

Terraprobe

*Consulting Geotechnical & Environmental Engineering
Construction Materials Inspection & Testing*

**PHASE TWO
ENVIRONMENTAL SITE ASSESSMENT
6360 REGIONAL ROAD 25
TOWN OF MILTON, ONTARIO**

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1.0 EXECUTIVE SUMMARY

Terraprobe Inc. (Terraprobe) was retained by Mr. Thomas Robert Colbeck to complete a Phase Two Environmental Site Assessment (ESA) of the property (herein referred to as “Property or Phase Two Property”) situated on the southwest corner of Louis St. Laurent Avenue and Regional Road 25. The Property is bound by Regional Road 25 to the north, Louis St. Laurent Avenue to the west, and residential buildings to the east and south. The municipal address of the Property is 6360 Regional Road 25, in the Town of Milton, Ontario.

The Phase Two Property is rectangular in shape and covers an area of approximately 0.99 ha (2.44 acres). The Property is currently occupied by a residential dwelling, accessory structure (barn), and undeveloped grassed land. The residential dwelling is a one-story building (including basement) located at the central portion of the Property and barn is located at the southwest portion of the Property. The surrounding area is predominantly developed for residential and Agricultural use with some vacant land. The Property is currently considered to be in residential land use, per Ontario Regulation 153/04 (O.Reg.153/04).

Terraprobe previously completed a Phase One ESA for the Property. The findings are provided in a report entitled “*Phase One Environmental Site Assessment, 6360 Regional Road, Town of Milton, Ontario*”, dated December 8, 2022.

The Phase One ESA identified the following potential contaminating activities (PCAs) that may result in areas of potential environmental concerns (APECs) of the Property:

Area of Potential Environmental Concern	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 1	Entire Property	#30 – Importation of Fill Material of Unknown Quality	On-Site	Metals and Inorganics	Soil
APEC 2	Central Portion of the Property	#28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHCs, and BTEX	Soil and Groundwater
APEC 3	Northwest Portion of the Property	#Other 1 – O. Reg 347 Waste Receiver	Off-Site	PCBs, PHCs, and BTEX	Groundwater

The PCAs resulted in three (3) Areas of Potential Environmental Concern (APECs) for the Property. APEC 1 was related to the presence of fill of unknown quality across the Property. APEC 2 was related to the

presence of a historic above-ground heating oil storage tank. APEC 3 was related to an adjacent property that was classified as a waste receiver.

The Phase One ESA recommended that a Phase Two Environmental Site Assessment must be completed to investigate the APECs for the Contaminants of Concern that have been identified on the Property. The Phase Two ESA was completed in compliance with amended O.Reg.153/04.

The conclusions arising from the Phase Two ESA are as follows:

- The subsurface investigation was conducted in conjunction with geotechnical and hydrogeological investigations at the Property. A total of nine (9) environmental boreholes were advanced on the Property to a depth of approximately 9.4 m below ground surface (mbgs). Six (6) of these boreholes were installed with monitoring wells (BH1, BH9, BH10, BH13, BH15, and BH16).
- Soil conditions encountered within the borehole consisted primarily of a layer of surficial material, earth-fill, and native soils. The surficial materials layer was composed of topsoil was encountered at all borehole locations and ranged approximately between 100 and 140 mm in thickness. The earth fill material extended to a depth of 0.3 to 0.8 mbgs. The earth-fill primarily consisted of clayey silt, with trace gravel, organics matter and sand, compact, brown, and moist. The earth-fill layer was underlain by the native soil. The fill material appears to comprise of reworked disturbed/weathered native soils at the Property.
- Native soils were encountered beneath the fill material soil. Native soil consisted of a clayey silt layer comprised of some sand to sandy, trace gravel, very stiff to hard, brown to reddish brown, and moist. The native clayey silt layer extended to a depth of approximately 0.8 to 6.1 mbgs.
- Below approximately 6.1 mbgs, a layer of sandy silt to sand and silt layer was observed. This layer was comprised of trace to some clay, trace to some gravel, very dense, reddish brown, and moist. This layer extended to a depth of approximately 6.1 to 9.4 mbgs. Bedrock was not encountered within the depth of the investigation.
- A total of four (4) grain size analyses were conducted to confirm the on-site soil texture on the Property. According to the grain size analysis the soil at the Property is Medium-Fine and Coarse in texture. However, when comparing the environmental analysis results to Ontario soil guidelines, stricter standards for example, coarse-textured soil standards were used as a conservative measure.
- The results of the samples submitted for chemical analysis were compared to the full depth generic site condition standards in a potable groundwater condition as contained in Table 2 of the Ministry of Environment, Conservation and Parks (MECP) publication “*Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act*” for potable groundwater condition residential/parkland/institutional Property Use, April 15, 2011.
- Selected soil samples were submitted for chemical analysis for metals, including hydride-forming metals (As, Sb, Se, Cr) and selected ORPs, polychlorinated biphenyls (PCBs), petroleum hydrocarbon (PHC F1-F4), including benzene, toluene, ethylbenzene, xylene (BTEX).
 - All soil samples submitted for chemical analysis met the applicable site condition standards.

- Selected groundwater samples were submitted for analysis for metals, polychlorinated biphenyls (PCBs), petroleum hydrocarbons (PHCs F1-F4), and volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, xylene (BTEX).
 - All groundwater samples submitted for chemical analysis met the applicable site condition standards.

Based on the findings of Phase Two ESA, a Record of Site Condition (RSC) can be filed with the Ministry of the Environment, Conservation and Parks (MECP) as per O.Reg. 153/04, if required.

All wells installed during the subsurface soil and groundwater investigation are required to be decommissioned under O.Reg.903 when they are no longer needed for groundwater observation.



2.0 INTRODUCTION

Terraprobe Inc. (Terraprobe) was retained by Thomas Robert Colbeck to complete a Phase Two Environmental Site Assessment (ESA) of the property (herein referred to as “Property or Phase Two Property”) situated at the southwest corner of Louis St. Laurent Avenue and Regional Road 25. The Property is bound by Regional Road 25 to the north, Louis St. Laurent Avenue to the west, and residential buildings to the east and south. The municipal address of the Property is 6360 Regional Road 25, in the Town of Milton, Ontario.

The Phase Two Property location can be found in Figure 1.

2.1 Site Description

The Property is situated at the southwest corner of Louis St. Laurent Avenue and Regional Road 25. The Property is identified with the municipal address of 6360 Regional Road 25, Town of Milton, Ontario.

The Property is square in shape and covers an area of approximately 0.99 ha (2.44 acres). The Property is currently occupied by a residential dwelling, accessory structure (barn), and undeveloped grassed land. The residential dwelling is a one-storey building (including basement) located at the central portion of the Property at 6360 Regional Road 25 and barn is located at the southwest portion of the Property.

It is understood that the existing structures on the Property are proposed to be demolished to support the redevelopment of the site to include an 8 storey Long Term Care Home structure with the potential of one level of underground parking that would cover most of the site, and driveways/access routes. The development will be fully serviced with municipal water, sewage, and roads. Under O.Reg.153/04 the future land use of the Property would be considered residential land use.

The surrounding area is predominantly developed for residential and Agricultural use with some vacant land. The Property is currently to be in residential land use, per Ontario Regulation 153/04 (O.Reg.153/04).

Site features are presented in Figure 2. The site plan is shown in Appendix A.

The Phase Two Property information is provided below:

Phase Two Property Information

Legal Description	<ul style="list-style-type: none">• Part Lot 8 Con 2 Traf (NS)• Part 2, 20R-9286
PIN(s)	<ul style="list-style-type: none">• 25081-1956 (LT)• 25081-2354 (LT)
Municipal Address	<ul style="list-style-type: none">• 6360 Regional Road 25, Town of Milton, Ontario
Zoning	The Town of Milton Zoning By-Law (No. 144-2003) was accessed, and the Property is zoned as Future Development Zone (FD).
Area	0.99 ha (2.44 acres)
Zone Northing Easting	17 T 593176E 4816474N

2.2 Property Ownership

The ownership information for the Phase Two Property is as follows:

Property Owner Information	Thomas Robert Colbeck (6360 Regional Road 25)
Persons, other than Property Owner, who engaged the Qualified Person to conduct the Phase One ESA	Rob Colbeck Thomas Robert Colbeck 7050 Appleby Line Milton, Ontario L9E 0M5

2.3 Current and Proposed Future Uses

2.3.1 Current Land Use

The Property is currently consisting of a residential dwelling, accessory structure, and undeveloped land. The residential dwelling is a one-story building (including basement) located at the central portion of the Property at 6360 Regional Road 25 and barn is located at the southwest portion of the Property. The surrounding area is predominantly developed for residential and Agricultural use with some vacant land. The Property is currently considered to be in residential land use, per Ontario Regulation 153/04 (O.Reg.153/04).

2.3.2 Future Land Use

The existing structures on the Property are proposed to be demolished to support the redevelopment of the site to include an 8 storey Long Term Care Home structure with the potential of one level of underground parking that would cover most of the site, and driveways/access routes. The development will be fully serviced with municipal water, sewage, and roads. Under O.Reg.153/04 the future land use of the Property would be considered residential land use.

2.4 Applicable Site Condition Standard

The applicable Site Condition Standards (SCS) for the future use of the subject property were determined to be those in Table 2 of April 15, 2011, Ontario Ministry of the Environment, Conservation and Parks (MECP) “*Soil, Ground Water and Sediment Standards for use under part XV.1 of the Environmental Protection Act*” for Residential/Parkland/Institutional land uses for coarse-textured soils in a potable groundwater condition. These are the applicable standards for the following reasons:

- Four (4) grain size analysis was conducted on the Property which resulted in a mix of Medium Fine and Coarse textured soil. However, stricter standards for example, coarse-textured soil standards were used as a conservative measure.
- The Property will be developed for residential purposes.

- Bedrock was not encountered within the depth of investigation and was expected to be approximately 25 m bgs based on MECP well record.
- The site is in an area of Milton which is serviced with municipal water services, using its potable water from Lake Ontario, however MECP Well record indicates presence of private wells in the area
- The site is not located within 30 m of a surface water body.
- The soil pH on the Property was determined to be between 5 and 9.

3.0 BACKGROUND INFORMATION

3.1 Physical Setting

3.1.1 Water Bodies and Area of Natural Significance

Mapping from the Ontario Ministry of Natural Resources and Forestry (MNRF) was reviewed to determine if water bodies were present on the Property and within the Study Area. The MNRF National Heritage Information Centre database for listings of Areas of Natural or Scientific Interest (ANSIs) was reviewed. The information is summarized below.

Water Bodies (Property)	<ul style="list-style-type: none"> • No water bodies were identified on the Property
Water Bodies (Study Area)	<ul style="list-style-type: none"> • One water body was identified within the Phase One Study Area. It is the Sixteen Mile Creek located approximately 315 meters northeast from the Property.
Wetland (Property)	<p><u>Provincially Significant</u></p> <ul style="list-style-type: none"> • No Provincially Significant wetlands were present on the Property. <p><u>Non- Provincially Significant</u></p> <ul style="list-style-type: none"> • No Non- Provincially Significant wetlands were present on the Property. <p><u>Unevaluated</u></p> <ul style="list-style-type: none"> • No Unevaluated wetlands were present on the Property.

<p>Wetland (Study Area)</p>	<p><u>Provincially Significant</u></p> <ul style="list-style-type: none"> • A Provincially Significant Wetland was present in the Study Area approximately 310 meters northeast from the Property. <p><u>Non- Provincially Significant</u></p> <ul style="list-style-type: none"> • No Non- Provincially Significant wetlands were present in the Study Area. <p><u>Unevaluated</u></p> <ul style="list-style-type: none"> • No Unevaluated wetlands were present in the Study Area.
<p>ANSIs (Property)</p>	<p><u>Provincially Significant Life Science ANSI</u></p> <ul style="list-style-type: none"> • No Life Science ANSIs were identified on the Property. <p><u>Provincially Significant Earth Science ANSI</u></p> <ul style="list-style-type: none"> • No Earth Science ANSIs were identified on the Property.
<p>ANSIs (Study Area)</p>	<p><u>Provincially Significant Life Science ANSI</u></p> <ul style="list-style-type: none"> • No Life Science ANSIs were identified in the Study Area. <p><u>Provincially Significant Earth Science ANSI</u></p> <ul style="list-style-type: none"> • No Earth Science ANSIs were identified in the Study Area.

3.1.2 Topography and Surface Water Drainage

A topographic map from the MNRF and the geological mapping produced by the Ontario Ministry of Northern Development and Mines - *Ontario Geological Survey* was reviewed. The information gleaned from the mapping is summarized below.

<p>Topography</p>	<p>Based on topographic information from the Ministry of Natural Resources topographic map, Toporama, the Subject Property's ground surface elevation is approximately 193 m above mean sea level. The ground surface slopes gently towards the southeast.</p>
<p>Hydrogeology</p>	<p>There are no surface water bodies or features located on the Property. There is a creek known as Sixteen Mile Creek located in the Study Area, approximately 300 m northeast from the Property. The ground water and surface water are expected to flow in the east/southeast direction towards Sixteen Mile Creek.</p>
<p>Geology (overburden)</p>	<p>Based on published geological information for the area, the near-surface overburden on the Property is mainly comprised of silt and clay, minor sand and gravel interbedded silt and clay and gritty, pebbly flow till and rainout deposits (8b).</p> <p>The Property is located in the physiographic region known as Peel Plain (33), within the physiographic landform of Bevelled Till Plains (8).</p>
<p>Geology (bedrock)</p>	<p>The bedrock on the Property is of the Queenston Formation, which is comprised of shale, limestone, dolostone, and siltstone (55a).</p>

Geology (depth to bedrock)	Based on the MECP well records, the depth to bedrock is approximately 25 m below ground surface.
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3.2 Past Investigations

Pervious investigation for the Property, which was conducted by Terraprobe Inc., is summarized below:

Report Title	Phase One ESA, 6360 Regional Road 25, Town of Milton, Ontario
Report Date	December 8, 2022
File No.	1-22-0209-41
Prepared By	Terraprobe Inc.
Prepared For	Thomas Robert Colbeck

The Phase One ESA was completed as per the requirements of Ontario Regulation 153/04. The Phase One Environmental Site Assessment (ESA) identified the following Potential Contaminating Activities (PCAs) resulting in Areas of Potential Environmental Concern (APEC) on the Phase One Property:

Area of Potential Environmental Concern	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity	Location of PCA (on-site or off-site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 1	Entire Property	#30 – Importation of Fill Material of Unknown Quality	On-Site	Metals and Inorganics	Soil
APEC 2	Central Portion of the Property	#28 – Gasoline and Associated Products Storage in Fixed Tanks	On-Site	PHCs, and BTEX	Soil and Groundwater
APEC 3	Northwest Portion of the Property	#Other 1 – O. Reg 347 Waste Receiver	Off-Site	PCBs, PHCs, and BTEX	Groundwater

4.0 SCOPE OF THE INVESTIGATION

4.1 Overview of Site Investigation

The investigation of the Property was completed in conjunction with geotechnical and hydrogeological studies that are reported separately. The Sampling and Analysis Plan is presented in Appendix B. The scope of work conducted by Terraprobe is summarized below:

Summary of Scope of Work

Date	Scope of Investigation	Scope of Soil Analysis*	Scope of Ground Water Analysis*
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<p>June 2022</p>	<ul style="list-style-type: none"> • 9 Environmental Boreholes • 5 monitoring wells • 2 set of water levels from all 5 monitoring wells 	<ul style="list-style-type: none"> • 9 metals including HFMs (As, Sb, Se, Cr) and ORPs analyses + 1 duplicates of each parameter • 2 PCB analyses + 1 duplicate of each parameter • 4 PHC and VOCs (including BTEX) analyses + 1 duplicates of each parameter • Four (4) grain size analysis was conducted 	<ul style="list-style-type: none"> • 3 PHC and VOCs (including BTEX) + 1 duplicate of each parameter + 1 Trip Blank for VOCs • 3 PCBs + 1 duplicate of each parameter
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*Note: PHC – petroleum hydrocarbons
VOC – volatile organic compound
PCB – polychlorinated biphenyl
ORP – Other Regulated Parameters
HFM – Hydride Forming Metals

4.2 Media Investigated

4.2.1 Rationale for Inclusion or Exclusion of Media

Media	Included or Excluded	Rationale
Soil	Included	Based upon the Phase One ESA, soil sampling was required on the Property of the identified PCoCs. Sample locations were selected to investigate all the identified APECs.
Sediment	Excluded	Surface water bodies were not present on the Property. As such, sediment sampling was not conducted during the investigation.
Ground Water	Included	Based upon the Phase One ESA, groundwater sampling was required on the Property of the identified PCoCs. Sample locations were selected to investigate all the identified APECs.
Surface Water	Excluded	Surface water bodies were not present on the Property. As such, surface water sampling was not conducted during the investigation.

4.2.2 Overview of Field Investigation of Media

Soil sampling was conducted during the drilling program using a split spoon sampling device. Groundwater sampling was conducted from monitoring wells installed within the completed boreholes.

4.3 Deviations from the Sampling and Analysis Plan

The sampling and analysis plan is provided in Appendix B. There was no deviation from the sampling & analysis plan.

4.4 Impediments

Impediments were not encountered during the investigation.

5.0 INVESTIGATION METHOD

5.1 General

Utility clearances were undertaken before commencing the subsurface investigation. The Phase Two ESA followed the methods outlined in the following documents:

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

The methods used in the Phase Two ESA investigation did not differ from the associated standard operating procedures. The Standard Operating Procedures are presented in Appendix C.

5.2 Drilling

The drilling information for the Phase Two ESA is provided below:

Date of Drilling	June 14-17, 2022
Borehole	BH1, BH3, BH6, BH9, BH10, BH11, BH13, BH15, and BH16.
Name of Contractor	TEC Drilling
Equipment Used	- Track Mount Drill Rigs - Soil Stem Augers - Hollow Stem Augers/mud rotary - Two (2)-inch Split Spoon Sampling Device
Decontamination Measures	The split spoon sampling device was washed between each sample to minimize potential cross-contamination
Sample Frequency	Please refer to the borehole logs in Appendix D for recovered soil samples

5.3 Soil Sampling

5.3.1 Equipment Used

- Laboratory supplied sampling containers
- Nitrile gloves
- Cooler with loose ice
- RKI EAGLE 2

5.3.2 Geological Description of Soil

The geological description of each soil sample collected is presented on the borehole logs in Appendix D.

5.4 Field Screening Measurements

Selected soil samples were screened in the field using portable hydrocarbon vapour testing equipment and following the procedure outlined in the “*Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario*” published by the Ontario Ministry of the Environment and Climate Change. All samples were screened using an RKI Instruments EAGLE 2 Monitor. The monitor has a range of 0 parts per million (ppm) to 50,000 ppm and an accuracy of +/- 5%. The monitor was calibrated with hexane before field screening as per the calibration procedure outlined by RKI Instruments in “*Instruction Manual Eagle Series Portable Multi-Gas Detector 71-0028RK*” released August 8, 2010.

Field screening measurements were used to help select samples for petroleum hydrocarbon and volatile organic compounds laboratory analysis. Complete field screening readings are provided on the borehole logs in Appendix D.

5.5 Groundwater Monitoring Well Installation

The monitoring well installation information for the Phase Two ESA is provided below:

Date of Drilling	June 14 –17, 2022
Monitoring Well	BH1, BH9, BH10, BH13, BH15, and BH16
Name of Contractor	TEC Drilling
Equipment Used	- Track Mount Drill Rigs - Soil Stem Augers - Hollow Stem Augers/mud rotary - Two (2)-inch Split Spoon Sampling Device
Decontamination Measures	The split spoon sampling device was washed between each sample to minimize potential cross-contamination
Sample Frequency	No groundwater samples were collected during this drilling event.
Well Construction	The wells were constructed of 50-mm (2-in) ID PVC screens and risers. Filter sand was placed around the well screen to approximately 0.6 m above the top of the screen. The wells were then backfilled with bentonite.
Well Elevations	Monitoring well elevations and depths are presented in Table 2 and Table 3.

The monitoring wells were developed by surging the wells by an inertial pump fitted with a surge block. The monitoring wells were then purged by removing approximately five (5) to ten (10) casing volumes or until the well was dry. The monitoring well locations are provided in Figure 4.

5.6 Field Measurement of Water Quality Parameter Ground Water: Sampling

A Hanna Model 991300 Hand-held System was used to measure the pH, conductivity, and temperature of the groundwater. During the purging of the monitoring wells and before sampling, readings were collected for every casing volume. Purging continued until the parameters had stabilized, indicating that formation water was being drawn through the monitoring well. The Hanna instrument measurements comply with the following EPA approved test methods:

- Temperature Standard Method 2550 B-2000
- Specific Conductance EPA Method 120.1 and Standard Method 2 2510 B-1997
- pH Standard Method 4500-H+B-2000 and USGS Method I-1586-85

The field measurements of water quality parameters are present below:

Range

- pH 0.00 to 14.00 pH
- EC 0.00 to 20.00 mS/cm
- TDS 0.00 to 10.00 ppt (g/L)
- Temperature 0.0 to 60.0°C

Resolution

- pH 0.01 pH
- EC 0.01 mS/cm
- TDS 0.01 ppt
- Temperature 0.1°C

Accuracy

- pH ± 0.01 pH
- EC $\pm 2\%$ F.S.
- TDS $\pm 2\%$ F.S.
- Temperature $\pm 0.5^\circ\text{C}$

5.7 Groundwater Sampling

The monitoring wells were purged and sampled using an inertia pump and tubing. Stabilization of parameters (pH, D.O., conductivity, temperature, etc.) and turbidity of the purged water are monitored before a sample is taken; thus, low flow methods facilitate equilibrium with the surrounding formation water and produce samples that are representative of the formation water.

Stabilization was considered to occur when consecutive readings were within the following:

- Conductivity $\pm 3\%$
- Temperature $\pm 0.2^\circ\text{C}$
- pH ± 0.1 unit

5.8 Sediment Sampling

No sediment sampling was conducted as part of this investigation.

5.9 Analytical Testing

AGAT Laboratories conducted analytical testing of soil and groundwater. Laboratory Certificates of Analyses were received for all samples submitted for chemical analysis. The soil and groundwater samples submitted for chemical analysis are summarized in the Sampling and Analysis Plan presented in Appendix B.

5.10 Residue Management Procedures

5.10.1 Soil Cuttings

Soil cuttings generated during the drilling activities were stored in drums and left on the Property for future appropriate disposal.

5.10.2 Ground Water

The development and purging water generated during the groundwater sampling was placed in the drums on the Property for future appropriate disposal.

5.10.3 Fluids from Cleaning

The fluids from cleaning were disposed of in the drums on the Property for future appropriate disposal.

5.11 Elevation Surveying

The elevations of the boreholes on the Property were surveyed by Terraprobe using a Trimble R10 survey system. The Trimble R10 is a differential global positioning system (GPS) that involves the cooperation of two receivers, one that's stationary and another that's roving around making position measurements. The elevation of each borehole on the Property is presented on the borehole logs in Appendix D.

5.12 Quality Assurance and Quality Control Measures

5.12.1 Containers, Labelling, Handling and Chain of Custody

Containers

The following laboratory-supplied sample containers were used for all sampling conducted on the Property.

Soil Parameters	Container
Chloride, electrical conductivity	250 mL glass jar, Teflon lined lid
Cyanide (CN ⁻)	250 mL glass jar, Teflon lined lid
Hexavalent chromium	250 mL glass jar, Teflon lined lid
Metals (includes hydride-forming metals, SAR, HWS boron, calcium, magnesium, sodium)	250 mL glass jar, Teflon lined lid

Soil Parameters	Container
Mercury, methyl mercury	250 mL glass jar, Teflon lined lid
pH	250 mL glass jar, Teflon lined lid
BTEX, PHCs (F1)	40–60 mL glass vial (charged with methanol preservative, pre-weighed) and a glass jar (for moisture content)
PHCs (F2–F4), PCBs	120 mL glass jar, Teflon lined lid
Ground Water Parameters	Container
BTEX, PHCs (F1), VOCs	40–60 mL glass vials (minimum of 2)
PHCs (F2–F4)	2 x 500 mL amber glass bottle, Teflon lined lid
PCBs	2 x 500 mL amber glass bottle, Teflon lined lid

Labelling

All sampling containers were identified with laboratory-supplied labels. The labels included the following information:

- Unique Sample ID
- Company Name
- Date and Time
- Project Number

Handling

Samples were placed in coolers with loose ice after collection for transportation to the laboratory. Sample hold times were met for all submitted soil and groundwater samples.

Chain of Custody

Laboratory-supplied Chain of Custody forms were completed for all samples submitted for analysis.

During soil sampling, the split spoon sampling device was washed between samples to minimize cross-contamination. While handling all samples, Terraprobe staff used nitrile gloves. New gloves were used for each sample to avoid cross-contamination.

No deviations from the sampling and analysis plan occurred. Field duplicates were obtained for both soil and groundwater samples at a rate of at least 10%. A trip blank was submitted for the VOC analysis of the groundwater samples

5.12.2 Equipment Cleaning Procedures

All non-dedicated sampling and monitoring equipment must be cleaned following each use. During soil sampling, the split spoon sampling device was washed between samples to minimize cross-contamination. During groundwater sampling, any part of the bladder pump or interface meter, which encountered the groundwater, was cleaned between monitoring wells.

Dedicated equipment (nitrile gloves, terracore samplers, tubing) was changed between each sample to avoid cross-contamination.

