordance with O.Reg. 406/19 and the Rules for Soil Management and Excess Soil Quality Standards.

NOTE: This executive summary provides a brief overview of the study findings. It is not intended to substitute for the complete report, nor does it detail specific issues discussed within the report. This summary is not to be adopted in lieu of reading the complete report.

2.0 INTRODUCTION

GeoPro Consulting Limited ("GeoPro") was retained by 869547 Ontario Inc. (the "Client") to prepare a Soil Characterization Report for the property located at 3225 Balsam Road (Concession 5 Road), Pickering, ON (the "Site" or "Project Area").

The Site consists of one (1) rectangular parcel of land. At the time of preparing this Soil Characterization Report, the Site was vacant. However, remnants of a residential house were observed. Thus, the current land use of the Site is considered residential use. The Site is currently owned by the Client. We understood that the Client intends to develop the Site with residential houses and 2000 m^3 of excess soil is estimated for the proposed excavation. Considering the excavation of soil at the Site, excess soil management studies are required in accordance with Ontario Regulation 406/19 (O. Reg. 406/19).

In support of filing with the Environmental Registry of Ontario, a Phase One Environmental Site Assessment ("ESA") was conducted at the Site in September 10, 2021 by GeoPro. As per section 11. (2) of O. Reg. 406/19, Assessment of Past Uses is not required if a Phase One ESA has been prepared for the project area within the meaning of O. Reg. 153/04. Based on the results of the Phase One ESA, three (3) Areas of Potential Environmental Concern ("APECs") were identified at the Project Area in the soil and/or crushed rock to be excavated.

The purpose of the Soil Characterization Report was to characterize the subsurface soil conditions at the Site and assess areas where contaminants may be present in the soil and/or crushed rock to be excavated. The Soil Characterization Report, which includes a Sampling and Analysis Plan, was conducted in general accordance with the On-Site and Excess Soil Regulation (O.Reg.406/19) under the Environmental Protection Act (EPA).

2.1 Site Description

The Site consists of one (1) rectangular parcel of land with an area of approximately 179,100 m^2. The total volume of excavated excess soil material is estimated to be approximately 2000 m^3.

The Universal Transverse Mercator ("UTM") coordinates for the approximate centroid of the Site are Zone 17, 658506.53 m East, 4864926.26m North, as obtained from Ontario Source Protection Information Atlas based on the 1983 North American Datum.

Municipal Addresses	3225 Balsam Road (Concession 5 Road), Pickering, Ontario
Legal Descriptions	PT LTS 3 & 4 CON 5 PICKERING, PT 1 ON PLAN 40R25092; PICKERING, REGIONAL MUNICIPALITY OF DURHAM
Excavated Area (s) Location	Entire Site
Excess Volume	An estimated 2000 m^3

The Site as well as the dimensions for the excavated areas and areas of potential environmental concern are presented in Drawings No. 1A and 1B.

2.2 Property Ownership

The contact information for the Client and the Owner is provided in the table below.

	Client	Property Owner
Name	869547 Ontario Inc.	869547 Ontario Inc.
Address	1730 McPherson Court, Unit 21, Pickering, Ontario L1W 3E6	1730 McPherson Court, Unit 21, Pickering, Ontario L1W 3E6
Telephone	N/A	N/A
Email	paul@grandhomescanada.com	paul@grandhomescanada.com

2.3 Current and Proposed Future Uses

Based on the Phase One ESA completed by GeoPro, the Site is considered to be firstly developed for residential purposes prior to 1954. The Site is currently vacant and considered as residential use. The proposed development at the Site is for residential purpose.

2.4 Applicable Site Condition Standard

The analytical results of the soil and leachate samples were evaluated using the standards contained in the Ministry of the Environment, Conservation and Parks (MECP) Soil, Groundwater, and Sediments Standards for Use under Part XV.1 of the Environmental Protection Act dated July 1, 2011, and the standards tables from the MECP "Rules For Soil Management And Excess Soil Quality Standards" dated December 2020 ("Soil Rules 2020") "Appendix 1 - Generic Excess Soil Quality Standards" and "Appendix 2 – Leachate Screening Levels for Excess Soil Reuse".

The Standards applied in this Soil Characterization Report for the Site were selected based on the following information:

- Carruthers Creek is observed at the Site.
- The Site is considered to be environmentally sensitive as per Ontario Regulation 153/04 Records of Site Condition ("O. Reg. 153/04"), as the Site is located within the Toronto and Region Conservation Authority ("TRCA") regulated area.
- The Site is not considered to be a shallow soil property, based on GeoPro's Soil Characterization Report field investigation.
- Potable water wells were noted in the MECP Well Record Report within a 250m radius of the Site.
- The Site is intended for residential use.
- Based on field observation, the native soil materials are generally medium-to-fine textured.

- The amount of excess soil is greater than 350 m^3.

Based on the above information and considering a more conservative assessment, the Ministry of the Environment, Conservation and Parks ("MECP") Table 1 Standards: Full Depth Background Site Condition Standards for Residential/Parkland/Institutional/Industrial/Community/Commercial Property Use ("Table 1 Standards"), was used for determining on-site soil reuse. Comparisons to Table 2.1: Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional ("R/P/I") Property Use ("MECP Table 2.1 Standards"), and Table 3.1: Full Depth Excess Soil Quality Standards in a Non-Potable Ground Water Condition for Residential/Parkland/Institutional ("R/P/I") Property Use ("MECP Table 3.1 Standards"), have also been carried out in this report for potential reuse or disposal determination. The TCLP leachate results were compared with "Schedule 4 – Leachate Quality Criteria" outlined in the Ontario Regulation 347, R.R.O. 1990, made under the Environmental Protection Act.

3.0 BACKGROUND

3.1 Physical Setting

Physiography

Based on the data obtained from Ontario Geological Survey ("OGS") database, the physiography of the Site is summarized in the following table:

Record Source	Physiography Region	Physiography Areas
Online Physiography Map of Southern Ontario	Iroquois Plan	Sand Plains

Quaternary Geology

Based on the data obtained from the OGS database, the quaternary geology of the Site is summarized in the following table:

Record Source	Deposit Types
Online Quaternary Geology Map of Ontario	Halton Till deposits consisting predominantly of silt to silty clay matrix, high in matrix carbonate content and clast poor. Glaciolacustrine deposits consisting predominantly of sand, gravelly sand and gravel, nearshore and beach deposits.

Bedrock Geology

Based on the data obtained from the OGS database, the bedrock geology of the Site is summarized in the following table:

Record Source	Geological Period	Bedrock Type	Bedrock Depth (mBGS)
Bedrock Geology Map of Ontario	Upper Ordovician	Shale, limestone, dolostone, and siltstone	Approximately 26 - 32

mBGS - meters below ground surface

Hydrology

Based on the data obtained from the database maintained by the local conservation authority, the hydrology in regard with the local watershed and open water body on the Site is summarized in the following table:

Watershed	Subwatershed	On-Site Open Water	Nearest On-Site Open Water		
			Name	Flow Direction	Discharge Location
Carruthers Creek Watershed	Carruthers Creek Subwatershed	Yes	Carruthers Creek	Towards Southeast	Approximately 10.9 km southeast of the Site

3.2 Previous Environmental Report(s)

3.2.1 Previous Investigations by GeoPro

A geotechnical investigation report entitled *"Geotechnical Investigation, Slope Stability Analysis and Geotechnical Setback Study, Part of Lots 3 and 4, Concession 5, City of Pickering, Ontario",* dated July 05, 2017 was prepared by GeoPro.

A Preliminary Hydrogeological Site Assessment report entitled *"Preliminary Hydrogeological Site Assessment, Proposed Residential Developments, Parts of Lots 3 and 4, Concession 5, City of Pickering, Ontario",* dated May 30, 2017 was also prepared by GeoPro.

The results of the reports have been summarized in the Phase One ESA report prepared by GeoPro.

A Phase One ESA report entitled "*Phase One Environmental Site Assessment, 3225 Balsam Road (Concession 5 Road), Pickering, ON*", dated September 10, 2021 was prepared by GeoPro. The results demonstrated that potentially contaminating activities ("PCAs") were indicated on the Site as well as the off-site properties within the Study Area. Three (3) areas of potential environmental concern ("APECs") were found to be present at the Site in the areas to be excavated. The findings from the Phase One ESA have been incorporated into this report. The Phase One ESA Conceptual Site Model is presented in Drawing No. 1B.

4.0 SCOPE OF THE ASSESSMENT

4.1 Overview of Site Assessment

The objective of the Soil Characterization Report was to assess the quality of the soil and/or crushed rock being excavated at the Site.

The scope of work included the following:

- Review readily available previous reports;
- Design and implement a Sampling and Analysis Plan in general accordance with O. Reg. 406/19;
- Locate the underground and overhead utilities;
- Advance boreholes and install monitoring wells;
- Carry out elevation survey of the boreholes/monitoring wells;
- Conduct soil sampling, field screening (visual and by instrument) to optimize sample selection for quantitative chemical analyses at a Canadian Association for Laboratory Accreditation ("CALA") accredited laboratory;
- Review and assess the analytical results of the samples analyzed;
- Prepare a draft Soil Characterization Report presenting the findings for client review; and
- Prepare a final Soil Characterization Report after addressing the comments provided by the client.

4.2 Media Investigated

Six (6) boreholes (BH101 to BH106) were advanced for the Soil Characterization Report. During the investigation, soil samples were collected from each of the six (6) boreholes (BH101 to BH106) and leachate samples were collected from BH101, BH103, BH104, and BH106.

The soil and leachate samples were delivered to a CALA accredited laboratory for quantitative analysis under a formal chain of custody.

4.3 Phase One Conceptual Site Model

The Phase One ESA report was conducted by GeoPro at the Site in general accordance with O. Reg. 153/04 as amended, from which a Phase One Conceptual Site Model ("CSM") was established. Potentially Contaminating Activities ("PCAs") were indicated at the Site and the properties within a 250 m radius around the Site boundary. As a result, three (3) Areas of Potential Environmental Concern ("APECs") were found in the areas to be excavated, as shown in Drawing No. 1B.

The PCAs, APECs, and Contaminants of Potential Concern ("COPCs") found at the Site in the areas to be excavated are summarized in the following table.

APEC	Location of APEC	PCA Number	Location of PCA	COPCs
APEC 1	Former residential house area	30	**On-Site** Former residential house area	Metals, PAHs
APEC 2	Northwest corner portion of the Site	40, 52	**Off-Site** 3330 Balsam Rd	Metals, PHCs, BTEX, PAHs, OCs
APEC 3	Southwest boundary area of the Site	40	**Off-Site** 2700 Audley Road North	Metals, OCs

Note: PCAs described specifically for the Project Area with reference to the applicable item number in the Table of Potentially Contaminating Activities provided in Schedule D of O.Reg.153/04 as amended, where applicable.
#30 – Importation of Fill Material of Unknown Quality
#40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage, and Large-Scale Applications
#52 – Storage, maintenance, fuelling, and repair of equipment, vehicles, and material used to maintain transportation Systems

The contaminants of potential concern ("COPCs") are listed as follows.
PAHs = Polycyclic Aromatic Hydrocarbons
BTEX = Benzene, Toluene, Etylbenzene, Xylene
PHCs = Petroleum Hydrocarbons
OCs = Organochlorine Pesticides

4.4 Sampling and Analysis Plan

A Sampling and Analysis Plan was prepared in accordance with O. Reg. 406/19. A total of 2,000 m^3 of excess soil is estimated to be generated during the proposed development at the Site. As determined based on the Soil Rules 2020, a minimum of ten (10) soil samples and four (4) leachate samples were required for analysis. Ten (10) soil samples and one (1) duplicate sample were submitted for analysis of bulk parameters. In addition, four (4) soil samples were submitted for leachate analysis under the Toxicity Characteristic Leaching Procedure ("TCLP").

All soil samples submitted for analysis were tested against the mandatory testing parameters as outlined in O. Reg 406/19 and the Soil Rules 2020. In addition, selected soil samples were analysed for the COPCs identified in the Phase One ESA.

A summary of the in-situ samples taken, and the parameters analyzed, as well as the rationale for sampling, is presented in Table I and Table II.

4.4.1 Deviations from Sampling and Analysis Plan

The soil and leachate sampling program was carried out in accordance with the Sampling and Analysis Plan prepared for the Soil Characterization Report.

4.4.2 Impediments

No significant impediments were encountered to affect implementation of site activities including the site visit, surveying, borehole drilling, and soil sampling.

5.0 INVESTIGATION METHOD

5.1 General

All methods used to complete this Soil Characterization Report were in accordance with O. Reg. 406/19, the Soil Rules 2020, the relevant sections of O. Reg. 153/04, GeoPro standard operating procedures, and generally accepted industry practices.

5.2 Borehole Drilling and Monitoring Well Installation

Prior to the intrusive investigation, the underground utilities were located and marked out in the field by the representatives of the major utility companies contacted through Ontario-One-Call and a private locator.

The drilling activities for the Soil Characterization Report were carried out on August 27, 2021. A total of six (6) boreholes (BH101 to BH106) were advanced to a depth of 5 mBGS.

The approximate borehole locations are shown in Drawing No. 2.

All field work was supervised and overseen by on-site GeoPro technical staff who determined the locations of all boreholes, logged each borehole (detailed lithology and observational comments), and secured samples of all media collected during the sampling program visually and instrumentally.

5.3 Soil Sampling

Soil samples were collected at regular intervals with a 50 mm O.D. split-barrel sampler driven with a hammer weighing 624 N and dropping 760 mm in accordance with the Standard Penetration Test (“SPT”) method. Soil samples were selected for quantitative analyses based on visual observation and field screening using the photoionization detector (“PID”) and the flame ionization detector (“FID”).

To prevent cross-contamination between sampling events and boreholes, appropriate decontamination protocols of soil sampling equipment and tools were carried out. A set of flight augers and tools were pre-cleaned by the drilling contractor prior to arrival on the site. The split spoon samplers were decontaminated prior to and between each soil sampling event by scrubbing with a wire brush and washing in a solution of Alconox solution and rinsing with distilled water. The wash water was drummed

for future management based on its quality relative to accepted standards. Dedicated disposable latex/nitrile gloves were used for each sampling event to prevent cross-contamination.

Each soil sample was split into two (2) portions. One (1) portion was placed into sealable plastic bags and allowed to reach ambient temperature for at least one-half hour, making sure to break up the sample inside the bag from outside the bag. The headspace in the bag was sampled using a PID by opening a small portion of the top of the bag and placing the PID tip into the headspace, taking care not to physically contact the sample. The other portion of the soil sample was logged and placed in laboratory-provided sample containers with or without the appropriate laboratory-provided preservatives in accordance with accepted analytical protocols, making sure to eliminate any headspace when sampling for VOCs. All soil samples were placed on ice in coolers for submission to the CALA accredited laboratory under a formal chain of custody.

All soil samples were logged in the field according to soil type, moisture content, colour, consistency, and presence of visual and/or olfactory indicators of potential impact, and then taken to the GeoPro laboratory for detailed examination by the project engineer. Details of the visual observations, including inferred stratigraphy and soil classification are presented on the Borehole Logs included in Appendix A.

5.4 Soil: Field Screening Measurements

As a preliminary screening, the soil headspace vapour concentrations were measured using an RKI Eagle II equipped with an FID for combustible gas concentrations, and a PID for volatile organic compound ("VOCs") concentrations. The RKI Eagle II was calibrated to hexane span gas for the FID, and to isobutylene span gas for the PID.

There are no regulatory criteria for soil vapours; however, measurements of soil vapour concentrations are often used as a field screening tool to indicate petroleum hydrocarbon and/or VOC impacted soils and to optimize selection of samples for quantitative analysis at the contract CALA accredited laboratory.

5.5 Analytical Testing

The collected soil samples were submitted to Eurofins Environment Testing Canada Inc. ("Eurofins") in Ottawa, Ontario, and ALS Environmental ("ALS") in Waterloo, Ontario for bulk and TCLP analysis, respectively. Both Eurofins and ALS are accredited by the Canadian Association for Laboratory Accreditation ("CALA") and meets the requirements of Section 47 of O. Reg. 153/04 certifying that the analytical laboratory be accredited in accordance with the International Standard ISO/IEC 17025, and with the standards developed by the Standards Council of Canada, and MECP Protocol for Analytical Methods Used in the Assessment of Properties and Excess Soil Quality under Part XV.1 of the Environmental Protection Act (MECP Protocol for Analytical Methods).

The analytical protocols were selected to meet the requirement of the Soil Rules 2020 and address the potential impact due to the COPCs in the area of potential environmental concern ("APEC") as documented in the GeoPro's Phase One ESA report dated September 10, 2021.

A summary of the in-situ samples taken, and the parameters analyzed, as well as the rationale for sampling, is presented in Table I and Table II. The results from the chemical analysis are summarized in Table III and IV and are presented in Appendix B and C.

5.6 Residue Management Procedures

All residues produced during the investigation were placed in sealed drums and secured at the Site pending receipt of laboratory analytical results for their management.

5.7 Elevation Survey

The elevations of the boreholes were surveyed by GeoPro staff on October 1, 2021 using GPS survey equipment. The survey data are presented on the attached Borehole Logs in Appendix A.

5.8 Quality Assurance (QA) and Quality Control (QC) Measures

The Soil Characterization Report was carried out in accordance with the Sampling and Analysis Plan prepared according to the previous findings of Phase One ESA. One (1) duplicate soil sample was collected for the Quality Assurance ("QA") and Quality Control ("QC") measures ("QA/QC").

All the soil and leachate samples were collected, handled, and analyzed in general accordance with O. Reg. 406/19 and the Soil Rules 2020. The field observations were made and documented in accordance with the generally accepted sampling and handling procedures used by the environmental consulting industry. All sample containers, preservatives, and labels were supplied by the laboratory. The samples were stored on ice in coolers for delivery to a CALA laboratory by GeoPro under a formal chain of custody. As previously stated, the samples were submitted to a CALA laboratory for quantitative analysis in accordance with accepted analytical methods and QA/QC procedures.

6.0 REVIEW AND EVALUATION

6.1 Soil Stratigraphy

Detailed descriptions of the subsurface conditions are presented on the Borehole Logs provided in Appendix A.

The soil stratigraphy at the Site generally consists of fill materials or reworked soil below topsoil, underlain by fine sandy silt, silty fine sand, silty sand, fine sand and silt to fine sandy silt/clayey silt and silty fine

sand. Fill materials which consist mainly of silty fine sand were encountered in BH101, BH105 and BH106 and extended to depths ranging from approximately 0.1 to 1.8 mBGS. Water was encountered between depths of 1.4-4.6 mBGS. No bedrock was encountered at the maximum drilled depth of approximately 5 mBGS.

6.2 Soil Texture

During the previous geotechnical investigation at the Site, most of the samples were found to contain less than 50% by mass of particles that are 75 micrometres or larger in mean diameter. Therefore, the soils at the Site are classified as medium-to-fine textured soils in accordance with O. Reg. 153/04, as amended (Section 42(2)).

6.3 Groundwater Conditions

Monitoring wells were not installed during this Soil Characterization Report. However, during borehole drilling for soil sampling conducted by GeoPro, groundwater was encountered at depths ranging from 1.4-4.6 mBGS.

The inferred local shallow groundwater flow direction at the Site is generally southeast in the west portion and southwest in the east portion towards the Carruthers Creek.

It should be noted that groundwater levels are expected to vary over time and are subject to seasonal fluctuations. In addition, the local flow direction, which is driven by the local hydraulic gradient, may diverge from the regional flow direction, as well as the distribution of underground utilities.

6.4 Soil: Field Screening

No visual evidence of staining was observed during borehole advancement and soil sample collection.

6.5 Soil Quality

The results of soil analysis were compared with the Ontario Ministry of the Environment, Conservation and Parks (MECP) “Generic Excess Soil Quality Standards”, December 2020, Table 1: Full Depth Background Site Condition Standards for Residential/Parkland/Institutional/Industrial/ Commercial/Community Property Use (“MECP Table 1 Standards”); Table 2.1: Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional (“R/P/I”) Property Use (“MECP Table 2.1 Standards”); and Table 3.1: Full Depth Excess Soil Quality Standards in a Non-Potable Ground Water Condition for R/P/I Property Use (“MECP Table 3.1 Standards”).

Based on the comparison, no exceedances of the applicable standards were found for metals and inorganics, PHCs, PAHs, PCBs, VOCs, and OCs in the soil samples submitted for quantitative analysis.

The analytical results of the soil samples are presented in the Laboratory Certificate of Analysis in Appendix B. The soil quality at the Site is presented in Drawing No. 3 and summarized in Table III.

6.6 Leachate Quality

The TCLP leachate results were compared with "Schedule 4 – Leachate Quality Criteria" outlined in the Ontario Regulation 347, R.R.O. 1990, made under the Environmental Protection Act.

Based on the comparison, no exceedances of the applicable standards were found for metals and inorganics, PAHs, VOCs, PCBs, and ignitability in the leachate samples submitted for quantitative analysis.

The analytical results of the leachate samples are presented in the Laboratory Certificate of Analysis in Appendix C. A summary of leachate quality at the Site is presented in Drawing No. 4 and summarized in Table IV.

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

The Soil Characterization Report was carried out in accordance with the Sampling and Analysis Plan, and with the GeoPro standard operating procedures.

All the soil and leachate samples were collected, handled, and analyzed in general accordance with O. Reg. 406/19 and the MECP Protocol for Analytical Methods.

6.7.1 Field Quality Assurance/Quality Control Samples

One (1) duplicate soil sample was included for analysis of metals and inorganics in the sampling and analysis program.

The analytical results of the field duplicate QA/QC samples are included in Appendix B.

Field Duplicate Samples

Details of QA/QC field duplicate samples are presented in the table below.

Duplicate Sample ID	Original Sample	Media	Parameter Analyzed
BH106 SS2D	BH106 SS2	Soil	Metals and Inorganics

The Relative Percentage Difference ("RPD") is a method of measuring the variation in a set of data that looks at the variation as a proportion of the average or target value. The RPD for the parameters detected with the concentrations five (5) times the detection limits were calculated, and the results are within the acceptable ranges. Therefore, the results of the duplicate samples are similar to the results of the original samples with respect to the parameters analyzed.

6.7.2 Sample Handling in Accordance with the Analytical Protocol

The samples analyzed as part of the Soil Characterization Report were handled in accordance with the MECP Protocol for Analytical Methods with respect to holding time, preservation method, storage requirement, and sample container type.

- The soil and leachate samples were submitted with chains of custody to the laboratory;
- The soil samples were analyzed by Eurofins Environmental Laboratories ("EUROFINS") in Ottawa, Ontario and the leachate samples were analyzed by ALS Environmental Laboratory ("ALS") in Waterloo, Ontario. Both laboratories are accredited by CALA; and
- The analytical results were reported in the laboratory Certificates of Analysis in accordance with O. Reg. 153/04, as amended (Appendix B and C).

6.7.3 Certification of Results

Based on a review of the QA/QC sample results, chain of custody, and the laboratory Certificates of Analysis, GeoPro confirms that:

- All Certificates of Analysis or Analytical Reports received pursuant to Section 47(2) of O. Reg. 153/04 (amended), comply with Section 47(3) of O. Reg. 153/04, as amended and O. Reg. 406/19;
- A Certificate of Analysis or Analytical Report has been received for each sample submitted for quantitative analysis; and
- All Certificates of Analysis are included in Appendix B and C.