5.12.3 Field Quality Control Measures

- All non-dedicated sampling and monitoring equipment was cleaned following each use.
- Sufficient field duplicate samples were collected in each medium being sampled so that at least one field duplicate sample can be submitted for laboratory analysis for every ten samples submitted for laboratory analysis
- Calibration checks on field instruments occurred daily before the commencement of sampling

5.12.4 Deviations in the Quality Assurance and Quality Control Measures

No deviations from the sampling and analysis plan occurred.

6.0 REVIEW AND EVALUATION

6.1 Geology

Detailed geological information for the site is presented on the borehole logs in Appendix D. The geology is summarized below.

6.1.1 Geological Units Thickness (Estimate)

The geological unit thicknesses are presented in Table 1.

6.1.2 Elevations of Geological Units

The geological unit elevations are presented in Table 1.

6.1.3 Material in Geological Units

Surficial Materials

The surficial materials layer was composed of topsoil was encountered at all borehole locations and ranged approximately between 100 and 140 mm in thickness. A layer of earth-fill material underlays the surficial material on the Property.

Earth Fill

Earth fill material was encountered at all borehole locations and extended to a depth of 0.3 to 0.8 mbgs. The earth-fill primarily consisted of clayey silt, with trace gravel, organics matter and sand, compact, brown, and moist. The earth-fill layer was underlain by the native soil. The fill material appears to comprise of reworked disturbed/weathered native soils at the Property.



Native Soil

Native soils were encountered beneath the fill material soil. Native soil consisted of a clayey silt layer comprised of some sand to sandy, trace gravel, very stiff to hard, brown to reddish brown, and moist. The native clayey silt layer extended to a depth of approximately 0.8 to 6.1 mbgs. Below approximately 6.1 mbgs, a layer of sandy silt to sand and silt layer was observed. This layer was comprised of trace to some clay, trace to some gravel, very dense, reddish brown, and moist. This layer extended to a depth of approximately 6.1 to 9.4 mbgs. Bedrock was not encountered within the depth of the investigation.

6.1.4 Properties of Aquifers and Aquitards

Earth Fill

The earth-fill on the Property is an unconfined and drained aquifer. The groundwater table on the Property is located below the fill. The fill is hydraulically interconnected to the native soils. Any water within the fill material is expected to migrate downwards into the native soil.

Native Soil

The native soils, consisting of non-cohesive sandy silt layer is part of an unconfined aquifer and are the primary water-bearing unit on the Property. Recharge into the aquifer will be primarily through rainfall events and migration from the north adjoining properties.

Bedrock

Bedrock was not encountered within the depth of the investigation. However, based on geological information the anticipated bedrock would comprise of the Queenston Formation.

6.1.5 Rationale for Choice of Aquifers and Aquitards Investigated

The native soil was chosen for investigation because:

- The likelihood of vertical migration of water from the fill aquifer downward
- The possibility of free groundwater present through recharge from a large area and up-gradient tributaries

6.2 Groundwater Elevations and Flow Direction

6.2.1 Rationale for Monitoring Well Locations and Screen Intervals

Monitoring wells were located across the Property to provide full site coverage. Screen intervals were chosen within the native soil unit to allow for the collection of groundwater samples within the water-bearing aquifer. Deeper boreholes instrumented with monitoring wells were installed for geotechnical and hydrogeological studies for the Property, which were carried out concurrently with the Phase Two ESA.

6.2.2 Results of Interface Probe Measurements

Interface probe measurements indicated that only water was present on the Property. No light non-aqueous phase liquids (LNAPL) or dense non-aqueous phase liquids (DNAPL) were detected.

6.2.3 Thickness of Free-Flowing Product

No free-flowing product was encountered on the Property.

6.2.4 Ground Water Elevations

Groundwater elevations are presented in Figure 5.

6.2.5 Interpreted Direction of Groundwater Flow

The interpreted direction of groundwater flow is to the southeast. Groundwater flow direction and groundwater elevation contours are presented in Figure 5.

6.2.6 Assessment of Temporal Variability

Two (2) groundwater level measurement events were conducted on the Property in the month of July 2022. The water level was observed to be similar between the measurement events. The data collected is insufficient to discern the temporal variability of the Property.

6.2.7 Influence of Buried Utilities

Subsurface structures and buried utilities on the Property may have affected the groundwater flow.

6.3 Groundwater Hydraulic Gradients

6.3.1 Hydraulic Conductivity

The hydraulic conductivity of the subsurface soils was assessed based on four (4) grain-size analyses. The hydraulic conductivity of the strata of geological units encountered on the Property is discussed in greater detail in the hydrogeological study reported under separate cover. The hydraulic conductivities were calculated for the four (4) native soil samples selected across the Property. The results of the testing are summarized below.

Monitoring Well / Soil Sample	Strata Screened / Soil Description	Hydraulic Conductivity (m/s)	
		Grain Size	Based on Published Data
BH1 SS8	Sandy silt, some gravel, some clay	1.0 E -9	10 ⁻⁶ to 10 ⁻⁹
BH10 SS5	Sandy silt, clayey, trace gravel	2.5 E -10	10 ⁻¹⁰ to 10 ⁻¹³
BH13 SS7	Sand and silt, some clay, trace gravel	2.25 E -10	10 ⁻¹⁰ to 10 ⁻¹³
BH16 SS9	Silty sand, some gravel, trace clay	4.2 E -8	10 ⁻⁶ to 10 ⁻⁹

The hydraulic conductivity value of the overburden based on constant head and falling head tests, and grain size analyses are in the order of 10⁻⁶ to 10⁻⁹ m/s. The hydraulic conductivity of the native, clayey silt layer is in the order of 10⁻⁹. These values correspond with hydraulic conductivity provided in the published data for the soil types identified at the Property.

6.3.2 Horizontal Hydraulic Gradients

The groundwater table investigation for the Property was within the overburden soil layer. Based on the measured groundwater levels, the horizontal hydraulic gradient of groundwater within the overburden at the Property from BH10 to BH16 was determined to be approximately 0.015 m/m in the east direction. The following calculation was used to determine the horizontal hydraulic gradient.

$$\text{Horizontal Hydraulic Gradient} = \frac{\text{change in water level}}{\text{distance between the wells}}$$

$$\text{Horizontal Hydraulic Gradient} = \frac{\Delta h}{L} = \frac{BH10 - BH16}{L} = \frac{185.8m - 184.9m}{60m} = \mathbf{0.015\ m/m}$$

6.3.3 Vertical Hydraulic Gradients

Vertical Hydraulic Gradients was not calculated as deep well data was not used during the environmental analysis for this Phase Two ESA report.

6.4 Medium to Fine Textured Soil

6.4.1 Rationale for Number of Grain Size Samples

Four (4) samples of the native soils were analyzed for grain size distribution (ASTM D422). Given the area of Phase Two Property and moderate variation in soil type across the Property, it was determined by the Qualified Person that four (4) samples would be provide an adequate representative sample to determine soil texture. The grain size analysis is presented in Appendix E.

6.4.2 Results of Grain Size Analysis

The grain size analysis results are provided in Appendix E and noted on the borehole logs at respective sampling depths. A summary of the grain size analysis results is presented below:

Sample Number	Sample		Composition (% Weight)				Soil	
	ID	Depth (mbgs)	Gravel	Sand	Silt	Clay	Description	Texture
1	BH1 SS8	7.6-8.2	13	32	42	13	Sandy silt, some gravel, some clay	Medium Fine
2	BH10 SS5	3.1-3.6	3	31	44	22	Sandy silt, clayey, trace gravel	Medium Fine
3	BH13 SS7	6.1-6.7	8	36	43	13	Sand and silt, some clay, trace gravel	Medium Fine
4	BH16 SS9	9.1-9.4	13	49	32	6	Silty sand, some gravel, trace clay	Coarse

According to O. Reg 153/04, the soil is considered coarse-textured if at least 50 percent by weight of the particles are larger than 75 µm (0.075 mm). The grain size curves are presented in Appendix E.

6.5 Soil Field Screening

Soil screening was conducted on soil samples from select boreholes using portable hydrocarbon vapour testing equipment and visual and olfactory observations. There was no evidence of impacts based on field observations.

6.6 Soil Quality

Soil samples from nine (9) boreholes were selected for chemical analysis, on the Property. The selected soil samples were analyzed for Metals, Hydride Forming Metals (HFM) and selected ORPs, PCBs, and PHCs (including BTEX). Also, at least one (1) duplicate sample were submitted for each parameter. The location and depths of the samples submitted for chemical analysis are presented below.

6.6.1 Location and Depth of Samples

Soil Sampling Plan & Summary

Borehole	Sample	Analytical Groups											
		M&I	EC / SAR	PCBs	pH	PHCs	BTEX	Duplicates					
								M&I	EC /SAR	PCBs	pH	PHCs	BTEX
1	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---
3	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---
	SS5	---	---	---	✓	---	---	---	---	---	---	---	---
6	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---
	SS6	---	---	---	✓	---	---	---	---	---	---	---	---
9	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---
	SS5	---	---	---	---	✓	✓	---	---	---	---	---	---
	SS7	---	---	✓	---	---	---	---	---	---	---	---	---
10	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---
	SS2	---	---	---	---	✓	✓	---	---	---	---	---	---
	SS5	---	---	---	✓	---	---	---	---	---	✓	---	---
	SS6	---	---	---	---	✓	✓	---	---	---	---	---	---
11	SS1	✓	✓	---	---	---	---	✓	✓	---	---	---	---
13	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---
	SS8	---	---	✓	---	✓	✓	---	---	✓	---	✓	✓
15	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---
	SS4	---	---	---	✓	---	---	---	---	---	---	---	---
16	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---

Note: ✓ - Meets MECP Table 2 RPI CT Standards

✗ - Exceeds MECP Table 2 RPI CT Standards

- Not sampled

6.6.2 Comparison to Applicable Standards

The rationale for sampling location and frequency are presented in the Sampling and Analysis Plan in Appendix B. The laboratory Certificates of Analysis are provided in Appendix F. The results of soil chemical analysis are provided in Tables 4, 5, 6, and 7. There were no exceedances of Table 2 RPI CT Standards for soil as provided below.

Metals, Inorganics, and ORP Parameters in Soil

Nine (9) soil samples with one (1) duplicate sample were selected for chemical analysis for Metals, Inorganics and ORP parameters. The collected nine (9) samples and duplicate sample met Table 2 RPI CT soil standards for all parameters.

PCBs, pH, and PHCs (including BTEX) Parameters

Two (2) soil samples with one (1) duplicate sample were selected for chemical analysis for PCBs. Four (4) soil samples with one (1) duplicate sample were selected for chemical analysis for PHCs (including BTEX). Four (4) soil samples with one (1) duplicate sample were selected for chemical analysis for pH. All soil samples met Table 2 RPI CT soil standards.

The laboratory Certificates of Analysis are provided in Appendix F. The soil sample results are provided in Tables 4, 5, 6, and 7.

6.6.3 Contaminants of Concern

No Contaminants of Concern associated with the soil on the Property were identified.

6.6.4 Chemical or Biological Transformations

No Contaminant of Concern associated with the soil on the Property were identified.

6.6.5 Contamination Impact on Other Media

No Contaminants of Concern associated with the soil on the Property were identified

6.6.6 Presence of Light or Dense Non-Aqueous Phase Liquids

No light non-aqueous phase liquids (LNAPL) or dense non-aqueous phase liquids (DNAPL) were detected in the soil on the Property.

6.7 Groundwater Quality

Groundwater sampling was completed for three (3) monitoring wells on the Property. Groundwater samples were analyzed for PCBs, PHCs and VOCs (including BTEX). Also, one (1) duplicate sample was submitted for each parameter, and one (1) trip blank was submitted for VOCs. The location and depths of the sample submitted for chemical analysis are presented below:

6.7.1 Location and Depth of Samples

Groundwater Sampling Plan & Summary

Borehole	Analytical Groups											
	M&I	PAHs	PCBs	PHCs	VOCs	BTEX	Duplicates					
							M&I	PAHs	PCBs	PHCs	VOCs	BTEX
9	---	---	✓	✓	✓	✓	---	---	---	---	---	---
10	---	---	✓	✓	✓	✓	---	---	---	---	---	---
13	---	---	✓	✓	✓	✓	---	---	✓	✓	✓	✓

Note: ✓ - Meets MECP Table 2 RPI CT Standards

- X – Exceeds MECP Table 2 RPI CT Standards
- Not sampled

6.7.2 Field Filtering

Field filtering was not conducted for ground water samples.

6.7.3 Comparison to Applicable Standards

The rationale for sampling location and frequency are presented in the Sampling and Analysis Plan in Appendix B. The laboratory Certificates of Analysis are provided in Appendix F. The results of groundwater chemical analysis are provided in Tables 8, 9, and 10. No exceedances of Table 2 RPI CT Standards for groundwater as provided below.

PCBs Parameters in Groundwater

Three (3) groundwater samples were selected from monitoring wells across the Property, with one (1) duplicate sample for chemical analysis for PCBs parameter. The four (4) samples met Table 2 RPI CT groundwater standards for the PCBs parameters.

PHCs Parameters in Groundwater

Three (3) groundwater samples were selected from monitoring wells across the Property, with one (1) duplicate sample for chemical analysis for PHCs parameter. The four (4) samples met Table 2 RPI CT groundwater standards for the PHCs parameters.

VOCs Parameters in Groundwater

Three (3) groundwater samples were selected from monitoring wells across the Property, with one (1) duplicate sample for chemical analysis for VOCs parameter. The four (4) samples met Table 2 RPI CT groundwater standards for the VOCs parameters.

The laboratory Certificates of Analysis are provided in Appendix F. The groundwater sample results are provided in Tables 8, 9, and 10.

6.7.4 Contaminants of Concern

No Contaminant of Concern associated with groundwater on the Property were identified.

6.7.5 Chemical or Biological Transformations

No Contaminant of Concern associated with the groundwater on the Property were identified.

6.7.6 Contamination Impact on Other Media

No Contaminant of Concern associated with the groundwater on the Property were identified.

6.7.7 Presence of Light or Dense Non-Aqueous Phase Liquids

No LNAPL or DNAPL was detected in the groundwater on the Property.

6.8 Sediment Quality

No surface water features were present on the property. Therefore, no sediment sampling was conducted as part of this investigation.

6.9 Quality Assurance and Quality Control Results

6.9.1 Types of Quality Control Samples Collected and Results

Soil and groundwater samples were handled per the Analytical Protocol concerning holding time, preservation method, storage requirement and sample container type. Laboratory results were compared to MECP standards for quality control under Ontario Regulation 153, which requires laboratory results to meet specific method detection limit (MDL) requirements. In general, the sampling and analyses performed conformed with the following:

- Ministry of the Environment Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario.
- Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.I of the Environmental Protection Act of Ontario.

Duplicate samples were submitted at a rate of 10% for both soil and groundwater samples.

6.9.2 Samples Not Handled in Accordance with the Analytical Methods

Holding Time

All samples met the holding times as specified in Ontario Ministry of the Environment, Conservation and Park – Laboratory Services Branch “*Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*” July 1, 2011.

Preservation Method

All samples met the preservation methods as specified in Ontario Ministry of the Environment, Conservation and Park – Laboratory Service Branch “*Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*” July 1, 2011.

Storage Requirement

All samples met the storage requirements as specified in Ontario Ministry of the Environment, Conservation and Park – Laboratory Service Branch “*Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*” July 1, 2011.

Container Type

All samples met the container type as specified in the Ontario Ministry of the Environment, Conservation and Park – Laboratory Services Branch “*Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*” July 1, 2011.

6.9.3 Subsection 47 (3) of the Regulation

All certificates of analysis or analytical reports received according to clause 47 (2) (b) of the regulation comply with subsection 47 (3). A certificate of analysis or analytical report has been received for each sample submitted for analysis. All certificates of analysis or analytical reports received have been included and are presented in Appendix F.

6.9.4 Results Qualified by Laboratory

The laboratory did not qualify any results or made any remarks in a certificate of analysis or analytical report about a sample.

6.9.5 Overall Quality of Field Data

Decision-making regarding the environmental condition of the Property was not affected by the overall quality of the field data. The overall quality of the field data was considered by the Qualified Person to meet the objectives of the investigation and assessment.

7.0 CONCLUSIONS

The conclusions arising from the Phase Two ESA are as follows:

- The subsurface investigation was conducted in conjunction with geotechnical and hydrogeological investigations at the Property. A total of nine (9) environmental boreholes were advanced on the Property to a depth of approximately 9.4 m below ground surface (mbgs). Six (6) of these boreholes were installed with monitoring wells (BH1, BH9, BH10, BH13, BH15, and BH16).
- Soil conditions encountered withing the borehole consisted primarily of a layer of surficial material, earth-fill, and native soils. The surficial materials layer was composed of top soil was encountered at all borehole locations and ranged approximately between 100 and 140 mm in thickness. The earth fill material extended to a depth of 0.3 to 0.8 mbgs. The earth-fill primarily consisted of clayey silt, with trace gravel, organics matter and sand, compact, brown, and moist. The earth-fill layer was underlain by the naive soil. The fill material appears to comprise of reworked disturbed/weathered native soils at the Property.
- Native soils were encountered beneath the fill material soil. Native soil consisted of a clayey silt layer comprised of some sand to sandy, trace gravel, very stiff to hard, brown to reddish brown, and moist. The native clayey silt layer extended to a depth of approximately 0.8 to 6.1 mbgs.
- Below approximately 6.1 mbgs, a layer of sandy silt to sand and silt layer was observed. This layer was comprised of trace to some clay, trace to some gravel, very dense, reddish brown, and moist. This layer extended to a depth of approximately 6.1 to 9.4 mbgs. Bedrock was not encountered within the depth of the investigation.
- A total of four (4) grain size analyses were conducted to confirm the on-site soil texture on the Property. According to the grain size analysis the soil at the Property is Medium-Fine and Coarse in texture. However, when comparing the environmental analysis results to Ontario soil guidelines, stricter standards for example, coarse-textured soil standards were used as a conservative measure.
- The results of the samples submitted for chemical analysis were compared to the full depth generic site condition standards in a potable groundwater condition as contained in Table 2 of the Ministry of Environment, Conservation and Parks (MECP) publication “*Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act*” for potable groundwater condition residential/parkland/institutional Property Use, April 15, 2011.
- Selected soil samples were submitted for chemical analysis for metals, including hydride-forming metals (As, Sb, Se, Cr), and selected ORPs, polychlorinated biphenyls (PCBs), petroleum hydrocarbon (PHC F1-F4), including benzene, toluene, ethylbenzene, xylene (BTEX).
 - All soil samples submitted for chemical analysis met the applicable site condition standards.
- Selected groundwater samples were submitted for analysis for metals, polychlorinated biphenyls (PCBs), petroleum hydrocarbons (PHCs F1-F4), and volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, xylene (BTEX).
 - All groundwater samples submitted for chemical analysis met the applicable site condition standards.

Based on the findings of Phase Two ESA, a Record of Site Condition (RSC) can be filed with the Ministry of the Environment, Conservation and Parks (MECP) as per O.Reg. 153/04, if required.

All wells installed during the subsurface soil and groundwater investigation are required to be decommissioned under O.Reg.903 when they are no longer needed for groundwater observation.



8.0 SIGNATURES

Asem Quadiri, B.Eng. (Environmental), EIT, has completed the Phase Two ESA under the direction and supervision of Muhammad I. Shahid P. Geo., QP_{ESA}. The findings and conclusions presented in this report have been determined based on the information that was obtained and reviewed, and on an assessment of the existing conditions on the property.

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

Yours truly,

Terraprobe Inc.



Asem Quadiri, B.Eng. (Environmental), E.I.T.
Engineer-In-Training



Muhammad I. Shahid P. Geo., QP_{ESA}
Senior Project Manager

Brampton Office



9.0 REFERENCES

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10.0 LIMITATIONS

This report was prepared for the exclusive use of **Thomas Robert Colbeck** and is intended to provide an assessment of the environmental conditions on the subject property, located at **6360 Regional Road 25, Town of Milton, Ontario**. The report was prepared for identifying potential environmental concerns, including an assessment of the likelihood that the environmental quality of the soil and groundwater at the site may have been adversely affected by past and present practices at the site, and/or those of the surrounding properties before the re-development of the property. Any use 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 parties. Terraprobe accepts no responsibility for damages, if any, suffered by any third party because of decisions made or actions based on this report, including consequential financial effects on transactions or property values or requirements for follow-up actions and costs.

The assessment should not be considered a comprehensive audit that eliminates all risks of encountering environmental problems. The information presented in this report is based on information collected during the completion of the investigation conducted by Terraprobe Inc. It is based on conditions at the subject property at the time of the site inspection. The subsurface conditions were assessed based on information collected at specific borehole and monitoring well locations. The actual subsurface conditions between the sampling points may vary.

There is no warranty expressed or implied by this report regarding the environmental status of the subject property. Professional judgment was exercised in gathering and analyzing information collected by our staff, as well as that submitted by others. The conclusions presented are the product of professional care and competence and cannot be construed as a guarantee.

If during future work new information regarding the environmental condition of the subject property is encountered, or if the outstanding responses from the regulatory agencies indicate outstanding issues on file concerning the subject property, Terraprobe should be notified so that we may re-evaluate the findings of this assessment and provide amendments, as required.

TABLES

TERRAPROBE INC

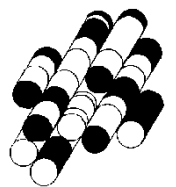


TABLE 1
GEOLOGICAL UNITS
6360 Regional Road 25, Town of Milton
PROJECT NUMBER : 1-22-0209-42

Borehole	BH1			BH3			BH6			BH9			BH10		
	Elev. Top (masl)	Elev. Bottom (masl)	Thickness (m)	Elev. Top (masl)	Elev. Bottom (masl)	Thickness (m)	Elev. Top (masl)	Elev. Bottom (masl)	Thickness (m)	Elev. Top (masl)	Elev. Bottom (masl)	Thickness (m)	Elev. Top (masl)	Elev. Bottom (masl)	Thickness (m)
Asphaltic Concrete & Aggregate	Not Encountered			Not Encountered			Not Encountered			Not Encountered			Not Encountered		
Topsoil	192.0	191.9	0.1	192.5	192.1	0.4	192.7	192.6	0.1	192.5	192.3	0.2	192.9	192.8	0.1
Fill	191.9	191.2	0.7	192.1	191.7	0.4	192.6	191.9	0.7	192.3	191.7	0.6	192.8	192.1	0.7
Clayey Silt	191.2	187.4	3.8	191.7	186.4	5.3	191.9	188.1	3.8	191.7	189.5	2.2	192.1	186.8	5.3
Sandy Silt to Sand and Silt	187.4	182.7	4.7	186.4	183.3	3.1	188.1	183.3	4.8	189.5	183.3	6.2	186.8	183.6	3.2

Borehole	BH11			BH13			BH15			BH16		
	Elev. Top (masl)	Elev. Bottom (masl)	Thickness (m)	Elev. Top (masl)	Elev. Bottom (masl)	Thickness (m)	Elev. Top (masl)	Elev. Bottom (masl)	Thickness (m)	Elev. Top (masl)	Elev. Bottom (masl)	Thickness (m)
Asphaltic Concrete & Aggregate	Not Encountered			Not Encountered			Not Encountered			Not Encountered		
Topsoil	192.5	192.4	0.1	192.4	192.3	0.1	192.2	192.1	0.1	192.2	192.1	0.1
Fill	192.4	191.7	0.7	192.3	191.6	0.7	192.1	191.4	0.7	192.1	191.4	0.7
Clayey Silt	191.7	187.9	3.8	191.6	189.4	2.2	191.4	186.1	5.3	191.4	186.1	5.3
Sandy Silt to Sand and Silt	187.9	183.2	4.7	189.4	183.1	6.3	186.1	182.9	3.2	186.1	183	3.1

TABLE 2
MONITORING WELL CONSTRUCTION
6360 Regional Road 25, Town of Milton
PROJECT NUMBER : 1-22-0209-42

Well ID	BH1		BH9		BH10		BH13		BH15		BH16	
Stick Up (m)	1.00		1.30		0.90		0.90		1.00		0.87	
Ground Elev. (masl)	192.0		192.5		192.9		192.4		192.2		192.2	
Well Component	Depth (m)	Elev. (masl)	Depth (m)	Elev. (masl)	Depth (m)	Elev. (masl)	Depth (m)	Elev. (masl)	Depth (m)	Elev. (masl)	Depth (m)	Elev. (masl)
Bentonite - Top	0.0	192.0	0.0	192.5	0.0	192.9	0.0	192.4	0.0	192.2	0.0	192.2
Bentonite - Bottom	5.5	186.5	5.5	187.0	5.4	187.5	5.4	187.0	5.5	186.7	5.5	186.7
Sand - Top	5.5	186.5	5.5	187.0	5.4	187.5	5.4	187.0	5.5	186.7	5.5	186.7
Screen - Top	6.0	186.0	6.0	186.5	5.9	187.0	5.9	186.5	6.0	186.2	6.0	186.2
Screen - Bottom	9.1	182.9	9.1	183.4	9.1	183.8	9.1	183.3	9.1	183.1	9.1	183.1
Sand - Bottom	9.3	182.7	9.2	183.3	9.3	183.6	9.3	183.1	9.3	182.9	9.2	183.0

TABLE 3
GROUNDWATER LEVELS
6360 Regional Road 25, Town of Milton
PROJECT NUMBER : 1-22-0209-42