6.7.4 Laboratory QA/QC Results

ALS and Eurofins have established and implemented their own internal QA/QC analytical protocol, consisting of analyzing duplicate, blank, control, certified reference material, and matrix spike samples.

Based on a review of the data in the laboratory Certificates of Analysis, the following inferences were made:

- All samples/sample extracts were analyzed within the applicable holding times using approved analytical methods.
- The reported detection limits were acceptable for all tested parameters.
- The recovery percentage for the surrogate samples were within the acceptable range.
- The results for the laboratory duplicate samples were similar to the results for the original samples, and relative percent differences for the detectable tested parameters were within the acceptable range.

In conclusion, the field and laboratory data obtained met the general requirements for the investigation, and the overall quality of the data did not affect the decision making in this Soil Characterization Report.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

GeoPro conducted a Soil Characterization Report at the Site based on the information obtained from the Phase One ESA. The soil samples were analyzed for parameters including OCs, PAHs, PCBs, PHCs, VOCs, and metals and inorganics. The results of soil analysis were compared with the Ontario Ministry of the Environment, Conservation and Parks (MECP) "Generic Excess Soil Quality Standards", December 2020, Table 1: Full Depth Background Site Condition Standards for Residential/Parkland/ Institutional/Industrial/Commercial/Community Property Use ("MECP Table 1 Standards"); Table 2.1: Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition for Residential/Parkland/ Institutional Property Use ("MECP Table 2.1 Standards"); and Table 3.1: Full Depth Excess Soil Quality Standards in a Non-Potable Ground Water Condition for Residential/Parkland/Institutional Property Use ("MECP Table 3.1 Standards").

Selected samples underwent a TCLP leachate analysis for metals and inorganics, VOCs, PCBs, PAHs, and ignitability. The TCLP leachate results were compared with "Schedule 4 – Leachate Quality Criteria" outlined in the Ontario Regulation 347, R.R.O. 1990, made under the Environmental Protection Act.

Based on the findings of the Soil Characterization Report, the following conclusions were made:

- The soil stratigraphy at the Site generally consists of fill materials or reworked soil below topsoil, underlain by fine sandy/clayey silt and silty fine sand. Fill materials which consist mainly of silty fine sand were encountered in BH101, BH105 and BH106, and extended to depths ranging from approximately 0.1 to 1.8 mBGS. No bedrock was encountered at the maximum drilled depth of approximately 5 mBGS.
- Based on the Site conditions, materials to be reused on Site should meet the MECP Table 1 Standards. Additional comparisons to MECP Table 2.1 and Table 3.1 Standards were carried out for reuse purposes.
- Based on the soil analytical results, no exceedances of the applicable standards were found for metals and inorganics, petroleum hydrocarbons ("PHCs"), volatile organic compounds ("VOCs"), polycyclic aromatic hydrocarbons ("PAHs"), polychlorinated biphenyls ("PCBs"), and organochlorine pesticides ("OCs") in the soil samples analyzed.
- Based on the analytical results of TCLP testing, no exceedances of the applicable standards were found for the leachate samples analyzed.

Based on the findings of the Soil Characterization Report, GeoPro provides the following recommendations.

- The groundwater table at the Site is anticipated to be shallow. Should the proposed excavation depth be deeper than the groundwater table, additional considerations should be made.
- The soils generated at the Site can be reused at the Site or at a receiving site that would accept the soils as per the test results. Further comparison and testing of the soil may be required to satisfy the requirements of the receiving Site.
- Conduct Leachate testing using modified Synthetic Precipitation Leaching Procedure (mSPLP) as per O. Reg. 406/19 before the transport of excess soil.
- An Excess Soil Destination Assessment Report should be conducted in accordance with O. Reg. 406/19.
- All excess soil management, transportation, storage, disposal, and reuse should be done in accordance with O.Reg. 406/19 and the Rules for Soil Management and Excess Soil Quality Standards.

8.0 SIGNATURE

This report was conducted by Sinclair Kenrick Hidajat and supervised by David Liu, who is a Qualified Person with the MECP as defined under Ontario Regulation 153/04.

We trust that the information contained in this report is complete within our terms of reference. If you have any questions or require further information, please do not hesitate to contact our office.

Sincerely,

GeoPro Consulting Limited
Geotechnical - Hydrogeology - Environmental - Materials Testing – Inspection

Sinclair Kenrick Hidajat, B.A.Sc.

David B. Liu, P.Eng., QP
Principal

TABLES

Table I: Soil Sample Analytical Protocol					
Sample Location	**Sample ID**	**Date of Sampling**	**Sample Depth**	**Chemical Analysis**	**Rationale**
BH101	BH101 SS2	27/08/2021	0.76 - 1.22	Metals & Inorganics, PHCs, PCBs, VOCs, PAHs	To assess the soil quality in APEC 1 and general soil quality in the excavated areas
	BH101 SS3	27/08/2021	1.52 - 1.98	Metals & Inorganics, PHCs, PCBs, VOCs, PAHs	To assess the soil quality in APEC 1 and general soil quality in the excavated areas
BH102	BH102 SS1	27/08/2021	0.3 - 0.61	Metals & Inorganics, PHCs, PCBs, VOCs, PAHs, OCs	To assess the soil quality in APEC 2 and general soil quality in the excavated areas
BH103	BH103 SS2	27/08/2021	0.76 - 1.22	Metals & Inorganics, PHCs, PCBs, VOCs, PAHs, OCs	To assess the soil quality in APEC 2 and general soil quality in the excavated areas
	BH103 SS3	27/08/2021	1.52 - 1.98	Metals & Inorganics, PHCs, PCBs, VOCs, PAHs, OCs	To assess the soil quality in APEC 2 and general soil quality in the excavated areas
BH104	BH104 SS2	27/08/2021	0.76 - 1.22	Metals & Inorganics, PHCs, PCBs, VOCs, PAHs, OCs	To assess the soil quality in APEC 3 and general soil quality in the excavated areas
	BH104 SS4	27/08/2021	2.29 - 2.74	Metals & Inorganics, PHCs, PCBs, VOCs, PAHs, OCs	To assess the soil quality in APEC 3 and general soil quality in the excavated areas
BH105	BH105 SS1	27/08/2021	0.25 - 0.61	Metals & Inorganics, PHCs, PCBs, VOCs, PAHs, OCs	To assess the soil quality in APEC 3 and general soil quality in the excavated areas
BH106	BH106 SS2	27/08/2021	0.76 - 1.22	Metals & Inorganics, PHCs, PCBs, VOCs, PAHs, OCs	To assess the soil quality in APEC 3 and general soil quality in the excavated areas
	BH106 SS2D	27/08/2021	0.76 - 1.22	Metals & Inorganics	QA/QC: duplicate soil sample of BH106 SS2
	BH106 SS4	27/08/2021	2.29 - 2.74	Metals & Inorganics, PHCs, PCBs, VOCs, PAHs, OCs	To assess the soil quality in APEC 3 and general soil quality in the excavated areas

Note:
QA/QC = Quality Assurance/Quality Control
VOCs = Volatile Organic Compounds
PCBs = Polychlorinated Biphenyls
PAHs = Polycyclic Aromatic Hydrocarbons
PHCs = Petroleum Hydrocarbons
OCs = Organochlorine Pesticides

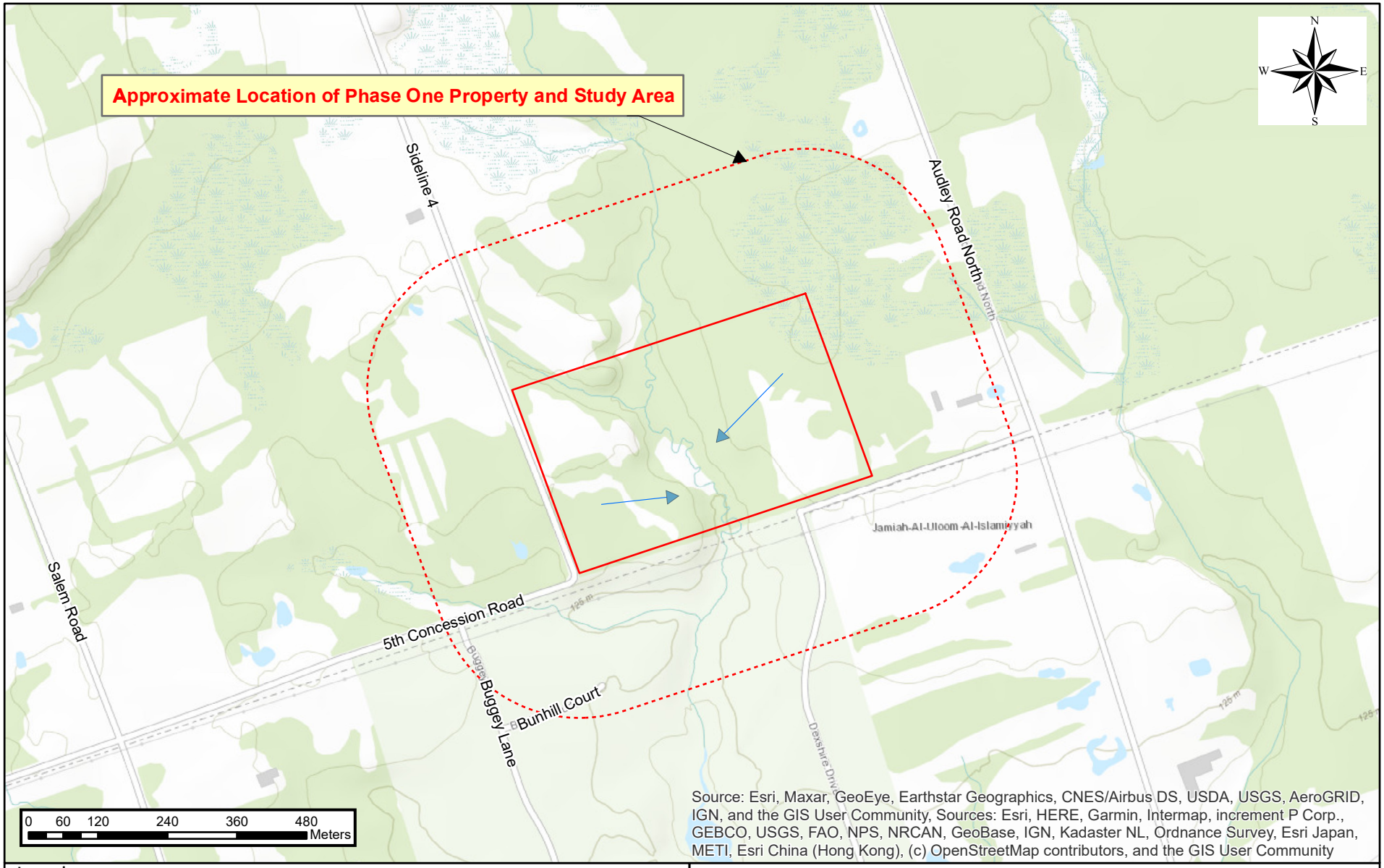
Table II: Leachate Sample Analytical Protocol				
Sample Location	**Sample ID**	**Date of Sampling**	**Sample Depth**	**Chemical Analysis**
BH101	BH101 SS2	27/08/2021	0.76 - 1.22	Metals & Inorganics, PCBs, VOCs, PAHs, Ignitability
BH103	BH103 SS3	27/08/2021	1.52 - 1.98	Metals & Inorganics, PCBs, VOCs, PAHs, Ignitability
BH104	BH104 SS4	27/08/2021	2.29 - 2.74	Metals & Inorganics, PCBs, VOCs, PAHs, Ignitability
BH106	BH106 SS4	27/08/2021	2.29 - 2.74	Metals & Inorganics, PCBs, VOCs, PAHs, Ignitability

Note:
VOCs = Volatile Organic Compounds
PCBs = Polychlorinated Biphenyls
PAHs = Polycyclic Aromatic Hydrocarbons

Table III: Soil Sample Comparison					
Sample Location	**Sample ID**	**Date Reported**	**Comparison with Table 1 Standards R/P/I/I/C/C**	**Comparison with Table 2.1 Standards R/P/I**	**Comparison with Table 3.1 Standards R/P/I**
BH101	BH101 SS2	17/09/2021	Passed	Passed	Passed
	BH101 SS3	17/09/2021	Passed	Passed	Passed
BH102	BH102 SS1	17/09/2021	Passed	Passed	Passed
BH103	BH103 SS2	17/09/2021	Passed	Passed	Passed
	BH103 SS3	17/09/2021	Passed	Passed	Passed
BH104	BH104 SS2	17/09/2021	Passed	Passed	Passed
	BH104 SS4	17/09/2021	Passed	Passed	Passed
BH105	BH105 SS1	17/09/2021	Passed	Passed	Passed
BH106	BH106 SS2	17/09/2021	Passed	Passed	Passed
	BH106 SS2D	17/09/2021	Passed	Passed	Passed
	BH106 SS4	17/09/2021	Passed	Passed	Passed

Table IV: Leachate Sample Comparison			
Sample Location	**Sample ID**	**Date Reported**	**Comparison with Leachate Quality Criteria**
BH101	BH101 SS2	16/09/2021	Passed
BH103	BH103 SS3	16/09/2021	Passed
BH104	BH104 SS4	16/09/2021	Passed
BH106	BH106 SS4	16/09/2021	Passed

DRAWINGS



Legend

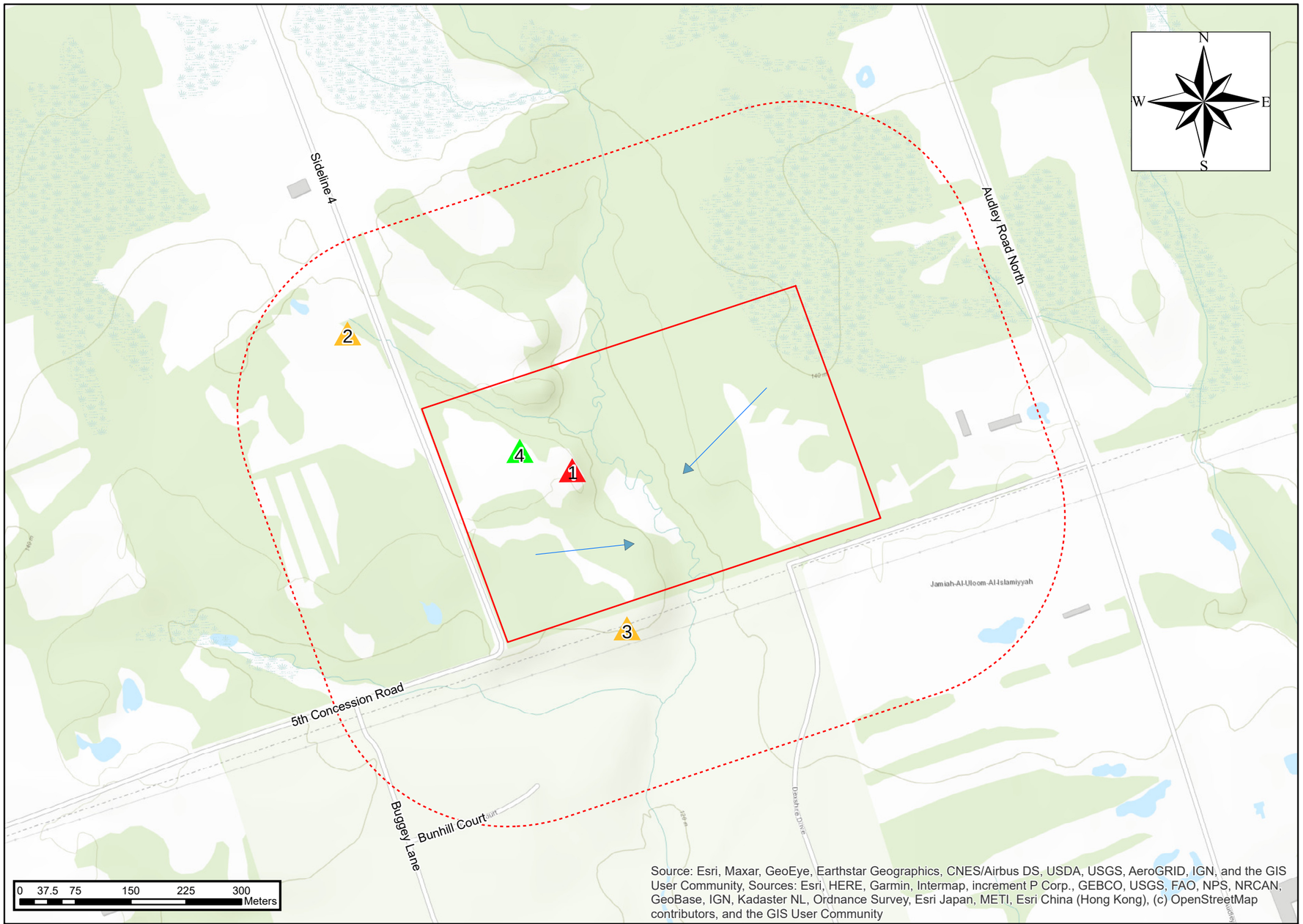
Project Area

Study Area

Inferred Groundwater Flow Direction

Map Sources:
ArcGIS Basemap projected in NAD83 UTM Zone 17N - Topographic

Prepared by: BN	Rev: KY	Approved: KY	Scale: As Shown	Project No.: 17-1780E3	Drawing No.: 1A	Original Size: Letter
Date: July 2021	Client: 869547 Ontario Inc.	Title: Site Location Plan	Project: Soil Characterization Report Proposed Residential Development at Part of Lot 3 & 4 Concession Road 5, Pickering, Ontario		GeoPro Consulting Limited	



Legend

- Project Area
- Study Area
- Inferred GW Flow Direction

PCA Risk

- Low
- Medium
- High

Map Sources:
ArcGIS Basemap projected in NAD83 UTM Zone 17N - Topographic
Definitions: "APEC" - Area of Potential Environmental Concern
"PCA" - Potentially Contaminating Activity
PCA Numbers are in accordance with Table 2, Schedule D of O. Reg. 153/04

Prepared by: BN	Rev: SK	Scale: As Shown	Project No.: 17-1780E3	Drawing No. 1B	Original Size: 11" x 17"
Date: July 2021	Client: 869547 Ontario Inc.	Title: Phase One Conceptual Site Model	Project: Soil Characterization Report Proposed Residential Development at Part of Lot 3 & 4 Concession Road 5, Pickering, Ontario	GeoPro Consulting Limited	

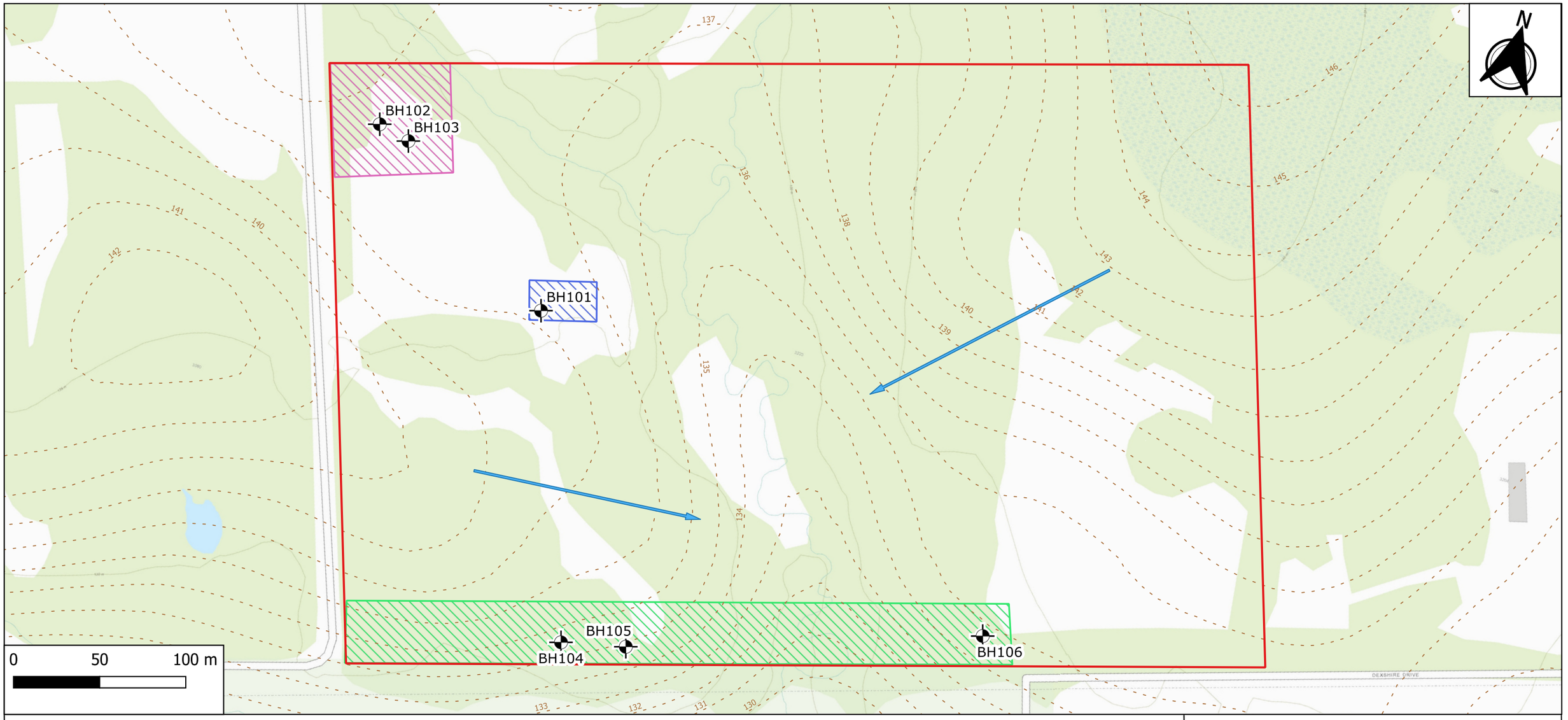
PCAs with Contribution to APEC

MAP ID	FIGURE ID	Location	PCA
1	AP3	Former residential house	30
2	E1,AP2,SN1	3330 Balsam Road	40,52
3	AP1,CD1,SN2	2700 Audley Road North	40

PCAs without Contribution to APEC

MAP ID	FIGURE ID	Location	PCA
4	PR1,SS1	Entire Site Area	30

Notes:
PCA numbers are in accordance with Table 2, Schedule D of O. Reg. 153/04.
#30 – Importation of Fill Material of Unknown Quality
#40 – Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications
#52 – Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems



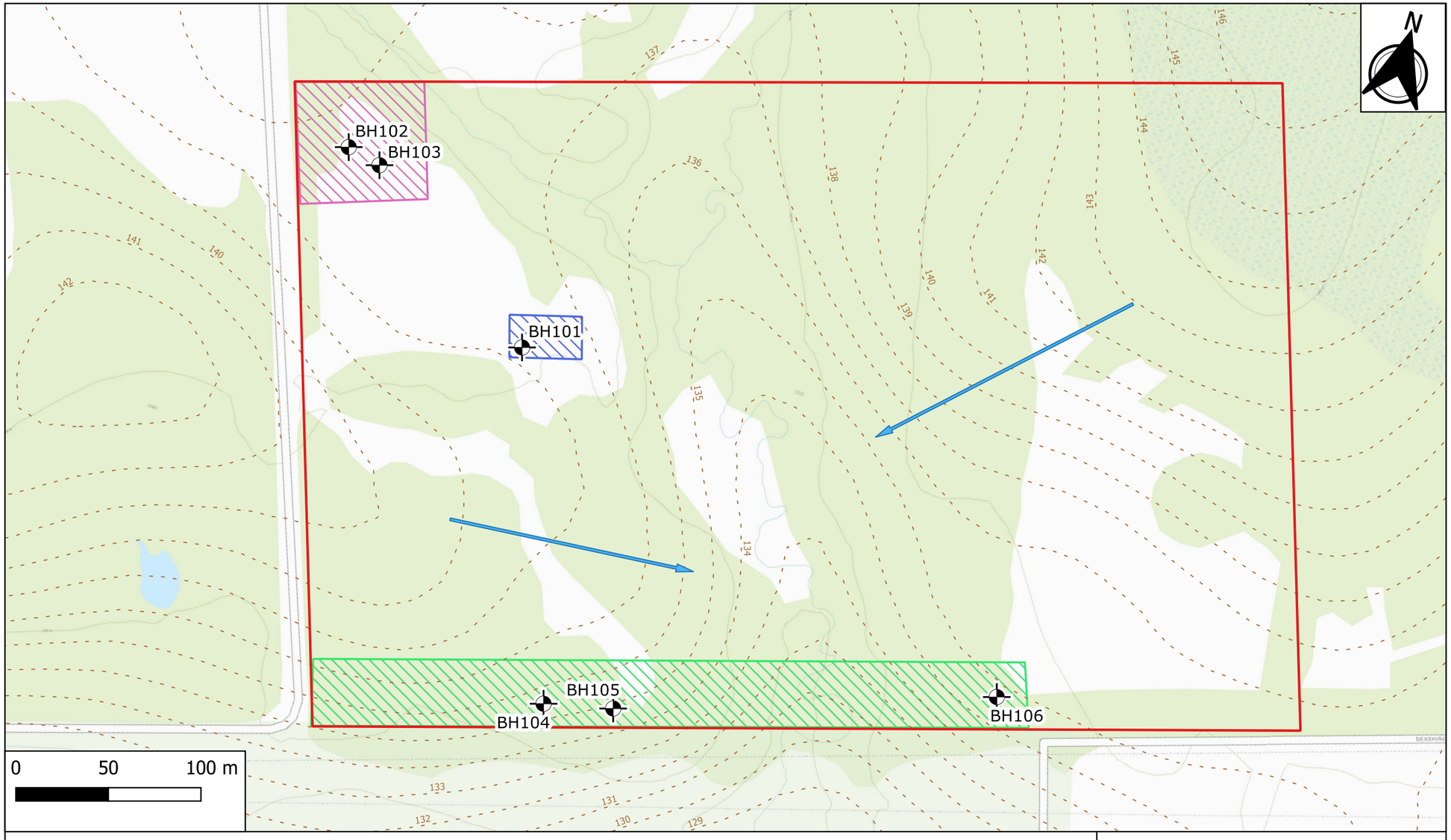
Legend

- Project Area
- Surface Contour
- Inferred Groundwater Flow Direction
- Borehole
- APEC 1
- APEC 2
- APEC 3

Definitions:
"APEC" = Area of Potential Environmental Concern
"PCA" = Potentially Contaminating Activity

PCAs are in accordance with Table 2, Schedule D of O. Reg 153/04

Map Sources: ESRI World Topographic Map Map Projection: NAD 83 Zone 17 UTM	Project: 17-1780E3 Soil Characterization Report Proposed Residential Development at Part of Lot 3 & 4 Concession Road 5, Pickering, Ontario Client: 869547 Ontario Inc.	Created by: VC	Approved by: VC	Drawing No.: 2	Original Size: 11" x 17"
		Date: October 2021	Title: Borehole Location Plan	GeoPro Consulting Limited	



Comparison with Table 1 Standards R/P/I/I/C/C

No exceedances found

Comparison with Table 2.1 & 3.1 Standards R/P/I

No exceedances found

Legend

- Project Area
- surface contour
- Inferred Groundwater Flow Direction
- Borehole
- APEC 1
- APEC 2
- APEC 3

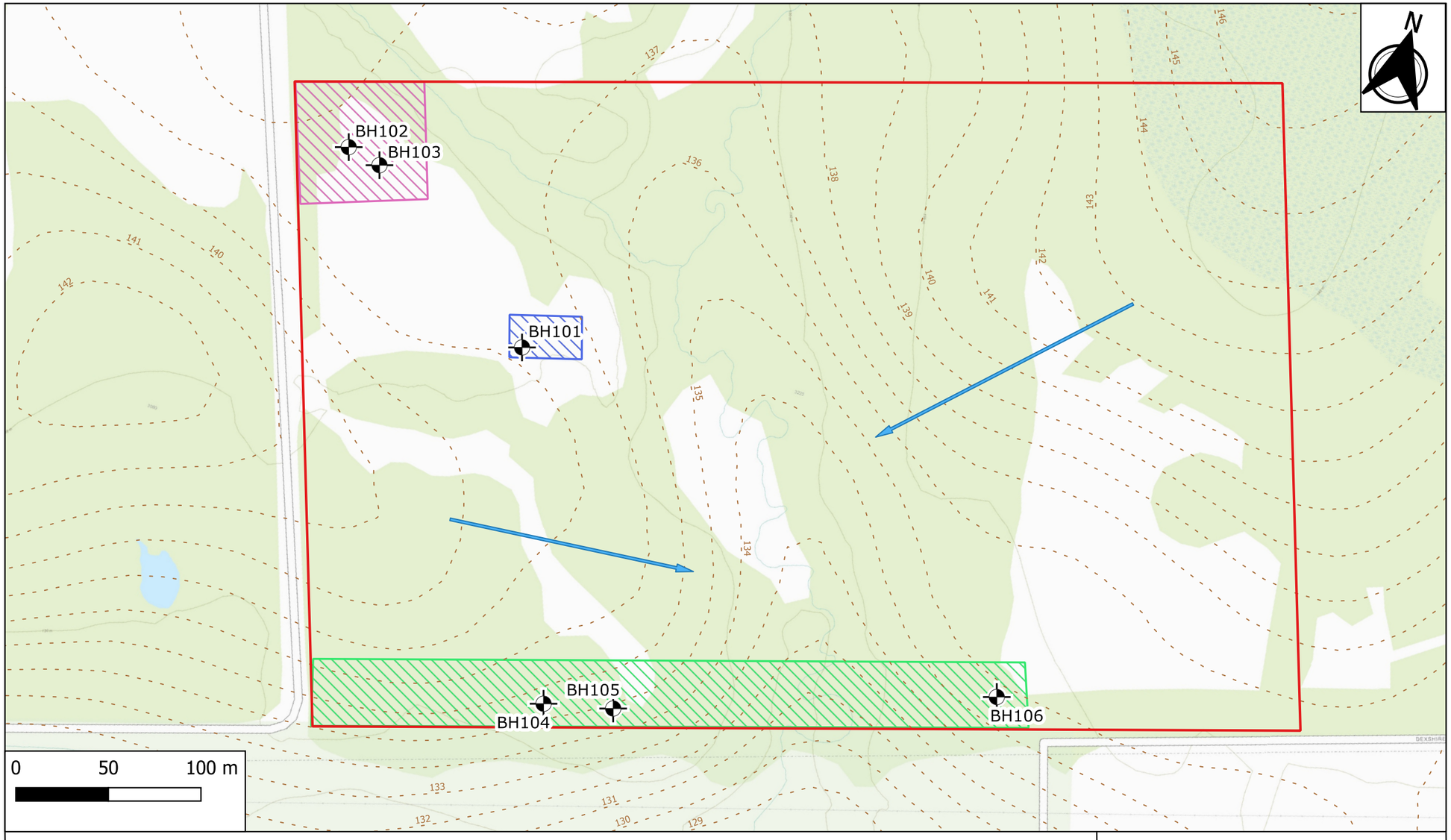
Definitions:
"APEC" = Area of Potential Environmental Concern
"PCA" = Potentially Contaminating Activity

PCAs are in accordance with Table 2, Schedule D of O. Reg 153/04

Map Sources: ESRI World Topographic Map Map Projection: NAD 83 Zone 17 UTM	Project: 17-1780E3 Soil Characterization Report Proposed Residential Development at Part of Lot 3 & 4 Concession Road 5, Pickering, Ontario Client: 869547 Ontario Inc.	Created by: VC	Approved by: VC	Drawing No.: 3	Original Size: 11" x 17"
		Date: October 2021	Title: Sumary of Soil Quality	GeoPro Consulting Limited	

Comparison with Leachate Quality Criteria

No exceedances found



Legend

- Project Area
- surface contour
- Inferred Groundwater Flow Direction
- Borehole
- APEC 1
- APEC 2
- APEC 3

Definitions:
"APEC" = Area of Potential Environmental Concern
"PCA" = Potentially Contaminating Activity

PCAs are in accordance with Table 2, Schedule D of O. Reg 153/04

Map Sources: ESRI World Topographic Map Map Projection: NAD 83 Zone 17 UTM	Project: 17-1780E3 Soil Characterization Report Proposed Residential Development at Part of Lot 3 & 4 Concession Road 5, Pickering, Ontario Client: 869547 Ontario Inc.	Created by: VC	Approved by: VC	Drawing No.: 4	Original Size: 11" x 17"
		Date: October 2021	Title: Summary of Leachate Quality	GeoPro Consulting Limited	

APPENDIX A

ENCLOSURES

Enclosure 1A: Notes on Sample Descriptions

1. Each soil stratum is described according to the *Modified Unified Soil Classification System*. The compactness condition of cohesionless soils (SPT) and the consistency of cohesive soils (undrained shear strength) are defined according to Canadian Foundation Engineering Manual, 4th Edition. Different soil classification systems may be used by others. Please note that a description of the soil stratums is based on visual and tactile examination of the samples augmented with field and laboratory test results, such as a grain size analysis and/or Atterberg Limits testing. Visual classification is not sufficiently accurate to provide exact grain sizing or precise differentiation between size classification systems.

2. Fill: Where fill is designated on the borehole log it is defined as indicated by the sample recovered during the boring process. The reader is cautioned that fills are heterogeneous in nature and variable in density or degree of compaction. The borehole description may therefore not be applicable as a general description of site fill materials. All fills should be expected to contain obstruction such as wood, large concrete pieces or subsurface basements, floors, tanks, etc., none of these may have been encountered in the boreholes. Since boreholes cannot accurately define the contents of the fill, test pits are recommended to provide supplementary information. Despite the use of test pits, the heterogeneous nature of fill will leave some ambiguity as to the exact composition of the fill. Most fills contain pockets, seams, or layers of organically contaminated soil. This organic material can result in the generation of methane gas and/or significant ongoing and future settlements. Fill at this site may have been monitored for the presence of methane gas and, if so, the results are given on the borehole logs. The monitoring process does not indicate the volume of gas that can be potentially generated nor does it pinpoint the source of the gas. These readings are to advise of the presence of gas only, and a detailed study is recommended for sites where any explosive gas/methane is detected. Some fill material may be contaminated by toxic/hazardous waste that renders it unacceptable for deposition in any but designated land fill sites; unless specifically stated the fill on this site has not been tested for contaminants that may be considered toxic or hazardous. This testing and a potential hazard study can be undertaken if requested. In most residential/commercial areas undergoing reconstruction, buried oil tanks are common and are generally not detected in a conventional preliminary geotechnical

site investigation.

3. Till: The term till on the borehole logs indicates that the material originates from a geological process associated with glaciation. Because of this geological process the till must be considered heterogeneous in composition and as such may contain pockets and/or seams of material such as sand, gravel, silt or clay. Till often contains cobbles (60 to 200 mm) or boulders (over 200 mm). Contractors may therefore encounter cobbles and boulders during excavation, even if they are not indicated by the borings. It should be appreciated that normal sampling equipment cannot differentiate the size or type of any obstruction. Because of the horizontal and vertical variability of till, the sample description may be applicable to a very limited zone; caution is therefore essential when dealing with sensitive excavations or dewatering programs in till materials.

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Enclosure 1B: Explanation of Terms Used in the Record of Boreholes

Sample Type

AS Auger sample
BS Block sample
CS Chunk sample
DO Drive open
DS Dimension type sample
FS Foil sample
NR No recovery
RC Rock core
SC Soil core
SS Spoon sample
SH Shelby tube Sample
ST Slotted tube
TO Thin-walled, open
TP Thin-walled, piston
WS Wash sample

Penetration Resistance

Standard Penetration Resistance (SPT), N:

The number of blows by a 63.5 kg (140 lb) hammer dropped 760 mm (30 in) required to drive a 50 mm (2 in) drive open sampler for a distance of 300 mm (12 in).

PM – Samples advanced by manual pressure
WR – Samples advanced by weight of sampler and rod
WH – Samples advanced by static weight of hammer

Dynamic Cone Penetration Resistance, Nd:

The number of blows by a 63.5 kg (140 lb) hammer dropped 760 mm (30 in) to drive uncased a 50 mm (2 in) diameter, 60^{o} cone attached to "A" size drill rods for a distance of 300 mm (12 in).

Piezo-Cone Penetration Test (CPT):

An electronic cone penetrometer with a 60-degree conical tip and a projected end area of 10 cm^2 pushed through ground at a penetration rate of 2 cm/s. Measurement of tip resistance (Qt), porewater pressure (PWP) and friction along a sleeve are recorded electronically at 25 mm penetration intervals.

Textural Classification of Soils (ASTM D2487)

Classification	Particle Size
Boulders	> 300 mm
Cobbles	75 mm - 300 mm
Gravel	4.75 mm - 75 mm
Sand	0.075 mm – 4.75 mm
Silt	0.002 mm-0.075 mm
Clay	<0.002 mm(*)

(*) Canadian Foundation Engineering Manual (4th Edition)

Coarse Grain Soil Description (50% greater than 0.075 mm)

Terminology	**Proportion**
Trace	0-10%
Some	10-20%
Adjective (e.g. silty or sandy)	20-35%
And (e.g. sand and gravel)	> 35%

Soil Description

a) Cohesive Soils (*)

Consistency	**Undrained Strength (kPa)**	**SPT "N" Value**
Very soft	<12	0-2
Soft	12-25	2-4
Firm	25-50	4-8
Stiff	50-100	8-15
Very stiff	100-200	15-30
Hard	>200	>30

(*) Hierarchy of Shear Strength prediction
1. Lab triaxial test
2. Field vane shear test
3. Lab. vane shear test
4. SPT "N" value
5. Pocket penetrometer

b) Cohesionless Soils

Compactness Condition (Formerly Relative Density)	**SPT "N" Value**
Very loose	<4
Loose	4-10
Compact	10-30
Dense	30-50
Very dense	>50

Soil Tests

w	Water content
w_p	Plastic limit
w_l	Liquid limit
C	Consolidation (oedometer) test
CID	Consolidated isotropically drained triaxial test
CIU	consolidated isotropically undrained triaxial test with porewater pressure measurement
D_R	Relative density (specific gravity, Gs)
DS	Direct shear test
ENV	Environmental/chemical analysis
M	Sieve analysis for particle size
MH	Combined sieve and hydrometer (H) analysis
MPC	Modified proctor compaction test
SPC	Standard proctor compaction test
OC	Organic content test
U	Unconsolidated Undrained Triaxial Test
V	Field vane (LV-laboratory vane test)
γ	Unit weight

LOG OF BOREHOLE BH101

PROJECT: Supplementray Geotechnical Investigation for Proposed Residential Development

CLIENT: 869547 Ontario Inc.

PROJECT LOCATION: Parts of Lots 3 and 4, Concession 5, Pickering, ON

DATUM: N/A

BH LOCATION: See Borehole Plan Location

DRILLING DATA

METHOD: Continuous Flight Auger - Auto Hammer | DIAMETER: 155 mm

FIELD ENGINEER: JF | DATE: 2021-08-27

SAMPLE REVIEW: CL | REF. NO.: 17-1780GHE3

CHECKED: DX | ENCL. NO.: 2

ELEV DEPTH (m)	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	"N" BLOWS/0.3m	GROUND WATER ELEVATION
0.0	**TOPSOIL:** (120 mm)					
0.1	**FILL:** silty fine sand, organic inclusions, rootlet inclusions, brown, moist, compact		1	SS	11	
0.7	**PROBABLE FILL:** silty fine sand, brown, moist, loose		2	SS	6	
			3	SS	6	
2.1	**FINE SANDY SILT:** trace clay, containing cobbles and boulders, brown, moist to wet, very dense		4	SS	65	
	--- auger grinding		5	SS	70	
4.0	**SILTY FINE SAND:** grey, wet, dense		6	SS	43	
5.0	**END OF BOREHOLE**					

Notes:

1) Water encountered at a depth of 3.0 m below ground surface (mBGS) during drilling.
2) Water was at a depth of 3.2 mBGS upon completion of drilling.
3) Borehole caved at a depth of 4.2 mBGS upon completion of drilling.

DYNAMIC PENETRATION TEST
○ SPT ~ Cone blows/0.3m
20 40 60 80

SHEAR STRENGTH (kPa)
● Unconfined ✕ Field Vane & Sensitivity
▲ Quick Triaxial ⊠ Penetrometer + Lab Vane
20 40 60 80

Plastic Limit | Natural Moisture Content | Liquid Limit
w_P w w_L
WATER CONTENT (%)
10 20 30 40

UNIT WT (kN/m³)

REMARKS AND GRAIN SIZE DISTRIBUTION (%)
GR SA SI CL

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

01 - GEOPRO SOIL LOG GEOPRO 17-1780GHE3 BH LOG 20211118 - NT - NG - DX.GPJ 2022-11-18 10:34

LOG OF BOREHOLE BH102

PROJECT: Supplementray Geotechnical Investigation for Proposed Residential Development

CLIENT: 869547 Ontario Inc.

PROJECT LOCATION: Parts of Lots 3 and 4, Concession 5, Pickering, ON

DATUM: N/A

BH LOCATION: See Borehole Plan Location

DRILLING DATA

METHOD: Continuous Flight Auger - Auto Hammer | DIAMETER: 155 mm

FIELD ENGINEER: JF | DATE: 2021-08-29

SAMPLE REVIEW: CL | REF. NO.: 17-1780GHE3

CHECKED: DX | ENCL. NO.: 3

ELEV / DEPTH (m)	DESCRIPTION	NUMBER	TYPE	"N" BLOWS/0.3m
0.0	**TOPSOIL:** (300 mm)			
0.3	**REWORKED SILTY FINE SAND:** rootlet inclusions, brown, moist, very loose to loose	1	SS	4
1		2A	SS	4
		2B	SS	
1.1	**SILTY FINE SAND:** pockets of sandy silt, brown, moist, very loose to dense	3	SS	21
2		4	SS	45
3	--- layers of fine sandy silt	5	SS	46
4.0	**SILTY SAND:** brown, wet, compact	6	SS	28
5				
5.0	**END OF BOREHOLE**			

Notes:

1) Water encountered at a depth of 4.6 m below ground surface (mBGS) during drilling.
2) Water was at a depth of 4.4 mBGS upon completion of drilling.
3) Borehole caved at a depth of 4.6 mBGS upon completion of drilling.

GROUND WATER ELEVATION

DYNAMIC PENETRATION TEST
○ SPT ≈ Cone blows/0.3m
20 40 60 80

SHEAR STRENGTH (kPa)
● Unconfined ✕ Field Vane & Sensitivity
▲ Quick Triaxial ⊠ Penetrometer + Lab Vane
20 40 60 80

Plastic Limit | Natural Moisture Content | Liquid Limit
w_P w w_L
WATER CONTENT (%)
10 20 30 40

UNIT WT (kN/m³)

REMARKS AND GRAIN SIZE DISTRIBUTION (%)
GR SA SI CL

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

LOG OF BOREHOLE BH103

PROJECT: Supplementray Geotechnical Investigation for Proposed Residential Development

CLIENT: 869547 Ontario Inc.

PROJECT LOCATION: Parts of Lots 3 and 4, Concession 5, Pickering, ON

DATUM: N/A

BH LOCATION: See Borehole Plan Location

DRILLING DATA

METHOD: Continuous Flight Auger - Auto Hammer | DIAMETER: 155 mm

FIELD ENGINEER: JF | DATE: 2021-08-27

SAMPLE REVIEW: CL | REF. NO.: 17-1780GHE3

CHECKED: DX | ENCL. NO.: 4

ELEV / DEPTH (m)	DESCRIPTION	NUMBER	TYPE	"N" BLOWS/0.3m
0.0	**TOPSOIL:** (300 mm)			
0.3	**REWORKED SILTY FINE SAND:** organic inclusions, rootlet inclusions, brown, moist, very loose	1	SS	2
1		2A	SS	2
		2B	SS	
1.1	**SILTY FINE SAND:** containing cobbles and boulders, brown, moist, very loose to dense	3	SS	11
2	--- auger grinding	4	SS	32
2.9	**FINE SAND AND SILT TO FINE SANDY SILT:** layers of silt, layers of silty sand, brown, moist to wet, compact	5	SS	25
4				
4.0	**SILTY SAND:** trace gravel, layers of sandy silt, brown, wet, compact	6	SS	27
5				
5.0	**END OF BOREHOLE**			

Notes:

1) Water encountered at a depth of 3.0 m below ground surface (mBGS) during drilling.
2) Water was at a depth of 3.2 mBGS upon completion of drilling.
3) Borehole caved at a depth of 4.3 mBGS upon completion of drilling.

DYNAMIC PENETRATION TEST: ○ SPT, ≈ Cone, blows/0.3m; 20 40 60 80

SHEAR STRENGTH (kPa): ● Unconfined, ▲ Quick Triaxial, × Field Vane & Sensitivity, ⊠ Penetrometer, + Lab Vane; 20 40 60 80

Plastic Limit (w_P) | Natural Moisture Content (w) | Liquid Limit (w_L)

WATER CONTENT (%): 10 20 30 40

UNIT WT (kN/m³)

REMARKS AND GRAIN SIZE DISTRIBUTION (%): GR SA SI CL

GROUNDWATER ELEVATIONS

Measurement: 1st ▽ 2nd ▼ 3rd ▼ 4th ▼

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

LOG OF BOREHOLE BH104

PROJECT: Supplementray Geotechnical Investigation for Proposed Residential Development

CLIENT: 869547 Ontario Inc.

PROJECT LOCATION: Parts of Lots 3 and 4, Concession 5, Pickering, ON

DATUM: N/A

BH LOCATION: See Borehole Plan Location

DRILLING DATA

METHOD: Continuous Flight Auger - Auto Hammer | DIAMETER: 155 mm

FIELD ENGINEER: JF | DATE: 2021-08-27

SAMPLE REVIEW: CL | REF. NO.: 17-1780GHE3

CHECKED: DX | ENCL. NO.: 5

ELEV / DEPTH (m)	DESCRIPTION	NUMBER	TYPE	"N" BLOWS/0.3m
0.0	**TOPSOIL:** (250 mm)			
0.3	**REWORKED SILTY FINE SAND:** some silt, organic inclusions, rootlet inclusions, brown, moist, loose	1	SS	7
		2A	SS	5
		2B	SS	
1.1	**SILTY FINE SAND:** brown, moist to wet, loose to compact	3	SS	20
2.1	**FINE SANDY SILT:** trace clay, grey, moist to wet, dense	4	SS	31
2.9	**SILT:** trace clay, some sand, grey, wet, dense	5	SS	43
4.0	**FINE SANDY SILT:** some clay, grey, wet, very dense	6	SS	58
5.0	**END OF BOREHOLE**			

Notes:

1) Water encountered at a depth of 1.4 m below ground surface (mBGS) during drilling.
2) Water was at a depth of 2.0 mBGS upon completion of drilling.
3) Borehole caved at a depth of 3.2 mBGS upon completion of drilling.

DYNAMIC PENETRATION TEST: ○ SPT, ≈ Cone, blows/0.3m; 20 40 60 80

SHEAR STRENGTH (kPa): ● Unconfined, ▲ Quick Triaxial, ✕ Field Vane & Sensitivity, ⊠ Penetrometer, + Lab Vane; 20 40 60 80

Plastic Limit (w_P) | Natural Moisture Content (w) | Liquid Limit (w_L)

WATER CONTENT (%): 10 20 30 40

UNIT WT (kN/m³)

REMARKS AND GRAIN SIZE DISTRIBUTION (%): GR SA SI CL

GROUNDWATER ELEVATIONS

Measurement: 1st ▽ 2nd ▼ 3rd ▼ 4th ▼

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

01 - GEOPRO SOIL LOG GEOPRO 17-1780GHE3 BH LOG 20211118 - NT - NG - DX.GPJ 2022-11-18 10:34

LOG OF BOREHOLE BH105

PROJECT: Supplementray Geotechnical Investigation for Proposed Residential Development

CLIENT: 869547 Ontario Inc.

PROJECT LOCATION: Parts of Lots 3 and 4, Concession 5, Pickering, ON

DATUM: N/A

BH LOCATION: See Borehole Plan Location

DRILLING DATA

METHOD: Continuous Flight Auger - Auto Hammer | DIAMETER: 155 mm

FIELD ENGINEER: JF | DATE: 2021-08-27

SAMPLE REVIEW: CL | REF. NO.: 17-1780GHE3

CHECKED: DX | ENCL. NO.: 6

ELEV DEPTH (m)	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	"N" BLOWS/0.3m	GROUND WATER ELEVATION
0.0	**TOPSOIL:** (250 mm)					
0.3	**FILL:** silty fine sand, trace gravel, organic inclusions, rootlet inclusions, containing rock fragments, brown, moist, loose to compact		1	SS	13	
			2	SS	6	
			3A	SS	5	
			3B	SS		
1.8	**SILTY FINE SAND:** layers of silt, containing cobbles and boulders, brown, wet, loose to compact --- auger grinding		4	SS	26	
2.9	**FINE SAND AND SILT TO SILTY FINE SAND:** grey, moist to wet, dense		5	SS	43	
4.0	**SILT:** trace to some clay, trace sand, interlayers of clayey silt, grey, moist to wet, dense		6	SS	33	
5.0	**END OF BOREHOLE** Notes: 1) Water encountered at a depth of 1.8 m below ground surface (mBGS) during drilling. 2) Water was at a depth of 2.2 mBGS upon completion of drilling. 3) Borehole caved at a depth of 3.4 mBGS upon completion of drilling.					

DYNAMIC PENETRATION TEST
○ SPT ≈ Cone blows/0.3m
20 40 60 80

SHEAR STRENGTH (kPa)
● Unconfined ✕ Field Vane & Sensitivity
▲ Quick Triaxial ⊠ Penetrometer + Lab Vane
20 40 60 80

Plastic Limit | Natural Moisture Content | Liquid Limit
w_P w w_L
WATER CONTENT (%)
10 20 30 40

UNIT WT (kN/m³)

REMARKS AND GRAIN SIZE DISTRIBUTION (%)
GR SA SI CL

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

LOG OF BOREHOLE BH106

PROJECT: Supplementray Geotechnical Investigation for Proposed Residential Development

CLIENT: 869547 Ontario Inc.

PROJECT LOCATION: Parts of Lots 3 and 4, Concession 5, Pickering, ON

DATUM: N/A

BH LOCATION: See Borehole Plan Location

DRILLING DATA

METHOD: Continuous Flight Auger - Auto Hammer | DIAMETER: 155 mm

FIELD ENGINEER: JF | DATE: 2021-08-27

SAMPLE REVIEW: CL | REF. NO.: 17-1780GHE3

CHECKED: DX | ENCL. NO.: 7

ELEV / DEPTH (m)	DESCRIPTION	STRATA PLOT	SAMPLES NUMBER	TYPE	"N" BLOWS/0.3m	GROUND WATER ELEVATION
0.0	**TOPSOIL:** (350 mm)		1	SS	3	
0.4	**FILL:** silty fine sand, organic matters, rootlet inclusions, dark brown, moist, very loose					
0.7	**CLAYEY SILT:** some sand, trace gravel, interlayers of silt, layers of fine sand and silt, seams of sand, brown, moist, very stiff		2	SS	22	
1.4	**SANDY SILT:** some clay, trace gravel, layers of clayey silt, brown, moist, compact		3	SS	22	
			4	SS	20	
2.9	**SANDY SILT TILL:** some clay, trace gravel, layers of sandy silt, containing cobbles and boulders, grey, moist, dense		5	SS	33	
	--- auger grinding					
			6	SS	50	
5.0	**END OF BOREHOLE**					

Note:

1) Borehole caved at a depth of 4.5 m below ground surface (mBGS) upon completion of drilling.

DYNAMIC PENETRATION TEST
○ SPT ≈ Cone blows/0.3m
20 40 60 80

SHEAR STRENGTH (kPa)
● Unconfined ✕ Field Vane & Sensitivity
▲ Quick Triaxial ⊠ Penetrometer + Lab Vane
20 40 60 80

Plastic Limit | Natural Moisture Content | Liquid Limit
w_P | w | w_L
WATER CONTENT (%)
10 20 30 40

UNIT WT (kN/m³)

REMARKS AND GRAIN SIZE DISTRIBUTION (%)
GR SA SI CL

GROUNDWATER ELEVATIONS
Measurement 1st 2nd 3rd 4th

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

01 - GEOPRO SOIL LOG GEOPRO 17-1780GHE3 BH LOG 20211118 - NT - NG - DX.GPJ 2022-11-18 10:34

APPENDIX B

Certificate of Analysis

Environment Testing

Client: Geo Pro Consulting
40 Vogell Rd, Unit 57
Richmond Hill, Ontario
L4B 3K6
Attention: Dylan X
Invoice to: Geo Pro Consulting
PO#:

Report Number:	1962118
Date Submitted:	2021-09-09
Date Reported:	2021-09-17
Project:	17-1780E3-1787
COC #:	879859
Temperature (C):	14
Custody Seal:	

Dear Dylan X:

Please find attached the analytical results for your samples. If you have any questions regarding this report, please do not hesitate to call (613-727-5692).

Report Comments:

Long Qu, Organics Supervisor

All analysis is completed at Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) unless otherwise stated
.
Eurofins Environment Testing Canada Inc. is accredited by CALA, Canadian Association for Laboratory Accreditation to ISO/IEC 17025 for tests which appear on the scope of accrteditation. The scope is available at http://www.cala.ca/scopes/2602.pdf

Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only. Guideline or regulatory limits listed on this report are provided for ease of use (informational purposes) only. Eurofins recommends consulting the official guideline or regulation as required. Unless otherwise stated, measurement uncertainty is not taken into account when determining guideline or regulatory exceedances.

Certificate of Analysis

Client: Geo Pro Consulting
40 Vogell Rd, Unit 57
Richmond Hill, Ontario
L4B 3K6
Attention: Dylan X
PO#:
Invoice to: Geo Pro Consulting

Report Number: 1962118
Date Submitted: 2021-09-09
Date Reported: 2021-09-17
Project: 17-1780E3-1787
COC #: 879859

Exceedence Summary

Sample I.D.	Analyte	Result	Units	Criteria

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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Invoice to: Geo Pro Consulting

Report Number: 1962118
Date Submitted: 2021-09-09
Date Reported: 2021-09-17
Project: 17-1780E3-1787
COC #: 879859

Guideline = Excess Soil-T1-Res/Park/Inst/Ind/Cml/Co

Hydrocarbons

Analyte	Batch No	MRL	Units	Guideline	1581932 Soil153 2021-08-27 BH101 SS2	1581933 Soil153 2021-08-27 BH101 SS3	1581934 Soil153 2021-08-27 BH102 SS1	1581935 Soil153 2021-08-27 BH103 SS2	1581936 Soil153 2021-08-27 BH103 SS3
Lab I.D. / Sample Matrix / Sample Type / Sample Date / Sampling Time / Sample I.D.									
PHC's F1	408730	10	ug/g	STD 25	<10	<10	<10	<10	<10
PHC's F1-BTEX	408744	10	ug/g		<10	<10	<10	<10	<10
PHC's F2	408483	10	ug/g	STD 10	<10	<10	<10	<10	<10
PHC's F2-Napth	408498	10	ug/g		<10	<10	<10	<10	<10
PHC's F3	408483	20	ug/g	STD 240	<20	<20	<20	<20	<20
PHC's F3-PAH	408499	20	ug/g		<20	<20	<20	<20	<20
PHC's F4	408483	20	ug/g	STD 120	<20	<20	<20	<20	<20

Hydrocarbons

Analyte	Batch No	MRL	Units	Guideline	1581937 Soil153 2021-08-27 BH104 SS2	1581938 Soil153 2021-08-27 BH104 SS4	1581939 Soil153 2021-08-27 BH105 SS1	1581940 Soil153 2021-08-27 BH106 SS2	1581941 Soil153 2021-08-27 BH106 SS4
Lab I.D. / Sample Matrix / Sample Type / Sample Date / Sampling Time / Sample I.D.									
PHC's F1	408730	10	ug/g	STD 25	<10	<10	<10	<10	<10
PHC's F1-BTEX	408744	10	ug/g		<10	<10	<10	<10	<10
PHC's F2	408483	10	ug/g	STD 10	<10	<10	<10	<10	<10
PHC's F2-Napth	408498	10	ug/g		<10	<10	<10	<10	<10
PHC's F3	408483	20	ug/g	STD 240	<20	<20	<20	<20	50
PHC's F3-PAH	408499	20	ug/g		<20	<20	<20	<20	50
PHC's F4	408483	20	ug/g	STD 120	<20	<20	<20	<20	<20

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Date Reported: 2021-09-17
Project: 17-1780E3-1787
COC #: 879859

Guideline = Excess Soil-T1-Res/Park/Inst/Ind/Cml/Co

Metals

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1581932	1581933	1581934	1581935	1581936
Sample Matrix					Soil153	Soil153	Soil153	Soil153	Soil153
Sample Type									
Sample Date					2021-08-27	2021-08-27	2021-08-27	2021-08-27	2021-08-27
Sampling Time									
Sample I.D.					BH101 SS2	BH101 SS3	BH102 SS1	BH103 SS2	BH103 SS3
Antimony	408535	1	ug/g	STD 1.3	<1	<1	<1	<1	<1
Arsenic	408535	1	ug/g	STD 18	2	2	2	2	1
Barium	408535	1	ug/g	STD 220	16	10	15	27	10
Beryllium	408535	1	ug/g	STD 2.5	<1	<1	<1	<1	<1
Boron (Hot Water Soluble)	408554	0.5	ug/g	STD N/A	<0.5	<0.5	<0.5	<0.5	<0.5
Boron (total)	408535	5	ug/g	STD 36	<5	<5	<5	<5	<5
Cadmium	408535	0.4	ug/g	STD 1.2	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium Total	408535	1	ug/g	STD 70	10	7	9	10	6
Chromium VI	408648	0.20	ug/g	STD 0.66	<0.20	<0.20	<0.20	<0.20	<0.20
Cobalt	408535	1	ug/g	STD 21	2	2	2	2	2
Copper	408535	1	ug/g	STD 92	3	3	2	3	2
Lead	408535	1	ug/g	STD 120	3	2	4	5	2
Mercury	408535	0.1	ug/g	STD 0.27	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	408535	1	ug/g	STD 2	<1	<1	<1	<1	<1
Nickel	408535	1	ug/g	STD 82	4	3	4	4	3
Selenium	408535	0.5	ug/g	STD 1.5	<0.5	<0.5	<0.5	<0.5	<0.5
Silver	408535	0.2	ug/g	STD 0.5	<0.2	<0.2	<0.2	<0.2	<0.2
Thallium	408535	1	ug/g	STD 1	<1	<1	<1	<1	<1
Uranium	408535	0.5	ug/g	STD 2.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vanadium	408535	2	ug/g	STD 86	25	18	25	27	18
Zinc	408535	2	ug/g	STD 290	13	10	17	22	9

Results relate only to the parameters tested on the samples submitted.
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Certificate of Analysis

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PO#:
Invoice to: Geo Pro Consulting

Report Number: 1962118
Date Submitted: 2021-09-09
Date Reported: 2021-09-17
Project: 17-1780E3-1787
COC #: 879859

Guideline = Excess Soil-T1-Res/Park/Inst/Ind/Cml/Co

Metals

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. / Sample Matrix / Sample Type / Sample Date / Sampling Time / Sample I.D.				
					1581937 Soil153 2021-08-27 BH104 SS2	1581938 Soil153 2021-08-27 BH104 SS4	1581939 Soil153 2021-08-27 BH105 SS1	1581940 Soil153 2021-08-27 BH106 SS2	1581941 Soil153 2021-08-27 BH106 SS4
Antimony	408535	1	ug/g	STD 1.3	<1	<1	<1	<1	<1
Arsenic	408535	1	ug/g	STD 18	3	1	2	2	3
Barium	408535	1	ug/g	STD 220	15	14	16	48	58
Beryllium	408535	1	ug/g	STD 2.5	<1	<1	<1	<1	<1
Boron (Hot Water Soluble)	408554	0.5	ug/g	STD N/A	<0.5				
	408673	0.5	ug/g	STD N/A		<0.5	<0.5	<0.5	<0.5
Boron (total)	408535	5	ug/g	STD 36	<5	<5	<5	<5	7
Cadmium	408535	0.4	ug/g	STD 1.2	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium Total	408535	1	ug/g	STD 70	8	7	7	12	17
Chromium VI	408648	0.20	ug/g	STD 0.66	<0.20	<0.20	<0.20	<0.20	<0.20
Cobalt	408535	1	ug/g	STD 21	2	2	2	3	5
Copper	408535	1	ug/g	STD 92	3	4	3	8	10
Lead	408535	1	ug/g	STD 120	3	2	4	4	5
Mercury	408535	0.1	ug/g	STD 0.27	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	408535	1	ug/g	STD 2	<1	<1	<1	<1	<1
Nickel	408535	1	ug/g	STD 82	3	3	3	7	11
Selenium	408535	0.5	ug/g	STD 1.5	<0.5	<0.5	<0.5	<0.5	<0.5
Silver	408535	0.2	ug/g	STD 0.5	<0.2	<0.2	<0.2	<0.2	<0.2
Thallium	408535	1	ug/g	STD 1	<1	<1	<1	<1	<1
Uranium	408535	0.5	ug/g	STD 2.5	<0.5	<0.5	<0.5	<0.5	0.5
Vanadium	408535	2	ug/g	STD 86	21	16	18	24	23
Zinc	408535	2	ug/g	STD 290	11	9	13	20	25

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

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Date Reported: 2021-09-17
Project: 17-1780E3-1787
COC #: 879859

Guideline = Excess Soil-T1-Res/Park/Inst/Ind/Cml/Co

Metals

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1581942 / Sample Matrix Soil153 / Sample Type / Sample Date 2021-08-27 / Sampling Time / Sample I.D. BH106 SS2D
Antimony	408535	1	ug/g	STD 1.3	<1
Arsenic	408535	1	ug/g	STD 18	2
Barium	408535	1	ug/g	STD 220	49
Beryllium	408535	1	ug/g	STD 2.5	<1
Boron (Hot Water Soluble)	408673	0.5	ug/g	STD N/A	<0.5
Boron (total)	408535	5	ug/g	STD 36	<5
Cadmium	408535	0.4	ug/g	STD 1.2	<0.4
Chromium Total	408535	1	ug/g	STD 70	12
Chromium VI	408713	0.20	ug/g	STD 0.66	<0.20
Cobalt	408535	1	ug/g	STD 21	4
Copper	408535	1	ug/g	STD 92	10
Lead	408535	1	ug/g	STD 120	5
Mercury	408535	0.1	ug/g	STD 0.27	<0.1
Molybdenum	408535	1	ug/g	STD 2	<1
Nickel	408535	1	ug/g	STD 82	8
Selenium	408535	0.5	ug/g	STD 1.5	<0.5
Silver	408535	0.2	ug/g	STD 0.5	<0.2
Thallium	408535	1	ug/g	STD 1	<1
Uranium	408535	0.5	ug/g	STD 2.5	<0.5
Vanadium	408535	2	ug/g	STD 86	25
Zinc	408535	2	ug/g	STD 290	22

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

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COC #: 879859

Guideline = Excess Soil-T1-Res/Park/Inst/Ind/Cml/Co

OCP/PCB

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1581934 / Sample Matrix Soil153 / Sample Type / Sample Date 2021-08-27 / Sampling Time / Sample I.D. BH102 SS1	Lab I.D. 1581935 / Sample Matrix Soil153 / Sample Type / Sample Date 2021-08-27 / Sampling Time / Sample I.D. BH103 SS2	Lab I.D. 1581936 / Sample Matrix Soil153 / Sample Type / Sample Date 2021-08-27 / Sampling Time / Sample I.D. BH103 SS3
Aldrin	408620	0.002	ug/g	STD 0.05	<0.002	<0.002	<0.002
Chlordane	408620	0.006	ug/g	STD 0.05	<0.006	<0.006	<0.006
Chlordane, alpha-	408620	0.002	ug/g		<0.002	<0.002	<0.002
Chlordane, gamma-	408620	0.002	ug/g		<0.002	<0.002	<0.002
DDD	408620	0.002	ug/g	STD 0.05	<0.002	<0.002	<0.002
DDE	408620	0.002	ug/g	STD 0.05	<0.002	<0.002	<0.002
DDT	408620	0.002	ug/g	STD 1.4	<0.002	<0.002	<0.002
Dieldrin	408620	0.002	ug/g	STD 0.05	<0.002	<0.002	<0.002
Endosulfan	408620	0.004	ug/g	STD 0.04	<0.004	<0.004	<0.004
Endosulfan I	408620	0.002	ug/g		<0.002	<0.002	<0.002
Endosulfan II	408620	0.002	ug/g		<0.002	<0.002	<0.002
Endrin	408620	0.002	ug/g	STD 0.04	<0.002	<0.002	<0.002
Heptachlor	408620	0.002	ug/g	STD 0.05	<0.002	<0.002	<0.002
Heptachlor Epoxide	408620	0.002	ug/g	STD 0.05	<0.002	<0.002	<0.002
Hexachlorobenzene	408620	0.002	ug/g	STD 0.01	<0.002	<0.002	<0.002
Hexachlorobutadiene	408620	0.002	ug/g	STD 0.01	<0.002	<0.002	<0.002
Hexachlorocyclohexane Gamma-	408620	0.002	ug/g		<0.002	<0.002	<0.002
Hexachloroethane	408620	0.002	ug/g	STD 0.01	<0.002	<0.002	<0.002
Methoxychlor	408620	0.002	ug/g	STD 0.05	<0.002	<0.002	<0.002

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Client: Geo Pro Consulting
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Project: 17-1780E3-1787
COC #: 879859

Guideline = Excess Soil-T1-Res/Park/Inst/Ind/Cml/Co

OCP/PCB

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. / Sample Matrix / Sample Type / Sample Date / Sampling Time / Sample I.D.				
					1581937 Soil153 2021-08-27 BH104 SS2	1581938 Soil153 2021-08-27 BH104 SS4	1581939 Soil153 2021-08-27 BH105 SS1	1581940 Soil153 2021-08-27 BH106 SS2	1581941 Soil153 2021-08-27 BH106 SS4
Aldrin	408620	0.002	ug/g	STD 0.05	<0.002	<0.002	<0.002	<0.002	<0.002
Chlordane	408620	0.006	ug/g	STD 0.05	<0.006	<0.006	<0.006	<0.006	<0.006
Chlordane, alpha-	408620	0.002	ug/g		<0.002	<0.002	<0.002	<0.002	<0.002
Chlordane, gamma-	408620	0.002	ug/g		<0.002	<0.002	<0.002	<0.002	<0.002
DDD	408620	0.002	ug/g	STD 0.05	<0.002	<0.002	<0.002	<0.002	<0.002
DDE	408620	0.002	ug/g	STD 0.05	<0.002	<0.002	<0.002	<0.002	<0.002
DDT	408620	0.002	ug/g	STD 1.4	<0.002	<0.002	<0.002	<0.002	<0.002
Dieldrin	408620	0.002	ug/g	STD 0.05	<0.002	<0.002	<0.002	<0.002	<0.002
Endosulfan	408620	0.004	ug/g	STD 0.04	<0.004	<0.004	<0.004	<0.004	<0.004
Endosulfan I	408620	0.002	ug/g		<0.002	<0.002	<0.002	<0.002	<0.002
Endosulfan II	408620	0.002	ug/g		<0.002	<0.002	<0.002	<0.002	<0.002
Endrin	408620	0.002	ug/g	STD 0.04	<0.002	<0.002	<0.002	<0.002	<0.002
Heptachlor	408620	0.002	ug/g	STD 0.05	<0.002	<0.002	<0.002	<0.002	<0.002
Heptachlor Epoxide	408620	0.002	ug/g	STD 0.05	<0.002	<0.002	<0.002	<0.002	<0.002
Hexachlorobenzene	408620	0.002	ug/g	STD 0.01	<0.002	<0.002	<0.002	<0.002	<0.002
Hexachlorobutadiene	408620	0.002	ug/g	STD 0.01	<0.002	<0.002	<0.002	<0.002	<0.002
Hexachlorocyclohexane Gamma-	408620	0.002	ug/g		<0.002	<0.002	<0.002	<0.002	<0.002
Hexachloroethane	408620	0.002	ug/g	STD 0.01	<0.002	<0.002	<0.002	<0.002	<0.002
Methoxychlor	408620	0.002	ug/g	STD 0.05	<0.002	<0.002	<0.002	<0.002	<0.002

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Attention: Dylan X
PO#:
Invoice to: Geo Pro Consulting

Report Number: 1962118
Date Submitted: 2021-09-09
Date Reported: 2021-09-17
Project: 17-1780E3-1787
COC #: 879859