Well ID	BH1		BH9		BH10		BH13		BH15		BH16	
Stick Up (m)	1.00		1.30		0.90		0.90		1.00		0.87	
Ground Elev. (masl)	192.0		192.5		192.9		192.4		192.2		192.2	
Depth (mbgs)	9.30		9.20		9.30		9.30		9.30		9.20	
Top of Screen (mbgs / masl)	6.0	186.0	6.0	186.5	5.9	187.0	5.9	186.5	6.0	186.2	6.0	186.2
Bottom of Screen (mbgs / masl)	9.1	182.9	9.1	183.4	9.1	183.8	9.1	183.3	9.1	183.1	9.1	183.1
Date	WL (m)	Elev. (masl)	WL (m)	Elev. (masl)	WL (m)	Elev. (masl)	WL (m)	Elev. (masl)	WL (m)	Elev. (masl)	WL (m)	Elev. (masl)
11-Jul-22	6.6	185.4	6.5	186.0	8.0	184.9	6.7	185.7	7.0	185.2	7.1	185.1
14-Jul-22	6.7	185.3	6.9	185.6	7.1	185.8	6.8	185.6	7.1	185.1	7.3	184.9

TABLE 4

SOIL QUALITY - pH

O. Reg. 153(511): Table 2 RPI Coarse Grain Textured Soil

6360 Regional Road 25, Milton, Ontario

PROJECT NUMBER : 1-22-0209-42

Sample Description			BH3-SS5	BH6-SS6	BH10-SS5	Dup3	BH15-SS4
Date Sampled			06/17/2022	06/14/2022	06/16/2022	06/16/2022	06/16/2022
Sample Depth (mbgs)			3.1-3.6	4.5-5.2	3.1-3.6		2.3-2.9
Sample Elevation (masl)			189.4-188.9	188.2-187.5	189.8-189.3		189.9-189.3
AGAT Workorder			22T912757	22T912757	22T912757	22T912757	22T912757
Parameter Name	ON T2 S RPI CT	Unit	4020312	4020314	4020321	4020326	4020330
pH, 2:1 CaCl2 Extraction	5.0-9.0	pH Units	7.19	7.42	7.35	7.34	7.47

TABLE 5

SOIL QUALITY - Metals, Inorganics & ORPs

O. Reg. 153(511): Table 2 RPI Coarse Grain Textured Soil

6360 Regional Road 25, Milton, Ontario

PROJECT NUMBER : 1-22-0209-42

Sample Description		BH1-SS1	BH3-SS1	BH6-SS1	BH9-SS1	BH10-SS1	BH11-SS1	Dup1	BH13-SS1	BH15-SS1	BH16-SS1	
Date Sampled		06/14/2022	06/17/2022	06/14/2022	06/15/2022	06/16/2022	06/15/2022	06/15/2022	06/16/2022	06/16/2022	06/15/2022	
Sample Depth (mbs)		0-0.6	0-0.6	0-0.6	0-0.6	0-0.6	0-0.6	0-0.6	0-0.6	0-0.6	0-0.6	
Sample Elevation (masl)		192.0-191.4	192.5-191.9	192.7-192.1	192.5-191.9	192.9-192.3	192.5-191.9	192.5-191.9	192.4-191.8	192.2-191.6	192.2-191.6	
AGAT Workorder		22T912757	22T912757	22T912757	22T912757	22T912757	22T912757	22T912757	22T912757	22T912757	22T912757	
Parameter Name	ON T2 S RPI CT	Unit	4020309	4020311	4020313	4020315	4020318	4020322	4020328	4020323	4020325	4020327
Antimony	7.5	µg/g	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	18	µg/g	8	8	7	7	7	6	7	7	9	7
Barium	390	µg/g	193	148	197	134	99	103	149	135	185	182
Beryllium	4	µg/g	0.8	1.1	1.2	1	0.8	0.8	1.1	1.1	1.6	1.4
Boron	120	µg/g	17	21	13	13	11	9	14	14	18	18
Boron (Hot Water Soluble)	1.5	µg/g	<0.10	0.15	0.34	<0.10	0.22	0.1	0.12	0.12	<0.10	<0.10
Cadmium	1.2	µg/g	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	160	µg/g	27	33	39	30	27	27	34	39	41	46
Chromium, Hexavalent	8	µg/g	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cobalt	22	µg/g	15.4	16.7	16.4	16.3	13.5	13.8	14.1	17.3	17.7	16.1
Copper	140	µg/g	35.2	30	23.8	33.2	30.2	27.8	29.8	28.1	36.4	26.4
Cyanide, Free	0.051	µg/g	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Lead	120	µg/g	12	13	17	13	13	12	14	14	16	16
Mercury	0.27	µg/g	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Molybdenum	6.9	µg/g	<0.5	0.7	<0.5	0.5	0.5	<0.5	<0.5	<0.5	0.5	<0.5
Nickel	100	µg/g	33	37	33	34	28	31	32	30	36	37
Selenium	2.4	µg/g	<0.8	<0.8	0.8	0.8	1	<0.8	1	0.9	1	0.8
Silver	20	µg/g	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	1	µg/g	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	23	µg/g	0.71	0.65	0.77	0.64	0.59	0.66	0.75	0.74	0.85	0.87
Vanadium	86	µg/g	37.6	46.3	55.4	41.1	39.4	37.3	49.4	52.4	57.2	61.4
Zinc	340	µg/g	69	76	92	80	75	67	85	87	90	89
pH, 2:1 CaCl2 Extraction	5.0-9.0	pH Units	6.88	6.68	6.88	7.36	7.26	6.8	7.29	6.82	7.33	6.66
Electrical Conductivity (2:1)	0.7	mS/cm	0.233	0.185	0.163	0.21	0.182	0.26	0.189	0.263	0.235	0.098
Sodium Adsorption Ratio (2:1) (Calc.)	5	N/A	1.9	0.351	0.343	0.712	0.137	1.59	0.539	1.43	0.654	0.388

TABLE 6

SOIL QUALITY - PCBs

O. Reg. 153(511): Table 2 RPI Coarse Grain Textured Soil

6360 Regional Road 25, Milton, Ontario

PROJECT NUMBER : 1-22-0209-42

Sample Description		BH9-SS7	BH13-SS8	Dup4	
Date Sampled		06/15/2022	06/16/2022	06/16/2022	
Sample Depth (mbgs)		6.1-6.7	7.6-8.2		
Sample Elevation (masl)		186.4-185.8	184.8-184.2		
AGAT Workorder		22T912757	22T912757	22T912757	
Parameter Name	ON T2 S RPI CT	Unit	4020317	4020324	4020331
Polychlorinated Biphenyls	0.35	µg/g	<0.1	<0.1	<0.1

TABLE 7

SOIL QUALITY - PHCs

O. Reg. 153(511): Table 2 RPI Coarse Grain Textured Soil

6360 Regional Road 25, Milton, Ontario

PROJECT NUMBER : 1-22-0209-42

Sample Description				BH9-SS5	BH10-SS2	BH10-SS6	BH13-SS8	Dup2
Date Sampled				06/15/2022	06/16/2022	06/16/2022	06/16/2022	06/16/2022
Sample Depth (mbgs)				3.1-3.6	1.5-2.1	4.5-5.2	7.6-8.2	
Sample Elevation (masl)				189.4-188.9	191.4-190.8	188.4-187.7	184.8-184.2	
AGAT Workorder				22T912757	22T912757	22T912757	22T912757	22T912757
Parameter Name	ON T2 S RPI CT	Unit		4020316	4020319	4020320	4020324	4020329
F1 (C6 - C10)	55	µg/g		<5	<5	<5	<5	<5
F2 (C10 to C16)	98	µg/g		<10	<10	<10	<10	<10
F3 (C16 to C34)	300	µg/g		<50	<50	<50	<50	<50
F4 (C34 to C50)	2800	µg/g		<50	<50	<50	<50	<50
Benzene	0.21	µg/g		<0.02	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	1.1	µg/g		<0.05	<0.05	<0.05	<0.05	<0.05
Toluene	2.3	µg/g		<0.05	<0.05	<0.05	<0.05	0.06
Xylenes (Total)	3.1	µg/g		<0.05	<0.05	<0.05	<0.05	<0.05

TABLE 8

GW QUALITY - PHCs F1-F4 (with VOCs)

O. Reg. 153(511): Table 2 RPI Coarse Textured Soil

6360 Regional Road, Milton, Ontario

PROJECT NUMBER : 1-22-0209-42

Sample Description	BH 09	BH 10	BH 13	DUP-1
Date Sampled	07/15/2022	07/15/2022	07/15/2022	07/15/2022
Screen Depth (mbgs)	6.0-9.0	6-9	6-9	
Screen Elevation (masl)	186.5-183.5	186.9-183.9	186.4-183.4	
AGAT Workorder	22T921255	22T921255	22T921255	22T921255
Parameter Name	ON T2 NPGW CT	Unit		
F1 (C6 - C10)	750	µg/L	<25	<25
F2 (C10 to C16)	150	µg/L	<100	<100
F3 (C16 to C34)	500	µg/L	<100	<100
F4 (C34 to C50)	500	µg/L	<100	<100

TABLE 9

GW QUALITY - PCBs (Water)

O. Reg. 153(511): Table 2 RPI Coarse Textured Soil

6360 Regional Road, Milton, Ontario

PROJECT NUMBER : 1-22-0209-42

Sample Description	BH 09	BH 13	DUP-1
Date Sampled	07/15/2022	07/15/2022	07/15/2022
Screen Depth (mbgs)	6.0-9.0	6-9	
Screen Elevation (masl)	186.5-183.5	186.4-183.4	
AGAT Workorder	22T921255	22T921255	22T921255
Parameter Name	ON T2 NPGW CT	Unit	
Polychlorinated Biphenyls	3 µg/L	<0.1	<0.1

TABLE 10

GW QUALITY - VOCs (With PHCs)

O. Reg. 153(511): Table 2 RPI Course Textured Soil

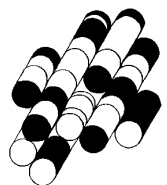
6360 Regional Road, Milton, Ontario

PROJECT NUMBER : 1-22-0209-42

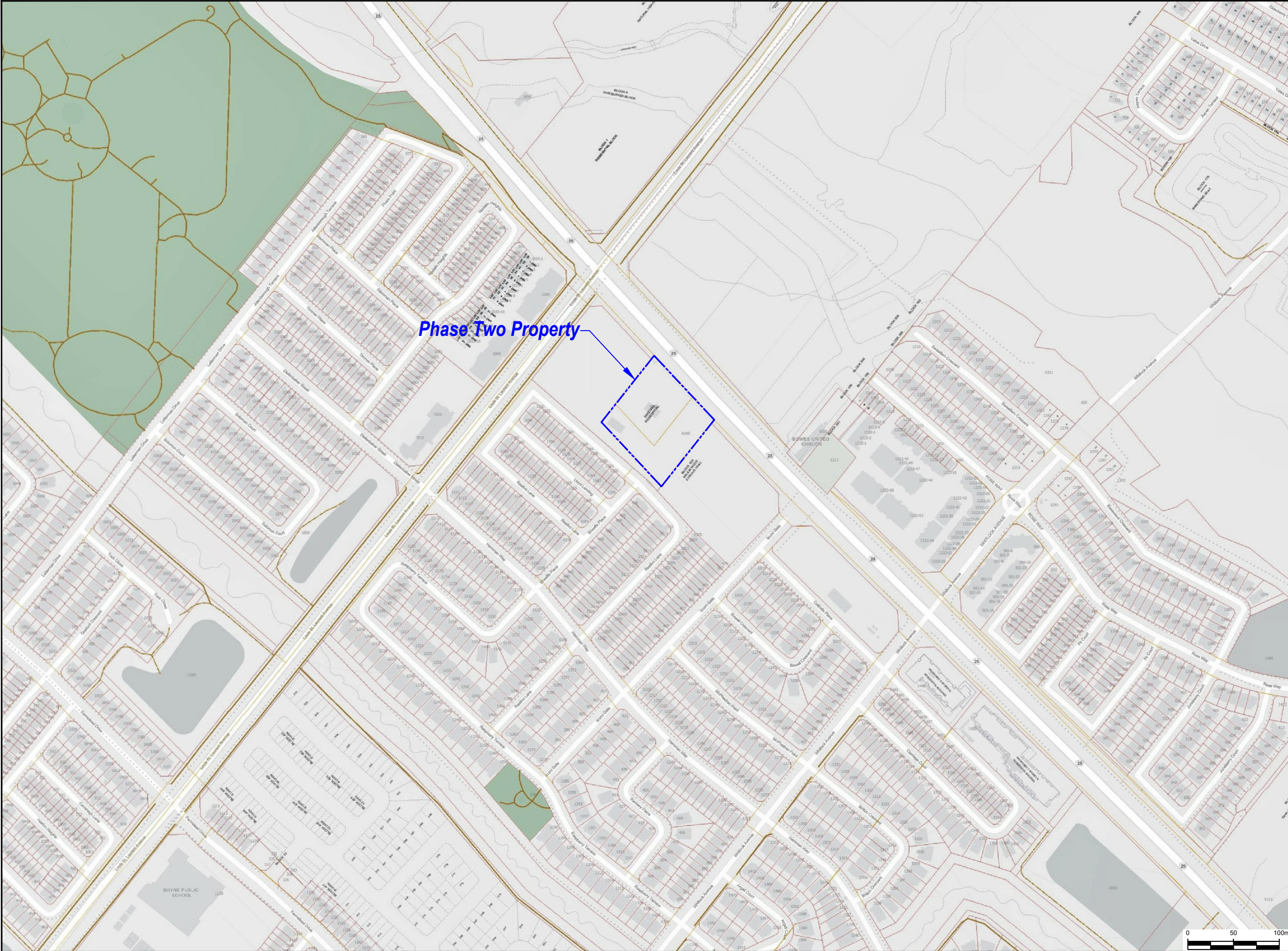
Sample Description		BH 09	BH 10	BH 13	DUP-1	
Date Sampled		07/15/2022	07/15/2022	07/15/2022		
Screen Depth (mbgs)		6.0-9.0	6-9	6-9		
Screen Elevation (masl)		186.5-183.5	186.9-183.9	186.4-183.4		
AGAT Workorder		22T921255	22T921255	22T921255	22T921255	
Parameter Name	ON T2 NPGW MFT	Unit	4100794	4100800	4100801	4100802
1,1,1,2-Tetrachloroethane	1.1	µg/L	<0.10	<0.10	<0.10	<0.10
1,1,1-Trichloroethane	200	µg/L	<0.30	<0.30	<0.30	<0.30
1,1,2,2-Tetrachloroethane	1	µg/L	<0.10	<0.10	<0.10	<0.10
1,1,2-Trichloroethane	4.7	µg/L	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane	5	µg/L	<0.30	<0.30	<0.30	<0.30
1,1-Dichloroethylene	1.6	µg/L	<0.30	<0.30	<0.30	<0.30
1,2-Dichlorobenzene	3	µg/L	<0.10	<0.10	<0.10	<0.10
1,2-Dichloroethane	1.6	µg/L	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane	5	µg/L	<0.20	<0.20	<0.20	<0.20
1,3-Dichlorobenzene	59	µg/L	<0.10	<0.10	<0.10	<0.10
1,3-Dichloropropene	0.5	µg/L	<0.30	<0.30	<0.30	<0.30
1,4-Dichlorobenzene	1	µg/L	<0.10	<0.10	<0.10	<0.10
Acetone	2700	µg/L	<1.0	<1.0	<1.0	<1.0
Benzene	5.0	µg/L	<0.20	<0.20	<0.20	<0.20
Bromodichloromethane	16	µg/L	<0.20	<0.20	<0.20	<0.20
Bromoform	25	µg/L	<0.10	<0.10	<0.10	<0.10
Bromomethane	0.89	µg/L	<0.20	<0.20	<0.20	<0.20
Carbon Tetrachloride	0.79	µg/L	<0.20	<0.20	<0.20	<0.20
Chlorobenzene	30	µg/L	<0.10	<0.10	<0.10	<0.10
Chloroform	2.4	µg/L	<0.20	<0.20	<0.20	<0.20
cis- 1,2-Dichloroethylene	1.6	µg/L	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane	25	µg/L	<0.10	<0.10	<0.10	<0.10
Dichlorodifluoromethane	590	µg/L	<0.40	<0.40	<0.40	<0.40
Ethylbenzene	2.4	µg/L	<0.10	<0.10	<0.10	<0.10
Ethylene Dibromide	0.2	µg/L	<0.10	<0.10	<0.10	<0.10
Methyl Ethyl Ketone	1800	µg/L	<1.0	<1.0	<1.0	<1.0
Methyl Isobutyl Ketone	640	µg/L	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	15	µg/L	<0.20	<0.20	<0.20	<0.20
Methylene Chloride	50	µg/L	<0.30	<0.30	<0.30	<0.30
n-Hexane	51	µg/L	<0.20	<0.20	<0.20	<0.20
Styrene	5.4	µg/L	<0.10	<0.10	<0.10	<0.10
Tetrachloroethylene	1.6	µg/L	<0.20	<0.20	<0.20	<0.20
Toluene	24	µg/L	<0.20	<0.20	<0.20	<0.20
trans- 1,2-Dichloroethylene	1.6	µg/L	<0.20	<0.20	<0.20	<0.20

FIGURES

TERRAPROBE INC.



Designed By:	AQ	File No.:	1-22-0209-42
Drawn By:	AA	Scale:	As Shown
Reviewed By:	MS	Figure No.:	1
Date:	December 2022		



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Reference:
 Milton GIS

Notes:
PCA - Potentially Contaminating Activity
Red PCA Causing APEC
Green PCA Not Causing APEC

Legend:

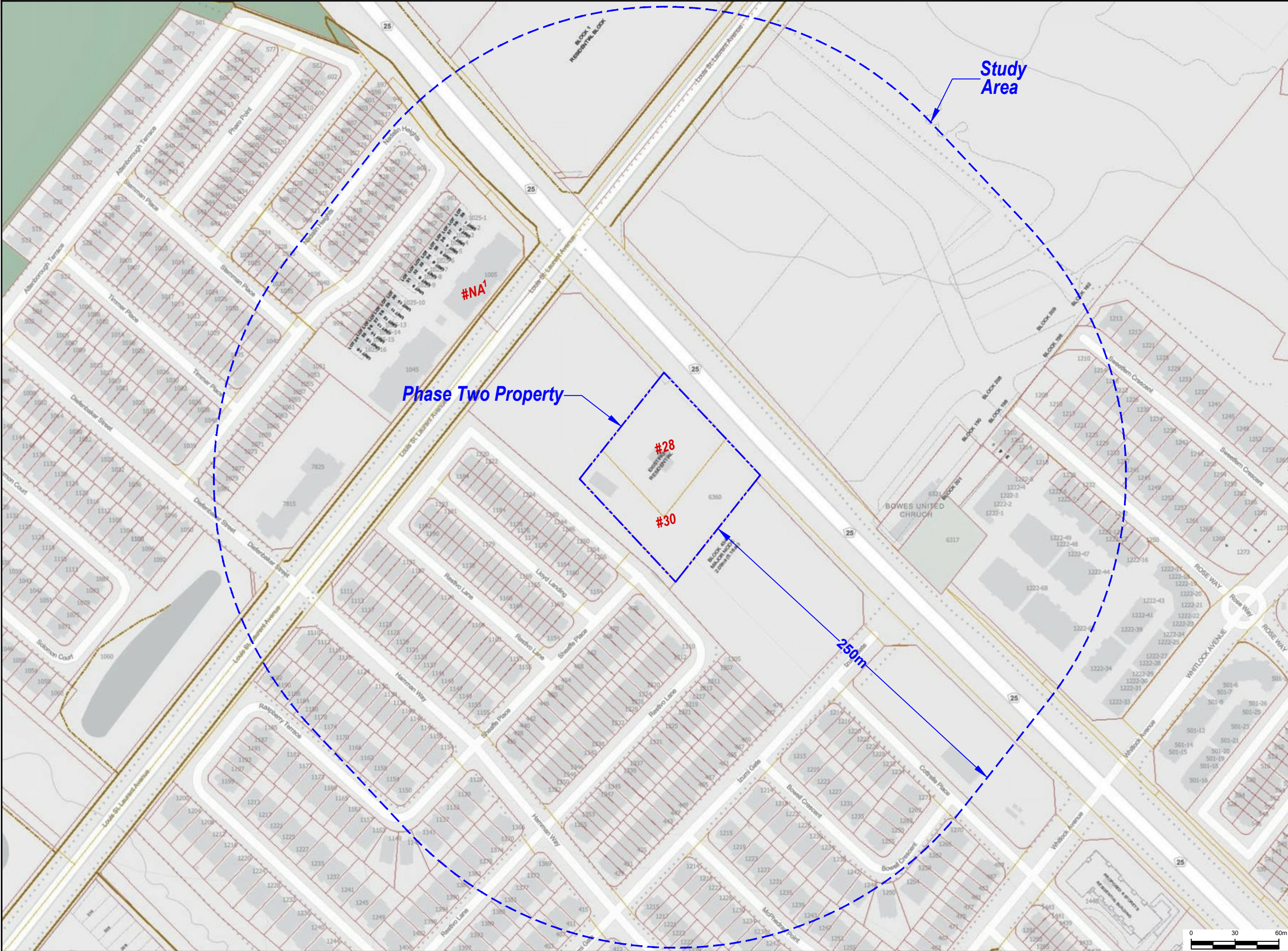
- Phase Two Property Boundary
- Phase Two Study Area, 250m
- #28 Gasoline and Associated Products Storage in Fixed Tanks
- #30 Importation of Fill Material of Unknown Quality
- #NA¹ O.Reg 347 Waste Receiver (PCB Storage Site)

Project Title:
 Phase Two Environmental Site Assessment

Site Location:
 6360 Regional Road 25, Milton, Ontario

Figure Title:
 PCA Locations

Designed By:	AQ	File No.:	1-22-0209-42
Drawn By:	AA	Scale:	As Shown
Reviewed By:	MS	Figure No.:	2
Date:	December 2022		



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Notes:
 APEC - Area of Potential Environmental Concern

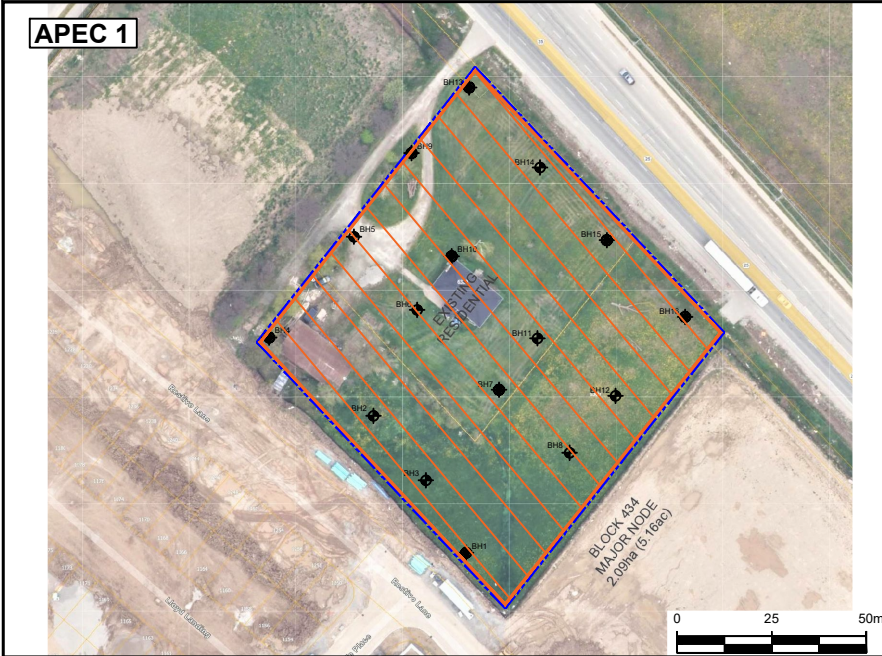
- Legend:
- Phase Two Property Boundary
 - APEC 1
 - APEC 2
 - APEC 3
 - Borehole Location
 - Monitoring Well Location

Project Title:
 Phase Two Environmental Site Assessment

Site Location:
 6360 Regional Road 25, Milton, Ontario

Figure Title:
 APEC Locations and Borehole/Monitoring Well Locations

Designed By:	AQ	File No.:	1-22-0209-42
Drawn By:	AA	Scale:	As Shown
Reviewed By:	MS	Figure No.:	3
Date:	December 2022		



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Legend:

- Phase Two Property Boundary
- Borehole Location
- Monitoring Well Location
- Ground Water Elevation(masl), July 14, 2022
- Ground Water Flow Direction(Southeast)
- Contour Lines

Project Title:
 Phase Two Environmental Site Assessment

Site Location:
 6360 Regional Road 25, Milton, Ontario

Figure Title:
 Groundwater Elevations, Contours & Flow Direction

Designed By:	AQ	File No.:	1-22-0209-42
Drawn By:	AA	Scale:	As Shown
Reviewed By:	MS	Figure No.:	4
Date:	December 2022		



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Reference:
 Milton GIS

Notes:

Legend:

- - - Phase Two Property Boundary
- Borehole Location
- Monitoring Well Location
- Cross Section Locations

Project Title:
 Phase Two Environmental Site Assessment

Site Location:
 6360 Regional Road 25, Milton, Ontario

Figure Title:
 Borehole/Monitoring Well and
 Cross-Section Location Plan

Designed By:	AQ	File No.:	1-22-0209-42
Drawn By:	AA	Scale:	As Shown
Reviewed By:	MS	Figure No.:	5
Date:	December 2022		