Guideline = Excess Soil-T1-Res/Park/Inst/Ind/Cml/Co

PAH

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1581932	1581933	1581934	1581935	1581936
Sample Matrix					Soil153	Soil153	Soil153	Soil153	Soil153
Sample Type									
Sample Date					2021-08-27	2021-08-27	2021-08-27	2021-08-27	2021-08-27
Sampling Time									
Sample I.D.					BH101 SS2	BH101 SS3	BH102 SS1	BH103 SS2	BH103 SS3
1+2-methylnaphthalene	408575	0.05	ug/g	STD 0.59	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	408573	0.05	ug/g	STD 0.072	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	408573	0.05	ug/g	STD 0.093	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	408573	0.05	ug/g	STD 0.16	<0.05	<0.05	<0.05	<0.05	<0.05
Benz[a]anthracene	408573	0.05	ug/g	STD 0.36	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo[a]pyrene	408573	0.05	ug/g	STD 0.3	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo[b]fluoranthene	408573	0.05	ug/g	STD 0.47	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo[ghi]perylene	408573	0.05	ug/g	STD 0.68	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo[k]fluoranthene	408573	0.05	ug/g	STD 0.48	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	408573	0.05	ug/g	STD 2.8	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz[a h]anthracene	408573	0.05	ug/g	STD 0.1	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	408573	0.05	ug/g	STD 0.56	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	408573	0.05	ug/g	STD 0.12	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno[1 2 3-cd]pyrene	408573	0.05	ug/g	STD 0.23	<0.05	<0.05	<0.05	<0.05	<0.05
Methlynaphthalene, 1-	408573	0.05	ug/g		<0.05	<0.05	<0.05	<0.05	<0.05
Methlynaphthalene, 2-	408573	0.05	ug/g		<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	408573	0.013	ug/g	STD 0.09	<0.013	<0.013	<0.013	<0.013	<0.013
Phenanthrene	408573	0.05	ug/g	STD 0.69	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	408573	0.05	ug/g	STD 1	<0.05	<0.05	<0.05	<0.05	<0.05

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Project: 17-1780E3-1787
COC #: 879859

Guideline = Excess Soil-T1-Res/Park/Inst/Ind/Cml/Co

PAH

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1581937	1581938	1581939	1581940	1581941
Sample Matrix					Soil153	Soil153	Soil153	Soil153	Soil153
Sample Type									
Sample Date					2021-08-27	2021-08-27	2021-08-27	2021-08-27	2021-08-27
Sampling Time									
Sample I.D.					BH104 SS2	BH104 SS4	BH105 SS1	BH106 SS2	BH106 SS4
1+2-methylnaphthalene	408575	0.05	ug/g	STD 0.59	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	408573	0.05	ug/g	STD 0.072	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	408573	0.05	ug/g	STD 0.093	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	408573	0.05	ug/g	STD 0.16	<0.05	<0.05	<0.05	<0.05	<0.05
Benz[a]anthracene	408573	0.05	ug/g	STD 0.36	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo[a]pyrene	408573	0.05	ug/g	STD 0.3	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo[b]fluoranthene	408573	0.05	ug/g	STD 0.47	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo[ghi]perylene	408573	0.05	ug/g	STD 0.68	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo[k]fluoranthene	408573	0.05	ug/g	STD 0.48	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	408573	0.05	ug/g	STD 2.8	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz[a h]anthracene	408573	0.05	ug/g	STD 0.1	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	408573	0.05	ug/g	STD 0.56	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	408573	0.05	ug/g	STD 0.12	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno[1 2 3-cd]pyrene	408573	0.05	ug/g	STD 0.23	<0.05	<0.05	<0.05	<0.05	<0.05
Methlynaphthalene, 1-	408573	0.05	ug/g		<0.05	<0.05	<0.05	<0.05	<0.05
Methlynaphthalene, 2-	408573	0.05	ug/g		<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	408573	0.013	ug/g	STD 0.09	<0.013	<0.013	<0.013	<0.013	<0.013
Phenanthrene	408573	0.05	ug/g	STD 0.69	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	408573	0.05	ug/g	STD 1	<0.05	<0.05	<0.05	<0.05	<0.05

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COC #: 879859

Guideline = Excess Soil-T1-Res/Park/Inst/Ind/Cml/Co

Volatiles

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1581932	1581933	1581934	1581935	1581936
Sample Matrix					Soil153	Soil153	Soil153	Soil153	Soil153
Sample Type									
Sample Date					2021-08-27	2021-08-27	2021-08-27	2021-08-27	2021-08-27
Sampling Time									
Sample I.D.					BH101 SS2	BH101 SS3	BH102 SS1	BH103 SS2	BH103 SS3
Acetone	408737	0.50	ug/g	STD 0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Benzene	408737	0.0068	ug/g	STD 0.02	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068
Bromodichloromethane	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromoform	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromomethane	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorobenzene	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chloroform	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibromochloromethane	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichlorobenzene, 1,2-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichlorobenzene, 1,3-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichlorobenzene, 1,4-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichlorodifluoromethane	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloroethane, 1,1-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloroethane, 1,2-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloroethylene, 1,1-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloroethylene, 1,2-cis-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloroethylene, 1,2-trans-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloropropane, 1,2-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloropropene,1,3-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloropropene,1,3-cis-	408737	0.05	ug/g		<0.05	<0.05	<0.05	<0.05	<0.05
Dichloropropene,1,3-trans-	408737	0.05	ug/g		<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	408737	0.018	ug/g	STD 0.05	<0.018	<0.018	<0.018	<0.018	<0.018

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Project: 17-1780E3-1787
COC #: 879859

Guideline = Excess Soil-T1-Res/Park/Inst/Ind/Cml/Co

Volatiles

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1581932	1581933	1581934	1581935	1581936
Sample Matrix					Soil153	Soil153	Soil153	Soil153	Soil153
Sample Type									
Sample Date					2021-08-27	2021-08-27	2021-08-27	2021-08-27	2021-08-27
Sampling Time									
Sample I.D.					BH101 SS2	BH101 SS3	BH102 SS1	BH103 SS2	BH103 SS3
Ethylene dibromide	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Hexane (n)	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl Ethyl Ketone	408737	0.50	ug/g	STD 0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl Isobutyl Ketone	408737	0.50	ug/g	STD 0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl tert-Butyl Ether (MTBE)	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Styrene	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tetrachloroethane, 1,1,1,2-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tetrachloroethane, 1,1,2,2-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tetrachloroethylene	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Toluene	408737	0.08	ug/g	STD 0.2	<0.08	<0.08	<0.08	<0.08	<0.08
Trichloroethane, 1,1,1-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trichloroethane, 1,1,2-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trichloroethylene	408737	0.01	ug/g	STD 0.05	<0.01	<0.01	<0.01	<0.01	<0.01
Trichlorofluoromethane	408737	0.05	ug/g	STD 0.25	<0.05	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	408737	0.02	ug/g	STD 0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Xylene Mixture	408743	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene, m/p-	408737	0.05	ug/g		<0.05	<0.05	<0.05	<0.05	<0.05
Xylene, o-	408737	0.05	ug/g		<0.05	<0.05	<0.05	<0.05	<0.05

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Volatiles

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1581937	1581938	1581939	1581940	1581941
Sample Matrix					Soil153	Soil153	Soil153	Soil153	Soil153
Sample Type									
Sample Date					2021-08-27	2021-08-27	2021-08-27	2021-08-27	2021-08-27
Sampling Time									
Sample I.D.					BH104 SS2	BH104 SS4	BH105 SS1	BH106 SS2	BH106 SS4
Acetone	408737	0.50	ug/g	STD 0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Benzene	408737	0.0068	ug/g	STD 0.02	<0.0068	<0.0068	<0.0068	<0.0068	<0.0068
Bromodichloromethane	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromoform	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromomethane	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorobenzene	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chloroform	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibromochloromethane	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichlorobenzene, 1,2-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichlorobenzene, 1,3-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichlorobenzene, 1,4-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichlorodifluoromethane	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloroethane, 1,1-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloroethane, 1,2-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloroethylene, 1,1-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloroethylene, 1,2-cis-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloroethylene, 1,2-trans-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloropropane, 1,2-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloropropene,1,3-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichloropropene,1,3-cis-	408737	0.05	ug/g		<0.05	<0.05	<0.05	<0.05	<0.05
Dichloropropene,1,3-trans-	408737	0.05	ug/g		<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	408737	0.018	ug/g	STD 0.05	<0.018	<0.018	<0.018	<0.018	<0.018

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Project: 17-1780E3-1787
COC #: 879859

Guideline = Excess Soil-T1-Res/Park/Inst/Ind/Cml/Co

Volatiles

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1581937	1581938	1581939	1581940	1581941
Sample Matrix					Soil153	Soil153	Soil153	Soil153	Soil153
Sample Type									
Sample Date					2021-08-27	2021-08-27	2021-08-27	2021-08-27	2021-08-27
Sampling Time									
Sample I.D.					BH104 SS2	BH104 SS4	BH105 SS1	BH106 SS2	BH106 SS4
Ethylene dibromide	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Hexane (n)	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl Ethyl Ketone	408737	0.50	ug/g	STD 0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl Isobutyl Ketone	408737	0.50	ug/g	STD 0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl tert-Butyl Ether (MTBE)	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Styrene	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tetrachloroethane, 1,1,1,2-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tetrachloroethane, 1,1,2,2-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tetrachloroethylene	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Toluene	408737	0.08	ug/g	STD 0.2	<0.08	<0.08	<0.08	<0.08	<0.08
Trichloroethane, 1,1,1-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trichloroethane, 1,1,2-	408737	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Trichloroethylene	408737	0.01	ug/g	STD 0.05	<0.01	<0.01	<0.01	<0.01	<0.01
Trichlorofluoromethane	408737	0.05	ug/g	STD 0.25	<0.05	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	408737	0.02	ug/g	STD 0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Xylene Mixture	408743	0.05	ug/g	STD 0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene, m/p-	408737	0.05	ug/g		<0.05	<0.05	<0.05	<0.05	<0.05
Xylene, o-	408737	0.05	ug/g		<0.05	<0.05	<0.05	<0.05	<0.05

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Inorganics

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. / Sample Matrix / Sample Type / Sample Date / Sampling Time / Sample I.D.				
					1581932 Soil153 2021-08-27 BH101 SS2	1581933 Soil153 2021-08-27 BH101 SS3	1581934 Soil153 2021-08-27 BH102 SS1	1581935 Soil153 2021-08-27 BH103 SS2	1581936 Soil153 2021-08-27 BH103 SS3
Cyanide (CN-)	408548	0.005	ug/g	STD 0.051		<0.005			<0.005
		0.05	ug/g	STD 0.051	<0.05		<0.05	<0.05	
Electrical Conductivity	408495	0.05	mS/cm	STD 0.57	0.12	0.10	0.14	0.15	0.12
pH - CaCl2	408675	2.00			6.17	7.02	7.19	7.14	7.13
Sodium Adsorption Ratio	408539	0.01		STD 2.4	0.18	0.11	0.06	0.08	0.07

Inorganics

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. / Sample Matrix / Sample Type / Sample Date / Sampling Time / Sample I.D.				
					1581937 Soil153 2021-08-27 BH104 SS2	1581938 Soil153 2021-08-27 BH104 SS4	1581939 Soil153 2021-08-27 BH105 SS1	1581940 Soil153 2021-08-27 BH106 SS2	1581941 Soil153 2021-08-27 BH106 SS4
Cyanide (CN-)	408548	0.005	ug/g	STD 0.051		<0.005		<0.005	<0.005
		0.05	ug/g	STD 0.051	<0.05		<0.05		
Electrical Conductivity	408495	0.05	mS/cm	STD 0.57	0.15	0.11	0.13	0.15	0.27
pH - CaCl2	408675	2.00			7.10	7.30	7.33	7.42	7.49
Sodium Adsorption Ratio	408539	0.01		STD 2.4	0.13	0.15	0.05	0.15	0.32

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Inorganics

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1581942 / Sample Matrix Soil153 / Sample Type / Sample Date 2021-08-27 / Sampling Time / Sample I.D. BH106 SS2D
Cyanide (CN-)	408548	0.05	ug/g	STD 0.051	<0.05
Electrical Conductivity	408495	0.05	mS/cm	STD 0.57	0.15
pH - CaCl2	408675	2.00			7.42
Sodium Adsorption Ratio	408539	0.01		STD 2.4	0.12

Moisture

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1581932 / Sample Matrix Soil153 / Sample Type / Sample Date 2021-08-27 / Sampling Time / Sample I.D. BH101 SS2	1581933 Soil153 2021-08-27 BH101 SS3	1581934 Soil153 2021-08-27 BH102 SS1	1581935 Soil153 2021-08-27 BH103 SS2	1581936 Soil153 2021-08-27 BH103 SS3
Moisture-Humidite	408483	0.1	%		5.6	7.7	2.7	6.7	5.3

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Moisture

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. / Sample Matrix / Sample Type / Sample Date / Sampling Time / Sample I.D.				
					1581937 Soil153 2021-08-27 BH104 SS2	1581938 Soil153 2021-08-27 BH104 SS4	1581939 Soil153 2021-08-27 BH105 SS1	1581940 Soil153 2021-08-27 BH106 SS2	1581941 Soil153 2021-08-27 BH106 SS4
Moisture-Humidite	408483	0.1	%		9.2	15.0	7.1	14.2	10.6

PCBs

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. / Sample Matrix / Sample Type / Sample Date / Sampling Time / Sample I.D.				
					1581932 Soil153 2021-08-27 BH101 SS2	1581933 Soil153 2021-08-27 BH101 SS3	1581934 Soil153 2021-08-27 BH102 SS1	1581935 Soil153 2021-08-27 BH103 SS2	1581936 Soil153 2021-08-27 BH103 SS3
Aroclor 1242	408468	0.02	ug/g		<0.02	<0.02			
	408604	0.02	ug/g				<0.02	<0.02	<0.02
Aroclor 1248	408468	0.02	ug/g		<0.02	<0.02			
	408604	0.02	ug/g				<0.02	<0.02	<0.02
Aroclor 1254	408468	0.02	ug/g		<0.02	<0.02			
	408604	0.02	ug/g				<0.02	<0.02	<0.02
Aroclor 1260	408468	0.02	ug/g		<0.02	<0.02			
	408604	0.02	ug/g				<0.02	<0.02	<0.02
Polychlorinated Biphenyls	408468	0.02	ug/g	STD 0.3	<0.02	<0.02			
	408604	0.02	ug/g	STD 0.3			<0.02	<0.02	<0.02

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PCBs

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. / Sample Matrix / Sample Type / Sample Date / Sampling Time / Sample I.D.				
					1581937 Soil153 2021-08-27 BH104 SS2	1581938 Soil153 2021-08-27 BH104 SS4	1581939 Soil153 2021-08-27 BH105 SS1	1581940 Soil153 2021-08-27 BH106 SS2	1581941 Soil153 2021-08-27 BH106 SS4
Aroclor 1242	408604	0.02	ug/g		<0.02	<0.02	<0.02	<0.02	<0.02
Aroclor 1248	408604	0.02	ug/g		<0.02	<0.02	<0.02	<0.02	<0.02
Aroclor 1254	408604	0.02	ug/g		<0.02	<0.02	<0.02	<0.02	<0.02
Aroclor 1260	408604	0.02	ug/g		<0.02	<0.02	<0.02	<0.02	<0.02
Polychlorinated Biphenyls	408604	0.02	ug/g	STD 0.3	<0.02	<0.02	<0.02	<0.02	<0.02

PCB Surrogate

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. / Sample Matrix / Sample Type / Sample Date / Sampling Time / Sample I.D.				
					1581932 Soil153 2021-08-27 BH101 SS2	1581933 Soil153 2021-08-27 BH101 SS3	1581934 Soil153 2021-08-27 BH102 SS1	1581935 Soil153 2021-08-27 BH103 SS2	1581936 Soil153 2021-08-27 BH103 SS3
Decachlorobiphenyl	408470	0	%		61	64			
	408605	0	%				62	67	69

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PCB Surrogate

Analyte	Batch No	MRL	Units	Guideline	Lab I.D.	1581937	1581938	1581939	1581940	1581941
					Sample Matrix	Soil153	Soil153	Soil153	Soil153	Soil153
					Sample Type					
					Sample Date	2021-08-27	2021-08-27	2021-08-27	2021-08-27	2021-08-27
					Sampling Time					
					Sample I.D.	BH104 SS2	BH104 SS4	BH105 SS1	BH106 SS2	BH106 SS4
Decachlorobiphenyl	408605	0	%			67	68	67	62	63

PHC Surrogate

Analyte	Batch No	MRL	Units	Guideline	Lab I.D.	1581932	1581933	1581934	1581935	1581936
					Sample Matrix	Soil153	Soil153	Soil153	Soil153	Soil153
					Sample Type					
					Sample Date	2021-08-27	2021-08-27	2021-08-27	2021-08-27	2021-08-27
					Sampling Time					
					Sample I.D.	BH101 SS2	BH101 SS3	BH102 SS1	BH103 SS2	BH103 SS3
Alpha-androstrane	408483	0	%			85	79	85	87	79

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PHC Surrogate

Analyte	Batch No	MRL	Units	Guideline	Lab I.D.	1581937	1581938	1581939	1581940	1581941
					Sample Matrix	Soil153	Soil153	Soil153	Soil153	Soil153
					Sample Type					
					Sample Date	2021-08-27	2021-08-27	2021-08-27	2021-08-27	2021-08-27
					Sampling Time					
					Sample I.D.	BH104 SS2	BH104 SS4	BH105 SS1	BH106 SS2	BH106 SS4
Alpha-androstrane	408483	0	%			73	60	77	92	110

VOCs Surrogates

Analyte	Batch No	MRL	Units	Guideline	Lab I.D.	1581932	1581933	1581934	1581935	1581936
					Sample Matrix	Soil153	Soil153	Soil153	Soil153	Soil153
					Sample Type					
					Sample Date	2021-08-27	2021-08-27	2021-08-27	2021-08-27	2021-08-27
					Sampling Time					
					Sample I.D.	BH101 SS2	BH101 SS3	BH102 SS1	BH103 SS2	BH103 SS3
1,2-dichloroethane-d4	408737	0	%			89	92	97	98	92
4-bromofluorobenzene	408737	0	%			108	111	116	110	113
Toluene-d8	408737	0	%			103	101	102	95	105

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VOCs Surrogates

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. / Sample Matrix / Sample Type / Sample Date / Sampling Time / Sample I.D.				
					1581937 Soil153 2021-08-27 BH104 SS2	1581938 Soil153 2021-08-27 BH104 SS4	1581939 Soil153 2021-08-27 BH105 SS1	1581940 Soil153 2021-08-27 BH106 SS2	1581941 Soil153 2021-08-27 BH106 SS4
1,2-dichloroethane-d4	408737	0	%		97	89	93	102	95
4-bromofluorobenzene	408737	0	%		110	106	108	116	104
Toluene-d8	408737	0	%		98	102	100	104	106

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Quality Assurance Summary

Batch No	Analyte	Blank	QC % Rec	QC Limits	Spike % Rec	Spike Limits	Dup % RPD	Duplicate Limits
408468	Aroclor 1242	<0.02 ug/g	83	60-140	72	60-140	0	0-40
408468	Aroclor 1248	<0.02 ug/g	83	60-140	72	60-140	0	0-40
408468	Aroclor 1254	<0.02 ug/g	83	60-140	72	60-140	0	0-40
408468	Aroclor 1260	<0.02 ug/g	83	60-140	72	60-140	0	0-40
408468	Polychlorinated Biphenyls	<0.02 ug/g	83	60-140	72	60-140	0	0-40
408483	PHC's F2	<10 ug/g	112	80-120	78	60-140	0	0-30
408483	PHC's F3	<20 ug/g	112	80-120	78	60-140	0	0-30
408483	PHC's F4	<20 ug/g	112	80-120	78	60-140	0	0-30
408483	Moisture-Humidite	<0.1 %	100	80-120			3	
408495	Electrical Conductivity	<0.05	97	90-110			3	0-10
408498	PHC's F2-Napth							
408499	PHC's F3-PAH							
408535	Silver	<0.2 ug/g	148	70-130	192	70-130	0	0-20
408535	Arsenic	<1 ug/g	96	70-130	112	70-130	0	0-20
408535	Boron (total)	<5 ug/g	104	70-130	137	70-130	0	0-20
408535	Barium	<1 ug/g	90	70-130	186	70-130	6	0-20
408535	Beryllium	<1 ug/g	103	70-130	96	70-130	0	0-20
408535	Cadmium	<0.4 ug/g	95	70-130	107	70-130	0	0-20
408535	Cobalt	<1 ug/g	92	70-130	99	70-130	0	0-20
408535	Chromium Total	<1 ug/g	97	70-130	145	70-130	31	0-20
408535	Copper	<1 ug/g	101	70-130	98	70-130	2	0-20
408535	Mercury	<0.1 ug/g	100	70-130	110	70-130	0	0-20
408535	Molybdenum	<1 ug/g	90	70-130	104	70-130	0	0-20
408535	Nickel	<1 ug/g	96	70-130	103	70-130	25	0-20
408535	Lead	<1 ug/g	91	70-130	101	70-130	0	0-20
408535	Antimony	<1 ug/g	73	70-130	102	70-130	0	0-20
408535	Selenium	<0.5 ug/g	108	70-130	120	70-130	0	0-20
408535	Thallium	<1 ug/g	91	70-130	96	70-130	0	0-20
408535	Uranium	<0.5 ug/g	87	70-130	96	70-130	0	0-20
408535	Vanadium	<2 ug/g	93	70-130	149	70-130	7	0-20
408535	Zinc	<2 ug/g	107	70-130	124	70-130	8	0-20
408539	Sodium Adsorption Ratio	<0.01					1	
408548	Cyanide (CN-)	<0.05 ug/g	100	75-125	100	70-130	0	0-20

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Quality Assurance Summary

Batch No	Analyte	Blank	QC % Rec	QC Limits	Spike % Rec	Spike Limits	Dup % RPD	Duplicate Limits
408554	Boron (Hot Water Soluble)	<0.5 ug/g	90	70-130	108	75-125	0	0-30
408573	Methlynaphthalene, 1-	<0.05 ug/g	88	50-140	81	50-140	0	0-40
408573	Methlynaphthalene, 2-	<0.05 ug/g	94	50-140	77	50-140	0	0-40
408573	Acenaphthene	<0.05 ug/g	76	50-140	61	50-140	0	0-40
408573	Acenaphthylene	0.07 ug/g	75	50-140	60	50-140	0	0-40
408573	Anthracene	<0.05 ug/g	78	50-140	65	50-140	0	0-40
408573	Benz[a]anthracene	<0.05 ug/g	52	50-140	62	50-140	0	0-40
408573	Benzo[a]pyrene	<0.05 ug/g	68	50-140	72	50-140	0	0-40
408573	Benzo[b]fluoranthene	<0.05 ug/g	76	50-140	69	50-140	0	0-40
408573	Benzo[ghi]perylene	<0.05 ug/g	62	50-140	60	50-140	0	0-40
408573	Benzo[k]fluoranthene	<0.05 ug/g	111	50-140	97		0	0-40
408573	Chrysene	<0.05 ug/g	86	50-140	75	50-140	0	0-40
408573	Dibenz[a h]anthracene	<0.05 ug/g	66	50-140	61	50-140	0	0-40
408573	Fluoranthene	<0.05 ug/g	78	50-140	71	50-140	0	0-40
408573	Fluorene	<0.05 ug/g	77	50-140	62	50-140	0	0-40
408573	Indeno[1 2 3-cd]pyrene	<0.05 ug/g	66	50-140	59	50-140	0	0-40
408573	Naphthalene	<0.013 ug/g	75	50-140	66	50-140	0	0-40
408573	Phenanthrene	<0.05 ug/g	75	50-140	64	50-140	0	0-40
408573	Pyrene	<0.05 ug/g	77	50-140	69	50-140	0	0-40
408575	1+2-methylnaphthalene							
408604	Aroclor 1242	<0.02 ug/g	83	60-140	72	60-140	0	0-40
408604	Aroclor 1248	<0.02 ug/g	83	60-140	72	60-140	0	0-40
408604	Aroclor 1254	<0.02 ug/g	83	60-140	72	60-140	0	0-40
408604	Aroclor 1260	<0.02 ug/g	83	60-140	72	60-140	0	0-40
408604	Polychlorinated Biphenyls	<0.02 ug/g	83	60-140	72	60-140	0	0-40
408620	Chlordane, alpha-	<0.002 ug/g	59	50-140		50-140	0	0-40
408620	Aldrin	<0.002 ug/g	59	50-140		50-140	0	0-40
408620	Chlordane	<0.006 ug/g					0	
408620	Dieldrin	<0.002 ug/g	62	50-140		50-140	0	0-40
408620	Endosulfan	<0.004 ug/g					0	
408620	Endosulfan I	<0.002 ug/g	64	50-140		50-140	0	0-40
408620	Endosulfan II	<0.002 ug/g	52	50-140		50-140	0	0-40
408620	Endrin	<0.002 ug/g	66	50-140		50-140	0	0-40

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PO#:
Invoice to: Geo Pro Consulting

Report Number: 1962118
Date Submitted: 2021-09-09
Date Reported: 2021-09-17
Project: 17-1780E3-1787
COC #: 879859

Quality Assurance Summary

Batch No	Analyte	Blank	QC % Rec	QC Limits	Spike % Rec	Spike Limits	Dup % RPD	Duplicate Limits
408620	Hexachlorocyclohexane Gamma-	<0.002 ug/g	60	50-140		50-140	0	0-40
408620	Chlordane, gamma-	<0.002 ug/g	59	50-140		50-140	0	0-40
408620	Heptachlor	<0.002 ug/g	53	50-140		50-140	0	0-40
408620	Heptachlor Epoxide	<0.002 ug/g	67	50-140		50-140	0	0-40
408620	Hexachlorobenzene	<0.002 ug/g	75	50-140		50-140	0	0-40
408620	Hexachlorobutadiene	<0.002 ug/g	82				0	
408620	Hexachloroethane	<0.002 ug/g	69				0	
408620	Methoxychlor	<0.002 ug/g	55	50-140		50-140	0	0-40
408620	DDD	<0.002 ug/g	66	50-140		50-140	0	0-40
408620	DDE	<0.002 ug/g	60	50-140		50-140	0	0-40
408620	DDT	<0.002 ug/g	64	50-140		50-140	0	0-40
408648	Chromium VI	<0.20 ug/g	108	80-120	100	70-130	0	0-35
408673	Boron (Hot Water Soluble)	<0.5 ug/g	100	70-130		75-125		0-30
408675	pH - CaCl2	6.56	101	90-110			0	
408713	Chromium VI	<0.20 ug/g	102	80-120	88	70-130	0	0-35
408730	PHC's F1	<10 ug/g	97	80-120	100	60-140	0	0-30
408737	Tetrachloroethane, 1,1,1,2-	<0.05 ug/g	99	60-130	96	50-140	0	0-50
408737	Trichloroethane, 1,1,1-	<0.05 ug/g	87	60-130	100	50-140	0	0-50
408737	Tetrachloroethane, 1,1,2,2-	<0.05 ug/g	88	60-130	92	50-140	0	0-30
408737	Trichloroethane, 1,1,2-	<0.05 ug/g	107	60-130	103	50-140	0	0-50
408737	Dichloroethane, 1,1-	<0.05 ug/g	94	60-130	107	50-140	0	0-50
408737	Dichloroethylene, 1,1-	<0.05 ug/g	83	60-130	110	50-140	0	0-50
408737	Dichlorobenzene, 1,2-	<0.05 ug/g	98	60-130	94	50-140	0	0-50
408737	Dichloroethane, 1,2-	<0.05 ug/g	88	60-130	113	50-140	0	0-50
408737	Dichloropropane, 1,2-	<0.05 ug/g	100	60-130	101	50-140	0	0-50
408737	Dichlorobenzene, 1,3-	<0.05 ug/g	81	60-130	76	50-140	0	0-50
408737	Dichloropropene,1,3-	<0.05 ug/g						
408737	Dichlorobenzene, 1,4-	<0.05 ug/g	98	60-130	92	50-140	0	0-50
408737	Acetone	<0.50 ug/g	94	60-130	119	50-140	0	0-50
408737	Benzene	<0.0068	85	60-130	106	50-140	0	0-50
408737	Bromodichloromethane	<0.05 ug/g	106	60-130	100	50-140	0	0-50
408737	Bromoform	<0.05 ug/g	100	60-130	102	50-140	0	0-50
408737	Bromomethane	<0.05 ug/g	80	60-130	100	50-140	0	0-50

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Project: 17-1780E3-1787
COC #: 879859

Quality Assurance Summary

Batch No	Analyte	Blank	QC % Rec	QC Limits	Spike % Rec	Spike Limits	Dup % RPD	Duplicate Limits
408737	Dichloroethylene, 1,2-cis-	<0.05 ug/g	89	60-130	106	50-140	0	0-50
408737	Dichloropropene,1,3-cis-	<0.05 ug/g	108	60-130	91	50-140	0	0-50
408737	Carbon Tetrachloride	<0.05 ug/g	94	60-130	102	50-140	0	0-50
408737	Chloroform	<0.05 ug/g	84	60-130	104	50-140	0	0-50
408737	Dibromochloromethane	<0.05 ug/g	106	60-130	100	50-140	0	0-50
408737	Dichlorodifluoromethane	<0.05 ug/g	90	60-130	75	50-140	0	0-50
408737	Methylene Chloride	<0.05 ug/g	83	60-130	109	50-140	0	0-50
408737	Ethylbenzene	<0.018 ug/g	85	60-130	95	50-140	0	0-50
408737	Ethylene dibromide	<0.05 ug/g	101	60-130		50-140		0-50
408737	Hexane (n)	<0.05 ug/g	82	60-130	84	50-140	0	0-50
408737	Xylene, m/p-	<0.05 ug/g	90	60-130	86	50-140	0	0-50
408737	Methyl Ethyl Ketone	<0.50 ug/g	90	60-130	118	50-140	0	0-50
408737	Methyl Isobutyl Ketone	<0.50 ug/g	85	60-130	85	50-140	0	0-50
408737	Methyl tert-Butyl Ether (MTBE)	<0.05 ug/g	128	60-130	104	50-140	0	0-50
408737	Chlorobenzene	<0.05 ug/g	83	60-130	98	50-140	0	0-50
408737	Xylene, o-	<0.05 ug/g	90	60-130	103	50-140	0	0-50
408737	Styrene	<0.05 ug/g	103	60-130	96	50-140	0	0-50
408737	Dichloroethylene, 1,2-trans-	<0.05 ug/g	88	60-130	105	50-140	0	0-50
408737	Dichloropropene,1,3-trans-	<0.05 ug/g	103	60-130	98	50-140	0	0-50
408737	Tetrachloroethylene	<0.05 ug/g	107	60-130	93	50-140	0	0-50
408737	Toluene	<0.08 ug/g	92	60-130	107	50-140	0	0-50
408737	Trichloroethylene	<0.01 ug/g	101	60-130	99	50-140	0	0-50
408737	Trichlorofluoromethane	<0.05 ug/g	83	60-130	80	50-140	0	0-50
408737	Vinyl Chloride	<0.02 ug/g	80	60-130	117	50-140	0	0-50
408743	Xylene Mixture							
408744	PHC's F1-BTEX							

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Test Summary

Batch No	Analyte	Instrument	Prep aration Date	Analysis Date	Analyst	Method
408468	Aroclor 1242	GC/ECD	2021-09-14	2021-09-14	R_G	EPA 8081B/8082A
408468	Aroclor 1248	GC/ECD	2021-09-14	2021-09-14	R_G	EPA 8081B/8082A
408468	Aroclor 1254	GC/ECD	2021-09-14	2021-09-14	R_G	EPA 8081B/8082A
408468	Aroclor 1260	GC/ECD	2021-09-14	2021-09-14	R_G	EPA 8081B/8082A
408468	Polychlorinated Biphenyls	GC/ECD	2021-09-14	2021-09-14	R_G	EPA 8081B/8082A
408483	PHC's F2	GC/FID	2021-09-14	2021-09-15	ZoB	CCME
408483	PHC's F3	GC/FID	2021-09-14	2021-09-15	ZoB	CCME
408483	PHC's F4	GC/FID	2021-09-14	2021-09-15	ZoB	CCME
408483	Moisture-Humidite	Oven	2021-09-14	2021-09-15	ZoB	ASTM 2216
408495	Electrical Conductivity	Electrical Conductivity Mete	2021-09-14	2021-09-14	Z_S	Cond-Soil
408498	PHC's F2-Napth	GC/FID	2021-09-15	2021-09-15	ZoB	CCME
408499	PHC's F3-PAH	GC/FID	2021-09-15	2021-09-15	ZoB	CCME
408535	Silver	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Arsenic	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Boron (total)	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Barium	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Beryllium	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Cadmium	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Cobalt	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Chromium Total	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Copper	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Mercury	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Molybdenum	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Nickel	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Lead	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Antimony	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Selenium	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Thallium	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Uranium	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Vanadium	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408535	Zinc	ICAPQ-MS	2021-09-15	2021-09-15	AaN	EPA 200.8/6020
408539	Sodium Adsorption Ratio	iCAP OES	2021-09-15	2021-09-15	Z_S	Ag Soil
408548	Cyanide (CN-)	Skalar CN Analyzer	2021-09-15	2021-09-15	AX	MOECC E3015

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Test Summary

Batch No	Analyte	Instrument	Prep aration Date	Analysis Date	Analyst	Method
408554	Boron (Hot Water Soluble)	iCAP OES	2021-09-15	2021-09-15	Z_S	MOECC E3470
408573	Methlynaphthalene, 1-	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Methlynaphthalene, 2-	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Acenaphthene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Acenaphthylene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Anthracene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Benz[a]anthracene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Benzo[a]pyrene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Benzo[b]fluoranthene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Benzo[ghi]perylene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Benzo[k]fluoranthene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Chrysene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Dibenz[a h]anthracene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Fluoranthene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Fluorene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Indeno[1 2 3-cd]pyrene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Naphthalene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Phenanthrene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408573	Pyrene	GC-MS	2021-09-13	2021-09-14	C_M	P 8270
408575	1+2-methylnaphthalene	GC-MS	2021-09-16	2021-09-16	C_M	P 8270
408604	Aroclor 1242	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408604	Aroclor 1248	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408604	Aroclor 1254	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408604	Aroclor 1260	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408604	Polychlorinated Biphenyls	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	Chlordane, alpha-	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	Aldrin	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	Chlordane	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	Dieldrin	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	Endosulfan	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	Endosulfan I	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	Endosulfan II	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	Endrin	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A

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Test Summary

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408620	Hexachlorocyclohexane Gamma-	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	Chlordane, gamma-	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	Heptachlor	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	Heptachlor Epoxide	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	Hexachlorobenzene	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	Hexachlorobutadiene	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	Hexachloroethane	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	Methoxychlor	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	DDD	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	DDE	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408620	DDT	GC/ECD	2021-09-16	2021-09-16	R_G	EPA 8081B/8082A
408648	Chromium VI	FAA	2021-09-16	2021-09-16	MW	M US EPA 3060A
408673	Boron (Hot Water Soluble)	iCAP OES	2021-09-16	2021-09-16	Z_S	MOECC E3470
408675	pH - CaCl2	pH Meter	2021-09-16	2021-09-16	MW	Ag Soil
408713	Chromium VI	FAA	2021-09-17	2021-09-17	MW	M US EPA 3060A
408730	PHC's F1	GC/FID	2021-09-17	2021-09-17	YH	CCME
408737	Tetrachloroethane, 1,1,1,2-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Trichloroethane, 1,1,1-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Tetrachloroethane, 1,1,2,2-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Trichloroethane, 1,1,2-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Dichloroethane, 1,1-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Dichloroethylene, 1,1-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Dichlorobenzene, 1,2-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Dichloroethane, 1,2-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Dichloropropane, 1,2-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Dichlorobenzene, 1,3-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Dichloropropene,1,3-	GC-MS	2021-09-17	2021-09-17	YH	V 8260B
408737	Dichlorobenzene, 1,4-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Acetone	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Benzene	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Bromodichloromethane	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Bromoform	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Bromomethane	GC-MS	2021-09-16	2021-09-16	YH	V 8260B

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Certificate of Analysis

Client: Geo Pro Consulting
40 Vogell Rd, Unit 57
Richmond Hill, Ontario
L4B 3K6
Attention: Dylan X
PO#:
Invoice to: Geo Pro Consulting

Report Number: 1962118
Date Submitted: 2021-09-09
Date Reported: 2021-09-17
Project: 17-1780E3-1787
COC #: 879859

Test Summary

Batch No	Analyte	Instrument	Prep aration Date	Analysis Date	Analyst	Method
408737	Dichloroethylene, 1,2-cis-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Dichloropropene,1,3-cis-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Carbon Tetrachloride	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Chloroform	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Dibromochloromethane	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Dichlorodifluoromethane	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Methylene Chloride	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Ethylbenzene	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Ethylene dibromide	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Hexane (n)	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Xylene, m/p-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Methyl Ethyl Ketone	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Methyl Isobutyl Ketone	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Methyl tert-Butyl Ether (MTBE)	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Chlorobenzene	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Xylene, o-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Styrene	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Dichloroethylene, 1,2-trans-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Dichloropropene,1,3-trans-	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Tetrachloroethylene	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Toluene	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Trichloroethylene	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Trichlorofluoromethane	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408737	Vinyl Chloride	GC-MS	2021-09-16	2021-09-16	YH	V 8260B
408743	Xylene Mixture	GC-MS	2021-09-17	2021-09-17	YH	V 8260B
408744	PHC's F1-BTEX	GC/FID	2021-09-17	2021-09-17	YH	CCME

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Client: Geo Pro Consulting
40 Vogell Rd, Unit 57
Richmond Hill, Ontario
L4B 3K6
Attention: Dylan X
PO#:
Invoice to: Geo Pro Consulting

Report Number: 1962118
Date Submitted: 2021-09-09
Date Reported: 2021-09-17
Project: 17-1780E3-1787
COC #: 879859

Petroleum Hydrocarbons - CCME Checklist

Samples were analysed by Eurofins Ottawa Method AMCCME2, "Petroleum Hydrocarbons in Water and Soil, CCME/TPH", "Petroleum Hydrocarbons in Water and Soil, CCME/TPH". These methods comply with the reference method for the CCME CWS PHC and are validated for use in the laboratory. Eurofins Ottawa is accredited by CALA (ISO 17025) for all CCME F1-F4 fractions as listed in this report. Data for QC samples (blank, duplicate, spike) are available on request

Holding/Analysis Times	Yes/No	If NO, then reasons
All fractions analyzed within recommended hold times/analysis times?	Yes	
F1		
nC6 and nC10 response factors within 30% of toluene	Yes	
BTEX was subtracted from F1 fraction	Yes	
If YES, was F1-BTEX (C6-C10) reported	Yes	
F2		
nC10, nC16 and nC34 response factors within 10% of their average (F2-F4)	Yes	
Linearity within 15% (F2-F4)	Yes	
Napthalene was subtracted from F2 fraction	Yes	
If YES was F2-Napthalene reported	Yes	
F3		
PAH (selected compounds) subtracted from F3 fraction	Yes	
If YES was F3-PAH reported	Yes	
F4		
C50 response factor within 70% of nC10+nC16+nC34 average	Yes	
Chromatogram descended to baseline by retention time of C50	Yes	
if NO was F4 (C34-C50) gravimetric reported		

Note: Gravimetric heavy hydrocarbon results for soil samples is known to be highly variable. Where F4G results have been provided, the F4G result cannot be added to the gas chromatographic result.

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Eurofins 879859

STANDARD CHAIN-OF-CUSTODY

146 Colonnade Road, Unit #8, Ottawa, ON, K2E 7Y1 - Phone: 613-727-5692, Fax: 613-727-5222

Eurofins Workorder #: 1962118

CLIENT INFORMATION

Company:	GeoPro Consulting Limited
Contact:	ELab elab@geoproconsulting.ca
Address:	40 Vogell Road, unit 23, Richmond Hill, ON L4B 3N6
Telephone:	905-237-8336 Cell:
Email: #1:	dylanx@geoproconsulting.ca; viktorc@geoproconsulting.ca
Email: #2:	elab@geoproconsulting.ca; kaiwen@geoproconsulting.ca
Project:	17-1780E3-1787 Quote #: 190500

INVOICE INFORMATION (SAME AS CLIENT INFORMATION: YES ☑ NO ☐)

Company:		Fax:	
Contact:		Email: #1:	
Address:		Email: #2:	
Telephone:		PO #:	

TURN-AROUND TIME (Business Days)

☐ 1 Day* (100%) ☐ 2 Day** (50%) ☐ 3-5 Days (25%) ☑ 5-7 Days (Standard)

Please contact Lab in advance to determine rush availability.

*For results reported after rush due date, surcharges will apply: before 12:00 - 100%, after 12:00 - 50%.

**For results reported after rush due date, surcharges will apply: before 12:00 - 50%, after 12:00 - 25%.

REGULATION/GUIDELINE REQUIRED

☐ Sanitary Sewer, City:
☐ Storm Sewer, City:
☐ ODWSOG
☐ PWQO
☐ O. Reg 347/558
☐ Other:
☐ None

☐ O. Reg 153

Table # ___, Course / Fine, Surface / subsurface.

Type: Com-Ind / Res-Park / Agri / GW / All Other / Sediment

☑ Excess Soil, Table: 1 Type:

The sample results from this submission will form part of a formal Record of Site Condition (RSC) under O.Reg. 153/04 ☐ Yes ☐ No

The optimal temperature conditions during transport should be less than 10°C. Sample(s) cannot be frozen, unless otherwise indicated or agreed upon with the Laboratory. Note that this COC is not to be used for drinking water samples. The COC must be complete upon submission of the samples, there will be a $25 surcharge if required information is missing (required fields are shaded in grey).

Sample Details			Sample Analysis Required																		
Field Filtered -->			O.Reg.153 parameters																		RN# (Lab Use Only)
Sample ID	Date/Time Collected	Sample Matrix	# of Containers	PHC F1 - F4	BTEX	VOCs	PAHs	PCBs	Metals + Inorganics	Metals only	OC-Pesticides										
BH101 SS2	08/27/2021	SOIL	4	✔		✔	✔	✔	✔												1581932
BH101 SS3	08/27/2021	SOIL	4	✔		✔	✔	✔	✔												33
BH102 SS1	08/27/2021	SOIL	4	✔		✔	✔	✔	✔		✔										34
BH103 SS2	08/27/2021	SOIL	4	✔		✔	✔	✔	✔		✔										35
BH103 SS3	08/27/2021	SOIL	4	✔		✔	✔	✔	✔		✔										36
BH104 SS2	08/27/2021	SOIL	4	✔		✔	✔	✔	✔		✔										37
BH104 SS4	08/27/2021	SOIL	4	✔		✔	✔	✔	✔		✔										38
BH105 SS1	08/27/2021	SOIL	4	✔		✔	✔	✔	✔		✔										39
BH106 SS2	08/27/2021	SOIL	4	✔		✔	✔	✔	✔		✔										40
BH106 SS4	08/27/2021	SOIL	4	✔		✔	✔	✔	✔		✔										41

	PRINT	SIGN	DATE/TIME	TEMP (°C)
Sampled By:				
Relinquished By:	VC		Sept. 9, 2021	
Received By:	Viktor Gallant		09/09/21 4:20 pm	13.6°C

COMMENTS:

CUSTODY SEAL: ☐ YES ☐ NO Ice packs submitted: ☑ Yes ☐ No

401 Magnetic Drive, Unit #1, North York, ON, M3J 3H9 - Telephone: 416-661-5287 • 380 Vansickle Road, Unit #630, St. Catharines, ON, L2S 0B5 - Telephone: 905-680-8887 • 608 Norris Court, Kingston, ON, K7P 2R9 - Telephone: 613-634-9307

AFSTDCOC.5

Copies: White - Laboratory, Yellow - Sampler

STANDARD CHAIN-OF-CUSTODY

eurofins

146 Colonnade Road, Unit #8, Ottawa, ON, K2E 7Y1 - Phone: 613-727-5692, Fax: 613-727-5222

Eurofins Workorder #: 1962118

CLIENT INFORMATION

Company:	GeoPro Consulting Limited
Contact:	ELab elab@geoproconsulting.ca
Address:	40 Vogell Road, unit 23, Richmond Hill, ON L4B 3N6
Telephone:	905-237-8336 Cell:
Email: #1:	dylanx@geoproconsulting.ca; viktorc@geoproconsulting.ca
Email: #2:	elab@geoproconsulting.ca; kaiwen@geoproconsulting.ca
Project:	17-1780E3-1787 Quote #: 190500

INVOICE INFORMATION (SAME AS CLIENT INFORMATION: YES ☑ NO ☐)

Company:		Fax:	
Contact:		Email: #1:	
Address:		Email: #2:	
Telephone:		PO #:	

TURN-AROUND TIME (Business Days)

☐ 1 Day* (100%) ☐ 2 Day** (50%) ☐ 3-5 Days (25%) ☑ 5-7 Days (Standard)

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*For results reported after rush due date, surcharges will apply: before 12:00 - 100%, after 12:00 - 50%.

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REGULATION/GUIDELINE REQUIRED

☐ Sanitary Sewer, City:_____

☐ Storm Sewer, City:_____

☐ ODWSOG

☐ PWQO

☐ O. Reg 347/558

☐ Other: _____

☐ None

☐ O. Reg 153

Table # ___, Course / Fine, Surface / subsurface.

Type: Com-Ind / Res-Park / Agri / GW / All Other / Sediment

☑ Excess Soil, Table: 1 Type: _____

The sample results from this submission will form part of a formal Record of Site Condition (RSC) under O.Reg. 153/04

☐ Yes ☐ No

The optimal temperature conditions during transport should be less than 10°C. Sample(s) cannot be frozen, unless otherwise indicated or agreed upon with the Laboratory. Note that this COC is not to be used for drinking water samples. The COC must be complete upon submission of the samples, there will be a $25 surcharge if required information is missing (required fields are shaded in grey).