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Reference:

Notes:

Legend:

-  Phase Two Property Boundary
-  Fill
-  Clayey Silt
-  Sandy Silt to Sand and Silt
-  Monitoring Well Screen
-  Groundwater Level (mas), July 14, 2022
-  Sample Exceeds MECP Table 3 Standards
-  Sample Meets MECP Table 3 Standards
-  Approximate Extent of Impact

Project Title:

Phase Two Environmental Site Assessment

Site Location:

6360 Regional Road 25, Milton, Ontario

Figure Title:

Cross Section A-A'

Designed By:

AQ

File No.:

1-22-0209-42

Drawn By:

AA

Scale:

As Shown

Reviewed By:

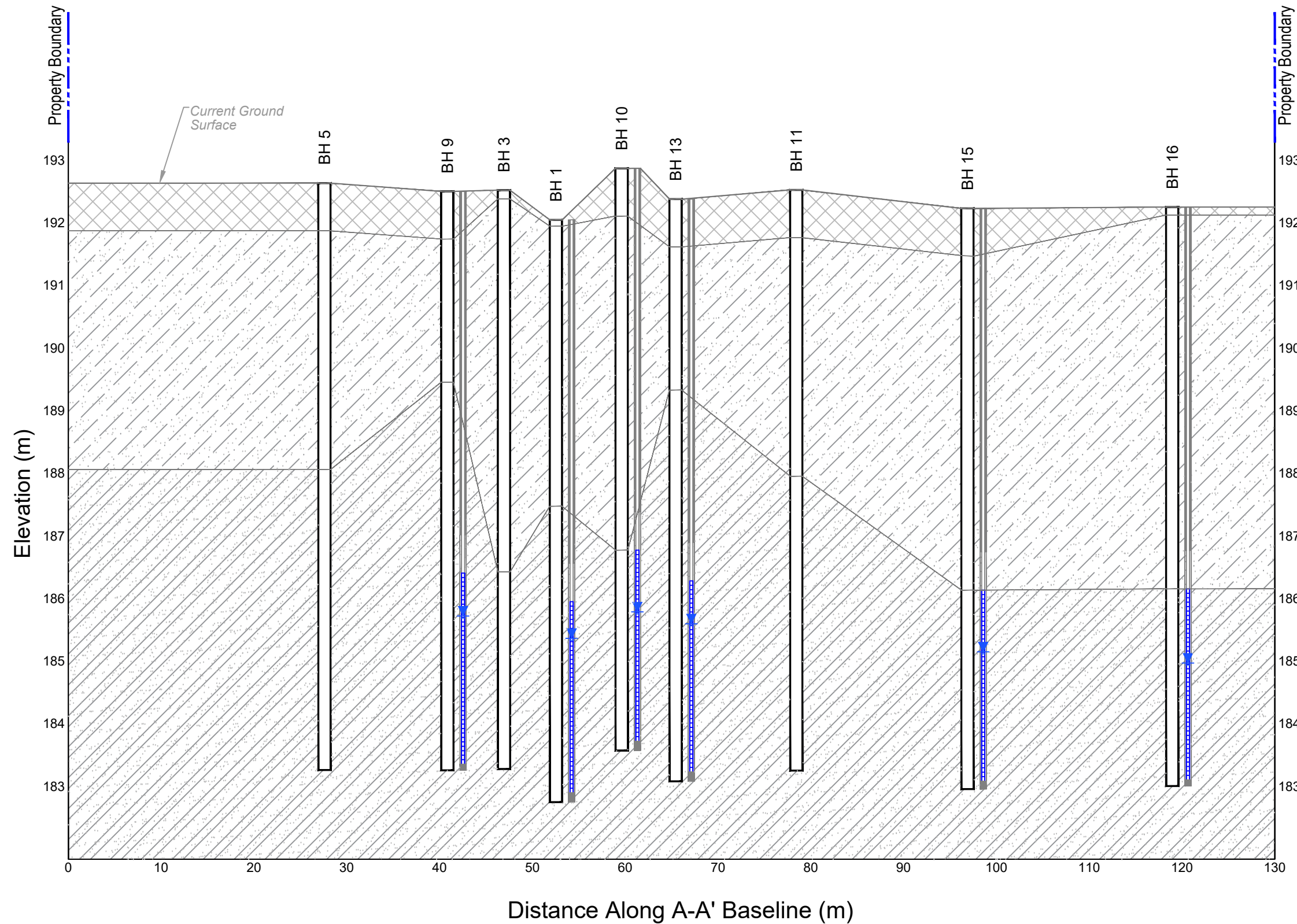
MS

Figure No.:

6

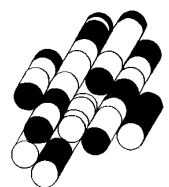
Date:

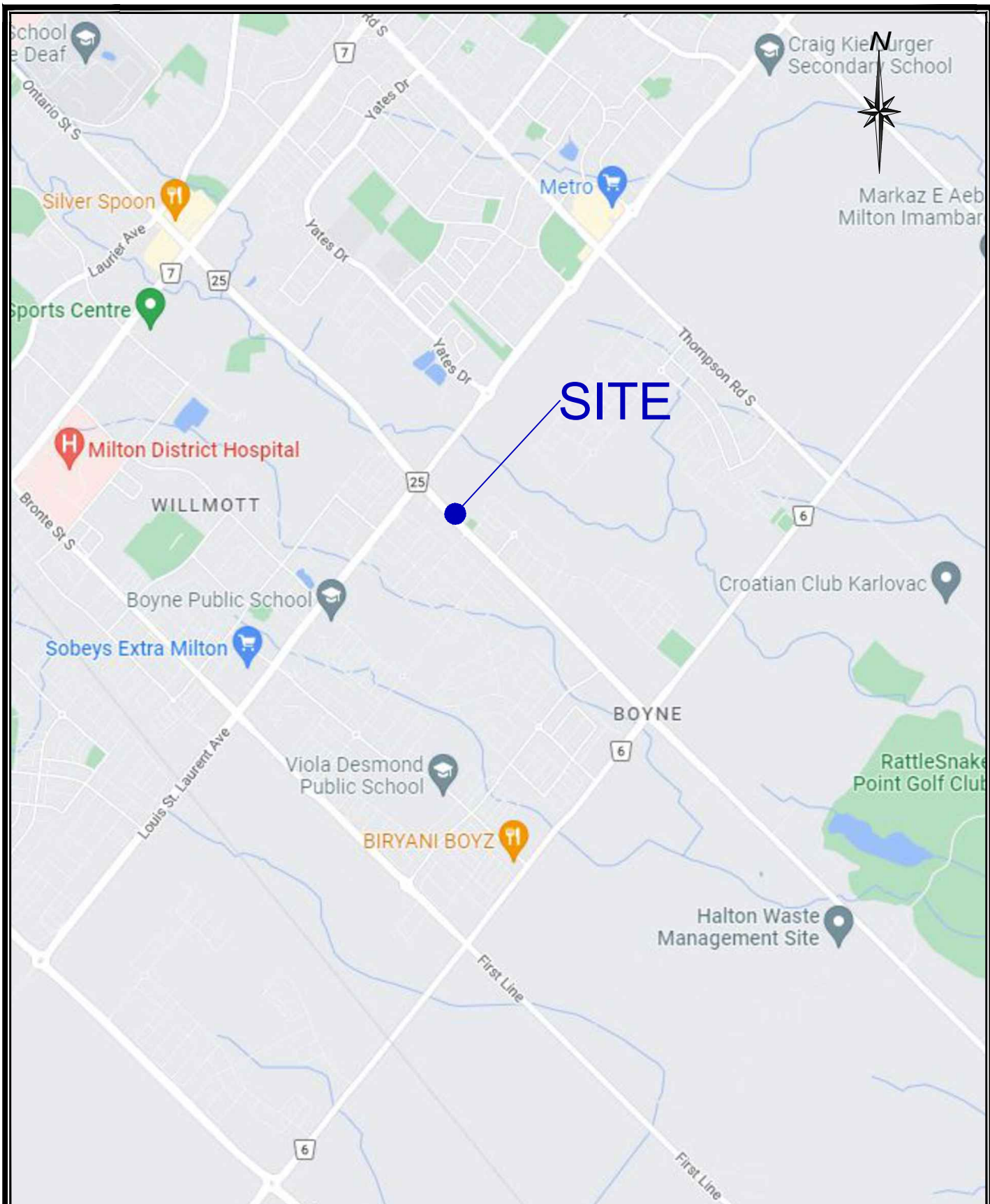
December 2022



APPENDIX A

TERRAPROBE INC.





REFERENCE
Image © 2022 Google

32 0 80m
SCALE



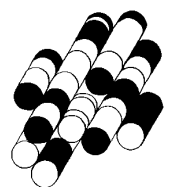
Terraprobe
11 Indell Lane, Brampton, Ontario, L6T 3Y3
Tel: (905) 796-2650 Fax: (905) 796-2250

Title: **SITE LOCATION PLAN**
File No.: 1-22-0209-01

FIGURE:
1

5 DD9 B8 ± '6

TERRAPROBE INC.



Soil Sampling Plan & Summary

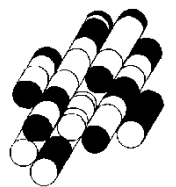
Borehole	Sample	Analytical Groups											
		M&I	EC / SAR	PCBs	pH	PHCs	BTEX	Duplicates					
								M&I	EC / SAR	PCBs	pH	PHCs	BTEX
1	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---
3	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---
	SS5	---	---	---	✓	---	---	---	---	---	---	---	---
6	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---
	SS6	---	---	---	✓	---	---	---	---	---	---	---	---
9	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---
	SS5	---	---	---	---	✓	✓	---	---	---	---	---	---
	SS7	---	---	✓	---	---	---	---	---	---	---	---	---
10	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---
	SS2	---	---	---	---	✓	✓	---	---	---	---	---	---
	SS5	---	---	---	✓	---	---	---	---	---	✓	---	---
	SS6	---	---	---	---	✓	✓	---	---	---	---	---	---
11	SS1	✓	✓	---	---	---	---	✓	✓	---	---	---	---
13	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---
	SS8	---	---	✓	---	✓	✓	---	---	✓	---	✓	✓
15	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---
	SS4	---	---	---	✓	---	---	---	---	---	---	---	---
16	SS1	✓	✓	---	---	---	---	---	---	---	---	---	---

Groundwater Sampling Plan & Summary

Borehole	Analytical Groups											
	M&I	PAHs	PCBs	PHCs	VOCs	BTEX	Duplicates					
							M&I	PAHs	PCBs	PHCs	VOCs	BTEX
9	---	---	✓	✓	✓	✓	---	---	---	---	---	---
10	---	---	✓	✓	✓	✓	---	---	---	---	---	---
13	---	---	✓	✓	✓	✓	---	---	✓	✓	✓	✓

APPENDIX C

TERRAPROBE INC



SUMMARY OF FIELD INVESTIGATION PROTOCOL

1. Drilling and Soil Sampling Procedures

Drilling and sampling of overburden materials are generally conducted using a mobile power auger. During augering operations, soil samples are recovered using a standard 50 mm diameter split-spoon sampling device. The sampler is generally advanced by a drop hammer to obtain standard penetration values (N values) for assessment of soil consistency.

In some instances, soil samples are obtained by directly pushing a sampling device into the soil using specialized drilling equipment.

Soil samples obtained from the split-spoon are examined in the field by qualified engineering staff. The soil is classified according to: grain size distribution, texture, colour, odour, moisture content, and other pertinent details. Field borehole logs are prepared and notes are made regarding visual or olfactory evidence of potential contamination of soil materials.

Following logging, all samples are placed into laboratory-cleaned 500 mL glass jars, with foil-lined lids. The samples are transported to Terraprobe's laboratory for detailed inspection by the site engineer. Where samples are collected for analysis of volatile organic compounds, they are placed into laboratory-cleaned, 50 mL glass septum jars with Teflon-lined caps. Following review by the project engineer, samples are forwarded to a CAEAL-certified laboratory for analysis.

During the drilling procedure, no lubricants are used on any of the drilling and sampling equipment in order to ensure there is no contamination with hydrocarbon-based or other lubricating materials.

If significant contamination of the soil or ground water is expected, then drill cuttings are placed into 205 L steel drums stored on the site. The drill cuttings and water are later characterized for proper off-site disposal, where necessary.

The sample collection and preservation techniques follow the general requirements of *Table 5.2(d), Required Container Preservation Techniques and Maximum Handling Times for Water Samples*, and from *MOE Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario* (May 1996).

Chain of custody forms are filled out for all samples which are shipped to commercial laboratories. The chain of custody forms are provided by the laboratory and include the following information:

1. Terraprobe's project number
2. Sample number and locations
3. Name of party shipping the samples to the laboratory
4. Required scope of analysis
5. Date of submission
6. Date of receipt by the laboratory
7. Any special notes or items of clarification appropriate to the project

2. Test Pit Excavation and Sampling

Test pits are generally excavated using a hydraulic backhoe of appropriate size and capacity depending on test pit depth and soil consistency. The test pit operations are carried out under the full-time supervision of Terraprobe engineering staff. During excavation, the test pits are logged based on the exposed soil and ground water profile. Soil samples are generally recovered from each soil strata noted during the investigation. Depending on the depth of the test pit, samples are obtained either by a spade or shovel from the side wall, or directly from the backhoe bucket.

In all cases, operations are carried out in strict accordance with the requirements of the Occupational Health and Safety Act. Personnel are not permitted to enter unsupported test pits with depths in excess of 1.2 m below prevailing grade.

3. Equipment Clean-up

All drilling equipment is cleaned by the contractor prior to beginning each project. This includes augers, drill rods, sampling spoons, and the like.

In the event that significant contamination is expected or noted during drilling, then the drilling equipment is also cleaned between each borehole location. The cleaning is conducted using high pressure washing equipment and a phosphate detergent. A decontamination pad or cleaning area is set up well away from the general work area.

All sampling equipment used during the investigation is cleaned between collection of each sample. This includes split-spoon equipment, shovels, trowels, and any other sampling equipment. Sampling equipment is cleaned as follows:

- All sampling equipment is wiped to remove excess soil material.
- Equipment is rinsed in municipal water.
- Equipment is further rinsed with distilled water.
- In the event of significant organic contamination (such as hydrocarbons), the material is rinsed with detergent and/or methanol to remove materials.
- A final rinse with distilled water is carried out prior to utilizing the sampling equipment.

4. Soil Gas Monitoring

Soil gas monitoring is conducted to assess the potential presence of volatile organic compounds in soil materials. The monitoring is conducted by obtaining headspace measurements from soil samples. Headspace measurement is conducted by placing the tip of a photo-ionization detector or flame ionization detector through an aluminum foil cover placed over the 500 mL sample jars. Alternatively, samples may be placed into polyethylene sampling bags and vapour analysis can be conducted through the wall of the sampling bag.

When the ambient air temperature is less than 10°C, samples are generally transported to Terraprobe's laboratory and allowed to remain in sealed containers until reaching room temperature. Vapour analysis is then conducted at room temperature.

All testing equipment is calibrated each day prior to conducting soil vapour measurements. Measurements are generally taken with respect to equivalent hexane concentration (concentration of parts per million), or in relation to the lower explosive limit of hexane. Where appropriate, the results are converted to represent concentrations of other gases such as methane.

The results of vapour monitoring are generally utilized to provide guidance for the selection of samples for later chemical analysis. They may also be used in assessing the presence of volatile organic compounds for the siting of monitoring wells.

5. Monitoring Well Installation

Monitoring wells are generally constructed using new, pre-packaged 50 mm diameter Schedule 40 PVC pipe and screens. The screen length and opening are dependent on the project requirements.

All wells are constructed using threaded joints without glues or solvents.

A silica sand pack is placed around the well screen and typically to a height of approximately 500 mm above the top of the well screen. A well seal, consisting of bentonite clay or cementitious bentonite grout, is then placed to a thickness of at least 1 m above the sand zone. The remainder of the hole is then filled to surface with an appropriate grout material or drill cuttings.

A locking security cap is fitted in areas which may be subject to vandalism or tampering of the well installation.

Specialized drilling procedures and monitoring well installation procedures are used where aquifer zones may be penetrated. All drilling is conducted in accordance with the general requirements of Regulation 903 to ensure that there is no cross-contamination or cross flow between aquifer zones.

6. Ground Water Sampling and Water Level Measurement

Water level measurements are conducted using an electronic water level finder. The water level finder is cleaned with distilled water, detergent, and where appropriate, methanol, prior to insertion into each well.

Measurements of non-aqueous phase liquids are conducted using specialized monitoring equipment which detects the presence of both the water column and non-aqueous phase liquids.

All measurements in the field are taken relative to a fixed point, which is generally the top of the well casing or top of the well protective cap. These are later referenced to appropriate elevations or ground surface.

Ground water sampling is conducted following proper development of the well. Wells are generally developed using a dedicated Waterra inertial pump. The wells are developed by removing a minimum of three casing volumes of water, or by bailing to dryness. Where possible, the wells are developed until clear, sediment-free water is obtained.

Ground water samples are obtained only following well bailing and development, as noted above. Samples are obtained either from a dedicated inertial pump, or a dedicated bailer.

During sampling, measurements are made for selected parameters including pH, conductivity, and temperature.

Samples are collected directly into laboratory-supplied containers. Samples collected for analysis of metals are filtered through a 0.45 micron disposable filter to eliminate suspended solids.

Sample bottles are stored in an insulated cooler to protect from freezing, and to maintain temperatures of less than 10°C.

The sample collection and preservation techniques follow the general requirements of *Table 5.2(d), Required Container Preservation Techniques and Maximum Handling Times for Water Samples*, and from *MOE Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario* (May 1996).

Chain of custody forms are filled out for all samples which are shipped to commercial laboratories. The chain of custody forms are provided by the laboratory and include the following information:

- Terraprobe's project number
- Sample number and locations
- Name of party shipping the samples to the laboratory
- Required scope of analysis
- Date of submission
- Date of receipt by the laboratory
- Any special notes or items of clarification appropriate to the project

7. Sample Quality Assurance and Quality Control

All chemical analysis of soil and ground water samples is carried out only by CAEAL certified laboratories. These laboratories provide internal quality control checks regarding laboratory analytical procedures. This includes the use of sample spikes, surrogate samples, and duplicate analysis.

For each sampling program, one trip blank is included. The trip blank consists of deionized water that is placed in the sample containers provided by the laboratory, and is prepared by the laboratory.

Field duplicate samples are prepared at the rate of approximately one sample per ten soil or ground water samples submitted. The number of duplicate samples depends on site and project-specific requirements. Duplicate samples are provided with a fictitious sample number in order that the laboratory is not aware of the duplicate sample.

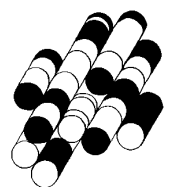
A field blank sample is obtained at the rate of approximately one sample per ten ground water samples submitted. A field blank is obtained by filling the appropriate laboratory containers with the deionized water in the field during the sampling procedure.

The results of all laboratory analysis are carefully examined and compared to the results of visual, olfactory, and soil vapour monitoring conducted in the field. Any unusual results or unexpected results are discussed carefully with the field technician and the laboratory. Where appropriate, resampling is conducted to ensure the veracity of all results.

.....

APPENDIX D

TERRAPROBE INC.

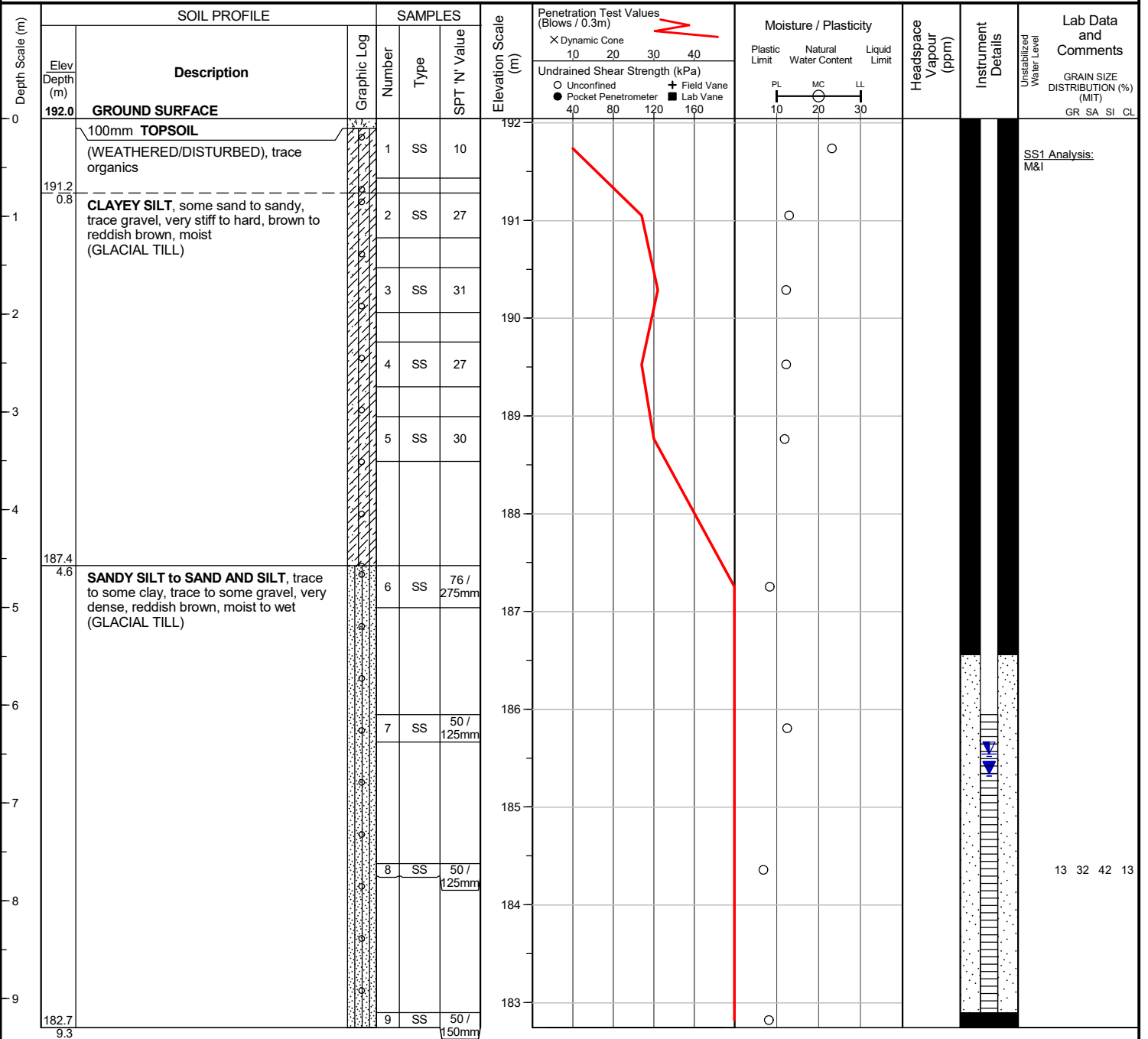


Project No. : 1-22-0209-01
 Date started : June 13, 2022
 Sheet No. : 1 of 1

Client : Thomas Robert Colbeck
 Project : 6360 Regional Road 25
 Location : Milton, Ontario

Originated by : DH
 Compiled by : HR
 Checked by : MMT

Position : E: 593189, N: 4816392 (UTM 17T) Elevation Datum : Geodetic
 Rig type : Track-mounted Drilling Method : Solid stem augers



END OF BOREHOLE

Borehole was dry and open upon completion of drilling.

50 mm dia. monitoring well installed.