Sample Details		Sample Analysis Required																		RN# (Lab Use Only)
Field Filtered -->																				
				O.Reg.153 parameters																
Sample ID	Date/Time Collected	Sample Matrix	# of Containers	PHC F1 - F4	BTEX	VOCs	PAHs	PCBs	Metals + Inorganics	Metals only	OC-Pesticides									
BH106 SS2D	08/27/2021	SOIL	4	☐	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	1581942
				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
				☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	

	PRINT	SIGN	DATE/TIME	TEMP (°C)
Sampled By:				
Relinquished By:	VC		Sept. 9, 2021	
Received By:	Victor Gallant	V.G.	09/09/21 4:30 p.m.	13.6°C

COMMENTS:

CUSTODY SEAL: ☐ YES ☐ NO Ice packs submitted: ☑ Yes ☐ No

401 Magnetic Drive, Unit #1, North York, ON, M3J 3H9 - Telephone: 416-661-5287 • 380 Vansickle Road, Unit #630, St. Catharines, ON, L2S 0B5 - Telephone: 905-680-8887 • 608 Norris Court, Kingston, ON, K7P 2R9 - Telephone: 613-634-9307

AFSTDCOC.5

Copies: White - Laboratory, Yellow - Sampler

APPENDIX C

GeoPro Consulting Limited (Richmond Hill)
ATTN: Sarena Medina
40 Vogell Road
Unit 23
Richmond Hill ON L4B 3N6

Date Received: 09-SEP-21
Report Date: 16-SEP-21 11:44 (MT)
Version: FINAL

Client Phone: 905-237-8336

Certificate of Analysis

Lab Work Order #: L2637474

Project P.O. #: NOT SUBMITTED
Job Reference: 17-1780E8-1788
C of C Numbers:
Legal Site Desc:

Jennifer Barkshire-Paterson
Account Manager

ANALYTICAL REPORT

Summary of Guideline Exceedances

Guideline ALS ID	Client ID	Grouping	Analyte	Result	Guideline Limit	Unit

Federal & Provincial Waste Regulations (MAR, 2008) - Ontario Ministry of the Environment, General Waste Control Regulation No. 347/90

(No parameter exceedances)

ANALYTICAL REPORT

Sample Preparation - WASTE

			Lab ID	L2637474-1	L2637474-2	L2637474-3	L2637474-4
			Sample Date	27-AUG-21	27-AUG-21	27-AUG-21	27-AUG-21
			Sample ID	BH101 SS2	BH103 SS3	BH104 SS4	BH106 SS4
Analyte	**Unit**	**Guide Limits #1**	**#2**				
Initial pH	pH units	-	-	8.48	8.94	9.37	9.57
Final pH	pH units	-	-	5.00	5.15	5.72	5.82

Guide Limit #1: Ontario Ministry of the Environment, General Waste Control Regulation No. 347/90

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

ANALYTICAL REPORT

Physical Tests - WASTE

Analyte	Unit	Guide Limits #1	Guide Limits #2	Lab ID: L2637474-1 / Sample Date: 27-AUG-21 / Sample ID: BH101 SS2	Lab ID: L2637474-2 / Sample Date: 27-AUG-21 / Sample ID: BH103 SS3	Lab ID: L2637474-3 / Sample Date: 27-AUG-21 / Sample ID: BH104 SS4	Lab ID: L2637474-4 / Sample Date: 27-AUG-21 / Sample ID: BH106 SS4
Air Velocity Of Fume Hood	m/sec	-	-	0.22	0.22	0.22	0.22
Burning Rate	mm/sec	-	-	NA	NA	NA	NA
Ignitability-Class		-	-	NON-FLAMMABLE	NON-FLAMMABLE	NON-FLAMMABLE	NON-FLAMMABLE
Samp Comment		-	-	BROWN SOIL	BROWN SOIL	BROWN CLAYEY SOIL	BROWN SOIL
Temperature Of Test Material	Deg. C	-	-	21.0	21.0	21.0	21.0
Time To Ignition	sec	-	-	NA	NA	NA	NA

Guide Limit #1: Ontario Ministry of the Environment, General Waste Control Regulation No. 347/90

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

TCLP Extractables - WASTE

Analyte	Unit	Guide Limits #1	Guide Limits #2	Lab ID: L2637474-1 / Sample Date: 27-AUG-21 / Sample ID: BH101 SS2	Lab ID: L2637474-2 / Sample Date: 27-AUG-21 / Sample ID: BH103 SS3	Lab ID: L2637474-3 / Sample Date: 27-AUG-21 / Sample ID: BH104 SS4	Lab ID: L2637474-4 / Sample Date: 27-AUG-21 / Sample ID: BH106 SS4
Acenaphthene	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050
Acenaphthylene	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050
Anthracene	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050
Aroclor 1242	mg/L	-	-	<0.00020	<0.00020	<0.00020	<0.00020
Aroclor 1248	mg/L	-	-	<0.00020	<0.00020	<0.00020	<0.00020
Aroclor 1254	mg/L	-	-	<0.00020	<0.00020	<0.00020	<0.00020
Aroclor 1260	mg/L	-	-	<0.00020	<0.00020	<0.00020	<0.00020
Benzo(a)anthracene	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050
Benzo(a)pyrene	mg/L	0.001	-	<0.0010	<0.0010	<0.0010	<0.0010
Benzo(b&j)fluoranthene	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050
Benzo(g,h,i)perylene	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050
Benzo(k)fluoranthene	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050
Chrysene	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050
Cyanide, Weak Acid Diss	mg/L	20	-	<0.10	<0.10	<0.10	<0.10
Dibenz(a,h)anthracene	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050
Fluoranthene	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050
Fluorene	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050
Fluoride (F)	mg/L	150.0	-	<10	<10	<10	<10
Indeno(1,2,3-cd)pyrene	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050
Naphthalene	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate and Nitrite as N	mg/L	1000	-	<4.0	<4.0	<4.0	<4.0
Nitrate-N	mg/L	-	-	<2.0	<2.0	<2.0	<2.0
Nitrite-N	mg/L	-	-	<2.0	<2.0	<2.0	<2.0
Total PCBs	mg/L	0.3	-	<0.00040	<0.00040	<0.00040	<0.00040
Phenanthrene	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050
Pyrene	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050
Surrogate: Chrysene d12	%	-	-	107.3	105.5	104.5	103.2
Surrogate: Naphthalene d8	%	-	-	100.1	100.2	99.8	101.2
Surrogate: Phenanthrene d10	%	-	-	95.5	92.8	92.3	96.0
Quinoline	mg/L	-	-	<0.0050	<0.0050	<0.0050	<0.0050

Guide Limit #1: Ontario Ministry of the Environment, General Waste Control Regulation No. 347/90

ANALYTICAL REPORT

TCLP Extractables - WASTE

Guide Limit #1: Ontario Ministry of the Environment, General Waste Control Regulation No. 347/90

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

ANALYTICAL REPORT

TCLP Metals - WASTE

			Lab ID	L2637474-1	L2637474-2	L2637474-3	L2637474-4
			Sample Date	27-AUG-21	27-AUG-21	27-AUG-21	27-AUG-21
			Sample ID	BH101 SS2	BH103 SS3	BH104 SS4	BH106 SS4
		Guide Limits					
Analyte	Unit	#1	#2				
Arsenic (As)	mg/L	2.5	-	<0.050	<0.050	<0.050	<0.050
Barium (Ba)	mg/L	100	-	<0.50	<0.50	<0.50	0.63
Boron (B)	mg/L	500	-	<2.5	<2.5	<2.5	<2.5
Cadmium (Cd)	mg/L	0.5	-	<0.0050	<0.0050	<0.0050	<0.0050
Chromium (Cr)	mg/L	5.0	-	<0.050	<0.050	<0.050	<0.050
Lead (Pb)	mg/L	5.0	-	<0.025	<0.025	<0.025	<0.025
Mercury (Hg)	mg/L	0.1	-	<0.00010	<0.00010	<0.00010	<0.00010
Selenium (Se)	mg/L	1.0	-	<0.025	<0.025	<0.025	<0.025
Silver (Ag)	mg/L	5.0	-	<0.0050	<0.0050	<0.0050	<0.0050
Uranium (U)	mg/L	10	-	<0.25	<0.25	<0.25	<0.25

Guide Limit #1: Ontario Ministry of the Environment, General Waste Control Regulation No. 347/90

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

TCLP VOCs - WASTE

			Lab ID	L2637474-1	L2637474-2	L2637474-3	L2637474-4
			Sample Date	27-AUG-21	27-AUG-21	27-AUG-21	27-AUG-21
			Sample ID	BH101 SS2	BH103 SS3	BH104 SS4	BH106 SS4
		Guide Limits					
Analyte	Unit	#1	#2				
1,1-Dichloroethylene	mg/L	1.4	-	<0.025	<0.025	<0.025	<0.025
1,2-Dichlorobenzene	mg/L	20.0	-	<0.025	<0.025	<0.025	<0.025
1,2-Dichloroethane	mg/L	0.5	-	<0.025	<0.025	<0.025	<0.025
1,4-Dichlorobenzene	mg/L	0.5	-	<0.025	<0.025	<0.025	<0.025
Benzene	mg/L	0.5	-	<0.025	<0.025	<0.025	<0.025
Carbon tetrachloride	mg/L	0.5	-	<0.025	<0.025	<0.025	<0.025
Chlorobenzene	mg/L	8	-	<0.025	<0.025	<0.025	<0.025
Chloroform	mg/L	10	-	<0.10	<0.10	<0.10	<0.10
Dichloromethane	mg/L	5.0	-	<0.50	<0.50	<0.50	<0.50
Methyl Ethyl Ketone	mg/L	200.0	-	<1.0	<1.0	<1.0	<1.0
Tetrachloroethylene	mg/L	3	-	<0.025	<0.025	<0.025	<0.025
Trichloroethylene	mg/L	5	-	<0.025	<0.025	<0.025	<0.025
Vinyl chloride	mg/L	0.2	-	<0.050	<0.050	<0.050	<0.050
Surrogate: 4-Bromofluorobenzene	%	-	-	101.4	103.1	102.8	102.2

Guide Limit #1: Ontario Ministry of the Environment, General Waste Control Regulation No. 347/90

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

ANALYTICAL REPORT

Volatile Organic Compounds - WASTE

			Lab ID	L2637474-1	L2637474-2	L2637474-3	L2637474-4
			Sample Date	27-AUG-21	27-AUG-21	27-AUG-21	27-AUG-21
			Sample ID	BH101 SS2	BH103 SS3	BH104 SS4	BH106 SS4
Analyte	**Unit**	**Guide Limits #1**	**#2**				
Surrogate: 1,4-Difluorobenzene	%	-	-	101.9	101.9	102.1	102.0

Guide Limit #1: Ontario Ministry of the Environment, General Waste Control Regulation No. 347/90

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

Polychlorinated Biphenyls - WASTE

			Lab ID	L2637474-1	L2637474-2	L2637474-3	L2637474-4
			Sample Date	27-AUG-21	27-AUG-21	27-AUG-21	27-AUG-21
			Sample ID	BH101 SS2	BH103 SS3	BH104 SS4	BH106 SS4
Analyte	Unit	Guide Limits #1	#2				
Surrogate: Decachlorobiphenyl	%	-	-	96.1	106.5	101.2	82.1
Surrogate: Tetrachloro-m-xylene	%	-	-	89.1	93.7	90.1	95.5

Guide Limit #1: Ontario Ministry of the Environment, General Waste Control Regulation No. 347/90

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

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference**
CN-TCLP-WT	Waste	Cyanide for O. Reg 347	APHA 4500CN I

This analysis is carried out in accordance with the extraction procedure outlined in "Test Methods for Evaluating Solid Waste - Physical/Chemical Methods Volume 1C" SW-846 EPA Method 1311, published by the United States Environmental Protection Agency (EPA). In summary, the sample is extracted at a 20:1 liquid to solids ratio for 16 to 20 hours using either extraction fluid #1 (glacial acetic acid, water and sodium hydroxide) or extraction fluid #2 (glacial acetic acid), depending on the pH of the original sample. The extract is then filtered through a 0.6 to 0.8 micron glass fiber filter. The extract is then analyzed using procedures adapted from APHA Method 4500-CN I. "Weak Acid Dissociable Cyanide". Weak Acid Dissociable (WAD) cyanide is determined by in-line sample distillation with final determination by colourimetric analysis.

F-TCLP-WT	Waste	Fluoride (F) for O. Reg 347	EPA 300.1

This analysis is carried out in accordance with the extraction procedure outlined in "Test Methods for Evaluating Solid Waste - Physical/Chemical Methods Volume 1C" SW-846 EPA Method 1311, published by the United States Environmental Protection Agency (EPA). In summary, the sample is extracted at a 20:1 liquid to solids ratio for 16 to 20 hours using either extraction fluid #1 (glacial acetic acid, water and sodium hydroxide) or extraction fluid #2 (glacial acetic acid), depending on the pH of the original sample. The extract is then filtered through a 0.6 to 0.8 micron glass fiber filter. The extract is then analyzed using procedures adapted from EPA 300.1 and is analyzed by Ion Chromatography with conductivity and/or UV detection.

HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347	EPA 1631E

This analysis is carried out in accordance with the extraction procedure outlined in "Test Methods for Evaluating Solid Waste - Physical/Chemical Methods Volume 1C" SW-846 EPA Method 1311, published by the United States Environmental Protection Agency (EPA). In summary, the sample is extracted at a 20:1 liquid to solids ratio for 16 to 20 hours using either extraction fluid #1 (glacial acetic acid, water and sodium hydroxide) or extraction fluid #2 (glacial acetic acid), depending on the pH of the original sample. The extract is then filtered through a 0.6 to 0.8 micron glass fibre filter and analysed using atomic absorption spectrophotometry (EPA 1631E).

IGNITABILITY-WT	Waste	O. Reg 347 Ignitability	EPA SW846, Method 1030, 1996

Preliminary Screening Test:
Prepare a sample "as received" 250 mm long by 20 mm wide by 10 mm high. Apply the tip of the flame to the end of the sample strip.
If the sample is non-metallic, hold the flame tip on the sample until the sample ignites or for a maximum of 2 minutes. If combustion occurs, begin timing with a stop watch and note whether the sample propagates up to the 200 mm mark within the 2 minute test period.
If the sample is metal or metal alloy powder, hold the flame tip on the sample until the sample ignites or for a maximum of 5 minutes. If combusiton occurs, begin timing with a stop watch and note whether the sample propagates up to the 200 mm mark within the 20 minute test period.
Note: If the waste propagates burning of 200 mm of the test strip within 2 minutes (20 minutes for metals), the material must be evaluated by the burning rate test.
Burning Rate Test:
Refer to section 7.2 of EPA Method 1030. Samples that have a burning rate of greater than 2.2 mm/s are considered to have a positive result for ignitability according to DOT regulations. For metallic samples , the burning rate must be greater than 0.17 mm/s.

LEACH-TCLP-WT	Waste	Leachate Procedure for Reg 347	EPA 1311

Inorganic and Semi-Volatile Organic contaminants are leached from waste samples in strict accordance with US EPA Method 1311, "Toxicity Characteristic Leaching Procedure" (TCLP). Test results are reported in leachate concentration units (normally mg/L).

MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals	EPA 6020B

This analysis is carried out in accordance with the extraction procedure outlined in "Test Methods for Evaluating Solid Waste - Physical/Chemical Methods Volume 1C" SW-846 EPA Method 1311, published by the United States Environmental Protection Agency (EPA). In summary, the sample is extracted at a 20:1 liquid to solids ratio for 16 to 20 hours using either extraction fluid #1 (glacial acetic acid, water and sodium hydroxide) or extraction fluid #2 (glacial acetic acid), depending on the pH of the original sample. The extract is then filtered through a 0.6 to 0.8 micron glass fibre filter. Instrumental analysis of the digested extract is by collision cell inductively coupled plasma - mass spectrometry (modifed from EPA Method 6020B).

N2N3-TCLP-WT	Waste	Nitrate/Nitrite-N for O. Reg 347	EPA 300.1

This analysis is carried out in accordance with the extraction procedure outlined in "Test Methods for Evaluating Solid Waste - Physical/Chemical Methods Volume 1C" SW-846 EPA Method 1311, published by the United States Environmental Protection Agency (EPA). In summary, the sample is extracted at a 20:1 liquid to solids ratio for 16 to 20 hours using either extraction fluid #1 (glacial acetic acid, water and sodium hydroxide) or extraction fluid #2 (glacial acetic acid), depending on the pH of the original sample. The extract is then filtered through a 0.6 to 0.8 micron glass fiber filter. The extract is then analyzed using procedures adapted from EPA 300.1 and is analyzed by Ion Chromatography with conductivity and/or UV detection.

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference**
PAH-TCLP-WT	Waste	PAH for O. Reg 347	SW846 8270 (PAH)

Samples are leached according to TCLP protocol and then the aqueous leachate is extracted and the resulting extracts are analyzed on GC/MSD. Depending on the analytical GC/MS column used benzo(j)fluoranthene may chromatographically co-elute with benzo(b)fluoranthene or benzo(k)fluoranthene.

PCB-TCLP-WT	Waste	PCBs for O. Reg 347	SW846 8270
VOC-TCLP-WT	Waste	VOC for O. Reg 347	SW846 8260

A sample of waste is leached in a zero headspace extractor at 30–2 rpm for 18–2.0 hours with the appropriate leaching solution. After tumbling the leachate is analyzed directly by headspace technology, followed by GC/MS using internal standard quantitation.

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

Chain of Custody Numbers:

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

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

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.
mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg wwt - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight
mg/L - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

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

Quality Control Report

Workorder: L2637474 Report Date: 16-SEP-21

Client: GeoPro Consulting Limited (Richmond Hill)
40 Vogell Road Unit 23
Richmond Hill ON L4B 3N6

Contact: Sarena Medina

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
CN-TCLP-WT	**Waste**							
Batch R5583910								
WG3616444-3 DUP		**L2633348-2**						
Cyanide, Weak Acid Diss		<0.10	<0.10	RPD-NA	mg/L	N/A	50	13-SEP-21
WG3616444-2 LCS								
Cyanide, Weak Acid Diss			103.4		%		70-130	13-SEP-21
WG3616444-1 MB								
Cyanide, Weak Acid Diss			<0.10		mg/L		0.1	13-SEP-21
WG3616444-4 MS		**L2633348-2**						
Cyanide, Weak Acid Diss			101.0		%		50-140	13-SEP-21
F-TCLP-WT	**Waste**							
Batch R5583725								
WG3615993-3 DUP		**L2633348-2**						
Fluoride (F)		<10	<10	RPD-NA	mg/L	N/A	30	13-SEP-21
WG3615993-2 LCS								
Fluoride (F)			94.5		%		70-130	13-SEP-21
WG3615993-1 MB								
Fluoride (F)			<10		mg/L		10	13-SEP-21
WG3615993-4 MS		**L2633348-2**						
Fluoride (F)			94.0		%		50-150	13-SEP-21
HG-TCLP-WT	**Waste**							
Batch R5583273								
WG3616093-3 DUP		**L2637101-2**						
Mercury (Hg)		<0.00010	<0.00010	RPD-NA	mg/L	N/A	50	13-SEP-21
WG3616093-2 LCS								
Mercury (Hg)			93.3		%		70-130	13-SEP-21
WG3616093-1 MB								
Mercury (Hg)			<0.00010		mg/L		0.0001	13-SEP-21
WG3616093-4 MS		**L2637101-2**						
Mercury (Hg)			93.9		%		50-140	13-SEP-21
MET-TCLP-WT	**Waste**							
Batch R5583562								
WG3615758-4 DUP		**WG3615758-3**						
Silver (Ag)		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Arsenic (As)		<0.050	<0.050	RPD-NA	mg/L	N/A	50	13-SEP-21
Boron (B)		<2.5	<2.5	RPD-NA	mg/L	N/A	50	13-SEP-21
Barium (Ba)		<0.50	<0.50	RPD-NA	mg/L	N/A	50	13-SEP-21
Cadmium (Cd)		0.0067	0.0069		mg/L	3.6	50	13-SEP-21
Chromium (Cr)		<0.050	<0.050	RPD-NA	mg/L	N/A	50	13-SEP-21

Quality Control Report

Workorder: L2637474 Report Date: 16-SEP-21

Client: GeoPro Consulting Limited (Richmond Hill)
40 Vogell Road Unit 23
Richmond Hill ON L4B 3N6
Contact: Sarena Medina

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-TCLP-WT	**Waste**							
Batch R5583562								
WG3615758-4 DUP		**WG3615758-3**						
Lead (Pb)		<0.025	<0.025	RPD-NA	mg/L	N/A	50	13-SEP-21
Selenium (Se)		<0.025	<0.025	RPD-NA	mg/L	N/A	50	13-SEP-21
Uranium (U)		<0.25	<0.25	RPD-NA	mg/L	N/A	50	13-SEP-21
WG3615758-2 LCS								
Silver (Ag)			100.4		%		70-130	13-SEP-21
Arsenic (As)			104.8		%		70-130	13-SEP-21
Boron (B)			94.3		%		70-130	13-SEP-21
Barium (Ba)			102.3		%		70-130	13-SEP-21
Cadmium (Cd)			101.6		%		70-130	13-SEP-21
Chromium (Cr)			101.9		%		70-130	13-SEP-21
Lead (Pb)			101.9		%		70-130	13-SEP-21
Selenium (Se)			104.2		%		70-130	13-SEP-21
Uranium (U)			104.9		%		70-130	13-SEP-21
WG3615758-1 MB								
Silver (Ag)			<0.0050		mg/L		0.005	13-SEP-21
Arsenic (As)			<0.050		mg/L		0.05	13-SEP-21
Boron (B)			<2.5		mg/L		2.5	13-SEP-21
Barium (Ba)			<0.50		mg/L		0.5	13-SEP-21
Cadmium (Cd)			<0.0050		mg/L		0.005	13-SEP-21
Chromium (Cr)			<0.050		mg/L		0.05	13-SEP-21
Lead (Pb)			<0.025		mg/L		0.025	13-SEP-21
Selenium (Se)			<0.025		mg/L		0.025	13-SEP-21
Uranium (U)			<0.25		mg/L		0.25	13-SEP-21
WG3615758-5 MS		**WG3615758-3**						
Silver (Ag)			111.7		%		50-140	13-SEP-21
Arsenic (As)			105.8		%		50-140	13-SEP-21
Boron (B)			104.7		%		50-140	13-SEP-21
Barium (Ba)			106.4		%		50-140	13-SEP-21
Cadmium (Cd)			101.9		%		50-140	13-SEP-21
Chromium (Cr)			102.1		%		50-140	13-SEP-21
Lead (Pb)			102.5		%		50-140	13-SEP-21
Selenium (Se)			106.7		%		50-140	13-SEP-21
Uranium (U)			104.6		%		50-140	13-SEP-21
N2N3-TCLP-WT	**Waste**							

Quality Control Report

Client: GeoPro Consulting Limited (Richmond Hill)
40 Vogell Road Unit 23
Richmond Hill ON L4B 3N6
Contact: Sarena Medina

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
N2N3-TCLP-WT	**Waste**							
Batch R5583725								
WG3615993-3 DUP		**L2633348-2**						
Nitrate-N		<2.0	<2.0	RPD-NA	mg/L	N/A	25	13-SEP-21
Nitrite-N		<2.0	<2.0	RPD-NA	mg/L	N/A	25	13-SEP-21
WG3615993-2 LCS								
Nitrate-N			99.2		%		70-130	13-SEP-21
Nitrite-N			99.0		%		70-130	13-SEP-21
WG3615993-1 MB								
Nitrate-N			<2.0		mg/L		2	13-SEP-21
Nitrite-N			<2.0		mg/L		2	13-SEP-21
WG3615993-4 MS		**L2633348-2**						
Nitrate-N			101.2		%		50-150	13-SEP-21
Nitrite-N			100.9		%		50-150	13-SEP-21
PAH-TCLP-WT	**Waste**							
Batch R5583407								
WG3615840-5 DUP		**WG3615840-3**						
Acenaphthene		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Acenaphthylene		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Anthracene		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Benzo(a)anthracene		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Benzo(a)pyrene		<0.0010	<0.0010	RPD-NA	mg/L	N/A	50	13-SEP-21
Benzo(b&j)fluoranthene		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Benzo(g,h,i)perylene		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Benzo(k)fluoranthene		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Chrysene		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Dibenz(a,h)anthracene		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Fluoranthene		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Fluorene		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Indeno(1,2,3-cd)pyrene		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Naphthalene		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Phenanthrene		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Pyrene		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
Quinoline		<0.0050	<0.0050	RPD-NA	mg/L	N/A	50	13-SEP-21
WG3615840-2 LCS								
Acenaphthene			87.8		%		50-130	13-SEP-21
Acenaphthylene			87.8		%		50-130	13-SEP-21

Quality Control Report

Client: GeoPro Consulting Limited (Richmond Hill)
40 Vogell Road Unit 23
Richmond Hill ON L4B 3N6
Contact: Sarena Medina

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-TCLP-WT	**Waste**							
Batch R5583407								
WG3615840-2 LCS								
Anthracene			83.3		%		50-130	13-SEP-21
Benzo(a)anthracene			103.9		%		50-140	13-SEP-21
Benzo(a)pyrene			85.1		%		60-140	13-SEP-21
Benzo(b&j)fluoranthene			82.2		%		50-130	13-SEP-21
Benzo(g,h,i)perylene			83.8		%		50-140	13-SEP-21
Benzo(k)fluoranthene			89.8		%		50-150	13-SEP-21
Chrysene			106.2		%		50-140	13-SEP-21
Dibenz(a,h)anthracene			87.8		%		50-140	13-SEP-21
Fluoranthene			94.4		%		50-130	13-SEP-21
Fluorene			90.5		%		50-130	13-SEP-21
Indeno(1,2,3-cd)pyrene			88.6		%		50-140	13-SEP-21
Naphthalene			81.4		%		50-130	13-SEP-21
Phenanthrene			91.4		%		50-130	13-SEP-21
Pyrene			97.3		%		50-140	13-SEP-21
Quinoline			105.4		%		50-130	13-SEP-21
WG3615840-1 MB								
Acenaphthene			<0.0050		mg/L		0.005	13-SEP-21
Acenaphthylene			<0.0050		mg/L		0.005	13-SEP-21
Anthracene			<0.0050		mg/L		0.005	13-SEP-21
Benzo(a)anthracene			<0.0050		mg/L		0.005	13-SEP-21
Benzo(a)pyrene			<0.0010		mg/L		0.001	13-SEP-21
Benzo(b&j)fluoranthene			<0.0050		mg/L		0.005	13-SEP-21
Benzo(g,h,i)perylene			<0.0050		mg/L		0.005	13-SEP-21
Benzo(k)fluoranthene			<0.0050		mg/L		0.005	13-SEP-21
Chrysene			<0.0050		mg/L		0.005	13-SEP-21
Dibenz(a,h)anthracene			<0.0050		mg/L		0.005	13-SEP-21
Fluoranthene			<0.0050		mg/L		0.005	13-SEP-21
Fluorene			<0.0050		mg/L		0.005	13-SEP-21
Indeno(1,2,3-cd)pyrene			<0.0050		mg/L		0.005	13-SEP-21
Naphthalene			<0.0050		mg/L		0.005	13-SEP-21
Phenanthrene			<0.0050		mg/L		0.005	13-SEP-21
Pyrene			<0.0050		mg/L		0.005	13-SEP-21
Quinoline			<0.0050		mg/L		0.005	13-SEP-21
Surrogate: Naphthalene d8			105.9		%		50-130	13-SEP-21

Quality Control Report

Client: GeoPro Consulting Limited (Richmond Hill)
40 Vogell Road Unit 23
Richmond Hill ON L4B 3N6
Contact: Sarena Medina

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-TCLP-WT	**Waste**							
Batch R5583407								
WG3615840-1 MB								
Surrogate: Phenanthrene d10			100.7		%		60-130	13-SEP-21
Surrogate: Chrysene d12			112.9		%		60-130	13-SEP-21
WG3615840-6 MB								
Acenaphthene			<0.0050		mg/L		0.005	13-SEP-21
Acenaphthylene			<0.0050		mg/L		0.005	13-SEP-21
Anthracene			<0.0050		mg/L		0.005	13-SEP-21
Benzo(a)anthracene			<0.0050		mg/L		0.005	13-SEP-21
Benzo(a)pyrene			<0.0010		mg/L		0.001	13-SEP-21
Benzo(b&j)fluoranthene			<0.0050		mg/L		0.005	13-SEP-21
Benzo(g,h,i)perylene			<0.0050		mg/L		0.005	13-SEP-21
Benzo(k)fluoranthene			<0.0050		mg/L		0.005	13-SEP-21
Chrysene			<0.0050		mg/L		0.005	13-SEP-21
Dibenz(a,h)anthracene			<0.0050		mg/L		0.005	13-SEP-21
Fluoranthene			<0.0050		mg/L		0.005	13-SEP-21
Fluorene			<0.0050		mg/L		0.005	13-SEP-21
Indeno(1,2,3-cd)pyrene			<0.0050		mg/L		0.005	13-SEP-21
Naphthalene			<0.0050		mg/L		0.005	13-SEP-21
Phenanthrene			<0.0050		mg/L		0.005	13-SEP-21
Pyrene			<0.0050		mg/L		0.005	13-SEP-21
Quinoline			<0.0050		mg/L		0.005	13-SEP-21
Surrogate: Naphthalene d8			98.1		%		50-130	13-SEP-21
Surrogate: Phenanthrene d10			92.8		%		60-130	13-SEP-21
Surrogate: Chrysene d12			105.4		%		60-130	13-SEP-21
WG3615840-4 MS		**WG3615840-3**						
Acenaphthene			87.3		%		50-140	13-SEP-21
Acenaphthylene			85.7		%		50-140	13-SEP-21
Anthracene			79.7		%		50-150	13-SEP-21
Benzo(a)anthracene			97.2		%		50-140	13-SEP-21
Benzo(a)pyrene			81.6		%		50-140	13-SEP-21
Benzo(b&j)fluoranthene			76.5		%		50-150	13-SEP-21
Benzo(g,h,i)perylene			94.0		%		50-140	13-SEP-21
Benzo(k)fluoranthene			86.7		%		50-150	13-SEP-21
Chrysene			102.3		%		50-140	13-SEP-21
Dibenz(a,h)anthracene			91.8		%		50-140	13-SEP-21

Quality Control Report

Client: GeoPro Consulting Limited (Richmond Hill)
40 Vogell Road Unit 23
Richmond Hill ON L4B 3N6
Contact: Sarena Medina

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-TCLP-WT	**Waste**							
Batch R5583407								
WG3615840-4 MS		**WG3615840-3**						
Fluoranthene			90.9		%		50-140	13-SEP-21
Fluorene			88.5		%		50-140	13-SEP-21
Indeno(1,2,3-cd)pyrene			100.6		%		50-140	13-SEP-21
Naphthalene			80.7		%		50-140	13-SEP-21
Phenanthrene			87.8		%		50-150	13-SEP-21
Pyrene			92.9		%		50-150	13-SEP-21
Quinoline			104.4		%		50-150	13-SEP-21
PCB-TCLP-WT	**Waste**							
Batch R5583496								
WG3615835-5 DUP		**WG3615835-3**						
Aroclor 1242		<0.00020	<0.00020	RPD-NA	mg/L	N/A	50	13-SEP-21
Aroclor 1248		<0.00020	<0.00020	RPD-NA	mg/L	N/A	50	13-SEP-21
Aroclor 1254		<0.00020	<0.00020	RPD-NA	mg/L	N/A	50	13-SEP-21
Aroclor 1260		<0.00020	<0.00020	RPD-NA	mg/L	N/A	50	13-SEP-21
WG3615835-2 LCS								
Aroclor 1242			97.3		%		65-130	13-SEP-21
Aroclor 1248			47.9	LCS-L	%		65-130	13-SEP-21
Aroclor 1254			97.0		%		65-130	13-SEP-21
Aroclor 1260			111.1		%		65-130	13-SEP-21
WG3615835-1 MB								
Aroclor 1242			<0.00020		mg/L		0.0002	13-SEP-21
Aroclor 1248			<0.00020		mg/L		0.0002	13-SEP-21
Aroclor 1254			<0.00020		mg/L		0.0002	13-SEP-21
Aroclor 1260			<0.00020		mg/L		0.0002	13-SEP-21
Surrogate: Decachlorobiphenyl			106.1		%		50-150	13-SEP-21
Surrogate: Tetrachloro-m-xylene			96.3		%		50-150	13-SEP-21
WG3615835-6 MB								
Aroclor 1242			<0.00020		mg/L		0.0002	13-SEP-21
Aroclor 1248			<0.00020		mg/L		0.0002	13-SEP-21
Aroclor 1254			<0.00020		mg/L		0.0002	13-SEP-21
Aroclor 1260			<0.00020		mg/L		0.0002	13-SEP-21
Surrogate: Decachlorobiphenyl			108.1		%		50-150	13-SEP-21
Surrogate: Tetrachloro-m-xylene			82.3		%		50-150	13-SEP-21
WG3615835-4 MS		**WG3615835-3**						

Quality Control Report

Client: GeoPro Consulting Limited (Richmond Hill)
40 Vogell Road Unit 23
Richmond Hill ON L4B 3N6
Contact: Sarena Medina

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PCB-TCLP-WT	**Waste**							
Batch R5583496								
WG3615835-4 MS		**WG3615835-3**						
Aroclor 1242			103.2		%		50-150	13-SEP-21
Aroclor 1254			98.6		%		50-150	13-SEP-21
Aroclor 1260			114.2		%		50-150	13-SEP-21
Batch R5585185								
WG3617496-5 DUP		**WG3617496-3**						
Aroclor 1242		<0.00020	<0.00020	RPD-NA	mg/L	N/A	50	16-SEP-21
Aroclor 1248		<0.00020	<0.00020	RPD-NA	mg/L	N/A	50	16-SEP-21
Aroclor 1254		<0.00020	<0.00020	RPD-NA	mg/L	N/A	50	16-SEP-21
Aroclor 1260		<0.00020	<0.00020	RPD-NA	mg/L	N/A	50	16-SEP-21
WG3617496-2 LCS								
Aroclor 1242			101.1		%		65-130	16-SEP-21
Aroclor 1248			98.8		%		65-130	16-SEP-21
Aroclor 1254			99.9		%		65-130	16-SEP-21
Aroclor 1260			114.0		%		65-130	16-SEP-21
WG3617496-1 MB								
Aroclor 1242			<0.00020		mg/L		0.0002	16-SEP-21
Aroclor 1248			<0.00020		mg/L		0.0002	16-SEP-21
Aroclor 1254			<0.00020		mg/L		0.0002	16-SEP-21
Aroclor 1260			<0.00020		mg/L		0.0002	16-SEP-21
Surrogate: Decachlorobiphenyl			92.7		%		50-150	16-SEP-21
Surrogate: Tetrachloro-m-xylene			95.3		%		50-150	16-SEP-21
WG3617496-6 MB								
Aroclor 1242			<0.00020		mg/L		0.0002	16-SEP-21
Aroclor 1248			<0.00020		mg/L		0.0002	16-SEP-21
Aroclor 1254			<0.00020		mg/L		0.0002	16-SEP-21
Aroclor 1260			<0.00020		mg/L		0.0002	16-SEP-21
Surrogate: Decachlorobiphenyl			103.6		%		50-150	16-SEP-21
Surrogate: Tetrachloro-m-xylene			91.9		%		50-150	16-SEP-21
WG3617496-4 MS		**WG3617496-3**						
Aroclor 1242			103.2		%		50-150	16-SEP-21
Aroclor 1254			99.9		%		50-150	16-SEP-21
Aroclor 1260			114.4		%		50-150	16-SEP-21
VOC-TCLP-WT	**Waste**							

Quality Control Report

Client: GeoPro Consulting Limited (Richmond Hill)
40 Vogell Road Unit 23
Richmond Hill ON L4B 3N6
Contact: Sarena Medina

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-TCLP-WT	**Waste**							
Batch R5583926								
WG3615794-1 LCS								
1,1-Dichloroethylene			94.4		%		70-130	13-SEP-21
1,2-Dichlorobenzene			96.1		%		70-130	13-SEP-21
1,2-Dichloroethane			86.7		%		70-130	13-SEP-21
1,4-Dichlorobenzene			100.1		%		70-130	13-SEP-21
Benzene			90.6		%		70-130	13-SEP-21
Carbon tetrachloride			99.5		%		60-140	13-SEP-21
Chlorobenzene			96.4		%		70-130	13-SEP-21
Chloroform			93.3		%		70-130	13-SEP-21
Dichloromethane			84.0		%		70-130	13-SEP-21
Methyl Ethyl Ketone			78.1		%		50-150	13-SEP-21
Tetrachloroethylene			104.9		%		70-130	13-SEP-21
Trichloroethylene			96.8		%		70-130	13-SEP-21
Vinyl chloride			82.0		%		60-130	13-SEP-21
WG3615794-2 MB								
1,1-Dichloroethylene			<0.025		mg/L		0.025	13-SEP-21
1,2-Dichlorobenzene			<0.025		mg/L		0.025	13-SEP-21
1,2-Dichloroethane			<0.025		mg/L		0.025	13-SEP-21
1,4-Dichlorobenzene			<0.025		mg/L		0.025	13-SEP-21
Benzene			<0.025		mg/L		0.025	13-SEP-21
Carbon tetrachloride			<0.025		mg/L		0.025	13-SEP-21
Chlorobenzene			<0.025		mg/L		0.025	13-SEP-21
Chloroform			<0.10		mg/L		0.1	13-SEP-21
Dichloromethane			<0.50		mg/L		0.5	13-SEP-21
Methyl Ethyl Ketone			<1.0		mg/L		1	13-SEP-21
Tetrachloroethylene			<0.025		mg/L		0.025	13-SEP-21
Trichloroethylene			<0.025		mg/L		0.025	13-SEP-21
Vinyl chloride			<0.050		mg/L		0.05	13-SEP-21
Surrogate: 1,4-Difluorobenzene			102.2		%		70-130	13-SEP-21
Surrogate: 4-Bromofluorobenzene			101.1		%		70-130	13-SEP-21
WG3615794-4 MB								
1,1-Dichloroethylene			<0.025		mg/L		0.025	13-SEP-21
1,2-Dichlorobenzene			<0.025		mg/L		0.025	13-SEP-21
1,2-Dichloroethane			<0.025		mg/L		0.025	13-SEP-21
1,4-Dichlorobenzene			<0.025		mg/L		0.025	13-SEP-21

Quality Control Report

Client: GeoPro Consulting Limited (Richmond Hill)
40 Vogell Road Unit 23
Richmond Hill ON L4B 3N6
Contact: Sarena Medina

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-TCLP-WT	**Waste**							
Batch R5583926								
WG3615794-4 MB								
Benzene			<0.025		mg/L		0.025	13-SEP-21
Carbon tetrachloride			<0.025		mg/L		0.025	13-SEP-21
Chlorobenzene			<0.025		mg/L		0.025	13-SEP-21
Chloroform			<0.10		mg/L		0.1	13-SEP-21
Dichloromethane			<0.50		mg/L		0.5	13-SEP-21
Methyl Ethyl Ketone			<1.0		mg/L		1	13-SEP-21
Tetrachloroethylene			<0.025		mg/L		0.025	13-SEP-21
Trichloroethylene			<0.025		mg/L		0.025	13-SEP-21
Vinyl chloride			<0.050		mg/L		0.05	13-SEP-21
Surrogate: 1,4-Difluorobenzene			102.1		%		70-130	13-SEP-21
Surrogate: 4-Bromofluorobenzene			103.2		%		70-130	13-SEP-21
WG3615794-3 MS		**L2636040-1**						
1,1-Dichloroethylene			95.4		%		50-140	15-SEP-21
1,2-Dichlorobenzene			96.0		%		50-140	15-SEP-21
1,2-Dichloroethane			86.4		%		50-140	15-SEP-21
1,4-Dichlorobenzene			98.0		%		50-140	15-SEP-21
Benzene			90.5		%		50-140	15-SEP-21
Carbon tetrachloride			99.8		%		50-140	15-SEP-21
Chlorobenzene			94.8		%		50-140	15-SEP-21
Chloroform			93.2		%		50-140	15-SEP-21
Dichloromethane			84.7		%		50-140	15-SEP-21
Methyl Ethyl Ketone			71.1		%		50-140	15-SEP-21
Tetrachloroethylene			101.9		%		50-140	15-SEP-21
Trichloroethylene			95.0		%		50-140	15-SEP-21
Vinyl chloride			85.4		%		50-140	15-SEP-21

Quality Control Report

Workorder: L2637474 Report Date: 16-SEP-21

Client: GeoPro Consulting Limited (Richmond Hill)
40 Vogell Road Unit 23
Richmond Hill ON L4B 3N6
Contact: Sarena Medina

Legend:

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

Sample Parameter Qualifier Definitions:

Qualifier	Description
LCS-L	Lab Control Sample recovery was below ALS DQO. Reference Material and/or Matrix Spike results were acceptable. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

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

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

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

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

Chain of Custody (C

L2637474-COFC

COC Number: 17-7180E3-1788

Canada T

www.alsglobal.com

Report To	Contact and company name below will appear on the final report
Company:	GeoPro Consulting Limited
Contact:	Elab elab@geoproconsulting.ca
Phone:	(905) 237-8336
	Company address below will appear on the final report
Street:	40 Vogell Road, Unit 23
City/Province:	Richmond Hill, ON
Postal Code:	L4B 3N6
Invoice To	Same as Report To ☑ YES ☐ NO
	Copy of Invoice with Report ☐ YES ☑ NO
Company:	
Contact:	

Reports / Recipients

Select Report Format: ☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)
Merge QC/QCI Reports with COA ☑ YES ☐ NO ☐ N/A
☑ Compare Results to Criteria on Report - provide details below if box checked
Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax dylanx@geoproconsulting.ca
Email 2 elab@geoproconsulting.ca
Email 3 viktorc@geoproconsulting.ca; kaiwen@geoprocons

Invoice Recipients

Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax dylanx@geoproconsulting.ca
Email 2 elab@geoproconsulting.ca

Turnaround Time (TAT) Requested

☑ Routine [R] if received by 3pm M-F - no surcharges apply
☐ 4 day [P4] if received by 3pm M-F - 25% rush surcharge minimum
☐ 3 day [P3] if received by 12pm M-F - 50% rush surcharge minimum
☐ 2 day [P2] if received by 12pm M-F - 100% rush surcharge minimum
☐ *1 day [E] if received by 12pm M-F - 200% rush surcharge minimum
*1 day only available for Inorganics, Metals, & VOC
* Same day [E2] unavailable for TCLP/SPLP

Date and Time Required for all E&P TATs:

For all tests with rush TATs requested, please contact your AM to confirm availability.

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Project Information

ALS Account # / Quote #:	Q79168
Job #:	21-2902G01-1790
PO / AFE:	
LSD:	

Oil and Gas Required Fields (client use)

AFE/Cost Center:	PO#
Major/Minor Code:	Routing Code:
Requisitioner:	
Location:	

ALS Lab Work Order # (ALS use only): X26 74

ALS Contact: **Sampler:**

Analysis Request

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	mSPLP (E9003)					TCLP (EPA 1311)						MISC	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
						METALS+INORGANICS	VOCs	O&G	BVOCs	1,4-Dioxane	Metals+Inorganics	VOCs	PAH	PCBs	PHC		IGNITABILITY-WT			
	BH101 SS2	27-Aug-21		SOIL/SOLID	2						R	R	R	R			R			
	BH103 SS3	27-Aug-21		SOIL/SOLID	2						R	R	R	R			R			
	BH104 SS4	27-Aug-21		SOIL/SOLID	2						R	R	R	R			R			
	BH106 SS4	27-Aug-21		SOIL/SOLID	2						R	R	R	R			R			

Limited Sample Size Authorization

If the sample provided contains less than the minimum required weight, the samples may be leached at a lower volume and qualified as Limited Sample Size:
☐ YES ☐ NO
Minimum Sample Size: 1X250 mL - No Headspace

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☐ NONE ☐ ICE ☑ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED
Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO
Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
20.2				2.6			

SHIPMENT RELEASE (client use)

Released by: Kriska Javier	09-Sep-21	Time:

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:
	Sep 1	14:3

FINAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:
	Sep 9	9:36

Refer to the Locations Tab for ALS Locations and Sampling Information

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions.

Reg. 406 mSPLP Metals scan includes: Sb,As,Ba,Be,B,Cd,Cr,Co,Cu,Pb,Mo,Ni,Se,Ag,Tl,U,V,Zn. Reg. 347/558 TCLP Metals+Inorganics includes: As,Ba,B,Cd,Cr,Pb,Se,Ag,U,Hg,Fluoride,CN (WAD),Nitrate+Nitrite as N

This report utilizes scientific principles, professional judgement and subjective interpretations. It has been prepared and is subject to the terms, conditions and limitations set out in our approved proposal prepared based on our understanding of the project.

The comments and recommendations given in this report are based on information obtained at the limited number of the test hole and test pit locations. The boundaries between the various strata as shown on the borehole logs are based on non-continuous sampling and represent an inferred transition between the various strata and their lateral continuation rather than a precise plane of geological change. Subsurface conditions and environmental conditions between and beyond the test holes and test pits may differ significantly from those encountered at the test hole and test pit locations.

The findings, comments and recommendations given in this report are based on information obtained by GeoPro at the sampling locations/depth expected to be representative of the area of investigation. It should be noted that the analytical results refer only to the sample analyzed which was obtained from specific sampling location and sampling depth, and the analytical results and soil/groundwater chemistry may vary between and beyond the location and depth of the sample taken. The findings in this report are limited to the environmental conditions on the Site at the time of investigation only.

Further, there can be no assurance that sampling techniques employed have necessarily disclosed all potential contaminants at the Site due, among other things and without limitation, to such factors as a practical and economic limitation on the number and location of samples, sample depth, drilling rig accessibility, lack of current definition of a particular material as hazardous, and the like. Moreover, in the event that GeoPro has been granted authorization to use data and/or information obtained from previous third party investigation reports prepared by other consultants we make no warranty as to its accuracy or completeness and understand it to be factual and correct. As such, GeoPro does not guarantee the accuracy of said data prepared by others.

The benchmark and elevations used in this report are primarily to establish relative elevation differences between the test hole and test pit locations and should not be used for other purposes, such as grading, excavating, planning, development, etc. The information provided in this report may not be sufficient to obtain approval for disposal of excess soil or materials generated during construction.

This report has been prepared for the exclusive use of the client and may not be relied upon by any third party without GeoPro's express written authorization. Unless otherwise agreed in writing by GeoPro Consulting Limited, it shall not be used to express or imply warranty as to any other purposes. No portion of this report shall be used as a separate entity, it is written to be read in its entirety.

The material in this report reflects our best judgment based on the information available to GeoPro Consulting Limited at the time of preparing this report. Any uses which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third party. GeoPro accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report unless we are specifically advised of and participate in such action, in which case our responsibility will be as agreed to at that time.

The recommendations given in this report are applicable only to the project carried out completely in accordance with the details stated in this report. Otherwise, our responsibility is limited to interpreting the factual information at the borehole or test pit locations.

Should any comments and recommendations provided in this report be made on any construction related issues, they are intended only for the guidance of the designers. The number of test holes and test pits may not be sufficient to determine all the factors that may affect construction activities, methods and costs. The contractors bidding on this project or undertaking the construction should, therefore, make their own interpretation of the factual information presented and make their own conclusions as to how the Site conditions may affect their work and determine the proper construction methods.