WATER LEVEL READINGS

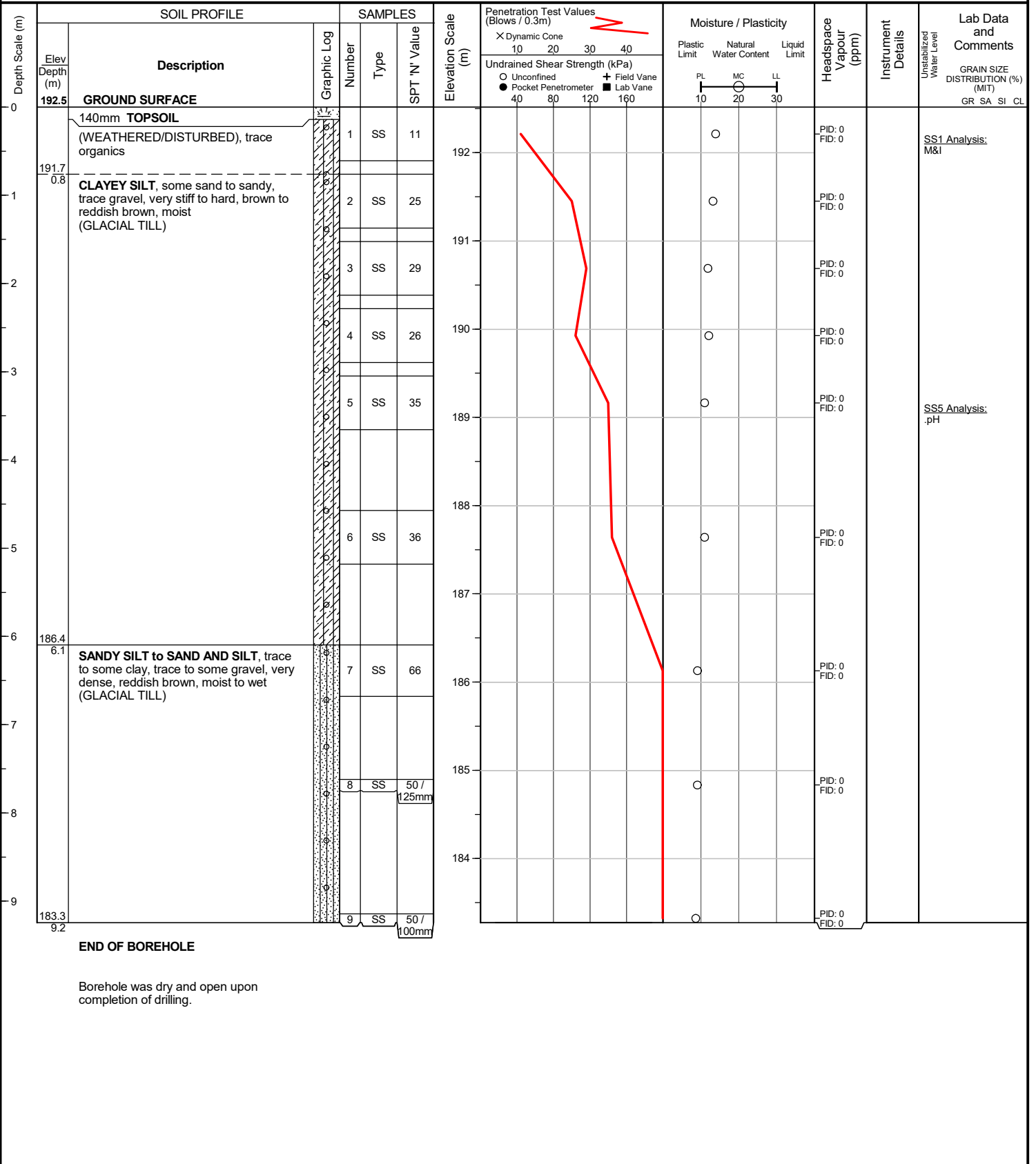
Date	Water Depth (m)	Elevation (m)
Jul 11, 2022	6.5	185.5
Jul 14, 2022	6.7	185.3

Project No. : 1-22-0209-01
 Date started : June 17, 2022
 Sheet No. : 1 of 1

Client : Thomas Robert Colbeck
 Project : 6360 Regional Road 25
 Location : Milton, Ontario

Originated by : DH
 Compiled by : HR
 Checked by : MMT

Position : E: 593178, N: 4816411 (UTM 17T) Elevation Datum : Geodetic
 Rig type : Track-mounted Drilling Method : Solid stem augers

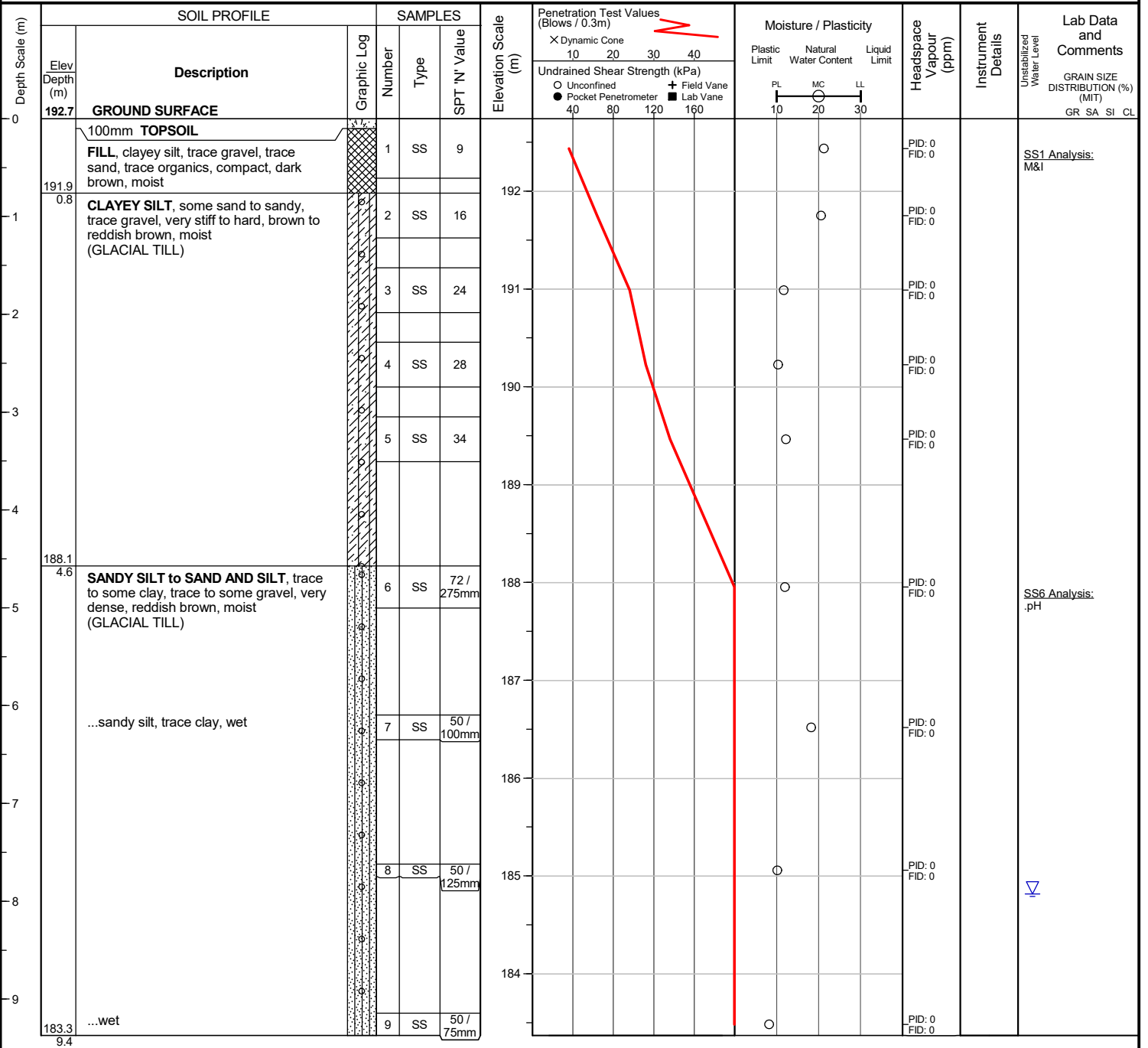


Project No. : 1-22-0209-01
 Date started : June 14, 2022
 Sheet No. : 1 of 1

Client : Thomas Robert Colbeck
 Project : 6360 Regional Road 25
 Location : Milton, Ontario

Originated by : DH
 Compiled by : HR
 Checked by : MMT

Position : E: 593175, N: 4816456 (UTM 17T) Elevation Datum : Geodetic
 Rig type : Track-mounted Drilling Method : Solid stem augers



END OF BOREHOLE

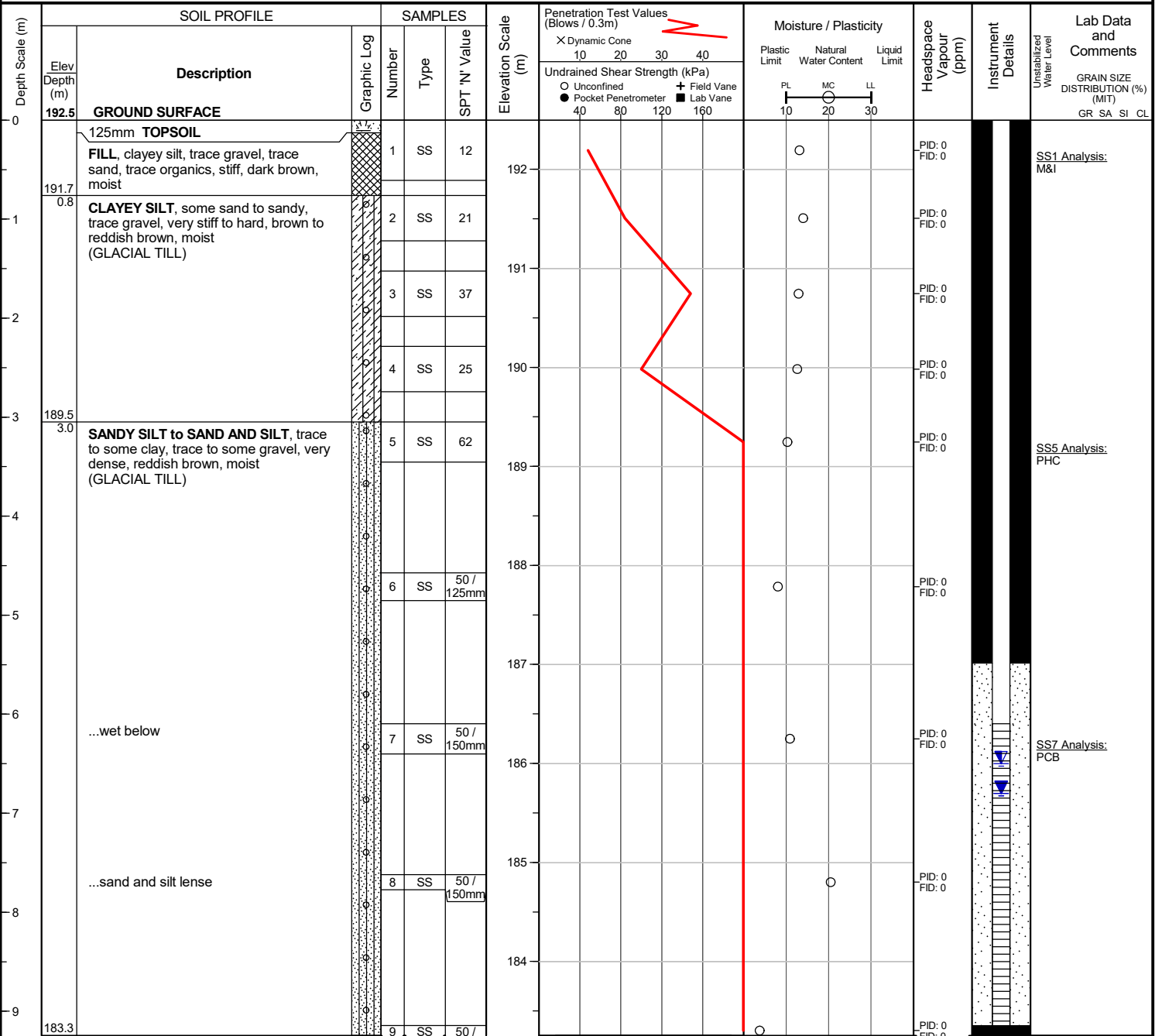
Unstabilized water level measured at 7.9 m below ground surface; borehole caved to 7.9 m below ground surface upon completion of drilling.

Project No. : 1-22-0209-01
 Date started : June 15, 2022
 Sheet No. : 1 of 1

Client : Thomas Robert Colbeck
 Project : 6360 Regional Road 25
 Location : Milton, Ontario

Originated by : DH
 Compiled by : HR
 Checked by : MMT

Position : E: 593172, N: 4816498 (UTM 17T) Elevation Datum : Geodetic
 Rig type : Track-mounted Drilling Method : Solid stem augers



WATER LEVEL READINGS

Date	Water Depth (m)	Elevation (m)
Jul 11, 2022	6.5	186.0
Jul 14, 2022	6.8	185.7

Borehole was dry and open upon completion of drilling.
 50 mm dia. monitoring well installed.

Project No. : 1-22-0209-01

Client : Thomas Robert Colbeck

Originated by : DH

Date started : June 16, 2022

Project : 6360 Regional Road 25

Compiled by : HR

Sheet No. : 1 of 1

Location : Milton, Ontario

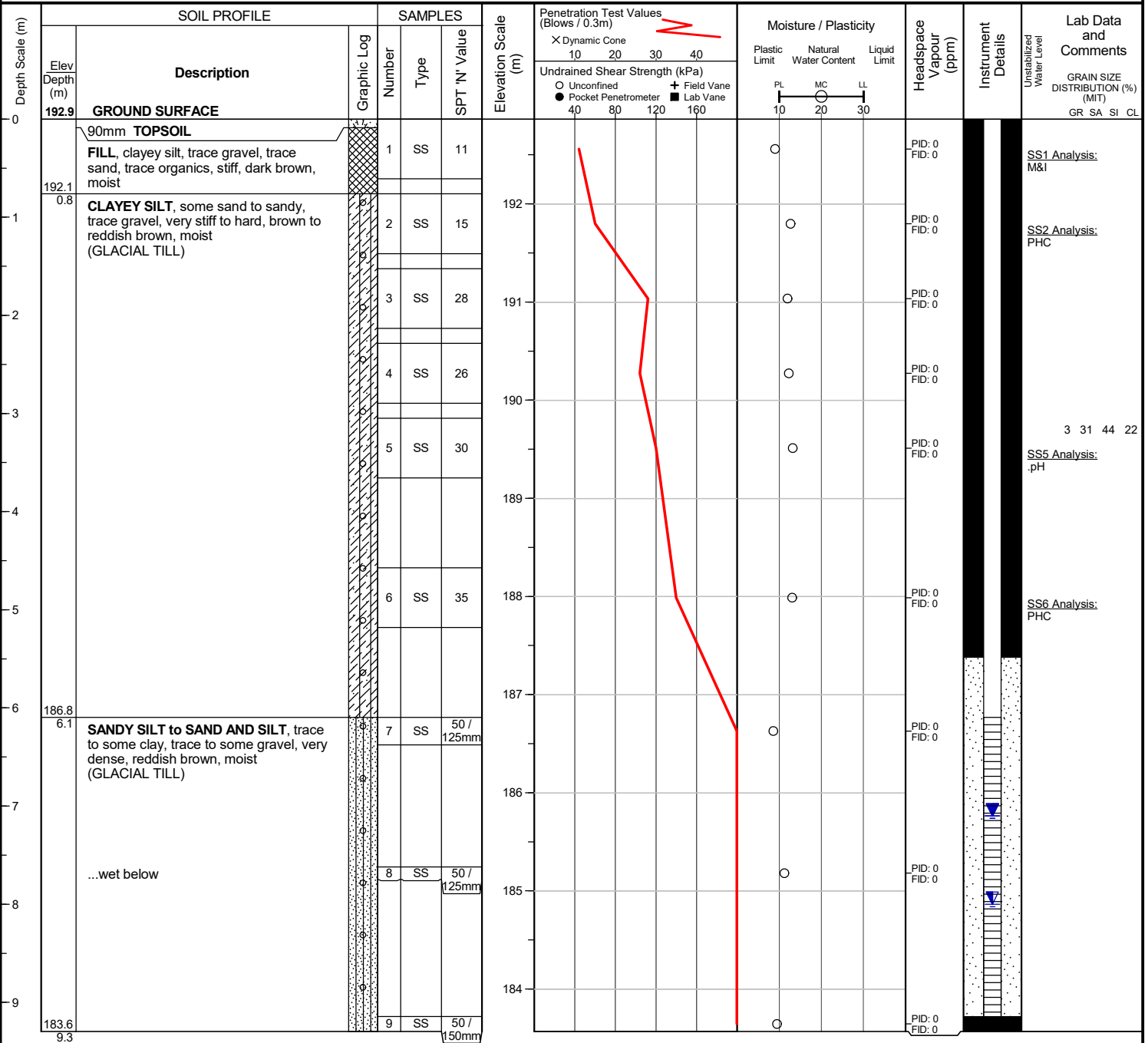
Checked by : MMT

Position : E: 593184, N: 4816470 (UTM 17T)

Elevation Datum : Geodetic

Rig type : Track-mounted

Drilling Method : Solid stem augers



END OF BOREHOLE

Borehole was dry and open upon completion of drilling.

50 mm dia. monitoring well installed.

WATER LEVEL READINGS		
Date	Water Depth (m)	Elevation (m)
Jul 11, 2022	8.0	184.9
Jul 14, 2022	7.1	185.8

Project No. : 1-22-0209-01

Client : Thomas Robert Colbeck

Originated by : DH

Date started : June 15, 2022

Project : 6360 Regional Road 25

Compiled by : HR

Sheet No. : 1 of 1

Location : Milton, Ontario

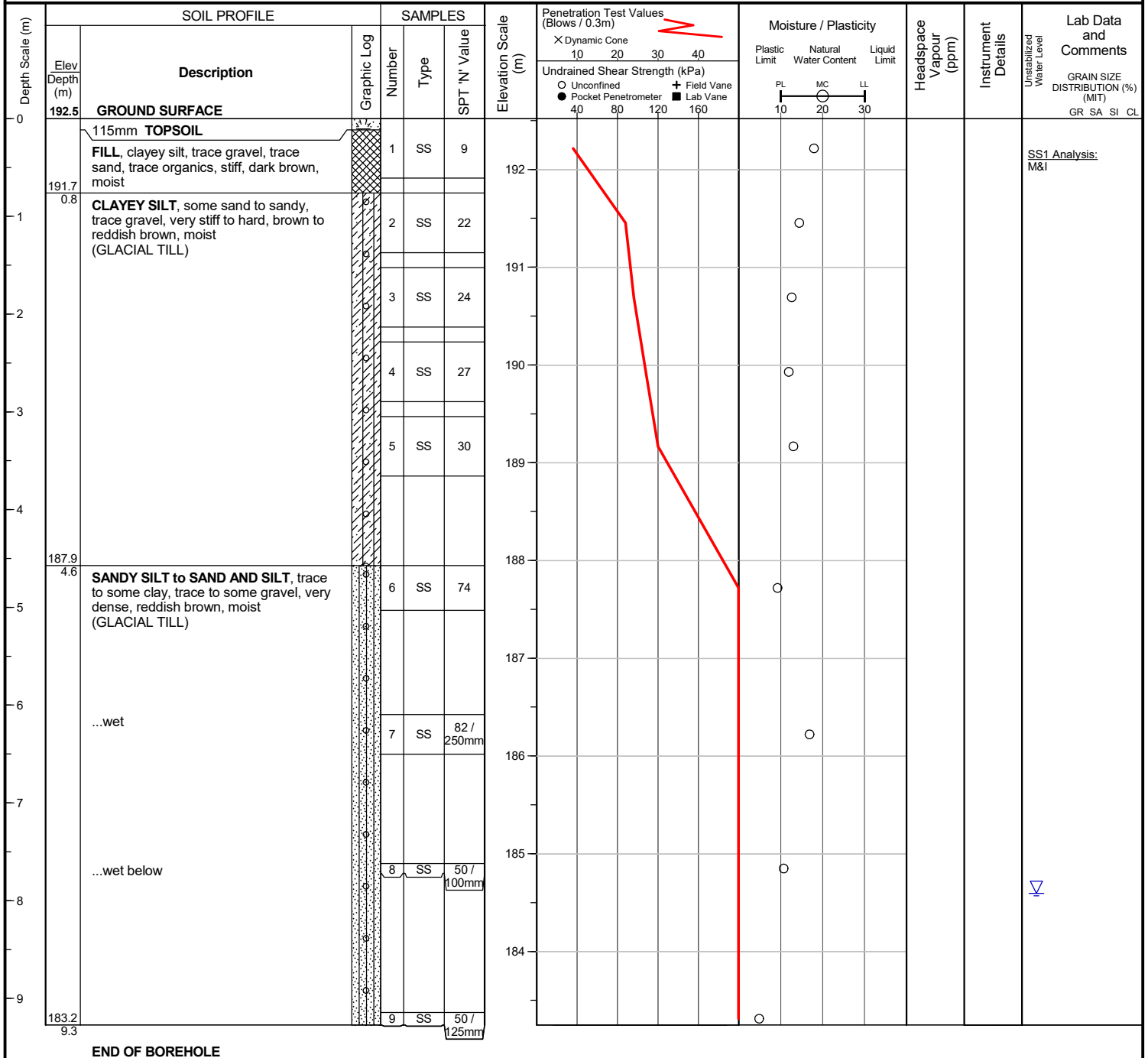
Checked by : MMT

Position : E: 593207, N: 4816449 (UTM 17T)

Elevation Datum : Geodetic

Rig type : Track-mounted

Drilling Method : Solid stem augers



Unstabilized water level measured at 7.9 m below ground surface; borehole caved to 8.8 m below ground surface upon completion of drilling.

Project No. : 1-22-0209-01

Client : Thomas Robert Colbeck

Originated by : DH

Date started : June 16, 2022

Project : 6360 Regional Road 25

Compiled by : HR

Sheet No. : 1 of 1

Location : Milton, Ontario

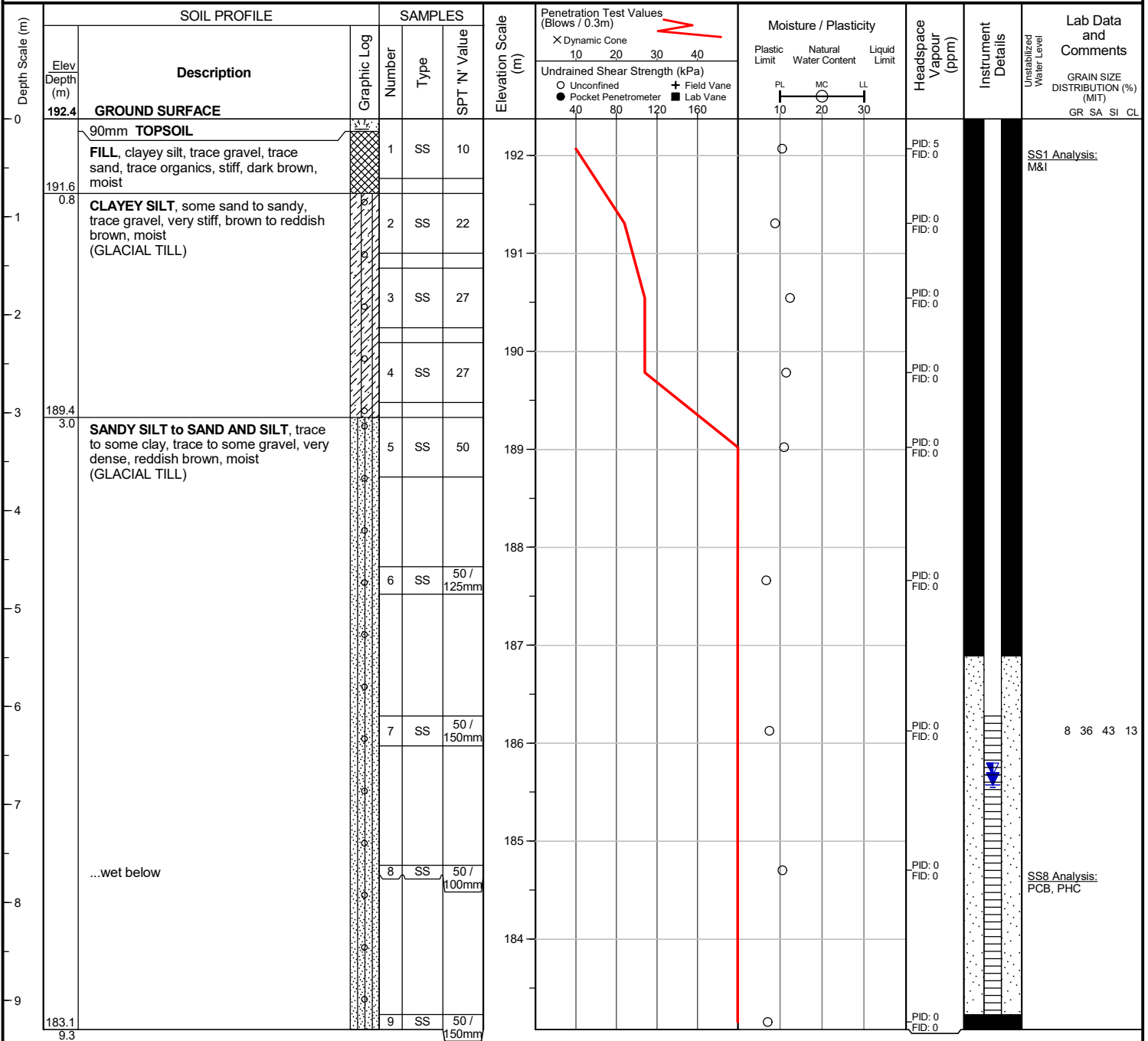
Checked by : MMT

Position : E: 593188, N: 4816515 (UTM 17T)

Elevation Datum : Geodetic

Rig type : Track-mounted

Drilling Method : Solid stem augers


WATER LEVEL READINGS

Date	Water Depth (m)	Elevation (m)
Jul 11, 2022	6.7	185.7
Jul 14, 2022	6.8	185.6

Borehole was dry and open upon completion of drilling.

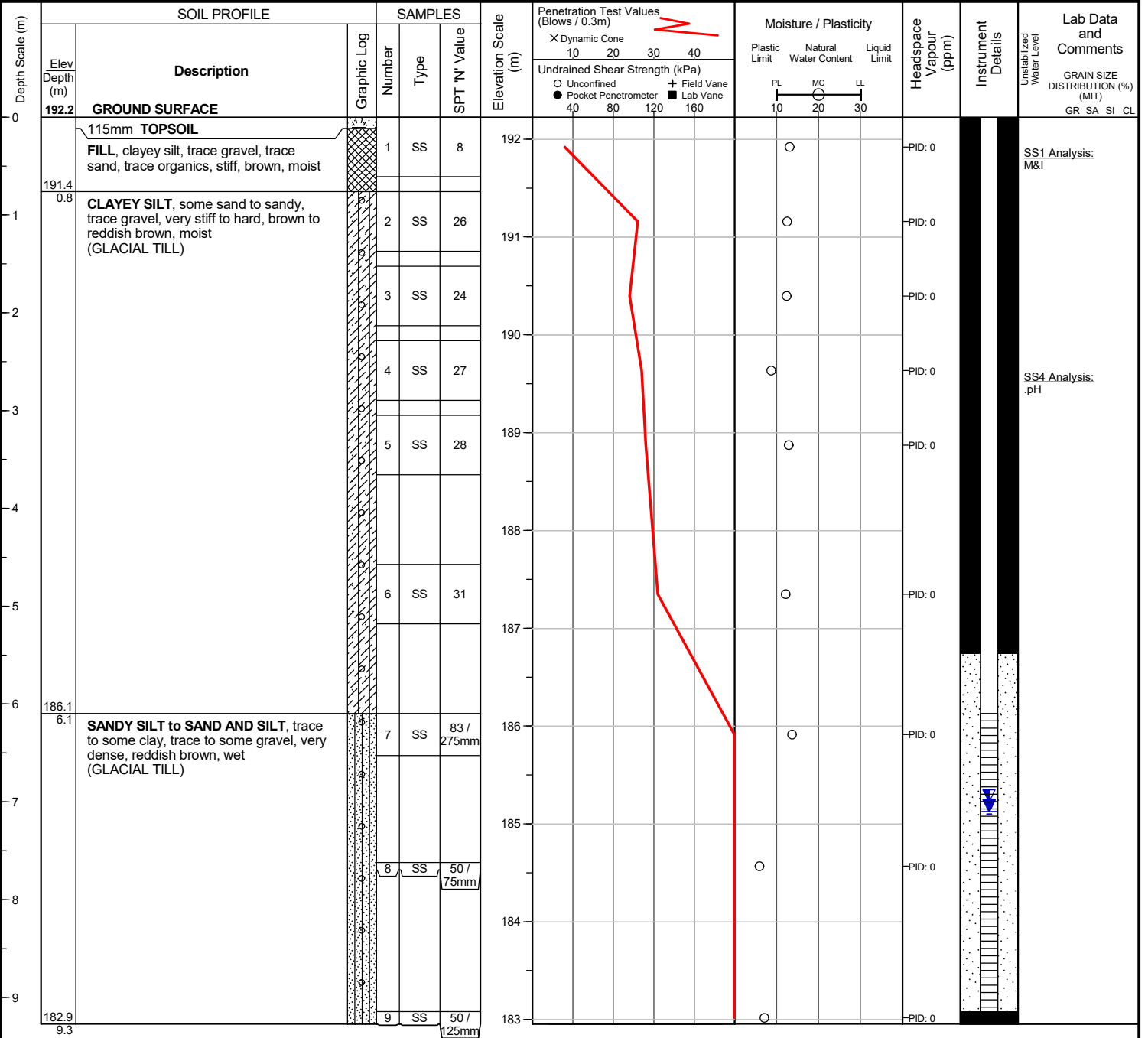
50 mm dia. monitoring well installed.

Project No. : 1-22-0209-01
 Date started : June 16, 2022
 Sheet No. : 1 of 1

Client : Thomas Robert Colbeck
 Project : 6360 Regional Road 25
 Location : Milton, Ontario

Originated by : DH
 Compiled by : HR
 Checked by : MMT

Position : E: 593225, N: 4816475 (UTM 17T) Elevation Datum : Geodetic
 Rig type : Track-mounted Drilling Method : Solid stem augers



WATER LEVEL READINGS

Date	Water Depth (m)	Elevation (m)
Jul 11, 2022	7.0	185.2
Jul 14, 2022	7.1	185.1

Borehole was dry and open upon completion of drilling.

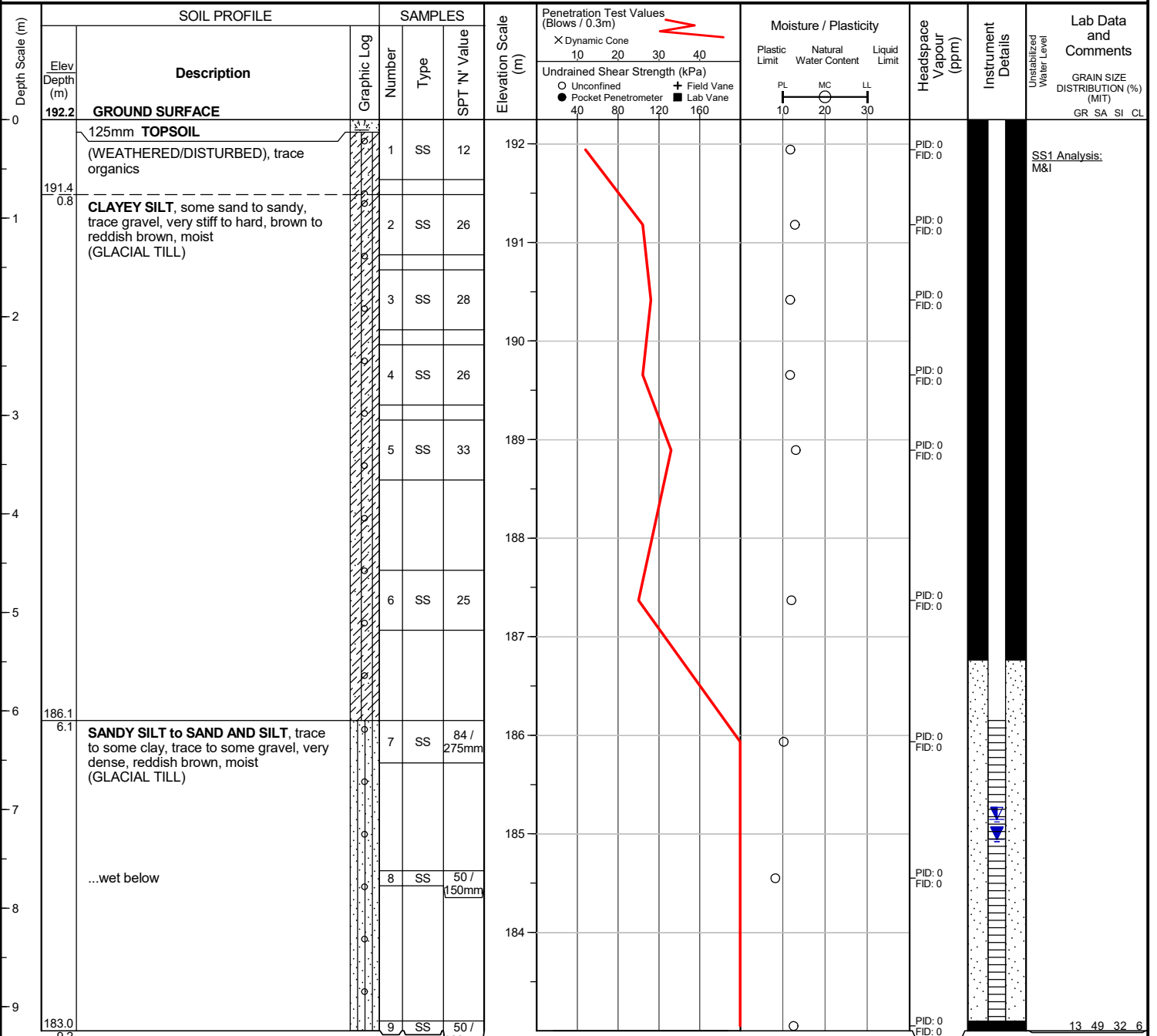
50 mm dia. monitoring well installed.

Project No. : 1-22-0209-01
 Date started : June 15, 2022
 Sheet No. : 1 of 1

Client : Thomas Robert Colbeck
 Project : 6360 Regional Road 25
 Location : Milton, Ontario

Originated by : DH
 Compiled by : HR
 Checked by : MMT

Position : E: 593246, N: 4816455 (UTM 17T) Elevation Datum : Geodetic
 Rig type : Track-mounted Drilling Method : Solid stem augers



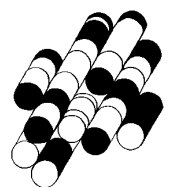
WATER LEVEL READINGS

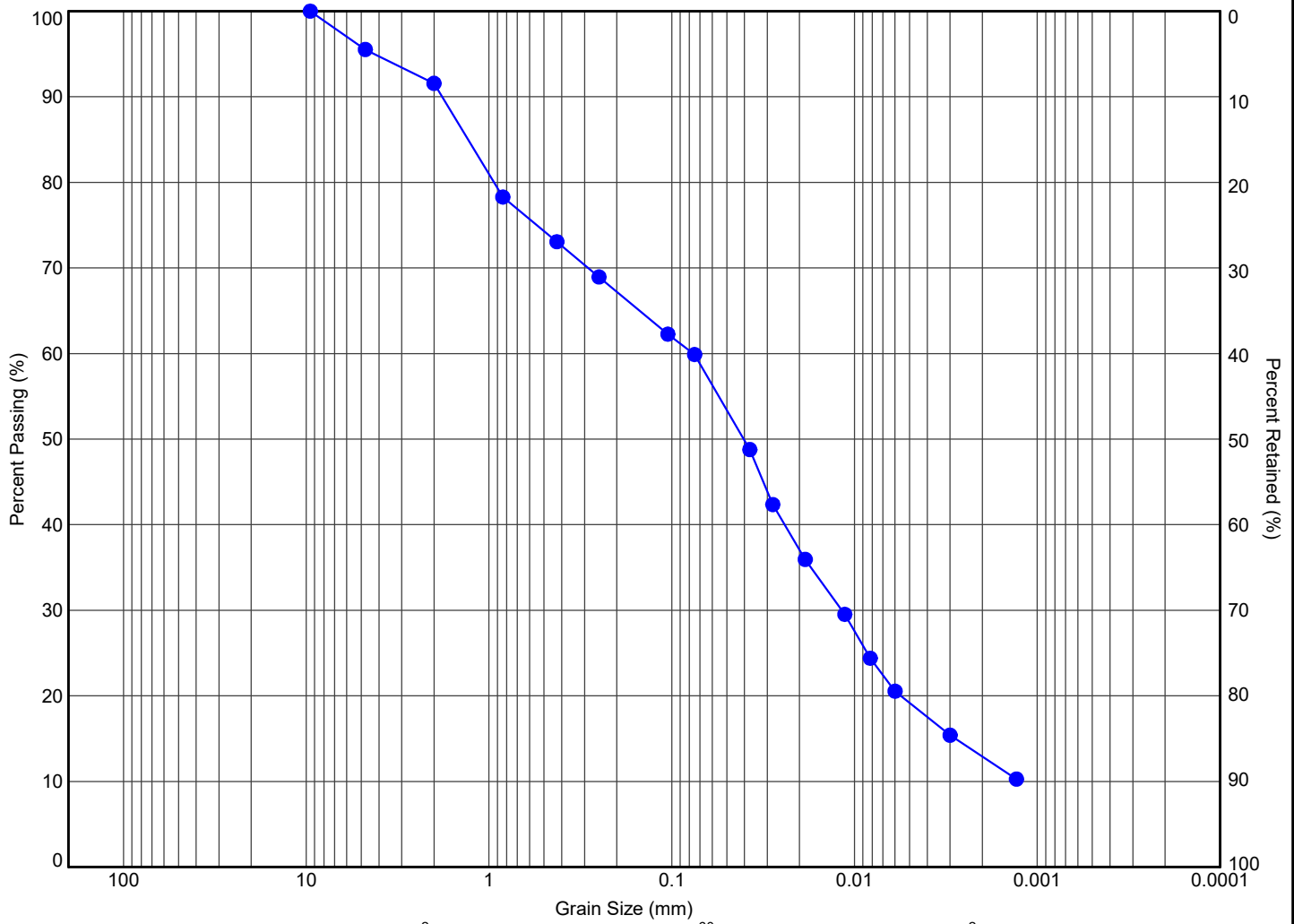
Date	Water Depth (m)	Elevation (m)
Jul 11, 2022	7.1	185.1
Jul 14, 2022	7.3	184.9

Borehole was dry and open upon completion of drilling.
 50 mm dia. monitoring well installed.

5 DD9 B8 ± '9

TERRAPROBE INC.





MIT SYSTEM	COBBLES	GRAVEL			SAND			SILT	CLAY
		COARSE	MEDIUM	FINE	COARSE	MEDIUM	FINE		

MIT SYSTEM									
Hole ID	Sample	Depth (m)	Elev. (m)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	(Fines, %)	
● 13	SS7	6.2	186.1	8	36	43	13		



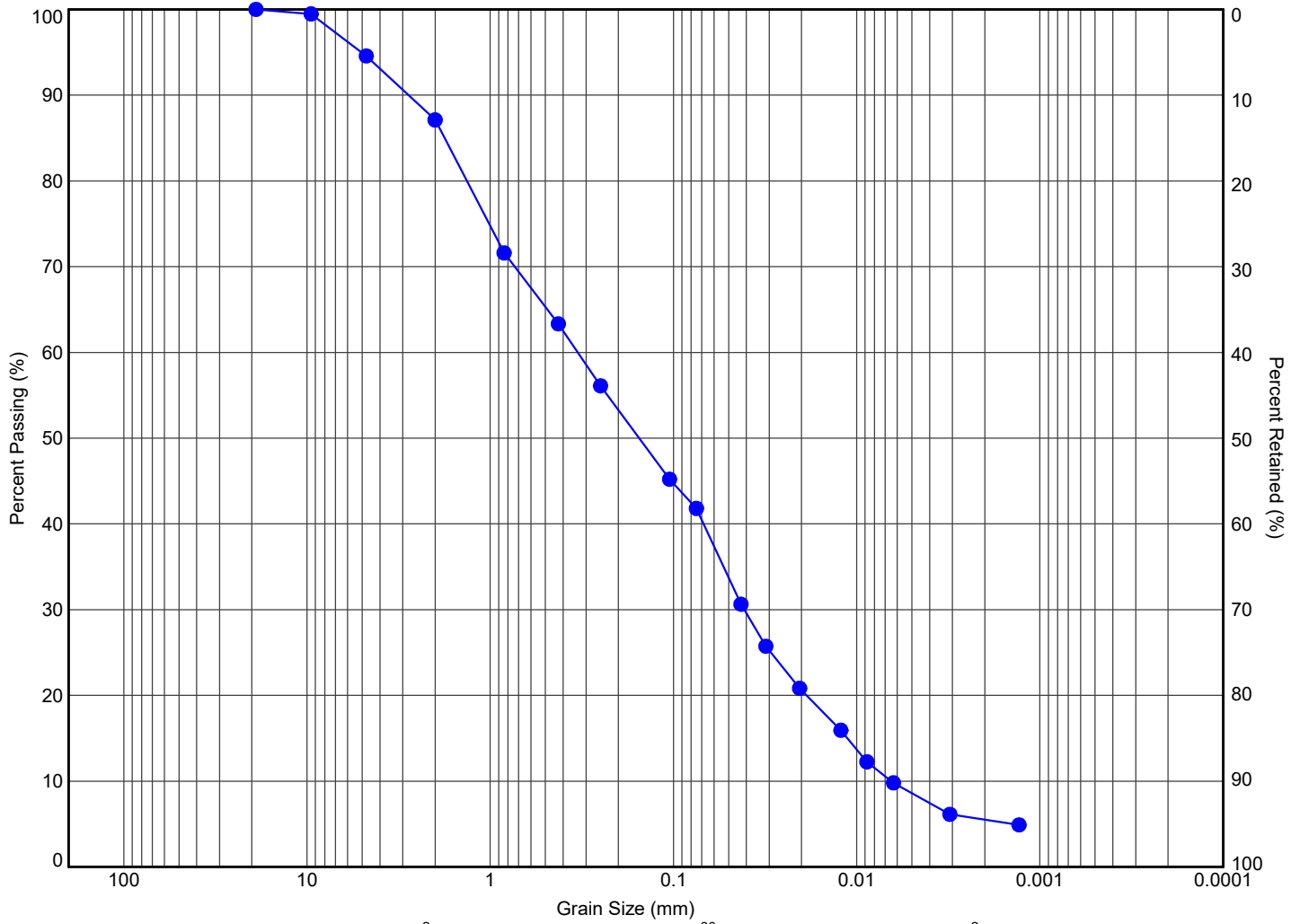
11 Indell Lane, Brampton Ontario L6T 3Y3
(905) 796-2650

Title:

**GRAIN SIZE DISTRIBUTION
SAND AND SILT, SOME CLAY, TRACE GRAVEL**

File No.:

1-22-0209-01



MIT SYSTEM	COBBLES	GRAVEL			SAND			SILT	CLAY
		COARSE	MEDIUM	FINE	COARSE	MEDIUM	FINE		

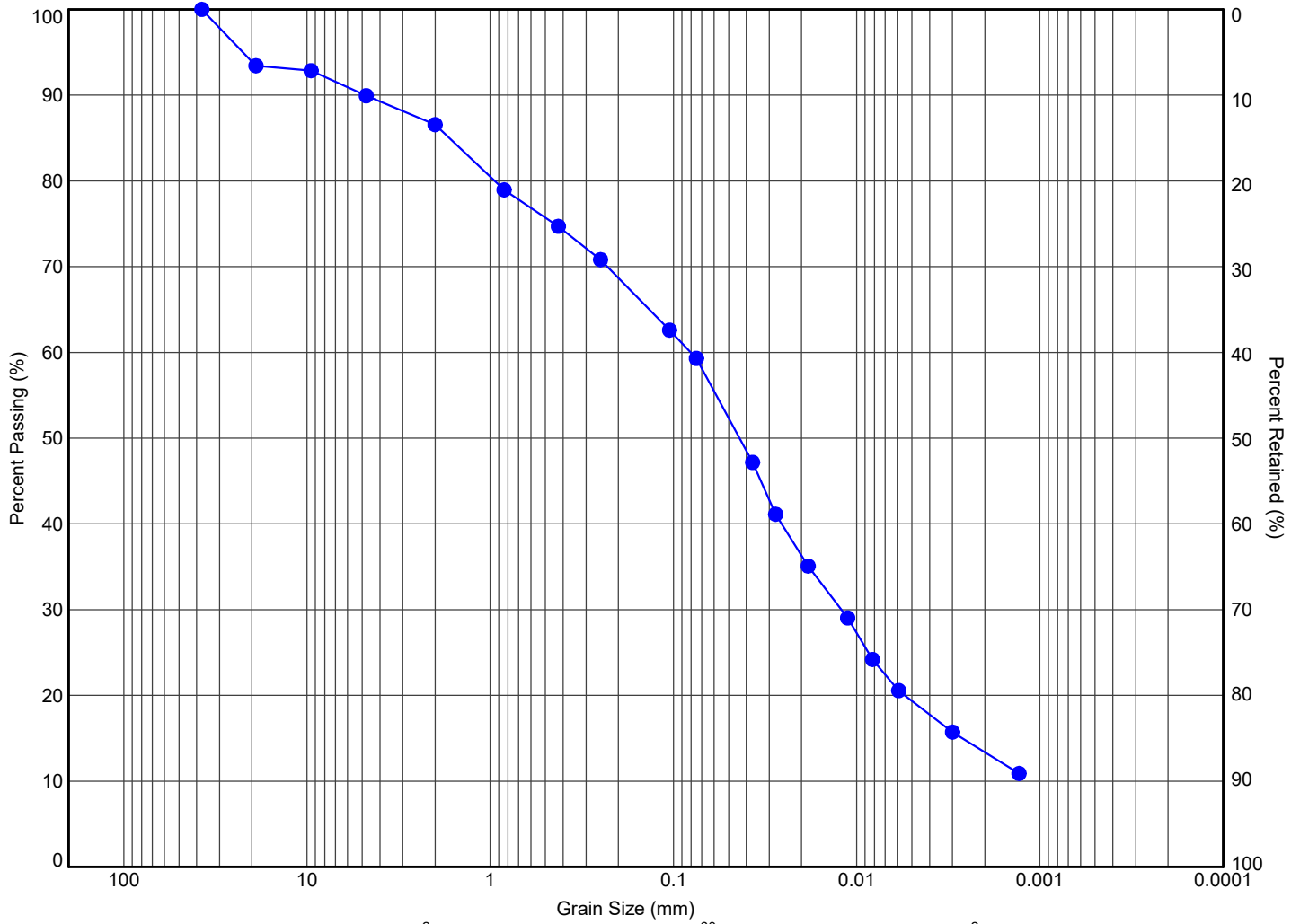
MIT SYSTEM									
Hole ID	Sample	Depth (m)	Elev. (m)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	(Fines, %)	
● 16	SS9	9.2	183.1	13	49	32	6		



11 Indell Lane, Brampton Ontario L6T 3Y3
(905) 796-2650

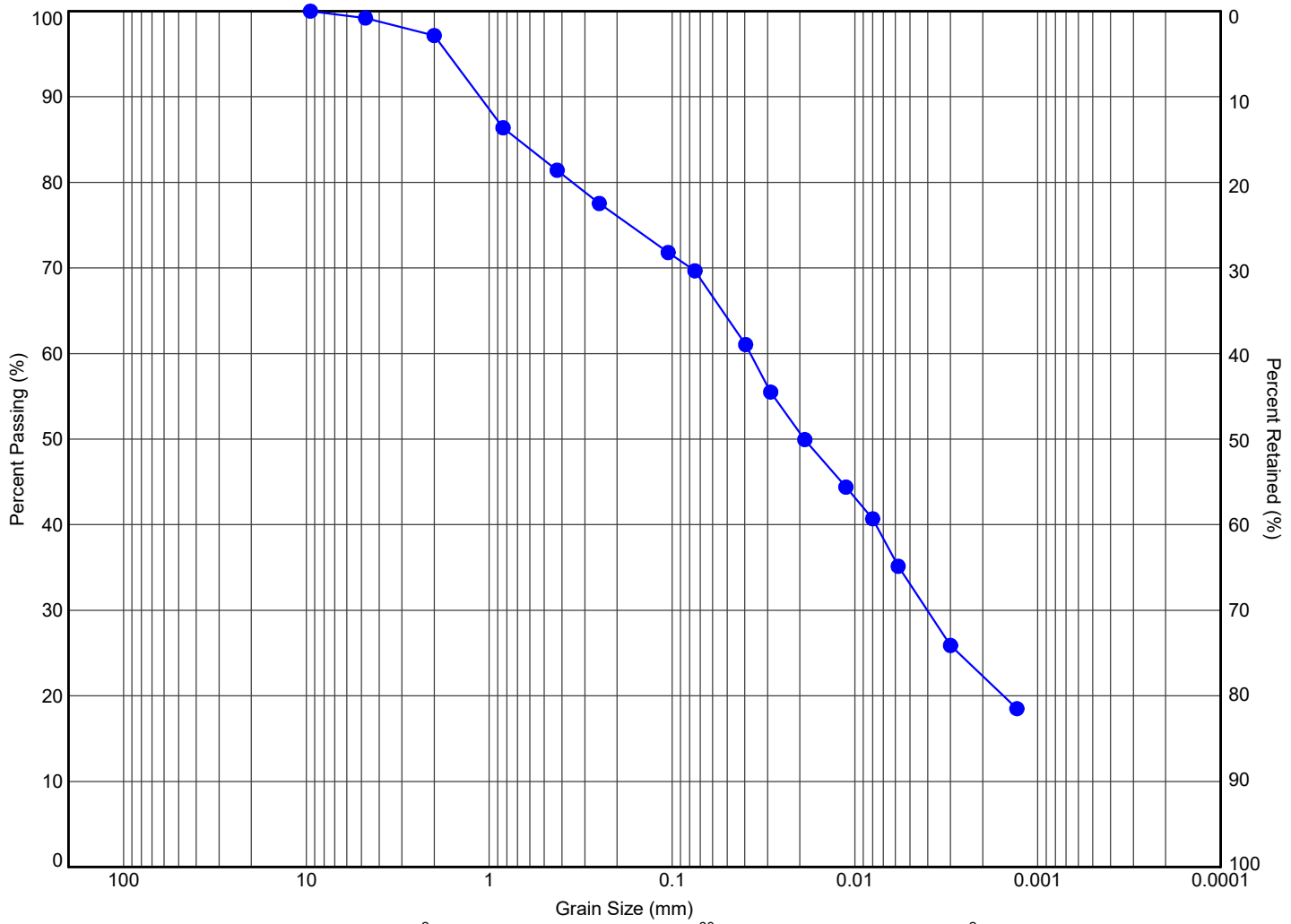
Title: **GRAIN SIZE DISTRIBUTION
SILTY SAND, SOME GRAVEL, TRACE CLAY**

File No.: **1-22-0209-01**



MIT SYSTEM	COBBLES	GRAVEL			SAND			SILT	CLAY
		COARSE	MEDIUM	FINE	COARSE	MEDIUM	FINE		

MIT SYSTEM									
Hole ID	Sample	Depth (m)	Elev. (m)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	(Fines, %)	
● 1	SS8	7.7	184.4	13	32	42	13		



MIT SYSTEM	COBBLES	GRAVEL			SAND			SILT	CLAY
		COARSE	MEDIUM	FINE	COARSE	MEDIUM	FINE		

MIT SYSTEM									
Hole ID	Sample	Depth (m)	Elev. (m)	Gravel (%)	Sand (%)	Silt (%)	Clay (%)	(Fines, %)	
● 10	SS5	3.4	189.5	3	31	44	22		



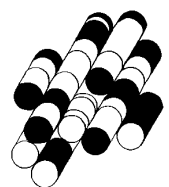
11 Indell Lane, Brampton Ontario L6T 3Y3
(905) 796-2650

Title: **GRAIN SIZE DISTRIBUTION
SANDY SILT, CLAYEY, TRACE GRAVEL**

File No.: **1-22-0209-01**

5 DD9 B8 ± :

TERRAPROBE INC.





CLIENT NAME: TERRAPROBE INC.
11 INDELL LANE
BRAMPTON, ON L6T3Y3
(905) 796-2650

ATTENTION TO: Ali Syed
PROJECT: 1-22-0209-42

AGAT WORK ORDER: 22T921255

TRACE ORGANICS REVIEWED BY: Pinkal Patel, Report Reviewer

DATE REPORTED: Jul 22, 2022

PAGES (INCLUDING COVER): 13

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

***Notes**

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.



Certificate of Analysis

AGAT WORK ORDER: 22T921255

PROJECT: 1-22-0209-42

5835 COOPERS AVENUE
 MISSISSAUGA, ONTARIO
 CANADA L4Z 1Y2
 TEL (905)712-5100
 FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: TERRAPROBE INC.

SAMPLING SITE: 6360 Regional Rd. 25 Milton, ON

ATTENTION TO: Ali Syed

SAMPLED BY: Deepak Masaum

O. Reg. 153(511) - PCBs (Water)

DATE RECEIVED: 2022-07-15

DATE REPORTED: 2022-07-22

		SAMPLE DESCRIPTION:				
		BH 09	BH 13	DUP-1		
		Water	Water	Water		
		2022-07-15 15:30	2022-07-15 15:30	2022-07-15 15:30		
Parameter	Unit	G / S	RDL	4100794	4100801	4100802
Polychlorinated Biphenyls	µg/L	3	0.1	<0.1	<0.1	<0.1
Surrogate	Unit	Acceptable Limits				
Decachlorobiphenyl	%	60-140	72	72	84	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
 Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

4100794-4100802 PCB total is a calculated parameter. The calculated value is the sum of Aroclor 1242, Aroclor 1248, Aroclor 1254 and Aroclor 1260.
 The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 22T921255

PROJECT: 1-22-0209-42

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
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<http://www.agatlabs.com>

CLIENT NAME: TERRAPROBE INC.

SAMPLING SITE: 6360 Regional Rd. 25 Milton, ON

ATTENTION TO: Ali Syed

SAMPLED BY: Deepak Masaum

O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Water)

DATE RECEIVED: 2022-07-15

DATE REPORTED: 2022-07-22

Parameter	Unit	SAMPLE DESCRIPTION:		BH 09	BH 10	BH 13	DUP-1
		G / S	RDL	Water	Water	Water	Water
		DATE SAMPLED:		2022-07-15	2022-07-15	2022-07-15	2022-07-15
				15:30	15:30	15:30	15:30
				4100794	4100800	4100801	4100802
F1 (C6 - C10)	µg/L	750	25	<25	<25	<25	<25
F1 (C6 to C10) minus BTEX	µg/L	750	25	<25	<25	<25	<25
F2 (C10 to C16)	µg/L	150	100	<100	<100	<100	<100
F3 (C16 to C34)	µg/L	500	100	<100	<100	<100	<100
F4 (C34 to C50)	µg/L	500	100	<100	<100	<100	<100
Gravimetric Heavy Hydrocarbons	µg/L		500	NA	NA	NA	NA
Sediment				NO	NO	NO	NO
Surrogate	Unit	Acceptable Limits					
Toluene-d8	%	50-140		104	102	102	100
Terphenyl	% Recovery	60-140		68	78	77	78

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Potable Ground Water - All Types of Property Uses - Coarse Textured Soils

Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

4100794-4100802 The C6-C10 fraction is calculated using Toluene response factor.

Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.

C6-C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX.

The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and nC34.

Gravimetric Heavy Hydrocarbons are not included in the Total C16 - C50 and are only determined if the chromatogram of the C34 - C50 Hydrocarbons indicated that hydrocarbons >C50 are present.

The chromatogram has returned to baseline by the retention time of nC50.

Total C6-C50 results are corrected for BTEX contribution.

This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.

nC6 and nC10 response factors are within 30% of Toluene response factor.

nC10, nC16 and nC34 response factors are within 10% of their average.

C50 response factor is within 70% of nC10 + nC16 nC34 average.

Linearity is within 15%.

Extraction and holding times were met for this sample.

Fractions 1-4 are quantified with the contribution of PAHs. Under Ontario Regulation 153/04, results are considered valid without determining the PAH contribution if not requested by the client.

NA = Not Applicable

Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.

Analysis performed at AGAT Toronto (unless marked by *)

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CLIENT NAME: TERRAPROBE INC.

SAMPLING SITE: 6360 Regional Rd. 25 Milton, ON

ATTENTION TO: Ali Syed

SAMPLED BY: Deepak Masaum

O. Reg. 153(511) - VOCs (Water)

DATE RECEIVED: 2022-07-15

DATE REPORTED: 2022-07-22

Parameter	Unit	SAMPLE DESCRIPTION:		Trip Blank
		SAMPLE TYPE:		Water
		DATE SAMPLED:		4100809
		G / S	RDL	
Dichlorodifluoromethane	µg/L	590	0.40	<0.40
Vinyl Chloride	µg/L	0.5	0.17	<0.17
Bromomethane	µg/L	0.89	0.20	<0.20
Trichlorofluoromethane	µg/L	150	0.40	<0.40
Acetone	µg/L	2700	1.0	<1.0
1,1-Dichloroethylene	µg/L	1.6	0.30	<0.30
Methylene Chloride	µg/L	50	0.30	<0.30
trans- 1,2-Dichloroethylene	µg/L	1.6	0.20	<0.20
Methyl tert-butyl ether	µg/L	15	0.20	<0.20
1,1-Dichloroethane	µg/L	5	0.30	<0.30
Methyl Ethyl Ketone	µg/L	1800	1.0	<1.0
cis- 1,2-Dichloroethylene	µg/L	1.6	0.20	<0.20
Chloroform	µg/L	2.4	0.20	<0.20
1,2-Dichloroethane	µg/L	1.6	0.20	<0.20
1,1,1-Trichloroethane	µg/L	200	0.30	<0.30
Carbon Tetrachloride	µg/L	0.79	0.20	<0.20
Benzene	µg/L	5.0	0.20	<0.20
1,2-Dichloropropane	µg/L	5	0.20	<0.20
Trichloroethylene	µg/L	1.6	0.20	<0.20
Bromodichloromethane	µg/L	16	0.20	<0.20
Methyl Isobutyl Ketone	µg/L	640	1.0	<1.0
1,1,2-Trichloroethane	µg/L	4.7	0.20	<0.20
Toluene	µg/L	24	0.20	<0.20
Dibromochloromethane	µg/L	25	0.10	<0.10
Ethylene Dibromide	µg/L	0.2	0.10	<0.10
Tetrachloroethylene	µg/L	1.6	0.20	<0.20
1,1,1,2-Tetrachloroethane	µg/L	1.1	0.10	<0.10
Chlorobenzene	µg/L	30	0.10	<0.10
Ethylbenzene	µg/L	2.4	0.10	<0.10
m & p-Xylene	µg/L		0.20	<0.20

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 22T921255

PROJECT: 1-22-0209-42

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CLIENT NAME: TERRAPROBE INC.

SAMPLING SITE: 6360 Regional Rd. 25 Milton, ON

ATTENTION TO: Ali Syed

SAMPLED BY: Deepak Masaum

O. Reg. 153(511) - VOCs (Water)

DATE RECEIVED: 2022-07-15

DATE REPORTED: 2022-07-22

Parameter	Unit	SAMPLE DESCRIPTION:		Trip Blank
		G / S	RDL	Water
DATE SAMPLED:		4100809		
Bromoform	µg/L	25	0.10	<0.10
Styrene	µg/L	5.4	0.10	<0.10
1,1,2,2-Tetrachloroethane	µg/L	1	0.10	<0.10
o-Xylene	µg/L		0.10	<0.10
1,3-Dichlorobenzene	µg/L	59	0.10	<0.10
1,4-Dichlorobenzene	µg/L	1	0.10	<0.10
1,2-Dichlorobenzene	µg/L	3	0.10	<0.10
1,3-Dichloropropene	µg/L	0.5	0.30	<0.30
Xylenes (Total)	µg/L	300	0.20	<0.20
n-Hexane	µg/L	51	0.20	<0.20
Surrogate	Unit	Acceptable Limits		
Toluene-d8	% Recovery	50-140		102
4-Bromofluorobenzene	% Recovery	50-140		101

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
 Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

4100809 Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
 1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
 The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



Certificate of Analysis

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PROJECT: 1-22-0209-42

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CLIENT NAME: TERRAPROBE INC.

SAMPLING SITE: 6360 Regional Rd. 25 Milton, ON

ATTENTION TO: Ali Syed

SAMPLED BY: Deepak Masaum

O. Reg. 153(511) - VOCs (with PHC) (Water)

DATE RECEIVED: 2022-07-15

DATE REPORTED: 2022-07-22

Parameter	Unit	SAMPLE DESCRIPTION:		BH 09	BH 10	BH 13	DUP-1
		G / S	RDL	Water	Water	Water	Water
		DATE SAMPLED:		2022-07-15	2022-07-15	2022-07-15	2022-07-15
				15:30	15:30	15:30	15:30
				4100794	4100800	4100801	4100802
Dichlorodifluoromethane	µg/L	590	0.40	<0.40	<0.40	<0.40	<0.40
Vinyl Chloride	µg/L	0.5	0.17	<0.17	<0.17	<0.17	<0.17
Bromomethane	µg/L	0.89	0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L	150	0.40	<0.40	<0.40	<0.40	<0.40
Acetone	µg/L	2700	1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	1.6	0.30	<0.30	<0.30	<0.30	<0.30
Methylene Chloride	µg/L	50	0.30	<0.30	<0.30	<0.30	<0.30
trans- 1,2-Dichloroethylene	µg/L	1.6	0.20	<0.20	<0.20	<0.20	<0.20
Methyl tert-butyl ether	µg/L	15	0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane	µg/L	5	0.30	<0.30	<0.30	<0.30	<0.30
Methyl Ethyl Ketone	µg/L	1800	1.0	<1.0	<1.0	<1.0	<1.0
cis- 1,2-Dichloroethylene	µg/L	1.6	0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	µg/L	2.4	0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	1.6	0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	200	0.30	<0.30	<0.30	<0.30	<0.30
Carbon Tetrachloride	µg/L	0.79	0.20	<0.20	<0.20	<0.20	<0.20
Benzene	µg/L	5.0	0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane	µg/L	5	0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	µg/L	1.6	0.20	<0.20	<0.20	<0.20	<0.20
Bromodichloromethane	µg/L	16	0.20	<0.20	<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L	640	1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	µg/L	4.7	0.20	<0.20	<0.20	<0.20	<0.20
Toluene	µg/L	24	0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane	µg/L	25	0.10	<0.10	<0.10	<0.10	<0.10
Ethylene Dibromide	µg/L	0.2	0.10	<0.10	<0.10	<0.10	<0.10
Tetrachloroethylene	µg/L	1.6	0.20	<0.20	<0.20	<0.20	<0.20
1,1,1,2-Tetrachloroethane	µg/L	1.1	0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	µg/L	30	0.10	<0.10	<0.10	<0.10	<0.10
Ethylbenzene	µg/L	2.4	0.10	<0.10	<0.10	<0.10	<0.10

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 22T921255

PROJECT: 1-22-0209-42

5835 COOPERS AVENUE
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CLIENT NAME: TERRAPROBE INC.

SAMPLING SITE: 6360 Regional Rd. 25 Milton, ON

ATTENTION TO: Ali Syed

SAMPLED BY: Deepak Masaum

O. Reg. 153(511) - VOCs (with PHC) (Water)

DATE RECEIVED: 2022-07-15

DATE REPORTED: 2022-07-22

Parameter	Unit	SAMPLE DESCRIPTION:		BH 09	BH 10	BH 13	DUP-1
		G / S	RDL	Water	Water	Water	Water
		DATE SAMPLED:		2022-07-15	2022-07-15	2022-07-15	2022-07-15
				15:30	15:30	15:30	15:30
				4100794	4100800	4100801	4100802
m & p-Xylene	µg/L		0.20	<0.20	<0.20	<0.20	<0.20
Bromoform	µg/L	25	0.10	<0.10	<0.10	<0.10	<0.10
Styrene	µg/L	5.4	0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane	µg/L	1	0.10	<0.10	<0.10	<0.10	<0.10
o-Xylene	µg/L		0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene	µg/L	59	0.10	<0.10	<0.10	<0.10	<0.10
1,4-Dichlorobenzene	µg/L	1	0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dichlorobenzene	µg/L	3	0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichloropropene	µg/L	0.5	0.30	<0.30	<0.30	<0.30	<0.30
Xylenes (Total)	µg/L	300	0.20	<0.20	<0.20	<0.20	<0.20
n-Hexane	µg/L	51	0.20	<0.20	<0.20	<0.20	<0.20
Surrogate	Unit	Acceptable Limits					
Toluene-d8	% Recovery	50-140		104	102	102	100
4-Bromofluorobenzene	% Recovery	50-140		80	78	77	76

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

4100794-4100802 Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

Quality Assurance

CLIENT NAME: TERRAPROBE INC.

AGAT WORK ORDER: 22T921255

PROJECT: 1-22-0209-42

ATTENTION TO: Ali Syed

SAMPLING SITE: 6360 Regional Rd. 25 Milton, ON

SAMPLED BY: Deepak Masam

Trace Organics Analysis

RPT Date: Jul 22, 2022			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

O. Reg. 153(511) - PCBs (Water)

Polychlorinated Biphenyls	4110275		< 0.1	< 0.1	NA	< 0.1	101%	50%	140%	100%	50%	140%	82%	50%	140%
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O. Reg. 153(511) - VOCs (Water)

Dichlorodifluoromethane	4100712		<0.40	<0.40	NA	< 0.40	103%	50%	140%	77%	50%	140%	88%	50%	140%
Vinyl Chloride	4100712		<0.17	<0.17	NA	< 0.17	115%	50%	140%	110%	50%	140%	94%	50%	140%
Bromomethane	4100712		<0.20	<0.20	NA	< 0.20	109%	50%	140%	102%	50%	140%	90%	50%	140%
Trichlorofluoromethane	4100712		<0.40	<0.40	NA	< 0.40	88%	50%	140%	96%	50%	140%	108%	50%	140%
Acetone	4100712		<1.0	<1.0	NA	< 1.0	75%	50%	140%	96%	50%	140%	102%	50%	140%
1,1-Dichloroethylene	4100712		<0.30	<0.30	NA	< 0.30	75%	50%	140%	72%	60%	130%	77%	50%	140%
Methylene Chloride	4100712		<0.30	<0.30	NA	< 0.30	78%	50%	140%	73%	60%	130%	85%	50%	140%
trans- 1,2-Dichloroethylene	4100712		<0.20	<0.20	NA	< 0.20	80%	50%	140%	79%	60%	130%	83%	50%	140%
Methyl tert-butyl ether	4100712		<0.20	<0.20	NA	< 0.20	89%	50%	140%	85%	60%	130%	113%	50%	140%
1,1-Dichloroethane	4100712		<0.30	<0.30	NA	< 0.30	80%	50%	140%	79%	60%	130%	86%	50%	140%
Methyl Ethyl Ketone	4100712		<1.0	<1.0	NA	< 1.0	89%	50%	140%	83%	50%	140%	98%	50%	140%
cis- 1,2-Dichloroethylene	4100712		<0.20	<0.20	NA	< 0.20	105%	50%	140%	86%	60%	130%	95%	50%	140%
Chloroform	4100712		<0.20	<0.20	NA	< 0.20	97%	50%	140%	78%	60%	130%	94%	50%	140%
1,2-Dichloroethane	4100712		<0.20	<0.20	NA	< 0.20	101%	50%	140%	74%	60%	130%	107%	50%	140%
1,1,1-Trichloroethane	4100712		2.74	2.61	4.9%	< 0.30	78%	50%	140%	77%	60%	130%	79%	50%	140%
Carbon Tetrachloride	4100712		<0.20	<0.20	NA	< 0.20	74%	50%	140%	79%	60%	130%	72%	50%	140%
Benzene	4100712		<0.20	<0.20	NA	< 0.20	85%	50%	140%	91%	60%	130%	113%	50%	140%
1,2-Dichloropropane	4100712		<0.20	<0.20	NA	< 0.20	74%	50%	140%	77%	60%	130%	103%	50%	140%
Trichloroethylene	4100712		3.91	3.04	25%	< 0.20	87%	50%	140%	79%	60%	130%	107%	50%	140%
Bromodichloromethane	4100712		<0.20	<0.20	NA	< 0.20	71%	50%	140%	80%	60%	130%	104%	50%	140%
Methyl Isobutyl Ketone	4100712		<1.0	<1.0	NA	< 1.0	91%	50%	140%	84%	50%	140%	107%	50%	140%
1,1,2-Trichloroethane	4100712		<0.20	<0.20	NA	< 0.20	109%	50%	140%	83%	60%	130%	104%	50%	140%
Toluene	4100712		<0.20	<0.20	NA	< 0.20	74%	50%	140%	73%	60%	130%	73%	50%	140%
Dibromochloromethane	4100712		<0.10	<0.10	NA	< 0.10	110%	50%	140%	87%	60%	130%	87%	50%	140%
Ethylene Dibromide	4100712		<0.10	<0.10	NA	< 0.10	111%	50%	140%	83%	60%	130%	102%	50%	140%
Tetrachloroethylene	4100712		9.04	9.07	0.3%	< 0.20	73%	50%	140%	78%	60%	130%	72%	50%	140%
1,1,1,2-Tetrachloroethane	4100712		<0.10	<0.10	NA	< 0.10	93%	50%	140%	81%	60%	130%	78%	50%	140%
Chlorobenzene	4100712		<0.10	<0.10	NA	< 0.10	85%	50%	140%	75%	60%	130%	79%	50%	140%
Ethylbenzene	4100712		<0.10	<0.10	NA	< 0.10	77%	50%	140%	78%	60%	130%	77%	50%	140%
m & p-Xylene	4100712		<0.20	<0.20	NA	< 0.20	74%	50%	140%	74%	60%	130%	81%	50%	140%
Bromoform	4100712		<0.10	<0.10	NA	< 0.10	119%	50%	140%	95%	60%	130%	92%	50%	140%
Styrene	4100712		<0.10	<0.10	NA	< 0.10	84%	50%	140%	73%	60%	130%	77%	50%	140%
1,1,2,2-Tetrachloroethane	4100712		<0.10	<0.10	NA	< 0.10	113%	50%	140%	92%	60%	130%	109%	50%	140%
o-Xylene	4100712		<0.10	<0.10	NA	< 0.10	80%	50%	140%	74%	60%	130%	76%	50%	140%
1,3-Dichlorobenzene	4100712		<0.10	<0.10	NA	< 0.10	88%	50%	140%	76%	60%	130%	83%	50%	140%
1,4-Dichlorobenzene	4100712		<0.10	<0.10	NA	< 0.10	90%	50%	140%	76%	60%	130%	84%	50%	140%

Quality Assurance

CLIENT NAME: TERRAPROBE INC.

AGAT WORK ORDER: 22T921255

PROJECT: 1-22-0209-42

ATTENTION TO: Ali Syed

SAMPLING SITE: 6360 Regional Rd. 25 Milton, ON

SAMPLED BY: Deepak Masam

Trace Organics Analysis (Continued)

RPT Date: Jul 22, 2022			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
1,2-Dichlorobenzene	4100712		<0.10	<0.10	NA	< 0.10	95%	50%	140%	75%	60%	130%	86%	50%	140%
n-Hexane	4100712		<0.20	<0.20	NA	< 0.20	89%	50%	140%	79%	60%	130%	81%	50%	140%
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Water)															
F1 (C6 - C10)	4100939		<25	<25	NA	< 25	107%	60%	140%	107%	60%	140%	108%	60%	140%
F2 (C10 to C16)	4100541		< 100	< 100	NA	< 100	102%	60%	140%	77%	60%	140%	74%	60%	140%
F3 (C16 to C34)	4100541		< 100	< 100	NA	< 100	86%	60%	140%	70%	60%	140%	72%	60%	140%
F4 (C34 to C50)	4100541		< 100	< 100	NA	< 100	100%	60%	140%	89%	60%	140%	88%	60%	140%
O. Reg. 153(511) - VOCs (with PHC) (Water)															
Dichlorodifluoromethane	4100939		<0.40	<0.40	NA	< 0.40	94%	50%	140%	77%	50%	140%	72%	50%	140%
Vinyl Chloride	4100939		<0.17	<0.17	NA	< 0.17	104%	50%	140%	88%	50%	140%	81%	50%	140%
Bromomethane	4100939		<0.20	<0.20	NA	< 0.20	93%	50%	140%	73%	50%	140%	103%	50%	140%
Trichlorofluoromethane	4100939		<0.40	<0.40	NA	< 0.40	110%	50%	140%	94%	50%	140%	85%	50%	140%
Acetone	4100939		<1.0	<1.0	NA	< 1.0	105%	50%	140%	103%	50%	140%	85%	50%	140%
1,1-Dichloroethylene	4100939		<0.30	<0.30	NA	< 0.30	100%	50%	140%	100%	60%	130%	88%	50%	140%
Methylene Chloride	4100939		<0.30	<0.30	NA	< 0.30	109%	50%	140%	111%	60%	130%	108%	50%	140%
trans- 1,2-Dichloroethylene	4100939		<0.20	<0.20	NA	< 0.20	103%	50%	140%	111%	60%	130%	92%	50%	140%
Methyl tert-butyl ether	4100939		<0.20	<0.20	NA	< 0.20	108%	50%	140%	106%	60%	130%	97%	50%	140%
1,1-Dichloroethane	4100939		<0.30	<0.30	NA	< 0.30	103%	50%	140%	106%	60%	130%	86%	50%	140%
Methyl Ethyl Ketone	4100939		<1.0	<1.0	NA	< 1.0	84%	50%	140%	109%	50%	140%	88%	50%	140%
cis- 1,2-Dichloroethylene	4100939		<0.20	<0.20	NA	< 0.20	114%	50%	140%	116%	60%	130%	94%	50%	140%
Chloroform	4100939		<0.20	<0.20	NA	< 0.20	107%	50%	140%	115%	60%	130%	89%	50%	140%
1,2-Dichloroethane	4100939		<0.20	<0.20	NA	< 0.20	118%	50%	140%	110%	60%	130%	108%	50%	140%
1,1,1-Trichloroethane	4100939		<0.30	<0.30	NA	< 0.30	96%	50%	140%	95%	60%	130%	83%	50%	140%
Carbon Tetrachloride	4100939		<0.20	<0.20	NA	< 0.20	100%	50%	140%	101%	60%	130%	88%	50%	140%
Benzene	4100939		<0.20	<0.20	NA	< 0.20	109%	50%	140%	114%	60%	130%	93%	50%	140%
1,2-Dichloropropane	4100939		<0.20	<0.20	NA	< 0.20	111%	50%	140%	117%	60%	130%	90%	50%	140%
Trichloroethylene	4100939		<0.20	<0.20	NA	< 0.20	117%	50%	140%	119%	60%	130%	107%	50%	140%
Bromodichloromethane	4100939		<0.20	<0.20	NA	< 0.20	114%	50%	140%	101%	60%	130%	95%	50%	140%
Methyl Isobutyl Ketone	4100939		<1.0	<1.0	NA	< 1.0	109%	50%	140%	109%	50%	140%	97%	50%	140%
1,1,2-Trichloroethane	4100939		<0.20	<0.20	NA	< 0.20	115%	50%	140%	104%	60%	130%	105%	50%	140%
Toluene	4100939		<0.20	<0.20	NA	< 0.20	100%	50%	140%	101%	60%	130%	94%	50%	140%
Dibromochloromethane	4100939		<0.10	<0.10	NA	< 0.10	111%	50%	140%	120%	60%	130%	100%	50%	140%
Ethylene Dibromide	4100939		<0.10	<0.10	NA	< 0.10	108%	50%	140%	120%	60%	130%	96%	50%	140%
Tetrachloroethylene	4100939		<0.20	<0.20	NA	< 0.20	94%	50%	140%	93%	60%	130%	91%	50%	140%
1,1,1,2-Tetrachloroethane	4100939		<0.10	<0.10	NA	< 0.10	95%	50%	140%	93%	60%	130%	89%	50%	140%
Chlorobenzene	4100939		<0.10	<0.10	NA	< 0.10	103%	50%	140%	105%	60%	130%	92%	50%	140%
Ethylbenzene	4100939		<0.10	<0.10	NA	< 0.10	92%	50%	140%	91%	60%	130%	81%	50%	140%
m & p-Xylene	4100939		<0.20	<0.20	NA	< 0.20	99%	50%	140%	100%	60%	130%	86%	50%	140%
Bromoform	4100939		<0.10	<0.10	NA	< 0.10	114%	50%	140%	111%	60%	130%	97%	50%	140%

Quality Assurance

CLIENT NAME: TERRAPROBE INC.

AGAT WORK ORDER: 22T921255

PROJECT: 1-22-0209-42

ATTENTION TO: Ali Syed

SAMPLING SITE: 6360 Regional Rd. 25 Milton, ON

SAMPLED BY: Deepak Masam

Trace Organics Analysis (Continued)

RPT Date: Jul 22, 2022			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Styrene	4100939		<0.10	<0.10	NA	< 0.10	89%	50%	140%	90%	60%	130%	75%	50%	140%
1,1,2,2-Tetrachloroethane	4100939		<0.10	<0.10	NA	< 0.10	109%	50%	140%	113%	60%	130%	102%	50%	140%
o-Xylene	4100939		<0.10	<0.10	NA	< 0.10	103%	50%	140%	105%	60%	130%	89%	50%	140%
1,3-Dichlorobenzene	4100939		<0.10	<0.10	NA	< 0.10	114%	50%	140%	115%	60%	130%	92%	50%	140%
1,4-Dichlorobenzene	4100939		<0.10	<0.10	NA	< 0.10	112%	50%	140%	114%	60%	130%	91%	50%	140%
1,2-Dichlorobenzene	4100939		<0.10	<0.10	NA	< 0.10	113%	50%	140%	113%	60%	130%	89%	50%	140%
n-Hexane	4100939		<0.20	<0.20	NA	< 0.20	103%	50%	140%	83%	60%	130%	108%	50%	140%

Comments: When the average of the sample and duplicate results is less than 5x the RDL, the Relative Percent Difference (RPD) will be indicated as Not Applicable (NA).

Certified By: _____



Method Summary

CLIENT NAME: TERRAPROBE INC.
AGAT WORK ORDER: 22T921255
PROJECT: 1-22-0209-42
ATTENTION TO: Ali Syed
SAMPLING SITE: 6360 Regional Rd. 25 Milton, ON
SAMPLED BY: Deepak Masam

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Polychlorinated Biphenyls	ORG-91-5112	modified from EPA SW-846 3510 & 8082A	GC/ECD
Decachlorobiphenyl	ORG-91-5112	modified from EPA SW-846 3510 & 8082A	GC/ECD
F1 (C6 - C10)	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/FID
Toluene-d8	VOL-91- 5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
F2 (C10 to C16)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F3 (C16 to C34)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F4 (C34 to C50)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5010	modified from MOE PHC-E3421	BALANCE
Terphenyl	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Sediment			
Dichlorodifluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromomethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Acetone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methylene Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
trans- 1,2-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl tert-butyl ether	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
cis- 1,2-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chloroform	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Benzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromodichloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

Method Summary

CLIENT NAME: TERRAPROBE INC.
AGAT WORK ORDER: 22T921255
PROJECT: 1-22-0209-42
ATTENTION TO: Ali Syed
SAMPLING SITE: 6360 Regional Rd. 25 Milton, ON
SAMPLED BY: Deepak Masam

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Methyl Isobutyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Toluene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Dibromochloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromoform	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans).

Report Information:

Company: Terraprobe Inc.
 Contact: Ali Syed
 Address: 11 Indell Lane Brampton, Ontario
L6T 3Y3
 Phone: 905-796-2650 Fax: _____
 Reports to be sent to:
 1. Email: sali@terraprobe.ca
 2. Email: jummy@terraprobe.ca

Project Information:

Project: 1-22-0209-42
 Site Location: 6360 Regional Rd. 25 Milton, ON
 Sampled By: Deepak Masamun
 AGAT ID #: _____ PO: _____
Please note: if quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Company: Terraprobe Inc. Bill To Same: Yes No
 Contact: Lorena Rossi
 Address: 11 Indell Ln, Brampton, ON
 Email: lrossi@terraprobe.ca

Regulatory Requirements:

(Please check all applicable boxes)

Regulation 153/04 Excess Soils R406 Sewer Use
 Sanitary Storm
 Table 2 Indicate One Ind. Com. Agriculture
 Parks/Park Regulation 558
 Coarse CCME
 Fine Other
Soil Texture (check one) Indicate One

Is this submission for a Record of Site Condition?

Yes No

Report Guideline on Certificate of Analysis

Yes No

Sample Matrix Legend

B Biota
 GW Ground Water
 O Oil
 P Paint
 S Soil
 SD Sediment
 SW Surface Water

Laboratory Use Only

Work Order #: 227921255

Cooler Quantity: 1 Med
 Arrival Temperatures: 7.4 8.7 7.9

Custody Seal Intact: Yes No N/A

Notes: Free Ice

Turnaround Time (TAT) Required:

Regular TAT (Most Analyses) 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

3 Business Days 2 Business Days Next Business Day

OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT
 *TAT is exclusive of weekends and statutory holidays

For 'Same Day' analysis, please contact your AGAT CPM

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC	Reg 153		Reg 406		Salt EC/SAR	Potentially Hazardous or High Concentration (Y/N)
							Metals & Inorganics	Metals - CrVI, Hg, HWSB	Landfill Disposal Characterization (CLP): TCUP, IMMI, VOCs, ABAs, BAP, PCBs	Excess Soils SPLP Rainwater Leach SPLP: Metals, VOCs, SVOCs		
BH 09	July 15	3:30 AM	7	GW			X	X	X			
BH 10	July 15	3:30 AM	7	GW			X	X	X			
BH 13	July 15	3:30 AM	7	GW			X	X	X			
Dup-1	July 15	3:30 AM	7	GW			X	X	X			
Trip Blanks									X			

Sampled/Retrieved By (Print Name and Sign) <u>Deepak Masamun</u>	Date/Time <u>July 15 4:30</u>	Samples Received By (Print Name and Sign) <u>Fernando Rivero</u>	Date/Time _____/_____/_____/_____
Samples Retrieved By (Print Name and Sign)	Date/Time	Samples Received By (Print Name and Sign)	Date/Time

22 JUL 15 4:02 PM

Page 1 of 1

22 JUL 15 4:06 PM



**CLIENT NAME: TERRAPROBE INC.
11 INDELL LANE
BRAMPTON, ON L6T3Y3
(905) 796-2650**

**ATTENTION TO: Syed Ali
PROJECT: 1-22-0209-42**

AGAT WORK ORDER: 22T912757

**SOIL ANALYSIS REVIEWED BY: Amanjot Bhela, Inorganic Lab Manager
TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist**

DATE REPORTED: Jul 04, 2022

PAGES (INCLUDING COVER): 14

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

***Notes**

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.



Certificate of Analysis

AGAT WORK ORDER: 22T912757

PROJECT: 1-22-0209-42

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: TERRAPROBE INC.

SAMPLING SITE: Milton, ON

ATTENTION TO: Syed Ali

SAMPLED BY: Dhruvish Halavi

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2022-06-24

DATE REPORTED: 2022-07-04

Parameter	Unit	SAMPLE DESCRIPTION:		BH1-SS1	BH3-SS1	BH6-SS1	BH9-SS1	BH10-SS1	BH11-SS1	BH13-SS1	BH15-SS1
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2022-06-14	2022-06-17	2022-06-14	2022-06-15	2022-06-16	2022-06-15	2022-06-16	2022-06-16
		G / S	RDL	4020309	4020311	4020313	4020315	4020318	4020322	4020323	4020325
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	8	8	7	7	7	6	7	9
Barium	µg/g	390	2.0	193	148	197	134	99.0	103	135	185
Beryllium	µg/g	4	0.4	0.8	1.1	1.2	1.0	0.8	0.8	1.1	1.6
Boron	µg/g	120	5	17	21	13	13	11	9	14	18
Boron (Hot Water Soluble)	µg/g	1.5	0.10	<0.10	0.15	0.34	<0.10	0.22	0.10	0.12	<0.10
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	5	27	33	39	30	27	27	39	41
Cobalt	µg/g	22	0.5	15.4	16.7	16.4	16.3	13.5	13.8	17.3	17.7
Copper	µg/g	140	1.0	35.2	30.0	23.8	33.2	30.2	27.8	28.1	36.4
Lead	µg/g	120	1	12	13	17	13	13	12	14	16
Molybdenum	µg/g	6.9	0.5	<0.5	0.7	<0.5	0.5	0.5	<0.5	<0.5	0.5
Nickel	µg/g	100	1	33	37	33	34	28	31	30	36
Selenium	µg/g	2.4	0.8	<0.8	<0.8	0.8	0.8	1.0	<0.8	0.9	1.0
Silver	µg/g	20	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.71	0.65	0.77	0.64	0.59	0.66	0.74	0.85
Vanadium	µg/g	86	0.4	37.6	46.3	55.4	41.1	39.4	37.3	52.4	57.2
Zinc	µg/g	340	5	69	76	92	80	75	67	87	90
Chromium, Hexavalent	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide, WAD	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	0.27	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	0.233	0.185	0.163	0.210	0.182	0.260	0.263	0.235
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A	1.90	0.351	0.343	0.712	0.137	1.59	1.43	0.654
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	6.88	6.68	6.88	7.36	7.26	6.80	6.82	7.33

Certified By:

Anamjot Bhele




Certificate of Analysis

AGAT WORK ORDER: 22T912757

PROJECT: 1-22-0209-42

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: TERRAPROBE INC.

SAMPLING SITE: Milton, ON

ATTENTION TO: Syed Ali

SAMPLED BY: Dhruvish Halavi

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2022-06-24

DATE REPORTED: 2022-07-04

Parameter	Unit	SAMPLE DESCRIPTION:		BH16-SS1	Dup1
		SAMPLE TYPE:		Soil	Soil
		DATE SAMPLED:		2022-06-15	2022-06-15
		G / S	RDL	4020327	4020328
Antimony	µg/g	7.5	0.8	<0.8	<0.8
Arsenic	µg/g	18	1	7	7
Barium	µg/g	390	2.0	182	149
Beryllium	µg/g	4	0.4	1.4	1.1
Boron	µg/g	120	5	18	14
Boron (Hot Water Soluble)	µg/g	1.5	0.10	<0.10	0.12
Cadmium	µg/g	1.2	0.5	<0.5	<0.5
Chromium	µg/g	160	5	46	34
Cobalt	µg/g	22	0.5	16.1	14.1
Copper	µg/g	140	1.0	26.4	29.8
Lead	µg/g	120	1	16	14
Molybdenum	µg/g	6.9	0.5	<0.5	<0.5
Nickel	µg/g	100	1	37	32
Selenium	µg/g	2.4	0.8	0.8	1.0
Silver	µg/g	20	0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.87	0.75
Vanadium	µg/g	86	0.4	61.4	49.4
Zinc	µg/g	340	5	89	85
Chromium, Hexavalent	µg/g	8	0.2	<0.2	<0.2
Cyanide, WAD	µg/g	0.051	0.040	<0.040	<0.040
Mercury	µg/g	0.27	0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	0.098	0.189
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A	0.388	0.539
pH, 2:1 CaCl ₂ Extraction	pH Units	5.0-9.0	NA	6.66	7.29

Certified By:





AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 22T912757

PROJECT: 1-22-0209-42

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
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CLIENT NAME: TERRAPROBE INC.

SAMPLING SITE: Milton, ON

ATTENTION TO: Syed Ali

SAMPLED BY: Dhruvish Halavi

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2022-06-24

DATE REPORTED: 2022-07-04

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.
4020309-4020328 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl₂ extract prepared at 2:1 ratio. SAR is a calculated parameter.
Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

Anamjot Bhela



Certificate of Analysis

AGAT WORK ORDER: 22T912757

PROJECT: 1-22-0209-42

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CLIENT NAME: TERRAPROBE INC.

SAMPLING SITE: Milton, ON

ATTENTION TO: Syed Ali

SAMPLED BY: Dhruvish Halavi

pH in Soil

DATE RECEIVED: 2022-06-24

DATE REPORTED: 2022-07-04

Parameter	Unit	SAMPLE DESCRIPTION:		BH3-SS5	BH6-SS6	BH10-SS5	BH15-SS4	Dup3
		G / S	RDL	Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2022-06-17	2022-06-14	2022-06-16	2022-06-16	2022-06-16
				4020312	4020314	4020321	4020326	4020330
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	7.19	7.42	7.35	7.47	7.34

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

4020312-4020330 pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio (2 parts extraction fluid : 1 part soil).
Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

Anamjot Bhela




Certificate of Analysis

AGAT WORK ORDER: 22T912757

PROJECT: 1-22-0209-42

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CLIENT NAME: TERRAPROBE INC.

SAMPLING SITE: Milton, ON

ATTENTION TO: Syed Ali

SAMPLED BY: Dhruvish Halavi

O. Reg. 153(511) - PCBs (Soil)

DATE RECEIVED: 2022-06-24

DATE REPORTED: 2022-07-04

Parameter	Unit	SAMPLE DESCRIPTION:				
		G / S	RDL	BH9-SS7	BH13-SS8	Dup4
				Soil	Soil	Soil
				2022-06-15	2022-06-16	2022-06-16
				4020317	4020324	4020331
Polychlorinated Biphenyls	µg/g	0.35	0.1	<0.1	<0.1	<0.1
Moisture Content	%		0.1	12.0	12.1	11.6
				Acceptable Limits		
Decachlorobiphenyl	%	50-140		120	104	108

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

4020317-4020331 Results are based on the dry weight of soil extracted.
PCB total is a calculated parameter. The calculated value is the sum of Aroclor 1242, Aroclor 1248, Aroclor 1254 and Aroclor 1260.
The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:





Certificate of Analysis

AGAT WORK ORDER: 22T912757

PROJECT: 1-22-0209-42

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CLIENT NAME: TERRAPROBE INC.

SAMPLING SITE: Milton, ON

ATTENTION TO: Syed Ali

SAMPLED BY: Dhruvish Halavi

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

DATE RECEIVED: 2022-06-24

DATE REPORTED: 2022-07-04

Parameter	Unit	SAMPLE DESCRIPTION:		BH9-SS5	BH10-SS2	BH10-SS6	BH13-SS8	Dup2
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2022-06-15	2022-06-16	2022-06-16	2022-06-16	2022-06-16
		G / S	RDL	4020316	4020319	4020320	4020324	4020329
Benzene	µg/g	0.21	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Toluene	µg/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05	0.06
Ethylbenzene	µg/g	1.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
m & p-Xylene	µg/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05
o-Xylene	µg/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylenes (Total)	µg/g	3.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
F1 (C6 - C10)	µg/g	55	5	<5	<5	<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	55	5	<5	<5	<5	<5	<5
F2 (C10 to C16)	µg/g	98	10	<10	<10	<10	<10	<10
F3 (C16 to C34)	µg/g	300	50	<50	<50	<50	<50	<50
F4 (C34 to C50)	µg/g	2800	50	<50	<50	<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	2800	50	NA	NA	NA	NA	NA
Moisture Content	%		0.1	10.8	11.9	11.8	12.1	11.7
Surrogate	Unit	Acceptable Limits						
Toluene-d8	% Recovery	60-140		97	111	112	106	109
Terphenyl	%	60-140		77	72	73	75	77

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 22T912757

PROJECT: 1-22-0209-42

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CLIENT NAME: TERRAPROBE INC.

SAMPLING SITE: Milton, ON

ATTENTION TO: Syed Ali

SAMPLED BY: Dhruvish Halavi

O. Reg. 153(511) - PHCs F1 - F4 (Soil)

DATE RECEIVED: 2022-06-24

DATE REPORTED: 2022-07-04

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

4020316-4020329 Results are based on sample dry weight.
The C6-C10 fraction is calculated using Toluene response factor.
Xylenes is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
C6-C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified with the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.
Quality Control Data is available upon request.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

Quality Assurance

CLIENT NAME: TERRAPROBE INC.
AGAT WORK ORDER: 22T912757
PROJECT: 1-22-0209-42
ATTENTION TO: Syed Ali
SAMPLING SITE: Milton, ON
SAMPLED BY: Dhruvish Halavi

Soil Analysis

RPT Date: Jul 04, 2022			DUPLICATE				Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE		MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Measured Value		Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	4020442		<0.8	<0.8	NA	< 0.8	99%	70%	130%	109%	80%	120%	81%	70%	130%
Arsenic	4020442		3	2	NA	< 1	119%	70%	130%	119%	80%	120%	127%	70%	130%
Barium	4020442		69.8	61.5	12.6%	< 2.0	109%	70%	130%	105%	80%	120%	96%	70%	130%
Beryllium	4020442		0.5	0.5	NA	< 0.4	105%	70%	130%	97%	80%	120%	110%	70%	130%
Boron	4020442		10	9	NA	< 5	86%	70%	130%	100%	80%	120%	115%	70%	130%
Boron (Hot Water Soluble)	4018578		1.14	1.19	4.3%	< 0.10	95%	60%	140%	106%	70%	130%	102%	60%	140%
Cadmium	4020442		<0.5	<0.5	NA	< 0.5	108%	70%	130%	104%	80%	120%	105%	70%	130%
Chromium	4020442		20	17	NA	< 5	110%	70%	130%	106%	80%	120%	99%	70%	130%
Cobalt	4020442		8.4	7.1	16.8%	< 0.5	114%	70%	130%	104%	80%	120%	106%	70%	130%
Copper	4020442		14.6	12.5	15.5%	< 1.0	100%	70%	130%	105%	80%	120%	95%	70%	130%
Lead	4020442		7	6	15.4%	< 1	108%	70%	130%	103%	80%	120%	96%	70%	130%
Molybdenum	4020442		<0.5	<0.5	NA	< 0.5	105%	70%	130%	100%	80%	120%	109%	70%	130%
Nickel	4020442		19	15	23.5%	< 1	115%	70%	130%	104%	80%	120%	101%	70%	130%
Selenium	4020442		<0.8	<0.8	NA	< 0.8	118%	70%	130%	108%	80%	120%	100%	70%	130%
Silver	4020442		<0.5	<0.5	NA	< 0.5	98%	70%	130%	104%	80%	120%	99%	70%	130%
Thallium	4020442		<0.5	<0.5	NA	< 0.5	113%	70%	130%	109%	80%	120%	104%	70%	130%
Uranium	4020442		0.63	0.56	NA	< 0.50	117%	70%	130%	112%	80%	120%	112%	70%	130%
Vanadium	4020442		33.0	26.7	21.1%	< 0.4	120%	70%	130%	102%	80%	120%	99%	70%	130%
Zinc	4020442		35	29	18.8%	< 5	108%	70%	130%	108%	80%	120%	104%	70%	130%
Chromium, Hexavalent	4020565		<0.2	<0.2	NA	< 0.2	97%	70%	130%	90%	80%	120%	105%	70%	130%
Cyanide, WAD	4020506		<0.040	<0.040	NA	< 0.040	95%	70%	130%	105%	80%	120%	107%	70%	130%
Mercury	4020442		<0.10	<0.10	NA	< 0.10	116%	70%	130%	112%	80%	120%	102%	70%	130%
Electrical Conductivity (2:1)	4018578		0.249	0.255	2.4%	< 0.005	104%	80%	120%	NA			NA		
Sodium Adsorption Ratio (2:1) (Calc.)	4020558		1.44	1.45	0.7%	N/A	NA			NA			NA		
pH, 2:1 CaCl2 Extraction	4020311	4020311	6.68	6.78	1.5%	NA	100%	80%	120%						

Comments: NA signifies Not Applicable.

pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.

Duplicate NA: results are under 5X the RDL and will not be calculated.

Certified By:



Quality Assurance

CLIENT NAME: TERRAPROBE INC.
PROJECT: 1-22-0209-42
SAMPLING SITE: Milton, ON

AGAT WORK ORDER: 22T912757
ATTENTION TO: Syed Ali
SAMPLED BY: Dhruvish Halavi

Trace Organics Analysis

RPT Date: Jul 04, 2022			DUPLICATE				Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Measured Value		Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits		
								Lower	Upper		Lower	Upper		Lower	Upper	
O. Reg. 153(511) - PHCs F1 - F4 (Soil)																
Benzene	4020329	4020329	<0.02	<0.02	NA	< 0.02	93%	60%	140%	86%	60%	140%	96%	60%	140%	
Toluene	4020329	4020329	0.06	<0.05	NA	< 0.05	93%	60%	140%	84%	60%	140%	103%	60%	140%	
Ethylbenzene	4020329	4020329	<0.05	<0.05	NA	< 0.05	90%	60%	140%	82%	60%	140%	106%	60%	140%	
m & p-Xylene	4020329	4020329	<0.05	<0.05	NA	< 0.05	88%	60%	140%	81%	60%	140%	101%	60%	140%	
o-Xylene	4020329	4020329	<0.05	<0.05	NA	< 0.05	85%	60%	140%	82%	60%	140%	104%	60%	140%	
F1 (C6 - C10)	4020329	4020329	<5	<5	NA	< 5	83%	60%	140%	115%	60%	140%	95%	60%	140%	
F2 (C10 to C16)	4020320	4020320	< 10	< 10	NA	< 10	112%	60%	140%	85%	60%	140%	68%	60%	140%	
F3 (C16 to C34)	4020320	4020320	< 50	< 50	NA	< 50	135%	60%	140%	89%	60%	140%	62%	60%	140%	
F4 (C34 to C50)	4020320	4020320	< 50	< 50	NA	< 50	120%	60%	140%	78%	60%	140%	65%	60%	140%	
O. Reg. 153(511) - PCBs (Soil)																
Polychlorinated Biphenyls	4019736		< 0.1	< 0.1	NA	< 0.1	105%	50%	140%	104%	50%	140%	98%	50%	140%	

Comments: When the average of the sample and duplicate results is less than 5x the RDL, the Relative Percent Difference (RPD) will be indicated as Not Applicable (NA).

Certified By:



Method Summary

CLIENT NAME: TERRAPROBE INC.
AGAT WORK ORDER: 22T912757
PROJECT: 1-22-0209-42
ATTENTION TO: Syed Ali
SAMPLING SITE: Milton, ON
SAMPLED BY: Dhruvish Halavi

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, WAD	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6075	modified from MSA PART 3, CH 14 and SM 2510 B	PC TITRATE
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl ₂ Extraction	INOR-93-6075	modified from EPA 9045D, MCKEAGUE 3.11 E3137	PC TITRATE



Method Summary

CLIENT NAME: TERRAPROBE INC.

AGAT WORK ORDER: 22T912757

PROJECT: 1-22-0209-42

ATTENTION TO: Syed Ali

SAMPLING SITE: Milton, ON

SAMPLED BY: Dhruvish Halavi

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Polychlorinated Biphenyls	ORG-91-5113	modified from EPA SW-846 3570 & 8082A	GC/ECD
Decachlorobiphenyl	ORG-91-5113	modified from EPA SW-846 3541 & 8082A	GC/ECD
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Benzene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
Toluene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
Ethylbenzene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
m & p-Xylene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
o-Xylene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
Xylenes (Total)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
F1 (C6 - C10)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	P&T GC/FID
Toluene-d8	VOL-91-5009	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
F2 (C10 to C16)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F4 (C34 to C50)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID



AGAT Laboratories

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Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
web@earth.agatlab.com

Laboratory Use Only

Work Order #: 22T912767

Cooler Quantity: 1 large
Arrival temperatures: 9.4 | 9.2 | 9.5

Custody Seal Intact: Yes No N/A
Notes: Loose top

Turnaround Time (TAT) Required:

Regular TAT 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

3 Business Days 2 Business Days Next Business Day

OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT
*TAT is exclusive of weekends and statutory holidays

For 'Same Day' analysis, please contact your AGAT CPM

Chain of Custody Record

If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans)

Report Information:

Company: Terraprobe Inc.
Contact: Syed Ali
Address: 11 Indell Lane, Brampton
Phone: 905-796-2650 Fax: _____
Reports to be sent to: sali@terraprobe.ca
1. Email: _____
2. Email: _____

Regulatory Requirements:

(Please check all applicable boxes)

Regulation 153/04 Excess Soils R406 Sewer Use
 Ind/Com Storm
 Res/Park Regulation 558 Prov. Water Quality Objectives (PWQO)
 Agriculture CCME Other
Soil Texture (Check One) Coarse Fine
Region: _____
Indicate One

Is this submission for a Record of Site Condition?

Yes No

Report Guideline on Certificate of Analysis

Yes No

Project Information:

Project: 1-22-0209-42
Site Location: Milton, ON
Sampled By: Dhruvish Halari
AGAT Quote #: _____ PO: _____
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes No
Company: Terraprobe Inc.
Contact: Lorena Rossi
Address: 11 Indell Lane, Brampton
Email: lrossi@terraprobe.ca

Sample Matrix Legend

B Biota
GW Ground Water
O Oil
P Paint
S Soil
SD Sediment
SW Surface Water

Sample Matrix	Y/N	0. Reg 153					0. Reg 558					0. Reg 406					Potentially Hazardous or High Concentration (Y/N)
		Metals & Inorganics	Metals - C,VI, Hg, HWSB	BTEX, F1-F4 PHCs	Analyze F4G if required	PAHs	PCBs	VOC	Landfill Disposal Characterization TQLP: TCEP, M&I, VOCs, Aque, B,le,lp, PCBs	Excess Soils SPLP Rainwater Leach	SPLP: Metals, VOCs, SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	pH			
BH1-SS1		X															
BH3-SS1		X															
BH3-SS5																	
BH6-SS1		X															X
BH6-SS6																	X
BH9-SS1		X															
BH9-SS5								X									
BH9-SS7										X							
BH10-SS1		X															
BH10-SS2								X									
BH10-SS6								X									

Samples Relinquished By (Print Name and Sign): <u>Syed Ali</u>	Date: <u>07/24/22</u>	Time: <u>4:05 pm</u>	Samples Received By (Print Name and Sign): <u>NEAL GOROSPZ</u>	Date: _____	Time: _____
Samples Relinquished By (Print Name and Sign):	Date:	Time:	Samples Received By (Print Name and Sign):	Date:	Time:
Samples Relinquished By (Print Name and Sign):	Date:	Time:	Samples Received By (Print Name and Sign):	Date:	Time:

