



LIVERPOOL ROAD LIMITED PARTNERSHIP

**PHASE TWO
ENVIRONMENTAL SITE ASSESSMENT**

**640 LIVERPOOL ROAD AND 609 ANNLAND STREET, PICKERING,
ONTARIO**

FINAL REPORT

JANUARY 11, 2023

Terrapex Environmental Ltd.
90 Scarsdale Road
Toronto, Ontario, M3B 2R7
Telephone: (416) 245-0011
Website: www.terrapex.com

TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	1
2.0	INTRODUCTION.....	3
2.1	SITE DESCRIPTION	3
2.2	PROPERTY OWNERSHIP	4
2.3	CURRENT AND PROPOSED FUTURE USES.....	4
2.4	APPLICABLE SITE CONDITION STANDARDS	4
3.0	BACKGROUND INFORMATION.....	6
3.1	PHYSICAL SETTING.....	6
3.1.1	WATER BODIES & AREAS OF NATURAL SIGNIFICANCE	6
3.1.2	TOPOGRAPHY & SURFACE WATER DRAINAGE	6
3.2	PAST INVESTIGATIONS.....	7
4.0	SCOPE OF INVESTIGATION	10
4.1	MEDIA INVESTIGATED	10
4.2	OVERVIEW OF SITE INVESTIGATION	10
4.3	PHASE ONE CONCEPTUAL SITE MODEL	11
4.4	DEVIATIONS FROM THE SAMPLING AND ANALYSIS PLAN.....	16
4.5	IMPEDIMENTS.....	17
5.0	INVESTIGATION METHOD	18
5.1	GENERAL.....	18
5.2	DRILLING	18
5.3	SOIL	19
5.3.1	SOIL SAMPLING.....	19
5.3.2	FIELD SCREENING MEASUREMENTS	19
5.4	GROUNDWATER.....	20
5.4.1	MONITORING WELL INSTALLATION.....	20
5.4.2	MONITORING WELL DEVELOPMENT METHOD.....	20
5.4.3	FIELD MEASUREMENTS OF WATER QUALITY PARAMETERS	21
5.4.4	GROUNDWATER SAMPLING	21
5.5	SEDIMENT	22
5.5.1	SEDIMENT SAMPLING.....	22
5.6	ANALYTICAL TESTING.....	22
5.7	RESIDUE MANAGEMENT PROCEDURES.....	22
5.8	ELEVATION SURVEYING.....	23
5.9	QUALITY ASSURANCE AND QUALITY CONTROL MEASURES.....	23
6.0	REVIEW AND EVALUATION	25
6.1	GEOLOGY.....	25
6.2	GROUNDWATER ELEVATIONS AND FLOW DIRECTION	25
6.3	GROUNDWATER HYDRAULIC GRADIENTS	26
6.4	FINE-MEDIUM SOIL TEXTURE	26

6.5	SOIL FIELD SCREENING	26
6.6	SOIL QUALITY	26
6.7	GROUNDWATER QUALITY	27
6.8	SEDIMENT QUALITY	28
6.9	QUALITY ASSURANCE AND QUALITY CONTROL RESULTS	28
6.10	PHASE TWO CONCEPTUAL SITE MODEL.....	29
7.0	CONCLUSIONS	31
7.1	SIGNATURES	31
8.0	REFERENCES.....	33

TABLE OF CONTENTS (CONTINUED)

FIGURES

Figure 1	Site Location
Figure 2	General Site Layout
Figure 3	Phase One Conceptual Site Model – Study Area
Figure 4	Phase One Conceptual Site Model – Potentially Contaminating Activities
Figure 5A	Phase One Conceptual Site Model – Areas of Potential Environmental Concern
Figure 5B	Phase One Conceptual Site Model – Areas of Potential Environmental Concern with Sampling Locations
Figure 6	Cross-Section Plan
Figure 7	Cross-Section A-A'
Figure 8	Cross-Section B-B'
Figure 9	Interpreted Groundwater Contours
Figure 10.1	Soil Analytical Results – Metals
Figure 10.2	Soil Analytical Results – Metals, Cross-Section A-A'
Figure 10.3	Soil Analytical Results – Metals, Cross-Section B-B'
Figure 11	Soil Analytical Results – Hydride-Forming Metals
Figure 12	Soil Analytical Results – Boron
Figure 13	Soil Analytical Results – Hexavalent Chromium
Figure 14	Soil Analytical Results – Cyanide
Figure 15.1	Soil Analytical Results – Mercury
Figure 15.2	Soil Analytical Results – Mercury, Cross-Section A-A'
Figure 15.3	Soil Analytical Results – Mercury, Cross-Section B-B'
Figure 16.1	Soil Analytical Results – pH
Figure 16.2	Soil Analytical Results – pH, Cross-Section A-A'
Figure 16.3	Soil Analytical Results – pH, Cross-Section B-B'
Figure 17	Soil Analytical Results – Electrical Conductivity
Figure 18	Soil Analytical Results – Sodium Adsorption Ratio
Figure 19	Soil Analytical Results – BTEX
Figure 20.1	Soil Analytical Results – PHCs F1-F4
Figure 20.2	Soil Analytical Results – PHCs F1-F4, Cross-Section A-A'
Figure 20.3	Soil Analytical Results – PHCs F1-F4, Cross-Section B-B'
Figure 21	Soil Analytical Results – VOCs
Figure 22	Soil Analytical Results – PAHs
Figure 23	Groundwater Analytical Results – Metals
Figure 24	Groundwater Analytical Results – Hydride-Forming Metals
Figure 25	Groundwater Analytical Results – Hexavalent Chromium
Figure 26	Groundwater Analytical Results – Cyanide
Figure 27	Groundwater Analytical Results – Mercury

TABLE OF CONTENTS (CONTINUED)

Figure 28	Groundwater Analytical Results – Chloride
Figure 29	Groundwater Analytical Results – Sodium
Figure 30	Groundwater Analytical Results – BTEX
Figure 31	Groundwater Analytical Results – PHCs F1-F4
Figure 32	Groundwater Analytical Results – VOCs
Figure 33	Groundwater Analytical Results – PAHs

TABLES

Table 1	Groundwater Monitoring Data
Table 2	Soil Analytical Results – Metals and Inorganics
Table 3	Soil Analytical Results – BTEX and PHCs
Table 4	Soil Analytical Results – VOCs
Table 5	Soil Analytical Results – PAHs
Table 6	Groundwater Analytical Results – Metals and Inorganics
Table 7	Groundwater Analytical Results – BTEX and PHCs
Table 8	Groundwater Analytical Results – VOCs
Table 9	Groundwater Analytical Results – PAHs

APPENDICES

Appendix I	Plan of Survey
Appendix II	Sampling and Analysis Plan
Appendix III	Borehole Logs
Appendix IV	Grain Size Analyses
Appendix V	Laboratory Certificates of Analysis

LIST OF ACRONYMS

amsl	Above mean sea level
ANSI:	Area of Natural or Scientific Interest
APEC:	Area of Potential Environmental Concern
AST:	Aboveground Storage Tank
BH:	Borehole
BTEX:	Benzene, Toluene, Ethylbenzene, and Xylenes
CALA:	Canadian Analytical Laboratories Association
COC:	Contaminant of Concern
COPC:	Contaminant of Potential Concern
CSA:	Canadian Standards Association
CSM:	Conceptual Site Model
CV:	Combustible Vapour
DO:	Dissolved Oxygen
DNAPL:	Dense Non-aqueous Phase Liquid
EC:	Electrical Conductivity
ERIS:	Environmental Risk Information Service Ltd.
EPA:	Environmental Protection Act
ESA:	Environmental Site Assessment
F1-F4	Petroleum hydrocarbon fractions 1 through 4 of the CCME Canada Wide Standards
HDPE:	High density polyethylene
LDPE:	Low density polyethylene
LEL:	Lower Explosive Limit
LNAPL:	Light Non-aqueous Phase Liquid
LPH:	Liquid-Phase Petroleum Hydrocarbons (free-product)
MECP:	Ministry of Environment, Conservation and Parks
mg/kg:	milligrams per kilogram
m bg	metres below grade
mg/L:	milligrams per litre
MGRA:	Modified Generic Risk Assessment (under O. Reg. 153/04)
MNR:	Ontario Ministry of Natural Resources
MOE:	Ontario Ministry of Environment
MOECC:	Ontario Ministry of Environment and Climate Change
MW:	Monitoring well
NAPL:	Non-aqueous Phase Liquid
NHIC:	Natural Heritage Information Centre
ORP:	oxidation-reduction potential
OSHA:	Occupational Safety and Health Act
PAHs:	Polycyclic Aromatic Hydrocarbons
PCA:	Potentially Contaminating Activity (from O. Reg. 153/04)
PCBs:	Polychlorinated Biphenyls
PHC:	Petroleum Hydrocarbon
PID:	Photo Ionization Detector
ppm:	Parts Per Million
PVC:	Polyvinyl chloride
QA:	Quality Assurance
QC:	Quality Control

LIST OF ACRONYMS (CONTINUED)

QP:	Qualified Person under O. Reg. 143/04
RA:	Risk Assessment
RAP:	Remedial Action Plan
RDL:	Reportable Detection Limit
RSC:	Record of Site Condition (under O. Reg. 153/04)
R.R.O. 1990:	Revised Regulations of Ontario, 1990.
SAR:	Sodium Adsorption Ratio
SCC:	Standards Council of Canada
SCS:	Site Condition Standards (from O. Reg. 153/04)
SOP:	Standard Operating Procedure
SV:	Soil Vapour
SVOCs:	Semi-Volatile Organic Compounds
TCLP	Toxicity Characteristic Leaching Procedure (Reg. 558/00)
TOC:	Total Organic Carbon
TP:	Test Pit
TPH:	Total Petroleum Hydrocarbons
UST:	Underground Storage Tank
VOCs:	Volatile Organic Compounds
WWIS:	Water Well Information System

1.0 EXECUTIVE SUMMARY

Terrapex Environmental Ltd. (Terrapex) was retained by Liverpool Road Limited Partnership (the Client) to conduct a Phase Two Environmental Site Assessment (ESA) of the property located at 640 Liverpool Road and 609 Annland Street, Pickering, Ontario (the "Site"). It is understood that the study documented herein is being undertaken for the purposes of filing a Record of Site Condition (RSC) per Ontario Regulation (O. Reg.) 153/04 under the Environmental Protection Act, Records of Site Condition Part XV.1 of the Act.

The objective of the Phase Two ESA was to assess Areas of Potential Environmental Concern (APECs) identified during a previous Phase One ESA work program at the Site in order to identify the location and concentration of contaminants, and (if necessary) to remediate contaminants found in the land or water on, in, or under the Phase Two property.

The Site is located at the southwest corner of Liverpool Road and Annland Street in Pickering, Ontario. It is situated in a mixed use residential and commercial neighbourhood. The Site is irregular in shape and measures 6,231.74 m². The eastern portion of the Site (640 Liverpool Road) is developed with a two-storey residential building with a basement, a storage shed, a hobby garage, and a parking area. The western portion of the Site (609 Annland Street) is developed as a public parking lot.

The Site is located in an area that has been primarily residential land-use. Businesses related to marina and port operations have been, and currently are, predominant to the northwest and south of the Site.

Based on a Phase One ESA study of the Site, the Phase Two ESA was undertaken to assess eight on-Site areas of potential environmental concern (APECs).

On March 1, 2022, eight boreholes were advanced to depths ranging between 5.2 m and 8.0 m bg., on August 23, 2022, nine boreholes were advanced to depths ranging between 2.3 m and 4.6 m bg, and on October 24, 2022, nineteen boreholes were advanced to depths ranging between 1.2 m and 2.4 m bg.

Selected soil samples recovered from the newly advanced boreholes were submitted for laboratory analyses for a variety of parameters including metal and inorganic parameters, benzene, toluene, ethylbenzene, and xylenes (collectively, BTEX) and the F1, F2, F3, and F4 petroleum hydrocarbon (PHC) fractions, volatile organic compounds (VOCs), and polycyclic aromatic hydrocarbons (PAHs). Selected groundwater samples recovered from the newly installed monitoring wells were submitted for laboratory analyses of metal and inorganic parameters, BTEX, PHCs, VOCs, and PAHs.

The full depth generic Site Condition Standards (SCSs) listed in Table 2 of the April 15, 2011 *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection*

Act (the Ministry of the Environment, Conservation and Parks, 2011) that are applicable to residential / parkland / institutional land use , coarse-textured soils, in a potable groundwater condition (hereafter referenced as the Table 2 SCSs) were selected for evaluating laboratory analytical results.

Based on the results of the Phase Two ESA, the following contaminants have been identified at the Site at concentrations exceeding the Table 2 SCSs:

Soil:

- metal and inorganic parameters: barium, cadmium, cobalt, lead, mercury, and zinc
- PHCs: PHC fractions F2, F3 and F4.

Groundwater:

- No contaminants of concern were identified in groundwater at the Site.

Sediment is not present at the Site, and therefore contaminants of concern are not present within sediment.

The Phase Two ESA investigation of the Site, as documented in this report, identified concentrations of Contaminants of Concern (COCs) soil in excess of the generic MECP Table 2 SCSs. As such, remedial activities will be required to be conducted at the Site prior to filing an RSC.

2.0 INTRODUCTION

Terrapex Environmental Ltd. (Terrapex) was retained by Liverpool Limited Partnership (the Client) to conduct a Phase Two Environmental Site Assessment (ESA) of the property located at 640 Liverpool Road and 609 Annland Street, Pickering, Ontario (the “Site”).

It is understood that the study documented herein is being undertaken by Liverpool Limited Partnership for the purpose of filing a Record of Site Condition per Ontario Regulation 153/04, *Records of Site Condition - Part XV.1 of the Act* for the Site on the basis future residential land use.

The objective of the investigation was to assess Areas of Potential Environmental Concern (APECs) identified during the Phase One ESA work program at the Site in order to identify the location and concentration of contaminants in the land or water on, in, or under the Phase Two Property, and (if necessary) to remediate contaminants found in the land or water on, in, or under the Phase Two property.

The findings of the Phase One ESA are documented in Terrapex's report entitled *Phase One Environmental Site Assessment, 640 Liverpool Road and 609 Annland Street, Pickering, Ontario, Final Report*, dated December 21, 2022.

2.1 SITE DESCRIPTION

The Site is located at the southwest corner of Liverpool Road and Annland Street in Pickering, Ontario (Figure 1). It is situated in a mixed use residential and commercial neighbourhood. The Site is irregular in shape and measures 6,231.74 m². The eastern portion of the Site (640 Liverpool Road) is developed with a two-storey residential building with a basement, a storage shed, a hobby garage, and a parking area. The western portion of the Site (609 Annland Street) is developed as a public parking lot. Figure 2 shows the layout of the Site at the time of the Phase Two ESA.

The Site is located in an area that has been primarily residential land-use. Businesses related to marina and port operations have been, and currently are, predominant to the northwest and south of the Site.

The legal description of the Site is *Pcl 7-2 Sec M89; Lt 7 Pl M89 (Pickering) Except Pt 77 Exprop Pl 95; and, Pcl 6-1 Sec M89; Lt 6 Pl M89 (Pickering) Except Pt 76 Exprop Pl 95; Pickering*

The Client provided a plan of survey for the Site, entitled *Plan of Survey Showing Topography of Parts of Lots 6 and 7 and Lots 5, 8, 9, 10, 11, 12 and 16, Registered Plan M-89 (Geographic Township of Pickering), Now in the City of Pickering, Regional Municipality of Durham*, by J.D. Barnes Limited, dated May 31, 2022. The Site is associated with PINs 26319-0615 (LT) and 26319-0614 (LT) with a total area of 6,231.74 m². The plan of survey is required to be signed

by an Ontario Land Surveyor (OLS) prior to use in filing an RSC for the Site. A copy of the plan of survey is included in Appendix I.

2.2 PROPERTY OWNERSHIP

The registered owner of the Site is Liverpool Road Limited Partnership. Authorization to proceed with the study was provided by Mr. Greg Silas, Vice President of Liverpool Road Limited Partnership.

2.3 CURRENT AND PROPOSED FUTURE USES

As the Site has been used for commercial purposes, the current land use of the Site is considered to be commercial per the definitions of the Ontario *Records of Site Condition – Part XV.1 of the Act* regulation (O. Reg. 153/04). The proposed future use of the Site is expected to be “residential property use” per Section 14.5 and 14.8 of O. Reg. 153/04.

2.4 APPLICABLE SITE CONDITION STANDARDS

Generic Ministry of the Environment, Conservation and Parks (MECP, previously Ministry of the Environment and Climate Change, MOECC) Site Condition Standards (SCSs) for evaluating laboratory analytical results were selected from the April 15, 2011 *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act* (MOE, 2011) document on the basis of the criteria specified in O. Reg. 153/04.

The Site specific details which influenced the soil and groundwater standards selection are summarized below:

- the Site is not within or adjacent to an area of natural significance as defined within Section 1 (1) of O. Reg. 153/04, does not include any land within 30 m of an area of natural significance, and is not otherwise considered “potentially sensitive”;
- the pH determined for “surface” soil samples (representative of depths not exceeding 1.5 m below ground surface, excluding any surface treatment) analysed as part of this Phase Two ESA ranged from 7.42 to 11.21, with the pH level in only one sample (MW208-1A) outside the prescribed value range of 5 to 9 for the application of the generic SCSs. Terrapex requested the laboratory to re-analyze sample MW208-1A to confirm the initial pH result, which was confirmed by the lab with a subsequent pH value of 10.89. As soil sample MW208-1A was collected from a hole cored through the concrete floor of the garage building and the field duplicate of this soil sample (MW208-99) and the soil sample directly below this sample (i.e., MW208-1B) were within the prescribed pH range, it is the QP’s opinion that the elevated pH in this sample is due to concrete dust contamination and is not representative of actual Site conditions.
- the pH determined for “subsurface” soil samples (representative of depths greater than 1.5 m below ground surface, excluding any surface treatment) analysed as part of this

Phase Two ESA ranged from 7.47 to 7.89, which is between the prescribed values of 5 to 11 for the application of generic SCSs;

- more than 2 m of overburden was observed over at least two-thirds of the area of the Site;
- the Site does not include a waterbody and is not located within 30 m of a waterbody;
- stratified site conditions will not be used when evaluating laboratory analytical results;
- current use of the Site is considered to be commercial;
- proposed future use of the Site is expected to be residential and the proposed grading is anticipated not to vary greatly from the existing grade;
- potable water at the Site, and all other properties located (in whole or in part) within 250 m of the Site, is supplied by a municipal drinking water system (as defined in the *Safe Drinking Water Act, 2002*);
- neither the Site nor any property located (in whole or in part) within 250 m of the Site has a known well that is used or intended for use as a source of water for human consumption or for agriculture, however, there is the chance that former water wells may still be present within the 250 m of the Site;
- the Site is not located in an area designated in a municipal Official Plan as a well-head protection area, or another designation by the municipality intended for the protection of groundwater; and,
- soil texture at the Site has been classified as “coarse textured” based on the result of grain size analysis. Results are included in Appendix IV.

Based on the above, Full Depth Generic SCSs applicable to residential, parkland, or institutional property use that are listed in Table 2 of the April 15, 2011 MECP *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act* document (hereafter referenced as the MECP Table 2 SCSs) are considered appropriate for evaluating laboratory analytical results.

3.0 BACKGROUND INFORMATION

3.1 PHYSICAL SETTING

3.1.1 WATER BODIES & AREAS OF NATURAL SIGNIFICANCE

Water Bodies: The nearest mapped water body is Frenchman's Bay which is located approximately 100 m west of the Site.

Areas of Natural Significance: Information from the City of Pickering Official Plan, the Ministry of Natural Resources (MNR) and the Toronto and Region Conservation Authority (TRCA) showed that the Site is not located within or adjacent to the Oak Ridges Moraine, the Rouge Watershed Protection Area, or Natural Heritage Restoration Areas, an environmental sensitive/ significant area, or an Area of Natural and Scientific Interest (Life and Earth Science). Though an ANSI was not identified, significant wetland is present at the mouth of the Krosno Creek, located approximately 150 m southeast of the Site.

3.1.2 TOPOGRAPHY & SURFACE WATER DRAINAGE

Topography: Based on contour information obtained from the plan of survey, VuMap interactive mapping application and the Google Earth website, the elevation at the Site is approximately 79 m above mean sea level (amsl).

The Plan of Survey Showing Topography of Parts of Lots 6 and 7 and Lots 5, 8, 9, 10, 11, 12 and 16, Registered Plan M-89 (Geographic Township of Pickering), Now in the City of Pickering, Regional Municipality of Durham, by J.D. Barnes Limited, dated May 31, 2022 (see Appendix I), indicates that the Site slopes down to the west and slightly to the south with elevations ranging from approximately 80.71 m to 78.81 m amsl, respectively.

The plan of survey is required to be signed by an OLS prior to use in filing an RSC.

Surface Water Drainage: Mapping available from the TRCA website (www.trca.on.ca) indicates that the Site is within the Frenchman's Bay watershed. Accordingly, surface water drainage from the Site ultimately flows to Frenchman's Bay.

The nearest mapped water bodies are Frenchman's Bay, part of Lake Ontario, which is located approximately 100 m west of the Site, and Krosno Creek, located approximately 150 m Southeast of the Site, which discharges into Lake Ontario.

Interpreted Direction of Groundwater Flow: Based on topography, the general regional groundwater flow is assumed to be southwest towards Frenchman's Bay and Lake Ontario. It should be recognized that local groundwater flow may also be influenced by local subsurface structures and utilities.

3.2 PAST INVESTIGATIONS

Liverpool LP provided Terrapex with the following previous environmental reports for review as part of the scope of the Phase One ESA. A previous report prepared for the Site by Terrapex, was also reviewed.

- *Phase I Environmental Site Assessment, 640 Liverpool Road, Pickering, Ontario*, prepared for The Renaissance Group Inc. by Edward Wong & Associates Inc, dated August 13, 2021
- *Phase II Environmental Site Assessment, 640 Liverpool Road, Pickering, Ontario*, prepared for The Renaissance Group Inc. by Edward Wong & Associates Inc, dated September, 2021
- *Geotechnical Investigation Report, Proposed Residential Development, 640 Liverpool Road, Pickering, Ontario*, prepared for Liverpool Limited Partnership by Terrapex, dated December 5, 2022.

A summary of pertinent investigation findings presented in these documents is presented below in chronological order of work being completed.

Edward Wong & Associates, 2021, Phase I ESA	
Objective/Work Program	Review of available historical and regulatory records of 640 Liverpool Road and surrounding properties within a 250 m radius to evaluate environmental conditions of the Phase I Property and Phase I Study Area.
Potential Contaminating Activities Identified	On-Site: PCA # 28 - Gasoline and Associated Products Storage in Fixed Tanks. (Three aboveground storage tanks (ASTs) were observed outside the hobby garage.) Off-Site: No off-Site PCAs were identified within the Phase I Study Area.
Areas of Potential Environmental Concern Identified	APEC #1: North of hobby garage, adjacent to the west property line, in the area with three ASTs.
Comments/Limitations/Other	Recommendations from Edward Wong and Associates are given below: <ul style="list-style-type: none"> • Prior to the redevelopment of the Site, a designated substance survey should be carried out. • Prior to re-development of the Site, the contents of the existing aboveground storage tanks should be emptied. The ASTs should be removed and disposed of at a recycling facility. • Any contaminated soil should be removed and disposed off at a landfill. Confirmatory sampling and testing should be carried out. • It was recommended that a Phase II ESA should be carried out to assess the chemical quality of the subsoil and groundwater and to determine if they were adversely impacted by the on-Site activities. Phase II can be done in conjunction with a geotechnical investigation for the proposed future development.

Edward Wong & Associates, 2021, Phase II ESA	
Work Program	<ul style="list-style-type: none"> • Drill three boreholes • Install three monitoring wells
Site Condition Standards Applied	<p>MECP Table 3 SCS for Residential/Parkland/Institutional (R/P/I) property land use in coarse textured soils.</p> <p>For excess soils conformation, a comparison to Table 1 R/P/I land use criteria were also made.</p>
Stratigraphy and Groundwater	<ul style="list-style-type: none"> • Site stratigraphy consisted of topsoil overlaying a fill layer, extending to a depth of 1.2 m below grade, consisting of crushed limestone, silty clay with topsoil inclusions and rootlets. The fill layer was underlain by a silty clay layer to a depth of approximately 2.5 m below grade and a silty sand till layer to a depth of approximately 6.0 m below grade. The till layer was underlain by a silty clay to a depth of approximately 7.5 m. Shale bedrock was encountered at a depth of approximately 7.5 m below grade and extended to approximately 7.9 m below grade, the maximum extent of the investigation. • The depth to groundwater upon completion of the drilling ranged between 1.72 m and 4.57 m below grade. Based on elevations, groundwater flow was assessed to be in a westerly direction, towards Frenchman's Bay.
Analytical Program	<p>Soil:</p> <ul style="list-style-type: none"> • three soil samples were submitted for the analysis of VOCs and PHC (F1-F4 fractions). One sample was submitted for metals and inorganics. <p>Groundwater:</p> <ul style="list-style-type: none"> • Three groundwater samples were submitted for the analysis of VOCs and PHCs (F1-F4). One groundwater sample from monitoring well 2 was submitted for metals and inorganics.
Results	<p>Soil:</p> <ul style="list-style-type: none"> • Concentrations of parameters in the analysed soil samples were below the Table 1 and Table 3 SCSs, except for PHC F2, PHC F3 and/or PHC F4 in one soil sample (BH2-1) collected from the vicinity of the drum storage area. <p>Groundwater:</p> <ul style="list-style-type: none"> • Concentrations of all parameters in the analysed groundwater samples were below the Table 1 and Table 3 SCSs.
Comments/Limitations/Other	<ul style="list-style-type: none"> • Soil results provided by EWA have been relied upon in this Phase Two ESA and are included in Tables 2 through 4. • Groundwater results provided by EWA have been relied upon in this Phase Two ESA and are included in Tables 6 through 8..

Terrapex, 2022, Geotechnical Investigation Report	
Work Program	<ul style="list-style-type: none"> • The March 2022 geotechnical investigation was conducted in conjunction with a hydrogeological investigation of the Site and the adjacent property to the west, and a limited environmental assessment on the Site. • Drill 13 boreholes (MW101 through MW113). Eight of the boreholes (BH102, BH103, MW104, BH106, MW107, BH108, MW112 and MW113) were drilled on the Site, with one (MW113) drilled specifically for environmental purposes. The remaining five boreholes were drilled on the adjacent property to the west. • Install monitoring wells in four of the on-Site boreholes (i.e., MW104, MW107, MW112, and MW113) and two (i.e., MW101 and MW109) on the adjacent property to the west

Terrapex, 2022, Geotechnical Investigation Report	
Stratigraphy and Groundwater	<ul style="list-style-type: none"> • Site stratigraphy consisted of approximately 150 mm to 250 mm topsoil overlaying a fill layer extending to a depth of 1.5 m below grade (bg) and comprised of sandy silt, some clay that is likely reworked native materials. The fill layer was underlain by sandy silt till some clay to a depth of approximately 3.0 to 8.0 m bg. The till layer was underlain by a clayey silt to a depth of approximately 6.1 m bg to 8.0 m bg. Shale bedrock was encountered at a depth of approximately 6.0 m bg and extended to approximately 8.0 m bg, the maximum depth of the investigation. • The depth to groundwater upon completion of the drilling ranged between 0.75 m and 3.78 m bg. Based on elevations, groundwater flow was assessed to be in a southwesterly direction, towards Frenchman's Bay.
Comments/Limitations/Other	<ul style="list-style-type: none"> • Sampling locations are included on Figure 2. • Borehole logs are included in Appendix III. • Copies of grain size analyses are included in Appendix IV.

4.0 SCOPE OF INVESTIGATION

4.1 MEDIA INVESTIGATED

Based on the previously conducted work program by Edward Wong in 2021, the Phase Two ESA work program documented herein included investigation of the environmental quality of both soil and groundwater at the Site, as well as delineation of identified soil impacts.

The environmental quality of sediment was not investigated as sediment is not present at the Site.

Soil and groundwater were investigated by drilling boreholes and installing monitoring wells, as described above, and in Section 5.0.

4.2 OVERVIEW OF SITE INVESTIGATION

Terrapex has reviewed the previous Phase II ESA work undertaken by Edward Wong in 2021 and is satisfied that the field and analytical work was undertaken in general accordance with the protocols of O. Reg. 153/04. Data from that investigation has been incorporated into and relied upon for this Phase Two ESA.

The scope of Terrapex's assessment comprised the following:

- preparing a sampling and analysis plan which identified target sampling locations and associated rationale, a proposed laboratory analytical program, sample containers and preservation methods, and the number and type of Quality Assurance/Quality Control (QA/QC) samples;
- advancing seven boreholes (BH102, BH103, MW104, BH106, MW107, BH108, and MW112) as part of the geotechnical and hydrogeological investigations to depths between approximately 7.8 m bg and 8.0 m bg, and one borehole (MW113) as part of the environmental assessment to a depth of approximately 5.2 m bg. Monitoring wells were installed in four boreholes (i.e., MW104, MW107, MW112 and MW113);
- advancing nine boreholes (BH201 to BH209) to depths between approximately 2.3 m bg and 4.5 m bg, with groundwater monitoring wells installed in two boreholes (i.e., MW207 and MW209);
- advancing 19 boreholes (BH301 to BH319) to depths between approximately 1.2 m and 2.4 m bg;
- collecting soil samples during drilling, and logging of visual, olfactory and tactile soil characteristics, and evidence of petroleum hydrocarbon or other chemical impacts, if any;
- measuring combustible soil vapour (CSV) and/or total organic vapour (TOV) concentrations in soil samples;

- submitting selected soil and groundwater samples for laboratory analyses of contaminants of potential concern (COPCs);
- monitoring groundwater conditions within each monitoring well;
- surveying the elevation of each of the existing and newly installed monitoring wells and newly drilled boreholes using a TOPCON HiPer V Global Navigation Satellite System (GNSS) Receiver in metres above mean sea level (m amsl);
- evaluating laboratory analytical results with respect to the selected SCSs; and,
- refining the existing Conceptual Site Model (CSM) (developed during the Terrapex Phase One ESA work program) in light of the information collected during the Phase Two ESA activities.

The sampling and analysis plan is attached in Appendix II. The sampling procedures are documented in detail in Section 5.0.

4.3 PHASE ONE CONCEPTUAL SITE MODEL

The identified PCAs and APECs associated with the CSM developed during the 2022 Terrapex Phase One ESA are illustrated on Figures 4 and 5, respectively. A summary of the CSM is provided below.

The Site is located at the southwest corner of the Liverpool Road and Annland Street in Pickering, Ontario. It is situated in a mixed use residential and commercial neighbourhood. The Site is irregular in shape and measures 6,231.74 m². The eastern portion of the Site (640 Liverpool Road) is developed with a two-storey residential building with a basement, a storage shed, a hobby garage, and a parking area. The western portion of the Site (609 Annland Street) is developed as a public parking lot.

The earliest available record (historical aerial photograph) indicates the Site was partially cleared of vegetation and developed with a residential dwelling and driveway in 1939. Therefore, it was determined that the first developed land use at the Site was prior to the year 1939 when the property was first developed for residential purposes.

Potentially Contaminating Activities: The following PCAs, as listed in Table 2 of Schedule D of O. Reg. 153/04, were identified on or potentially affecting the Site, per below:

POTENTIALLY CONTAMINATING ACTIVITIES ON, IN OR UNDER THE PHASE ONE PROPERTY

PCA¹	POTENTIALLY CONTAMINATING ACTIVITY²	DESCRIPTION	SOURCE/ REFERENCE	LIKELIHOOD TO CONTRIBUTE TO AN APEC³	UNCERTAINTY
PCA 1	28 - Gasoline and Associated Products Storage in Fixed Tanks	Fuel oil tank located in basement of 640 Liverpool Road residence.	Site inspection	Yes	Low – observed on Site
PCA 2	58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	The Hobby Garage is currently active and in use for personal vehicle maintenance The address is registered as a generator of waste oils and lubricants from 1988 to 2022.	Site inspection Interviews ERIS Report	Yes	Low – observed on Site
PCA 3	30 – Importation of Fill Material of Unknown Quality	Fill materials of unknown quality across the Site. Previous reports prepared by other consultants indicated fill materials across the Site during the Phase II investigation.	Previous reports	Yes	Low – identified during the geotechnical investigation
PCA 4	28 - Gasoline and Associated Products Storage in Fixed Tanks	An UST is located adjacent to the west of the storage shed on-Site	Site inspection Interviews ERIS report	Yes	Low – confirmed by tenant and ground penetrating radar
PCA 5	28 - Gasoline and Associated Products Storage in Fixed waste Tanks	Former oil ASTs and drum storage to the northwest of the Hobby Garage	Site inspection Interviews Previous reports	Yes	Low -the presence of ASTs and drum storage is well documented
PCA 6	Other – use of de-icing agents on gravel covered driveway and parking areas	Exterior gravel covered parking areas in the central and western portions of the Site	Site inspection Aerial Photographs Previous reports	Yes	Low – gravel covered areas were apparent

¹ As shown on Figure 4.

POTENTIALLY CONTAMINATING ACTIVITIES WITHIN THE PHASE ONE STUDY AREA

PCA ¹	POTENTIALLY CONTAMINATING ACTIVITY ²	ADDRESS/ LOCATION	DESCRIPTION	SOURCE/ REFERENCE	LIKELIHOOD TO CONTRIBUTE TO AN APEC ³	UNCERTAINTY
PCA 7	58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	1290 Wharf Street, approximately 40 m west of the Site	In 2014 and 2015, a construction company locate at the address was listed as a generator of waste oils, lubricants, light fuels and oil sludges.	ERIS report	No – due to being located down gradient from the Site	High – Site activities and housekeeping are not known
PCA 8	7 - Boat Manufacturing	641 Liverpool Road, approximately 25 m east of the Site	Stelray Boats listed as a boat builder 1986 with two employees	ERIS report	No – due to the property being residential, significant manufacturing processes are not anticipated	High – As the address is a residential property, production and housekeeping practices are not known
PCA 9	28 - Gasoline and Associated Products Storage in Fixed Tanks	1288 Wharf Street, approximately 25 m southwest of the Site	Fuel oil tank in basement of the residential building	Site inspection	No – the address is located down gradient and has been previously investigated, and has an RSC.	Low – AST was observed during the Site reconnaissance
PCA 10	44 - Port Activities, including Operation and Maintenance of Wharves and Docks	1278 Wharf Street, approximately 55 m west of the Site.	Former use of the property as a boat launch, pier, and boat storage.	City Directories Aerial photographs Previous reports	No – The property is located downgradient of the Site.	Low – There are multiple sources of information
PCA 11A	19 - Electronic and Computer Equipment Manufacturing	1295 Wharf Street approximately 40 m south of the Site	The property operated as Pickering Harbour Company Limited	ERIS	No – The property is located downgradient of the Site.	Low – the address is located down gradient
PCA 11B	44 - Port Activities, including Operation and Maintenance of Wharves and Docks		High Tech-Matic Controls Ltd. was listed as a manufacturer of various electrical equipment			
PCA 11C	58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners		The property is identified as a generator of wastes.			

PCA ¹	POTENTIALLY CONTAMINATING ACTIVITY ²	ADDRESS/ LOCATION	DESCRIPTION	SOURCE/ REFERENCE	LIKELIHOOD TO CONTRIBUTE TO AN APEC ³	UNCERTAINTY
PCA 12	44 - Port Activities, including Operation and Maintenance of Wharves and Docks	1289 Wharf Street, approximately 50 m southwest of the Site	The property currently and historically has operated as a wharf and marina	Aerial photographs Site inspection	No – the property is located downgradient of the Site	Low – port activities were confirmed during the Site inspection
PCA 13	44 - Port Activities, including Operation and Maintenance of Wharves and Docks	684 Front Street, approximately 150 m northwest of the Site	The property currently and historically has operated as a wharf and marina	Aerial photographs Site inspection	No – due to the intervening distance	Low – port activities were confirmed during the Site inspection

Overall a total of 15 PCAs were identified on the Phase One property and within the Phase One Study Area, of which six, may be contributing to an area of potential environmental concern (APEC) at the Site.

Areas of Potential Environmental Concern: As a result of the PCAs identified and other considerations, the following six APECs were identified at the Site:

APEC ¹	LOCATION OF APEC ON PHASE ONE PROPERTY	POTENTIALLY CONTAMINATING ACTIVITY ²	LOCATION OF PCA (ON-SITE or OFF-SITE)	CONTAMINANTS OF POTENTIAL CONCERN ³	MEDIA POTENTIALLY IMPACTED (Ground water, Soil, and/or Sediment)
APEC 1	Western portion of the 640 Liverpool Road residence.	28 - Gasoline and Associated Products Storage in Fixed Tanks	On-Site (PCA 1)	BTEX PHCs PAHs	Soil Groundwater
APEC 2	Around the Hobby Garage	58 - Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	On-Site (PCA 2)	BTEX PHCs VOCs Metals PAHs Hydride-forming metals	Soil Groundwater
APEC 3	Entire Site	30 - Importation of Fill Material of Unknown Quality	On-Site (PCA 3)	Metals BTEX PHCs PAHs Hydride-forming metals ORPs (B, Hg, Cr (VI), CN-, EC, SAR)	Soil
APEC 4	Adjacent to the west of the storage shed on-Site	28 - Gasoline and Associated Products Storage in Fixed Tanks	On-Site (PCA 4)	BTEX PHCs PAHs	Soil Groundwater

APEC ¹	LOCATION OF APEC ON PHASE ONE PROPERTY	POTENTIALLY CONTAMINATING ACTIVITY ²	LOCATION OF PCA (ON-SITE or OFF-SITE)	CONTAMINANTS OF POTENTIAL CONCERN ³	MEDIA POTENTIALLY IMPACTED (Ground water, Soil, and/or Sediment)
APEC 5	Northwest of the Hobby Garage	28 - Gasoline and Associated Products Storage in Fixed Tanks	On-Site (PCA 5)	BTEX PHCs PAHs	Soil Groundwater
APEC 6	Gravel covered areas in the central and western portions of the Site	Other (O1) – Application of de-icing salts (not specifically defined in the regulation)	On-Site (PCA 6)	EC and SAR (Soil only) Na and Cl (Groundwater only)	Soil Groundwater

¹ Areas of potential environmental concern (APEC) means the area on, in or under a Phase One property where one or more contaminants are potentially present, as determined through the Phase One environmental site assessment, including through, (a) identification of past or present uses on, in or under the Phase One property, and (b) identification of potentially contaminating activity.

² As set out in Column A of Table 2 of Schedule D.

³ Contaminants of potential concern (COPC) according to the Method Groups as identified in the "Protocol for in the Assessment of Properties under Part XV.1 of the Environmental Protection Act", March 9, 2004, amended as of July 1, 2011:

BTEX: benzene, toluene, ethylbenzene, xylenes	Hg: mercury	As: arsenic	Cl: chloride
PHCs: petroleum hydrocarbons (F1-F4)	B (hws): boron, hot water soluble	Sb: antimony	EC: electrical conductivity
VOCs: volatile organic compounds	Cr (VI): chromium (hexavalent)	Se: selenium	SAR: sodium adsorption ratio
PAHs: polycyclic aromatic hydrocarbons	CN-: cyanide	Na: sodium	PCBs: polychlorinated biphenyls

Contaminants of Potential Concern:

The Contaminants of Potential Concern (COPCs) associated with the APECs are as follows:

- Metals (soil and groundwater)
- Hydride-forming metals (soil)
- EC and SAR (soil)
- Sodium and Chloride (groundwater)
- PAHs (soil and groundwater)
- BTEX (soil and groundwater)
- PHCs (soil and groundwater)
- VOCs (soil)

Underground Utilities:

In general, potential migration pathways for subsurface contaminants at the Site would consist of buried services or remnants of former buried services.

Geology/Hydrogeology:

Available regional or Site specific geological and hydrogeological information are summarized below:

SUMMARY OF TOPOGRAPHY, HYDROLOGY AND GEOLOGY

SITE FEATURE	DESCRIPTION / DETAILS
REGIONAL TOPOGRAPHY	Local and surrounding area topography is generally flat with a slight slope down towards the west (towards Frenchman's Bay).
ELEVATION	Approximately 79 m asl
PHYSIOGRAPHIC REGION	The Site and Phase One Study Area are located within the Iroquois Plain, which is characterized by clay plains.
OVERBURDEN SOIL STRATIGRAPHY	Previous intrusive investigations at the Site, identified soil stratigraphy of fill material, followed by clay and gravel, overlaying layers of clay and sand.
BEDROCK AND APPROXIMATE DEPTH	Previous investigations indicated bedrock, consisting of weathered shale with limestone interbeds, was encountered at depths of approximately 7.5 m bg.

SUMMARY OF WATER BODIES, AREAS OF NATURAL SIGNIFICANCE, GROUNDWATER INFORMATION

FEATURE	WITHIN PHASE ONE PROPERTY	WITHIN PHASE ONE STUDY AREA	DESCRIPTION/ DETAILS
WATER BODY	NO	YES	The nearest surface water body is Frenchman's Bay which is located approximately 100 m west of the Site.
ANSI	NO	NO	Though an ANSI was not identified, significant wetland is present at the mouth of the Krosno Creek, located approximately 150 m southeast of the Site.
WELL-HEAD PROTECTION AREA	NO	NO	N/A
MUNICIPAL DRINKING WATER SYSTEM	YES	YES	Supplied by Region of Durham from Lake Ontario
WELL FOR CONSUMPTION/ AGRICULTURAL USE	NO	YES	Three water wells were identified within the Phase One Study Area

Uncertainty on absence of information: The main uncertainty associated with the CSM developed for the Site relates to the limited information regarding the former use of the Site as well as the limited information regarding activities on neighbouring properties. This lack of information is mitigated by the inherent nature of residential land uses, which are not typically associated with significant PCAs.

Notwithstanding the above, it should be noted that Phase One ESAs have inherent limitations, and therefore findings cannot be considered definitive (i.e., the findings of a Phase One ESA are inherently associated with some uncertainty).

4.4 DEVIATIONS FROM THE SAMPLING AND ANALYSIS PLAN

Deviations from the proposed sampling and analysis plan are as follows:

- In March 2022, MW113 was sampled the same day as development. This is not considered to be of concern, as MW113 was re-sampled in accordance with O.Reg. 153/04 as part of the Phase Two ESA sampling program in August 2022.

- Boreholes BH205 and BH303 had an additional, deeper sample analysed, as hydrocarbon odour was detected.
- Borehole MW208 had an additional pH sample analysed, as elevated pH was identified in the surface sample.
- Soil samples collected from BH309 and BH310 were not analysed as samples from other boreholes delineated fully delineated the areal extents of the impacted soil.
- During the delineation of mercury in shallow soils around the residential dwelling and storage shed, soil sample BH308-2 was analyzed three days past the accepted hold time, and samples BH316-1, BH317-2, and BH318-2 were analyzed 17 days past the accepted hold time.
- Monitoring well MW107 was sampled two additional times to confirm initial groundwater results.

The chemical analysis for mercury in four samples past the hold time may have resulted in low biases being reported for the soil samples, possibly indicating that the extent of the mercury impacted soil may not be fully delineated. However, as further delineation and remediation are required, the exceeded hold times are not considered to have significantly affected the data or the conclusions of the Phase Two ESA.

4.5 IMPEDIMENTS

Access to and throughout the Site was not impeded at any time during the Phase Two ESA work program.

The presence of buried services and infrastructure at the Site limited the placement of boreholes and monitoring wells at the Site. Some locations required minor adjustments in the field to the planned location of boreholes to avoid potential damage. In addition, the presence of obstacles (i.e., trees and parked vehicles/trailers, etc.) and soft, unstable ground surface required minor adjustments in the field to the planned location of some boreholes.

Borehole locations MW208, BH312 and BH315 were drilled using a Pionjar drilling system due to being in areas not readily accessible to the larger Powerprobe drilling system. Monitoring well MW208, located in the hobby garage, was installed using a 32 mm interior-diameter well pipe with a screen length of 1.5 m.

These impediments are not considered to have significantly affected the data or the conclusions of the ESA.

5.0 INVESTIGATION METHOD

5.1 GENERAL

Prior to drilling at the Site, local utility companies were contacted in order to obtain stake-outs and clearance with respect to buried services. A private locating company was also retained to provide clearance with respect to buried services in the work areas. All intrusive sampling locations were greater than the required distance from all located underground utilities, and were therefore given clearance. The approximate locations of the on-Site underground utility locations are provided in Figure 2.

For work that Terrapex supervised, a Site-specific health and safety plan (HASP) and a Daily Safe Work Permit were also prepared by Terrapex prior to commencing all field work. All team members, including sub-contractors, read and signed the HASP before working at the Site.

All methods used during the investigation were completed as per Terrapex's associated standard operating procedures (SOPs).

5.2 DRILLING

Borehole drilling and monitoring well installation services required for the Phase Two ESA were provided by Profile Drilling Inc. (Profile) of Mississauga, Ontario, a Ministry of the Environment, Conservation and Parks (MECP)-licensed well drilling contractor, under contract with Terrapex. The drilling and monitoring well installation activities were completed under the full-time supervision of Terrapex staff. The drilling activities included the following:

- On March 1, 2022, eight boreholes (BH102, BH103, MW104, BH106, MW107, BH108, MW112, and MW113) were advanced as part of the previous geotechnical investigation, was advanced to depths between approximately 5.2 m and 8.0 m bg using a track-mounted conventional rotary drill rig equipped with hollow stem augers and 0.6 m steel sampling spoon equipment.
- On August 23, 2022, eight boreholes (BH201 to MW207 and BH209) were advanced to depths between 2.3 m bg and 4.5 m bg using a track-mounted Powerprobe 9700 VTR direct-push drill rig with hollow stem augers and dual-tube sampling equipment, and one borehole (MW208) was advanced to a depth of 3.0 m bg using a Pionjar 120 portable drilling system equipped with a 0.6 m steel sampling spoon.
- On October 24, 2022 17 boreholes (BH301 to BH311, BH313, BH314, and BH316 to BH319) were advanced to depths between 1.2 m and 2.4 m bg using a track-mounted Powerprobe 9700 VTR direct-push drill rig with dual-tube sampling equipment and two boreholes (BH312 and BH315) were advanced to depths of approximately 1.2 m bg using a Pionjar 120 portable drilling system equipped with a 0.6 m steel sampling spoon.

The borehole locations are shown on Figure 2.

5.3 SOIL

5.3.1 SOIL SAMPLING

Soil samples were generally collected on a continuous basis at each borehole location using a 1.2 m long, 60 mm diameter direct-push sampler except for MW113, MW208, MW312, and MW315, which were sampled using a 0.6 m long, 60 mm diameter split spoon.

To mitigate cross-contamination, clean drilling augers were used at each borehole, soil sampling equipment was cleaned with Alconox and rinsed with potable water between sampling intervals, and new PVC liners were used inside the direct-push sampler for each soil sample. Fresh nitrile gloves were donned for the handling of each sample.

Each recovered sample was divided into two portions, with one portion placed in a clear sampling bag for field screening/logging, and the second portion placed in a laboratory supplied sampling container. Soil descriptions were recorded based on the Unified Soil Classification System (USCS).

Samples for selected for chemical analysis were placed in a cooler with ice packs and delivered under signed chain of custody forms to the project laboratory for analysis.

Borehole and monitoring well locations are shown on Figure 2. Graphic borehole logs illustrating the stratigraphy encountered, chemical analysis samples and measured soil vapour concentrations are included in Appendix III.

5.3.2 FIELD SCREENING MEASUREMENTS

TOV and CSV concentrations were measured in each soil sample using a RKI Eagle 2 Hydrocarbon Surveyor (Eagle) calibrated to *n*-hexane and operated in “methane elimination” mode. The Eagle can measure organic compounds to a nominal detection level of 0.1 parts per million by volume (ppm), with an accuracy of $\pm 10\%$, and can measure combustible organic compounds to a nominal detection level of 5 ppm, with an accuracy of $\pm 5\%$.

The Eagle was calibrated according to the manufacturer’s instructions and Terrapex’s SOP before the field investigation.

“Worst-case” soil samples from each borehole were identified on the basis of vapour screening, visual and olfactory evidence of contamination, and sample location in relation to potential point sources of impact, as well as for delineation purposes of identified impacts.

5.4 GROUNDWATER

5.4.1 MONITORING WELL INSTALLATION

On-Site monitoring wells completed as part of Terrapex's previous geotechnical program (i.e. MW104, MW107, MW112, and MW113) were installed by Profile using a conventional track-mounted drill rig equipped with hollow-stem augers.

Monitoring wells for the Phase Two ESA work program were also installed by Profile. Boreholes BH201, BH202, BH203, BH204, BH205, BH206, MW207, and BH209 were advanced using a track-mounted Powerprobe 9700 VTR direct-push drill rig equipped with standard hollow-stem augers and dual-tube sampling equipment. MW208, was advanced using a Bosch Pionjar 120 direct-push portable unit, following the coring of the concrete floor slab within the hobby garage. Monitoring wells were installed in boreholes MW207 and MW208.

Two monitoring wells were installed using new 50 mm inside-diameter schedule 40 PVC well pipe and # 10 slot screen, with the exception of monitoring well MW208, which was constructed with 32 mm inside-diameter well pipe. The annulus of each well was backfilled with washed silica sand to a depth of approximately 0.3 m above the screened interval. A hydrated bentonite seal was placed above the sand pack to prevent infiltration of surface water into the monitoring well. A steel monument casing, cemented in place, was installed at well locations MW104, MW112 and MW207, and a steel flush-mount casing was cemented in place at well locations MW107, MW113, and MW208.

To mitigate cross-contamination, new materials were used for the installation of each monitoring well.

Well installation details are provided on the borehole logs in Appendix III.

5.4.2 MONITORING WELL DEVELOPMENT METHOD

Monitoring well MW113 was developed on March 4, 2022, with all other monitoring wells developed on August 24, 2022 to remove drilling debris that may have been introduced during well installation and to minimize any potential sampling and analytical bias that may result from excessive particulate capture within groundwater samples recovered from these wells. Monitoring well MW207, was further developed on September 6, 2022.

Prior to development, the wells were monitored for vapours in the well headspace. Depth to water and depth to the bottom of the well were also measured prior to well development. The volume of water in the well and its annulus were calculated based on the depth measurements, diameter of the well standpipe and annulus, and assumed annulus porosity of 30%.

The wells were developed using a surge block and a dedicated inertial sampler comprising low density polyethylene (LDPE) tubing and a LDPE foot valve. Each well was surged and purged until water free of visible particulate was yielded, the well went dry three times, or until ten well volumes of water was removed, whichever came first. The use of this technique resulted in the removal of between 4 L and 50 L from each of the monitoring wells.

5.4.3 FIELD MEASUREMENTS OF WATER QUALITY PARAMETERS

Water quality parameters: temperature, pH, specific conductivity, dissolved oxygen (DO), and oxidation reduction potential (ORP), were measured during sampling of groundwater using a peristaltic pump and a YSI 556 MPS water quality meter. Prior to sampling, Terrapex recorded the water quality parameters over three minute intervals. When the parameters stabilized to within requirements as outlined in the Groundwater Sampling, Low Volume Purging, Using Peristaltic Pump SOP, the well was deemed appropriate for sampling.

5.4.4 GROUNDWATER SAMPLING

Prior to sampling, monitoring activities included the measurement of vapours within the headspace of the well immediately upon removal of the well standpipe cap, using an Eagle. The depth to water in the well was measured using a Solinst interface probe. The presence, and apparent thickness (if applicable), of any light non-aqueous phase liquids (LNAPL) or dense non-aqueous phase liquids (DNAPL) in the well was also assessed using the interface probe.

A groundwater sample was collected from monitoring well MW113 on March 4, 2022. Additional groundwater samples were collected from monitoring wells BH2, MW107, MW113, MW207, and MW208 on August 29, 2022. Monitoring well MW107 was re-sampled on October 13 and October 27, 2022.

To mitigate cross-contamination, the interface probe was washed with a liquid solution of Alconox detergent and rinsed with fresh water between each monitoring well. A fresh pair of latex or nitrile gloves was donned at each well location.

Sampling was conducted using “low-flow” methodology with a peristaltic pump (Spectra) as per Terrapex's SOP.

Groundwater samples were collected directly into pre-cleaned, laboratory-supplied bottles, placed in a cooler with ice, and shipped within four days of collection under chain of custody to the project laboratory for analysis. Samples collected for metal parameters were filtered in the field using 0.45 µm inline filters.

5.5 SEDIMENT

5.5.1 SEDIMENT SAMPLING

The sampling of sediments was not completed as part of this work program as sediment is not present at the Site.

5.6 ANALYTICAL TESTING

Laboratory analytical services for this work program were provided by Paracel Laboratories Ltd. (Paracel) in Hamilton and Bureau Veritas (BV) in Mississauga, Ontario. Paracel and BV are accredited by The Canadian Association for Laboratory Accreditation (CALA) and BV is also accredited by the Standards Council of Canada (SCC) to International Standard ISO/IEC 17025:2017, *General Requirement for the Competence of Testing and Calibration Laboratories* for the parameters included in the analytical program.

Soil samples were analyzed as follows:

- a total of 45 soil samples were analysed for various metal and/or inorganic parameters;
- a total of 26 soil samples were analysed for BTEX and PHCs F1-F4;
- a total of eight soil samples were analysed for VOCs; and,
- a total of 19 soil samples were analysed for PAHs.

Groundwater samples were analyzed as follows:

- a total of eight groundwater samples were submitted for laboratory analyses for various metal and inorganic parameters;
- a total of 10 groundwater samples were submitted for laboratory analyses for BTEX, PHCs, and VOCs; and,
- a total of 11 groundwater samples were submitted for laboratory analyses of PAHs.

The specific sample locations and parameters analyzed at each location are shown on the sampling and analysis plan in Appendix II and in Tables 2 through 9.

5.7 RESIDUE MANAGEMENT PROCEDURES

All soil cuttings and groundwater produced during borehole drilling, well development and well purging were contained in 205 L drums and stored temporarily at the Site. A composite soil sample for waste characterization (COMP-1) was analyzed for various organic and inorganic parameters. Results indicated that the waste characterization sample was below the Table 2 SCSs and O.Reg. 588/00 standards. As such, this material is considered to be non-hazardous for future disposal. The waste characterization results can be found in Laboratory Certificate 2235314 in Appendix V.

5.8 ELEVATION SURVEYING

The ground surface and top of pipe elevations of the previously installed monitoring wells and all of Terrapex's sampling locations were surveyed by Terrapex on April 13, 2022 (100-series), August 24, 2022 (200-series) and October 27, 2022 (300-series) using a TOPCON HiPer V Global Navigation Satellite System (GNSS) Receiver in metres above mean sea level (m amsl).

5.9 QUALITY ASSURANCE AND QUALITY CONTROL MEASURES

To mitigate cross-contamination during drilling, clean drilling augers were used for each borehole, as well as split spoon sampler and new PVC liners inside the direct-push sampler were used for each soil sample. Fresh nitrile gloves were donned for the handling of each sample.

During groundwater sampling, dedicated sampling tubing was used at each monitoring well location. To mitigate cross-contamination, the interface probe was washed with a liquid solution of Alconox detergent and rinsed with fresh municipal water between each monitoring well. A fresh pair of nitrile gloves was donned at each well location.

Pre-cleaned soil and groundwater sample containers for the Site's specific parameters were provided by the laboratories and used at each borehole and monitoring well location for the collection of soil and groundwater samples.

The sample containers and preservation methods for soil and groundwater samples collected for this investigation are provided in the sampling and analysis plan in Appendix II.

Samples for analyses were placed in an enclosed cooler with loose ice and shipped undersigned chain of custody and custody seals to Paracel Laboratories for analysis. Soil samples for analysis of volatile organic parameters were received at the laboratory, and immediately extracted.

Paracel's and BV's QA/QC programs consisted of the analysis of method blanks, duplicates, and spikes, process percent recoveries, and surrogate percent recoveries, as appropriate for the particular analysis protocol.

Soil and groundwater field duplicates were submitted to the laboratories for chemical analysis for QA/QC purposes during the Phase Two ESA work program:

- three blind duplicate soil samples was submitted for laboratory analyses of various metal and inorganic parameters for QA/QC purposes;
- five blind duplicate soil samples were submitted for laboratory analyses of BTEX and PHCs F1-F4 for QA/QC purposes;
- two blind duplicate soil sample was submitted for laboratory analyses of VOCs for QA/QC purposes;

- four blind duplicate soil samples were submitted laboratory analyses of PAHs for QA/QC purposes; and,
- one methanol blank sample was submitted for laboratory analyses of VOCs, BTEX and PHCs F1; and one methanol blank sample was submitted for laboratory analyses of BTEX and PHCs F1 only, for QA/QC purposes.
- two blind duplicate groundwater samples were submitted for laboratory analyses of metal and inorganic parameters for QA/QC purposes;
- two blind duplicate groundwater samples were submitted for laboratory analyses of BTEX, PHCs, and VOCs for QA/QC purpose;
- four blind duplicate groundwater samples were submitted for laboratory analyses of PAHs, for QA/QC purposes; and,
- one trip spike sample and one trip blank sample were submitted for laboratory analyses of VOCs and PHC F1 for QA/QC purposes.

With the exception of the trip blank and trip spike samples that were prepared by the laboratory itself, the laboratory was not informed of the nature or number of field QA/QC samples. The sampling containers remained within the bottle order package from the time of the delivery, sampling and submission to the laboratory.

6.0 REVIEW AND EVALUATION

6.1 GEOLOGY

The Site is located in a physiographic region known as the Iroquois Plain. The Iroquois Plain is characterized by clay plains.—Bedrock geology consists of upper Ordovician shale, limestone, dolostone, and siltstone of the Georgian Bay formation, was encountered at depths of approximately 7.5 m bg.

Stratigraphy encountered during the drilling program generally consisted of topsoil and fill material to approximately 1.2 m bg, generally underlain by native sandy clayey silt soils until shale bedrock was encountered at approximately 7.6 m bg. No deleterious material was observed in samples of fill collected during drilling.

Saturated conditions (i.e., the apparent water table) were observed at depths between approximately 1.2 m and 4.6 m bg in the sandy clayey silt stratum.

A copy of the borehole logs is included in Appendix III.

6.2 GROUNDWATER ELEVATIONS AND FLOW DIRECTION

The monitoring wells were screened from a depth of approximately 1.6 mbg to a depth of approximately 4.6 m bg, based on field observation of moisture content. Installation details of the monitoring wells are shown on Table 1 and on the borehole logs in Appendix III.

Depths to groundwater in the monitoring wells measured on September 6, 2022 were between 1.69 m (MW208) and 4.61 m bg (MW107), Monitoring data is shown on Table 1.

No evidence of either light, non-aqueous phase liquid (LNAPL) or dense, non-aqueous phase liquid (DNAPL) was observed during monitoring, purging, or sampling of the monitoring wells during this work program.

Groundwater elevations were calculated using the surveyed elevation of the top of the well pipe and the measured depth to water on September 6, 2022. The minimum groundwater elevation on this date was 75.06 m (MW107) and the maximum groundwater elevation was 78.19 m (BH3).

Groundwater contours were electronically generated using Surfer™ Surface Mapping System with Point Kriging geostatistical gridding method to interpolate the data points. Interpreted groundwater contours based on these calculations are shown on Figure 9. The general flow direction of shallow groundwater at the Site was determined to be to the southwest.

As the water table is fairly shallow, the direction of groundwater flow may be somewhat influenced by seasonal factors. It may also be influenced by deeper utilities (e.g., water and sewage lines), but the contouring results do not suggest that this is occurring.

6.3 GROUNDWATER HYDRAULIC GRADIENTS

Based on the measured groundwater elevations, the average horizontal hydraulic gradient over the area assessed was calculated as approximately 0.072 m/m calculated between BH3 and BH1 which are along the same groundwater flow path (southwesterly).

Vertical gradients have not been determined by this study and are not required at this time.

The horizontal hydraulic conductivity (K) in the sandy silty clay is estimated to be 1.0×10^{-7} m/s based on the published values for this type of soil (*Groundwater*, Freeze and Cherry, 1979). Assuming an average hydraulic gradient (n_e) of 0.072 m/m and a typical porosity (i) for sandy silty clay of 0.4, the average linear horizontal groundwater velocity across the sandy silty clay layer (where the majority of groundwater flow would be expected) at the Site is calculated, using Darcy's Law of $V=(Ki)/n_e$, to be in the order of 0.001 m/year.

6.4 FINE-MEDIUM SOIL TEXTURE

Two representative soil samples of the dominant stratigraphy encountered (native sandy silt) at the Site were selected from soil samples MW106-3 and MW207-4A for grain size analysis. The results of the analyses confirmed that the soil at the Site is a coarse-textured material as defined by O. Reg. 153/04. Therefore, the Table 2 SCSs applicable to the Site apply to coarse-textured soils for evaluation of the Site. Grain size analyses results are included in Appendix IV.

6.5 SOIL FIELD SCREENING

- Soil samples BH202-2, BH205-1B, and BH205-2A, had slight hydrocarbon (HC) odours;
- CSV concentrations ranged from < 5 ppm to a maximum of 35 ppm in soil samples BH205-1A and BH205-1B; and,
- TOV concentrations ranged from 0 ppm to a maximum of 2 ppm in soil samples BH205-1B, BH207-4B, MW208-1A, MW208-1B, and MW208-2.

6.6 SOIL QUALITY

Laboratory analytical results of the soil samples submitted for analyses of metal and inorganic parameters, BTEX and PHCs, VOCs, and PAHs are summarized in Tables 2 through 5, respectively. Plan view and cross-section drawings illustrating lateral and vertical delineation for all contaminants of potential concern in soil, are provided in Figures 10.1 through 16.3. Copies of the Laboratory Certificates of Analyses are attached in Appendix V. The soil vapour

concentration measured for each soil sample, the soil conditions, sample depths and chemical parameters analysed at each borehole location are presented in the borehole logs in Appendix III. A discussion of the results is provided below.

The laboratory results indicate that the concentrations of all tested parameters were less than the applicable Table 2 SCSs at the locations tested except for the below parameters:

Metals and Inorganic Parameters (Table 5, Figures 10.1 to 18): Concentrations of one or more parameters of barium, cadmium, cobalt, lead, mercury, and zinc exceeded the Table 2 SCSs in shallow soils at the Site at borehole locations MW208, MW303, BH304, BH307, BH308, BH311, BH313, BH314, BH317, and BH318. Additionally, one surface soil sample (MW208-1A), had an elevated pH value of 11.21, which is outside the prescribed values of 5 to 9 for the application of generic SCSs. As soil sample MW208-1A was collected from a hole cored through the concrete floor of the garage building and the field duplicate of this soil sample (MW208-99) and the soil sample directly below this sample (i.e., MW208-1B) were within the prescribed pH range, it is the QP's opinion that the elevated pH in this sample is due to concrete dust contamination and is not representative of actual Site conditions.

PHCs (Table 6, Figures 20.1 to 20.3): Concentrations of one or more petroleum parameters of PHC F2, PHC F3, and PHC F4 exceeded the Table 2 SCSs at borehole locations BH2, BH202, BH205, and BH303.

6.7 GROUNDWATER QUALITY

Laboratory analytical results of the groundwater samples submitted for analysis which contribute to the Phase Two CSM are summarized in Tables 6 through 9. The sample names and well screen intervals are shown in the borehole logs in Appendix III. Plan view drawings for all contaminants of potential concern in groundwater are provided in Figures 23 through 33. Copies of the laboratory certificates of analyses are attached in Appendix V. A discussion of the results is provided below.

All groundwater samples analysed had concentrations of all parameters less than the applicable Table 2 SCSs, with the following exception:

PAHs (Table 9, Figure 33): It should be noted that the groundwater sample collected from MW107 on August 29, 2022 had a concentration of benzo[a]pyrene above the Table 2 SCSs. In order to confirm the lab data, groundwater samples were subsequently collected from MW107 on October 13 and 27, 2022 and analysed for PAHs. Concentrations of all PAH parameters in the two subsequent sampling events were below the Table 2 SCSs. As a result, the initial exceedance of benzo[a]pyrene was assessed to have been due to the presence of suspended particulate within the groundwater sample and not representative of groundwater quality. As such, the initial sample result was not considered to be representative of Site conditions.

6.8 SEDIMENT QUALITY

The environmental quality of sediment was not investigated as sediment is not present at the Site.

6.9 QUALITY ASSURANCE AND QUALITY CONTROL RESULTS

QA/QC Control Limits: A review of the quality assurance reports attached to the laboratory certificates of analyses indicate that the laboratory QA/QC samples were within the quality control limits.

Matrix Spike Recoveries: No issues regarding matrix spike recoveries were outlined in any of the laboratory certificates of analysis, with the exception of:

Parcel's Certificate of Analysis #2236110

- The method spike recovery of acetone was higher than the control limit. The laboratory analysis batch was accepted based on other QC included in the batch. As acetone was not detected in groundwater samples, this is not considered to have significantly affected the interpretation of the reported analytical results.
- The method spike recovery of sodium was outside the control limit due to elevated analyte concentrations. As sodium in excess of the Table 2 SCSs was not detected in groundwater samples, this is not considered to have significantly affected the interpretation of the reported analytical results.

Detection Limits: No sample dilution was required by the laboratory, and reporting detection limits were not adjusted.

Trip Spike Samples: Trip spike recoveries reported by the laboratory are summarized in the groundwater analytical results tables (Tables 7 and 8). The recoveries of all analysed parameters within the travel spike sample were within acceptance limits.

Trip Blank Samples: Laboratory results for the trip blank samples are presented in the soil analytical results tables (Tables 3 and 4) and groundwater analytical results tables (Tables 7 and 8). Detectable concentrations of the tested parameters were not reported in the trip blank samples.

Field Duplicate Samples: Field duplicate sample results are presented in the soil and groundwater analytical results tables (Tables 2 through 9). Relative percent difference (RPD) for field duplicate sample results is calculated as follows:

$$RPD = \left| \frac{result_1 - result_2}{\frac{1}{2} \times (result_1 + result_2)} \right| \times 100\%$$

RPD is not calculated where reported concentrations are less than five times the method detection limit. Increased RPD values may be encountered whenever duplicate analyses are completed on samples representing heterogeneous fill materials, however significant concerns regarding the validity of analytical results would generally not be suspected if calculated RPD do not exceed the specified alert criteria by more than a factor of 2.(i.e., an RPD of >60%).

Quantitative correlation was not calculable for the BTEX, PHC, VOC and PAH analytical results of the field duplicate soil samples and the PHC and VOC analytical results of the field duplicate groundwater samples and their sample pairs, as the reported concentrations of all tested parameters for either one or both samples were less than five times the reportable detection limits.

Calculated RPDs for the field duplicate samples for the analysis of metal and inorganic parameters. The acceptable correlation between original and field duplicate samples is typically 30% for metal and inorganic parameters. Acceptable correlation (including, where applicable, calculated RPDs less than the acceptance criteria) was generally observed between the duplicate samples and their corresponding sampling pairs for each of the tested parameters.

A qualitative evaluation of the analytical results indicates acceptable correlation between the sampling pairs in soil and groundwater, with the exception of the following:

- For soil sample MW208-1A and its blind duplicate, MW208-99, The RPD between barium, lead, EC, and SAR is higher than 30% due to the heterogeneous nature of the fill materials comprising the sample and duplicate.

Sample Holding Times: Sample holding times were met for all samples, except the following:

- During the delineation process of mercury in shallow soils around the residence and storage shed, soil samples BH308-2, BH316-1, BH317-2, and BH318-2 were analyzed after the accepted holding time had been exceeded.

The chemical analysis for mercury in four samples past the hold time may have resulted in low biases being reported for the soil samples, possibly indicating that the extent of the mercury impacted soil may not be fully delineated. However, as further delineation and remediation are required, the exceeded hold times are not considered to have significantly affected the data or the conclusions of the Phase Two ESA.

6.10 PHASE TWO CONCEPTUAL SITE MODEL

A preliminary conceptual site model was developed as part of the Phase One ESA, which is discussed in Section 4.3. Following the completion of the Phase Two ESA and subsequent remedial activities, the CSM will be prepared to present the Site characteristics and identify actual or potential sources of contamination, pathways, release mechanisms, receptors, and exposure routes. The CSM will be required prior to the filing of a RSC for the Site.

Below is a summary of the PCAs and APECs identified on the Phase Two ESA Property

Fifteen PCAs were identified within the Phase One Study Area and are shown on Figure 4. Eight of these PCAs were identified on the Phase Two ESA Property and were associated with:

- PCA 1 – presence of fuel oil tank (AST) located in basement of 640 Liverpool Road residence;
- PCA 2 – the Hobby Garage for personal vehicle maintenance, and the address is registered as a generator of waste oils and lubricants from 1988 to 2022;
- PCA 3 – unknown quality of fill materials placed on-Site;
- PCA 4 – presence of a waste oil UST located west of the storage shed on-Site;
- PCA 5 – former oil tank and drum storage to the northwest of the Hobby Garage;
- PCA 6 – de-icing applications to the municipally-operated parking lot located in the north-central portion of the Site;
- PCA 14 – historical use of exterior lead-based paint on the storage shed, and;
- PCA-15 – historical use of exterior lead-based paint on the residence.

Eight APECs associated with the PCAs were identified on the Phase Two ESA Property:

- APEC 1 (northwest portion of 640 Liverpool Road residence) – presence of oil AST (PCA 1);
- APEC 2 (around the Hobby Garage) – an active garage and registered waste generator (PCA 2);
- APEC 3 (entire Site) – imported fill materials with unknown quality (PCA 3);
- APEC 4 (adjacent west of the storage shed) – presence of UST (PCA 4);
- APEC 5 (northwest of Hobby Garage) – former oil ASTs and drum storage (PCA 5);
- APEC 6 (municipally-operated parking lot) – application of de-icing agents (PCA 6);
- APEC 7A (storage shed) – historical use of exterior lead-based paint (PCA 14); and,
- APEC 7B (Residential dwelling) - historical use of exterior lead-based paint (PCA 15).

APECs are shown on Figure 5.

7.0 CONCLUSIONS

The Phase Two ESA investigation of the Site, as documented in this report, identified concentrations of COCs in soil in excess of the generic MECP Table 2 SCSs. As such, remedial activities will be required to be conducted at the Site prior to filing an RSC.

No contaminants of concern were identified in groundwater at the Site.

Sediment is not present at the Site, and therefore contaminants of concern are not present within sediment.

7.1 SIGNATURES

This report has been completed in accordance with the terms of reference for this project as agreed upon by Liverpool Road Limited Partnership and Terrapex Environmental Ltd. and generally accepted engineering or environmental consulting practices in this area.

The reported information is believed to provide a reasonable representation of the general environmental conditions at the site; however, studies of this nature have inherent limitations. The data were collected at specific locations and conditions may vary at other locations, or with the passage of time. The assessment was also limited to a study of those chemical parameters specifically addressed in this report.

Terrapex has relied in good faith on information and representations obtained from the Client and third parties and, except where specifically identified, has made no attempt to verify such information. Terrapex accepts no responsibility for any deficiency or inaccuracy in this report as a result of any misstatement, omission, misrepresentation, or fraudulent act of those providing information. Terrapex shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time of the study.

This report has been prepared for the sole use of Liverpool Road Limited Partnership. Terrapex accepts no liability for claims arising from the use of this report, or from actions taken or decisions made as a result of this report, by parties other than Liverpool Road Limited Partnership.

Respectfully Submitted,
TERRAPEX ENVIRONMENTAL LTD.



Edward Lai B.Sc.
Environmental Scientist



Sara Sutherland, CET, EP
Project Manager



David R. Crawford, P.Ge.
Senior Reviewer
Qualified Person per O. Reg. 153/04



8.0 REFERENCES

Regulations and Guidelines:

Ontario Regulation 153/04, *Records of Site Condition – Part XV.1 of the Environmental Protection Act*

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

Physical Setting Sources:

Aerial photographs for the years 1939, 1946, 1961, 1969, 1975, 1981, 2002, 2012, and 2021 available from National Air Photo Library of Canada, Mapcast Mapping Services, and Previous ESA reports.

Topographic Map: National Topographic Systems (NTS), Energy, Mines and Resources Canada, (1:50,000), Atlas of Canada Toporama mapping, available from the Natural Resources Canada website: <http://atlas.nrcan.gc.ca/site/english/index.html>, updated 2010.

The Physiography of Southern Ontario, Third Edition, Ontario Geological Survey Special Volume 2 (1984), Chapman and Putnam, map provided by ERIS.

Ontario Geological Survey map entitled *Surficial Geology of southern Ontario*, map provided by ERIS.

Ontario Geological Survey map entitled *Bedrock Geology of Ontario*, map provided by ERIS.

Ontario Ministry of Agriculture and Food, Ministry of Natural Resources, Soil Survey Complex (ON Soils), Soil Survey Complex (ON Soils), map provided by ERIS.

Well record information available from ERIS on the Water Well Information System databases and from the MECP Environmental Monitoring and Reporting Branch Water Well Information System, on-line mapping application

The Plan of Survey Showing Topography of Parts of Lots 6 and 7 and Lots 5, 8, 9, 10, 11, 12 and 16, Registered Plan M-89 (Geographic Township of Pickering), Now in the City of Pickering, Regional Municipality of Durham, by J.D. Barnes Limited, dated May 31, 2022

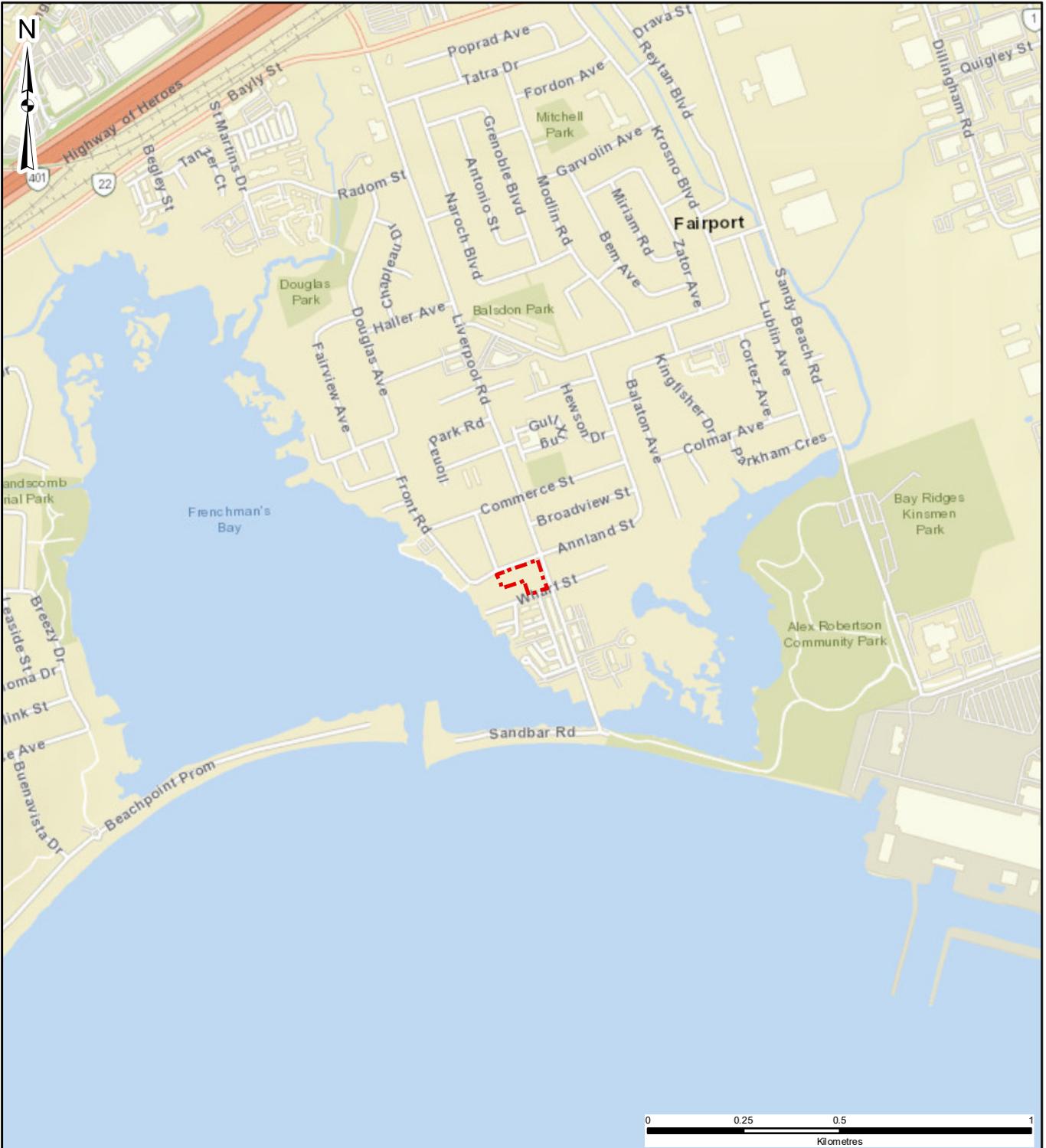
Municipal Address Map, Part Lot 5 and Lots 8-12, Plan M-89 (1280, 1288, 1290, 1292, 1294 Wharf Street, & 607 Annland Street), by City of Pickering, City Development, dated October 12, 2017

Environmental Reports:

- *Phase I Environmental Site Assessment, 640 Liverpool Road, Pickering, Ontario*, prepared for The Renaissance Group Inc. by Edward Wong & Associates Inc, dated August 13, 2021

- *Phase II Environmental Site Assessment, 640 Liverpool Road, Pickering, Ontario*, prepared for The Renaissance Group Inc. by Edward Wong & Associates Inc, dated September, 2021
- *Geotechnical Investigation Report, Proposed Residential Development, 640 Liverpool Road, Pickering, Ontario*, prepared for Liverpool Limited Partnership by Terrapex, dated December 5, 2022

FIGURES



C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3414.01\640 Liverpool Road_Pickering\MXD\Phase Two\CT3414.01 FIG1 SITE LOCATION.mxd

LEGEND

 SITE BOUNDARY

CLIENT: LIVERPOOL ROAD LIMITED PARTNERSHIP		
SITE LOCATION: 640 LIVERPOOL ROAD PICKERING, ONTARIO		
		
TITLE: SITE LOCATION		
DRAWN BY: SW/JS	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 1

DATA SOURCE: ESRI
 MAP PROJECTION: NAD 1983 UTM Zone 17N

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG2 GENERAL SITE LAYOUT.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- ⊗ FORMER ABOVEGROUND STORAGE TANK

UTILITIES

- UNDERGROUND COMMUNICATION
- UNDERGROUND GAS
- UNDERGROUND HYDRO
- UNDERGROUND WATER

DATA SOURCE: MAPCAST MAPPING SERVICES
 MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
 LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
 640 LIVERPOOL ROAD AND 609 ANNLAND STREET
 PICKERING, ONTARIO



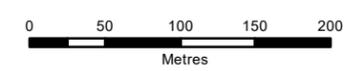
TITLE:
GENERAL SITE LAYOUT

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 2



LEGEND

- SITE BOUNDARY
- PHASE ONE STUDY AREA
- + MECP WATER WELL RECORD



DATA SOURCE: CITY OF TORONTO
 IMAGERY SOURCE: MAPCAST MAPPING SERVICES
 MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
 LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
 640 LIVERPOOL ROAD AND 609 ANNLAND STREET
 PICKERING, ONTARIO



TITLE:
**PHASE ONE STUDY AREA AND
 SURROUNDING LAND USES**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 3

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414\01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414_01 FIG3 STUDY AREA.mxd

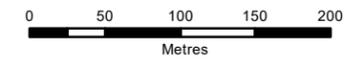


LEGEND
 [Red dashed line] SITE BOUNDARY
 [Red solid line] PHASE ONE STUDY AREA

POTENTIALLY CONTAMINATING ACTIVITY TYPES
 ● ON-SITE PCA LEADING TO APEC
 ● OFF-SITE PCA NOT LEADING TO APEC

POTENTIALLY CONTAMINATING ACTIVITY TYPES
 7. BOAT MANUFACTURING
 19. ELECTRONIC AND COMPUTER EQUIPMENT MANUFACTURING
 28. GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS
 30. IMPORTATION OF FILL MATERIAL OF UNKNOWN QUALITY
 44. PORT ACTIVITIES, INCLUDING OPERATION AND MAINTENANCE OF WHARVES AND DOCKS
 58. WASTE DISPOSAL AND WASTE MANAGEMENT, INCLUDING THERMAL TREATMENT, LANDFILLING AND TRANSFER OF WASTE, OTHER THAN USE OF BIOSOILS AS SOIL CONDITIONERS
 OT1. OTHER - USE OF DE-ICING AGENTS ON GRAVEL COVERED DRIVEWAY AND PARKING AREAS
 OT2. OTHER - HISTORICAL USE OF EXTERIOR LEAD-BASED PAINT

NOTE:
 ● PCA ID (PCA TYPE)
 REFER TO TABLE 17 IN THE REPORT FOR ADDITIONAL DETAILS.



DATA SOURCE: CITY OF TORONTO
 IMAGERY SOURCE: MAPCAST MAPPING SERVICES
 MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
 LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
 640 LIVERPOOL ROAD AND 609 ANN LAND STREET
 PICKERING, ONTARIO



TITLE:
**CONCEPTUAL SITE MODEL -
 POTENTIALLY CONTAMINATING ACTIVITIES**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 4

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414\01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414_01_FIG4_PCA.mxd

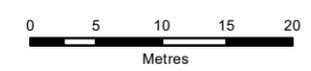
C:\Users\USerrou\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG5A APEC.mxd



LEGEND

- SITE BOUNDARY
- AREAS OF POTENTIAL ENVIRONMENTAL CONCERN (APEC)**
- APEC 1
- APEC 2
- APEC 3 (ENTIRE SITE)
- APEC 4
- APEC 5
- APEC 6
- APEC 7A
- APEC 7B

APEC	PCA ID	PCA TYPE	DESCRIPTION
1	1	28	GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS
2	2	58	WASTE DISPOSAL AND WASTE MANAGEMENT, INCLUDING THERMAL TREATMENT, LANDFILLING AND TRANSFER OF WASTE, OTHER THAN USE OF BIOSOILS AS SOIL CONDITIONERS
3	3	30	IMPORTATION OF FILL MATERIAL OF UNKNOWN QUALITY
4	4	28	GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS
5	5	28	GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS
6	6	OT1	APPLICATION OF DE-ICING SALTS (NOT SPECIFICALLY DEFINED IN THE REGULATION)
7	14	OT2	HISTORICAL USE OF EXTERIOR LEAD-BASED PAINT
	15		



DATA SOURCE: MAPCAST MAPPING SERVICES
 MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
 LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
 640 LIVERPOOL ROAD
 PICKERING, ONTARIO



TITLE:
CONCEPTUAL SITE MODEL - AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 5A

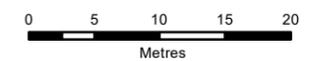
C:\Users\USerroull\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIGSB APEC WITH SAMPLE LOCATIONS.mxd



LEGEND

- SITE BOUNDARY
 - BOREHOLE (TERRAPEX)
 - + MONITORING WELL (TERRAPEX)
 - ⊕ MONITORING WELL (EDWARD WONG)
- AREAS OF POTENTIAL ENVIRONMENTAL CONCERN (APEC)**
- APEC 1
 - APEC 2
 - APEC 3 (ENTIRE SITE)
 - APEC 4
 - APEC 5
 - APEC 6
 - APEC 7A
 - APEC 7B

APEC	PCA ID	PCA TYPE	DESCRIPTION
1	1	28	GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS
2	2	58	WASTE DISPOSAL AND WASTE MANAGEMENT, INCLUDING THERMAL TREATMENT, LANDFILLING AND TRANSFER OF WASTE, OTHER THAN USE OF BIOSOILS AS SOIL CONDITIONERS
3	3	30	IMPORTATION OF FILL MATERIAL OF UNKNOWN QUALITY
4	4	28	GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS
5	5	28	GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS
6	6	OT1	APPLICATION OF DE-ICING SALTS (NOT SPECIFICALLY DEFINED IN THE REGULATION)
7	14	OT2	HISTORICAL USE OF EXTERIOR LEAD-BASED PAINT
	15		



DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
640 LIVERPOOL ROAD AND 609 ANNLAND STREET
PICKERING, ONTARIO



TITLE:
CONCEPTUAL SITE MODEL - AREAS OF POTENTIAL ENVIRONMENTAL CONCERN WITH SAMPLE LOCATIONS

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 5B

C:\Users\USerrou\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG6 CROSS SECTION PLAN.mxd



- LEGEND**
- SITE BOUNDARY
 - CROSS SECTIONS
 - BOREHOLE (TERRAPEX)
 - MONITORING WELL (TERRAPEX)
 - MONITORING WELL (EDWARD WONG)
 - UNDERGROUND STORAGE TANK
 - ABOVEGROUND STORAGE TANK
 - FORMER ABOVEGROUND STORAGE TANK



DATA SOURCE: MAPCAST MAPPING SERVICES
 MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
 LIVERPOOL ROAD LIMITED PARTNERSHIP

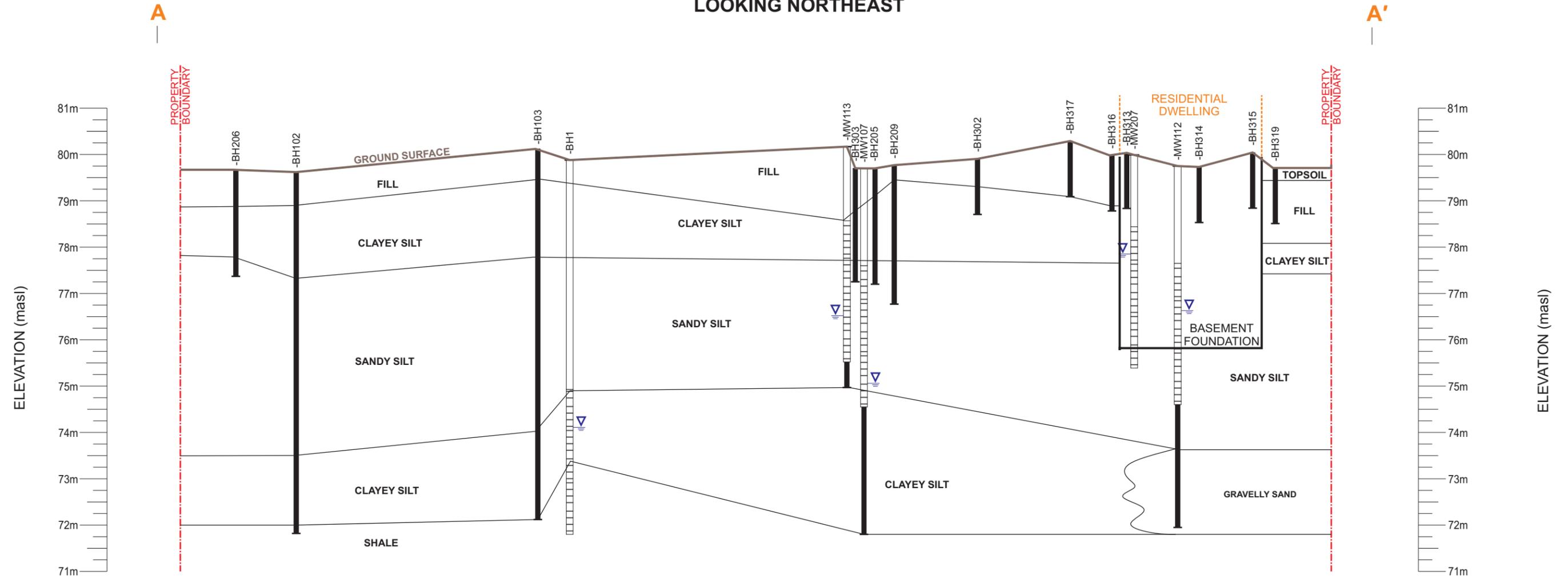
SITE LOCATION:
 640 LIVERPOOL ROAD AND 609 ANNLAND STREE
 PICKERING, ONTARIO



TITLE:
CROSS SECTION PLAN

DRAWN BY: JS	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 6

LOOKING NORTHEAST



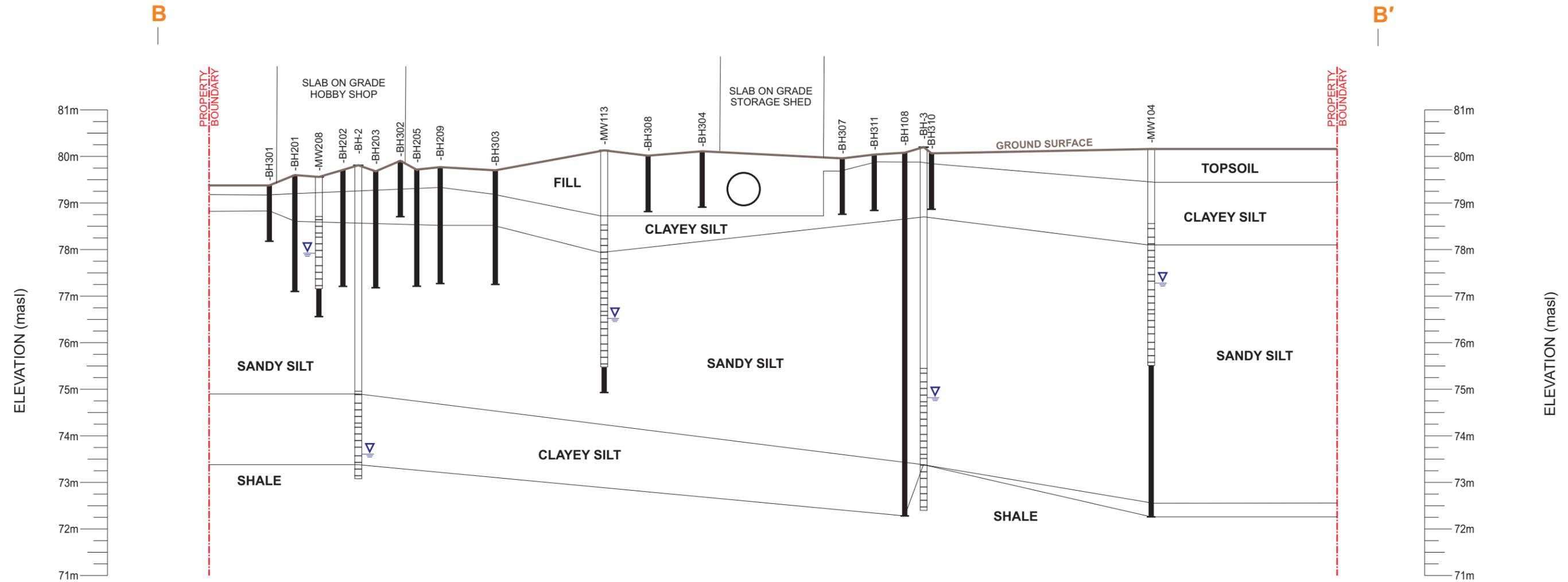
LEGEND

-  GROUNDWATER LEVEL (AS OF SEPTEMBER 6, 2022)
-  - MONITORING WELL
-  - BOREHOLE
-  - SCREENED LEVEL



CLIENT: LIVERPOOL ROAD LIMITED PARTNERSHIP		
SITE LOCATION: 640 LIVERPOOL ROAD PICKERING, ONTARIO		
		
TITLE: CROSS SECTION A-A'		
DRAWN BY: JS/ AB	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 7

LOOKING NORTHWEST



LEGEND

- GROUNDWATER LEVEL (AS OF SEPTEMBER 6, 2022)
- UNDERGROUND STORAGE TANK
- MONITORING WELL
- BOREHOLE
- SCREENED LEVEL



CLIENT: LIVERPOOL ROAD LIMITED PARTNERSHIP		
SITE LOCATION: 640 LIVERPOOL ROAD PICKERING, ONTARIO		
TITLE: CROSS SECTION B-B'		
DRAWN BY: JS	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 8

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG9 INTERPRETED GROUNDWATER FLOW.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- + MONITOIING WELL (TERRAPEX)
- + MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK
- INTERPRETED DIRECTION OF GROUNDWATER MOVEMENT
- EQUIPOTENTIAL CONTOUR

130.1 STATIC WATER LEVEL (6 Sep 2022) (m ASL)



DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
640 LIVERPOOL ROAD AND 609 ANN LAND STREET
PICKERING, ONTARIO

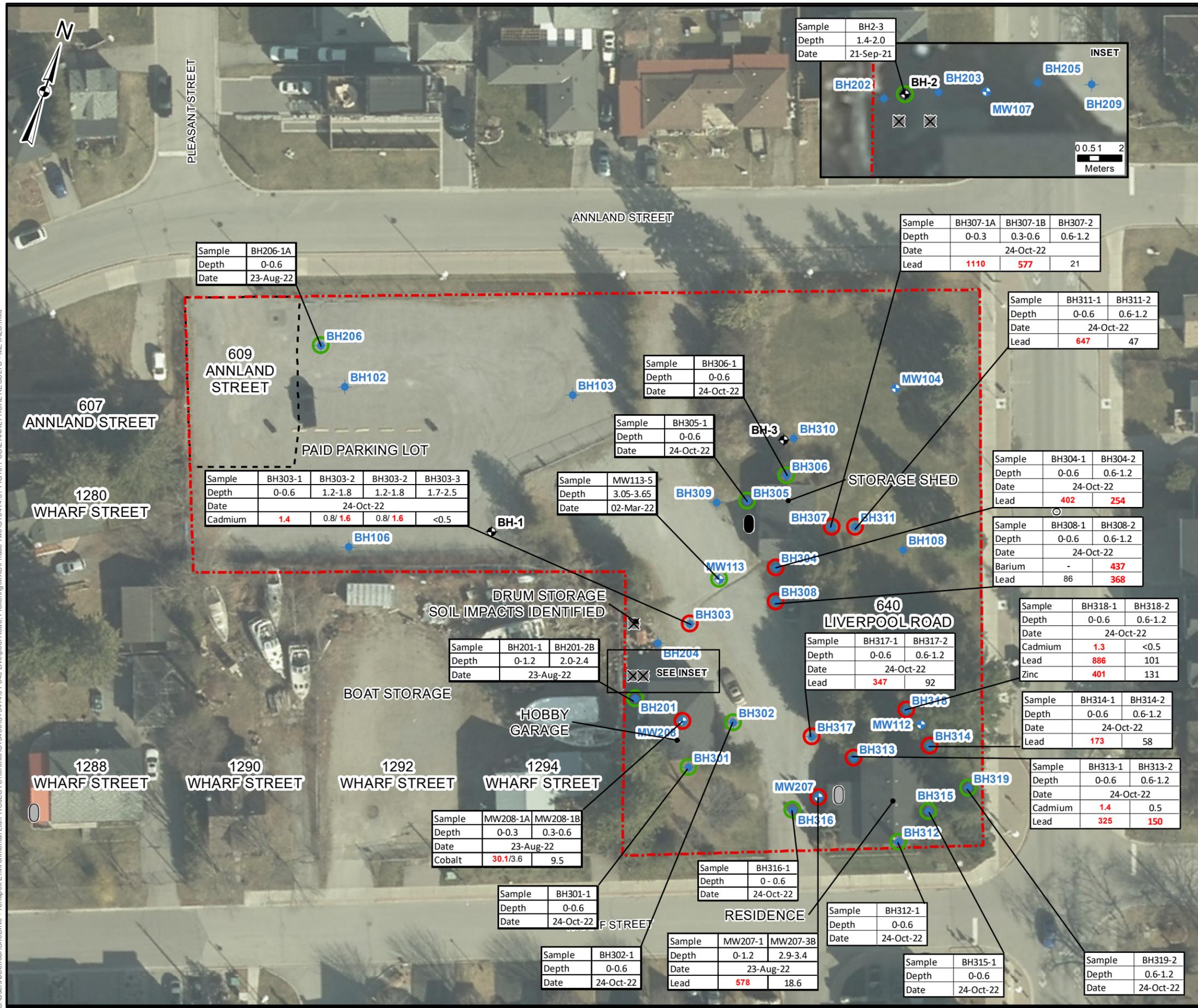


TITLE:
**INTERPRETED GROUNDWATER FLOW
(AS OF SEPTEMBER 6, 2022)**

DRAWN BY: SW/ AB	PROJECT NO.: CT3414.01	CHECKED BY: SS
---------------------	---------------------------	-------------------

REVISION: 00	DATE: JANUARY 2023	FIGURE: 9
-----------------	-----------------------	---------------------

C:\Users\USerrou\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG10.1 SOIL ANALYTICAL RESULTS - METALS.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

SAMPLE	DEPTH	DATE	PARAMETER	TABLE 2 SCS
Barium				390
Cadmium				1.2
Cobalt				22
Lead				120
Zinc				340

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
- DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

DATA SOURCE: MAPCAST MAPPING SERVICES
 MAP PROJECTION: NAD 1983 UTM ZONE 17N

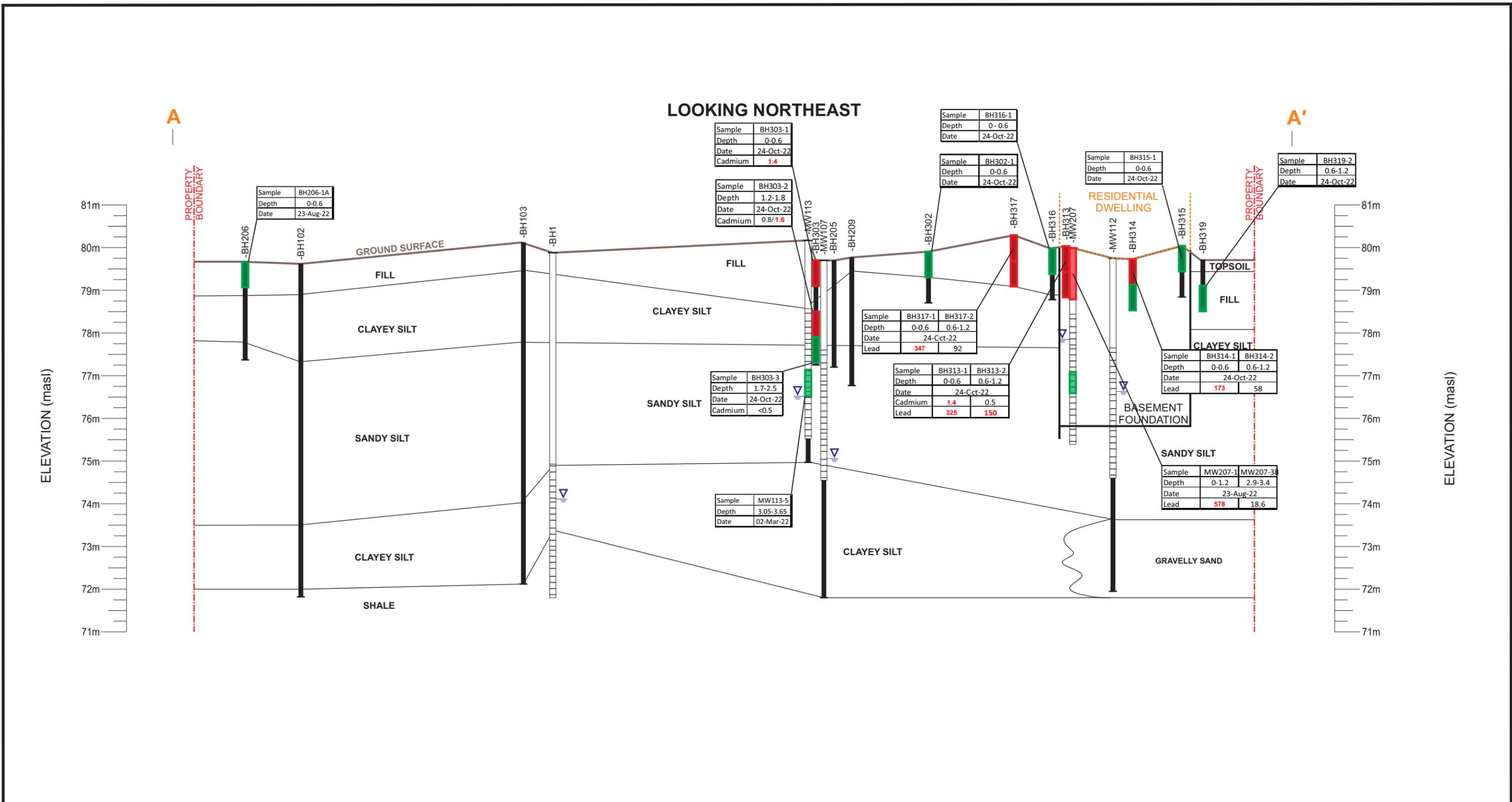
CLIENT:
 LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
 640 LIVERPOOL ROAD AND 609 ANNLAND STREET
 PICKERING, ONTARIO



TITLE:
SOIL ANALYTICAL RESULTS - METALS

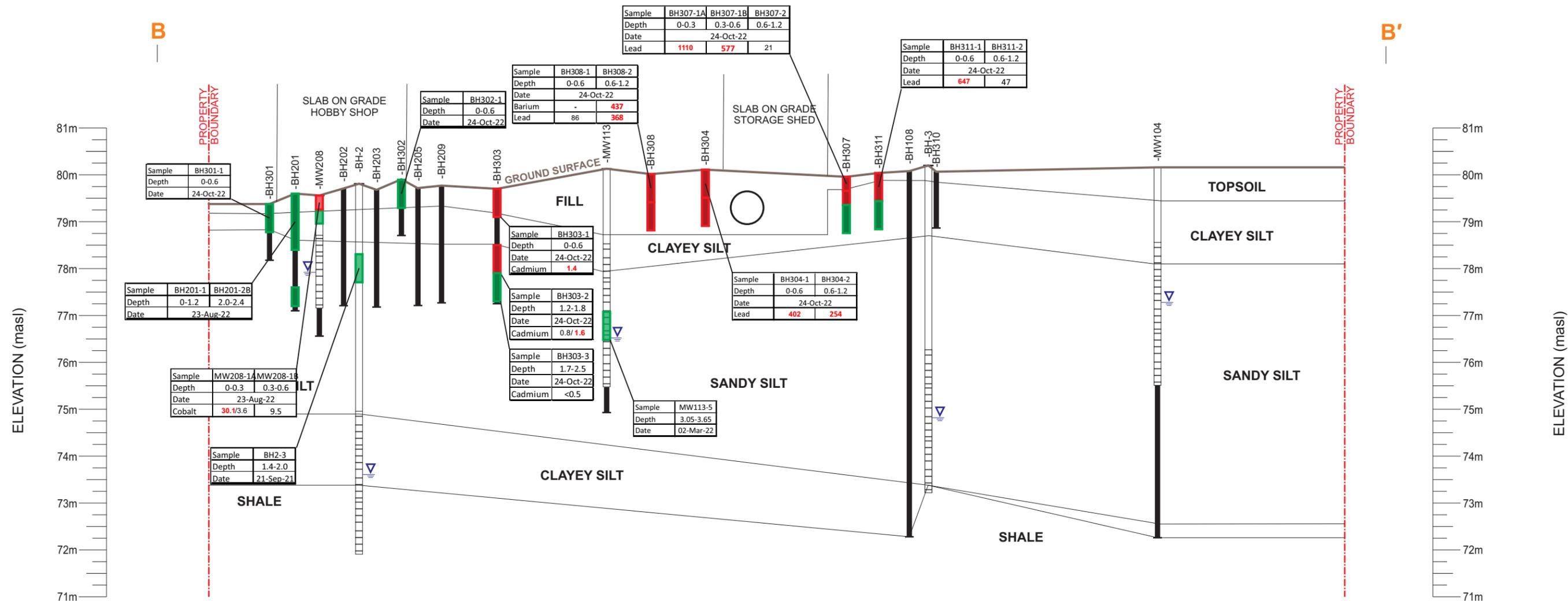
DRAWN BY: SW/ AB	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 10.1



<p>LEGEND</p> <p> GROUNDWATER LEVEL (AS OF SEPTEMBER 6, 2022)</p> <p> - MONITORING WELL</p> <p> - BOREHOLE</p> <p> - SCREENED LEVEL</p>	<p>ANALYSIS INFORMATION</p> <p> Less than or equal to Table 2 SCS</p> <p> Greater than Table 2 SCS</p> <p>MECP Table 2: Full Depth Generic SCS in a Potable Groundwater Condition for Residential/Parkland/Institutional property use with coarse textured soil.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>SAMPLE</th> <th>DEPTH</th> <th>DATE</th> <th>TABLE 2 SCS</th> </tr> </thead> <tbody> <tr> <td>Barium</td> <td></td> <td></td> <td>390</td> </tr> <tr> <td>Cadmium</td> <td></td> <td></td> <td>1.2</td> </tr> <tr> <td>Cobalt</td> <td></td> <td></td> <td>22</td> </tr> <tr> <td>Lead</td> <td></td> <td></td> <td>120</td> </tr> <tr> <td>Zinc</td> <td></td> <td></td> <td>340</td> </tr> </tbody> </table>	SAMPLE	DEPTH	DATE	TABLE 2 SCS	Barium			390	Cadmium			1.2	Cobalt			22	Lead			120	Zinc			340	<p>CLIENT: LIVERPOOL ROAD LIMITED PARTNERSHIP</p> <p>SITE LOCATION: 640 LIVERPOOL ROAD PICKERING, ONTARIO</p> <p style="text-align: center;"></p> <p>TITLE: SOIL ANALYTICAL RESULTS METALS CROSS SECTION A-A'</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">DRAWN BY: JS/ SW/ AB</td> <td style="width: 33%;">PROJECT NO.: CT3414.01</td> <td style="width: 33%;">CHECKED BY: SS</td> </tr> <tr> <td>REVISION: 00</td> <td>DATE: JANUARY 2023</td> <td>FIGURE: 10.2</td> </tr> </table>	DRAWN BY: JS/ SW/ AB	PROJECT NO.: CT3414.01	CHECKED BY: SS	REVISION: 00	DATE: JANUARY 2023	FIGURE: 10.2
SAMPLE	DEPTH	DATE	TABLE 2 SCS																													
Barium			390																													
Cadmium			1.2																													
Cobalt			22																													
Lead			120																													
Zinc			340																													
DRAWN BY: JS/ SW/ AB	PROJECT NO.: CT3414.01	CHECKED BY: SS																														
REVISION: 00	DATE: JANUARY 2023	FIGURE: 10.2																														

HORIZONTAL SCALE: 0 10m 20m

LOOKING NORTHWEST



LEGEND

- GROUNDWATER LEVEL (AS OF SEPTEMBER 6, 2022)
- UNDERGROUND STORAGE TANK
- MONITORING WELL
- BOREHOLE
- SCREENED LEVEL

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

MECP Table 2: Full Depth Generic SCS in a Potable Groundwater Condition for Residential/Parkland/Institutional property use with coarse textured soil.

SAMPLE	
DEPTH	
DATE	
PARAMETER	TABLE 2 SCS
Cadmium	1.2
Cobalt	22
Lead	120



CLIENT:	LIVERPOOL ROAD LIMITED PARTNERSHIP	
SITE LOCATION:	640 LIVERPOOL ROAD PICKERING, ONTARIO	
TITLE:	SOIL ANALYTICAL RESULTS METALS CROSS SECTION B-B'	
DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS/ SW/ AB	CT3414.01	SS
REVISION:	DATE:	FIGURE:
00	JANUARY 2023	10.3

C:\Users\USerrou\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG11 SOIL ANALYTICAL RESULTS - HFMETALS.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

1. ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
2. DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
3. RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
640 LIVERPOOL ROAD AND 609 ANNLAND STREET
PICKERING, ONTARIO

TITLE:
**SOIL ANALYTICAL RESULTS
HYDRIDE-FORMING METALS**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 11

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG12 SOIL ANALYTICAL RESULTS - BORON.mxd



LEGEND

- SITE BOUNDARY
- - - PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- ⊗ FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
- DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
640 LIVERPOOL ROAD AND 609 ANN LAND STREET
PICKERING, ONTARIO

TERRAPEX

TITLE:
**SOIL ANALYTICAL RESULTS
BORON (HOT WATER SOLUBLE)**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 12

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\Map\Phase Two\CT3414.01 FIG13 SOIL ANALYTICAL RESULTS - HEXACHROM.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
- DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
640 LIVERPOOL ROAD AND 609 ANN LAND STREET
PICKERING, ONTARIO

TITLE:
**SOIL ANALYTICAL RESULTS
HEXAVALENT CHROMIUM**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 13

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\Phase Two\CT3414.01 FIG14 SOIL ANALYTICAL RESULTS - CYANIDE.mxd



LEGEND

- SITE BOUNDARY
- - - PARCEL
- BOREHOLE (TERRAPEX)
- MONITORING WELL (TERRAPEX)
- MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- ⊗ FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
- DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
 MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
 LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
 640 LIVERPOOL ROAD AND 609 ANN LAND STREET
 PICKERING, ONTARIO

TERRAPEX

TITLE:
SOIL ANALYTICAL RESULTS - CYANIDE

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 14

C:\Users\USerrouil\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG15.1 SOIL ANALYTICAL RESULTS - MERCURY.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

SAMPLE	DEPTH	DATE	PARAMETER	TABLE 2 SCS
BH307-1A	0-0.3	24-Oct-22	Mercury	0.27

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

1. ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
2. DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
3. RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

DATA SOURCE: MAPCAST MAPPING SERVICES
 MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
 LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
 640 LIVERPOOL ROAD AND 609 ANNLAND STREET
 PICKERING, ONTARIO



TITLE:
SOIL ANALYTICAL RESULTS - MERCURY

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 15.1

Sample	BH2-3
Depth	1.4-2.0
Date	21-Sep-21

Sample	BH206-1A
Depth	0-0.6
Date	23-Aug-22

Sample	BH306-1
Depth	0-0.6
Date	24-Oct-22

Sample	BH305-1
Depth	0-0.6
Date	24-Oct-22

Sample	MW113-5
Depth	3.05-3.65
Date	02-Mar-22

Sample	BH307-1A	BH307-1B
Depth	0-0.3	0.3-0.6
Date	24-Oct-22	

Sample	BH304-1
Depth	0-0.6
Date	24-Oct-22

Sample	BH308-2
Depth	0.6-1.2
Date	24-Oct-22

Sample	BH318-1
Depth	0-0.6
Date	24-Oct-22

Sample	BH314-1
Depth	0-0.6
Date	24-Oct-22

Sample	BH201-1	BH201-2B
Depth	0-1.2	2.0-2.4
Date	23-Aug-22	

Sample	BH208-1A	BH208-1B
Depth	0-0.3	0.3-0.6
Date	23-Aug-22	

Sample	BH315-1
Depth	0-0.6
Date	24-Oct-22

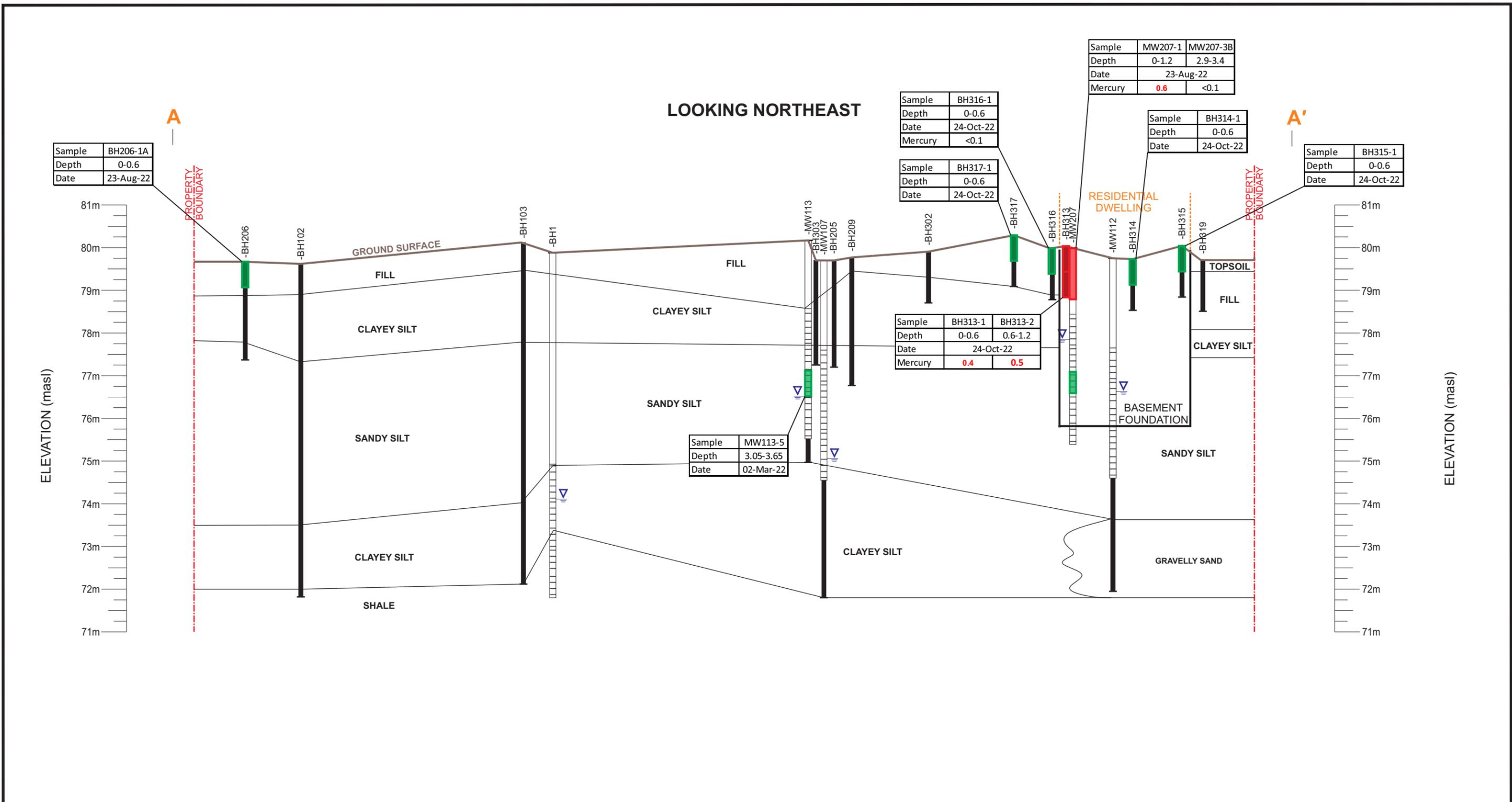
Sample	BH317-1
Depth	0-0.6
Date	24-Oct-22

Sample	BH312-1
Depth	0-0.6
Date	24-Oct-22

Sample	BH316-1
Depth	0-0.6
Date	24-Oct-22
Mercury	<0.1

Sample	MW207-1	MW207-3B
Depth	0-1.2	2.9-3.4
Date	23-Aug-22	
Mercury	0.6	<0.1

Sample	BH313-1	BH313-2
Depth	0-0.6	0.6-1.2
Date	24-Oct-22	
Mercury	0.4	0.5



Sample	BH206-1A
Depth	0-0.6
Date	23-Aug-22

Sample	BH316-1
Depth	0-0.6
Date	24-Oct-22
Mercury	<0.1

Sample	BH317-1
Depth	0-0.6
Date	24-Oct-22

Sample	MW207-1	MW207-3B
Depth	0-1.2	2.9-3.4
Date	23-Aug-22	
Mercury	0.6	<0.1

Sample	BH314-1
Depth	0-0.6
Date	24-Oct-22

Sample	BH315-1
Depth	0-0.6
Date	24-Oct-22

Sample	BH313-1	BH313-2
Depth	0-0.6	0.6-1.2
Date	24-Oct-22	
Mercury	0.4	0.5

Sample	MW113-5
Depth	3.05-3.65
Date	02-Mar-22

LEGEND

▽ GROUNDWATER LEVEL (AS OF SEPTEMBER 6, 2022)

— MONITORING WELL

— BOREHOLE

— SCREENED LEVEL

ANALYSIS INFORMATION

■ Less than or equal to Table 2 SCS

■ Greater than Table 2 SCS

MECP Table 2: Full Depth Generic SCS in a Potable Groundwater Condition for Residential/Parkland/Institutional property use with coarse textured soil.

SAMPLE	
DEPTH	
DATE	
PARAMETER	TABLE 2 SCS
Mercury	0.27



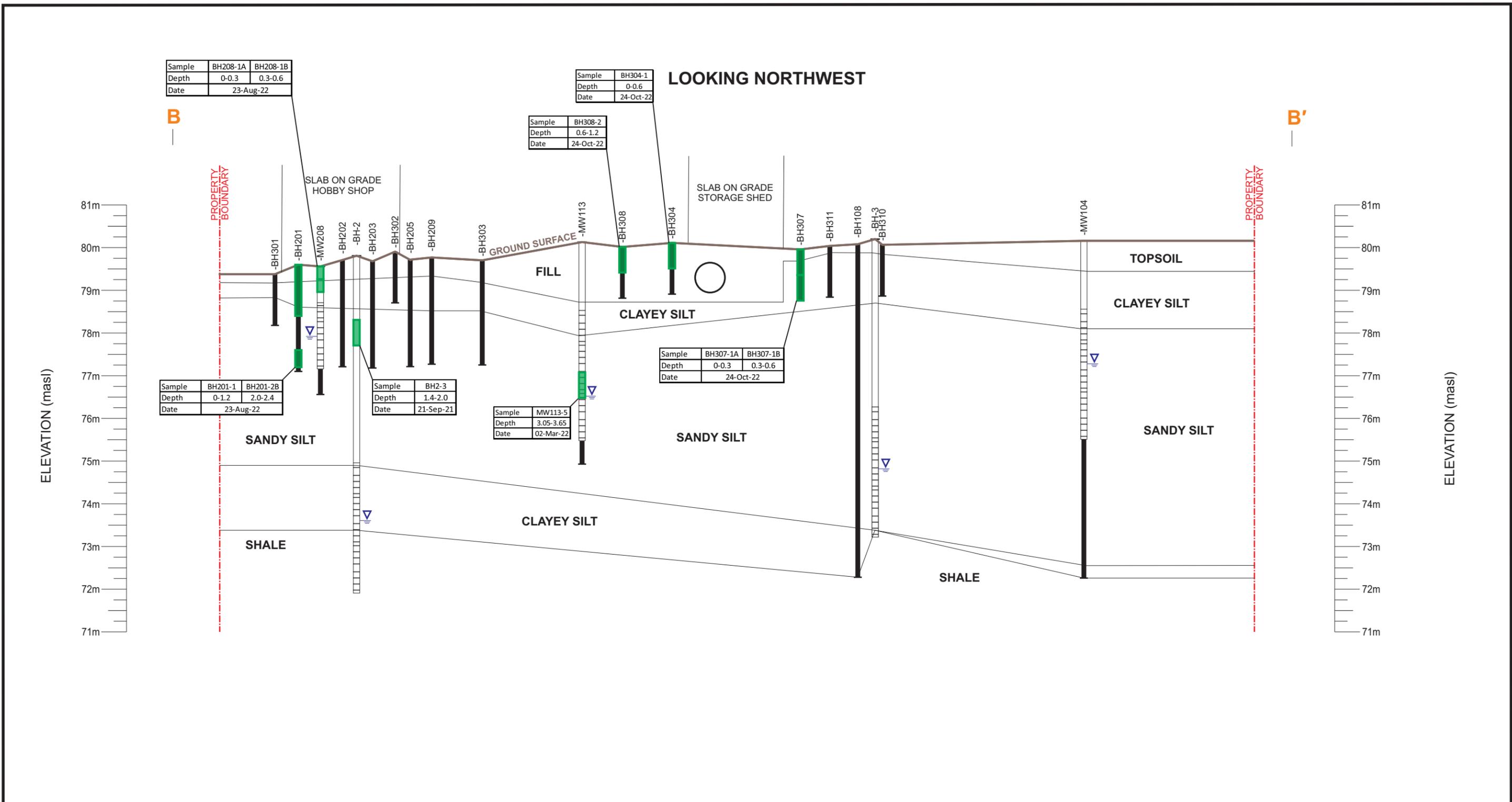
CLIENT: LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION: 640 LIVERPOOL ROAD PICKERING, ONTARIO

TERRAPEX

TITLE: SOIL ANALYTICAL RESULTS MERCURY CROSS SECTION A-A'

DRAWN BY: JS/ SW/ AB	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 15.2



LEGEND

- ▽ GROUNDWATER LEVEL (AS OF SEPTEMBER 6, 2022)
- UNDERGROUND STORAGE TANK
- ▬ MONITORING WELL
- ▬ BOREHOLE
- ▬ SCREENED LEVEL

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

MECP Table 2: Full Depth Generic SCS in a Potable Groundwater Condition for Residential/Parkland/Institutional property use with coarse textured soil.

SAMPLE	
DEPTH	
DATE	
PARAMETER	TABLE 2 SCS
Mercury	0.27

HORIZONTAL SCALE
0 5m 10m

CLIENT: LIVERPOOL ROAD LIMITED PARTNERSHIP		
SITE LOCATION: 640 LIVERPOOL ROAD PICKERING, ONTARIO		
TITLE: SOIL ANALYTICAL RESULTS MERCURY CROSS SECTION B-B'		
DRAWN BY: JS/ SW/ AB	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 15.3

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG16 SOIL ANALYTICAL RESULTS - pH.mxd



LEGEND

- SITE BOUNDARY
- - - PARCEL
- BOREHOLE (TERRAPEX)
- MONITORING WELL (TERRAPEX)
- MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- ⊗ FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

SAMPLE	
DEPTH	
DATE	
PARAMETER	TABLE 2 SCS
pH	5 to 9 (Surface soils) 5 to 11 (Subsurface Soils)

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
- DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
640 LIVERPOOL ROAD AND 609 ANN LAND STREET
PICKERING, ONTARIO

TERRAPEX

TITLE:
SOIL ANALYTICAL RESULTS - pH

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 16

C:\Users\swilliams\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414_01_640_Liverpool\Road_Pickering\MXD\Phase Two\CT3414.01_FIG16_SOIL_ANALYTICAL_RESULTS - pH.mxd



Sample	BH2-3
Depth	1.4-2.0
Date	21-Sep-21

Sample	BH206-1A
Depth	0-0.6
Date	23-Aug-22

Sample	MW113-5
Depth	3.05-3.65
Date	02-Mar-22

Sample	BH303-1
Depth	0-0.6
Date	24-Oct-22

Sample	BH201-1	BH201-2B
Depth	0-1.2	2.0-2.4
Date	23-Aug-22	

Sample	BH208-1A	BH208-1A	BH208-1B	BH208-4
Depth	0-0.3	0-0.3	0.3-0.6	1.8-2.4
Date	23-Aug-22			
pH	11.21/8.02	10.89	7.42	7.82

Sample	BH301-1
Depth	0-0.6
Date	24-Oct-22

Sample	BH302-1
Depth	0-0.6
Date	24-Oct-22

Sample	MW207-1	MW207-3B
Depth	0-1.2	2.9-3.4
Date	23-Aug-22	

LEGEND

- SITE BOUNDARY
- PARCEL
- + BOREHOLE (TERRAPEX)
- + MONITORING WELL (TERRAPEX)
- + MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

SAMPLE	
DEPTH	
DATE	
PARAMETER	TABLE 2 SCS
pH	5 to 9 (Surface soils) 5 to 11 (Subsurface Soils)

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
- DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

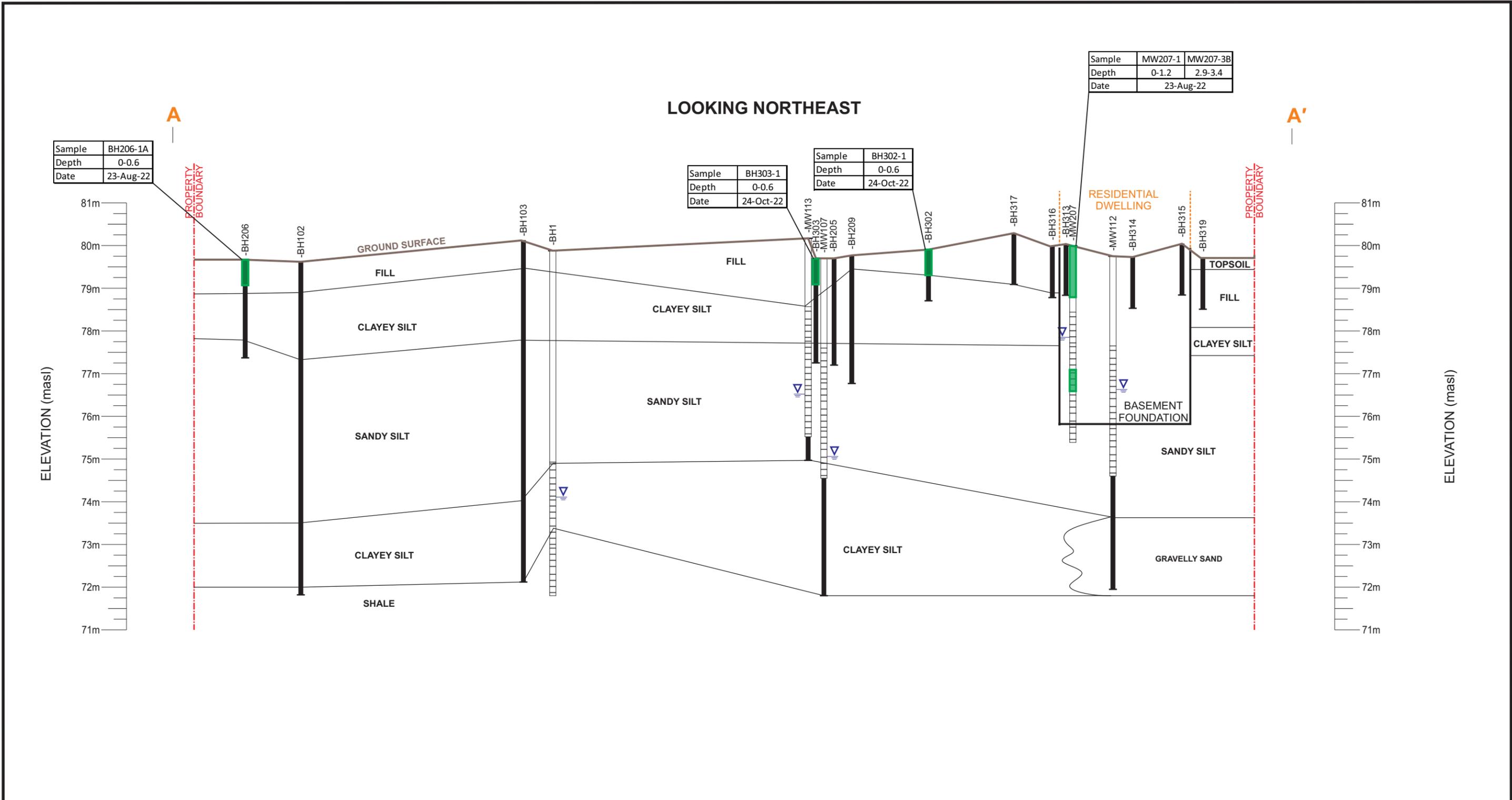
CLIENT:
LIVERPOOL LIMITED PARTNERSHIP

SITE LOCATION:
640 LIVERPOOL ROAD AND 609 ANNLAND STREET
PICKERING, ONTARIO



TITLE:
SOIL ANALYTICAL RESULTS - pH

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: NOVEMBER 2022	FIGURE: 16



LEGEND GROUNDWATER LEVEL (AS OF SEPTEMBER 6, 2022) - MONITORING WELL - BOREHOLE - SCREENED LEVEL	ANALYSIS INFORMATION Less than or equal to Table 2 SCS Greater than Table 2 SCS <small>MECP Table 2: Full Depth Generic SCS in a Potable Groundwater Condition for Residential/Parkland/Institutional property use with coarse textured soil.</small>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>SAMPLE</td><td></td></tr> <tr><td>DEPTH</td><td></td></tr> <tr><td>DATE</td><td></td></tr> <tr><td>PARAMETER</td><td style="text-align: center;">TABLE 2 SCS</td></tr> <tr><td>pH</td><td>5 to 9 (Surface soils) 5 to 11 (Subsurface Soils)</td></tr> </table>	SAMPLE		DEPTH		DATE		PARAMETER	TABLE 2 SCS	pH	5 to 9 (Surface soils) 5 to 11 (Subsurface Soils)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td colspan="3">CLIENT: LIVERPOOL ROAD LIMITED PARTNERSHIP</td></tr> <tr><td colspan="3">SITE LOCATION: 640 LIVERPOOL ROAD PICKERING, ONTARIO</td></tr> <tr><td colspan="3" style="text-align: center;"></td></tr> <tr><td colspan="3">TITLE: SOIL ANALYTICAL RESULTS pH CROSS SECTION A-A'</td></tr> <tr> <td>DRAWN BY: JS/ SW/ AB</td> <td>PROJECT NO.: CT3414.01</td> <td>CHECKED BY: SS</td> </tr> <tr> <td>REVISION: 00</td> <td>DATE: JANUARY 2023</td> <td>FIGURE: 16.2</td> </tr> </table>	CLIENT: LIVERPOOL ROAD LIMITED PARTNERSHIP			SITE LOCATION: 640 LIVERPOOL ROAD PICKERING, ONTARIO						TITLE: SOIL ANALYTICAL RESULTS pH CROSS SECTION A-A'			DRAWN BY: JS/ SW/ AB	PROJECT NO.: CT3414.01	CHECKED BY: SS	REVISION: 00	DATE: JANUARY 2023	FIGURE: 16.2
SAMPLE																															
DEPTH																															
DATE																															
PARAMETER	TABLE 2 SCS																														
pH	5 to 9 (Surface soils) 5 to 11 (Subsurface Soils)																														
CLIENT: LIVERPOOL ROAD LIMITED PARTNERSHIP																															
SITE LOCATION: 640 LIVERPOOL ROAD PICKERING, ONTARIO																															
TITLE: SOIL ANALYTICAL RESULTS pH CROSS SECTION A-A'																															
DRAWN BY: JS/ SW/ AB	PROJECT NO.: CT3414.01	CHECKED BY: SS																													
REVISION: 00	DATE: JANUARY 2023	FIGURE: 16.2																													

HORIZONTAL SCALE

Sample	BH208-1A	BH208-1A	BH208-1B	BH208-4
Depth	0-0.3	0-0.3	0.3-0.6	1.8-2.4
Date	23-Aug-22			
pH	11.21/8.02	10.89	7.42	7.82

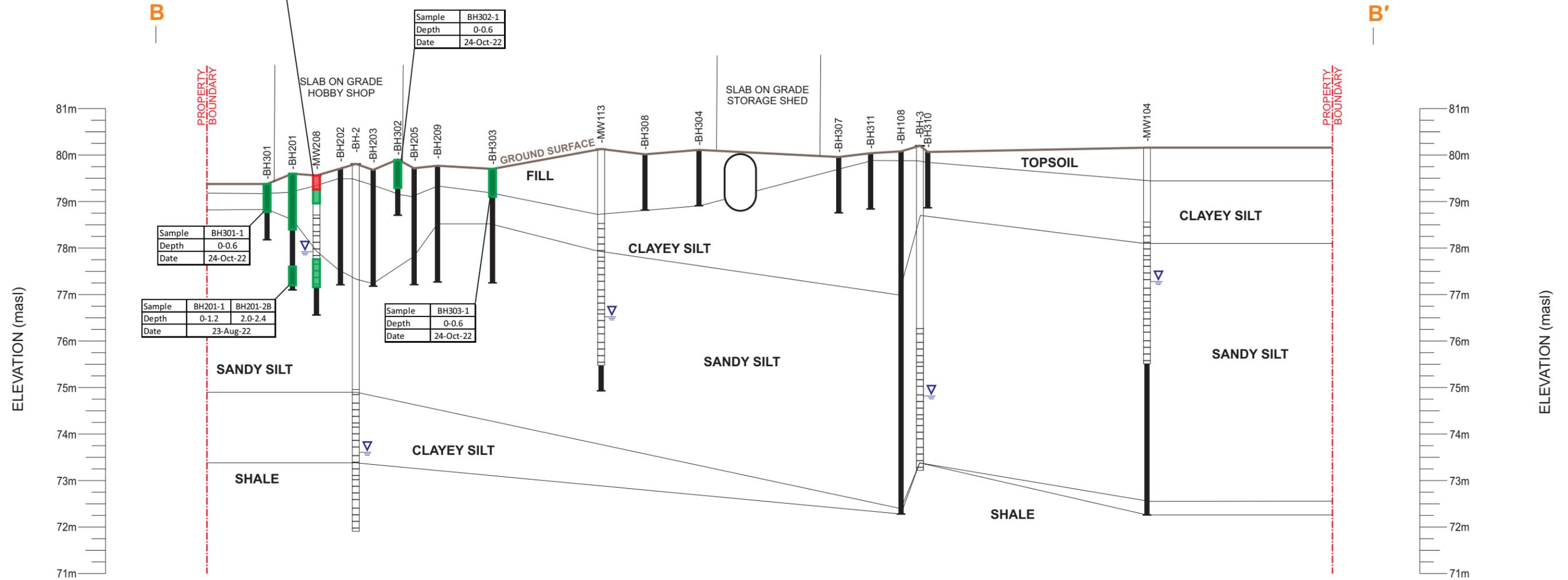
Sample	BH302-1
Depth	0-0.6
Date	24-Oct-22

Sample	BH301-1
Depth	0-0.6
Date	24-Oct-22

Sample	BH201-1	BH201-2B
Depth	0-1.2	2.0-2.4
Date	23-Aug-22	

Sample	BH303-1
Depth	0-0.6
Date	24-Oct-22

LOOKING NORTHWEST



LEGEND

- GROUNDWATER LEVEL (AS OF SEPTEMBER 6, 2022)
- UNDERGROUND STORAGE TANK
- MONITORING WELL
- BOREHOLE
- SCREENED LEVEL

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

MECP Table 2: Full Depth Generic SCS in a Potable Groundwater Condition for Residential/Parkland/Institutional property use with coarse textured soil.

SAMPLE	
DEPTH	
DATE	
PARAMETER	TABLE 2 SCS
pH	5 to 9 (Surface soils) 6 to 11 (Subsurface Soils)



CLIENT: LIVERPOOL ROAD LIMITED PARTNERSHIP		
SITE LOCATION: 640 LIVERPOOL ROAD PICKERING, ONTARIO		
TITLE: SOIL ANALYTICAL RESULTS pH CROSS SECTION B-B'		
DRAWN BY: JS/ SW/ AB	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 16.3

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\Phase Two\CT3414.01 FIG17 SOIL ANALYTICAL RESULTS - EC.mxd



LEGEND

- SITE BOUNDARY
- - - PARCEL
- BOREHOLE (TERRAPEX)
- MONITORING WELL (TERRAPEX)
- MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- ⊗ FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

SAMPLE	
DEPTH	
DATE	
PARAMETER	TABLE 2 SCS
Electrical Conductivity	700 mS/cm

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
- DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
640 LIVERPOOL ROAD AND 609 ANN LAND STREET
PICKERING, ONTARIO

TERRAPEX

TITLE: **SOIL ANALYTICAL RESULTS
ELECTRICAL CONDUCTIVITY**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 17

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG18 SOIL ANALYTICAL RESULTS - SAR.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- MONITORING WELL (TERRAPEX)
- MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

SAMPLE	
DEPTH	
DATE	
PARAMETER	TABLE 2 SCS
Sodium Adsorption Ratio	5.0

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
- DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
640 LIVERPOOL ROAD AND 609 ANN LAND STREET
PICKERING, ONTARIO

TERRAPEX

TITLE: **SOIL ANALYTICAL RESULTS
SODIUM ADSORPTION RATIO**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 18

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG19 SOIL ANALYTICAL RESULTS - BTEX.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- + BOREHOLE (TERRAPEX)
- + MONITORING WELL (TERRAPEX)
- + MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
- DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
 MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
 LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
 640 LIVERPOOL ROAD AND 609 ANN LAND STREET
 PICKERING, ONTARIO



TITLE:
SOIL ANALYTICAL RESULTS - BTEX

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 19

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG20.1 SOIL ANALYTICAL RESULTS - PHC.mxd



Sample	BH202-1B	BH202-2A
Depth	0.6-1.2	1.2-1.8
Date	23-Aug-22	
F3	311/483	44



Sample	BH2-1
Depth	0.1-0.6
Date	20-Sep-21
F2	220
F3	2500
F4	2900

Sample	BH205-1B	BH205-2A	BH205-2B
Depth	0.6-1.2	1.2-1.8	1.9-2.4
Date	23-Aug-22		
F2	285/305	346	<4
F3	1010/1790	1020	<8

Sample	BH206-1A
Depth	0-0.6
Date	23-Aug-22

Sample	BH3-2
Depth	0.8-1.4
Date	20-Sep-21

Sample	BH1-2
Depth	0.8-1.4
Date	20-Sep-21

Sample	MW113-5
Depth	3.05-3.65
Date	02-Mar-22

Sample	BH204-1B
Depth	0.6-1.2
Date	23-Aug-22

Sample	BH201-1	BH201-2B
Depth	0-1.2	2.0-2.4
Date	23-Aug-22	

Sample	BH208-1A
Depth	0-0.3
Date	23-Aug-22

Sample	BH303-2	BH303-3
Depth	1.2-1.8	1.8-2.5
Date	24-Oct-22	
F3	706/210	<8

Sample	MW207-1	MW207-3B
Depth	0-1.2	2.9-3.4
Date	23-Aug-22	

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

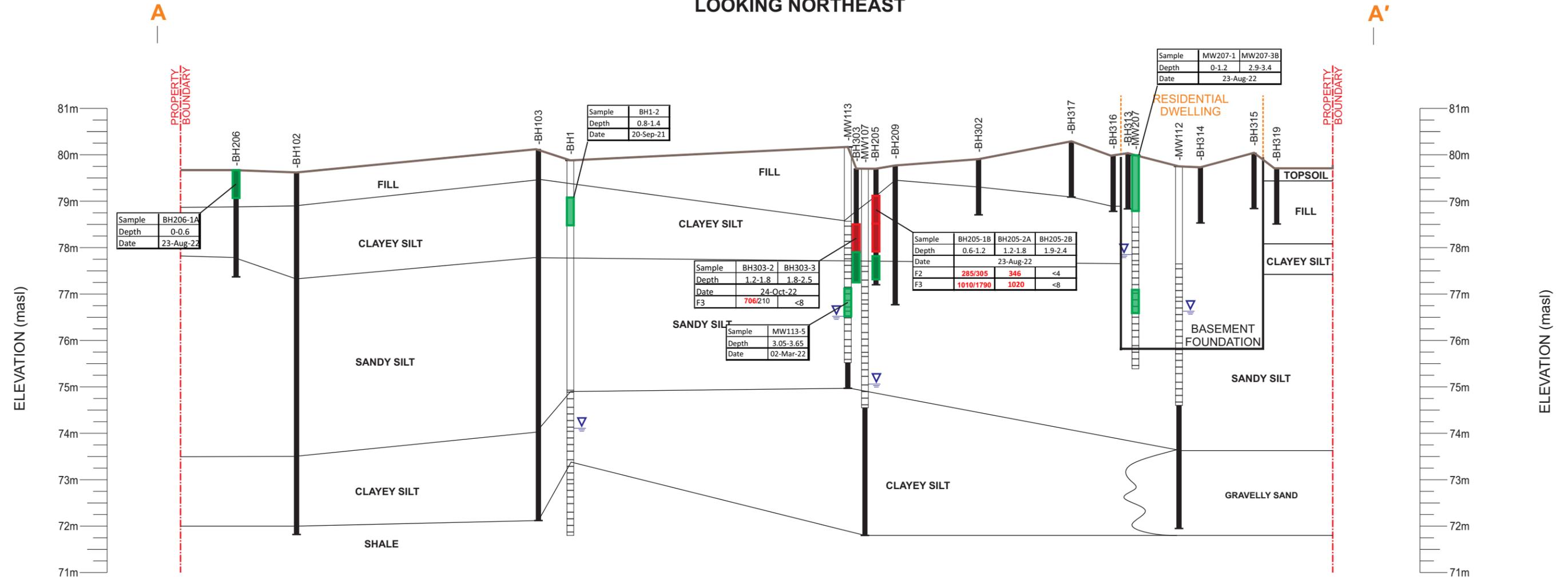
SITE LOCATION:
640 LIVERPOOL ROAD AND 609 ANN LAND STREET
PICKERING, ONTARIO

TERRAPEX

TITLE:
SOIL ANALYTICAL RESULTS - PHC F1-F4

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 20.1

LOOKING NORTHEAST



LEGEND

- GROUNDWATER LEVEL (AS OF SEPTEMBER 6, 2022)
- MONITORING WELL
- BOREHOLE
- SCREENED LEVEL

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

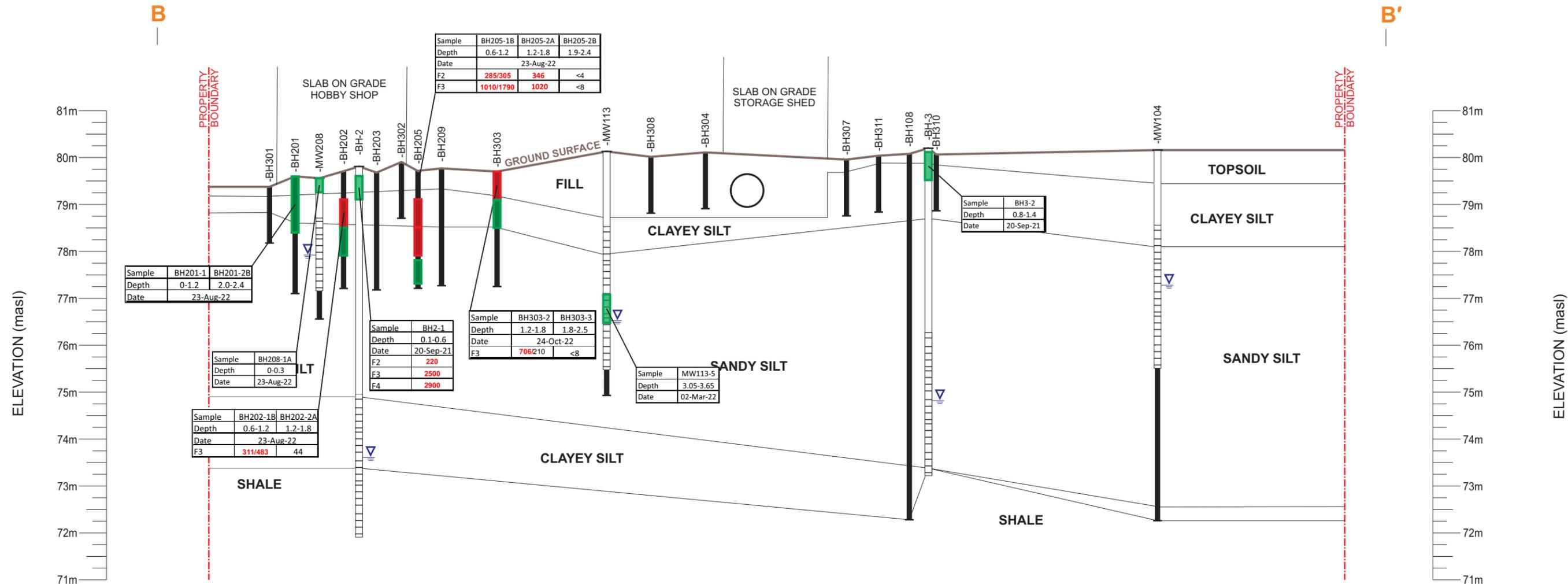
MECP Table 2: Full Depth Generic SCS in a Potable Groundwater Condition for Residential/Parkland/Institutional property use with coarse textured soil.

SAMPLE	DEPTH	DATE
PARAMETER	TABLE 2 SCS	
F2	98	
F3	98	
F4	2,800	



CLIENT:	LIVERPOOL ROAD LIMITED PARTNERSHIP	
SITE LOCATION:	640 LIVERPOOL ROAD PICKERING, ONTARIO	
TITLE:	SOIL ANALYTICAL RESULTS PHC F1-F4 CROSS SECTION A-A'	
DRAWN BY:	JS/ SW/ AB	CHECKED BY: SS
PROJECT NO.:	CT3414.01	
REVISION:	00	FIGURE: 20.2
DATE:	JANUARY 2023	

LOOKING NORTHWEST



LEGEND

- ▽ GROUNDWATER LEVEL (AS OF SEPTEMBER 6, 2022)
- UNDERGROUND STORAGE TANK
- ▬ MONITORING WELL
- ▬ BOREHOLE
- ▬ SCREENED LEVEL

ANALYSIS INFORMATION

- Green box: Less than or equal to Table 2 SCS
 - Red box: Greater than Table 2 SCS
- MECP Table 2: Full Depth Generic SCS in a Potable Groundwater Condition for Residential/Parkland/Institutional property use with coarse textured soil.

SAMPLE	DEPTH	DATE	TABLE 2 SCS
F2			98
F3			98
F4			2,800



CLIENT: LIVERPOOL ROAD LIMITED PARTNERSHIP		
SITE LOCATION: 640 LIVERPOOL ROAD PICKERING, ONTARIO		
TITLE: SOIL ANALYTICAL RESULTS PHC F1-F4 CROSS SECTION B-B'		
DRAWN BY: JS/ SW/ AB	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 20.3

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG21 SOIL ANALYTICAL RESULTS - VOC.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

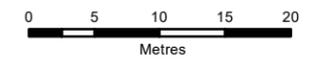
STANDARD INFORMATION

SAMPLE	
DEPTH	
DATE	
PARAMETER	TABLE 2 SCS
Bromomethane	0.050
Carbon Tetrachloride	0.050
Dichloroethane, 1,2-	0.050
Dichloroethylene, 1,1-	0.050
Dichloropropane, 1,2-	0.050
Dichloropropene, 1,3-	0.050
Ethylene dibromide	0.050
Tetrachloroethane, 1,1,2-	0.058
Tetrachloroethylene	0.28
Trichloroethane, 1,1,2-	0.050
Vinyl Chloride	0.020

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES
 1. ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
 2. DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
 3. RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.



DATA SOURCE: MAPCAST MAPPING SERVICES
 MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
 LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
 640 LIVERPOOL ROAD AND 609 ANN LAND STREET
 PICKERING, ONTARIO



TITLE:
**SOIL ANALYTICAL RESULTS
 VOCs (Non-Petroleum)**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
-----------------	---------------------------	-------------------

REVISION: 00	DATE: JANUARY 2023	FIGURE: 21
-----------------	-----------------------	----------------------

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG22 SOIL ANALYTICAL RESULTS - PAH.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- MONITORING WELL (TERRAPEX)
- MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/g UNLESS OTHERWISE SPECIFIED
- DEPTHS ARE IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE.

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
640 LIVERPOOL ROAD AND 609 ANN LAND STREET
PICKERING, ONTARIO

TERRAPEX

TITLE:
SOIL ANALYTICAL RESULTS - PAHs

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 22

C:\Users\sewilliams\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01_640_Liverpool Road_Pickering\MXD\Phase Two\CT3414.01_FIG23.1_GW_ANALYTICAL_RESULTS - METALS.mxd



Sample	BH2
Screen Interval	4.8-7.9
Date	21-Sep-21

Sample	MW107
Screen Interval	13.4-16.4
Date	29-Aug-22

Sample	MW113	
Screen Interval	11.8-14.8	
Date	04-Mar-22	29-Aug-22

Sample	MW208
Screen Interval	0.88-2.4
Date	29-Aug-22

Sample	MW207
Screen Interval	1.59-4.64
Date	29-Aug-22

LEGEND

- SITE BOUNDARY
- PARCEL
- ◆ BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- X
 FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/L UNLESS OTHERWISE SPECIFIED
- SCREEN INTERVAL IS IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
 MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
 LIVERPOOL LIMITED PARTNERSHIP

SITE LOCATION:
 640 LIVERPOOL ROAD AND 609 ANN LAND STREET
 PICKERING, ONTARIO



TITLE:
**GROUNDWATER ANALYTICAL RESULTS
 METALS**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
-----------------	---------------------------	-------------------

REVISION: 00	DATE: NOVEMBER 2022	FIGURE: 23.1
-----------------	------------------------	------------------------

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG23.1 GW ANALYTICAL RESULTS - METALS.mxd



Sample	BH2
Screen Interval	4.8-7.9
Date	21-Sep-21

Sample	MW107
Screen Interval	13.4-16.4
Date	29-Aug-22

Sample	MW113	
Screen Interval	11.8-14.8	
Date	04-Mar-22	29-Aug-22

Sample	MW208
Screen Interval	0.88-2.4
Date	29-Aug-22

Sample	MW207
Screen Interval	1.59-4.64
Date	29-Aug-22

LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/L UNLESS OTHERWISE SPECIFIED
- SCREEN INTERVAL IS IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
**640 LIVERPOOL ROAD AND 609 ANN LAND STREET
PICKERING, ONTARIO**

TERRAPEX

TITLE:
**GROUNDWATER ANALYTICAL RESULTS
METALS**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 23.1

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\Map\Phase Two\CT3414.01 FIG24 GW ANALYTICAL RESULTS - HFME.TALS.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/L UNLESS OTHERWISE SPECIFIED
- SCREEN INTERVAL IS IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
**640 LIVERPOOL ROAD AND 609 ANN LAND STREET
PICKERING, ONTARIO**



TITLE:
**GROUNDWATER ANALYTICAL RESULTS
HYDRIDE-FORMING METALS**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
-----------------	---------------------------	-------------------

REVISION: 00	DATE: JANUARY 2023	FIGURE: 24
-----------------	-----------------------	----------------------

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG25 GW ANALYTICAL RESULTS - HEXACHROM.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/L UNLESS OTHERWISE SPECIFIED
- SCREEN INTERVAL IS IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
**640 LIVERPOOL ROAD AND 609 ANN LAND STREET
PICKERING, ONTARIO**



TITLE:
**GROUNDWATER ANALYTICAL RESULTS
HEXAVALENT CHROMIUM**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
-----------------	---------------------------	-------------------

REVISION: 00	DATE: JANUARY 2023	FIGURE: 25
-----------------	-----------------------	----------------------

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG26 GW ANALYTICAL RESULTS - CYANIDE.mxd



Sample	BH2
Screen Interval	4.8-7.9
Date	21-Sep-21

Sample	MW107
Screen Interval	13.4-16.4
Date	29-Aug-22

Sample	MW113	
Screen Interval	11.8-14.8	
Date	04-Mar-22	29-Aug-22

Sample	MW208
Screen Interval	0.88-2.4
Date	29-Aug-22

Sample	MW207
Screen Interval	1.59-4.64
Date	29-Aug-22

LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- X FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/L UNLESS OTHERWISE SPECIFIED
- SCREEN INTERVAL IS IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
**640 LIVERPOOL ROAD AND 609 ANNLAND STREET
PICKERING, ONTARIO**

TERRAPEX

TITLE:
**GROUNDWATER ANALYTICAL RESULTS
CYANIDE**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 26

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG27 GW ANALYTICAL RESULTS - MERCURY.mxd



Sample	BH2
Screen Interval	4.8-7.9
Date	21-Sep-21

Sample	MW107
Screen Interval	13.4-16.4
Date	29-Aug-22

Sample	MW113	
Screen Interval	11.8-14.8	
Date	04-Mar-22	29-Aug-22

Sample	MW208
Screen Interval	0.88-2.4
Date	29-Aug-22

Sample	MW207
Screen Interval	1.59-4.64
Date	29-Aug-22

LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- X FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/L UNLESS OTHERWISE SPECIFIED
- SCREEN INTERVAL IS IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
 MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
 LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
 640 LIVERPOOL ROAD AND 609 ANN LAND STREET
 PICKERING, ONTARIO

TITLE:
**GROUNDWATER ANALYTICAL RESULTS
 MERCURY**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 27

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG28 GW ANALYTICAL RESULTS - CHLORIDE.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/L UNLESS OTHERWISE SPECIFIED
- SCREEN INTERVAL IS IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
**640 LIVERPOOL ROAD AND 609 ANN LAND STREET
PICKERING, ONTARIO**

TERRAPEX

TITLE:
**GROUNDWATER ANALYTICAL RESULTS
CHLORIDE**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 28

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG29 GW ANALYTICAL RESULTS - SODIUM.mxd



Sample	BH2
Screen Interval	4.8-7.9
Date	21-Sep-21

Sample	MW107
Screen Interval	13.4-16.4
Date	29-Aug-22

Sample	MW113	
Screen Interval	11.8-14.8	
Date	04-Mar-22	29-Aug-22

Sample	MW208
Screen Interval	0.88-2.4
Date	29-Aug-22

Sample	MW207
Screen Interval	1.59-4.64
Date	29-Aug-22

LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

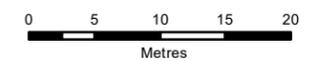
STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
 VALUE LESS THAN OR EQUAL TO SCS

NOTES

1. ALL UNITS ARE IN µg/L UNLESS OTHERWISE SPECIFIED
2. SCREEN INTERVAL IS IN METRES BELOW GROUND SURFACE (mbgs)
3. RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE



DATA SOURCE: MAPCAST MAPPING SERVICES
 MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:

LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:

640 LIVERPOOL ROAD AND 609 ANNLAND STREET
 PICKERING, ONTARIO



TITLE:

**GROUNDWATER ANALYTICAL RESULTS
 SODIUM**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 29

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG30 GW ANALYTICAL RESULTS - BTEX.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- X FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/L UNLESS OTHERWISE SPECIFIED
- SCREEN INTERVAL IS IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
640 LIVERPOOL ROAD AND 609 ANNLAND STREET
PICKERING, ONTARIO

TITLE:
**GROUNDWATER ANALYTICAL RESULTS
BTEX**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 30

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG31 GW ANALYTICAL RESULTS - PHC.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- X FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/L UNLESS OTHERWISE SPECIFIED
- SCREEN INTERVAL IS IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
640 LIVERPOOL ROAD AND 609 ANNLAND STREET
PICKERING, ONTARIO

TITLE:
**GROUNDWATER ANALYTICAL RESULTS
PHC F1-F4**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 31

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG32 GW ANALYTICAL RESULTS - VOC.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- + BOREHOLE (TERRAPEX)
- + MONITORING WELL (TERRAPEX)
- + MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

1. ALL UNITS ARE IN µg/L UNLESS OTHERWISE SPECIFIED
2. SCREEN INTERVAL IS IN METRES BELOW GROUND SURFACE (mbgs)
3. RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
**640 LIVERPOOL ROAD AND 609 ANNLAND STREET
PICKERING, ONTARIO**



**TITLE: GROUNDWATER ANALYTICAL RESULTS
VOCs (Non-Petroleum)**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
-----------------	---------------------------	-------------------

REVISION: 00	DATE: JANUARY 2023	FIGURE: 32
-----------------	-----------------------	----------------------

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Toronto\CT3400\CT3414.01 640 Liverpool Road, Pickering\MXD\Phase Two\CT3414.01 FIG33 GW ANALYTICAL RESULTS - PAH.mxd



LEGEND

- SITE BOUNDARY
- PARCEL
- BOREHOLE (TERRAPEX)
- ⊕ MONITORING WELL (TERRAPEX)
- ⊕ MONITORING WELL (EDWARD WONG)
- UNDERGROUND STORAGE TANK
- ABOVEGROUND STORAGE TANK
- FORMER ABOVEGROUND STORAGE TANK

ANALYSIS INFORMATION

- Less than or equal to Table 2 SCS
- Greater than Table 2 SCS

STANDARD INFORMATION

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR RESIDENTIAL/PARKLAND/INSTITUTIONAL PROPERTY USE WITH COARSE TEXTURED SOIL.

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS

NOTES

- ALL UNITS ARE IN µg/L UNLESS OTHERWISE SPECIFIED
- SCREEN INTERVAL IS IN METRES BELOW GROUND SURFACE (mbgs)
- RESULTS PRESENTED AS # / # REPRESENTS PARENT SAMPLE / FIELD DUPLICATE

0 5 10 15 20
Metres

DATA SOURCE: MAPCAST MAPPING SERVICES
MAP PROJECTION: NAD 1983 UTM ZONE 17N

CLIENT:
LIVERPOOL ROAD LIMITED PARTNERSHIP

SITE LOCATION:
640 LIVERPOOL ROAD AND 609 ANNLAND STREET
PICKERING, ONTARIO

TITLE:
**GROUNDWATER ANALYTICAL RESULTS
PAHs**

DRAWN BY: SW	PROJECT NO.: CT3414.01	CHECKED BY: SS
REVISION: 00	DATE: JANUARY 2023	FIGURE: 33

TABLES

TABLE 1 GROUNDWATER MONITORING DATA
640 Liverpool Rd, Pickering ON

WELL NUMBER	DATE	GROUND ELEVATION ¹ (m)	T.O.P. ELEVATION ² (m)	SCREEN LENGTH (m)	BOTTOM OF SCREEN ³ (m)	CV ⁴	DEPTH TO WATER FROM T.O.P. (m)	DEPTH TO WATER FROM GROUND (m)	GROUNDWATER ELEVATION ⁵ (m)
MW104	14-Mar-22	80.16	80.13	3.05	64.38	-	0.30	0.32	79.83
	29-Aug-22					<5ppm / 3ppm	1.74	1.76	78.40
	06-Sep-22					<5ppm	2.86	2.88	77.28
MW107	14-Mar-22	79.70	79.66	3.05	63.26	-	3.78	3.82	75.88
	29-Aug-22					<5ppm / 1ppm	4.46	4.50	75.20
	06-Sep-22					<5ppm	4.61	4.65	75.06
	13-Oct-22					<5ppm	4.78	4.82	74.88
27-Oct-22	<5ppm	4.79	4.82	74.88					
MW112	14-Mar-22	79.75	79.70	3.05	63.30	-	0.82	0.87	78.88
	29-Aug-22					<5ppm / 4ppm	3.97	4.01	75.74
	06-Sep-22					<5ppm	3.07	3.11	76.63
MW113	14-Mar-22	80.13	80.08	3.05	65.32	-	0.95	0.99	79.14
	29-Aug-22					<5ppm / 2ppm	3.09	3.13	77.00
	06-Sep-22					<5ppm	3.57	3.61	76.52
MW207	29-Aug-22	79.99	79.93	3.05	75.35	10ppm / 2ppm	1.92	1.99	78.01
	06-Sep-22					<5ppm	2.07	2.14	77.85
MW208	29-Aug-22	79.56	79.60	1.52	77.16	<5ppm / 2ppm	1.28	1.23	78.33
	06-Sep-22					25ppm / 1ppm	1.69	1.64	77.92
BH-1	06-Sep-22	79.88	79.81	3.05	71.98	<5ppm	4.59	4.65	75.23
BH-2	06-Sep-22	79.81	79.75	3.05	71.91	<5ppm	2.74	2.80	77.01
BH-3	06-Sep-22	80.20	80.08	3.05	72.30	<5ppm	1.89	2.01	78.19

¹ Elevation of ground surface at well location, relative to site benchmark

² Elevation of highest point of well pipe ("top of pipe"), relative to site benchmark

³ Elevation of bottom of well screened interval, relative to site benchmark

⁴ Combustible vapour concentration in well headspace in parts per million by volume (ppm) or percent of lower explosive limit (%LEL)

⁵ Static water level elevation, relative to site benchmark

⁶ Measured thickness of light, non-aqueous phase liquid, if any

TABLE 2 SOIL ANALYTICAL RESULTS - METALS AND INORGANICS
640 Liverpool Road and 609 Annlard Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 R/P/I coarse	BH2-3 by EWA	MW 113-5	MW 1000 Field Duplicate of MW 113-5	BH201-1	BH201-2B	BH206-1A	MW207-1	MW207-3B	MW208-1A	MW208-99 Field Duplicate of MW208-1A
Sample Depth	m bg	-	1.4-2.0	3.05-3.65	3.05-3.65	0-1.2	2.0-2.4	0-0.6	0-1.2	2.9-3.4	0-0.3	0-0.3
Native/Fill	-	-	Native	Native	Native	Native	Native	Fill	Fill	Native	Fill	Fill
Sampling Date	dd-mmm-yy	-	21-Sep-21	2-Mar-22	2-Mar-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22
Analysis Date (on or before)	dd-mmm-yy	-	28-Sep-21	9-Mar-22	9-Mar-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22
Certificate of Analysis No.	-	-	C1R3947	C256889	C256889	2235312	2235312	2235312	2235312	2235312	2235312	2235312
pH	pH Units	NV	7.47	7.89	7.75	7.43	7.59	7.80	7.45	7.75	11.21	8.02
Antimony	ug/g	7.5	<0.20	<0.20	<0.20	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Arsenic	ug/g	18	1.2	2.8	2.7	2.5	5.3	1.3	6.4	5.1	2.7	1.4
Barium	ug/g	390	58	29	27	137	53.5	22.9	222	45.1	27.0	12.1
Beryllium	ug/g	4.0	0.32	0.3	0.31	0.6	0.5	<0.5	0.6	0.6	<0.5	<0.5
Boron (total)	ug/g	120	7.1	5.7	5.2	9.5	7.7	<5.0	8.9	9.2	<5.0	<5.0
Boron (Hot Water Soluble) ¹	-	1.5	0.21	0.14	0.12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium	ug/g	1.2	0.58	<0.10	<0.10	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5
Chromium Total	-	160	14	19	17	-	-	-	-	-	-	-
Chromium VI	ug/g	8.0	<0.18	<0.18	<0.18	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cobalt	ug/g	22	4.3	5.9	5.7	7.4	9.4	2.9	8.4	14.4	30.1	3.6
Copper	ug/g	140	11	15	15	22.8	24.2	7.6	38.2	25.7	6.7	<5.0
Cyanide (CN-)	ug/g	0.051	<0.01	<0.01	<0.01	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Lead	ug/g	120	8.1	11	10	28.8	13.8	5.9	578	18.6	13.5	8.0
Mercury	ug/g	0.27	<0.050	<0.050	<0.050	<0.1	<0.1	<0.1	0.6	<0.1	<0.1	<0.1
Molybdenum	ug/g	6.9	<0.50	0.6	0.57	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0
Nickel	ug/g	100	9.3	14	13	16.2	22.9	7.4	17.4	31.4	7.2	<5.0
Selenium	ug/g	2.4	<0.50	<0.50	<0.50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Silver	ug/g	20	<0.20	<0.20	<0.20	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Thallium	ug/g	1.0	0.094	0.11	0.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Uranium	ug/g	23	0.48	0.98	0.98	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Vanadium	ug/g	86	21	18	17	32.0	28.1	21.8	33.7	27.4	14.7	11.2
Zinc	ug/g	340	35	29	30	90.3	46.6	31.1	142	54.5	24.7	<20.0
Electrical Conductivity	uS/cm	700	0.20	0.24	0.23	389	161	89	172	116	416	146
Sodium Adsorption Ratio	-	5.0	0.43	1.2	1.2	0.82	0.46	0.12	0.11	0.38	0.45	0.20

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

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition
Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed
- m bg meters below grade
- RPD Relative percent difference
- Value** Exceeds standard
- Value Detection limit exceeds standard
- ¹ Hot water soluble boron applies to surface soils (<1.5 m bg).
- EWA Edward Wong & Associates Inc.

TABLE 2 SOIL ANALYTICAL RESULTS - METALS AND INORGANICS
640 Liverpool Road and 609 Annlard Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 R/P/I coarse	MW208-1A	MW208-1B	MW208-4	BH301-1	BH302-1	BH303-1	BH303-2	BH2000 Field Duplicate of BH303-2	BH303-3	BH304-1	BH304-2
Sample Depth	m bg	-	0-0.3	0.3-0.6	1.8-2.4	0-0.6	0-0.6	0.6-1.2	1.2-1.8	1.2-1.8	1.7-2.5	0-0.6	0.6-1.2
Native/Fill	-	-	Fill	Fill	Native	Native	Fill	Fill	Native	Native	Native	Native	Native
Sampling Date	dd-mmm-yy	-	23-Aug-22	23-Aug-22	23-Aug-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22
Analysis Date (on or before)	dd-mmm-yy	-	31-Aug-22	31-Aug-22	31-Aug-22	4-Nov-22	4-Nov-22	4-Nov-22	4-Nov-22	4-Nov-22	12-Nov-22	4-Nov-22	4-Nov-22
Certificate of Analysis No.	-	-	2235312	2235312	2235312	2244199	2244199	2244199	2244199	2244199	2244199	2244199	2244199
pH	pH Units	NV	10.89	7.42	7.82	7.43	7.53	7.60	-	-	-	-	-
Antimony	ug/g	7.5	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-
Arsenic	ug/g	18	-	4.1	-	6.3	3.1	1.4	1.0	<1.0	<1.0	3.8	-
Barium	ug/g	390	-	151	-	140	74.8	75.1	47.6	67.1	57.3	160	-
Beryllium	ug/g	4.0	-	0.8	-	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-
Boron (total)	ug/g	120	-	6.9	-	5.6	<5.0	<5.0	9.1	9.4	8.1	5.9	-
Boron (Hot Water Soluble) ¹	-	1.5	-	<0.5	-	-	-	-	<0.5	-	-	-	-
Cadmium	ug/g	1.2	-	<0.5	-	<0.5	1.2	1.4	0.8	1.6	<0.5	0.5	-
Chromium Total	-	160	-	-	-	23.1	17.2	11.0	9.4	13.4	11.9	22.5	-
Chromium VI	ug/g	8.0	-	<0.2	-	-	-	-	<0.2	-	-	-	-
Cobalt	ug/g	22	-	9.5	-	7.5	5.3	2.5	2.7	4	3.8	6.5	-
Copper	ug/g	140	-	33.8	-	19.8	19.5	14.2	6.7	11.2	6.6	22.3	-
Cyanide (CN-)	ug/g	0.051	-	-	-	-	-	-	-	-	-	-	-
Lead	ug/g	120	-	8.4	-	77.3	60.3	35.4	20.8	26.8	4.1	402	254
Mercury	ug/g	0.27	-	<0.1	-	-	-	-	<0.1	-	-	<0.1	-
Molybdenum	ug/g	6.9	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-
Nickel	ug/g	100	-	21.2	-	11.9	9.6	<5.0	6.5	8.9	8.1	9.5	-
Selenium	ug/g	2.4	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-
Silver	ug/g	20	-	<0.3	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-
Thallium	ug/g	1.0	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-
Uranium	ug/g	23	-	<1.0	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-
Vanadium	ug/g	86	-	43.7	-	30.9	25.3	13.2	14.9	20.8	18.3	29.2	-
Zinc	ug/g	340	-	59.3	-	77.6	61.6	46.7	36.8	51.3	26.7	106	-
Electrical Conductivity	uS/cm	700	-	-	-	-	-	142	-	-	-	-	-
Sodium Adsorption Ratio	-	5.0	-	-	-	-	-	0.18	-	-	-	-	-

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1 of the En

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition
Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed
- m bg meters below grade
- RPD Relative percent difference
- Value** Exceeds standard
- Value Detection limit exceeds standard
- ¹ Hot water soluble boron applies to surface soils (<1.5 m bg).
- EWA Edward Wong & Associates Inc.

TABLE 2 SOIL ANALYTICAL RESULTS - METALS AND INORGANICS
640 Liverpool Road and 609 Annlard Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 R/P/I coarse	BH305-1	BH305-2	BH306-1	BH307-1A	BH307-1B	BH307-2	BH308-1	BH308-2	BH311-1	BH311-2	BH312-1
Sample Depth	m bg	-	0-0.6	0.6-1.2	0-0.6	0-0.3	0.3-0.6	0.6-1.2	0-0.6	0.6-1.2	0-0.6	0.6-1.2	0-0.6
Native/Fill	-	-	Fill	Native	Native	Native	Native	Native	Native	Native	Native	Native	Fill
Sampling Date	dd-mm-yy	-	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22
Analysis Date (on or before)	dd-mm-yy	-	4-Nov-22	24-Nov-22	4-Nov-22	4-Nov-22	4-Nov-22	4-Nov-22	4-Nov-22	24-Nov-22	4-Nov-22	22-Nov-22	4-Nov-22
Certificate of Analysis No.	-	-	2244199	2244199	2244199	2244199	2244199	2244199	2244199	2244199	2244199	2244199	2244199
pH	pH Units	NV	-	-	-	-	-	-	-	-	-	-	-
Antimony	ug/g	7.5	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	-	<1.0
Arsenic	ug/g	18	1.3	<1.0	6.1	5.1	3.6	-	-	6	-	-	2.3
Barium	ug/g	390	13.6	198	155	205	168	-	-	437	-	-	144
Beryllium	ug/g	4.0	<0.5	0.7	0.5	<0.5	0.6	-	-	0.6	-	-	0.6
Boron (total)	ug/g	120	<5.0	8.5	<5.0	<5.0	6.5	-	-	10.7	-	-	<5.0
Boron (Hot Water Soluble) ¹	-	1.5	-	-	-	-	-	-	-	<0.5	-	-	-
Cadmium	ug/g	1.2	<0.5	<0.5	<0.5	0.6	<0.5	-	-	<0.5	-	-	<0.5
Chromium Total	-	160	5.2	28.5	24.5	28.1	29.6	-	-	26.2	-	-	25.7
Chromium VI	ug/g	8.0	-	-	-	-	-	-	-	<0.2	-	-	-
Cobalt	ug/g	22	1.7	9.3	8.0	7.4	8.6	-	-	9.0	-	-	8.3
Copper	ug/g	140	<5.0	26	20.1	77.2	23.8	-	-	54.6	-	-	12.8
Cyanide (CN-)	ug/g	0.051	-	-	-	-	-	-	-	-	-	-	-
Lead	ug/g	120	5.0	220	104	1110	577	21	86	368	647	47	54.0
Mercury	ug/g	0.27	<0.1	-	<0.1	<0.1	<0.1	-	-	0.1	-	-	<0.1
Molybdenum	ug/g	6.9	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	-	<1.0
Nickel	ug/g	100	<5.0	19.5	13.7	12.8	14.8	-	-	17.2	-	-	11.5
Selenium	ug/g	2.4	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	-	<1.0
Silver	ug/g	20	<0.3	<0.3	<0.3	<0.3	<0.3	-	-	<0.3	-	-	<0.3
Thallium	ug/g	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	-	<1.0
Uranium	ug/g	23	<1.0	<1.0	<1.0	<1.0	<1.0	-	-	<1.0	-	-	<1.0
Vanadium	ug/g	86	12.3	38.4	34.0	31.7	39.2	-	-	38	-	-	35.1
Zinc	ug/g	340	<20.0	99	90.0	237	87.9	-	-	247	-	-	67.7
Electrical Conductivity	uS/cm	700	-	-	-	-	-	-	-	-	-	-	-
Sodium Adsorption Ratio	-	5.0	-	-	-	-	-	-	-	-	-	-	-

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1 of the En

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition
 Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed
- m bg meters below grade
- RPD Relative percent difference
- Value** Exceeds standard
- Value Detection limit exceeds standard
- ¹ Hot water soluble boron applies to surface soils (<1.5 m bg).
- EWA Edward Wong & Associates Inc.

TABLE 2 SOIL ANALYTICAL RESULTS - METALS AND INORGANICS
640 Liverpool Road and 609 Annlard Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 R/P/I coarse	BH313-1	BH313-2	BH314-1	BH314-2	BH315-1	BH316-1	BH317-1	BH317-2	BH317-2	BH318-1	BH318-2	BH319-1	BH319-2
Sample Depth	m bg	-	0-0.6	0.6- 2	0-0.6	0.6-1.2	0-0.6	0-0.6	0-0.6	0.6-1.2	0.6-1.2	0-0.6	0.6-1.2	0-0.6	0.6-1.2
Native/Fill	-	-	Native	Native	Native	Native	Native	Fill	Native	Native	Native	Native	Native	Native	Native
Sampling Date	dd-mmm-yy	-	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22	24-Oct-22
Analysis Date (on or before)	dd-mmm-yy	-	4-Nov-22	4-Nov-22	4-Nov-22	4-Nov-22	4-Nov-22	22-Nov-22	4-Nov-22	22-Nov-22	22-Nov-22	4-Nov-22	22-Nov-22	4-Nov-22	4-Nov-22
Certificate of Analysis No.	-	-	2244199	2244199	2244199	2244199	2244199	2244199	2244199	2244199	2244199	2244199	2244199	2244199	2244199
pH	pH Units	NV	-	-	-	-	-	-	-	0.05	-	-	-	-	-
Antimony	ug/g	7.5	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	1.0	-	<1.0	-	<1.0	-
Arsenic	ug/g	18	4.3	-	3.6	-	2.8	<1.0	4.1	1.0	-	4	-	<1.0	-
Barium	ug/g	390	209	-	201	-	99.1	19.6	146	1.0	-	347	-	172	-
Beryllium	ug/g	4.0	<0.5	-	0.7	-	<0.5	<0.5	<0.5	0.5	-	0.5	-	0.8	-
Boron (total)	ug/g	120	8.1	-	6.9	-	<5.0	<5.0	8.0	5.0	-	19	-	8.5	-
Boron (Hot Water Soluble) ¹	-	1.5	-	-	-	-	-	-	0.9	-	-	0.9	-	-	-
Cadmium	ug/g	1.2	1.4	0.5	<0.5	-	<0.5	<0.5	0.8	0.5	-	1.3	-	<0.5	-
Chromium Total	-	160	26.6	-	32.8	-	21.7	7.3	17.5	5.0	-	36.5	-	31.6	-
Chromium VI	ug/g	8.0	-	-	-	-	-	-	<0.2	-	-	<0.2	-	-	-
Cobalt	ug/g	22	8.1	-	10.3	-	7.5	2.3	6.5	1.0	-	8.5	-	9.5	-
Copper	ug/g	140	46.2	-	22.8	-	15.3	<5.0	36.9	5	-	43.5	-	20.1	-
Cyanide (CN-)	ug/g	0.051	-	-	-	-	-	-	-	-	-	-	-	-	-
Lead	ug/g	120	325	150	173	58	31.8	10.2	347	1.0	92	886	101	63.6	55
Mercury	ug/g	0.27	0.4	0.5	<0.1	-	<0.1	<0.1	0.2	0.1	-	<0.1	-	-	-
Molybdenum	ug/g	6.9	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	1	-	<1.0	-	<1.0	-
Nickel	ug/g	100	14.7	-	18.9	-	13.9	<5.0	15.4	5	-	18.6	-	19.7	-
Selenium	ug/g	2.4	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	1	-	<1.0	-	<1.0	-
Silver	ug/g	20	<0.3	-	<0.3	-	<0.3	<0.3	<0.3	0.3	-	<0.3	-	<0.3	-
Thallium	ug/g	1.0	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	1	-	<1.0	-	<1.0	-
Uranium	ug/g	23	<1.0	-	<1.0	-	<1.0	<1.0	<1.0	1	-	<1.0	-	<1.0	-
Vanadium	ug/g	86	34.0	-	44.6	-	31.9	19.2	23.6	10	-	37.7	-	39	-
Zinc	ug/g	340	203	-	103	-	53.4	<20.0	150	20	-	401	-	79.1	-
Electrical Conductivity	uS/cm	700	-	-	-	-	-	78	-	-	-	-	-	-	-
Sodium Adsorption Ratio	-	5.0	-	-	-	-	-	0.10	-	-	-	-	-	-	-

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the En

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition
 Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed
- m bg meters below grade
- RPD Relative percent difference
- Value** Exceeds standard
- Value Detection limit exceeds standard
- ¹ Hot water soluble boron applies to surface soils (<1.5 m bg).
- EWA Edward Wong & Associates Inc.

TABLE 3 SOIL ANALYTICAL RESULTS - BTEX & PHCs

640 Liverpool Road and 609 Anland Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 R/P/I coarse	BH1-2 by EWA	BH2-1 by EWA	BH3-2 by EWA	MW 113-5	MW 1000 Field Duplicate of MW 113-5	BH201-1	BH201-2B
Sample Depth	m bg	-	0.8-1.4	0.1-0.6	0.8-1.4	3.05-3.65	3.05-3.65	0-1.2	2.0-2.4
Native/Fill	-	-	Native	Fill	Native	Native	Native	Native	Native
Sampling Date	dd-mmm-yy	-	20-Sep-21	20-Sep-21	20-Sep-21	2-Mar-22	2-Mar-22	23-Aug-22	23-Aug-22
Analysis Date (on or before)	dd-mmm-yy	-	28-Sep-21	28-Sep-21	28-Sep-21	9-Mar-22	9-Mar-22	31-Aug-22	31-Aug-22
Certificate of Analysis No.	-	-	C1R3947	C1R3947	C1R3947	C256889	C256889	2235312	2235312
Benzene	ug/g	0.21	<0.0060	<0.012	<0.0060	<0.0060	<0.0060	<0.02	<0.02
Toluene	ug/g	2.3	<0.020	<0.040	<0.020	<0.020	<0.020	<0.05	<0.05
Ethylbenzene	ug/g	1.1	<0.010	<0.020	<0.010	<0.010	<0.010	<0.05	<0.05
Xylene Mixture	ug/g	3.1	<0.020	<0.040	<0.020	<0.020	<0.020	<0.05	<0.05
Petroleum Hydrocarbons F1 ¹	ug/g	55	<10	<20	<10	<10	<10	<7	<7
Petroleum Hydrocarbons F2	ug/g	98	<10	<u>220</u>	<10	29	31	<4	27
Petroleum Hydrocarbons F3	ug/g	300	<50	<u>2,500</u>	<50	110	110	13	58
Petroleum Hydrocarbons F4	ug/g	2,800	69	<u>2,900</u>	<50	<50	<50	8	10
Petroleum Hydrocarbons F4G	-	2,800	-	-	-	-	-	-	-

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1

of the Environmental Protection Act (April 15, 2011 and as amended)

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition

Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed

m bg meters below grade

RPD Relative percent difference

Value Exceeds standard

Value Detection limit exceeds standard

¹ Hot water soluble boron applies to surface soils (<1.5 m bg).

² Analysis for methyl mercury only applies when mercury standard is exceeded.

¹ the sum of 1-methylnaphthalene and 2- methylnaphthalene.

¹ F1 fraction does not include BTEX.

EWA Edward Wong & Associates Inc.

Pinchin Pinchin Ltd.

TABLE 3 SOIL ANALYTICAL RESULTS - BTEX & PHCs

640 Liverpool Road and 609 Anland Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 R/P/I coarse	BH202-1B	BH202-99 Field Duplicate of BH202-1B	BH202-2A	BH203-1B	BH204-1B	BH205-1B	BH205-99 Field Duplicate of BH205-1B
Sample Depth	m bg	-	0.6-1.2	0.6-1.2	1.2-1.8	0.6-1.2	0.6-1.2	0.6-1.2	0.6-1.2
Native/Fill	-	-	Native	Native	Native	Native	Fill	Native	Native
Sampling Date	dd-mmm-yy	-	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22
Analysis Date (on or before)	dd-mmm-yy	-	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22
Certificate of Analysis No.	-	-	2235312	2235312	2235312	2235312	2235312	2235312	2235312
Benzene	ug/g	0.21	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Toluene	ug/g	2.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene Mixture	ug/g	3.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Petroleum Hydrocarbons F1 ¹	ug/g	55	<7	<7	<7	<7	<7	<7	<7
Petroleum Hydrocarbons F2	ug/g	98	31	29	<4	<4	<4	285	305
Petroleum Hydrocarbons F3	ug/g	300	311	483	44	36	27	1010	1790
Petroleum Hydrocarbons F4	ug/g	2,800	49	617	<6	<6	<6	996	1,920
Petroleum Hydrocarbons F4G	-	2,800	539	577	-	-	-	1,720	3,700

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1

of the Environmental Protection Act (April 15, 2011 and as amended)

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition

Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed

m bg meters below grade

RPD Relative percent difference

Value Exceeds standard

Value Detection limit exceeds standard

¹ Hot water soluble boron applies to surface soils (<1.5 m bg).

² Analysis for methyl mercury only applies when mercury standard is exceeded.

¹ the sum of 1-methylnaphthalene and 2- methylnaphthalene.

¹ F1 fraction does not include BTEX.

EWA Edward Wong & Associates Inc.

Pinchin Pinchin Ltd.

TABLE 3 SOIL ANALYTICAL RESULTS - BTEX & PHCs

640 Liverpool Road and 609 Anland Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 R/P/I coarse	BH205-2A	BH205-2B	BH206-1B	MW207-1	MW207-3B	MW208-1B	MW208-4
Sample Depth	m bg	-	1.2-1.8	1.9-2.4	0.6-1.2	0-1.2	2.9-3.4	0.3-0.6	1.8-2.4
Native/Fill	-	-	Native	Native	Native	Fill	Native	Native	Native
Sampling Date	dd-mmm-yy	-	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22
Analysis Date (on or before)	dd-mmm-yy	-	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22
Certificate of Analysis No.	-	-	2235312	2235312	2235312	2235312	2235312	2235312	2235312
Benzene	ug/g	0.21	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Toluene	ug/g	2.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene Mixture	ug/g	3.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Petroleum Hydrocarbons F1 ¹	ug/g	55	<7	<7	<7	<7	<7	<7	<7
Petroleum Hydrocarbons F2	ug/g	98	346	<4	<4	<4	32	<4	<4
Petroleum Hydrocarbons F3	ug/g	300	1020	<8	17	<8	82	<8	<8
Petroleum Hydrocarbons F4	ug/g	2,800	1,000	<6	<6	<6	<6	<6	<6
Petroleum Hydrocarbons F4G	-	2,800	1,820	-	-	-	-	-	-

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1

of the Environmental Protection Act (April 15, 2011 and as amended)

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition

Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed
- m bg meters below grade
- RPD Relative percent difference
- Value** Exceeds standard
- Value Detection limit exceeds standard
- ¹ Hot water soluble boron applies to surface soils (<1.5 m bg).
- ² Analysis for methyl mercury only applies when mercury standard is exceeded.
- ¹ the sum of 1-methylnaphthalene and 2- methylnaphthalene.
- ¹ F1 fraction does not include BTEX.
- EWA Edward Wong & Associates Inc.
- Pinchin Pinchin Ltd.

TABLE 3 SOIL ANALYTICAL RESULTS - BTEX & PHCs

640 Liverpool Road and 609 Anland Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 R/P/I coarse	MW208-98 Field Duplicate of MW208-4	BH209-1B	BH303-2	BH2000 Field Duplicate of BH303-2	BH303-3	BH1000 (Methanol Blank)	Blank 99 (Methanol Blank)
Sample Depth	m bg	-	1.8-2.4	0.6-1.2	0.6-1.2	0.6-1.2	1.2-1.8	-	-
Native/Fill	-	-	Native	Native	Native	Native	Native	-	-
Sampling Date	dd-mmm-yy	-	23-Aug-22	23-Aug-22	24-Oct-22	24-Oct-22	24-Oct-22	23-Aug-22	24-Oct-22
Analysis Date (on or before)	dd-mmm-yy	-	31-Aug-22	31-Aug-22	4-Nov-22	4-Nov-22	4-Nov-22	31-Aug-22	4-Nov-22
Certificate of Analysis No.	-	-	2235312	2235312	2244199	2244199	2244199	2235312	2244199
Benzene	ug/g	0.21	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Toluene	ug/g	2.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene Mixture	ug/g	3.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Petroleum Hydrocarbons F1 ¹	ug/g	55	<7	<7	<7	<7	<7	<7	<7
Petroleum Hydrocarbons F2	ug/g	98	9	<4	<4	<4	<4	-	-
Petroleum Hydrocarbons F3	ug/g	300	32	<8	706	210	<8	-	-
Petroleum Hydrocarbons F4	ug/g	2,800	<6	<6	636	173	<6	-	-
Petroleum Hydrocarbons F4G	-	2,800	-	-	-	-	-	-	-

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1

of the Environmental Protection Act (April 15, 2011 and as amended)

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition

Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed

m bg meters below grade

RPD Relative percent difference

Value Exceeds standard

Value Detection limit exceeds standard

¹ Hot water soluble boron applies to surface soils (<1.5 m bg).

² Analysis for methyl mercury only applies when mercury standard is exceeded.

¹ the sum of 1-methylnaphthalene and 2- methylnaphthalene.

¹ F1 fraction does not include BTEX.

EWA Edward Wong & Associates Inc.

Pinchin Pinchin Ltd.

TABLE 4 SOIL ANALYTICAL RESULTS - VOCs
640 Liverpool Road and 609 Annlund Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 R/P/I coarse	BH1-2 by EWA	BH2-1 by EWA	BH3-2 by EWA	MW 113-5	MW 1000 Field Duplicate of MW 113-5	MW208-1B	MW208-4	MW208-98 Field Duplicate of MW208-4	BH1000 (Methanol Blank)
Sample Depth	m bg	-	0.8-1.4	0.1-0.6	0.8-1.4	3.05-3.65	3.05-3.65	0.3-0.6	1.8-2.4	1.8-2.4	-
Native/Fill			Native	Fill	Native	Native	Native	Native	Native	Native	-
Sampling Date	dd-mmm-yy	-	20-Sep-21	20-Sep-21	20-Sep-21	2-Mar-22	2-Mar-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22
Analysis Date (on or before)	dd-mmm-yy	-	28-Sep-21	28-Sep-21	28-Sep-21	9-Mar-22	9-Mar-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22
Certificate of Analysis No.	-	-	C1R3947	C1R3947	C1R3947	C256889	C256889	2235312	2235312	2235312	2235312
Acetone	ug/g	16	<0.49	<0.98	<0.49	<0.49	<0.49	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	ug/g	1.5	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Bromoform	ug/g	0.27	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Bromomethane	ug/g	0.050	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.050	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Chlorobenzene	ug/g	2.4	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Chloroform	ug/g	0.050	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Dichlorobenzene, 1,2-	ug/g	1.2	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Dichlorobenzene, 1,3-	ug/g	4.8	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Dichlorobenzene, 1,4-	ug/g	0.083	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Dichlorodifluoromethane	ug/g	16	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Dichloroethane, 1,1-	ug/g	0.47	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Dichloroethane, 1,2-	ug/g	0.050	<0.049	<0.080	<0.049	<0.049	<0.049	<0.05	<0.05	<0.05	<0.05
Dichloroethylene, 1,1-	ug/g	0.050	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Dichloroethylene, 1,2-cis-	ug/g	1.9	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Dichloroethylene, 1,2-trans-	ug/g	0.084	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Dichloropropane, 1,2-	ug/g	0.050	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Dichloropropene, 1,3-	ug/g	0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.05	<0.05	<0.05	<0.05
Ethylene dibromide	ug/g	0.050	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Hexane (n)	ug/g	2.8	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Methyl Ethyl Ketone	ug/g	16	<0.40	<0.80	<0.40	<0.40	<0.40	<0.50	<0.50	<0.50	<0.50
Methyl Isobutyl Ketone	ug/g	1.7	<0.40	<0.80	<0.40	<0.40	<0.40	<0.50	<0.50	<0.50	<0.50
Methyl tert-Butyl Ether (MTBE)	ug/g	0.75	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	0.10	<0.049	<0.098	<0.049	<0.049	<0.049	<0.05	<0.05	<0.05	<0.05
Styrene	ug/g	0.70	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Tetrachloroethane, 1,1,1,2-	ug/g	0.058	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Tetrachloroethane, 1,1,2,2-	ug/g	0.050	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Tetrachloroethylene	ug/g	0.28	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Trichloroethane, 1,1,1-	ug/g	0.38	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Trichloroethane, 1,1,2-	ug/g	0.050	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Trichloroethylene	ug/g	0.061	<0.010	<0.020	<0.010	<0.010	<0.010	<0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4.0	<0.040	<0.080	<0.040	<0.040	<0.040	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.020	<0.020	<0.038	<0.020	<0.019	<0.019	<0.02	<0.02	<0.02	<0.02

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1

of the Environmental Protection Act (April 15, 2011 and as amended)
 Table 2: Full Depth Generic SCS in a Potable Ground Water Condition
 Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed
- m bg meters below grade
- RPD Relative percent difference
- Value Exceeds standard
- Value Detection limit exceeds standard
- EWA Edward Wong & Associates Inc.

TABLE 5 SOIL ANALYTICAL RESULTS - PAHS

640 Liverpool Road and 609 Annlard Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 R/P/I coarse	MW 113-5	MW 1000 Field Duplicate of MW 113-5	BH201-1	BH201-2B	BH202-1B	BH202-99 Field Duplicate of BH202-1B	BH202-2A	BH203-1B
Sample Depth	m bg	-	3.05-3.65	3.05-3.65	0-1.2	2.0-2.4	0.6-1.2	0.6-1.2	1.2-1.8	0.6-1.2
Native/Fill	-	-	Native	Native	Native	Native	Native	Native	Native	Native
Sampling Date	dd-mmm-yy	-	2-Mar-22	2-Mar-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22
Analysis Date (on or before)	dd-mmm-yy	-	9-Mar-22	9-Mar-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22
Certificate of Analysis No.	-	-	C256889	C256889	2235312	2235312	2235312	2235312	2235312	2235312
Acenaphthene	ug/g	7.9	<0.0050	<0.0050	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Acenaphthylene	ug/g	0.15	<0.0050	<0.0050	<0.02	<0.02	<0.02	<0.02	<0.02	0.04
Anthracene	ug/g	0.67	<0.0050	<0.0050	<0.02	<0.02	<0.02	<0.02	<0.02	0.03
Benz[a]anthracene	ug/g	0.50	<0.0050	<0.0050	<0.02	<0.02	<0.02	<0.02	<0.02	0.10
Benzo[a]pyrene	ug/g	0.30	<0.0050	<0.0050	<0.02	<0.02	<0.02	<0.02	<0.02	0.13
Benzo[b]fluoranthene	ug/g	0.78	<0.0050	<0.0050	<0.02	<0.02	<0.02	<0.02	<0.02	0.14
Benzo[ghi]perylene	ug/g	6.6	<0.0050	<0.0050	<0.02	<0.02	<0.02	<0.02	<0.02	0.09
Benzo[k]fluoranthene	ug/g	0.78	<0.0050	<0.0050	<0.02	<0.02	<0.02	<0.02	<0.02	0.07
Chrysene	ug/g	7.0	0.0092	0.016	<0.02	<0.02	<0.02	<0.02	<0.02	0.16
Dibenz[a h]anthracene	ug/g	0.10	<0.0050	<0.0050	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Fluoranthene	ug/g	0.69	<0.0050	<0.0050	<0.02	<0.02	<0.02	<0.02	<0.02	0.24
Fluorene	ug/g	62	<0.0050	<0.0050	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Indeno[1 2 3-cd]pyrene	ug/g	0.38	<0.0050	<0.0050	<0.02	<0.02	<0.02	<0.02	<0.02	0.08
Methylnaphthalene, 2-(1-) ¹	ug/g	0.99	<0.0050	<0.0090	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Naphthalene	ug/g	0.60	<0.0050	<0.0050	<0.01	<0.01	<0.01	<0.01	<0.01	0.01
Phenanthrene	ug/g	6.2	0.0085	0.018	<0.02	<0.02	<0.02	<0.02	<0.02	0.13
Pyrene	ug/g	78	<0.0050	0.0081	<0.02	<0.02	<0.02	<0.02	<0.02	0.21

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1

of the Environmental Protection Act (April 15, 2011 and as amended)

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition

Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed

m bg meters below grade

RPD Relative percent difference

Value Exceeds standard

Value Detection limit exceeds standard

¹ the sum of 1-methylnaphthalene and 2- methylnaphthalene.

TABLE 5 SOIL ANALYTICAL RESULTS - PAHS

640 Liverpool Road and 609 Annlard Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 R/P/I coarse	BH204-1B	BH205-1B	BH205-99 Field Duplicate of BH205-1B	BH205-2A	BH206-1B	MW207-1	MW207-3B	MW208-1B
Sample Depth	m bg	-	0.6-1.2	0.6-1.2	0.6-1.2	1.2-1.8	0.6-1.2	0-1.2	2.9-3.4	0.3-0.6
Native/Fill	-	-	Native	Native	Native	Native	Native	Fill	Native	Native
Sampling Date	dd-mmm-yy	-	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22	23-Aug-22
Analysis Date (on or before)	dd-mmm-yy	-	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22	31-Aug-22
Certificate of Analysis No.	-	-	2235312	2235312	2235312	2235312	2235312	2235312	2235312	2235312
Acenaphthene	ug/g	7.9	<0.02	<0.02	<0.02	0.06	<0.02	<0.02	<0.02	<0.02
Acenaphthylene	ug/g	0.15	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Anthracene	ug/g	0.67	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Benzo[a]anthracene	ug/g	0.50	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02
Benzo[a]pyrene	ug/g	0.30	<0.02	<0.02	<0.02	<0.02	<0.02	0.03	<0.02	<0.02
Benzo[b]fluoranthene	ug/g	0.78	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	<0.02	<0.02
Benzo[ghi]perylene	ug/g	6.6	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02
Benzo[k]fluoranthene	ug/g	0.78	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02
Chrysene	ug/g	7.0	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	<0.02	<0.02
Dibenz[a h]anthracene	ug/g	0.10	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Fluoranthene	ug/g	0.69	<0.02	<0.02	<0.02	<0.02	<0.02	0.06	<0.02	<0.02
Fluorene	ug/g	62	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Indeno[1 2 3-cd]pyrene	ug/g	0.38	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02
Methylnaphthalene, 2-(1-) ¹	ug/g	0.99	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Naphthalene	ug/g	0.60	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phenanthrene	ug/g	6.2	<0.02	<0.02	<0.02	<0.02	<0.02	0.04	<0.02	<0.02
Pyrene	ug/g	78	<0.02	<0.02	<0.02	0.03	<0.02	0.05	<0.02	<0.02

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1

of the Environmental Protection Act (April 15, 2011 and as amended)

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition

Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed

m bg meters below grade

RPD Relative percent difference

Value Exceeds standard

Value Detection limit exceeds standard

¹ the sum of 1-methylnaphthalene and 2- methylnaphthalene.

TABLE 5 SOIL ANALYTICAL RESULTS - PAHs

640 Liverpool Road and 609 Annlard Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 R/P/I coarse	MW208-4	MW208-98 Field Duplicate of MW208-4	BH209-1B
Sample Depth	m bg	-	1.8-2.4	1.8-2.4	0.6-1.2
Native/Fill	-	-	Native	Native	Native
Sampling Date	dd-mmm-yy	-	23-Aug-22	23-Aug-22	23-Aug-22
Analysis Date (on or before)	dd-mmm-yy	-	31-Aug-22	31-Aug-22	31-Aug-22
Certificate of Analysis No.	-	-	2235312	2235312	2235312
Acenaphthene	ug/g	7.9	<0.02	<0.02	<0.02
Acenaphthylene	ug/g	0.15	<0.02	<0.02	<0.02
Anthracene	ug/g	0.67	<0.02	<0.02	<0.02
Benz[a]anthracene	ug/g	0.50	<0.02	<0.02	<0.02
Benzo[a]pyrene	ug/g	0.30	<0.02	<0.02	<0.02
Benzo[b]fluoranthene	ug/g	0.78	<0.02	<0.02	<0.02
Benzo[ghi]perylene	ug/g	6.6	<0.02	<0.02	<0.02
Benzo[k]fluoranthene	ug/g	0.78	<0.02	<0.02	<0.02
Chrysene	ug/g	7.0	<0.02	<0.02	<0.02
Dibenz[a h]anthracene	ug/g	0.10	<0.02	<0.02	<0.02
Fluoranthene	ug/g	0.69	<0.02	<0.02	<0.02
Fluorene	ug/g	62	<0.02	<0.02	<0.02
Indeno[1 2 3-cd]pyrene	ug/g	0.38	<0.02	<0.02	<0.02
Methylnaphthalene, 2-(1-) ¹	ug/g	0.99	<0.04	<0.04	<0.04
Naphthalene	ug/g	0.60	<0.01	<0.01	<0.01
Phenanthrene	ug/g	6.2	<0.02	<0.02	<0.02
Pyrene	ug/g	78	<0.02	<0.02	<0.02

Standards from *Soil, Ground Water and Sediment Standards for Use Under Part XV.1*

of the Environmental Protection Act (April 15, 2011 and as amended)

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition

Residential/Parkland/Institutional Property-Use, Coarse-Textured Soil

- Not analyzed

m bg meters below grade

RPD Relative percent difference

Value Exceeds standard

Value Detection limit exceeds standard

¹ the sum of 1-methylnaphthalene and 2- methylnaphthalene.

TABLE 6 GROUNDWATER ANALYTICAL RESULTS - METALS AND INORGANICS
640 Liverpool Road and 609 Annland Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 coarse	BH2	MW107	MW113	MW1001 Field Duplicate of MW113	MW113	MW207	MW1000 Field Duplicate of MW207	MW208
Vapour Reading	see note	-	-	<5 ppm / 1ppm	1%LEL	-	<5 ppm / 2 ppm	10 ppm / 8 ppm	-	<5 ppm / 2 ppm
Screen Range	m bg	-	4.8-7.9	13.4-16.4	11.8-14.8	11.8-14.8	11.8-14.8	1.59-4.64	1.59-4.64	0.88-2.4
Sampling Date	dd-mmm-yy	-	21-Sep-21	29-Aug-22	4-Mar-22	4-Mar-22	29-Aug-22	29-Aug-22	29-Aug-22	29-Aug-22
Analysis Date (on or before)	dd-mmm-yy	-	28-Sep-21	6-Sep-22	12-Mar-22	14-Mar-22	6-Sep-22	6-Sep-22	6-Sep-22	6-Sep-22
Certificate of Analysis No.	-	-	C1R3963	2236110	C259474	C259474	2236110	2236110	2236110	2236110
pH	pH Units	NV	-	7.0	-	-	7.1	7.2	7.1	7.0
Antimony	ug/L	6.0	0.53	<0.5	<0.50	<0.50	<0.5	<0.5	<0.5	<0.5
Arsenic	ug/L	25	3.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Barium	ug/L	1,000	140	114	120	130	101	136	137	143
Beryllium	ug/L	4.0	<0.40	<0.5	<0.40	<0.40	<0.5	<0.5	<0.5	<0.5
Boron (total)	ug/L	5,000	270	73.7	17	19	19.1	135	141	129
Cadmium	ug/L	2.7	<0.090	<0.2	<0.090	<0.090	<0.2	<0.2	<0.2	<0.2
Chromium Total	ug/L	50	<5.0	<1.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0
Chromium VI	ug/L	25	<0.50	<10	<0.50	<0.50	<10	<10	<10	<10
Cobalt	ug/L	3.8	2.3	<0.5	0.81	0.82	<0.5	0.9	0.9	0.6
Copper	ug/L	87	1.1	2.0	1.1	0.9	0.8	1.1	1.1	1.4
Cyanide (CN-)	ug/L	66	<1	<2	<1	<1	<2	<2	<2	<2
Lead	ug/L	10	0.66	<0.2	<0.50	<0.50	<0.2	<0.2	<0.2	0.2
Mercury	ug/L	0.29	<0.10	<0.1	<0.10	<0.10	<0.1	<0.1	<0.1	<0.1
Molybdenum	ug/L	70	1.6	1.9	1.7	1.8	1.3	20.4	21.2	2.3
Nickel	ug/L	100	4.2	3.3	2.8	2.8	2.6	4.1	4.0	1.3
Selenium	ug/L	10	<2.0	<1.0	<2.0	<2.0	<1.0	2.2	2.1	<1.0
Silver	ug/L	1.5	<0.090	<0.2	<0.090	<0.090	<0.2	<0.2	<0.2	<0.2
Thallium	ug/L	2.0	<0.050	<0.5	<0.050	<0.050	<0.5	<0.5	<0.5	<0.5
Uranium	ug/L	20	0.77	1.0	3.4	3.4	1.9	3.1	3.0	0.5
Vanadium	ug/L	6.2	0.67	<0.5	<0.50	<0.50	<0.5	<0.5	<0.5	1.7
Zinc	ug/L	1,100	5.2	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloride	mg/L	790,000	75	64.9	150	150	226	54.6	54.7	55.9
Sodium	ug/L	490,000	49,000	44600	120000	130000	178000	70100	70500	83900

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1

of the Environmental Protection Act (April 15, 2011 and as amended)

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition

All Types of Property-Use, Coarse-Textured Soil

- Not analyzed
- m bg meters below grade
- RPD Relative percent difference
- Value** Exceeds standard
- Value Detection limit exceeds standard
- EWA Edward Wong & Associates Inc.

TABLE 7 GROUNDWATER ANALYTICAL RESULTS - BTEX & PHCs
640 Liverpool Road and 609 Annland Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 coarse	BH1	BH2	BH3	MW107	MW113	MW1001 Field Duplicate of MW113
Vapour Reading	see note	-	-	-	-	<5 ppm / 1ppm	1%LEL	-
Screen Range	m bg	-	4.8-7.9	4.8-7.9	4.8-7.9	13.4-16.4	11.8-14.8	11.8-14.8
Sampling Date	dd-mmm-yy	-	21-Sep-21	21-Sep-21	21-Sep-21	29-Aug-22	4-Mar-22	4-Mar-22
Analysis Date (on or before)	dd-mmm-yy	-	28-Sep-21	28-Sep-21	28-Sep-21	6-Sep-22	12-Mar-22	14-Mar-22
Certificate of Analysis No.	-	-	C1R3963	C1R3963	C1R3963	2236110	C259474	C259474
Benzene	ug/L	5.0	<0.17	<0.17	<0.17	<0.5	<0.17	<0.17
Toluene	ug/L	24	<0.20	0.21	<0.20	<0.5	<0.20	<0.20
Ethylbenzene	ug/L	2.4	<0.20	<0.20	<0.20	<0.5	<0.20	<0.20
Xylene Mixture	ug/L	300	<0.20	<0.20	<0.20	<0.5	<0.20	<0.20
Petroleum Hydrocarbons F1 ¹	ug/L	750	<25	<25	<25	<25	<25	<25
Petroleum Hydrocarbons F2	ug/L	150	<100	<100	<100	<100	<100	<100
Petroleum Hydrocarbons F3	ug/L	500	<200	<200	<200	<100	<200	<200
Petroleum Hydrocarbons F4	ug/L	500	<200	<200	<200	<100	<200	<200

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1

of the Environmental Protection Act (April 15, 2011 and as amended)

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition

All Types of Property-Use, Coarse-Textured Soil

- Not analyzed
- m bg meters below grade
- ppm parts per million
- % LEL percent of the lower explosive limit
- RPD Relative percent difference
- Value** Exceeds standard
- Value Detection limit exceeds standard
- EWA Edward Wong & Associates Inc.
- ¹ F1 fraction does not include BTEX.

TABLE 7 GROUNDWATER ANALYTICAL RESULTS - BTEX & PHCs
640 Liverpool Road and 609 Annland Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 coarse	MW113	MW207	MW1000 Field Duplicate of MW207	MW208	Trip Spike	Trip Blank
Vapour Reading	see note	-	<5 ppm / 2 ppm	10 ppm / 8 ppm	-	<5 ppm / 2 ppm	-	-
Screen Range	m bg	-	11.8-14.8	1.59-4.64	1.59-4.64	0.88-2.4	-	-
Sampling Date	dd-mmm-yy	-	29-Aug-22	29-Aug-22	29-Aug-22	29-Aug-22	25-Aug-22	26-Aug-22
Analysis Date (on or before)	dd-mmm-yy	-	6-Sep-22	6-Sep-22	6-Sep-22	6-Sep-22	6-Sep-22	6-Sep-22
Certificate of Analysis No.	-	-	2236110	2236110	2236110	2236110	2236110	2236110
Benzene	ug/L	5.0	<0.5	<0.5	<0.5	<0.5	40.8	<0.5
Toluene	ug/L	24	<0.5	<0.5	<0.5	<0.5	39.2	<0.5
Ethylbenzene	ug/L	2.4	<0.5	<0.5	<0.5	<0.5	39.3	<0.5
Xylene Mixture	ug/L	300	<0.5	<0.5	<0.5	<0.5	118	<0.5
Petroleum Hydrocarbons F1 ¹	ug/L	750	<25	<25	<25	<25	40	<25
Petroleum Hydrocarbons F2	ug/L	150	<100	<100	<100	<100	-	-
Petroleum Hydrocarbons F3	ug/L	500	<100	<100	<100	<100	-	-
Petroleum Hydrocarbons F4	ug/L	500	<100	<100	<100	<100	-	-

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1

of the Environmental Protection Act (April 15, 2011 and as amended)

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition

All Types of Property-Use, Coarse-Textured Soil

- Not analyzed
- m bg meters below grade
- ppm parts per million
- % LEL percent of the lower explosive limit
- RPD Relative percent difference
- Value** Exceeds standard
- Value Detection limit exceeds standard
- EWA Edward Wong & Associates Inc.
- ¹ F1 fraction does not include BTEX.

**TABLE 8 GROUNDWATER ANALYTICAL RESULTS - VOCs
640 Liverpool Road and 609 Anniand Street, Pickering, Ontario**

Sample Name	Units	STANDARDS	BH1	BH2	BH3	MW107	MW113	MW1001
		Table 2 coarse	EWA	EWA	EWA			Field Duplicate of MW113
Vapour Reading	see note	-	-	-	-	<5 ppm / 1ppm	1%LEL	-
Screen Range	m bg	-	4.8-7.9	4.8-7.9	4.8-7.9	13.4-16.4	11.8-14.8	11.8-14.8
Sampling Date	dd-mmm-yy	-	21-Sep-21	21-Sep-21	21-Sep-21	29-Aug-22	4-Mar-22	4-Mar-22
Analysis Date (on or before)	dd-mmm-yy	-	28-Sep-21	28-Sep-21	28-Sep-21	6-Sep-22	12-Mar-22	14-Mar-22
Certificate of Analysis No.	-	-	C1R3963	C1R3963	C1R3963	2236110	C259474	C259474
Acetone	ug/L	2,700	<10	12	<10	<5.0	<10	<10
Bromodichloromethane	ug/L	16	<0.50	<0.50	<0.50	<0.5	<0.50	<0.50
Bromoform	ug/L	25	<1.0	<1.0	<1.0	<0.5	<1.0	<1.0
Bromomethane	ug/L	0.89	<0.50	<0.50	<0.50	<0.5	<0.50	<0.50
Carbon Tetrachloride	ug/L	0.79	<0.20	<0.20	<0.20	<0.2	<0.20	<0.20
Chlorobenzene	ug/L	30	<0.20	<0.20	<0.20	<0.5	<0.20	<0.20
Chloroform	ug/L	2.4	<0.20	<0.20	<0.20	<0.5	<0.20	<0.20
Dibromochloromethane	ug/L	25	<0.50	<0.50	<0.50	<0.5	<0.50	<0.50
Dichlorobenzene, 1,2-	ug/L	3.0	<0.50	<0.50	<0.50	<0.5	<0.50	<0.50
Dichlorobenzene, 1,3-	ug/L	59	<0.50	<0.50	<0.50	<0.5	<0.50	<0.50
Dichlorobenzene, 1,4-	ug/L	1.0	<0.50	<0.50	<0.50	<0.5	<0.50	<0.50
Dichlorodifluoromethane	ug/L	590	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dichloroethane, 1,1-	ug/L	5.0	<0.20	<0.20	<0.20	<0.5	<0.20	<0.20
Dichloroethane, 1,2-	ug/L	1.6	<0.50	<0.50	<0.50	<0.5	<0.50	<0.50
Dichloroethylene, 1,1-	ug/L	1.6	<0.20	<0.20	<0.20	<0.5	<0.20	<0.20
Dichloroethylene, 1,2-cis-	ug/L	1.6	<0.50	<0.50	<0.50	<0.5	<0.50	<0.50
Dichloroethylene, 1,2-trans-	ug/L	1.6	<0.50	<0.50	<0.50	<0.5	<0.50	<0.50
Dichloropropane, 1,2-	ug/L	5.0	<0.20	<0.20	<0.20	<0.5	<0.20	<0.20
Dichloropropene, 1,3-	ug/L	0.50	<0.50	<0.50	<0.50	<0.5	<0.50	<0.50
Ethylene dibromide	ug/L	0.20	<0.20	<0.20	<0.20	<0.2	<0.20	<0.20
Hexane (n)	ug/L	51	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl Ethyl Ketone	ug/L	1,800	<10	<10	<10	<5.0	<10	<10
Methyl Isobutyl Ketone	ug/L	640	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl tert-Butyl Ether (MTBE)	ug/L	15	<0.50	<0.50	<0.50	<2.0	<0.50	<0.50
Methylene Chloride	ug/L	50	<2.0	<2.0	<2.0	<5.0	<2.0	<2.0
Styrene	ug/L	5.4	<0.50	<0.50	<0.50	<0.5	<0.50	<0.50
Tetrachloroethane, 1,1,1,2-	ug/L	1.1	<0.50	<0.50	<0.50	<0.5	<0.50	<0.50
Tetrachloroethane, 1,1,2,2-	ug/L	1.0	<0.50	<0.50	<0.50	<0.5	<0.50	<0.50
Tetrachloroethylene	ug/L	1.6	<0.20	<0.20	<0.20	<0.5	<0.20	<0.20
Trichloroethane, 1,1,1,1-	ug/L	200	<0.20	<0.20	<0.20	<0.5	<0.20	<0.20
Trichloroethane, 1,1,2-	ug/L	4.7	<0.50	<0.50	<0.50	<0.5	<0.50	<0.50
Trichloroethylene	ug/L	1.6	<0.20	<0.20	<0.20	<0.5	<0.20	<0.20
Trichlorofluoromethane	ug/L	150	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50
Vinyl Chloride	ug/L	0.50	<0.20	<0.20	<0.20	<0.5	<0.20	<0.20

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1

of the Environmental Protection Act (April 15, 2011 and as amended)

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition

All Types of Property-Use, Coarse-Textured Soil

- Not analyzed
- m bg meters below grade
- RPD Relative percent difference
- Value** Exceeds standard
- Value Detection limit exceeds standard
- * Expressed as percent recovery
- EWA Edward Wong & Associates Inc.

TABLE 8 GROUNDWATER ANALYTICAL RESULTS - VOCs
640 Liverpool Road and 609 Anniand Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 coarse	MW113	MW207	MW1000 Field Duplicate of MW207	MW208	Trip Spike *	Trip Blank
Vapour Reading	see note	-	<5 ppm / 2 ppm	10 ppm / 8 ppm	-	<5 ppm / 2 ppm	-	-
Screen Range	m bg	-	11.8-14.8	1.59-4.64	1.59-4.64	0.88-2.4	-	-
Sampling Date	dd-mmm-yy	-	29-Aug-22	29-Aug-22	29-Aug-22	29-Aug-22	25-Aug-22	26-Aug-22
Analysis Date (on or before)	dd-mmm-yy	-	6-Sep-22	6-Sep-22	6-Sep-22	6-Sep-22	6-Sep-22	6-Sep-22
Certificate of Analysis No.	-	-	2236110	2236110	2236110	2236110	2236110	2236110
Acetone	ug/L	2,700	<5.0	<5.0	5.2	<5.0	119	<5.0
Bromodichloromethane	ug/L	16	<0.5	<0.5	<0.5	<0.5	40.1	<0.5
Bromoform	ug/L	25	<0.5	<0.5	<0.5	<0.5	41.5	<0.5
Bromomethane	ug/L	0.89	<0.5	<0.5	<0.5	<0.5	40.5	<0.5
Carbon Tetrachloride	ug/L	0.79	<0.2	<0.2	<0.2	<0.2	39.5	<0.2
Chlorobenzene	ug/L	30	<0.5	<0.5	<0.5	<0.5	40.9	<0.5
Chloroform	ug/L	2.4	<0.5	<0.5	<0.5	<0.5	41	<0.5
Dibromochloromethane	ug/L	25	<0.5	<0.5	<0.5	<0.5	39	<0.5
Dichlorobenzene, 1,2-	ug/L	3.0	<0.5	<0.5	<0.5	<0.5	40.1	<0.5
Dichlorobenzene, 1,3-	ug/L	59	<0.5	<0.5	<0.5	<0.5	39.1	<0.5
Dichlorobenzene, 1,4-	ug/L	1.0	<0.5	<0.5	<0.5	<0.5	38.8	<0.5
Dichlorodifluoromethane	ug/L	590	<1.0	<1.0	<1.0	<1.0	37.7	<1.0
Dichloroethane, 1,1-	ug/L	5.0	<0.5	<0.5	<0.5	<0.5	39.7	<0.5
Dichloroethane, 1,2-	ug/L	1.6	<0.5	<0.5	<0.5	<0.5	39.3	<0.5
Dichloroethylene, 1,1-	ug/L	1.6	<0.5	<0.5	<0.5	<0.5	34	<0.5
Dichloroethylene, 1,2-cis-	ug/L	1.6	<0.5	<0.5	<0.5	<0.5	39.1	<0.5
Dichloroethylene, 1,2-trans-	ug/L	1.6	<0.5	<0.5	<0.5	<0.5	37	<0.5
Dichloropropane, 1,2-	ug/L	5.0	<0.5	<0.5	<0.5	<0.5	39.7	<0.5
Dichloropropene, 1,3-	ug/L	0.50	<0.5	<0.5	<0.5	<0.5	58	<0.5
Ethylene dibromide	ug/L	0.20	<0.2	<0.2	<0.2	<0.2	38	<0.2
Hexane (n)	ug/L	51	<1.0	<1.0	<1.0	<1.0	26.7	<1.0
Methyl Ethyl Ketone	ug/L	1,800	<5.0	<5.0	<5.0	<5.0	115	<5.0
Methyl Isobutyl Ketone	ug/L	640	<5.0	<5.0	<5.0	<5.0	103	<5.0
Methyl tert-Butyl Ether (MTBE)	ug/L	15	<2.0	<2.0	<2.0	<2.0	110	<2.0
Methylene Chloride	ug/L	50	<5.0	<5.0	<5.0	<5.0	37.4	<5.0
Styrene	ug/L	5.4	<0.5	<0.5	<0.5	<0.5	39.3	<0.5
Tetrachloroethane, 1,1,1,2-	ug/L	1.1	<0.5	<0.5	<0.5	<0.5	38.8	<0.5
Tetrachloroethane, 1,1,2,2-	ug/L	1.0	<0.5	<0.5	<0.5	<0.5	44.7	<0.5
Tetrachloroethylene	ug/L	1.6	<0.5	<0.5	<0.5	<0.5	35.8	<0.5
Trichloroethane, 1,1,1-	ug/L	200	<0.5	<0.5	<0.5	<0.5	38.8	<0.5
Trichloroethane, 1,1,2-	ug/L	4.7	<0.5	<0.5	<0.5	<0.5	39.3	<0.5
Trichloroethylene	ug/L	1.6	<0.5	<0.5	<0.5	<0.5	36.7	<0.5
Trichlorofluoromethane	ug/L	150	<1.0	<1.0	<1.0	<1.0	36.8	<1.0
Vinyl Chloride	ug/L	0.50	<0.5	<0.5	<0.5	<0.5	39	<0.5

Standards from Soil, Ground Water and Sediment Standards for Use Under Part XV.1

of the Environmental Protection Act (April 15, 2011 and as amended)

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition

All Types of Property-Use, Coarse-Textured Soil

- Not analyzed

m bg meters below grade

RPD Relative percent difference

Value Exceeds standard

Value Detection limit exceeds standard

* Expressed as percent recovery

EWA Edward Wong & Associates Inc.

TABLE 9 GROUNDWATER ANALYTICAL RESULTS - PAHs
640 Liverpool Road and 609 Annlard Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 coarse	MW107	MW107	MW1000 Field duplicate of MW107	MW107	MW1000 Field duplicate of MW107
Vapour Reading	see note	-	<5 ppm / 1ppm	<5ppm	-	<5ppm	-
Screen Range	m bg	-	13.4 - 16.4	13.4 - 16.4	13.4 - 16.4	13.4 - 16.4	13.4 - 16.4
Sampling Date	dd-mmm-yy	-	29-Aug-22	13-Oct-22	13-Oct-22	27-Oct-22	27-Oct-22
Analysis Date (on or before)	dd-mmm-yy	-	6-Sep-22	24-Oct-22	24-Oct-22	6-Nov-22	6-Nov-22
Certificate of Analysis No.	-	-	2236110	C2T9680	C2T9680	C2V6534	C2V6534
Acenaphthene	ug/L	4.1	<0.05	<0.050	<0.050	<0.050	<0.050
Acenaphthylene	ug/L	1.0	<0.05	<0.050	<0.050	<0.050	<0.050
Anthracene	ug/L	2.4	0.04	<0.050	<0.050	<0.050	<0.050
Benz[a]anthracene	ug/L	1.0	0.10	<0.050	<0.050	<0.050	<0.050
Benzo[a]pyrene	ug/L	0.010	0.07	<0.0090	<0.0090	<0.0090	<0.0090
Benzo[b]fluoranthene	ug/L	0.10	<0.05	<0.050	<0.050	<0.050	<0.050
Benzo[ghi]perylene	ug/L	0.20	<0.05	<0.050	<0.050	<0.050	<0.050
Benzo[k]fluoranthene	ug/L	0.10	<0.05	<0.050	<0.050	<0.050	<0.050
Chrysene	ug/L	0.10	0.05	<0.050	<0.050	<0.050	<0.050
Dibenz[a h]anthracene	ug/L	0.20	<0.05	<0.050	<0.050	<0.050	<0.050
Fluoranthene	ug/L	0.41	0.05	<0.050	<0.050	<0.050	<0.050
Fluorene	ug/L	120	<0.05	<0.050	<0.050	<0.050	<0.050
Indeno[1 2 3-cd]pyrene	ug/L	0.20	<0.05	<0.050	<0.050	<0.050	<0.050
Methylnaphthalene, 2-(1-) ¹	ug/L	3.2	<0.10	<0.071	<0.071	<0.071	<0.071
Naphthalene	ug/L	11	<0.05	<0.050	<0.050	<0.050	<0.050
Phenanthrene	ug/L	1.0	<0.05	<0.030	<0.030	<0.030	<0.030
Pyrene	ug/L	4.1	0.06	<0.050	<0.050	<0.050	<0.050

Standards from *Soil, Ground Water and Sediment Standards for Use Under Part XV.1*

of the Environmental Protection Act (April 15, 2011 and as amended)

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition

All Types of Property-Use, Coarse-Textured Soil

- Not analyzed

m bg meters below grade

RPD Relative percent difference

Value Exceeds standard

Value Detection limit exceeds standard

EWA Edward Wong & Associates Inc.

¹ the sum of 1-methylnaphthalene and 2- methylnaphthalene.

TABLE 9 GROUNDWATER ANALYTICAL RESULTS - PAHs
640 Liverpool Road and 609 Annlard Street, Pickering, Ontario

Sample Name	Units	STANDARDS Table 2 coarse	MW113	MW1001 Field Duplicate of MW113	MW113	MW207	MW1000 Field Duplicate of MW207	MW208
Vapour Reading	see note	-	1%LEL	-	<5 ppm / 2 ppm	10 ppm / 8 ppm	-	<5 ppm / 2 ppm
Screen Range	m bg	-	11.8 - 14.8	11.8 - 14.8	11.8 - 14.8	1.59 - 4.64	1.59 - 4.64	0.88 - 2.4
Sampling Date	dd-mmm-yy	-	4-Mar-22	4-Mar-22	29-Aug-22	29-Aug-22	29-Aug-22	29-Aug-22
Analysis Date (on or before)	dd-mmm-yy	-	12-Mar-22	14-Mar-22	6-Sep-22	6-Sep-22	6-Sep-22	6-Sep-22
Certificate of Analysis No.	-	-	C259474	C259474	2236110	2236110	2236110	2236110
Acenaphthene	ug/L	4.1	<0.050	<0.050	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	ug/L	1.0	<0.050	<0.050	<0.05	<0.05	<0.05	<0.05
Anthracene	ug/L	2.4	<0.050	<0.050	<0.01	0.08	<0.01	<0.01
Benz[a]anthracene	ug/L	1.0	<0.050	<0.050	<0.01	<0.01	<0.01	<0.01
Benzo[a]pyrene	ug/L	0.010	<0.0090	<0.0090	<0.01	<0.01	<0.01	<0.01
Benzo[b]fluoranthene	ug/L	0.10	<0.050	<0.050	<0.05	<0.05	<0.05	<0.05
Benzo[ghi]perylene	ug/L	0.20	<0.050	<0.050	<0.05	<0.05	<0.05	<0.05
Benzo[k]fluoranthene	ug/L	0.10	<0.050	<0.050	<0.05	<0.05	<0.05	<0.05
Chrysene	ug/L	0.10	<0.050	<0.050	<0.05	<0.05	<0.05	<0.05
Dibenz[a h]anthracene	ug/L	0.20	<0.050	<0.050	<0.05	<0.05	<0.05	<0.05
Fluoranthene	ug/L	0.41	<0.050	<0.050	<0.01	<0.01	<0.01	<0.01
Fluorene	ug/L	120	<0.050	<0.050	<0.05	<0.05	<0.05	<0.05
Indeno[1 2 3-cd]pyrene	ug/L	0.20	<0.050	<0.050	<0.05	<0.05	<0.05	<0.05
Methylnaphthalene, 2-(1-) ¹	ug/L	3.2	<0.050	<0.050	<0.10	<0.10	<0.10	<0.10
Naphthalene	ug/L	11	<0.050	<0.050	<0.05	<0.05	<0.05	<0.05
Phenanthrene	ug/L	1.0	0.036	<0.030	<0.05	0.05	<0.05	<0.05
Pyrene	ug/L	4.1	<0.050	<0.050	<0.01	<0.01	<0.01	<0.01

Standards from *Soil, Ground Water* and Sediment Standards for Use Under Part XV.1

of the Environmental Protection Act (April 15, 2011 and as amended)

Table 2: Full Depth Generic SCS in a Potable Ground Water Condition

All Types of Property-Use, Coarse-Textured Soil

- Not analyzed

m bg meters below grade

RPD Relative percent difference

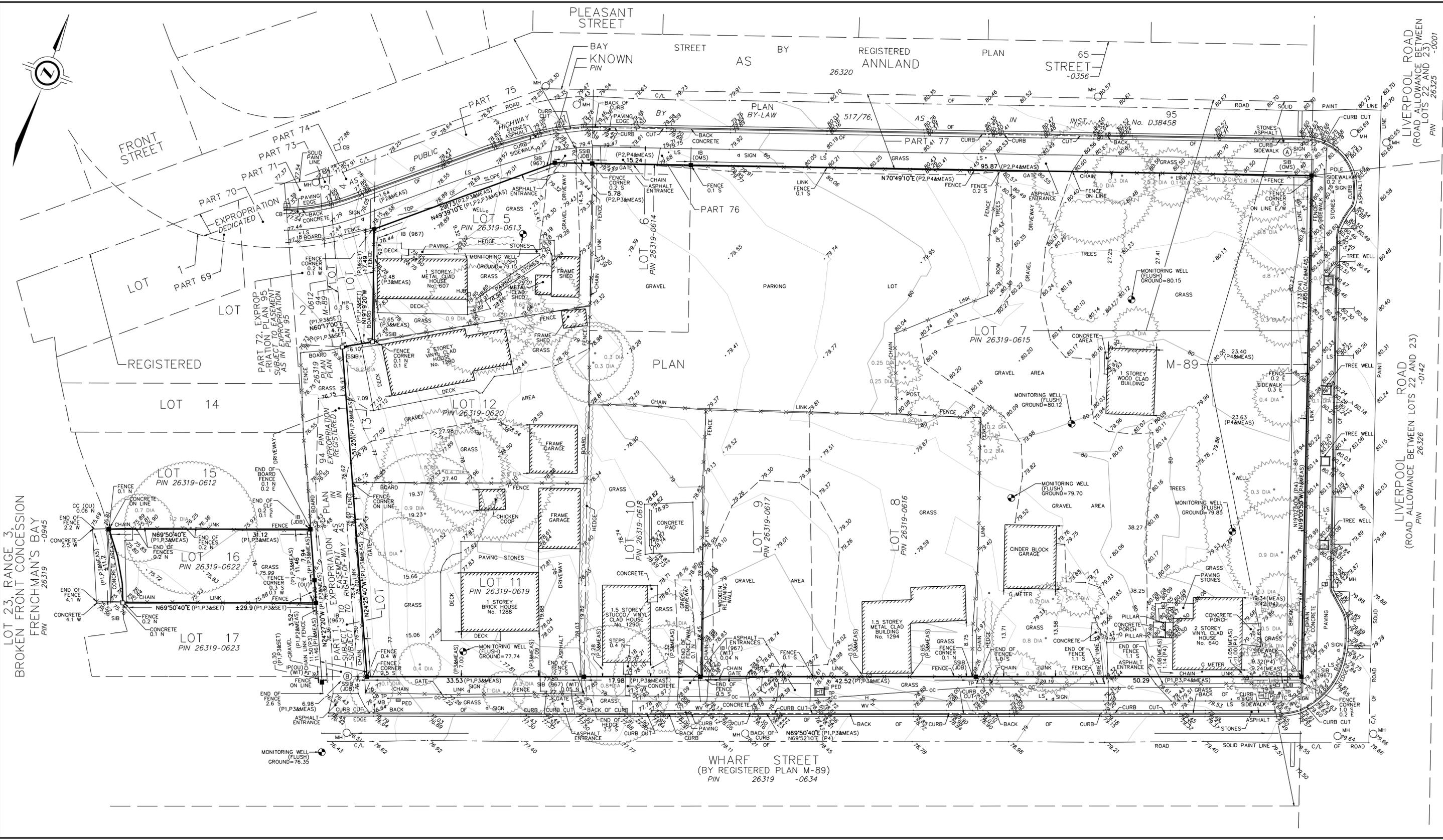
Value Exceeds standard

Value Detection limit exceeds standard

EWA Edward Wong & Associates Inc.

¹ the sum of 1-methylnaphthalene and 2- methylnaphthalene.

APPENDIX I
PLAN OF SURVEY



PLAN OF SURVEY SHOWING TOPOGRAPHY OF
 PART OF LOTS 6 AND 7 AND
 LOTS 5, 8, 9, 10, 11, 12 AND 16
 REGISTERED PLAN M-89
 (GEOGRAPHIC TOWNSHIP OF PICKERING)
 NOW IN THE
 CITY OF PICKERING
 REGIONAL MUNICIPALITY OF DURHAM
 SCALE 1 : 300

J.D. BARNES LIMITED
 © COPYRIGHT 2022

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

BENCHMARK
 ELEVATIONS HEREON ARE GEODETIC AND ARE REFERRED TO CITY OF PICKERING BENCHMARK No. R-39, HAVING A PUBLISHED ELEVATION OF 82.555m. (CVG0-1928-1978)

NOTES
 BEARINGS ARE UTM GRID, DERIVED FROM OBSERVED REFERENCE POINTS A AND B, BY REAL TIME NETWORK (RTN) OBSERVATIONS, UTM ZONE 17, NAD83 (CSRS) (2010.0).
 DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999884.

FOR BEARING COMPARISONS, A COUNTER-CLOCKWISE ROTATION OF 1'21"10" WAS APPLIED TO P1, P2 AND P4 TO CONVERT TO GRID BEARINGS.

INTEGRATION DATA			
OBSERVED REFERENCE POINTS (ORPs): UTM ZONE 17, NAD83 (CSRS) (2010.0). COORDINATES TO URBAN ACCURACY PER SECTION 14 (2) OF O.REG 216/10.			
POINT ID	EASTING	NORTHING	
ORP (A)	654 233.57	4 853 302.56	
ORP (B)	654 123.40	4 853 179.41	
COORDINATES CANNOT, IN THEMSELVES, BE USED TO RE-ESTABLISH CORNERS OR BOUNDARIES SHOWN ON THIS PLAN.			
THE RESULTANT TIE BETWEEN ORP (A) AND ORP (B) IS 165.25m, N41°49'00"E.			

LEGEND	
■	DENOTES SURVEY MONUMENT FOUND
□	DENOTES SURVEY MONUMENT SET
SIB	DENOTES STANDARD IRON BAR
IB	DENOTES SHORT STANDARD IRON BAR
IP	DENOTES IRON PIPE
CC	DENOTES CUT CROSS
WT	DENOTES WITNESS
MEAS	DENOTES MEASURED
JDB	DENOTES J.D. BARNES LIMITED
OMS	DENOTES OMARI MMINYI SURVEYING LTD., O.L.S.
OU	DENOTES ORIGIN UNKNOWN
9B7	DENOTES W.N. WILDMAN, O.L.S.
P1	DENOTES REGISTERED PLAN M-89
P2	DENOTES EXPROPRIATION PLAN No. 95
P3	DENOTES PLAN OF SURVEY BY J.D. BARNES LIMITED, DATED NOVEMBER 19, 2015 (REF. No. 15-25-097-00).
P4	DENOTES SURVEYOR'S REAL PROPERTY REPORT BY OMARI MMINYI SURVEYING LTD., O.L.S. DATED OCTOBER 1, 2021 (PROJECT No. 21-085-S).
DENOTES	DENOTES CALCULATED FROM PLANS P1 & P2
■	DENOTES CATCHBASIN
□	DENOTES TELEPHONE CHAMBER
□	DENOTES HYDRO JUNCTION BOX
□	DENOTES GAS TRANSFORMER ON CONCRETE PAD
○	DENOTES GAS METER
○	DENOTES MANHOLE
○	DENOTES HYDRO POLE
○	DENOTES LIGHT STANDARD
○	DENOTES TELEPHONE POLE
○	DENOTES TELEPHONE PEDESTAL
○	DENOTES FIRE HYDRANT
○	DENOTES WATER VALVE
○	DENOTES WELL
○	DENOTES MAILBOX
○	DENOTES OVERHEAD CABLES
○	DENOTES CONIFEROUS TREE
○	DENOTES DECIDUOUS TREE

ALL SURVEYED LIMITS HAVE BEEN CONFIRMED BY BOUNDARIES ACT PLAN 128

SURVEYOR'S CERTIFICATE
 I CERTIFY THAT:
 1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
 2. THE SURVEY WAS COMPLETED ON MAY 5, 2022.

DATE _____ G.C. LAFRAMBOISE
 ONTARIO LAND SURVEYOR

J.D. BARNES
 LIMITED
 SURVEYING MAPPING GIS
 LAND INFORMATION SPECIALISTS
 110 SCOTIA COURT, UNIT 38, WHITBY, ON L1N 8Y7
 T: (905) 723-1212 F: (905) 723-4234 www.jdbarnes.com

DRAWN BY: M.R.	CHECKED BY: G.C.L.	REFERENCE NO.: 22-25-053-01
FILE: G:\22-25-053\01\22-25-053-01.dgn		DATED: 5/31/2022

PLOTTED: 6/6/2022

APPENDIX II
SAMPLING AND ANALYSIS PLAN

PROPOSED SAMPLING PLAN AND RATIONALE
640 Liverpool Road and 609 Annland Street, Pickering, ON

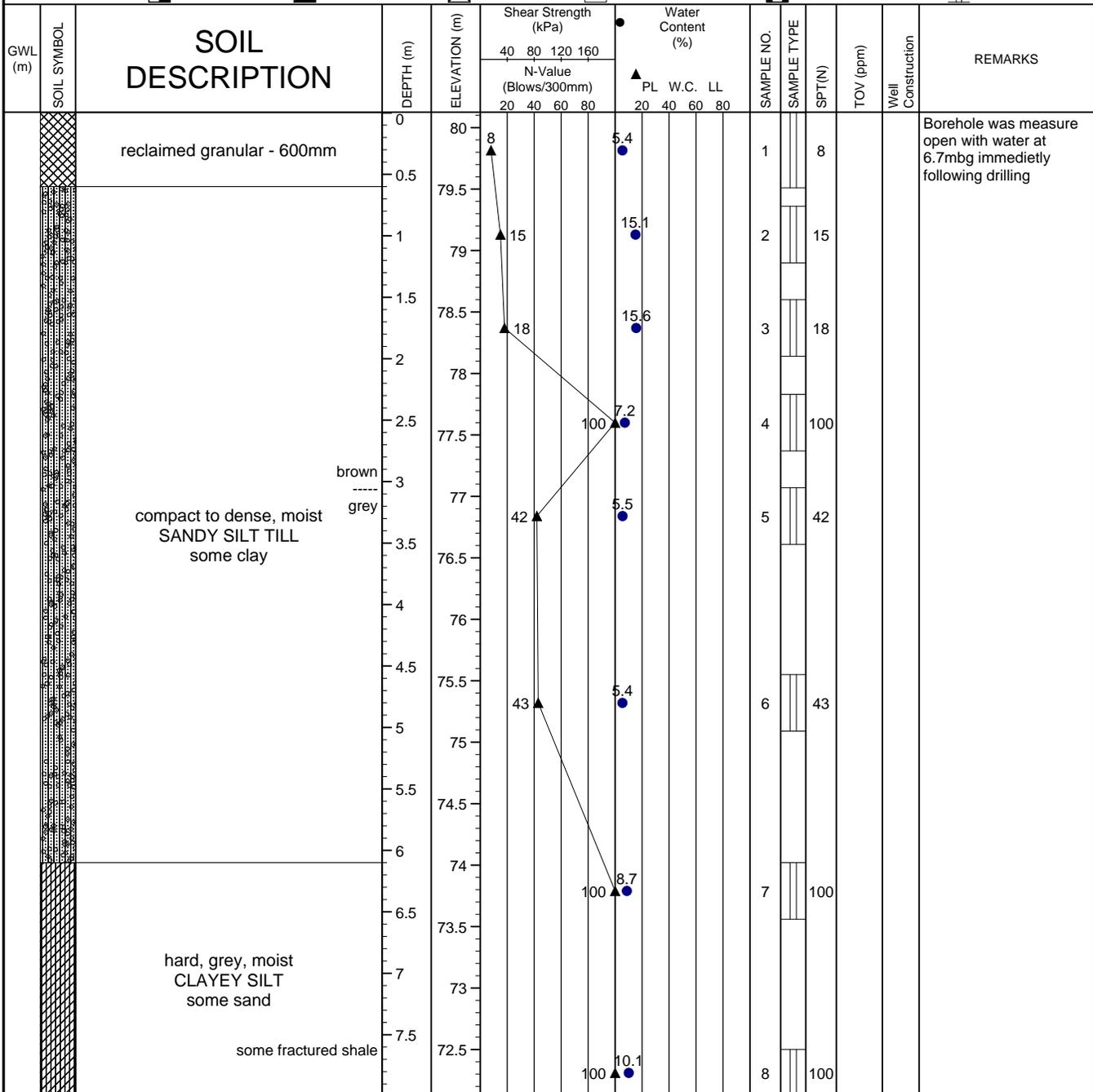
Borehole No.	Location	APEC	Depth (m)	Screened Interval (m)	Sampling Technique	Rationale	Lab Analyses								
							Soil					Groundwater			
							BTEX, F1-F4	VOCs	Inorg.	Grain Size	PAHs	BTEX, F1-F4	VOCs	Inorg.	PAHs
MW107	North of hobby garage	2, 3, 5	8	2.0 - 5.0	Peristaltic Pump	Investigate around former AST/drum storage (GW only)						1	1	1	1
MW113	Southwest of storage shed and UST	3, 4	5.1	1.5 - 4.5	Split Spoon / Peristaltic Pump	Investigate presence of UST	1	1	1		1	1	1	1	1
BH201	West of hobby garage	2, 3, 5	2.5	-	Direct Push	Investigate around former AST/drum storage	2		2		2				
BH202	Northwest of hobby garage	2, 3, 5	2.5	-	Direct Push	Investigate around former AST/drum storage	2				2				
BH203	North of hobby garage	2, 3, 5	2.5	-	Direct Push	Investigate around former AST/drum storage	1				1				
BH204	North of hobby garage	3, 5	2.5	-	Direct Push	Investigate around former AST/drum storage	1				1				
BH205	North of hobby garage	2, 3, 5	2.5	-	Direct Push	Investigate around former AST/drum storage	2				2				
BH206	Northwest corner of paid parking lot	3, 6	2.5	-	Direct Push	General site coverage and investigate fill.	1		1		1				
MW207	West of residence and AST	1, 3	4.5	1.5 - 4.5	Direct Push / Peristaltic Pump	Investigate heating oil AST within residence	2		2	1	2	1	1	1	1
MW208	Inside hobby garage	2, 3	4.5	1.5 - 4.5	Pionjar / Peristaltic Pump	Investigate below slab of hobby garage	2	2	2		2	1	1	1	1
BH209	North of hobby garage	2, 3, 5	2.5	-	Direct Push	Investigate around former AST/drum storage	1								
BH301	North of hobby garage	2, 3, 5	1.5	-	Direct Push	Investigate around former AST/drum storage	1		1						
BH302	North of hobby garage	2, 3, 5	1.5	-	Direct Push	Investigate around former AST/drum storage			1						
BH303	North of hobby garage	3, 5	1.5	-	Direct Push	Investigate around former AST/drum storage	1		2						
BH304	Around the storage shed	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
BH305	Around the storage shed	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
BH306	Around the storage shed	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
BH307	Around the storage shed	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
BH308	Around the storage shed	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
BH309	Around the storage shed	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
BH310	Around the storage shed	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
BH311	Around the storage shed	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
BH312	Around the residence	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
BH313	Around the residence	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
BH314	Around the residence	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
BH315	Around the residence	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
BH316	Around the residence	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
BH317	Around the residence	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
BH318	Around the residence	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
BH319	Around the residence	3, 7	1.5	-	Direct Push	Delineation of lead and mercury impacts			2						
Total Before QA/QC Samples							17	3	44	1	14	3	3	3	3
QA/QC field duplicate							2	1	5		2	1	1		
QA/QC trip blank							1	1				1	1		
QA/QC trip spike												1	1		
Total Laboratory Analyses							21	6	49	1	16	7	7	4	3

Notes: APEC = Area of Potential Concern, refer to phase one ESA
VOCs = volatile organic compounds (O. Reg. 153/04)
BTEX/F1-F4 = benzene, toluene, ethylbenzene, xylenes and petroleum hydrocarbons in the F1 to F4 fractions
Inorg. = metals and general inorganic parameters (O. Reg. 153/04)
PAHs = polycyclic aromatic hydrocarbons (O. Reg. 153/04)

APPENDIX III
BOREHOLE LOGS

CLIENT: Liverpool Road Limited Partnership		METHOD: 0.2m hollow stem augur with split spoon		BH No.: BH102									
PROJECT: 640 Liverpool Road		PROJECT ENGINEER: VN	ELEV. (m) 79.62										
LOCATION: Pickering, Ontario		NORTHING: 4853261.43	EASTING: 654154.09	PROJECT NO.: CT3414.00									
SAMPLE TYPE		AUGER	DRIVEN	CORING	DYNAMIC CONE	SHELBY	SPLIT SPOON						
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	Shear Strength (kPa) 40 80 120 160 N-Value (Blows/300mm) 20 40 60 80	Water Content (%) PL W.C. LL 20 40 60 80	SAMPLE NO.	SAMPLE TYPE	SPT(N)	TOV (ppm)	Well Construction	REMARKS	
		crusher run limestone 150mm dark brown, moist gravelly sand fill 150mm some recycled asphalt	0	79.5	15			1A				Borehole was measure open with water at 6.7mbg immedietly following drilling	
		compact, moist SANDY SILT TILL some clay brown ----- grey	0.5	79				1B	15				
			1	78.5	13				2	13			
			1.5	78					3	16			
			2	77.5	16				4	64			
			2.5	77	64				5	29			
			3	76.5	29				6	39			
			3.5	76					7	26			
			4	75.5	39				8	21			
		4.5	75	26									
		very stiff, grey, wet CLAYEY SILT some sand	5	74.5									
			6	74									
			6.5	73.5	21								
			7	73									
			7.5	72.5									
		FRACTURED SHALE		72				9	100				
		END OF BOREHOLE											
					LOGGED BY: AD		DRILLING DATE: February 24, 2022						
					REVIEWED BY: VN		Page 1 of 1						

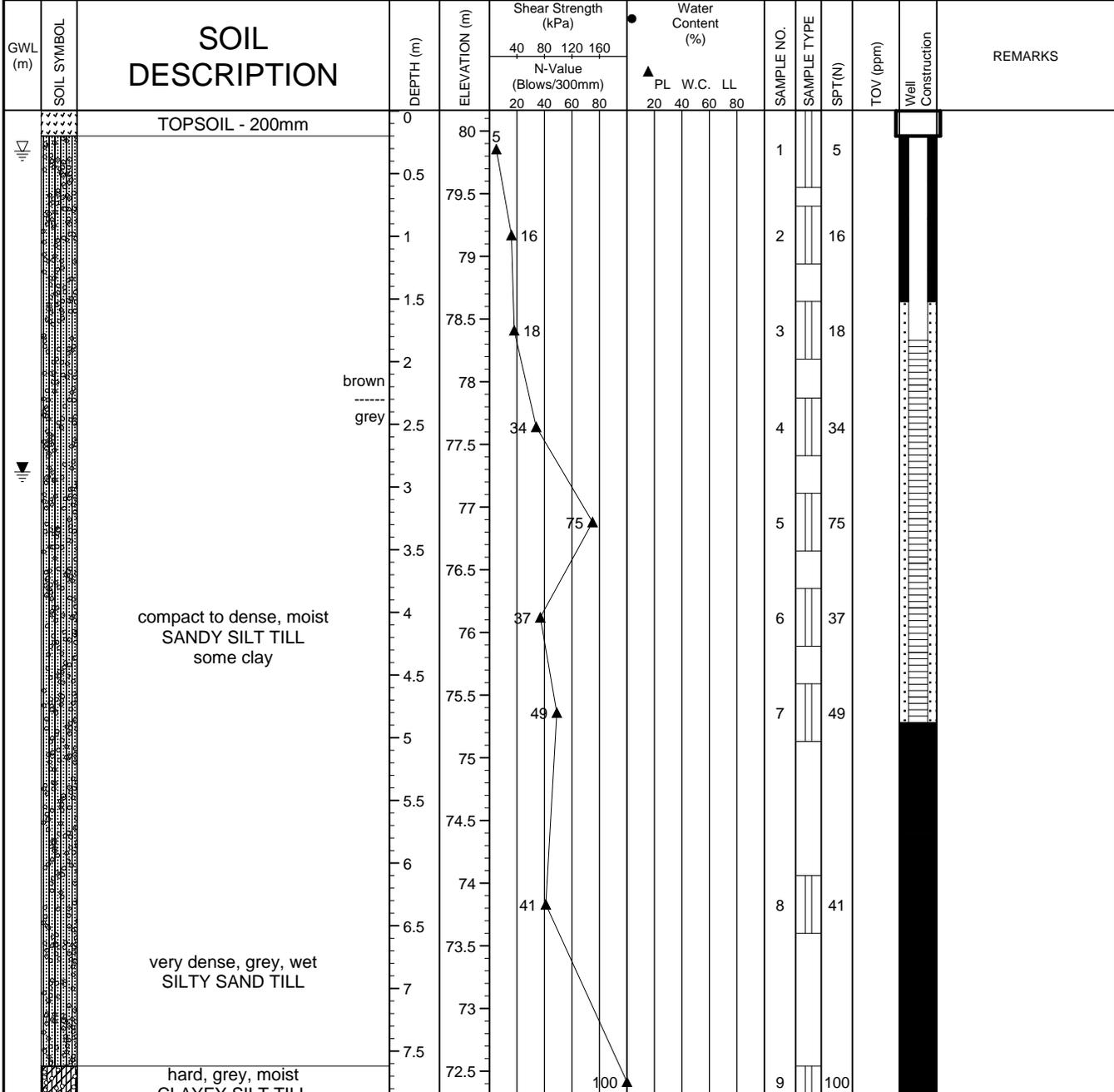
CLIENT: Liverpool Road Limited Partnership		METHOD: 0.2m hollow stem augur with split spoon		BH No.: BH103		
PROJECT: 640 Liverpool Road		PROJECT ENGINEER: VN	ELEV. (m) 80.12			
LOCATION: Pickering, Ontario		NORTHING: 4853270.50	EASTING: 654184.67	PROJECT NO.: CT3414.00		
SAMPLE TYPE	<input type="checkbox"/> AUGER	<input checked="" type="checkbox"/> DRIVEN	<input checked="" type="checkbox"/> CORING	<input type="checkbox"/> DYNAMIC CONE	<input type="checkbox"/> SHELBY	<input type="checkbox"/> SPLIT SPOON



END OF BOREHOLE

CLIENT: Liverpool Road Limited Partnership METHOD: 0.2m hollow stem augur with split spoon
 PROJECT: 640 Liverpool Road PROJECT ENGINEER: VN ELEV. (m) 80.16 **BH No.: MW104**
 LOCATION: Pickering, Ontario NORTHING: 4853285.82 EASTING: 654227.19 PROJECT NO.: CT3414.00

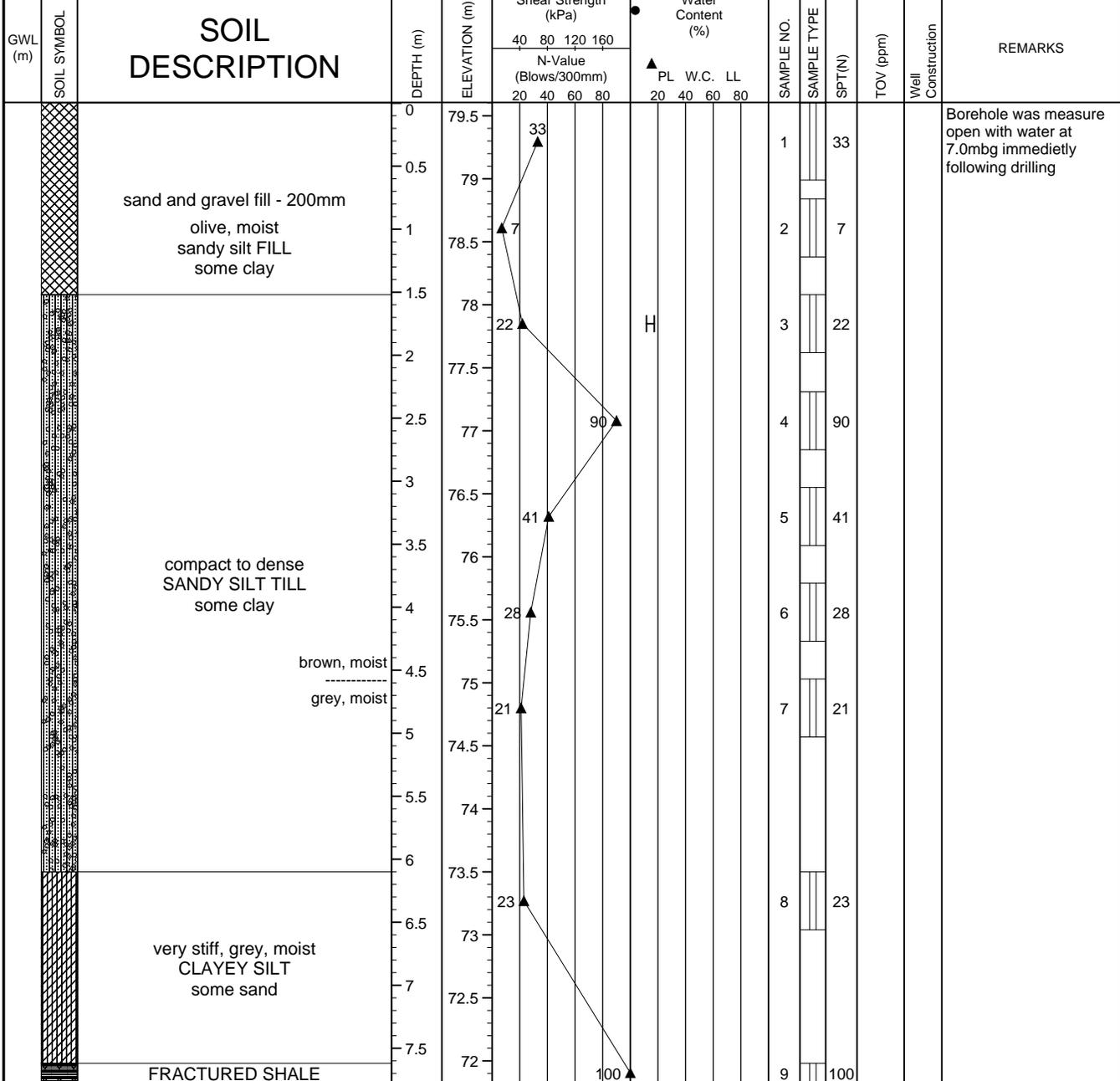
SAMPLE TYPE AUGER DRIVEN CORING DYNAMIC CONE SHELBY SPLIT SPOON



hard, grey, moist CLAYEY SILT TILL some fractured shale
 END OF BOREHOLE

CLIENT: Liverpool Road Limited Partnership	METHOD: 0.2m hollow stem augur with split spoon		BH No.: BH106
PROJECT: 640 Liverpool Road	PROJECT ENGINEER: VN	ELEV. (m) 79.60	
LOCATION: Pickering, Ontario	NORTHING: 4853240.36	EASTING: 654161.78	PROJECT NO.: CT3414.00

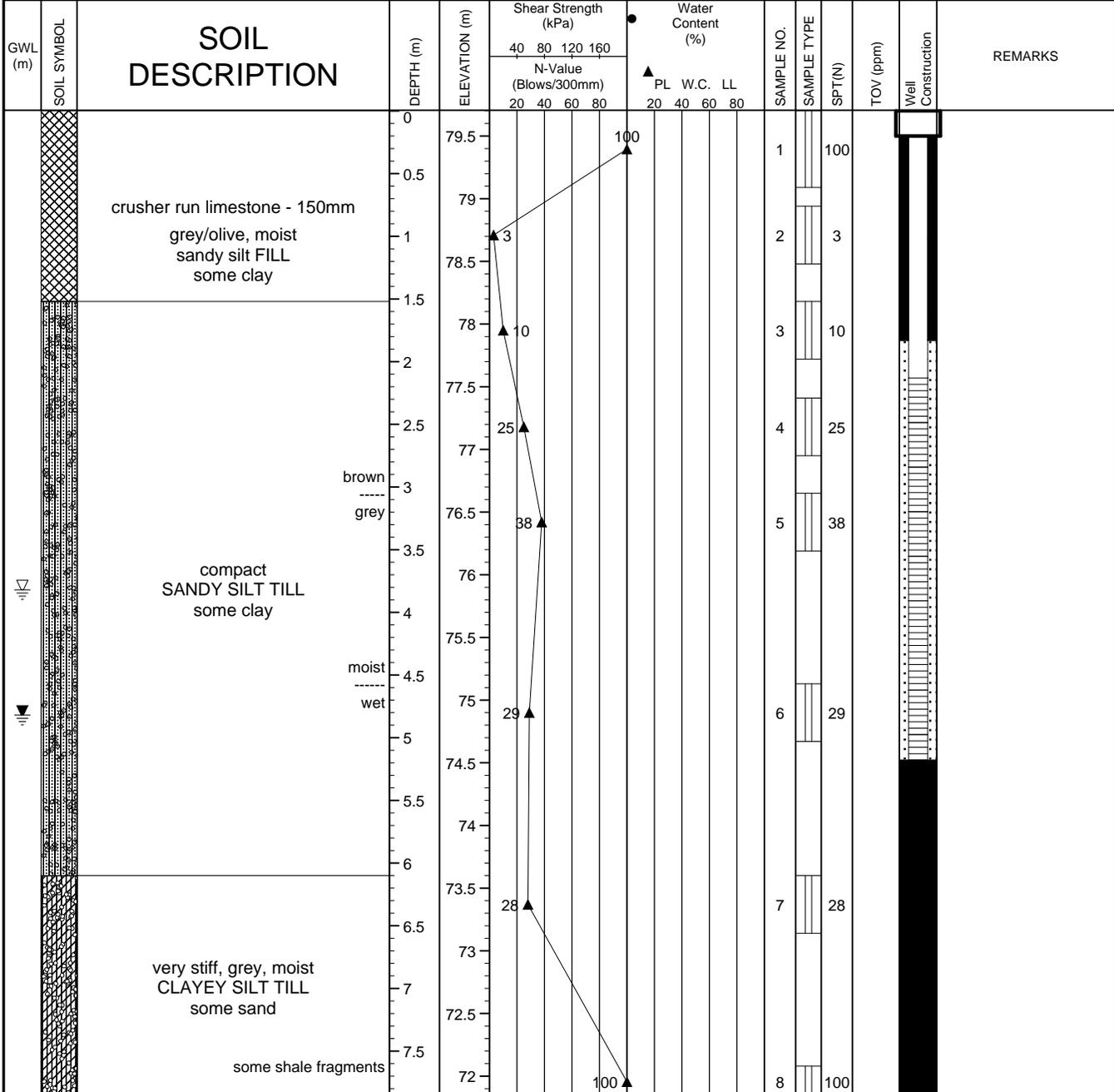
SAMPLE TYPE AUGER DRIVEN CORING DYNAMIC CONE SHELBY SPLIT SPOON



END OF BOREHOLE

CLIENT: Liverpool Road Limited Partnership METHOD: 0.2m hollow stem augur with split spoon
 PROJECT: 640 Liverpool Road PROJECT ENGINEER: VN ELEV. (m) 79.70 **BH No.: MW107**
 LOCATION: Pickering, Ontario NORTHING: 4853247.93 EASTING: 654205.81 PROJECT NO.: CT3414.00

SAMPLE TYPE AUGER DRIVEN CORING DYNAMIC CONE SHELBY SPLIT SPOON

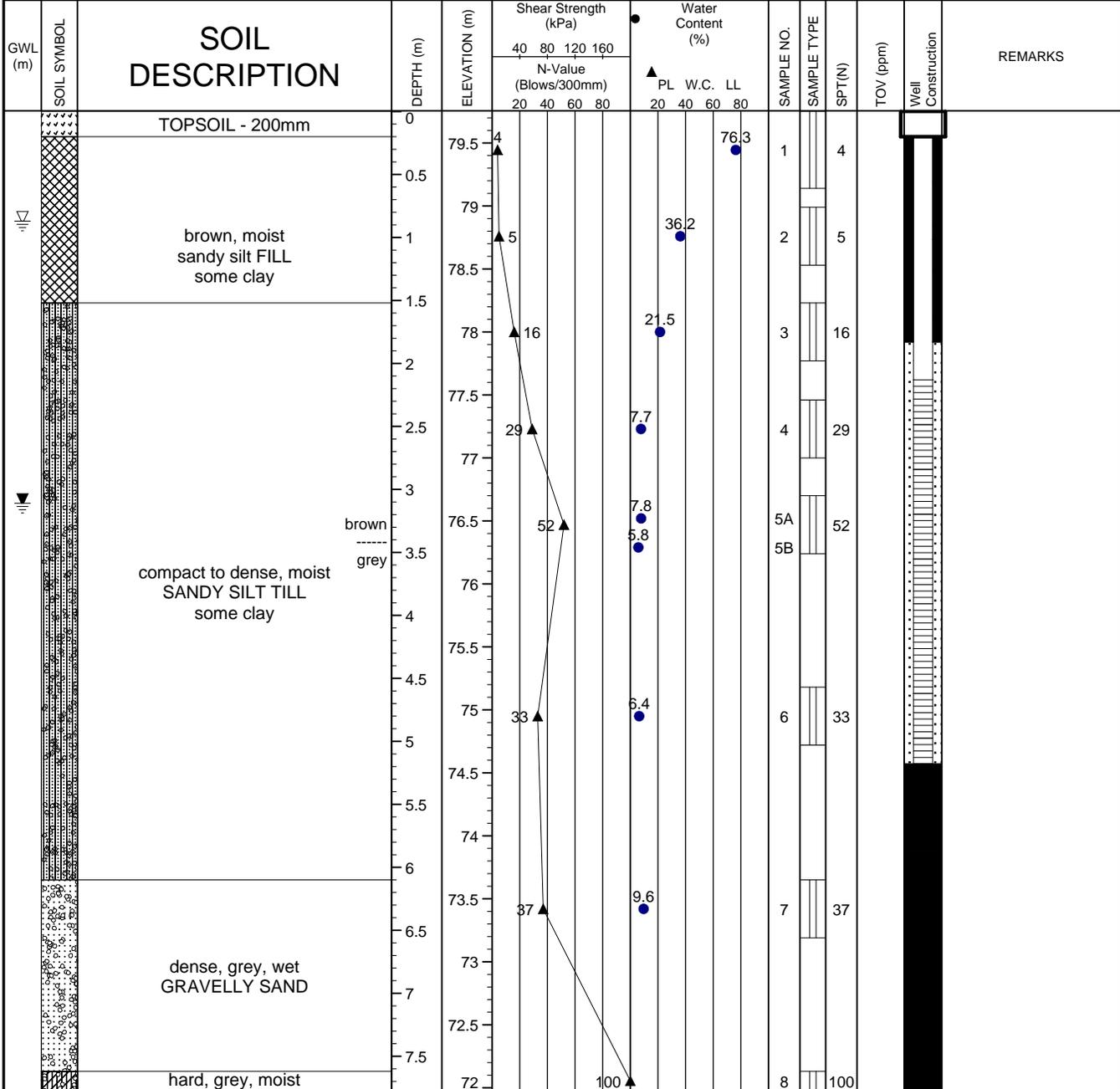


END OF BOREHOLE

CLIENT: Liverpool Road Limited Partnership		METHOD: 0.2m hollow stem augur with split spoon		BH No.: BH108								
PROJECT: 640 Liverpool Road		PROJECT ENGINEER: VN	ELEV. (m) 80.08									
LOCATION: Pickering, Ontario		NORTHING: 4853264.81	EASTING: 654235.33	PROJECT NO.: CT3414.00								
SAMPLE TYPE		AUGER	DRIVEN	CORING	DYNAMIC CONE	SHELBY	SPLIT SPOON					
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	Shear Strength (kPa)	Water Content (%)	SAMPLE NO.	SAMPLE TYPE	SPT(N)	TOV (ppm)	Well Construction	REMARKS
					40 80 120 160	PL W.C. LL						
					N-Value (Blows/300mm)							
					20 40 60 80	20 40 60 80						
		TOPSOIL 150mm	0	80								Borehole was measure open to 4.9mbg with water at 2.1mbg immedietly following drilling
			0.5	79.5	3			1	3			
			1	79	10			2	10			
			1.5	78.5	5			3	5			
			2	78								
			2.5	77.5	43			4	43			
		brown ----- grey	3	77	50			5	50			
		compact to very dense, moist SANDY SILT TILL some clay	3.5	76.5								
			4	76	76			6	76			
			4.5	75.5								
			5	75	28			7	28			
			5.5	74.5								
			6	74								
			6.5	73.5	51			8	51			
			7	73								
			7.5	72.5	100			9	100			
		END OF BOREHOLE										
					LOGGED BY: AD		DRILLING DATE: February 25, 2022					
					REVIEWED BY: VN		Page 1 of 1					

CLIENT: Liverpool Road Limited Partnership	METHOD: 0.2m hollow stem augur with split spoon	BH No.: MW112
PROJECT: 640 Liverpool Road	PROJECT ENGINEER: VN ELEV. (m) 79.75	
LOCATION: Pickering, Ontario	NORTHING: 4853236.13	EASTING: 654235.94 PROJECT NO.: CT3414.00

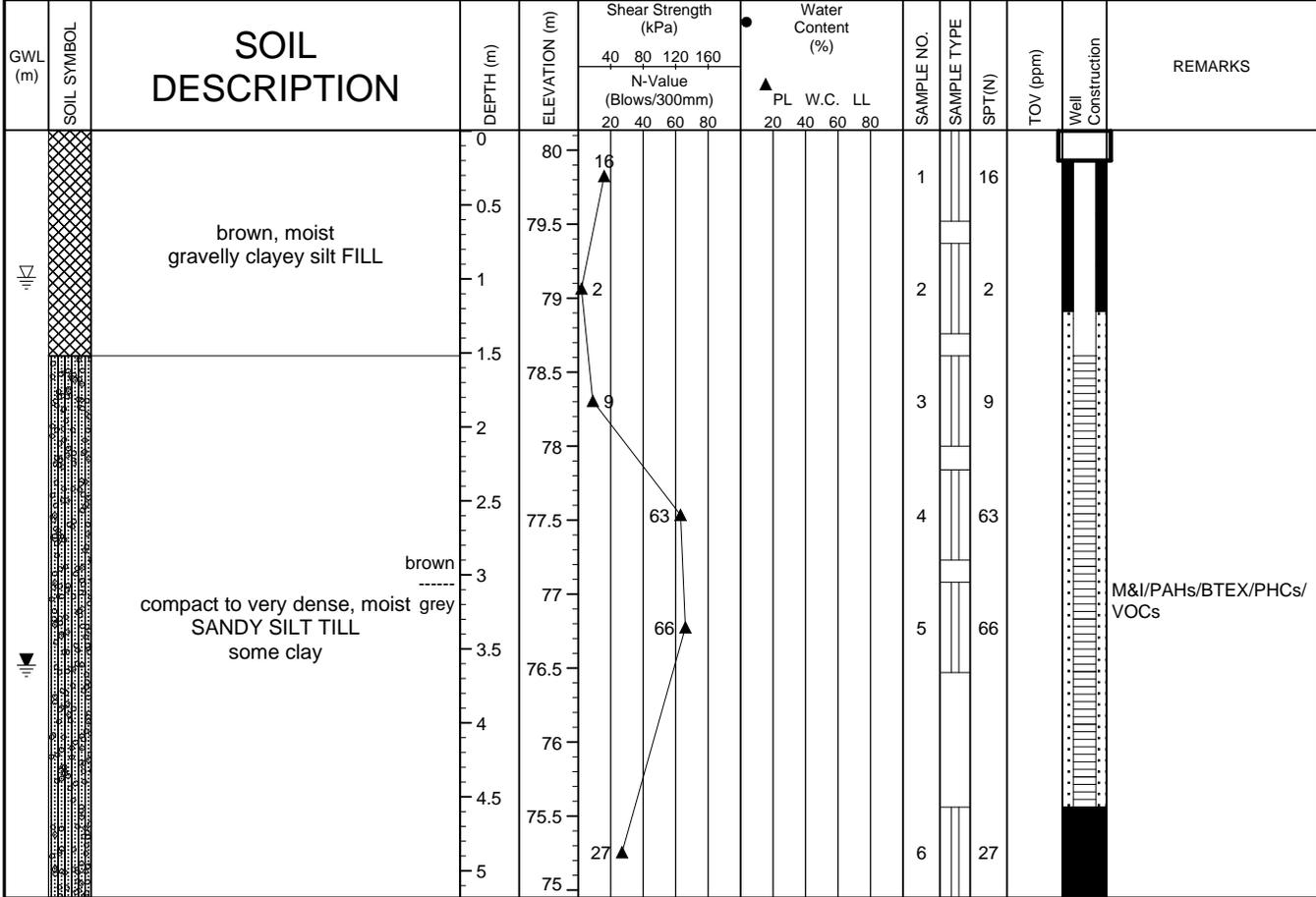
SAMPLE TYPE AUGER DRIVEN CORING DYNAMIC CONE SHELBY SPLIT SPOON



hard, grey, moist CLAYEY SILT TILL some sand, shale fragments
END OF BOREHOLE

CLIENT: Liverpool Road Limited Partnership	METHOD: 0.2m hollow stem augur with split spoon		BH No.: MW113
PROJECT: 640 Liverpool Road	PROJECT ENGINEER: VN	ELEV. (m) 80.13	
LOCATION: Pickering, Ontario	NORTHING: 4853252.72	EASTING: 654212.318	PROJECT NO.: CT3414.00

SAMPLE TYPE AUGER DRIVEN CORING DYNAMIC CONE SHELBY SPLIT SPOON



END OF BOREHOLE



LOGGED BY: AD	DRILLING DATE: MARCH 1, 2022
REVIEWED BY: VN	Page 1 of 1

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF:													
ADDRESS: 640 LIVERPOOL ROAD			STATION:			BH201													
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853233.165		EASTING (m): 654206.475		ELEV. (m) 79.601												
CONTRACTOR: PROFILE DRILLING INC.				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING															
BOREHOLE DIAMETER (cm): 5		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG											
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY											
<input type="checkbox"/> SPLIT SPOON																			
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					N-VALUE (Blows/300mm) ▲				PL W.C. LL										
					40	80	120	160	20	40	60	80							
		TOPSOIL trace brick fragments	0	79.5															
		SANDY SILT (TILL) trace clay grey, very moist	0.5	79									1	30	<5/0	M+/ BTEX/ PHC/ PAH			
		trace gravel with oxidation	1	78.5															
			1.5	78									2A	100	<5/0				
		some gravel brown	2	77.5									2B	100	<5/0	M+/ PHC/ BTEX/ PAH			
		END OF BOREHOLE																	
												LOGGED BY: SB/EMW			DRILLING DATE: 23-AUG-22				
												INPUT BY: SW			MONITORING DATE: N/A				
												REVIEWED BY: SB			PAGE 1 OF 1				

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF:													
ADDRESS: 640 LIVERPOOL ROAD			STATION:			BH202													
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853236.823		EASTING (m): 654204.200		ELEV. (m) 79.714												
CONTRACTOR: PROFILE DRILLING INC.				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING															
BOREHOLE DIAMETER (cm): 5		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG											
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON									
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					40	80	120	160	PL	W.C.	LL	20							
		GRAVEL	0																
		SAND, GRAVEL AND TOPSOIL trace wood pieces dark brown, moist (FILL)	0.5	79.5								1A	50	<5/0					SLIGHT HC ODOUR
		CLAYEY SILT grey, very moist (NATIVE)	1	79								1B	50	<5/1	PHC/ BTEX/ PAH				
		SANDY SILTY CLAY (TILL)	1.5	78.5								2A	100	<5/0	PHC/ BTEX/ PAH				
		grey, very moist to wet, with oxidation	2	78								2B	100	<5/0					
		END OF BOREHOLE		77.5															
										LOGGED BY: SB/EMW				DRILLING DATE: 23-AUG-22					
										INPUT BY: SW				MONITORING DATE: N/A					
										REVIEWED BY: SB				PAGE 1 OF 1					

CLIENT: LIVERPOOL LIMITED PARTNERSHIP		PROJECT NO.: CT3414.01		RECORD OF: BH203															
ADDRESS: 640 LIVERPOOL ROAD		STATION:																	
CITY/PROVINCE: PICKERING, ONTARIO		NORTHING (m): 4853237.916		EASTING (m): 654206.478		ELEV. (m) 79.677													
CONTRACTOR: PROFILE DRILLING INC.			METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING																
BOREHOLE DIAMETER (cm): 5		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG											
SAMPLE TYPE		AUGER		DRIVEN		CORING		DYNAMIC CONE		SHELBY		SPLIT SPOON							
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					40	80	120	160	PL	W.C.	LL	20							
						N-VALUE (Blows/300mm)													
						20	40	60	80	20	40	60	80						
		SANDY SILT trace clay brown to grey, moist (NATIVE)	0 0.5	79.5 79									1A	50	<5/0				
		SANDY CLAYEY SILT grey, wet, with oxidation (TILL)	1 1.5	78.5 78									1B	50	<5/0	PHC/ BTEX/ PAH			
			2	77.5									2A	100	<5/0				
													2B	100	<5/0				
		END OF BOREHOLE																	



LOGGED BY: SB/EMW

DRILLING DATE: 23-AUG-22

INPUT BY: SW

MONITORING DATE: N/A

REVIEWED BY: SB

PAGE 1 OF 1

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH204														
ADDRESS: 640 LIVERPOOL ROAD			STATION:																	
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853241.487		EASTING (m): 654206.984		ELEV. (m) 79.851													
CONTRACTOR: PROFILE DRILLING INC.				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING																
BOREHOLE DIAMETER (cm): 5		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG												
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON										
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS	
					N-VALUE (Blows/300mm) ▲				PL W.C. LL											
					40	80	120	160	20	40	60	80								
		TOPSOIL, SAND AND GRAVEL brown, moist (FILL)	0	79.5									1A	60	<5/0					
		CLAYEY SILT (NATIVE) trace sand, with wood pieces grey, moist	0.5	79									1B	30	<5/0	PHC/ BTEX/ PAH				
		SANDY SILTY CLAY (TILL) trace gravel grey, wet brown with oxidation	1.5	78.5									2A	100	<5/1					
			2	78									2B	100	<5/0					
			2	77.5																
		END OF BOREHOLE																		
					LOGGED BY: SB/EMW				DRILLING DATE: 23-AUG-22											
					INPUT BY: SW				MONITORING DATE: N/A											
					REVIEWED BY: SB				PAGE 1 OF 1											

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF:														
ADDRESS: 640 LIVERPOOL ROAD			STATION:			BH205														
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853239.791		EASTING (m): 654210.694		ELEV. (m) 79.702													
CONTRACTOR: PROFILE DRILLING INC.				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING																
BOREHOLE DIAMETER (cm): 5		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG												
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON										
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS	
					40	80	120	160	PL	W.C.	LL	20								40
		SAND AND GRAVEL (FILL)	0	79.5									1A	50	35/1					
		SILTY CLAY (NATIVE) trace sand brown with black staining, moist	0.5	79									1B	50	35/2	PHC/ BTEX/ PAH				HC ODOUR
		SANDY SILTY CLAY (TILL) trace gravel greyish-brown, wet	1	78.5									2A	100	25/1	PHC/ BTEX/ PAH				SLIGHT HC ODOUR
			1.5	78									2B	100	15/1	PHC/ BTEX				
			2	77.5																
		END OF BOREHOLE																		
												LOGGED BY: SB/EMW			DRILLING DATE: 23-AUG-22					
												INPUT BY: SW			MONITORING DATE: N/A					
												REVIEWED BY: SB			PAGE 1 OF 1					

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH206														
ADDRESS: 640 LIVERPOOL ROAD			STATION:																	
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853265.750		EASTING (m): 654149.107		ELEV. (m) 79.671													
CONTRACTOR: PROFILE DRILLING INC.				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING																
BOREHOLE DIAMETER (cm): 5		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG												
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON										
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS	
					N-VALUE (Blows/300mm) ▲				PL W.C. LL											
					40	80	120	160	20	40	60	80								
		SANDY SILT grey, moist (FILL)	0	79.5									1A	70	10/0		M+I			
		SANDY SILT trace gravel and asphalt brown, moist	0.5	79									1B	70	15/0		PHC/ BTEX/ PAH			
		CLAYEY SILT brown, moist (TILL)	1	78.5									2A	100	5/1					
			1.5	78									2B	100	10/1					
		SANDY SILT brown, moist	2	77.5																
		END OF BOREHOLE																		
												LOGGED BY: SB/EMW			DRILLING DATE: 23-AUG-22					
												INPUT BY: SW			MONITORING DATE: N/A					
												REVIEWED BY: SB			PAGE 1 OF 1					

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: MW207													
ADDRESS: 640 LIVERPOOL ROAD			STATION:																
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853228.272		EASTING (m): 654235.134		ELEV. (m) 79.994												
CONTRACTOR: PROFILE DRILLING INC.			METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING																
BOREHOLE DIAMETER (cm): 20		WELL DIAMETER (cm): 5		SCREEN SLOT #: 10		SAND TYPE: WE		WELLSEALANT TYPE: ENVIROPLUG											
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON									
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					N-VALUE (Blows/300mm) ▲				PL W.C. LL										
		TOPSOIL SANDY SILT trace clay and gravel brown, moist (FILL)	0 0.5 1	79.5 79									1	14			M+/ BTEX/ PHC/ PAH		
		CLAYEY SILT (NATIVE) brown, mottled, very moist	1.5 2	78.5 78									2A	44	15/1				
		SANDY SILTY CLAY trace gravel brown, wet	2.5 3	77.5 77									2B	44	15/1				
		SILTY SAND some gravel brown, wet	3.5	76.5									3A	100	25/1				
		SANDY SILT trace gravel grey, moist	4	76									3B	100	30/1		M+/ BTEX/ PHC/ PAH/ GRAIN SIZE		
		END OF BOREHOLE	4.5	75.5									4A	100	25/1				
													4B	100	15/2				
			LOGGED BY: SB/EMW			DRILLING DATE: 23-AUG-22													
			INPUT BY: SW			MONITORING DATE: 29-AUG-22													
			REVIEWED BY: SB			PAGE 1 OF 1													

CLIENT: LIVERPOOL LIMITED PARTNERSHIP				PROJECT NO.: CT3414.01				RECORD OF: MW208													
ADDRESS: 640 LIVERPOOL ROAD																					
CITY/PROVINCE: PICKERING, ONTARIO				NORTHING (m): 4853232.267				EASTING (m): 654213.784		ELEV. (m) 79.561											
CONTRACTOR: PROFILE DRILLING INC.				METHOD: SPLIT-SPOON SAMPLING WITH PIONJAR																	
BOREHOLE DIAMETER (cm): 20			WELL DIAMETER (cm): 3		SCREEN SLOT #: 10		SAND TYPE: WELL SAND		SEALANT TYPE: ENVIROPLUG												
SAMPLE TYPE		<input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON									
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION		DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) ●				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS	
						N-VALUE (Blows/300mm) ▲				PL W.C. LL											
						40	80	120	160												
				0	79.5									1A	85	10/2		M+I			
				0.5	79									1B	85	<5/2		M+I/ BTEX/ VOC/ PHC/ PAH			
				1	78.5									2	60	<5/2					
				1.5	78									3	90	<5/1					
				2	77.5									4	100	<5/0		M+I/ VOC/ PHC/ PAH			
				2.5	77									5	100	<5/0					
				3																	
END OF BOREHOLE																					



LOGGED BY: SB/EMW

DRILLING DATE: 23-AUG-22

INPUT BY: SW

MONITORING DATE: 29-AUG-22

REVIEWED BY: SB

PAGE 1 OF 1

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH209													
ADDRESS: 640 LIVERPOOL ROAD			STATION:																
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853240.499		EASTING (m): 654213.094		ELEV. (m) 79.771												
CONTRACTOR: PROFILE DRILLING INC.				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING															
BOREHOLE DIAMETER (cm): 5		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG											
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON									
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					N-VALUE (Blows/300mm) ▲				PL W.C. LL										
		SAND AND GRAVEL (FILL)	0																
		CLAYEY SILT trace gravel grey, moist (NATIVE)	0.5	79.5								1A	70	<5/0					
		SANDY SILTY CLAY grey, wet (TILL)	1	79								1B	70	<5/0		BTEX/ PHC/ PAH			
			1.5	78.5									2A	100	<5/1				
		END OF BOREHOLE	2	78															
			2.5	77.5									2B	100	<5/1				
		LOGGED BY: SB/EMW			DRILLING DATE: 23-AUG-22														
		INPUT BY: SW			MONITORING DATE: N/A														
		REVIEWED BY: SB			PAGE 1 OF 1														

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH301													
ADDRESS: 640 LIVERPOOL ROAD			STATION: N/A																
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853224.938		EASTING (m): 654216.577		ELEV. (m) 79.378												
CONTRACTOR: PROFILE DRILLING				METHOD: DIRECT PUSH AND DUEL-TUBE SAMPLING															
BOREHOLE DIAMETER (cm): 10		WELL DIAMETER (cm):		SCREEN SLOT #:		SAND TYPE:		SEALANT TYPE: ENVIROPLUG											
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON									
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					40	80	120	160	PL	W.C.	LL	20							
					N-VALUE (Blows/300mm) ▲														
					20	40	60	80	20	40	60	80							
		SANDY SILT some organics, gravel dark brown, moist (NATIVE) trace organics	0 0.5 1	79 78.5									1 2	80 100	5/0 <5/0	METALS BTEX/ PHCs			
		END OF BOREHOLE																	
												LOGGED BY: TL			DRILLING DATE: 24-OCT-2022				
												INPUT BY: JS			MONITORING DATE: -				
												REVIEWED BY: SS			PAGE 1 OF 1				

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH302														
ADDRESS: 640 LIVERPOOL ROAD			STATION: N/A																	
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853237.689		EASTING (m): 6554218.578		ELEV. (m) 79.906													
CONTRACTOR: PROFILE DRILLING				METHOD: DIRECT PUSH AND DUEL-PUSH SAMPLING																
BOREHOLE DIAMETER (cm): 10		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG												
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON										
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS	
					40	80	120	160	PL	W.C.	LL	20								40
					N-VALUE (Blows/300mm)															
					20	40	60	80	20	40	60	80								
		SAND AND GRAVEL brown-grey, dry-moist (FILL)	0										1	100	<5/0	METALS				
		CLAYEY SILT trace sand black, moist (NATIVE)	0.5	79.5									2	100	<5/0					
		END OF BOREHOLE	1	79																
												LOGGED BY: TL			DRILLING DATE: 24-OCT-2022					
												INPUT BY: JS			MONITORING DATE: -					
												REVIEWED BY: SS			PAGE 1 OF 1					

CLIENT: LIVERPOOL LIMITED PARTNERSHIP				PROJECT NO.: CT3414.01				RECORD OF: BH303											
ADDRESS: 640 LIVERPOOL ROAD																			
CITY/PROVINCE: PICKERING, ONTARIO				NORTHING (m): 4853239.217				EASTING (m): 654210.778		ELEV. (m) 79.784									
CONTRACTOR: PROFILE DRILLING						METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING													
BOREHOLE DIAMETER (cm): 10			WELL DIAMETER (cm): -			SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG									
SAMPLE TYPE		<input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON							
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					N-VALUE (Blows/300mm)				PL W.C. LL										
		NO RECOVERY	0																
		SAND AND GRAVEL light brown, moist (FILL)	0.5	79.5									1		15/0		METALS		
		SITLY CLAY trace gravel, black staining black-grey, wet (NATIVE) light brown, moist	1.5	78.5									2		15/0		METAL/ BTEX/ PHCs		
		END OF BOREHOLE	2	78									3		20/0		BTEX/ PHCs		
			2	77.5															
												LOGGED BY: TL				DRILLING DATE: 24-OCT-2022			
												INPUT BY: JS				MONITORING DATE: -			
												REVIEWED BY: SS				PAGE 1 OF 1			

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH304														
ADDRESS: 640 LIVERPOOL ROAD			STATION: N/A																	
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853254.920		EASTING (m): 654221.329		ELEV. (m) 80.111													
CONTRACTOR: PROFILE DRILLING				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING																
BOREHOLE DIAMETER (cm): 10		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG												
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON										
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS	
					40	80	120	160	PL	W.C.	LL	20								40
					N-VALUE (Blows/300mm)															
					20	40	60	80	20	40	60	80								
		SILTY CLAY some gravel dark brown, moist (FILL) trace sand, black staining	0 0.5 1	80 79.5 79									1 2	100 100	15/0 15/0	METALS LEAD				
		END OF BOREHOLE																		
												LOGGED BY: TL			DRILLING DATE: 24-OCT-2022					
												INPUT BY: JS			MONITORING DATE: -					
												REVIEWED BY: SS			PAGE 1 OF 1					

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH305															
ADDRESS: 640 LIVERPOOL ROAD			STATION: N/A																		
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853262.755		EASTING (m): 654213.049		ELEV. (m) 80.174														
CONTRACTOR: PROFILE DRILLING				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING																	
BOREHOLE DIAMETER (cm): 10		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG													
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON											
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS		
					40	80	120	160	PL	W.C.	LL	20								40	60
		SAND trace clay, gravel brown, moist (FILL)	0 0.5	80																	
		CLAYEY SILT trace sand light brown, moist (NATIVE)	0.5 1	79.5																	
		END OF BOREHOLE		79																	
					LOGGED BY: TL					DRILLING DATE: 24-OCT-2022											
					INPUT BY: JS					MONITORING DATE: -											
					REVIEWED BY: SS					PAGE 1 OF 1											

CLIENT: LIVERPOOL LIMITED PARTNERSHIP				PROJECT NO.: CT3414.01				RECORD OF: BH306											
ADDRESS: 640 LIVERPOOL ROAD				STATION: N/A															
CITY/PROVINCE: PICKERING, ONTARIO				NORTHING (m): 4853270.155		EASTING (m): 654220.609		ELEV. (m) 80.094											
CONTRACTOR: PROFILE DRILLING				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING															
BOREHOLE DIAMETER (cm): 10		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG											
SAMPLE TYPE <input type="checkbox"/> AUGER		<input type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON									
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					40	80	120	160	PL	W.C.	LL	20							
						N-VALUE (Blows/300mm) ▲													
						20	40	60	80	20	40	60	80						
		CLAYEY SILT (NATIVE) trace organics dark brown, moist light brown, some sand, dry	0 0.5 1	80 79.5 79									1 2	100 10/0	15/0	METALS			
		END OF BOREHOLE																	
												LOGGED BY: TL				DRILLING DATE: 24-OCT-2022			
												INPUT BY: JS				MONITORING DATE: -			
												REVIEWED BY: SS				PAGE 1 OF 1			

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH307															
ADDRESS: 640 LIVERPOOL ROAD			STATION: N/A																		
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853262.490		EASTING (m): 654224.803		ELEV. (m) 79.958														
CONTRACTOR: PROFILE DRILLING				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING																	
BOREHOLE DIAMETER (cm): 10		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG													
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON											
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS		
					40	80	120	160	PL	W.C.	LL	20								40	60
		TOPSOIL some organics, trace gravel dark brown, moist	0										1A								
		CLAYEY SILT trace organics brown, moist (FILL)	0.5	79.5									1B	100	<5/0		METALS				
		SANDY GRAVEL trace organics light brown, dry (FILL)	1	79									2	100	<5/0		LEAD				
		END OF BOREHOLE																			
												LOGGED BY: TL				DRILLING DATE: 24-OCT-2022					
												INPUT BY: JS				MONITORING DATE: -					
												REVIEWED BY: SS				PAGE 1 OF 1					

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH310													
ADDRESS: 640 LIVERPOOL ROAD			STATION: N/A																
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853272.913		EASTING (m): 654220.026		ELEV. (m) 80.129												
CONTRACTOR: PROFILE DRILLING				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING															
BOREHOLE DIAMETER (cm): 10		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG											
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON									
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					40	80	120	160	PL	W.C.	LL	20							
					N-VALUE (Blows/300mm) ▲														
					20	40	60	80	20	40	60	80							
		CLAYEY SILT (NATIVE) trace organics, trace sand dark brown, moist light brown, dry	0 0.5 1	80 79.5 79									1 2	100 100	10/0 25/0				
		END OF BOREHOLE																	
										LOGGED BY: TL				DRILLING DATE: 24-OCT-2022					
										INPUT BY: JS				MONITORING DATE: -					
										REVIEWED BY: SS				PAGE 1 OF 1					

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH312														
ADDRESS: 640 LIVERPOOL ROAD			STATION: N/A																	
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853223.925		EASTING (m): 654248.569		ELEV. (m) 79.531													
CONTRACTOR: PROFILE DRILLING				METHOD: PIONJAR, SPLIT SPOON SAMPLING																
BOREHOLE DIAMETER (cm): 5		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG												
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON										
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION		DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
						40	80	120	160	PL	W.C.	LL								
						N-VALUE (Blows/300mm) ▲														
				0	79.5									1	100	<5/0	METALS			
				0.5	79									2	100	<5/0				
				1	78.5															
		END OF BOREHOLE																		
										LOGGED BY: TL			DRILLING DATE: 24-OCT-2022							
										INPUT BY: JS			MONITORING DATE: -							
										REVIEWED BY: SS			PAGE 1 OF 1							

CLIENT: LIVERPOOL LIMITED PARTNERSHIP				PROJECT NO.: CT3414.01				RECORD OF: BH313											
ADDRESS: 640 LIVERPOOL ROAD				STATION: N/A															
CITY/PROVINCE: PICKERING, ONTARIO				NORTHING (m): 4853233.393		EASTING (m): 654235.468		ELEV. (m) 80.035											
CONTRACTOR: PROFILE DRILLING				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING															
BOREHOLE DIAMETER (cm): 10		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG											
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON									
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
					40	80	120	160	PL	W.C.	LL	20							
		CLAYEY SILT (NATIVE) trace organics, gravel brown, moist	0	80															
			0.5	79.5															
			1	79															
		END OF BOREHOLE																	
												LOGGED BY: TL				DRILLING DATE: 24-OCT-2022			
												INPUT BY: JS				MONITORING DATE: -			
												REVIEWED BY: SS				PAGE 1 OF 1			

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH314															
ADDRESS: 640 LIVERPOOL ROAD			STATION: N/A																		
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853238.588		EASTING (m): 654247.666		ELEV. (m) 79.731														
CONTRACTOR: PROFILE DRILLING				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING																	
BOREHOLE DIAMETER (cm): 10		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG													
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON											
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS		
					40	80	120	160	PL	W.C.	LL	20								40	60
		SANDY SILT trace organics, trace clay, trace gravel dark brown, moist (NATIVE)	0 0.5 1	79.5 79																	
		END OF BOREHOLE																			
										LOGGED BY: TL				DRILLING DATE: 24-OCT-2022							
										INPUT BY: JS				MONITORING DATE: -							
										REVIEWED BY: SS				PAGE 1 OF 1							

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH315															
ADDRESS: 640 LIVERPOOL ROAD			STATION: N/A																		
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853231.717		EASTING (m): 654258.276		ELEV. (m) 80.042														
CONTRACTOR: PROFILE DRILLING				METHOD: PIONJAR AND SPLIT SPOON SAMPLING																	
BOREHOLE DIAMETER (cm): 5		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG													
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON											
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS		
					N-VALUE (Blows/300mm)				PL W.C. LL												
			0	80	40	80	120	160	20	40	60	80	20	40	60	80					
		SILTY SAND (NATIVE) trace organics, gravel light brown, dry	0.5	79.5									1	100	<5/0	METALS					
		SANDY SILT some gravel dark brown, dry	1	79									2	100	15/0						
		END OF BOREHOLE																			
												LOGGED BY:			DRILLING DATE: 24-OCT-2022						
												INPUT BY:			MONITORING DATE: -						
												REVIEWED BY: SS			PAGE 1 OF 1						

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH316														
ADDRESS: 640 LIVERPOOL ROAD			STATION: N/A																	
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853226.798		EASTING (m): 654234.587		ELEV. (m) 79.981													
CONTRACTOR: PROFILE DRILLING				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING																
BOREHOLE DIAMETER (cm): 10		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG												
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON										
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS	
					40	80	120	160	PL	W.C.	LL	20								40
		SAND some gravel brown, moist (FILL)	0																	
		CLAYEY SILT some sand, trace gravel dark brown, moist (NATIVE)	0.5	79.5									1	100	<5/0	METALS				
		END OF BOREHOLE	1	79									2	100	<5/0					
										LOGGED BY: TL		DRILLING DATE: 24-OCT-2022								
										INPUT BY: JS		MONITORING DATE: -								
										REVIEWED BY: SS		PAGE 1 OF 1								

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH317															
ADDRESS: 640 LIVERPOOL ROAD			STATION: N/A																		
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853235.063		EASTING (m): 654232.308		ELEV. (m) 80.290														
CONTRACTOR: PROFILE DRILLING				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING																	
BOREHOLE DIAMETER (cm): 10		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG													
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON											
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS		
					40	80	120	160	PL	W.C.	LL	20								40	60
		CLAYEY SILT trace gravel, dark brown-grey, moist (NATIVE) some sand	0 0.5 0.75 1	80 79.5																	
		END OF BOREHOLE																			
										LOGGED BY: TL				DRILLING DATE: 24-OCT-2022							
										INPUT BY: JS				MONITORING DATE: -							
										REVIEWED BY: SS				PAGE 1 OF 1							

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH318														
ADDRESS: 640 LIVERPOOL ROAD			STATION: N/A																	
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853242.076		EASTING (m): 654243.846		ELEV. (m) 79.757													
CONTRACTOR: PROFILE DRILLING				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING																
BOREHOLE DIAMETER (cm): 10		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG												
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON										
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS	
					N-VALUE (Blows/300mm)				PL W.C. LL											
					40	80	120	160	20	40	60	80								
		SANDY SILT some organics, trace sand, trace clay dark brown, moist trace to fine gravel, dry	0 0.5 1	79.5 79									1		100	<5/0	M+I			
													2		100	<5/1	LEAD			
		END OF BOREHOLE																		
												LOGGED BY: TL			DRILLING DATE: 24-OCT-2022					
												INPUT BY: JS			MONITORING DATE: -					
												REVIEWED BY: SS			PAGE 1 OF 1					

CLIENT: LIVERPOOL LIMITED PARTNERSHIP			PROJECT NO.: CT3414.01			RECORD OF: BH319														
ADDRESS: 640 LIVERPOOL ROAD			STATION: N/A																	
CITY/PROVINCE: PICKERING, ONTARIO			NORTHING (m): 4853236.194		EASTING (m): 654253.973		ELEV. (m) 79.709													
CONTRACTOR: PROFILE DRILLING				METHOD: DIRECT PUSH AND DUAL-TUBE SAMPLING																
BOREHOLE DIAMETER (cm): 10		WELL DIAMETER (cm): -		SCREEN SLOT #: -		SAND TYPE: -		SEALANT TYPE: ENVIROPLUG												
SAMPLE TYPE <input type="checkbox"/> AUGER		<input checked="" type="checkbox"/> DRIVEN		<input checked="" type="checkbox"/> CORING		<input type="checkbox"/> DYNAMIC CONE		<input type="checkbox"/> SHELBY		<input type="checkbox"/> SPLIT SPOON										
GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa)				WATER CONTENT (%)				SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL)	LABORATORY TESTING	WELL INSTALLATION	REMARKS	
					40	80	120	160	N-VALUE (Blows/300mm)											PL
					20	40	60	80	20	40	60	80								
		CLAYEY SILT trace organics brown, dry-moist (NATIVE)	0 0.5 1	79.5 79 78.5									1	100	<5/1					
		END OF BOREHOLE											2	100	<5/1	LEAD				
		LOGGED BY: TL			DRILLING DATE: 24-OCT-2022															
		INPUT BY: JS			MONITORING DATE: -															
		REVIEWED BY: SS			PAGE 1 OF 1															

PROJECT: 640 Liverpool Road

Borehole 1

Edward Wong & Associates Inc.

LOCATION: Pickering

Unit 19, 441 Esna Park Drive, Markham L3R 1H7

STARTED: 2021-09-20

SHEET 1 of 1

COMPLETED: 2021-09-21

DATUM: 81 m

DEPTH (m)	DESCRIPTION	STRATA PLOT	ELEV. (m)	SAMPLES			Total Organic Content ppm	Shear Strength (kPa)	WATER CONTENT (%)	WELL INSTALLATION
				NUMBER	TYPE	BLOWS				
0	Fill- ~255 mm of 19 mm diameter crushed stone.moist.		80.75	1	III	7, 5, 6	0	110	25	
1	Silty Clay-mottled brown and grey, scattered sand seam, very moist, stiff, no odor.			2	III	10, 3, 9	0	175	12	
2	- becoming very stiff below ~ 1.5 m depth.			3	III	6, 6, 7	0	175	10	
3	Silty Sand Till- brown, some clay, trace gravel, moist, dense, no odor.		78.72	4	III	8, 20, 25	0	50	7	
4	- becoming compact below ~3 m depth.			5	III	19, 7, 17	0	>225	6	
5	- becoming very moist and dense below ~4.5 m depth.			6	III	5, 10, 22	0		13	
6	- Groundwater was first encountered at 6.1 m depth.									
7	Silty Clay-grey, moist, hard.		74.90	7	III	8, 11, 12	0	>225	7	
8	Shale-weathered, hard limestone layers, grey (Georgian Bay Formation)		73.38							
8	End of Borehole		72.92	8	III	50	0			
9										
10										
11										
12										

WATER LEVEL: 6.10 m (Sep 20, 21)

WATER LEVEL (DATE): 4.57 m (Sep 21, 21)

LOGGED: EW

CHECKED: EW

PROJECT: 640 Liverpool Road

Borehole 2

Edward Wong & Associates Inc.

LOCATION: Pickering

Unit 19, 441 Esna Park Drive, Markham L3R 1H7

STARTED: 2021-09-20

SHEET 1 of 1

COMPLETED: 2021-09-21

DATUM: 81 m

DEPTH (m)	DESCRIPTION	STRATA PLOT	ELEV. (m)	SAMPLES			Total Organic Content ppm 100 200 300 400	Shear Strength (kPa) 150 300	WATER CONTENT (%) 10 20 30 40	WELL INSTALLATION
				NUMBER	TYPE	BLOWS				
0	Topsoil- ~100 mm thick.			1		4,5,6,4				
1	Fill- silty clay, topsoil inclusions, rootlets, grey, very moist, soft, no odor.		79.79	2		6,7,6		5, 15		
2	Silty Clay-grey, stiff, very moist.			3		4,4,5	75	13		
3	Silty Sand Till-brown, trace gravel, trace clay, oxidized, moist, very dense, no odor.		78.72	4		12,27,46	>225	7		
4	- encountered boulder at 3.6 m depth.			5		31,29,30	>225	5		
5				6		13,25,30		10		
6	-Wet auger encountered at 6.1m depth.		74.90	7		6,14,25	>225	24		
7	Silty Clay-grey, very moist, hard.									
8	Shale- weathered, hard limestone layers, grey. (Georgian Bay Formation)		73.38	8		24,50				
8			73.08							
9	End of Borehole									
10										
11										
12										

WATER LEVEL: 6.10 m (Sep 20, 21)

WATER LEVEL (DATE): 1.72 m (Sep 21, 21)

LOGGED: EW

CHECKED: EW

PROJECT: 640 Liverpool Road

Borehole 3

Edward Wong & Associates Inc.

LOCATION: Pickering

Unit 19, 441 Esna Park Drive, Markham L3R 1H7

STARTED: 2021-09-20

SHEET 1 of 1

COMPLETED: 2021-09-21

DATUM: 81 m

DEPTH (m)	DESCRIPTION	STRATA PLOT	ELEV. (m)	SAMPLES			Total Organic Content ppm	Shear Strength (kPa)	WATER CONTENT (%)	WELL INSTALLATION
				NUMBER	TYPE	BLOWS				
0	Topsoil- ~255 mm thick.			1	III	7, 5, 6		>225	10	
1	Silty Clay- mottled brown and grey, trace sand, occasional gravel, very moist, hard.			2	III	10, 3, 9		>225	15	
2				3	III	6, 6, 7			14	
3			78.72	4	III	8, 20, 25		>225	9	
4	Silty Sand Till-brown, trace gravel, trace clay, oxidized, moist to very moist, dense			5	III	19, 7, 17			6	
5	- encountered cobble at ~2.4 m depth.			6	III	5, 16, 22		>225	11	
6	- becoming compact below ~3.0 m depth.			7	III	8, 11, 12		200	6	
7	- becoming dense below ~4.5 m depth.									
8	Shale-weathered, hard limestone layers, grey (Geogian Bay Formation)		73.38 73.23	8	III	50				
9	End of Borehole									
10										
11										
12										

WATER LEVEL: 7.01 m (Sep 20, 21)

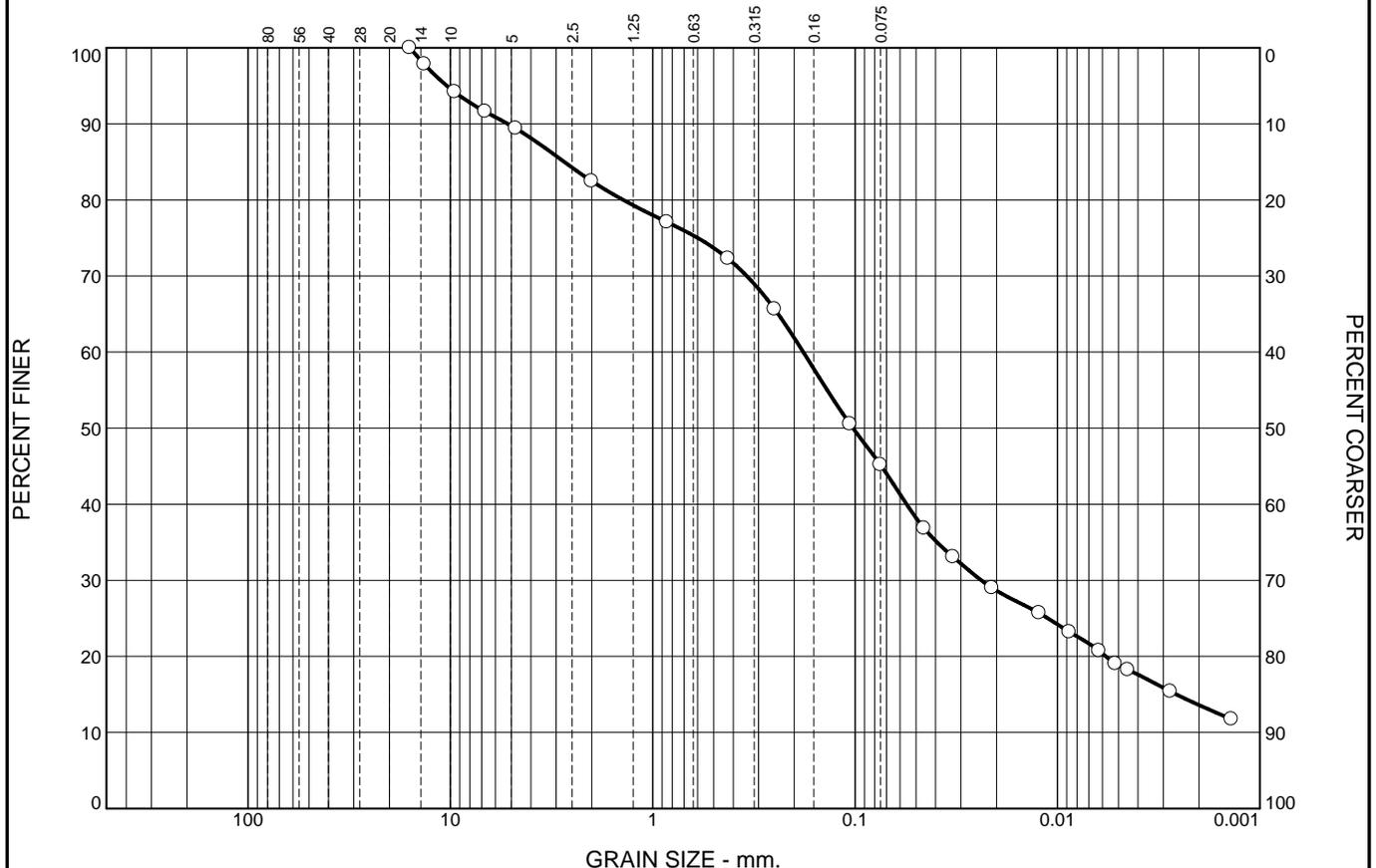
WATER LEVEL (DATE): 3.25 m (Sep 21, 21)

LOGGED: EW

CHECKED: EW

APPENDIX IV
GRAIN SIZE ANALYSES

Particle Size Distribution Report



	% +3"	% Gravel	% Sand		% Fines	
			Coarse	Fine	Silt	Clay
<input type="radio"/>	0	18	10	27	31	14

	LL	PL	D85	D60	D50	D30	D15	D10	Cc	Cu
<input type="radio"/>	17.3	11.7	2.7354	0.1802	0.1025	0.0238	0.0026			

Material Description	USCS	AASHTO
<input type="radio"/> SILTY SAND some gravel some clay	SC-SM	A-4(0)

Project No. CT3414 **Client:** Liverpool Limited Partnership
Project: 640 Liverpool Road, Pickering
 Sample Number: BH 106, Sample 3

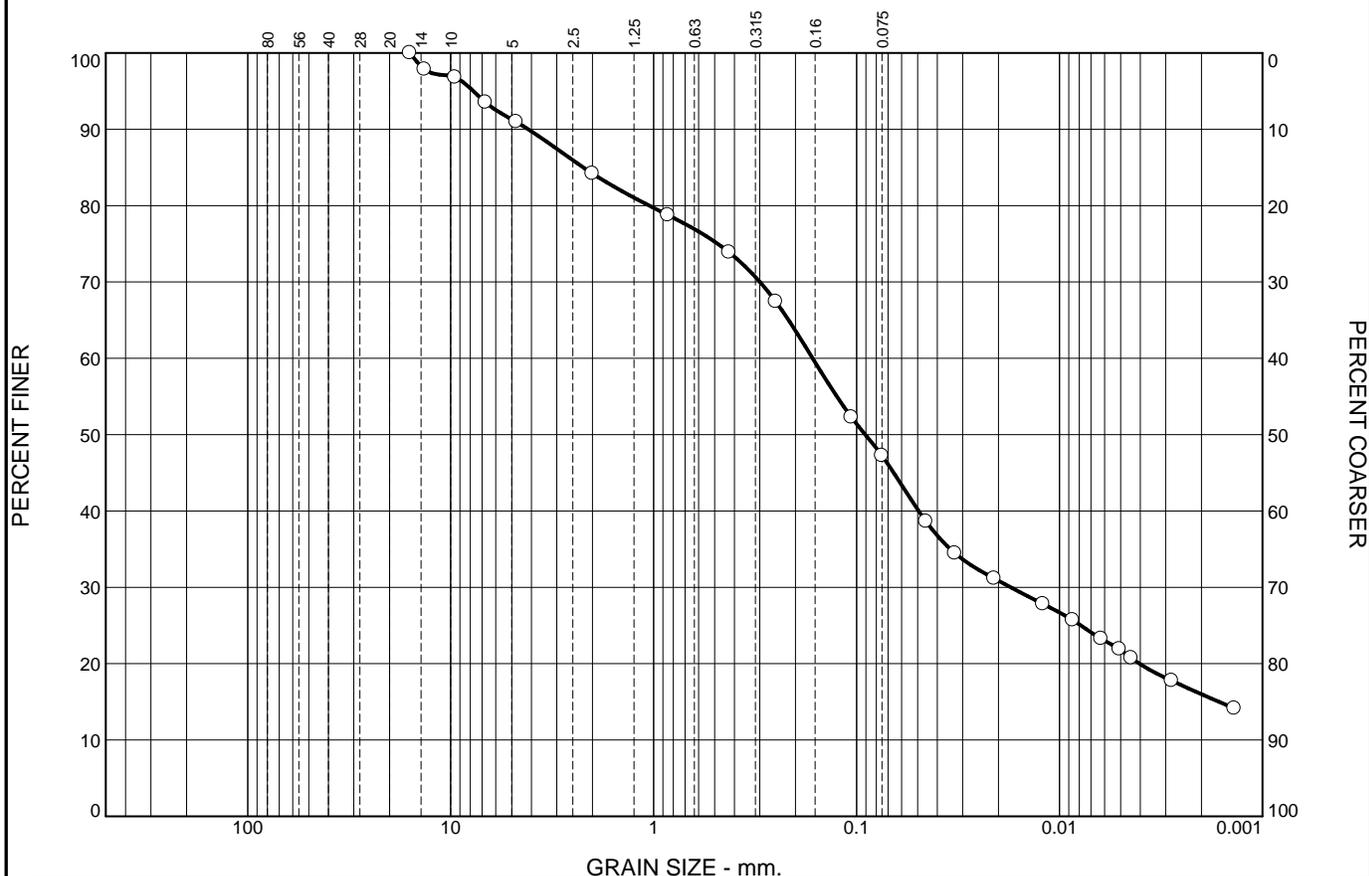
Remarks:
 HYDROMETER DETAILS: Spec. Grav. 2.75(assumed); Vb=53cm³; L2=13.8cm; L1=10.7cm; hs=0.16cm/Div; A=30.2cm²; Mass of Disp. Agent=40g/l Test Date: March 7, 2022

Terrapex
 Toronto, Ontario

Figure 1

Tested By: AM

Particle Size Distribution Report



	% +3"	% Gravel	% Sand		% Fines	
			Coarse	Fine	Silt	Clay
<input type="radio"/>	0	16	10	27	31	16

<input checked="" type="checkbox"/>	LL	PL	D85	D60	D50	D30	D15	D10	Cc	Cu
<input type="radio"/>			2.2198	0.1646	0.0906	0.0174	0.0016			

Material Description	USCS	AASHTO
<input type="radio"/> SILTY SAND some gravel some clay		

<p>Project No. CT3414 Client: Liverpool Limited Partnership</p> <p>Project: 640 Liverpool Road, Pickering</p> <p><input type="radio"/> Sample Number: BH 106, Sample 5</p>	<p>Remarks:</p> <p><input type="radio"/> HYDROMETER DETAILS: Spec. Grav. 2.75(assumed); Vb=53cm³; L2=13.8cm; L1=10.7cm; hs=0.16cm/Div; A=30.2cm²; Mass of Disp. Agent=40g/1 Test Date: March 7, 2022</p>
<p>Terrapex</p> <p>Toronto, Ontario</p>	
<p>Figure 2</p>	

Tested By: AM/UB

E - MAIL

To: Sara Sutherland
Terrapex Environmental

Email: s.sutherland@terrapex.com

From: Anna Matthews

Ref. No.: CT 3414.01

Date: 27 Sept. 2022

Subject: Laboratory Testing

Page 1 of 1

We received one soil sample on 1 Sept 2022 for wash sieve test; the results of this test are used to classify the material according to the criteria in Ontario Regulation 153/04, Section 42.2. Our results are tabulated below.

Sample No.	Particles (by dry weight) %	Smaller/Larger than 75 µm	Material Classification
MW 207 Sample 4A	56.73	Larger	Coarse

If you have any questions regarding this email please do not hesitate to contact our office.

Regards,

Anna Matthews

APPENDIX V
LABORATORY CERTIFICATES OF ANALYSIS

Certificate of Analysis

Terrapex Environmental Ltd. (Toronto)

90 Scarsdale Road
Toronto, ON M3B 2R7
Attn: Sara Sutherland

Client PO:
Project: CT3414.01

Custody: 135465, 135466, 135464

Report Date: 8-Sep-2022
Order Date: 24-Aug-2022

Revised Report

Order #: 2235312

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Parcel ID	Client ID	Parcel ID	Client ID
2235312-01	BH201-1	2235312-22	MW208-1A
2235312-02	BH201-2B	2235312-23	MW208-99
2235312-03	BH202-1B	2235312-24	MW208-1B
2235312-04	BH202-99	2235312-25	MW208-4
2235312-05	BH202-2A	2235312-26	MW208-98
2235312-07	BH203-1B	2235312-27	BH209-1B
2235312-09	BH204-1B	2235312-28	BH1000 (Methanol Blank)
2235312-12	BH205-1B		
2235312-13	BH205-99		
2235312-14	BH205-2A		
2235312-15	BH205-2B		
2235312-16	BH206-1A		
2235312-17	BH206-1B		
2235312-19	MW207-1		
2235312-20	MW207-3B		
2235312-22	MW208-1A		

Approved By:



Dale Robertson, BSc

Laboratory Director

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Boron, available	MOE (HWE), EPA 200.8 - ICP-MS	29-Aug-22	29-Aug-22
BTEX by P&T GC-MS	EPA 8260 - P&T GC-MS	26-Aug-22	27-Aug-22
Chromium, hexavalent - soil	MOE E3056 - Extraction, colourimetric	26-Aug-22	29-Aug-22
Conductivity	MOE E3138 - probe @25 °C, water ext	29-Aug-22	30-Aug-22
Cyanide, free	MOE E3015 - Auto Colour, water extraction	29-Aug-22	29-Aug-22
Mercury by CVAA	EPA 7471B - CVAA, digestion	29-Aug-22	29-Aug-22
pH, soil	EPA 150.1 - pH probe @ 25 °C, CaCl buffered ext.	29-Aug-22	29-Aug-22
PHC F1	CWS Tier 1 - P&T GC-FID	26-Aug-22	27-Aug-22
PHC F4G (gravimetric)	CWS Tier 1 - Extraction Gravimetric	30-Aug-22	31-Aug-22
PHCs F2 to F4	CWS Tier 1 - GC-FID, extraction	25-Aug-22	29-Aug-22
REG 153: Metals by ICP/MS, soil	EPA 6020 - Digestion - ICP-MS	29-Aug-22	29-Aug-22
REG 153: PAHs by GC-MS	EPA 8270 - GC-MS, extraction	26-Aug-22	31-Aug-22
REG 153: VOCs by P&T GC/MS	EPA 8260 - P&T GC-MS	26-Aug-22	27-Aug-22
SAR	Calculated	29-Aug-22	29-Aug-22
Solids, %	Gravimetric, calculation	30-Aug-22	30-Aug-22

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Summary of Criteria Exceedances

(If this page is blank then there are no exceedances)

Only those criteria that a sample exceeds will be highlighted in red

Regulatory Comparison:

Paracel Laboratories has provided regulatory guidelines on this report for informational purposes only and makes no representations or warranties that the data is accurate or reflects the current regulatory values. The user is advised to consult with the appropriate official regulations to evaluate compliance. Sample results that are highlighted have exceeded the selected regulatory limit. Calculated uncertainty estimations have not been applied for determining regulatory exceedances.

Sample	Analyte	MDL / Units	Result	Reg 153/04 -T2 Res/Park, coarse	-
BH202-1B	F3 PHCs (C16-C34)	8 ug/g	311	300 ug/g	-
BH202-99	F3 PHCs (C16-C34)	8 ug/g	483	300 ug/g	-
BH205-1B	F2 PHCs (C10-C16)	4 ug/g	285	98 ug/g	-
BH205-1B	F3 PHCs (C16-C34)	8 ug/g	1010	300 ug/g	-
BH205-99	F2 PHCs (C10-C16)	4 ug/g	305	98 ug/g	-
BH205-99	F3 PHCs (C16-C34)	8 ug/g	1790	300 ug/g	-
BH205-99	F4G PHCs (gravimetric)	50 ug/g	3700	2800 ug/g	-
BH205-2A	F2 PHCs (C10-C16)	4 ug/g	346	98 ug/g	-
BH205-2A	F3 PHCs (C16-C34)	8 ug/g	1020	300 ug/g	-
MW207-1	Lead	1 ug/g	578	120 ug/g	-
MW207-1	Mercury	0.1 ug/g	0.6	0.27 ug/g	-
MW208-1A	pH	0.05 pH Units	11.21	5.00 - 9.00 pH Units	-
MW208-1A	Cobalt	1 ug/g	30.1	22 ug/g	-
MW208-1A	pH	0.05 pH Units	10.89	5.00 - 9.00 pH Units	-

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH201-1	BH201-2B	BH202-1B	BH202-99	Criteria:
Sample Date:	23-Aug-22 08:45	23-Aug-22 08:50	23-Aug-22 09:10	23-Aug-22 09:10	Reg 153/04 -T2 Res/Park, coarse -
Sample ID:	2235312-01	2235312-02	2235312-03	2235312-04	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	82.1	90.2	72.4	76.3	-	-
----------	--------------	------	------	------	------	---	---

General Inorganics

SAR	0.01 N/A	0.82	0.46	-	-	5 N/A	-
Conductivity	5 uS/cm	389	161	-	-	0.7 mS/cm	-
Cyanide, free	0.03 ug/g	<0.03	<0.03	-	-	0.051 ug/g	-
pH	0.05 pH Units	7.43	7.59	-	-	5.00 - 9.00 pH Units	-

Metals

Antimony	1 ug/g	<1.0	<1.0	-	-	7.5 ug/g	-
Arsenic	1 ug/g	2.5	5.3	-	-	18 ug/g	-
Barium	1 ug/g	137	53.5	-	-	390 ug/g	-
Beryllium	0.5 ug/g	0.6	0.5	-	-	4 ug/g	-
Boron, available	0.5 ug/g	<0.5	<0.5	-	-	1.5 ug/g	-
Boron	5 ug/g	9.5	7.7	-	-	120 ug/g	-
Cadmium	0.5 ug/g	<0.5	<0.5	-	-	1.2 ug/g	-
Chromium (VI)	0.2 ug/g	<0.2	<0.2	-	-	8 ug/g	-
Chromium	5 ug/g	22.8	16.1	-	-	160 ug/g	-
Cobalt	1 ug/g	7.4	9.4	-	-	22 ug/g	-
Copper	5 ug/g	22.8	24.2	-	-	140 ug/g	-
Lead	1 ug/g	28.8	13.8	-	-	120 ug/g	-
Mercury	0.1 ug/g	<0.1	<0.1	-	-	0.27 ug/g	-
Molybdenum	1 ug/g	<1.0	<1.0	-	-	6.9 ug/g	-
Nickel	5 ug/g	16.2	22.9	-	-	100 ug/g	-
Selenium	1 ug/g	<1.0	<1.0	-	-	2.4 ug/g	-
Silver	0.3 ug/g	<0.3	<0.3	-	-	20 ug/g	-
Thallium	1 ug/g	<1.0	<1.0	-	-	1 ug/g	-

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH201-1	BH201-2B	BH202-1B	BH202-99	Criteria:
Sample Date:	23-Aug-22 08:45	23-Aug-22 08:50	23-Aug-22 09:10	23-Aug-22 09:10	Reg 153/04 -T2 Res/Park, coarse -
Sample ID:	2235312-01	2235312-02	2235312-03	2235312-04	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Metals

Uranium	1 ug/g	<1.0	<1.0	-	-	23 ug/g	-
Vanadium	10 ug/g	32.0	28.1	-	-	86 ug/g	-
Zinc	20 ug/g	90.3	46.6	-	-	340 ug/g	-

Volatiles

Benzene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.21 ug/g	-
Ethylbenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	1.1 ug/g	-
Toluene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	2.3 ug/g	-
m,p-Xylenes	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
o-Xylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
Xylenes, total	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	3.1 ug/g	-
Toluene-d8	Surrogate	118%	114%	121%	117%	-	-

Hydrocarbons

F1 PHCs (C6-C10)	7 ug/g	<7	<7	<7	<7	55 ug/g	-
F2 PHCs (C10-C16)	4 ug/g	<4	27	31	29	98 ug/g	-
F3 PHCs (C16-C34)	8 ug/g	13	58	311	483	300 ug/g	-
F4 PHCs (C34-C50)	6 ug/g	8	10	49 [2]	617 [2]	2800 ug/g	-
F4G PHCs (gravimetric)	50 ug/g	-	-	539	577	2800 ug/g	-

Semi-Volatiles

Acenaphthene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	7.9 ug/g	-
Acenaphthylene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.15 ug/g	-
Anthracene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.67 ug/g	-
Benzo [a] anthracene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.5 ug/g	-
Benzo [a] pyrene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.3 ug/g	-
Benzo [b] fluoranthene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.78 ug/g	-
Benzo [g,h,i] perylene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	6.6 ug/g	-

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH201-1	BH201-2B	BH202-1B	BH202-99	Criteria:
Sample Date:	23-Aug-22 08:45	23-Aug-22 08:50	23-Aug-22 09:10	23-Aug-22 09:10	Reg 153/04 -T2
Sample ID:	2235312-01	2235312-02	2235312-03	2235312-04	Res/Park, coarse
Matrix:	Soil	Soil	Soil	Soil	-
MDL/Units					

Semi-Volatiles

Benzo [k] fluoranthene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.78 ug/g	-
Chrysene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	7 ug/g	-
Dibenzo [a,h] anthracene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.1 ug/g	-
Fluoranthene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.69 ug/g	-
Fluorene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	62 ug/g	-
Indeno [1,2,3-cd] pyrene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.38 ug/g	-
1-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.99 ug/g	-
2-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.99 ug/g	-
Methylnaphthalene (1&2)	0.04 ug/g	<0.04	<0.04	<0.04	<0.04	0.99 ug/g	-
Naphthalene	0.01 ug/g	<0.01	<0.01	<0.01	<0.01	0.6 ug/g	-
Phenanthrene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	6.2 ug/g	-
Pyrene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	78 ug/g	-
2-Fluorobiphenyl	Surrogate	76.8%	99.3%	89.6%	74.0%	-	-
Terphenyl-d14	Surrogate	83.3%	116%	89.6%	76.4%	-	-

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH202-2A	BH203-1B	BH204-1B	BH205-1B	Criteria:
Sample Date:	23-Aug-22 09:15	23-Aug-22 09:40	23-Aug-22 09:55	23-Aug-22 10:10	Reg 153/04 -T2 Res/Park, coarse -
Sample ID:	2235312-05	2235312-07	2235312-09	2235312-12	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	85.6	74.4	75.1	85.1	-	-
----------	--------------	------	------	------	------	---	---

Volatiles

Benzene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.21 ug/g	-
Ethylbenzene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	1.1 ug/g	-
Toluene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	2.3 ug/g	-
m,p-Xylenes	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
o-Xylene	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	-	-
Xylenes, total	0.05 ug/g	<0.05	<0.05	<0.05	<0.05	3.1 ug/g	-
Toluene-d8	Surrogate	113%	120%	124%	117%	-	-

Hydrocarbons

F1 PHCs (C6-C10)	7 ug/g	<7	<7	<7	<7	55 ug/g	-
F2 PHCs (C10-C16)	4 ug/g	<4	<4	<4	285	98 ug/g	-
F3 PHCs (C16-C34)	8 ug/g	44	36	27	1010	300 ug/g	-
F4 PHCs (C34-C50)	6 ug/g	<6	<6	<6	996 [2]	2800 ug/g	-
F4G PHCs (gravimetric)	50 ug/g	-	-	-	1720	2800 ug/g	-

Semi-Volatiles

Acenaphthene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	7.9 ug/g	-
Acenaphthylene	0.02 ug/g	<0.02	0.04	<0.02	<0.02	0.15 ug/g	-
Anthracene	0.02 ug/g	<0.02	0.03	<0.02	<0.02	0.67 ug/g	-
Benzo [a] anthracene	0.02 ug/g	<0.02	0.10	<0.02	<0.02	0.5 ug/g	-
Benzo [a] pyrene	0.02 ug/g	<0.02	0.13	<0.02	<0.02	0.3 ug/g	-
Benzo [b] fluoranthene	0.02 ug/g	<0.02	0.14	<0.02	<0.02	0.78 ug/g	-
Benzo [g,h,i] perylene	0.02 ug/g	<0.02	0.09	<0.02	<0.02	6.6 ug/g	-
Benzo [k] fluoranthene	0.02 ug/g	<0.02	0.07	<0.02	<0.02	0.78 ug/g	-
Chrysene	0.02 ug/g	<0.02	0.16	<0.02	<0.02	7 ug/g	-

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH202-2A	BH203-1B	BH204-1B	BH205-1B	Criteria:
Sample Date:	23-Aug-22 09:15	23-Aug-22 09:40	23-Aug-22 09:55	23-Aug-22 10:10	Reg 153/04 -T2
Sample ID:	2235312-05	2235312-07	2235312-09	2235312-12	Res/Park, coarse
Matrix:	Soil	Soil	Soil	Soil	-
MDL/Units					

Semi-Volatiles

Dibenzo [a,h] anthracene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.1 ug/g	-
Fluoranthene	0.02 ug/g	<0.02	0.24	<0.02	<0.02	0.69 ug/g	-
Fluorene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	62 ug/g	-
Indeno [1,2,3-cd] pyrene	0.02 ug/g	<0.02	0.08	<0.02	<0.02	0.38 ug/g	-
1-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.99 ug/g	-
2-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	<0.02	0.99 ug/g	-
Methylnaphthalene (1&2)	0.04 ug/g	<0.04	<0.04	<0.04	<0.04	0.99 ug/g	-
Naphthalene	0.01 ug/g	<0.01	0.01	<0.01	<0.01	0.6 ug/g	-
Phenanthrene	0.02 ug/g	<0.02	0.13	<0.02	<0.02	6.2 ug/g	-
Pyrene	0.02 ug/g	<0.02	0.21	<0.02	<0.02	78 ug/g	-
2-Fluorobiphenyl	Surrogate	94.7%	82.0%	73.6%	96.3%	-	-
Terphenyl-d14	Surrogate	103%	86.1%	77.7%	95.5%	-	-

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH205-99	BH205-2A	BH205-2B	BH206-1A	Criteria:
Sample Date:	23-Aug-22 10:10	23-Aug-22 10:15	23-Aug-22 10:15	23-Aug-22 10:45	Reg 153/04 -T2
Sample ID:	2235312-13	2235312-14	2235312-15	2235312-16	Res/Park, coarse
Matrix:	Soil	Soil	Soil	Soil	-
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	78.5	88.8	87.9	96.5	-	-
----------	--------------	------	------	------	------	---	---

General Inorganics

SAR	0.01 N/A	-	-	-	0.12	5 N/A	-
Conductivity	5 uS/cm	-	-	-	89	0.7 mS/cm	-
Cyanide, free	0.03 ug/g	-	-	-	<0.03	0.051 ug/g	-
pH	0.05 pH Units	-	-	-	7.80	5.00 - 9.00 pH Units	-

Metals

Antimony	1 ug/g	-	-	-	<1.0	7.5 ug/g	-
Arsenic	1 ug/g	-	-	-	1.3	18 ug/g	-
Barium	1 ug/g	-	-	-	22.9	390 ug/g	-
Beryllium	0.5 ug/g	-	-	-	<0.5	4 ug/g	-
Boron	5 ug/g	-	-	-	<5.0	120 ug/g	-
Boron, available	0.5 ug/g	-	-	-	<0.5	1.5 ug/g	-
Cadmium	0.5 ug/g	-	-	-	0.7	1.2 ug/g	-
Chromium	5 ug/g	-	-	-	10.7	160 ug/g	-
Chromium (VI)	0.2 ug/g	-	-	-	<0.2	8 ug/g	-
Cobalt	1 ug/g	-	-	-	2.9	22 ug/g	-
Copper	5 ug/g	-	-	-	7.6	140 ug/g	-
Lead	1 ug/g	-	-	-	5.9	120 ug/g	-
Mercury	0.1 ug/g	-	-	-	<0.1	0.27 ug/g	-
Molybdenum	1 ug/g	-	-	-	<1.0	6.9 ug/g	-
Nickel	5 ug/g	-	-	-	7.4	100 ug/g	-
Selenium	1 ug/g	-	-	-	<1.0	2.4 ug/g	-
Silver	0.3 ug/g	-	-	-	<0.3	20 ug/g	-
Thallium	1 ug/g	-	-	-	<1.0	1 ug/g	-

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH205-99	BH205-2A	BH205-2B	BH206-1A	Criteria:
Sample Date:	23-Aug-22 10:10	23-Aug-22 10:15	23-Aug-22 10:15	23-Aug-22 10:45	Reg 153/04 -T2 Res/Park, coarse -
Sample ID:	2235312-13	2235312-14	2235312-15	2235312-16	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Metals

Element	MDL/Units	BH205-99	BH205-2A	BH205-2B	BH206-1A	Criteria
Uranium	1 ug/g	-	-	-	<1.0	23 ug/g -
Vanadium	10 ug/g	-	-	-	21.8	86 ug/g -
Zinc	20 ug/g	-	-	-	31.1	340 ug/g -

Volatiles

Compound	MDL/Units	BH205-99	BH205-2A	BH205-2B	BH206-1A	Criteria
Benzene	0.02 ug/g	<0.02	<0.02	<0.02	-	0.21 ug/g -
Ethylbenzene	0.05 ug/g	<0.05	<0.05	<0.05	-	1.1 ug/g -
Toluene	0.05 ug/g	<0.05	<0.05	<0.05	-	2.3 ug/g -
m,p-Xylenes	0.05 ug/g	<0.05	<0.05	<0.05	-	- -
o-Xylene	0.05 ug/g	<0.05	<0.05	<0.05	-	- -
Xylenes, total	0.05 ug/g	<0.05	<0.05	<0.05	-	3.1 ug/g -
Toluene-d8	Surrogate	116%	114%	84.4%	-	- -

Hydrocarbons

PHC Group	MDL/Units	BH205-99	BH205-2A	BH205-2B	BH206-1A	Criteria
F1 PHCs (C6-C10)	7 ug/g	<7	<7	<7	-	55 ug/g -
F2 PHCs (C10-C16)	4 ug/g	305	346	<4	-	98 ug/g -
F3 PHCs (C16-C34)	8 ug/g	1790	1020	<8	-	300 ug/g -
F4 PHCs (C34-C50)	6 ug/g	1920 [2]	1000 [2]	<6	-	2800 ug/g -
F4G PHCs (gravimetric)	50 ug/g	3700	1820	-	-	2800 ug/g -

Semi-Volatiles

Compound	MDL/Units	BH205-99	BH205-2A	BH205-2B	BH206-1A	Criteria
Acenaphthene	0.02 ug/g	<0.02	0.06	-	-	7.9 ug/g -
Acenaphthylene	0.02 ug/g	<0.02	<0.02	-	-	0.15 ug/g -
Anthracene	0.02 ug/g	<0.02	<0.02	-	-	0.67 ug/g -
Benzo [a] anthracene	0.02 ug/g	<0.02	<0.02	-	-	0.5 ug/g -
Benzo [a] pyrene	0.02 ug/g	<0.02	<0.02	-	-	0.3 ug/g -
Benzo [b] fluoranthene	0.02 ug/g	<0.02	<0.02	-	-	0.78 ug/g -
Benzo [g,h,i] perylene	0.02 ug/g	<0.02	<0.02	-	-	6.6 ug/g -

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH205-99	BH205-2A	BH205-2B	BH206-1A	Criteria:
Sample Date:	23-Aug-22 10:10	23-Aug-22 10:15	23-Aug-22 10:15	23-Aug-22 10:45	Reg 153/04 -T2 Res/Park, coarse -
Sample ID:	2235312-13	2235312-14	2235312-15	2235312-16	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Semi-Volatiles

Compound	BH205-99	BH205-2A	BH205-2B	BH206-1A	Criteria
Benzo [k] fluoranthene	0.02 ug/g	<0.02	<0.02	-	0.78 ug/g -
Chrysene	0.02 ug/g	<0.02	<0.02	-	7 ug/g -
Dibenzo [a,h] anthracene	0.02 ug/g	<0.02	<0.02	-	0.1 ug/g -
Fluoranthene	0.02 ug/g	<0.02	<0.02	-	0.69 ug/g -
Fluorene	0.02 ug/g	<0.02	<0.02	-	62 ug/g -
Indeno [1,2,3-cd] pyrene	0.02 ug/g	<0.02	<0.02	-	0.38 ug/g -
1-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	-	0.99 ug/g -
2-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	-	0.99 ug/g -
Methylnaphthalene (1&2)	0.04 ug/g	<0.04	<0.04	-	0.99 ug/g -
Naphthalene	0.01 ug/g	<0.01	<0.01	-	0.6 ug/g -
Phenanthrene	0.02 ug/g	<0.02	<0.02	-	6.2 ug/g -
Pyrene	0.02 ug/g	<0.02	0.03	-	78 ug/g -
2-Fluorobiphenyl	Surrogate	86.5%	81.4%	-	- -
Terphenyl-d14	Surrogate	73.7%	79.4%	-	- -

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH206-1B	MW207-1	MW207-3B	MW208-1A	Criteria:
Sample Date:	23-Aug-22 10:45	23-Aug-22 11:20	23-Aug-22 11:30	23-Aug-22 13:15	Reg 153/04 -T2
Sample ID:	2235312-17	2235312-19	2235312-20	2235312-22	Res/Park, coarse
Matrix:	Soil	Soil	Soil	Soil	-
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	86.2	94.2	91.5	91.5	-	-
----------	--------------	------	------	------	------	---	---

General Inorganics

SAR	0.01 N/A	-	0.11	0.38	0.45	5 N/A	-
Conductivity	5 uS/cm	-	172	116	416	0.7 mS/cm	-
Cyanide, free	0.03 ug/g	-	<0.03	<0.03	<0.03	0.051 ug/g	-
pH	0.05 pH Units	-	7.45	7.75	11.21	5.00 - 9.00 pH Units	-

Metals

Antimony	1 ug/g	-	<1.0	<1.0	<1.0	7.5 ug/g	-
Arsenic	1 ug/g	-	6.4	5.1	2.7	18 ug/g	-
Barium	1 ug/g	-	222	45.1	27.0	390 ug/g	-
Beryllium	0.5 ug/g	-	0.6	0.6	<0.5	4 ug/g	-
Boron, available	0.5 ug/g	-	<0.5	<0.5	<0.5	1.5 ug/g	-
Boron	5 ug/g	-	8.9	9.2	<5.0	120 ug/g	-
Cadmium	0.5 ug/g	-	<0.5	<0.5	<0.5	1.2 ug/g	-
Chromium	5 ug/g	-	27.3	16.7	8.3	160 ug/g	-
Chromium (VI)	0.2 ug/g	-	<0.2	<0.2	<0.2	8 ug/g	-
Cobalt	1 ug/g	-	8.4	14.4	30.1	22 ug/g	-
Copper	5 ug/g	-	38.2	25.7	6.7	140 ug/g	-
Lead	1 ug/g	-	578	18.6	13.5	120 ug/g	-
Mercury	0.1 ug/g	-	0.6	<0.1	<0.1	0.27 ug/g	-
Molybdenum	1 ug/g	-	<1.0	1.1	<1.0	6.9 ug/g	-
Nickel	5 ug/g	-	17.4	31.4	7.2	100 ug/g	-
Selenium	1 ug/g	-	<1.0	<1.0	<1.0	2.4 ug/g	-
Silver	0.3 ug/g	-	<0.3	<0.3	<0.3	20 ug/g	-
Thallium	1 ug/g	-	<1.0	<1.0	<1.0	1 ug/g	-

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH206-1B	MW207-1	MW207-3B	MW208-1A	Criteria:
Sample Date:	23-Aug-22 10:45	23-Aug-22 11:20	23-Aug-22 11:30	23-Aug-22 13:15	Reg 153/04 -T2 Res/Park, coarse -
Sample ID:	2235312-17	2235312-19	2235312-20	2235312-22	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Metals

Element	BH206-1B	MW207-1	MW207-3B	MW208-1A	Criteria
Uranium	1 ug/g	-	<1.0	<1.0	23 ug/g -
Vanadium	10 ug/g	-	33.7	27.4	86 ug/g -
Zinc	20 ug/g	-	142	54.5	24.7 340 ug/g -

Volatiles

Compound	BH206-1B	MW207-1	MW207-3B	MW208-1A	Criteria
Benzene	0.02 ug/g	<0.02	<0.02	<0.02	- 0.21 ug/g -
Ethylbenzene	0.05 ug/g	<0.05	<0.05	<0.05	- 1.1 ug/g -
Toluene	0.05 ug/g	<0.05	<0.05	<0.05	- 2.3 ug/g -
m,p-Xylenes	0.05 ug/g	<0.05	<0.05	<0.05	- - -
o-Xylene	0.05 ug/g	<0.05	<0.05	<0.05	- - -
Xylenes, total	0.05 ug/g	<0.05	<0.05	<0.05	- 3.1 ug/g -
Toluene-d8	Surrogate	114%	110%	113%	- - -

Hydrocarbons

PHC Group	BH206-1B	MW207-1	MW207-3B	MW208-1A	Criteria
F1 PHCs (C6-C10)	7 ug/g	<7	<7	<7	- 55 ug/g -
F2 PHCs (C10-C16)	4 ug/g	<4	<4	32	- 98 ug/g -
F3 PHCs (C16-C34)	8 ug/g	17	<8	82	- 300 ug/g -
F4 PHCs (C34-C50)	6 ug/g	<6	<6	<6	- 2800 ug/g -

Semi-Volatiles

Compound	BH206-1B	MW207-1	MW207-3B	MW208-1A	Criteria
Acenaphthene	0.02 ug/g	<0.02	<0.02	<0.02	- 7.9 ug/g -
Acenaphthylene	0.02 ug/g	<0.02	<0.02	<0.02	- 0.15 ug/g -
Anthracene	0.02 ug/g	<0.02	<0.02	<0.02	- 0.67 ug/g -
Benzo [a] anthracene	0.02 ug/g	<0.02	0.02	<0.02	- 0.5 ug/g -
Benzo [a] pyrene	0.02 ug/g	<0.02	0.03	<0.02	- 0.3 ug/g -
Benzo [b] fluoranthene	0.02 ug/g	<0.02	0.04	<0.02	- 0.78 ug/g -
Benzo [g,h,i] perylene	0.02 ug/g	<0.02	0.02	<0.02	- 6.6 ug/g -
Benzo [k] fluoranthene	0.02 ug/g	<0.02	0.02	<0.02	- 0.78 ug/g -

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH206-1B	MW207-1	MW207-3B	MW208-1A	Criteria:
Sample Date:	23-Aug-22 10:45	23-Aug-22 11:20	23-Aug-22 11:30	23-Aug-22 13:15	Reg 153/04 -T2
Sample ID:	2235312-17	2235312-19	2235312-20	2235312-22	Res/Park, coarse
Matrix:	Soil	Soil	Soil	Soil	-
MDL/Units					

Semi-Volatiles

Chrysene	0.02 ug/g	<0.02	0.04	<0.02	-	7 ug/g	-
Dibenzo [a,h] anthracene	0.02 ug/g	<0.02	<0.02	<0.02	-	0.1 ug/g	-
Fluoranthene	0.02 ug/g	<0.02	0.06	<0.02	-	0.69 ug/g	-
Fluorene	0.02 ug/g	<0.02	<0.02	<0.02	-	62 ug/g	-
Indeno [1,2,3-cd] pyrene	0.02 ug/g	<0.02	0.02	<0.02	-	0.38 ug/g	-
1-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	-	0.99 ug/g	-
2-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	<0.02	-	0.99 ug/g	-
Methylnaphthalene (1&2)	0.04 ug/g	<0.04	<0.04	<0.04	-	0.99 ug/g	-
Naphthalene	0.01 ug/g	<0.01	<0.01	<0.01	-	0.6 ug/g	-
Phenanthrene	0.02 ug/g	<0.02	0.04	<0.02	-	6.2 ug/g	-
Pyrene	0.02 ug/g	<0.02	0.05	<0.02	-	78 ug/g	-
2-Fluorobiphenyl	Surrogate	51.4%	88.9%	95.3%	-	-	-
Terphenyl-d14	Surrogate	74.1%	90.6%	112%	-	-	-

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW208-1A	MW208-99	MW208-1B	MW208-4	Criteria:
Sample Date:	23-Aug-22 13:15	23-Aug-22 13:15	23-Aug-22 13:15	23-Aug-22 13:30	Reg 153/04 -T2
Sample ID:	2235312-22RE1	2235312-23	2235312-24	2235312-25	Res/Park, coarse
Matrix:	Soil	Soil	Soil	Soil	-
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	-	92.5	80.5	82.4	-	-
----------	--------------	---	------	------	------	---	---

General Inorganics

SAR	0.01 N/A	-	0.20	-	-	5 N/A	-
Conductivity	5 uS/cm	-	146	-	-	0.7 mS/cm	-
Cyanide, free	0.03 ug/g	-	<0.03	-	-	0.051 ug/g	-
pH	0.05 pH Units	10.89	8.02	7.42	7.82	5.00 - 9.00 pH Units	-

Metals

Antimony	1 ug/g	-	<1.0	<1.0	-	7.5 ug/g	-
Arsenic	1 ug/g	-	1.4	4.1	-	18 ug/g	-
Barium	1 ug/g	-	12.1	151	-	390 ug/g	-
Beryllium	0.5 ug/g	-	<0.5	0.8	-	4 ug/g	-
Boron, available	0.5 ug/g	-	<0.5	<0.5	-	1.5 ug/g	-
Boron	5 ug/g	-	<5.0	6.9	-	120 ug/g	-
Cadmium	0.5 ug/g	-	<0.5	<0.5	-	1.2 ug/g	-
Chromium	5 ug/g	-	5.4	30.4	-	160 ug/g	-
Chromium (VI)	0.2 ug/g	-	<0.2	<0.2	-	8 ug/g	-
Cobalt	1 ug/g	-	3.6	9.5	-	22 ug/g	-
Copper	5 ug/g	-	<5.0	33.8	-	140 ug/g	-
Lead	1 ug/g	-	8.0	8.4	-	120 ug/g	-
Mercury	0.1 ug/g	-	<0.1	<0.1	-	0.27 ug/g	-
Molybdenum	1 ug/g	-	<1.0	<1.0	-	6.9 ug/g	-
Nickel	5 ug/g	-	<5.0	21.2	-	100 ug/g	-
Selenium	1 ug/g	-	<1.0	<1.0	-	2.4 ug/g	-
Silver	0.3 ug/g	-	<0.3	<0.3	-	20 ug/g	-
Thallium	1 ug/g	-	<1.0	<1.0	-	1 ug/g	-

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW208-1A	MW208-99	MW208-1B	MW208-4	Criteria:
Sample Date:	23-Aug-22 13:15	23-Aug-22 13:15	23-Aug-22 13:15	23-Aug-22 13:30	Reg 153/04 -T2 Res/Park, coarse -
Sample ID:	2235312-22RE1	2235312-23	2235312-24	2235312-25	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Metals

Element	MW208-1A	MW208-99	MW208-1B	MW208-4	Criteria
Uranium	1 ug/g	-	<1.0	<1.0	23 ug/g -
Vanadium	10 ug/g	-	11.2	43.7	86 ug/g -
Zinc	20 ug/g	-	<20.0	59.3	340 ug/g -

Volatiles

Compound	MW208-1A	MW208-99	MW208-1B	MW208-4	Criteria	
Acetone	0.5 ug/g	-	-	<0.50	<0.50	16 ug/g -
Benzene	0.02 ug/g	-	-	<0.02	<0.02	0.21 ug/g -
Bromodichloromethane	0.05 ug/g	-	-	<0.05	<0.05	1.5 ug/g -
Bromoform	0.05 ug/g	-	-	<0.05	<0.05	0.27 ug/g -
Bromomethane	0.05 ug/g	-	-	<0.05	<0.05	0.05 ug/g -
Carbon Tetrachloride	0.05 ug/g	-	-	<0.05	<0.05	0.05 ug/g -
Chlorobenzene	0.05 ug/g	-	-	<0.05	<0.05	2.4 ug/g -
Chloroform	0.05 ug/g	-	-	<0.05	<0.05	0.05 ug/g -
Dibromochloromethane	0.05 ug/g	-	-	<0.05	<0.05	2.3 ug/g -
Dichlorodifluoromethane	0.05 ug/g	-	-	<0.05	<0.05	16 ug/g -
1,2-Dichlorobenzene	0.05 ug/g	-	-	<0.05	<0.05	1.2 ug/g -
1,3-Dichlorobenzene	0.05 ug/g	-	-	<0.05	<0.05	4.8 ug/g -
1,4-Dichlorobenzene	0.05 ug/g	-	-	<0.05	<0.05	0.083 ug/g -
1,1-Dichloroethane	0.05 ug/g	-	-	<0.05	<0.05	0.47 ug/g -
1,2-Dichloroethane	0.05 ug/g	-	-	<0.05	<0.05	0.05 ug/g -
1,1-Dichloroethylene	0.05 ug/g	-	-	<0.05	<0.05	0.05 ug/g -
cis-1,2-Dichloroethylene	0.05 ug/g	-	-	<0.05	<0.05	1.9 ug/g -
trans-1,2-Dichloroethylene	0.05 ug/g	-	-	<0.05	<0.05	0.084 ug/g -
1,2-Dichloropropane	0.05 ug/g	-	-	<0.05	<0.05	0.05 ug/g -
cis-1,3-Dichloropropylene	0.05 ug/g	-	-	<0.05	<0.05	- -
trans-1,3-Dichloropropylene	0.05 ug/g	-	-	<0.05	<0.05	- -

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW208-1A	MW208-99	MW208-1B	MW208-4	Criteria:
Sample Date:	23-Aug-22 13:15	23-Aug-22 13:15	23-Aug-22 13:15	23-Aug-22 13:30	Reg 153/04 -T2 Res/Park, coarse -
Sample ID:	2235312-22RE1	2235312-23	2235312-24	2235312-25	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Volatiles

1,3-Dichloropropene, total	0.05 ug/g	-	-	<0.05	<0.05	0.05 ug/g	-
Ethylbenzene	0.05 ug/g	-	-	<0.05	<0.05	1.1 ug/g	-
Ethylene dibromide (dibromoethane,	0.05 ug/g	-	-	<0.05	<0.05	0.05 ug/g	-
Hexane	0.05 ug/g	-	-	<0.05	<0.05	2.8 ug/g	-
Methyl Ethyl Ketone (2-Butanone)	0.5 ug/g	-	-	<0.50	<0.50	16 ug/g	-
Methyl Isobutyl Ketone	0.5 ug/g	-	-	<0.50	<0.50	1.7 ug/g	-
Methyl tert-butyl ether	0.05 ug/g	-	-	<0.05	<0.05	0.75 ug/g	-
Methylene Chloride	0.05 ug/g	-	-	<0.05	<0.05	0.1 ug/g	-
Styrene	0.05 ug/g	-	-	<0.05	<0.05	0.7 ug/g	-
1,1,1,2-Tetrachloroethane	0.05 ug/g	-	-	<0.05	<0.05	0.058 ug/g	-
1,1,2,2-Tetrachloroethane	0.05 ug/g	-	-	<0.05	<0.05	0.05 ug/g	-
Tetrachloroethylene	0.05 ug/g	-	-	<0.05	<0.05	0.28 ug/g	-
Toluene	0.05 ug/g	-	-	<0.05	<0.05	2.3 ug/g	-
1,1,1-Trichloroethane	0.05 ug/g	-	-	<0.05	<0.05	0.38 ug/g	-
1,1,2-Trichloroethane	0.05 ug/g	-	-	<0.05	<0.05	0.05 ug/g	-
Trichloroethylene	0.05 ug/g	-	-	<0.05	<0.05	0.061 ug/g	-
Trichlorofluoromethane	0.05 ug/g	-	-	<0.05	<0.05	4 ug/g	-
Vinyl chloride	0.02 ug/g	-	-	<0.02	<0.02	0.02 ug/g	-
m,p-Xylenes	0.05 ug/g	-	-	<0.05	<0.05	-	-
o-Xylene	0.05 ug/g	-	-	<0.05	<0.05	-	-
Xylenes, total	0.05 ug/g	-	-	<0.05	<0.05	3.1 ug/g	-
Toluene-d8	Surrogate	-	-	119%	118%	-	-
Dibromofluoromethane	Surrogate	-	-	75.0%	109%	-	-
4-Bromofluorobenzene	Surrogate	-	-	117%	118%	-	-

Hydrocarbons

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW208-1A	MW208-99	MW208-1B	MW208-4	Criteria:
Sample Date:	23-Aug-22 13:15	23-Aug-22 13:15	23-Aug-22 13:15	23-Aug-22 13:30	Reg 153/04 -T2 Res/Park, coarse -
Sample ID:	2235312-22RE1	2235312-23	2235312-24	2235312-25	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Hydrocarbons

Parameter	MW208-1A	MW208-99	MW208-1B	MW208-4	Criteria
F1 PHCs (C6-C10)	7 ug/g	-	-	<7	55 ug/g -
F2 PHCs (C10-C16)	4 ug/g	-	-	<4	98 ug/g -
F3 PHCs (C16-C34)	8 ug/g	-	-	<8	300 ug/g -
F4 PHCs (C34-C50)	6 ug/g	-	-	<6	2800 ug/g -

Semi-Volatiles

Parameter	MW208-1A	MW208-99	MW208-1B	MW208-4	Criteria
Acenaphthene	0.02 ug/g	-	-	<0.02	7.9 ug/g -
Acenaphthylene	0.02 ug/g	-	-	<0.02	0.15 ug/g -
Anthracene	0.02 ug/g	-	-	<0.02	0.67 ug/g -
Benzo [a] anthracene	0.02 ug/g	-	-	<0.02	0.5 ug/g -
Benzo [a] pyrene	0.02 ug/g	-	-	<0.02	0.3 ug/g -
Benzo [b] fluoranthene	0.02 ug/g	-	-	<0.02	0.78 ug/g -
Benzo [g,h,i] perylene	0.02 ug/g	-	-	<0.02	6.6 ug/g -
Benzo [k] fluoranthene	0.02 ug/g	-	-	<0.02	0.78 ug/g -
Chrysene	0.02 ug/g	-	-	<0.02	7 ug/g -
Dibenzo [a,h] anthracene	0.02 ug/g	-	-	<0.02	0.1 ug/g -
Fluoranthene	0.02 ug/g	-	-	<0.02	0.69 ug/g -
Fluorene	0.02 ug/g	-	-	<0.02	62 ug/g -
Indeno [1,2,3-cd] pyrene	0.02 ug/g	-	-	<0.02	0.38 ug/g -
1-Methylnaphthalene	0.02 ug/g	-	-	<0.02	0.99 ug/g -
2-Methylnaphthalene	0.02 ug/g	-	-	<0.02	0.99 ug/g -
Methylnaphthalene (1&2)	0.04 ug/g	-	-	<0.04	0.99 ug/g -
Naphthalene	0.01 ug/g	-	-	<0.01	0.6 ug/g -
Phenanthrene	0.02 ug/g	-	-	<0.02	6.2 ug/g -
Pyrene	0.02 ug/g	-	-	<0.02	78 ug/g -
2-Fluorobiphenyl	Surrogate	-	-	66.1%	51.4% -

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW208-1A	MW208-99	MW208-1B	MW208-4	Criteria:
Sample Date:	23-Aug-22 13:15	23-Aug-22 13:15	23-Aug-22 13:15	23-Aug-22 13:30	Reg 153/04 -T2
Sample ID:	2235312-22RE1	2235312-23	2235312-24	2235312-25	-
Matrix:	Soil	Soil	Soil	Soil	Res/Park, coarse
MDL/Units					

Semi-Volatiles

Terphenyl-d14	Surrogate	-	-	70.4%	51.1%	-	-
---------------	-----------	---	---	-------	-------	---	---

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW208-98	BH209-1B	BH1000 (Methanol Blank)		Criteria:
Sample Date:	23-Aug-22 13:30	23-Aug-22 15:00	23-Aug-22 15:30		Reg 153/04 -T2
Sample ID:	2235312-26	2235312-27	2235312-28		Res/Park, coarse
Matrix:	Soil	Soil	Soil		-
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	90.9	86.8	-	-	-
----------	--------------	------	------	---	---	---

Volatiles

Acetone	0.5 ug/g	<0.50	-	<0.50	-	16 ug/g	-
Benzene	0.02 ug/g	<0.02	-	<0.02	-	0.21 ug/g	-
Bromodichloromethane	0.05 ug/g	<0.05	-	<0.05	-	1.5 ug/g	-
Bromoform	0.05 ug/g	<0.05	-	<0.05	-	0.27 ug/g	-
Bromomethane	0.05 ug/g	<0.05	-	<0.05	-	0.05 ug/g	-
Carbon Tetrachloride	0.05 ug/g	<0.05	-	<0.05	-	0.05 ug/g	-
Chlorobenzene	0.05 ug/g	<0.05	-	<0.05	-	2.4 ug/g	-
Chloroform	0.05 ug/g	<0.05	-	<0.05	-	0.05 ug/g	-
Dibromochloromethane	0.05 ug/g	<0.05	-	<0.05	-	2.3 ug/g	-
Dichlorodifluoromethane	0.05 ug/g	<0.05	-	<0.05	-	16 ug/g	-
1,2-Dichlorobenzene	0.05 ug/g	<0.05	-	<0.05	-	1.2 ug/g	-
1,3-Dichlorobenzene	0.05 ug/g	<0.05	-	<0.05	-	4.8 ug/g	-
1,4-Dichlorobenzene	0.05 ug/g	<0.05	-	<0.05	-	0.083 ug/g	-
1,1-Dichloroethane	0.05 ug/g	<0.05	-	<0.05	-	0.47 ug/g	-
1,2-Dichloroethane	0.05 ug/g	<0.05	-	<0.05	-	0.05 ug/g	-
1,1-Dichloroethylene	0.05 ug/g	<0.05	-	<0.05	-	0.05 ug/g	-
cis-1,2-Dichloroethylene	0.05 ug/g	<0.05	-	<0.05	-	1.9 ug/g	-
trans-1,2-Dichloroethylene	0.05 ug/g	<0.05	-	<0.05	-	0.084 ug/g	-
1,2-Dichloropropane	0.05 ug/g	<0.05	-	<0.05	-	0.05 ug/g	-
cis-1,3-Dichloropropylene	0.05 ug/g	<0.05	-	<0.05	-	-	-
trans-1,3-Dichloropropylene	0.05 ug/g	<0.05	-	<0.05	-	-	-
1,3-Dichloropropene, total	0.05 ug/g	<0.05	-	<0.05	-	0.05 ug/g	-

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW208-98	BH209-1B	BH1000 (Methanol Blank)		Criteria:
Sample Date:	23-Aug-22 13:30	23-Aug-22 15:00	23-Aug-22 15:30		Reg 153/04 -T2
Sample ID:	2235312-26	2235312-27	2235312-28		Res/Park, coarse
Matrix:	Soil	Soil	Soil		-
MDL/Units					

Volatiles

Ethylbenzene	0.05 ug/g	<0.05	-	<0.05	-	1.1 ug/g	-
Ethylene dibromide (dibromoethane,	0.05 ug/g	<0.05	-	<0.05	-	0.05 ug/g	-
Hexane	0.05 ug/g	<0.05	-	<0.05	-	2.8 ug/g	-
Methyl Ethyl Ketone (2-Butanone)	0.5 ug/g	<0.50	-	<0.50	-	16 ug/g	-
Methyl Isobutyl Ketone	0.5 ug/g	<0.50	-	<0.50	-	1.7 ug/g	-
Methyl tert-butyl ether	0.05 ug/g	<0.05	-	<0.05	-	0.75 ug/g	-
Methylene Chloride	0.05 ug/g	<0.05	-	<0.05	-	0.1 ug/g	-
Styrene	0.05 ug/g	<0.05	-	<0.05	-	0.7 ug/g	-
1,1,1,2-Tetrachloroethane	0.05 ug/g	<0.05	-	<0.05	-	0.058 ug/g	-
1,1,2,2-Tetrachloroethane	0.05 ug/g	<0.05	-	<0.05	-	0.05 ug/g	-
Tetrachloroethylene	0.05 ug/g	<0.05	-	<0.05	-	0.28 ug/g	-
Toluene	0.05 ug/g	<0.05	-	<0.05	-	2.3 ug/g	-
1,1,1-Trichloroethane	0.05 ug/g	<0.05	-	<0.05	-	0.38 ug/g	-
1,1,2-Trichloroethane	0.05 ug/g	<0.05	-	<0.05	-	0.05 ug/g	-
Trichloroethylene	0.05 ug/g	<0.05	-	<0.05	-	0.061 ug/g	-
Trichlorofluoromethane	0.05 ug/g	<0.05	-	<0.05	-	4 ug/g	-
Vinyl chloride	0.02 ug/g	<0.02	-	<0.02	-	0.02 ug/g	-
m,p-Xylenes	0.05 ug/g	<0.05	-	<0.05	-	-	-
o-Xylene	0.05 ug/g	<0.05	-	<0.05	-	-	-
Xylenes, total	0.05 ug/g	<0.05	-	<0.05	-	3.1 ug/g	-
Toluene-d8	Surrogate	111%	-	106%	-	-	-
Dibromofluoromethane	Surrogate	68.7%	-	65.5%	-	-	-
4-Bromofluorobenzene	Surrogate	108%	-	103%	-	-	-
Benzene	0.02 ug/g	-	<0.02	-	-	0.21 ug/g	-

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW208-98	BH209-1B	BH1000 (Methanol Blank)		Criteria:
Sample Date:	23-Aug-22 13:30	23-Aug-22 15:00	23-Aug-22 15:30		Reg 153/04 -T2
Sample ID:	2235312-26	2235312-27	2235312-28		Res/Park, coarse
Matrix:	Soil	Soil	Soil		-
MDL/Units					

Volatiles

Ethylbenzene	0.05 ug/g	-	<0.05	-	-	1.1 ug/g	-
Toluene	0.05 ug/g	-	<0.05	-	-	2.3 ug/g	-
m,p-Xylenes	0.05 ug/g	-	<0.05	-	-	-	-
o-Xylene	0.05 ug/g	-	<0.05	-	-	-	-
Xylenes, total	0.05 ug/g	-	<0.05	-	-	3.1 ug/g	-
Toluene-d8	Surrogate	-	112%	-	-	-	-

Hydrocarbons

F1 PHCs (C6-C10)	7 ug/g	<7	<7	<7	-	55 ug/g	-
F2 PHCs (C10-C16)	4 ug/g	9	<4	-	-	98 ug/g	-
F3 PHCs (C16-C34)	8 ug/g	32	<8	-	-	300 ug/g	-
F4 PHCs (C34-C50)	6 ug/g	<6	<6	-	-	2800 ug/g	-

Semi-Volatiles

Acenaphthene	0.02 ug/g	<0.02	<0.02	-	-	7.9 ug/g	-
Acenaphthylene	0.02 ug/g	<0.02	<0.02	-	-	0.15 ug/g	-
Anthracene	0.02 ug/g	<0.02	<0.02	-	-	0.67 ug/g	-
Benzo [a] anthracene	0.02 ug/g	<0.02	<0.02	-	-	0.5 ug/g	-
Benzo [a] pyrene	0.02 ug/g	<0.02	<0.02	-	-	0.3 ug/g	-
Benzo [b] fluoranthene	0.02 ug/g	<0.02	<0.02	-	-	0.78 ug/g	-
Benzo [g,h,i] perylene	0.02 ug/g	<0.02	<0.02	-	-	6.6 ug/g	-
Benzo [k] fluoranthene	0.02 ug/g	<0.02	<0.02	-	-	0.78 ug/g	-
Chrysene	0.02 ug/g	<0.02	<0.02	-	-	7 ug/g	-
Dibenzo [a,h] anthracene	0.02 ug/g	<0.02	<0.02	-	-	0.1 ug/g	-
Fluoranthene	0.02 ug/g	<0.02	<0.02	-	-	0.69 ug/g	-
Fluorene	0.02 ug/g	<0.02	<0.02	-	-	62 ug/g	-

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW208-98	BH209-1B	BH1000 (Methanol Blank)		Criteria:
Sample Date:	23-Aug-22 13:30	23-Aug-22 15:00	23-Aug-22 15:30		Reg 153/04 -T2
Sample ID:	2235312-26	2235312-27	2235312-28		Res/Park, coarse
Matrix:	Soil	Soil	Soil		-
MDL/Units					

Semi-Volatiles

Indeno [1,2,3-cd] pyrene	0.02 ug/g	<0.02	<0.02	-	-	0.38 ug/g	-
1-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	-	-	0.99 ug/g	-
2-Methylnaphthalene	0.02 ug/g	<0.02	<0.02	-	-	0.99 ug/g	-
Methylnaphthalene (1&2)	0.04 ug/g	<0.04	<0.04	-	-	0.99 ug/g	-
Naphthalene	0.01 ug/g	<0.01	<0.01	-	-	0.6 ug/g	-
Phenanthrene	0.02 ug/g	<0.02	<0.02	-	-	6.2 ug/g	-
Pyrene	0.02 ug/g	<0.02	<0.02	-	-	78 ug/g	-
2-Fluorobiphenyl	Surrogate	80.2%	74.8%	-	-	-	-
Terphenyl-d14	Surrogate	82.5%	80.5%	-	-	-	-

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics								
Conductivity	ND	5	uS/cm					
Cyanide, free	ND	0.03	ug/g					
Hydrocarbons								
F1 PHCs (C6-C10)	ND	7	ug/g					
F2 PHCs (C10-C16)	ND	4	ug/g					
F3 PHCs (C16-C34)	ND	8	ug/g					
F4 PHCs (C34-C50)	ND	6	ug/g					
F4G PHCs (gravimetric)	ND	50	ug/g					
Metals								
Antimony	ND	1.0	ug/g					
Arsenic	ND	1.0	ug/g					
Barium	ND	1.0	ug/g					
Beryllium	ND	0.5	ug/g					
Boron, available	ND	0.5	ug/g					
Boron	ND	5.0	ug/g					
Cadmium	ND	0.5	ug/g					
Chromium (VI)	ND	0.2	ug/g					
Chromium	ND	5.0	ug/g					
Cobalt	ND	1.0	ug/g					
Copper	ND	5.0	ug/g					
Lead	ND	1.0	ug/g					
Mercury	ND	0.1	ug/g					
Molybdenum	ND	1.0	ug/g					
Nickel	ND	5.0	ug/g					
Selenium	ND	1.0	ug/g					
Silver	ND	0.3	ug/g					
Thallium	ND	1.0	ug/g					
Uranium	ND	1.0	ug/g					
Vanadium	ND	10.0	ug/g					
Zinc	ND	20.0	ug/g					
Semi-Volatiles								
Acenaphthene	ND	0.02	ug/g					

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Acenaphthylene	ND	0.02	ug/g					
Anthracene	ND	0.02	ug/g					
Benzo [a] anthracene	ND	0.02	ug/g					
Benzo [a] pyrene	ND	0.02	ug/g					
Benzo [b] fluoranthene	ND	0.02	ug/g					
Benzo [g,h,i] perylene	ND	0.02	ug/g					
Benzo [k] fluoranthene	ND	0.02	ug/g					
Chrysene	ND	0.02	ug/g					
Dibenzo [a,h] anthracene	ND	0.02	ug/g					
Fluoranthene	ND	0.02	ug/g					
Fluorene	ND	0.02	ug/g					
Indeno [1,2,3-cd] pyrene	ND	0.02	ug/g					
1-Methylnaphthalene	ND	0.02	ug/g					
2-Methylnaphthalene	ND	0.02	ug/g					
Methylnaphthalene (1&2)	ND	0.04	ug/g					
Naphthalene	ND	0.01	ug/g					
Phenanthrene	ND	0.02	ug/g					
Pyrene	ND	0.02	ug/g					
Surrogate: 2-Fluorobiphenyl	1.17		ug/g	87.5	50-140			
Surrogate: Terphenyl-d14	1.60		ug/g	120	50-140			
Volatiles								
Acetone	ND	0.50	ug/g					
Benzene	ND	0.02	ug/g					
Bromodichloromethane	ND	0.05	ug/g					
Bromoform	ND	0.05	ug/g					
Bromomethane	ND	0.05	ug/g					
Carbon Tetrachloride	ND	0.05	ug/g					
Chlorobenzene	ND	0.05	ug/g					
Chloroform	ND	0.05	ug/g					
Dibromochloromethane	ND	0.05	ug/g					
Dichlorodifluoromethane	ND	0.05	ug/g					
1,2-Dichlorobenzene	ND	0.05	ug/g					

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
1,3-Dichlorobenzene	ND	0.05	ug/g					
1,4-Dichlorobenzene	ND	0.05	ug/g					
1,1-Dichloroethane	ND	0.05	ug/g					
1,2-Dichloroethane	ND	0.05	ug/g					
1,1-Dichloroethylene	ND	0.05	ug/g					
cis-1,2-Dichloroethylene	ND	0.05	ug/g					
trans-1,2-Dichloroethylene	ND	0.05	ug/g					
1,2-Dichloropropane	ND	0.05	ug/g					
cis-1,3-Dichloropropylene	ND	0.05	ug/g					
trans-1,3-Dichloropropylene	ND	0.05	ug/g					
1,3-Dichloropropene, total	ND	0.05	ug/g					
Ethylbenzene	ND	0.05	ug/g					
Ethylene dibromide (dibromoethane, 1,2-)	ND	0.05	ug/g					
Hexane	ND	0.05	ug/g					
Methyl Ethyl Ketone (2-Butanone)	ND	0.50	ug/g					
Methyl Isobutyl Ketone	ND	0.50	ug/g					
Methyl tert-butyl ether	ND	0.05	ug/g					
Methylene Chloride	ND	0.05	ug/g					
Styrene	ND	0.05	ug/g					
1,1,1,2-Tetrachloroethane	ND	0.05	ug/g					
1,1,1,2,2-Tetrachloroethane	ND	0.05	ug/g					
Tetrachloroethylene	ND	0.05	ug/g					
Toluene	ND	0.05	ug/g					
1,1,1-Trichloroethane	ND	0.05	ug/g					
1,1,2-Trichloroethane	ND	0.05	ug/g					
Trichloroethylene	ND	0.05	ug/g					
Trichlorofluoromethane	ND	0.05	ug/g					
Vinyl chloride	ND	0.02	ug/g					
m,p-Xylenes	ND	0.05	ug/g					
o-Xylene	ND	0.05	ug/g					
Xylenes, total	ND	0.05	ug/g					
Surrogate: 4-Bromofluorobenzene	8.22		ug/g	103	50-140			

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
<i>Surrogate: Dibromofluoromethane</i>	5.82		ug/g	72.8	50-140			
<i>Surrogate: Toluene-d8</i>	8.38		ug/g	105	50-140			
Benzene	ND	0.02	ug/g					
Ethylbenzene	ND	0.05	ug/g					
Toluene	ND	0.05	ug/g					
m,p-Xylenes	ND	0.05	ug/g					
o-Xylene	ND	0.05	ug/g					
Xylenes, total	ND	0.05	ug/g					
<i>Surrogate: Toluene-d8</i>	8.38		ug/g	105	50-140			

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
SAR	2.52	0.01	N/A	2.09			18.7	30	
Conductivity	307	5	uS/cm	311			1.3	5	
Cyanide, free	ND	0.03	ug/g	ND			NC	35	
pH	7.64	0.05	pH Units	7.62			0.3	2.3	
Hydrocarbons									
F1 PHCs (C6-C10)	ND	7	ug/g	ND			NC	40	
F2 PHCs (C10-C16)	ND	4	ug/g	ND			NC	30	
F3 PHCs (C16-C34)	12	8	ug/g	13			10.4	30	
F4 PHCs (C34-C50)	ND	6	ug/g	8			NC	30	
Metals									
Antimony	ND	1.0	ug/g	ND			NC	30	
Arsenic	1.7	1.0	ug/g	1.7			2.3	30	
Barium	75.0	1.0	ug/g	70.0			7.0	30	
Beryllium	ND	0.5	ug/g	ND			NC	30	
Boron, available	ND	0.5	ug/g	ND			NC	35	
Boron	8.4	5.0	ug/g	8.9			6.1	30	
Cadmium	ND	0.5	ug/g	ND			NC	30	
Chromium (VI)	ND	0.2	ug/g	ND			NC	35	
Chromium	20.3	5.0	ug/g	19.4			4.9	30	
Cobalt	6.6	1.0	ug/g	6.0			8.6	30	
Copper	15.9	5.0	ug/g	14.3			10.8	30	
Lead	28.9	1.0	ug/g	26.9			6.9	30	
Mercury	ND	0.1	ug/g	ND			NC	30	
Molybdenum	1.2	1.0	ug/g	1.0			15.5	30	
Nickel	12.5	5.0	ug/g	11.3			9.8	30	
Selenium	ND	1.0	ug/g	ND			NC	30	
Silver	ND	0.3	ug/g	ND			NC	30	
Thallium	ND	1.0	ug/g	ND			NC	30	
Uranium	ND	1.0	ug/g	ND			NC	30	
Vanadium	28.1	10.0	ug/g	26.2			6.8	30	

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Zinc	57.7	20.0	ug/g	54.2			6.3	30	
Physical Characteristics									
% Solids	99.7	0.1	% by Wt.	99.5			0.2	25	
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g	ND			NC	40	
Acenaphthylene	ND	0.02	ug/g	ND			NC	40	
Anthracene	ND	0.02	ug/g	ND			NC	40	
Benzo [a] anthracene	ND	0.02	ug/g	ND			NC	40	
Benzo [a] pyrene	ND	0.02	ug/g	ND			NC	40	
Benzo [b] fluoranthene	ND	0.02	ug/g	ND			NC	40	
Benzo [g,h,i] perylene	ND	0.02	ug/g	ND			NC	40	
Benzo [k] fluoranthene	ND	0.02	ug/g	ND			NC	40	
Chrysene	ND	0.02	ug/g	ND			NC	40	
Dibenzo [a,h] anthracene	ND	0.02	ug/g	ND			NC	40	
Fluoranthene	ND	0.02	ug/g	ND			NC	40	
Fluorene	ND	0.02	ug/g	ND			NC	40	
Indeno [1,2,3-cd] pyrene	ND	0.02	ug/g	ND			NC	40	
1-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
2-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
Naphthalene	ND	0.01	ug/g	ND			NC	40	
Phenanthrene	ND	0.02	ug/g	ND			NC	40	
Pyrene	ND	0.02	ug/g	ND			NC	40	
Surrogate: 2-Fluorobiphenyl	1.32		ug/g		81.1	50-140			
Surrogate: Terphenyl-d14	1.38		ug/g		84.8	50-140			
Volatiles									
Acetone	ND	0.50	ug/g	ND			NC	50	
Benzene	ND	0.02	ug/g	ND			NC	50	
Bromodichloromethane	ND	0.05	ug/g	ND			NC	50	
Bromoform	ND	0.05	ug/g	ND			NC	50	
Bromomethane	ND	0.05	ug/g	ND			NC	50	
Carbon Tetrachloride	ND	0.05	ug/g	ND			NC	50	

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Chlorobenzene	ND	0.05	ug/g	ND			NC	50	
Chloroform	ND	0.05	ug/g	ND			NC	50	
Dibromochloromethane	ND	0.05	ug/g	ND			NC	50	
Dichlorodifluoromethane	ND	0.05	ug/g	ND			NC	50	
1,2-Dichlorobenzene	ND	0.05	ug/g	ND			NC	50	
1,3-Dichlorobenzene	ND	0.05	ug/g	ND			NC	50	
1,4-Dichlorobenzene	ND	0.05	ug/g	ND			NC	50	
1,1-Dichloroethane	ND	0.05	ug/g	ND			NC	50	
1,2-Dichloroethane	ND	0.05	ug/g	ND			NC	50	
1,1-Dichloroethylene	ND	0.05	ug/g	ND			NC	50	
cis-1,2-Dichloroethylene	ND	0.05	ug/g	ND			NC	50	
trans-1,2-Dichloroethylene	ND	0.05	ug/g	ND			NC	50	
1,2-Dichloropropane	ND	0.05	ug/g	ND			NC	50	
cis-1,3-Dichloropropylene	ND	0.05	ug/g	ND			NC	50	
trans-1,3-Dichloropropylene	ND	0.05	ug/g	ND			NC	50	
Ethylbenzene	ND	0.05	ug/g	ND			NC	50	
Ethylene dibromide (dibromoethane, 1,2-)	ND	0.05	ug/g	ND			NC	50	
Hexane	ND	0.05	ug/g	ND			NC	50	
Methyl Ethyl Ketone (2-Butanone)	ND	0.50	ug/g	ND			NC	50	
Methyl Isobutyl Ketone	ND	0.50	ug/g	ND			NC	50	
Methyl tert-butyl ether	ND	0.05	ug/g	ND			NC	50	
Methylene Chloride	ND	0.05	ug/g	ND			NC	50	
Styrene	ND	0.05	ug/g	ND			NC	50	
1,1,1,2-Tetrachloroethane	ND	0.05	ug/g	ND			NC	50	
1,1,2,2-Tetrachloroethane	ND	0.05	ug/g	ND			NC	50	
Tetrachloroethylene	ND	0.05	ug/g	ND			NC	50	
Toluene	ND	0.05	ug/g	ND			NC	50	
1,1,1-Trichloroethane	ND	0.05	ug/g	ND			NC	50	
1,1,2-Trichloroethane	ND	0.05	ug/g	ND			NC	50	
Trichloroethylene	ND	0.05	ug/g	ND			NC	50	
Trichlorofluoromethane	ND	0.05	ug/g	ND			NC	50	

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Vinyl chloride	ND	0.02	ug/g	ND			NC	50	
m,p-Xylenes	ND	0.05	ug/g	ND			NC	50	
o-Xylene	ND	0.05	ug/g	ND			NC	50	
<i>Surrogate: 4-Bromofluorobenzene</i>	11.8		ug/g		116	50-140			
<i>Surrogate: Dibromofluoromethane</i>	11.6		ug/g		115	50-140			
<i>Surrogate: Toluene-d8</i>	11.7		ug/g		115	50-140			
Benzene	ND	0.02	ug/g	ND			NC	50	
Ethylbenzene	ND	0.05	ug/g	ND			NC	50	
Toluene	ND	0.05	ug/g	ND			NC	50	
m,p-Xylenes	ND	0.05	ug/g	ND			NC	50	
o-Xylene	ND	0.05	ug/g	ND			NC	50	
<i>Surrogate: Toluene-d8</i>	11.7		ug/g		115	50-140			

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
Cyanide, free	0.313	0.03	ug/g	ND	81.2	50-150			
Hydrocarbons									
F1 PHCs (C6-C10)	165	7	ug/g	ND	82.3	80-120			
F2 PHCs (C10-C16)	174	4	ug/g	73	125	60-140			
F3 PHCs (C16-C34)	317	8	ug/g	90	115	60-140			
F4 PHCs (C34-C50)	180	6	ug/g	38	113	60-140			
F4G PHCs (gravimetric)	930	50	ug/g	ND	93.0	80-120			
Metals									
Arsenic	57.8	1.0	ug/g	ND	114	70-130			
Barium	81.0	1.0	ug/g	28.0	106	70-130			
Beryllium	56.3	0.5	ug/g	ND	112	70-130			
Boron, available	4.39	0.5	ug/g	ND	87.9	70-122			
Boron	56.3	5.0	ug/g	ND	106	70-130			
Cadmium	52.5	0.5	ug/g	ND	105	70-130			
Chromium (VI)	0.2	0.2	ug/g	ND	83.0	70-130			
Chromium	62.4	5.0	ug/g	7.7	109	70-130			
Cobalt	55.7	1.0	ug/g	2.4	107	70-130			
Copper	57.0	5.0	ug/g	5.7	103	70-130			
Lead	61.0	1.0	ug/g	10.8	100	70-130			
Mercury	1.25	0.1	ug/g	ND	83.6	70-130			
Molybdenum	52.2	1.0	ug/g	ND	104	70-130			
Nickel	56.5	5.0	ug/g	ND	104	70-130			
Selenium	50.0	1.0	ug/g	ND	99.9	70-130			
Silver	45.0	0.3	ug/g	ND	90.0	70-130			
Thallium	50.9	1.0	ug/g	ND	102	70-130			
Uranium	52.8	1.0	ug/g	ND	105	70-130			
Vanadium	64.6	10.0	ug/g	10.5	108	70-130			
Zinc	71.1	20.0	ug/g	21.7	98.8	70-130			
Semi-Volatiles									
Acenaphthene	0.172	0.02	ug/g	ND	84.9	50-140			

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Acenaphthylene	0.155	0.02	ug/g	ND	76.2	50-140			
Anthracene	0.179	0.02	ug/g	ND	88.0	50-140			
Benzo [a] anthracene	0.153	0.02	ug/g	ND	75.4	50-140			
Benzo [a] pyrene	0.164	0.02	ug/g	ND	80.7	50-140			
Benzo [b] fluoranthene	0.203	0.02	ug/g	ND	100	50-140			
Benzo [g,h,i] perylene	0.156	0.02	ug/g	ND	76.8	50-140			
Benzo [k] fluoranthene	0.198	0.02	ug/g	ND	97.4	50-140			
Chrysene	0.163	0.02	ug/g	ND	80.3	50-140			
Dibenzo [a,h] anthracene	0.162	0.02	ug/g	ND	79.9	50-140			
Fluoranthene	0.148	0.02	ug/g	ND	72.7	50-140			
Fluorene	0.168	0.02	ug/g	ND	82.9	50-140			
Indeno [1,2,3-cd] pyrene	0.162	0.02	ug/g	ND	79.6	50-140			
1-Methylnaphthalene	0.198	0.02	ug/g	ND	97.7	50-140			
2-Methylnaphthalene	0.216	0.02	ug/g	ND	106	50-140			
Naphthalene	0.192	0.01	ug/g	ND	94.8	50-140			
Phenanthrene	0.156	0.02	ug/g	ND	76.9	50-140			
Pyrene	0.153	0.02	ug/g	ND	75.3	50-140			
<i>Surrogate: 2-Fluorobiphenyl</i>	<i>1.42</i>		<i>ug/g</i>		<i>87.8</i>	<i>50-140</i>			
<i>Surrogate: Terphenyl-d14</i>	<i>1.50</i>		<i>ug/g</i>		<i>92.5</i>	<i>50-140</i>			
Volatiles									
Acetone	11.1	0.50	ug/g	ND	111	50-140			
Benzene	4.65	0.02	ug/g	ND	116	60-130			
Bromodichloromethane	3.91	0.05	ug/g	ND	97.9	60-130			
Bromoform	4.56	0.05	ug/g	ND	114	60-130			
Bromomethane	4.50	0.05	ug/g	ND	113	50-140			
Carbon Tetrachloride	4.13	0.05	ug/g	ND	103	60-130			
Chlorobenzene	4.38	0.05	ug/g	ND	109	60-130			
Chloroform	4.58	0.05	ug/g	ND	114	60-130			
Dibromochloromethane	4.62	0.05	ug/g	ND	115	60-130			
Dichlorodifluoromethane	2.91	0.05	ug/g	ND	72.8	50-140			
1,2-Dichlorobenzene	3.86	0.05	ug/g	ND	96.6	60-130			

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
1,3-Dichlorobenzene	3.82	0.05	ug/g	ND	95.4	60-130			
1,4-Dichlorobenzene	3.82	0.05	ug/g	ND	95.5	60-130			
1,1-Dichloroethane	4.62	0.05	ug/g	ND	116	60-130			
1,2-Dichloroethane	4.13	0.05	ug/g	ND	103	60-130			
1,1-Dichloroethylene	3.52	0.05	ug/g	ND	88.0	60-130			
cis-1,2-Dichloroethylene	3.75	0.05	ug/g	ND	93.7	60-130			
trans-1,2-Dichloroethylene	3.88	0.05	ug/g	ND	97.1	60-130			
1,2-Dichloropropane	4.79	0.05	ug/g	ND	120	60-130			
cis-1,3-Dichloropropylene	4.36	0.05	ug/g	ND	109	60-130			
trans-1,3-Dichloropropylene	4.13	0.05	ug/g	ND	103	60-130			
Ethylbenzene	4.38	0.05	ug/g	ND	110	60-130			
Ethylene dibromide (dibromoethane, 1,2-)	4.45	0.05	ug/g	ND	111	60-130			
Hexane	2.63	0.05	ug/g	ND	65.7	60-130			
Methyl Ethyl Ketone (2-Butanone)	12.3	0.50	ug/g	ND	123	50-140			
Methyl Isobutyl Ketone	12.7	0.50	ug/g	ND	127	50-140			
Methyl tert-butyl ether	12.4	0.05	ug/g	ND	124	50-140			
Methylene Chloride	4.26	0.05	ug/g	ND	107	60-130			
Styrene	4.30	0.05	ug/g	ND	108	60-130			
1,1,1,2-Tetrachloroethane	4.46	0.05	ug/g	ND	112	60-130			
1,1,2,2-Tetrachloroethane	4.88	0.05	ug/g	ND	122	60-130			
Tetrachloroethylene	3.91	0.05	ug/g	ND	97.7	60-130			
Toluene	4.45	0.05	ug/g	ND	111	60-130			
1,1,1-Trichloroethane	4.78	0.05	ug/g	ND	120	60-130			
1,1,2-Trichloroethane	4.64	0.05	ug/g	ND	116	60-130			
Trichloroethylene	4.42	0.05	ug/g	ND	111	60-130			
Trichlorofluoromethane	4.00	0.05	ug/g	ND	99.9	50-140			
Vinyl chloride	4.62	0.02	ug/g	ND	116	50-140			
m,p-Xylenes	8.45	0.05	ug/g	ND	106	60-130			
o-Xylene	4.36	0.05	ug/g	ND	109	60-130			
Surrogate: 4-Bromofluorobenzene	8.38		ug/g		105	50-140			
Surrogate: Dibromofluoromethane	5.98		ug/g		74.8	50-140			

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
<i>Surrogate: Toluene-d8</i>	8.12		<i>ug/g</i>		102	50-140			
Benzene	4.65	0.02	ug/g	ND	116	60-130			
Ethylbenzene	4.38	0.05	ug/g	ND	110	60-130			
Toluene	4.45	0.05	ug/g	ND	111	60-130			
m,p-Xylenes	8.45	0.05	ug/g	ND	106	60-130			
o-Xylene	4.36	0.05	ug/g	ND	109	60-130			
<i>Surrogate: Toluene-d8</i>	8.12		<i>ug/g</i>		102	50-140			

Certificate of Analysis

Report Date: 08-Sep-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Qualifier Notes:

Login Qualifiers :

Container and COC sample IDs don't match - 120ml jr- ID reads BH207-1 and coc reads MW207-1

Applies to Samples: MW207-1

Sample Qualifiers :

2: GC-FID signal did not return to baseline by C50

Sample Data Revisions:

None

Work Order Revisions / Comments:

Revision 1 - This report includes additional parameters

Other Report Notes:

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

NC: Not Calculated

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.

- F1 range corrected for BTEX.

- F2 to F3 ranges corrected for appropriate PAHs where available.

- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.

- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.

- When reported, data for F4G has been processed using a silica gel cleanup.

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.



Parcel Order Number (Lab Use Only) 2235312	Chain Of Custody (Lab Use Only) No 135465
---	--

Client Name: Terrapex Environmental Ltd.	Project Ref: CT3414.01	Page 1 of 3
Contact Name: Sara Sutherland	Quote #: Terrapex S.O.	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular Date Required: _____
Address: 90 Scarsdale Road, Toronto, ON M3B 2R7	PO #: -	
Telephone: 416-245-0011 ext. 261	E-mail: s.sutherland@terrapex.com s.beatty@terrapex.com	

<input checked="" type="checkbox"/> REG 153/04 <input type="checkbox"/> REG 406/19 <input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Res/Park <input type="checkbox"/> Med/Fine <input checked="" type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input checked="" type="checkbox"/> Coarse <input checked="" type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> Table _____ For RSC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other Regulation <input type="checkbox"/> REG 558 <input type="checkbox"/> PWQO <input type="checkbox"/> CCME <input type="checkbox"/> MISA <input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm Mun: _____ <input type="checkbox"/> Other: _____	Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)	Required Analysis PHCs F1-F4+BTEX VOCs PAHs Metals by ICP Hg CrVI B (HWS) Reg. 153 Metals + Inorganics PH HOLD
--	--	---	--

Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken		PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	Reg. 153 Metals + Inorganics	PH	HOLD
				Date	Time										
BH201-1	S	-	3	AUG. 23/2022	8:45	X		X					X		
BH201-2B	S	-	3	↓	8:50	X		X					X		
BH202-1B	S	-	2		9:10	X		X							
BH202-99	S	-	2		9:10	X		X							
BH202-2A	S	-	2		9:15	X		X							
BH202-2B	S	-	2		9:15										X
BH203-1B	S	-	2		9:40	X		X							X
BH203-2A	S	-	2		9:45										X
BH204-1B	S	-	2		9:55	X		X							
BH204-2A	S	-	2		10:00										X

Comments:		Method of Delivery: RABBEX	
Relinquished By (Sign): Sam Beatty	Received By Driver/Depot: [Signature]	Received at Lab: Jurnee Parn Bohmer	Verified By: [Signature]
Relinquished By (Print): Sam Beatty	Date/Time: 24-AUG-22 13:45	Date/Time: AUG 25, 2022 09:55	Date/Time: AUG 25, 22 10:52
Date/Time: AUG 24/2022 11:00 AM	Temperature: 6.1 °C	Temperature: 8.3 °C	pH Verified: <input type="checkbox"/> By: _____



Parcel Order Number (Lab Use Only) 2235312	Chain Of Custody (Lab Use Only) No 135466
---	--

Client Name: Terrapex Environmental Ltd.	Project Ref: CT3414.01	Page 2 of 3
Contact Name: Sara Sutherland	Quote #: Terrapex. S.O.	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular
Address: 90 Scarsdale Road, Toronto, ON M3B 2R7	PO #: -	
Telephone: 416-245-0011 ext. 261	E-mail: S. Sutherland @ terrapex.com S.bratty @ terrapex.com	
Date Required: _____		

<input checked="" type="checkbox"/> REG 153/04 <input type="checkbox"/> REG 406/19 Other Regulation <input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Res/Park <input type="checkbox"/> Med/Fine <input type="checkbox"/> REG 558 <input type="checkbox"/> PWQO <input checked="" type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input checked="" type="checkbox"/> Coarse <input type="checkbox"/> CCME <input type="checkbox"/> MISA <input checked="" type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm <input type="checkbox"/> Table _____ For RSC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)	Required Analysis												
Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken		PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	Reg 153 metals + inorganics	PH	HOLD
				Date	Time										
1 BH204-2B	S	-	2	Aug 23/2022	10:00										
2 BH205-1B	S	-	2	↓	10:10	X		X							X
3 BH205-99	S	-	2		10:10	X		X							
4 BH205-2A	S	-	2		10:15	X		X							
5 BH205-2B	S	-	2		10:15										
6 BH206-1A	S	-	1		10:45							X			X
7 BH206-1B	S	-	2		10:45	X		X							
8 BH206-2B	S	-	3		10:55										X
9 MW207-1	S	-	3		11:20	X		X				X			
10 MW207-3B	S	-	3		11:30	X		X				X			

Comments:		Method of Delivery: RABBEX	
Relinquished By (Sign): Sara Bratty	Received By Driver/Depot: RA	Received at Lab: J. Neepoon Dokmai	Verified By: Blam
Relinquished By (Print): Sara Bratty	Date/Time: 24-AUG-22 13:45	Date/Time: Aug 25, 2022 (19:55)	Date/Time: AUG 25, 22 10:52
Date/Time: AUG 24/2022 11:00 AM	Temperature: 6.1 °C	Temperature: 8.3 °C	pH Verified: <input type="checkbox"/> By: _____



Client Name: Terrapex Environmental Ltd.	Project Ref: CT3414.01	Page 3 of 3
Contact Name: Sara Sutherland	Quote #: Terrapex S.O.	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular
Address: 90 Scarisdale Road, Toronto, ON M3B 2R7	PO #: -	
Telephone: 416-245-0011 ext. 261	E-mail: S.sutherland@terrapex.com S.beatty@terrapex.com	
Date Required: _____		

REG 153/04 <input checked="" type="checkbox"/> REG 406/19 <input type="checkbox"/>		Other Regulation		Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)		Required Analysis											
<input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Res/Park <input type="checkbox"/> Med/Fine	<input type="checkbox"/> REG 558 <input type="checkbox"/> PWQO	<input type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input checked="" type="checkbox"/> Coarse	<input type="checkbox"/> CCME <input type="checkbox"/> MISA	<input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other	<input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm	PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	HOLD	Reg 153 Metals and Inorganics	PH	VOCs / FI	
Mun: _____				Matrix	Air Volume	# of Containers	Sample Taken										
For RSC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				Date	Time												
Sample ID/Location Name																	
1	MW207-4B	S	-	2	AUG 23 2022	10:40	<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>				
2	MW208-1A	S	-	1		13:15							<input checked="" type="checkbox"/>				
3	MW208-99	S	-	1		13:15							<input checked="" type="checkbox"/>				
4	MW208-1B	S	-	2		13:15	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
5	MW208-4	S	-	3		13:30	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
6	MW208-98	S	-	2		13:30	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
7	BH209-1B	S	-	2		15:00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>								
8	BH1000 (methanol blank)	S	-	1		15:30	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>
9	Sample	S	-	2		15:30	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>
10																	

Comments: MW208-99 - limited recovery			Method of Delivery: RABBIT		
Relinquished By (Sign): Sam Beatty	Received By Driver/Depot: KA	Received at Lab: June 2022 Bk mail	Verified By: Sam		
Relinquished By (Print): Sam Beatty	Date/Time: 24-AUG-22 13:45	Date/Time: AUG 25, 2022 09:55	Date/Time: AUG 25, 22 10:52		
Date/Time: AUG 24/2022 10:30 AM	Temperature: 6.1 °C	Temperature: 8.3 °C	pH Verified: <input type="checkbox"/>	By: _____	

Certificate of Analysis

Terrapex Environmental Ltd. (Toronto)

90 Scarsdale Road
Toronto, ON M3B 2R7
Attn: Sara Sutherland

Client PO:
Project: CT3414.01

Custody: 137549,137550,137552,137551,137436

Report Date: 19-Dec-2022
Order Date: 25-Oct-2022

Revised Report

Order #: 2244199

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Parcel ID	Client ID	Parcel ID	Client ID
2244199-01	BH301-1	2244199-24	BH312-1
2244199-03	BH302-1	2244199-26	BH313-1
2244199-05	BH303-1	2244199-27	BH313-2
2244199-06	BH303-2	2244199-28	BH314-1
2244199-07	BH303-3	2244199-29	BH314-2
2244199-08	BH304-1	2244199-30	BH315-1
2244199-09	BH304-2	2244199-32	BH316-1
2244199-10	BH305-1	2244199-34	BH317-1
2244199-11	BH305-2	2244199-35	BH317-2
2244199-12	BH306-1	2244199-36	BH318-1
2244199-14	BH307-1A	2244199-37	BH318-2
2244199-15	BH307-1B	2244199-38	BH319-1
2244199-16	BH308-1	2244199-39	BH319-2
2244199-17	BH308-2	2244199-40	BH2000
2244199-22	BH311-1	2244199-42	BH307-2
2244199-23	BH311-2	2244199-43	Blank 99

Approved By:



Alex Enfield, MSc

Lab Manager

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Boron, available	MOE (HWE), EPA 200.8 - ICP-MS	22-Nov-22	22-Nov-22
BTEX by P&T GC-MS	EPA 8260 - P&T GC-MS	3-Nov-22	4-Nov-22
Chromium, hexavalent - soil	MOE E3056 - Extraction, colourimetric	22-Nov-22	22-Nov-22
Conductivity	MOE E3138 - probe @25 °C, water ext	22-Nov-22	22-Nov-22
Mercury by CVAA	EPA 7471B - CVAA, digestion	24-Nov-22	24-Nov-22
Metals, ICP-MS	EPA 6020 - Digestion - ICP-MS	10-Nov-22	12-Nov-22
PHC F1	CWS Tier 1 - P&T GC-FID	3-Nov-22	4-Nov-22
PHCs F2 to F4	CWS Tier 1 - GC-FID, extraction	27-Oct-22	31-Oct-22
REG 153: Metals by ICP/MS, soil	EPA 6020 - Digestion - ICP-MS	28-Oct-22	28-Oct-22
REG 153: pH, soil	EPA 150.1 - pH probe @ 25 °C, CaCl buffered ext.	27-Oct-22	28-Oct-22
SAR	Calculated	22-Nov-22	24-Nov-22
Solids, %	CWS Tier 1 - Gravimetric	27-Oct-22	27-Oct-22

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Summary of Criteria Exceedances

(If this page is blank then there are no exceedances)

Only those criteria that a sample exceeds will be highlighted in red

Regulatory Comparison:

Paracel Laboratories has provided regulatory guidelines on this report for informational purposes only and makes no representations or warranties that the data is accurate or reflects the current regulatory values. The user is advised to consult with the appropriate official regulations to evaluate compliance. Sample results that are highlighted have exceeded the selected regulatory limit. Calculated uncertainty estimations have not been applied for determining regulatory exceedances.

Sample	Analyte	MDL / Units	Result	Reg 153/04 -T2 Res/Park, coarse	-
BH303-1	Cadmium	0.5 ug/g	1.4	1.2 ug/g	-
BH303-2	F3 PHCs (C16-C34)	8 ug/g	706	300 ug/g	-
BH304-1	Lead	1 ug/g	402	120 ug/g	-
BH304-2	Lead	1 ug/g	254	120 ug/g	-
BH305-2	Lead	1 ug/g	220	120 ug/g	-
BH307-1A	Lead	1 ug/g	1110	120 ug/g	-
BH307-1B	Lead	1 ug/g	577	120 ug/g	-
BH308-2	Barium	1 ug/g	437	390 ug/g	-
BH308-2	Lead	1 ug/g	368	120 ug/g	-
BH311-1	Lead	1 ug/g	647	120 ug/g	-
BH313-1	Cadmium	0.5 ug/g	1.4	1.2 ug/g	-
BH313-1	Lead	1 ug/g	325	120 ug/g	-
BH313-1	Mercury	0.1 ug/g	0.4	0.27 ug/g	-
BH313-2	Lead	1 ug/g	150	120 ug/g	-
BH313-2	Mercury	0.1 ug/g	0.5	0.27 ug/g	-
BH314-1	Lead	1 ug/g	173	120 ug/g	-
BH317-1	Lead	1 ug/g	347	120 ug/g	-
BH317-1	Lead	1 ug/g	357	120 ug/g	-
BH318-1	Cadmium	0.5 ug/g	1.3	1.2 ug/g	-
BH318-1	Lead	1 ug/g	886	120 ug/g	-
BH318-1	Lead	1 ug/g	866	120 ug/g	-
BH318-1	Zinc	20 ug/g	401	340 ug/g	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Summary of Criteria Exceedances

(If this page is blank then there are no exceedances)

Only those criteria that a sample exceeds will be highlighted in red

Regulatory Comparison:

Paracel Laboratories has provided regulatory guidelines on this report for informational purposes only and makes no representations or warranties that the data is accurate or reflects the current regulatory values. The user is advised to consult with the appropriate official regulations to evaluate compliance. Sample results that are highlighted have exceeded the selected regulatory limit. Calculated uncertainty estimations have not been applied for determining regulatory exceedances.

Sample	Analyte	MDL / Units	Result	Reg 153/04 -T2 Res/Park, coarse	-
BH318-2	Lead	1 ug/g	121	120 ug/g	-
BH2000	Cadmium	0.5 ug/g	1.6	1.2 ug/g	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH301-1	BH302-1	BH303-1	BH303-2	Criteria:
Sample Date:	24-Oct-22 15:10	24-Oct-22 15:00	24-Oct-22 14:45	24-Oct-22 14:50	Reg 153/04 -T2 Res/Park, coarse -
Sample ID:	2244199-01	2244199-03	2244199-05	2244199-06	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	85.7	86.7	95.0	87.5	-	-
----------	--------------	------	------	------	------	---	---

General Inorganics

SAR	0.01 N/A	-	-	0.18	-	5 N/A	-
Conductivity	5 uS/cm	-	-	142	-	0.7 mS/cm	-
pH	0.05 pH Units	7.43	7.53	7.60	-	5.00 - 9.00 pH Units	-

Metals

Antimony	1 ug/g	<1.0	<1.0	<1.0	<1.0	7.5 ug/g	-
Arsenic	1 ug/g	6.3	3.1	1.4	1.0	18 ug/g	-
Barium	1 ug/g	140	74.8	75.1	47.6	390 ug/g	-
Beryllium	0.5 ug/g	0.5	<0.5	<0.5	<0.5	4 ug/g	-
Boron, available	0.5 ug/g	-	-	-	<0.5	1.5 ug/g	-
Boron	5 ug/g	5.6	<5.0	<5.0	9.1	120 ug/g	-
Cadmium	0.5 ug/g	<0.5	1.2	1.4	0.8	1.2 ug/g	-
Chromium (VI)	0.2 ug/g	-	-	-	<0.2	8 ug/g	-
Chromium	5 ug/g	23.1	17.2	11.0	9.4	160 ug/g	-
Cobalt	1 ug/g	7.5	5.3	2.5	2.7	22 ug/g	-
Copper	5 ug/g	19.8	19.5	14.2	6.7	140 ug/g	-
Lead	1 ug/g	77.3	60.3	35.4	20.8	120 ug/g	-
Mercury	0.1 ug/g	-	-	-	<0.1 [2]	0.27 ug/g	-
Molybdenum	1 ug/g	<1.0	<1.0	<1.0	<1.0	6.9 ug/g	-
Nickel	5 ug/g	11.9	9.6	<5.0	6.5	100 ug/g	-
Selenium	1 ug/g	<1.0	<1.0	<1.0	<1.0	2.4 ug/g	-
Silver	0.3 ug/g	<0.3	<0.3	<0.3	<0.3	20 ug/g	-
Thallium	1 ug/g	<1.0	<1.0	<1.0	<1.0	1 ug/g	-
Uranium	1 ug/g	<1.0	<1.0	<1.0	<1.0	23 ug/g	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH301-1	BH302-1	BH303-1	BH303-2	Criteria:
Sample Date:	24-Oct-22 15:10	24-Oct-22 15:00	24-Oct-22 14:45	24-Oct-22 14:50	Reg 153/04 -T2 Res/Park, coarse -
Sample ID:	2244199-01	2244199-03	2244199-05	2244199-06	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Metals

Vanadium	10 ug/g	30.9	25.3	13.2	14.9	86 ug/g	-
Zinc	20 ug/g	77.6	61.6	46.7	36.8	340 ug/g	-

Volatiles

Benzene	0.02 ug/g	-	-	-	<0.02	0.21 ug/g	-
Ethylbenzene	0.05 ug/g	-	-	-	<0.05	1.1 ug/g	-
Toluene	0.05 ug/g	-	-	-	<0.05	2.3 ug/g	-
m,p-Xylenes	0.05 ug/g	-	-	-	<0.05	-	-
o-Xylene	0.05 ug/g	-	-	-	<0.05	-	-
Xylenes, total	0.05 ug/g	-	-	-	<0.05	3.1 ug/g	-
Toluene-d8	Surrogate	-	-	-	96.9%	-	-

Hydrocarbons

F1 PHCs (C6-C10)	7 ug/g	-	-	-	<7	55 ug/g	-
F2 PHCs (C10-C16)	4 ug/g	-	-	-	<4	98 ug/g	-
F3 PHCs (C16-C34)	8 ug/g	-	-	-	706	300 ug/g	-
F4 PHCs (C34-C50)	6 ug/g	-	-	-	636	2800 ug/g	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH303-3	BH304-1	BH304-2	BH305-1	Criteria:
Sample Date:	24-Oct-22 14:55	24-Oct-22 14:30	24-Oct-22 14:35	24-Oct-22 14:10	Reg 153/04 -T2 Res/Park, coarse
Sample ID:	2244199-07	2244199-08	2244199-09	2244199-10	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	90.3	87.8	77.6	92.6	-	-
----------	--------------	------	------	------	------	---	---

Metals

Antimony	1 ug/g	<1.0	<1.0	-	<1.0	7.5 ug/g	-
Arsenic	1 ug/g	<1.0	3.8	-	1.3	18 ug/g	-
Barium	1 ug/g	57.3	160	-	13.6	390 ug/g	-
Beryllium	0.5 ug/g	<0.5	<0.5	-	<0.5	4 ug/g	-
Boron	5 ug/g	8.1	5.9	-	<5.0	120 ug/g	-
Cadmium	0.5 ug/g	<0.5	0.5	-	<0.5	1.2 ug/g	-
Chromium	5 ug/g	11.9	22.5	-	5.2	160 ug/g	-
Cobalt	1 ug/g	3.8	6.5	-	1.7	22 ug/g	-
Copper	5 ug/g	6.6	22.3	-	<5.0	140 ug/g	-
Lead	1 ug/g	4.1	402	254	5.0	120 ug/g	-
Mercury	0.1 ug/g	-	<0.1	-	<0.1	0.27 ug/g	-
Molybdenum	1 ug/g	<1.0	<1.0	-	<1.0	6.9 ug/g	-
Nickel	5 ug/g	8.1	9.5	-	<5.0	100 ug/g	-
Selenium	1 ug/g	<1.0	<1.0	-	<1.0	2.4 ug/g	-
Silver	0.3 ug/g	<0.3	<0.3	-	<0.3	20 ug/g	-
Thallium	1 ug/g	<1.0	<1.0	-	<1.0	1 ug/g	-
Uranium	1 ug/g	<1.0	<1.0	-	<1.0	23 ug/g	-
Vanadium	10 ug/g	18.3	29.2	-	12.3	86 ug/g	-
Zinc	20 ug/g	26.7	106	-	<20.0	340 ug/g	-

Volatiles

Benzene	0.02 ug/g	<0.02	-	-	-	0.21 ug/g	-
Ethylbenzene	0.05 ug/g	<0.05	-	-	-	1.1 ug/g	-
Toluene	0.05 ug/g	<0.05	-	-	-	2.3 ug/g	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH303-3	BH304-1	BH304-2	BH305-1	Criteria:
Sample Date:	24-Oct-22 14:55	24-Oct-22 14:30	24-Oct-22 14:35	24-Oct-22 14:10	Reg 153/04 -T2
Sample ID:	2244199-07	2244199-08	2244199-09	2244199-10	Res/Park, coarse
Matrix:	Soil	Soil	Soil	Soil	-
MDL/Units					

Volatiles

m,p-Xylenes	0.05 ug/g	<0.05	-	-	-	-
o-Xylene	0.05 ug/g	<0.05	-	-	-	-
Xylenes, total	0.05 ug/g	<0.05	-	-	-	3.1 ug/g
Toluene-d8	Surrogate	96.9%	-	-	-	-

Hydrocarbons

F1 PHCs (C6-C10)	7 ug/g	<7	-	-	-	55 ug/g	-
F2 PHCs (C10-C16)	4 ug/g	<4	-	-	-	98 ug/g	-
F3 PHCs (C16-C34)	8 ug/g	<8	-	-	-	300 ug/g	-
F4 PHCs (C34-C50)	6 ug/g	<6	-	-	-	2800 ug/g	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH305-2	BH306-1	BH307-1A	BH307-1B	Criteria:
Sample Date:	24-Oct-22 14:15	24-Oct-22 14:00	24-Oct-22 12:40	24-Oct-22 12:45	Reg 153/04 -T2 Res/Park, coarse -
Sample ID:	2244199-11	2244199-12	2244199-14	2244199-15	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	81.3	79.7	82.9	85.2	-	-
----------	--------------	------	------	------	------	---	---

Metals

		BH305-2	BH306-1	BH307-1A	BH307-1B	Criteria	
Antimony	1 ug/g	<1.0	<1.0	<1.0	<1.0	7.5 ug/g	-
Arsenic	1 ug/g	<1.0	6.1	5.1	3.6	18 ug/g	-
Barium	1 ug/g	198	155	205	168	390 ug/g	-
Beryllium	0.5 ug/g	0.7	0.5	<0.5	0.6	4 ug/g	-
Boron	5 ug/g	8.5	<5.0	<5.0	6.5	120 ug/g	-
Cadmium	0.5 ug/g	<0.5	<0.5	0.6	<0.5	1.2 ug/g	-
Chromium	5 ug/g	28.5	24.5	28.1	29.6	160 ug/g	-
Cobalt	1 ug/g	9.3	8.0	7.4	8.6	22 ug/g	-
Copper	5 ug/g	26.0	20.1	77.2	23.8	140 ug/g	-
Lead	1 ug/g	220	104	1110	577	120 ug/g	-
Mercury	0.1 ug/g	-	<0.1	<0.1	<0.1	0.27 ug/g	-
Molybdenum	1 ug/g	<1.0	<1.0	<1.0	<1.0	6.9 ug/g	-
Nickel	5 ug/g	19.5	13.7	12.8	14.8	100 ug/g	-
Selenium	1 ug/g	<1.0	<1.0	<1.0	<1.0	2.4 ug/g	-
Silver	0.3 ug/g	<0.3	<0.3	<0.3	<0.3	20 ug/g	-
Thallium	1 ug/g	<1.0	<1.0	<1.0	<1.0	1 ug/g	-
Uranium	1 ug/g	<1.0	<1.0	<1.0	<1.0	23 ug/g	-
Vanadium	10 ug/g	38.4	34.0	31.7	39.2	86 ug/g	-
Zinc	20 ug/g	99.0	90.0	237	87.9	340 ug/g	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH308-1	BH308-2	BH311-1	BH311-2	Criteria:
Sample Date:	24-Oct-22 11:05	24-Oct-22 11:10	24-Oct-22 11:35	24-Oct-22 11:40	Reg 153/04 -T2
Sample ID:	2244199-16	2244199-17	2244199-22	2244199-23	Res/Park, coarse
Matrix:	Soil	Soil	Soil	Soil	-
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	95.8	81.6	83.1	86.1	-	-
----------	--------------	------	------	------	------	---	---

Metals

Antimony	1 ug/g	-	<1.0	-	-	7.5 ug/g	-
Arsenic	1 ug/g	-	6.0	-	-	18 ug/g	-
Barium	1 ug/g	-	437	-	-	390 ug/g	-
Beryllium	0.5 ug/g	-	0.6	-	-	4 ug/g	-
Boron	5 ug/g	-	10.7	-	-	120 ug/g	-
Boron, available	0.5 ug/g	-	<0.5	-	-	1.5 ug/g	-
Cadmium	0.5 ug/g	-	<0.5	-	-	1.2 ug/g	-
Chromium	5 ug/g	-	26.2	-	-	160 ug/g	-
Chromium (VI)	0.2 ug/g	-	<0.2	-	-	8 ug/g	-
Cobalt	1 ug/g	-	9.0	-	-	22 ug/g	-
Copper	5 ug/g	-	54.6	-	-	140 ug/g	-
Lead	1 ug/g	86	368	647	47	120 ug/g	-
Mercury	0.1 ug/g	-	0.1 [2]	-	-	0.27 ug/g	-
Molybdenum	1 ug/g	-	<1.0	-	-	6.9 ug/g	-
Nickel	5 ug/g	-	17.2	-	-	100 ug/g	-
Selenium	1 ug/g	-	<1.0	-	-	2.4 ug/g	-
Silver	0.3 ug/g	-	<0.3	-	-	20 ug/g	-
Thallium	1 ug/g	-	<1.0	-	-	1 ug/g	-
Uranium	1 ug/g	-	<1.0	-	-	23 ug/g	-
Vanadium	10 ug/g	-	38.0	-	-	86 ug/g	-
Zinc	20 ug/g	-	247	-	-	340 ug/g	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH312-1	BH313-1	BH313-2	BH314-1	Criteria:
Sample Date:	24-Oct-22 11:45	24-Oct-22 11:55	24-Oct-22 12:00	24-Oct-22 12:05	Reg 153/04 -T2 Res/Park, coarse -
Sample ID:	2244199-24	2244199-26	2244199-27	2244199-28	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	87.0	86.8	84.6	98.7	-	-
----------	--------------	------	------	------	------	---	---

Metals

Antimony	1 ug/g	<1.0	<1.0	-	<1.0	7.5 ug/g	-
Arsenic	1 ug/g	2.3	4.3	-	3.6	18 ug/g	-
Barium	1 ug/g	144	209	-	201	390 ug/g	-
Beryllium	0.5 ug/g	0.6	<0.5	-	0.7	4 ug/g	-
Boron	5 ug/g	<5.0	8.1	-	6.9	120 ug/g	-
Cadmium	0.5 ug/g	<0.5	1.4	0.5	<0.5	1.2 ug/g	-
Chromium	5 ug/g	25.7	26.6	-	32.8	160 ug/g	-
Cobalt	1 ug/g	8.3	8.1	-	10.3	22 ug/g	-
Copper	5 ug/g	12.8	46.2	-	22.8	140 ug/g	-
Lead	1 ug/g	54.0	325	150	173	120 ug/g	-
Mercury	0.1 ug/g	<0.1	0.4	0.5	<0.1	0.27 ug/g	-
Molybdenum	1 ug/g	<1.0	<1.0	-	<1.0	6.9 ug/g	-
Nickel	5 ug/g	11.5	14.7	-	18.9	100 ug/g	-
Selenium	1 ug/g	<1.0	<1.0	-	<1.0	2.4 ug/g	-
Silver	0.3 ug/g	<0.3	<0.3	-	<0.3	20 ug/g	-
Thallium	1 ug/g	<1.0	<1.0	-	<1.0	1 ug/g	-
Uranium	1 ug/g	<1.0	<1.0	-	<1.0	23 ug/g	-
Vanadium	10 ug/g	35.1	34.0	-	44.6	86 ug/g	-
Zinc	20 ug/g	67.7	203	-	103	340 ug/g	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH314-2	BH315-1	BH316-1	BH317-1	Criteria:
Sample Date:	24-Oct-22 12:10	24-Oct-22 13:15	24-Oct-22 13:25	24-Oct-22 13:35	Reg 153/04 -T2 Res/Park, coarse
Sample ID:	2244199-29	2244199-30	2244199-32	2244199-34	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	85.0	87.3	91.0	81.6	-	-
----------	--------------	------	------	------	------	---	---

General Inorganics

SAR	0.01 N/A	-	-	0.10	-	5 N/A	-
Conductivity	5 uS/cm	-	-	78	-	0.7 mS/cm	-

Metals

Antimony	1 ug/g	-	<1.0	<1.0	<1.0	7.5 ug/g	-
Arsenic	1 ug/g	-	2.8	<1.0	4.1	18 ug/g	-
Barium	1 ug/g	-	99.1	19.6	146	390 ug/g	-
Beryllium	0.5 ug/g	-	<0.5	<0.5	<0.5	4 ug/g	-
Boron, available	0.5 ug/g	-	-	-	0.9	1.5 ug/g	-
Boron	5 ug/g	-	<5.0	<5.0	8.0	120 ug/g	-
Cadmium	0.5 ug/g	-	<0.5	<0.5	0.8	1.2 ug/g	-
Chromium (VI)	0.2 ug/g	-	-	-	<0.2	8 ug/g	-
Chromium	5 ug/g	-	21.7	7.3	17.5	160 ug/g	-
Cobalt	1 ug/g	-	7.5	2.3	6.5	22 ug/g	-
Copper	5 ug/g	-	15.3	<5.0	36.9	140 ug/g	-
Lead	1 ug/g	58	31.8	10.2	347	120 ug/g	-
Mercury	0.1 ug/g	-	<0.1	<0.1 [1]	0.2 [2]	0.27 ug/g	-
Molybdenum	1 ug/g	-	<1.0	<1.0	<1.0	6.9 ug/g	-
Nickel	5 ug/g	-	13.9	<5.0	15.4	100 ug/g	-
Selenium	1 ug/g	-	<1.0	<1.0	<1.0	2.4 ug/g	-
Silver	0.3 ug/g	-	<0.3	<0.3	<0.3	20 ug/g	-
Thallium	1 ug/g	-	<1.0	<1.0	<1.0	1 ug/g	-
Uranium	1 ug/g	-	<1.0	<1.0	<1.0	23 ug/g	-
Vanadium	10 ug/g	-	31.9	19.2	23.6	86 ug/g	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH314-2	BH315-1	BH316-1	BH317-1	Criteria:
Sample Date:	24-Oct-22 12:10	24-Oct-22 13:15	24-Oct-22 13:25	24-Oct-22 13:35	Reg 153/04 -T2
Sample ID:	2244199-29	2244199-30	2244199-32	2244199-34	Res/Park, coarse
Matrix:	Soil	Soil	Soil	Soil	-
MDL/Units					

Metals

Zinc	20 ug/g	-	53.4	<20.0	150	340 ug/g	-
------	---------	---	------	-------	-----	----------	---

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH317-2	BH318-1	BH318-2	BH319-1	Criteria:
Sample Date:	24-Oct-22 13:40	24-Oct-22 13:45	24-Oct-22 13:50	24-Oct-22 10:55	Reg 153/04 -T2 Res/Park, coarse -
Sample ID:	2244199-35	2244199-36	2244199-37	2244199-38	
Matrix:	Soil	Soil	Soil	Soil	
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	81.1	82.1	84.5	83.5	-	-
----------	--------------	------	------	------	------	---	---

Metals

Antimony	1 ug/g	-	<1.0	<1.0	<1.0	7.5 ug/g	-
Arsenic	1 ug/g	-	4.0	<1.0	<1.0	18 ug/g	-
Barium	1 ug/g	-	347	229	172	390 ug/g	-
Beryllium	0.5 ug/g	-	0.5	0.9	0.8	4 ug/g	-
Boron, available	0.5 ug/g	-	0.9	-	-	1.5 ug/g	-
Boron	5 ug/g	-	19.0	10.4	8.5	120 ug/g	-
Cadmium	0.5 ug/g	-	1.3	<0.5	<0.5	1.2 ug/g	-
Chromium (VI)	0.2 ug/g	-	<0.2	-	-	8 ug/g	-
Chromium	5 ug/g	-	36.5	38.4	31.6	160 ug/g	-
Cobalt	1 ug/g	-	8.5	11.2	9.5	22 ug/g	-
Copper	5 ug/g	-	43.5	25.3	20.1	140 ug/g	-
Lead	1 ug/g	92	886	101	63.6	120 ug/g	-
Mercury	0.1 ug/g	0.2 [1]	<0.1 [2]	0.1 [1]	-	0.27 ug/g	-
Molybdenum	1 ug/g	-	<1.0	<1.0	<1.0	6.9 ug/g	-
Nickel	5 ug/g	-	18.6	23.6	19.7	100 ug/g	-
Selenium	1 ug/g	-	<1.0	<1.0	<1.0	2.4 ug/g	-
Silver	0.3 ug/g	-	<0.3	<0.3	<0.3	20 ug/g	-
Thallium	1 ug/g	-	<1.0	<1.0	<1.0	1 ug/g	-
Uranium	1 ug/g	-	<1.0	<1.0	<1.0	23 ug/g	-
Vanadium	10 ug/g	-	37.7	49.6	39.0	86 ug/g	-
Zinc	20 ug/g	-	401	131	79.1	340 ug/g	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH319-2	BH2000	BH307-2	Blank 99	Criteria:
Sample Date:	24-Oct-22 11:00	24-Oct-22 14:20	24-Oct-22 12:50	24-Oct-22 00:00	Reg 153/04 -T2
Sample ID:	2244199-39	2244199-40	2244199-42	2244199-43	Res/Park, coarse
Matrix:	Soil	Soil	Soil	Soil	-
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	81.8	86.9	91.2	-	-
----------	--------------	------	------	------	---	---

Metals

Antimony	1 ug/g	-	<1.0	-	-	7.5 ug/g	-
Arsenic	1 ug/g	-	<1.0	-	-	18 ug/g	-
Barium	1 ug/g	-	67.1	-	-	390 ug/g	-
Beryllium	0.5 ug/g	-	<0.5	-	-	4 ug/g	-
Boron	5 ug/g	-	9.4	-	-	120 ug/g	-
Cadmium	0.5 ug/g	-	1.6	-	-	1.2 ug/g	-
Chromium	5 ug/g	-	13.4	-	-	160 ug/g	-
Cobalt	1 ug/g	-	4.0	-	-	22 ug/g	-
Copper	5 ug/g	-	11.2	-	-	140 ug/g	-
Lead	1 ug/g	55	26.8	21	-	120 ug/g	-
Molybdenum	1 ug/g	-	<1.0	-	-	6.9 ug/g	-
Nickel	5 ug/g	-	8.9	-	-	100 ug/g	-
Selenium	1 ug/g	-	<1.0	-	-	2.4 ug/g	-
Silver	0.3 ug/g	-	<0.3	-	-	20 ug/g	-
Thallium	1 ug/g	-	<1.0	-	-	1 ug/g	-
Uranium	1 ug/g	-	<1.0	-	-	23 ug/g	-
Vanadium	10 ug/g	-	20.8	-	-	86 ug/g	-
Zinc	20 ug/g	-	51.3	-	-	340 ug/g	-

Volatiles

Benzene	0.02 ug/g	-	<0.02	-	<0.02	0.21 ug/g	-
Ethylbenzene	0.05 ug/g	-	<0.05	-	<0.05	1.1 ug/g	-
Toluene	0.05 ug/g	-	<0.05	-	<0.05	2.3 ug/g	-
m,p-Xylenes	0.05 ug/g	-	<0.05	-	<0.05	-	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Client ID:	BH319-2	BH2000	BH307-2	Blank 99	Criteria:
Sample Date:	24-Oct-22 11:00	24-Oct-22 14:20	24-Oct-22 12:50	24-Oct-22 00:00	Reg 153/04 -T2
Sample ID:	2244199-39	2244199-40	2244199-42	2244199-43	Res/Park, coarse
Matrix:	Soil	Soil	Soil	Soil	-
MDL/Units					

Volatiles

o-Xylene	0.05 ug/g	-	<0.05	-	<0.05	-	-
Xylenes, total	0.05 ug/g	-	<0.05	-	<0.05	3.1 ug/g	-
Toluene-d8	Surrogate	-	96.3%	-	96.0%	-	-

Hydrocarbons

F1 PHCs (C6-C10)	7 ug/g	-	<7	-	<7	55 ug/g	-
F2 PHCs (C10-C16)	4 ug/g	-	<4	-	-	98 ug/g	-
F3 PHCs (C16-C34)	8 ug/g	-	210	-	-	300 ug/g	-
F4 PHCs (C34-C50)	6 ug/g	-	173	-	-	2800 ug/g	-

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics								
SAR	ND	0.01	N/A					
Conductivity	ND	5	uS/cm					
Hydrocarbons								
F1 PHCs (C6-C10)	ND	7	ug/g					
F2 PHCs (C10-C16)	ND	4	ug/g					
F3 PHCs (C16-C34)	ND	8	ug/g					
F4 PHCs (C34-C50)	ND	6	ug/g					
Metals								
Antimony	ND	1.0	ug/g					
Arsenic	ND	1.0	ug/g					
Barium	ND	1.0	ug/g					
Beryllium	ND	0.5	ug/g					
Boron, available	ND	0.5	ug/g					
Boron	ND	5.0	ug/g					
Cadmium	ND	0.5	ug/g					
Cadmium	ND	0.5	ug/g					
Chromium (VI)	ND	0.2	ug/g					
Chromium	ND	5.0	ug/g					
Cobalt	ND	1.0	ug/g					
Copper	ND	5.0	ug/g					
Lead	ND	1	ug/g					
Lead	ND	1.0	ug/g					
Mercury	ND	0.1	ug/g					
Molybdenum	ND	1.0	ug/g					
Nickel	ND	5.0	ug/g					
Selenium	ND	1.0	ug/g					
Silver	ND	0.3	ug/g					
Thallium	ND	1.0	ug/g					
Uranium	ND	1.0	ug/g					
Vanadium	ND	10.0	ug/g					
Zinc	ND	20.0	ug/g					

Volatiles

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Benzene	ND	0.02	ug/g					
Ethylbenzene	ND	0.05	ug/g					
Toluene	ND	0.05	ug/g					
m,p-Xylenes	ND	0.05	ug/g					
o-Xylene	ND	0.05	ug/g					
Xylenes, total	ND	0.05	ug/g					
Surrogate: Toluene-d8	7.92		ug/g	99.0	50-140			

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
SAR	0.10	0.01	N/A	0.10			0.0	30	
Conductivity	77.2	5	uS/cm	78.5			1.6	5	
pH	7.62	0.05	pH Units	7.64			0.3	10	
Hydrocarbons									
F1 PHCs (C6-C10)	ND	7	ug/g	ND			NC	40	
F2 PHCs (C10-C16)	ND	4	ug/g	ND			NC	30	
F3 PHCs (C16-C34)	ND	8	ug/g	ND			NC	30	
F4 PHCs (C34-C50)	ND	6	ug/g	ND			NC	30	
Metals									
Antimony	ND	1.0	ug/g	ND			NC	30	
Arsenic	8.5	1.0	ug/g	8.8			3.4	30	
Barium	19.3	1.0	ug/g	19.4			0.4	30	
Beryllium	ND	0.5	ug/g	ND			NC	30	
Boron, available	1.95	0.5	ug/g	ND			NC	35	
Boron	7.3	5.0	ug/g	ND			NC	30	
Cadmium	0.6	0.5	ug/g	0.5			16.8	30	
Cadmium	ND	0.5	ug/g	ND			NC	30	
Chromium (VI)	ND	0.2	ug/g	ND			NC	35	
Chromium	15.1	5.0	ug/g	16.0			6.1	30	
Cobalt	5.7	1.0	ug/g	6.2			9.2	30	
Copper	13.0	5.0	ug/g	14.0			7.3	30	
Lead	168	1	ug/g	150			11.5	30	
Lead	12.6	1.0	ug/g	12.8			2.1	30	
Mercury	ND	0.1	ug/g	ND			NC	30	
Molybdenum	1.7	1.0	ug/g	ND			NC	30	
Nickel	9.1	5.0	ug/g	9.3			2.1	30	
Selenium	1.3	1.0	ug/g	ND			NC	30	
Silver	ND	0.3	ug/g	ND			NC	30	
Thallium	ND	1.0	ug/g	ND			NC	30	
Uranium	ND	1.0	ug/g	ND			NC	30	

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Vanadium	34.5	10.0	ug/g	35.8			3.6	30	
Zinc	43.7	20.0	ug/g	47.4			8.2	30	
Physical Characteristics									
% Solids	91.9	0.1	% by Wt.	92.1			0.2	25	
Volatiles									
Benzene	ND	0.02	ug/g	ND			NC	50	
Ethylbenzene	ND	0.05	ug/g	ND			NC	50	
Toluene	ND	0.05	ug/g	ND			NC	50	
m,p-Xylenes	ND	0.05	ug/g	ND			NC	50	
o-Xylene	ND	0.05	ug/g	ND			NC	50	
Surrogate: Toluene-d8	6.10		ug/g		98.7	50-140			

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	70	7	ug/g	ND	98.2	80-120			
F2 PHCs (C10-C16)	116	4	ug/g	ND	120	60-140			
F3 PHCs (C16-C34)	239	8	ug/g	ND	110	60-140			
F4 PHCs (C34-C50)	169	6	ug/g	ND	108	60-140			
Metals									
Antimony	126	1.0	ug/g	ND	100	70-130			
Arsenic	151	1.0	ug/g	8.8	114	70-130			
Barium	162	1.0	ug/g	19.4	114	70-130			
Beryllium	130	0.5	ug/g	ND	104	70-130			
Boron, available	5.18	0.5	ug/g	ND	104	70-122			
Boron	131	5.0	ug/g	ND	105	70-130			
Cadmium	133	0.5	ug/g	0.5	106	70-130			
Cadmium	141	0.5	ug/g	ND	112	70-130			
Chromium (VI)	4.4	0.2	ug/g	ND	89.0	70-130			
Chromium	154	5.0	ug/g	16.0	111	70-130			
Cobalt	142	1.0	ug/g	6.2	108	70-130			
Copper	151	5.0	ug/g	14.0	110	70-130			
Lead	286	1	ug/g	150	109	70-130			
Lead	146	1.0	ug/g	12.8	107	70-130			
Mercury	1.51	0.1	ug/g	ND	100	70-130			
Molybdenum	141	1.0	ug/g	ND	113	70-130			
Nickel	150	5.0	ug/g	9.3	113	70-130			
Selenium	145	1.0	ug/g	ND	116	70-130			
Silver	119	0.3	ug/g	ND	95.2	70-130			
Thallium	135	1.0	ug/g	ND	108	70-130			
Uranium	144	1.0	ug/g	ND	115	70-130			
Vanadium	174	10.0	ug/g	35.8	111	70-130			
Zinc	185	20.0	ug/g	47.4	110	70-130			
Volatiles									
Benzene	3.49	0.02	ug/g	ND	87.4	60-130			

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Ethylbenzene	3.40	0.05	ug/g	ND	85.1	60-130			
Toluene	3.41	0.05	ug/g	ND	85.3	60-130			
m,p-Xylenes	6.78	0.05	ug/g	ND	84.6	60-130			
o-Xylene	3.69	0.05	ug/g	ND	92.2	60-130			
Surrogate: Toluene-d8	7.68		ug/g		96.0	50-140			

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Qualifier Notes:

Login Qualifiers :

Container and COC sample IDs don't match - Methanol vial labelled as BHC-2

Applies to Samples: BH303-2

Container and COC sample IDs don't match - Methanol vial labelled as BHC-3

Applies to Samples: BH303-3

Sample Qualifiers :

- 1: Holding time had been exceeded upon receipt of the sample at the laboratory or prior to the analysis being requested.
- 2: This analysis was conducted after the accepted holding time had been exceeded.

Sample Data Revisions:

None

Certificate of Analysis

Report Date: 19-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 25-Oct-2022

Client PO:

Project Description: CT3414.01

Work Order Revisions / Comments:

REVISION-01: This report includes an updated parameter list, as per client.

REVISION-02: This report includes an updated parameter list, as per client.

REVISION-03: This report includes an updated parameter list, as per client.

Other Report Notes:

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

NC: Not Calculated

Soil results are reported on a dry weight basis unless otherwise noted.

Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.
- When reported, data for F4G has been processed using a silica gel cleanup.

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.



Paracel Order Number (Lab Use Only) 2244199	Chain Of Custody (Lab Use Only) No 137549
--	--

Client Name: Terrapex Environmental Ltd.	Project Ref: CT3414.01	Page 1 of 5
Contact Name: Sara Sutherland.	Quote #: TPEX 2022	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular
Address: 90 Scavdale Rd. Toronto ON. M3B 2R7	PO #:	
Telephone: 416 529 9215	E-mail: s.sutherland@terrapex.com.	
Date Required: _____		

<input checked="" type="checkbox"/> REG 153/04 <input type="checkbox"/> REG 406/19	Other Regulation	Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)	Required Analysis
<input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Res/Park <input type="checkbox"/> Med/Fine <input checked="" type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input checked="" type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> Table _____ For RSC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> REG 558 <input type="checkbox"/> PWQO <input type="checkbox"/> CCME <input type="checkbox"/> MISA <input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm Mun: _____ <input type="checkbox"/> Other: _____		

Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken		PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	HOLA	pH
				Date	Time									
1 BH 301-1	S	/	1	Oct 24/22	15:10				X					X
2 BH 301-2	S	/	1		15:15							X		
3 BH 302-1	S	/	1		15:00				X					X
4 BH 302-2	S	/	1		15:05							X		
5 BH 303-1	S	/	1		14:45				X					X
6 BH 303-2	S	/	2		14:50	X								
7 BH 303-3	S	/	2		14:55	X								
8 BH 304-1	S	/	1		14:30			X	X					
9 BH 304-2	S	/	1		14:35							X		
10 BH 305-1	S	/	1		14:10			X	X					

Comments: **BH303-2 limited sample recovery (analyzed)** Method of Delivery: **RABBEX**

Relinquished By (Sign): <i>[Signature]</i>	Received By Driver/Depot: <i>[Signature]</i>	Received at Lab: C-114	Verified By: C-114
Relinquished By (Print): Seal Litmanowich	Date/Time: 25-OCT-22 13:24	Date/Time: Oct 26/22 13:34	Date/Time: Oct 26/22 14:14
Date/Time: 2022/10/25 10:00	Temperature: 4.7 °C	Temperature: 9.6 °C	pH Verified: <input type="checkbox"/> By: _____



Parcel Order Number (Lab Use Only) 2244199	Chain Of Custody (Lab Use Only) Nº 137550
---	--

Client Name: Terrapex Environmental Ltd.	Project Ref: CT3414.01	Page 2 of 5
Contact Name: Sara Sutherland.	Quote #: TPEX 2022	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular
Address: 90 Seaside Rd Toronto ON M3B 2R7	PO #:	
Telephone: 416-529-9215	E-mail: s.sutherland@terrapex.com	
Date Required: _____		

<input checked="" type="checkbox"/> REG 153/04 <input type="checkbox"/> REG 406/19	Other Regulation	Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)	Required Analysis																	
<input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Res/Park <input type="checkbox"/> Med/Fine <input checked="" type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input checked="" type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> Table _____ For RSC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> REG 558 <input type="checkbox"/> PWQO <input type="checkbox"/> CCME <input type="checkbox"/> MISA <input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm Mun: _____ <input type="checkbox"/> Other: _____	Matrix	Air Volume	# of Containers	Sample Taken		PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	HOLD						
Sample ID/Location Name					Date	Time														
1	BH 305-2	S	1	1	Oct 24/22	14:15								X						
2	BH 306-1	S	1	1		14:00				X	X									
3	BH 306-2	S	1	1		14:05								X						
4	BH 307+1A	S	1	1		12:40				X	X									
5	BH 307-1B	S	1	1		12:45				X	X									
6	BH 308-1	S	1	1		11:05								X						
7	BH 308-2	S	1	1		11:10								X						
8	BH 309-1	S	1	1		11:15								X						
9	BH 309-2	S	1	1		11:20								X						
10	BH 310-1	S	1	1		11:25								X						

Comments: _____ Method of Delivery: **RABBIT**

Relinquished By (Sign): <i>[Signature]</i>	Received By Driver/Depot: <i>[Signature]</i>	Received at Lab: <i>[Signature]</i>	Verified By: <i>[Signature]</i>
Relinquished By (Print): Tal C. Anagnostich	Date/Time: 25 Oct 22 13:24	Date/Time: Oct 26/22 15:54	Date/Time: Oct 26/22 14:14
Date/Time: 2022 10/25 10:00	Temperature: 4.7 °C	Temperature: 9.6 °C	pH Verified: <input type="checkbox"/> By: _____



Parcel Order Number (Lab Use Only) 2244199	Chain Of Custody (Lab Use Only) No 137552
---	--

Client Name: Terrapex Environmental Ltd.	Project Ref: CT3414.01	Page 3 of 5
Contact Name: Sara Sutherland	Quote #: TPEX 2022	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular
Address: 70 Scarsdale Rd. Toronto ON M3B 2R7	PO #:	
Telephone: 416 529-9245	E-mail: Ssutherland@terrapex.com	
Date Required: _____		

<input checked="" type="checkbox"/> REG 153/04 <input type="checkbox"/> REG 406/19 Other Regulation <input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Res/Park <input type="checkbox"/> Med/Fine <input type="checkbox"/> REG 558 <input type="checkbox"/> PWQO <input checked="" type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input checked="" type="checkbox"/> Coarse <input type="checkbox"/> CCME <input type="checkbox"/> MISA <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm <input type="checkbox"/> Table _____ For RSC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)	Required Analysis											
Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken		PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	Other	
				Date	Time									
1 BH 310-2	S	-	1	Oct 24/22	11:30									HOLD
2 BH 311-1	S	-	1		11:35									X
3 BH 311-2	S	-	1		11:40									X
4 BH 312-1	S	-	1		11:45					X	X			X
5 BH 312-2	S	-	1		11:50									X
6 BH 313-1	S	-	1		11:55					X	X			X
7 BH 313-2	S	-	1		12:30/12:00									X
8 BH 314-1	S	-	1		12:50/12:05					X	X			X
9 BH 314-2	S	-	1		12:50/12:10									X
10 BH 315-1	S	-	1		12:50/13:15					X	X			X

Comments: **BH 314, BH 315, BH 316, BH 317, BH 318, BH 319**
 (limited large jars - submitting 1 120ml instead) **Analyze as is**

Relinquished By (Signature): <i>[Signature]</i>	Received By Driver/Depot: <i>[Signature]</i>	Received at Lab: C-PLU	Method of Delivery: RABBEX
Relinquished By (Print): Tal Litmanovitch	Date/Time: 25-OCT-22 13:24	Date/Time: Oct 26/22 15:34	Verified By: C-PLU
Date/Time: 2022/10/25 10:00	Temperature: 4.7 °C	Temperature: 9.6 °C	Date/Time: Oct 26/22 14:14
Chain of Custody (Env).xlsx		pH Verified: <input type="checkbox"/> By: _____	



Parcel Order Number (Lab Use Only)	Chain Of Custody (Lab Use Only)
2244199	Nº 137551

Client Name: <u>Terrapex Environmental Ltd.</u>	Project Ref: <u>CT3414.01</u>	Page <u>4</u> of <u>5</u>
Contact Name: <u>Sara Sutherland</u>	Quote #: <u>TPEx 2022</u>	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular
Address: <u>90 Scarsdale Rd, Toronto ON M3B 2R7</u>	PO #: _____	
Telephone: <u>416 529 9215</u>	E-mail: <u>s.sutherland@terrapex.com</u>	
Date Required: _____		

<input checked="" type="checkbox"/> REG 153/04 <input type="checkbox"/> REG 406/19	Other Regulation	Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)	Required Analysis										
<input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Res/Park <input type="checkbox"/> Med/Fine	<input type="checkbox"/> REG 558 <input type="checkbox"/> PWQO	Matrix	Air Volume	# of Containers	Sample Taken	PHCs F1-F4+BTEX	VOCS	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	HGLD
<input checked="" type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input checked="" type="checkbox"/> Coarse	<input type="checkbox"/> CCME <input type="checkbox"/> MISA												
<input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other	<input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm	Mun: _____		Date		Time							
<input type="checkbox"/> Table _____	<input type="checkbox"/> Other: _____	For RSC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No											

Sample ID/Location Name	Matrix	Air Volume	# of Containers	Date	Time	PHCs F1-F4+BTEX	VOCS	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	HGLD
1 BH 315-2	S	-	1	Oct 24/22	13:20								X
2 BH 316-1	S	-	1		13:25								X
3 BH 316-2	S	-	1		13:30								X
4 BH 317-1	S	-	1		13:35								X
5 BH 317-2	S	-	1		13:40								X
6 BH 318-1	S	-	1		13:45								X
7 BH 318-2	S	-	1		13:50								X
8 BH 319-1	S	-	1		10:55								X
9 BH 319-2	S	-	1		11:00								X
10 BH2000	S	-	2		14:50	X							

Comments: BH2000 25/24 * BH 2000 and BH 3000 limited sample recovery

Method of Delivery: RABBIT

Relinquished By (Sign): <u>[Signature]</u>	Received By Driver/Depot: <u>[Signature]</u>	Received at Lab: <u>C-114</u>	Verified By: <u>C-114</u>
Relinquished By (Print): <u>Tal Litmanovitch</u>	Date/Time: <u>25 OCT 22 13:24</u>	Date/Time: <u>Oct 26/22 15:34</u>	Date/Time: <u>Oct 26/22 14:14</u>
Date/Time: <u>2022/10/25 10:00</u>	Temperature: <u>4.7</u> °C	Temperature: <u>9.6</u> °C	pH Verified: <input type="checkbox"/> By: _____



2244199

No 137436

Client Name: Terrapac Environmental Ltd.	Project Ref: CB414.01	Page 5 of 5
Contact Name: Sam Sutherland	Quote #: TPEX 2022	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular Date Required: _____
Address: 90 Scarisdate Rd. Toronto ON M8S 2R7	PO #:	
Telephone:	E-mail: s.sutherland@terrapac.com	

<input checked="" type="checkbox"/> REG 153/04 <input type="checkbox"/> REG 406/19 <input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Res/Park <input type="checkbox"/> Med/Fine <input checked="" type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input checked="" type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> Table _____ For RSC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other Regulation <input type="checkbox"/> REG 558 <input type="checkbox"/> PW00 <input type="checkbox"/> CCME <input type="checkbox"/> MISA <input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm Mun: _____ <input type="checkbox"/> Other: _____	Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)	Required Analysis											
Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken		PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	HOLD	PH
				Date	Time									
1 BK3000	S	1	1	Oct 24/22	11:30									X
2 BK3000 307-Q.	S	-	1	Oct 24/22	12:50								X	
3 Blank 99			1			X								
4														
5														
6														
7														
8														
9														
10														

Comments:		Method of Delivery: RABBIT	
Relinquished By (Sign): <i>Jad Litmanovitch</i>	Received By Driver/Depot: <i>[Signature]</i>	Received at Lab: <i>C-PLU</i>	Verified By: <i>C-PLU</i>
Relinquished By (Print): <i>Jad Litmanovitch</i>	Date/Time: 25-OCT-22 13:24	Date/Time: Oct 26/22 15:39	Date/Time: Oct 26/22 14:14
Date/Time: 2022/10/25 10:00	Temperature: 4.7 °C	Temperature: 9.6 °C	pH Verified: <input type="checkbox"/> By: _____



Your Project #: CT3414.00
 Site Location: 640 LIVERPOOL
 Your C.O.C. #: 850856-49-01

Attention: David Crawford

Terrapex Environmental Ltd
 90 Scarsdale Rd
 Toronto, ON
 CANADA M3B 2R7

Report Date: 2022/03/10
 Report #: R7037428
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C256889

Received: 2022/03/03, 15:10

Sample Matrix: Soil
 # Samples Received: 2

Analyses	Quantity	Date		Laboratory Method	Analytical Method
		Extracted	Analyzed		
Methylnaphthalene Sum	2	N/A	2022/03/09	CAM SOP-00301	EPA 8270D m
Hot Water Extractable Boron	2	2022/03/07	2022/03/07	CAM SOP-00408	R153 Ana. Prot. 2011
1,3-Dichloropropene Sum	2	N/A	2022/03/07		EPA 8260C m
Free (WAD) Cyanide	2	2022/03/07	2022/03/07	CAM SOP-00457	OMOE E3015 m
Conductivity	2	2022/03/08	2022/03/08	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1)	2	2022/03/04	2022/03/08	CAM SOP-00436	EPA 3060/7199 m
Petroleum Hydrocarbons F2-F4 in Soil (2)	2	2022/03/07	2022/03/07	CAM SOP-00316	CCME CWS m
Acid Extractable Metals by ICPMS	2	2022/03/07	2022/03/08	CAM SOP-00447	EPA 6020B m
Moisture	2	N/A	2022/03/04	CAM SOP-00445	Carter 2nd ed 51.2 m
PAH Compounds in Soil by GC/MS (SIM)	2	2022/03/06	2022/03/08	CAM SOP-00318	EPA 8270D m
pH CaCl2 EXTRACT	2	2022/03/07	2022/03/07	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR)	2	N/A	2022/03/09	CAM SOP-00102	EPA 6010C
Volatile Organic Compounds and F1 PHCs	2	N/A	2022/03/05	CAM SOP-00230	EPA 8260C m

Remarks:

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

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

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

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

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



Your Project #: CT3414.00
Site Location: 640 LIVERPOOL
Your C.O.C. #: 850856-49-01

Attention: David Crawford

Terrapex Environmental Ltd
90 Scarsdale Rd
Toronto, ON
CANADA M3B 2R7

Report Date: 2022/03/10
Report #: R7037428
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C256889

Received: 2022/03/03, 15:10

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

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

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

(1) Soils are reported on a dry weight basis unless otherwise specified.

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

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Kudrat Bajwa, B.Sc., Project Manager
Email: Kudrat.Bajwa@bureauveritas.com
Phone# (905)817-5755

=====

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

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



BUREAU
VERITAS

Bureau Veritas Job #: C256889
Report Date: 2022/03/10

Terrapex Environmental Ltd
Client Project #: CT3414.00
Site Location: 640 LIVERPOOL
Sampler Initials: AD

O.REG 153 METALS & INORGANICS PKG (SOIL)

Bureau Veritas ID		RZQ568	RZQ569		
Sampling Date		2022/03/02 12:35	2022/03/02 12:35		
COC Number		850856-49-01	850856-49-01		
	UNITS	MW 113-5	MW 1000	RDL	QC Batch
Calculated Parameters					
Sodium Adsorption Ratio	N/A	1.2	1.2		7863471
Inorganics					
Conductivity	mS/cm	0.24	0.23	0.002	7869520
Available (CaCl2) pH	pH	7.89	7.75		7867580
WAD Cyanide (Free)	ug/g	<0.01	<0.01	0.01	7867392
Chromium (VI)	ug/g	<0.18	<0.18	0.18	7865407
Metals					
Hot Water Ext. Boron (B)	ug/g	0.14	0.12	0.050	7867485
Acid Extractable Antimony (Sb)	ug/g	<0.20	<0.20	0.20	7867631
Acid Extractable Arsenic (As)	ug/g	2.8	2.7	1.0	7867631
Acid Extractable Barium (Ba)	ug/g	29	27	0.50	7867631
Acid Extractable Beryllium (Be)	ug/g	0.30	0.31	0.20	7867631
Acid Extractable Boron (B)	ug/g	5.7	5.2	5.0	7867631
Acid Extractable Cadmium (Cd)	ug/g	<0.10	<0.10	0.10	7867631
Acid Extractable Chromium (Cr)	ug/g	19	17	1.0	7867631
Acid Extractable Cobalt (Co)	ug/g	5.9	5.7	0.10	7867631
Acid Extractable Copper (Cu)	ug/g	15	15	0.50	7867631
Acid Extractable Lead (Pb)	ug/g	11	10	1.0	7867631
Acid Extractable Molybdenum (Mo)	ug/g	0.60	0.57	0.50	7867631
Acid Extractable Nickel (Ni)	ug/g	14	13	0.50	7867631
Acid Extractable Selenium (Se)	ug/g	<0.50	<0.50	0.50	7867631
Acid Extractable Silver (Ag)	ug/g	<0.20	<0.20	0.20	7867631
Acid Extractable Thallium (Tl)	ug/g	0.11	0.10	0.050	7867631
Acid Extractable Uranium (U)	ug/g	0.98	0.98	0.050	7867631
Acid Extractable Vanadium (V)	ug/g	18	17	5.0	7867631
Acid Extractable Zinc (Zn)	ug/g	29	30	5.0	7867631
Acid Extractable Mercury (Hg)	ug/g	<0.050	<0.050	0.050	7867631
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					



O.REG 153 PAHS (SOIL)

Bureau Veritas ID		RZQ568		RZQ569		
Sampling Date		2022/03/02 12:35		2022/03/02 12:35		
COC Number		850856-49-01		850856-49-01		
	UNITS	MW 113-5	RDL	MW 1000	RDL	QC Batch
Calculated Parameters						
Methylnaphthalene, 2-(1-)	ug/g	<0.0071	0.0071	<0.010	0.010	7863465
Polyaromatic Hydrocarbons						
Acenaphthene	ug/g	<0.0050	0.0050	<0.0050	0.0050	7867137
Acenaphthylene	ug/g	<0.0050	0.0050	<0.0050	0.0050	7867137
Anthracene	ug/g	<0.0050	0.0050	<0.0050	0.0050	7867137
Benzo(a)anthracene	ug/g	<0.0050	0.0050	<0.0050	0.0050	7867137
Benzo(a)pyrene	ug/g	<0.0050	0.0050	<0.0050	0.0050	7867137
Benzo(b/j)fluoranthene	ug/g	<0.0050	0.0050	<0.0050	0.0050	7867137
Benzo(g,h,i)perylene	ug/g	<0.0050	0.0050	<0.0050	0.0050	7867137
Benzo(k)fluoranthene	ug/g	<0.0050	0.0050	<0.0050	0.0050	7867137
Chrysene	ug/g	0.0092	0.0050	0.016	0.0050	7867137
Dibenzo(a,h)anthracene	ug/g	<0.0050	0.0050	<0.0050	0.0050	7867137
Fluoranthene	ug/g	<0.0050	0.0050	<0.0050	0.0050	7867137
Fluorene	ug/g	<0.0050	0.0050	<0.0050	0.0050	7867137
Indeno(1,2,3-cd)pyrene	ug/g	<0.0050	0.0050	<0.0050	0.0050	7867137
1-Methylnaphthalene	ug/g	<0.0050	0.0050	0.0073	0.0050	7867137
2-Methylnaphthalene	ug/g	<0.0050	0.0050	<0.0090 (1)	0.0090	7867137
Naphthalene	ug/g	<0.0050	0.0050	<0.0050	0.0050	7867137
Phenanthrene	ug/g	0.0085	0.0050	0.018	0.0050	7867137
Pyrene	ug/g	<0.0050	0.0050	0.0081	0.0050	7867137
Surrogate Recovery (%)						
D10-Anthracene	%	103		98		7867137
D14-Terphenyl (FS)	%	104		100		7867137
D8-Acenaphthylene	%	97		93		7867137
RDL = Reportable Detection Limit QC Batch = Quality Control Batch (1) Detection Limit was raised due to matrix interferences.						



BUREAU
VERITAS

Bureau Veritas Job #: C256889
Report Date: 2022/03/10

Terrapex Environmental Ltd
Client Project #: CT3414.00
Site Location: 640 LIVERPOOL
Sampler Initials: AD

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

Bureau Veritas ID		RZQ568	RZQ569		
Sampling Date		2022/03/02 12:35	2022/03/02 12:35		
COC Number		850856-49-01	850856-49-01		
	UNITS	MW 113-5	MW 1000	RDL	QC Batch
Inorganics					
Moisture	%	6.5	6.5	1.0	7864451
Calculated Parameters					
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	<0.050	0.050	7862921
Volatile Organics					
Acetone (2-Propanone)	ug/g	<0.49	<0.49	0.49	7864695
Benzene	ug/g	<0.0060	<0.0060	0.0060	7864695
Bromodichloromethane	ug/g	<0.040	<0.040	0.040	7864695
Bromoform	ug/g	<0.040	<0.040	0.040	7864695
Bromomethane	ug/g	<0.040	<0.040	0.040	7864695
Carbon Tetrachloride	ug/g	<0.040	<0.040	0.040	7864695
Chlorobenzene	ug/g	<0.040	<0.040	0.040	7864695
Chloroform	ug/g	<0.040	<0.040	0.040	7864695
Dibromochloromethane	ug/g	<0.040	<0.040	0.040	7864695
1,2-Dichlorobenzene	ug/g	<0.040	<0.040	0.040	7864695
1,3-Dichlorobenzene	ug/g	<0.040	<0.040	0.040	7864695
1,4-Dichlorobenzene	ug/g	<0.040	<0.040	0.040	7864695
Dichlorodifluoromethane (FREON 12)	ug/g	<0.040	<0.040	0.040	7864695
1,1-Dichloroethane	ug/g	<0.040	<0.040	0.040	7864695
1,2-Dichloroethane	ug/g	<0.049	<0.049	0.049	7864695
1,1-Dichloroethylene	ug/g	<0.040	<0.040	0.040	7864695
cis-1,2-Dichloroethylene	ug/g	<0.040	<0.040	0.040	7864695
trans-1,2-Dichloroethylene	ug/g	<0.040	<0.040	0.040	7864695
1,2-Dichloropropane	ug/g	<0.040	<0.040	0.040	7864695
cis-1,3-Dichloropropene	ug/g	<0.030	<0.030	0.030	7864695
trans-1,3-Dichloropropene	ug/g	<0.040	<0.040	0.040	7864695
Ethylbenzene	ug/g	<0.010	<0.010	0.010	7864695
Ethylene Dibromide	ug/g	<0.040	<0.040	0.040	7864695
Hexane	ug/g	<0.040	<0.040	0.040	7864695
Methylene Chloride(Dichloromethane)	ug/g	<0.049	<0.049	0.049	7864695
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.40	<0.40	0.40	7864695
Methyl Isobutyl Ketone	ug/g	<0.40	<0.40	0.40	7864695
Methyl t-butyl ether (MTBE)	ug/g	<0.040	<0.040	0.040	7864695
Styrene	ug/g	<0.040	<0.040	0.040	7864695
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					



BUREAU
VERITAS

Bureau Veritas Job #: C256889
Report Date: 2022/03/10

Terrapex Environmental Ltd
Client Project #: CT3414.00
Site Location: 640 LIVERPOOL
Sampler Initials: AD

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

Bureau Veritas ID		RZQ568	RZQ569		
Sampling Date		2022/03/02 12:35	2022/03/02 12:35		
COC Number		850856-49-01	850856-49-01		
	UNITS	MW 113-5	MW 1000	RDL	QC Batch
1,1,1,2-Tetrachloroethane	ug/g	<0.040	<0.040	0.040	7864695
1,1,2,2-Tetrachloroethane	ug/g	<0.040	<0.040	0.040	7864695
Tetrachloroethylene	ug/g	<0.040	<0.040	0.040	7864695
Toluene	ug/g	<0.020	<0.020	0.020	7864695
1,1,1-Trichloroethane	ug/g	<0.040	<0.040	0.040	7864695
1,1,2-Trichloroethane	ug/g	<0.040	<0.040	0.040	7864695
Trichloroethylene	ug/g	<0.010	<0.010	0.010	7864695
Trichlorofluoromethane (FREON 11)	ug/g	<0.040	<0.040	0.040	7864695
Vinyl Chloride	ug/g	<0.019	<0.019	0.019	7864695
p+m-Xylene	ug/g	<0.020	<0.020	0.020	7864695
o-Xylene	ug/g	<0.020	<0.020	0.020	7864695
Total Xylenes	ug/g	<0.020	<0.020	0.020	7864695
F1 (C6-C10)	ug/g	<10	<10	10	7864695
F1 (C6-C10) - BTEX	ug/g	<10	<10	10	7864695
F2-F4 Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	ug/g	29	31	10	7867435
F3 (C16-C34 Hydrocarbons)	ug/g	110	110	50	7867435
F4 (C34-C50 Hydrocarbons)	ug/g	<50	<50	50	7867435
Reached Baseline at C50	ug/g	Yes	Yes		7867435
Surrogate Recovery (%)					
o-Terphenyl	%	88	98		7867435
4-Bromofluorobenzene	%	85	87		7864695
D10-o-Xylene	%	80	81		7864695
D4-1,2-Dichloroethane	%	117	117		7864695
D8-Toluene	%	90	90		7864695
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					



BUREAU
VERITAS

Bureau Veritas Job #: C256889
Report Date: 2022/03/10

Terrapex Environmental Ltd
Client Project #: CT3414.00
Site Location: 640 LIVERPOOL
Sampler Initials: AD

TEST SUMMARY

Bureau Veritas ID: RZQ568
Sample ID: MW 113-5
Matrix: Soil

Collected: 2022/03/02
Shipped:
Received: 2022/03/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	7863465	N/A	2022/03/09	Automated Statchk
Hot Water Extractable Boron	ICP	7867485	2022/03/07	2022/03/07	Medhat Nasr
1,3-Dichloropropene Sum	CALC	7862921	N/A	2022/03/07	Automated Statchk
Free (WAD) Cyanide	TECH	7867392	2022/03/07	2022/03/07	Aditiben Patel
Conductivity	AT	7869520	2022/03/08	2022/03/08	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	7865407	2022/03/04	2022/03/08	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7867435	2022/03/07	2022/03/07	Jeevaraj Jeevaratnam
Acid Extractable Metals by ICPMS	ICP/MS	7867631	2022/03/07	2022/03/08	Prempal Bhatti
Moisture	BAL	7864451	N/A	2022/03/04	Min Yang
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	7867137	2022/03/06	2022/03/08	Mitesh Raj
pH CaCl2 EXTRACT	AT	7867580	2022/03/07	2022/03/07	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	7863471	N/A	2022/03/09	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7864695	N/A	2022/03/05	Jett Wu

Bureau Veritas ID: RZQ569
Sample ID: MW 1000
Matrix: Soil

Collected: 2022/03/02
Shipped:
Received: 2022/03/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	7863465	N/A	2022/03/09	Automated Statchk
Hot Water Extractable Boron	ICP	7867485	2022/03/07	2022/03/07	Medhat Nasr
1,3-Dichloropropene Sum	CALC	7862921	N/A	2022/03/07	Automated Statchk
Free (WAD) Cyanide	TECH	7867392	2022/03/07	2022/03/07	Aditiben Patel
Conductivity	AT	7869520	2022/03/08	2022/03/08	Kien Tran
Hexavalent Chromium in Soil by IC	IC/SPEC	7865407	2022/03/04	2022/03/08	Lusine Khachatryan
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7867435	2022/03/07	2022/03/07	Jeevaraj Jeevaratnam
Acid Extractable Metals by ICPMS	ICP/MS	7867631	2022/03/07	2022/03/08	Prempal Bhatti
Moisture	BAL	7864451	N/A	2022/03/04	Min Yang
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	7867137	2022/03/06	2022/03/08	Mitesh Raj
pH CaCl2 EXTRACT	AT	7867580	2022/03/07	2022/03/07	Taslima Aktar
Sodium Adsorption Ratio (SAR)	CALC/MET	7863471	N/A	2022/03/09	Automated Statchk
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7864695	N/A	2022/03/05	Jett Wu



BUREAU
VERITAS

Bureau Veritas Job #: C256889
Report Date: 2022/03/10

Terrapex Environmental Ltd
Client Project #: CT3414.00
Site Location: 640 LIVERPOOL
Sampler Initials: AD

GENERAL COMMENTS

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

Package 1	2.3°C
-----------	-------

Results relate only to the items tested.



BUREAU
VERITAS

Bureau Veritas Job #: C256889

Report Date: 2022/03/10

QUALITY ASSURANCE REPORT

Terrapex Environmental Ltd

Client Project #: CT3414.00

Site Location: 640 LIVERPOOL

Sampler Initials: AD

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7864695	4-Bromofluorobenzene	2022/03/04	111	60 - 140	96	60 - 140	83	%		
7864695	D10-o-Xylene	2022/03/04	106	60 - 130	92	60 - 130	83	%		
7864695	D4-1,2-Dichloroethane	2022/03/04	105	60 - 140	109	60 - 140	140	%		
7864695	D8-Toluene	2022/03/04	112	60 - 140	117	60 - 140	88	%		
7867137	D10-Anthracene	2022/03/08	96	50 - 130	107	50 - 130	111	%		
7867137	D14-Terphenyl (FS)	2022/03/08	99	50 - 130	109	50 - 130	109	%		
7867137	D8-Acenaphthylene	2022/03/08	88	50 - 130	99	50 - 130	94	%		
7867435	o-Terphenyl	2022/03/07	91	60 - 130	93	60 - 130	91	%		
7864451	Moisture	2022/03/04							1.1	20
7864695	1,1,1,2-Tetrachloroethane	2022/03/04	105	60 - 140	108	60 - 130	<0.040	ug/g	NC	50
7864695	1,1,1-Trichloroethane	2022/03/04	104	60 - 140	102	60 - 130	<0.040	ug/g	NC	50
7864695	1,1,2,2-Tetrachloroethane	2022/03/04	111	60 - 140	114	60 - 130	<0.040	ug/g	NC	50
7864695	1,1,2-Trichloroethane	2022/03/04	106	60 - 140	112	60 - 130	<0.040	ug/g	NC	50
7864695	1,1-Dichloroethane	2022/03/04	103	60 - 140	102	60 - 130	<0.040	ug/g	NC	50
7864695	1,1-Dichloroethylene	2022/03/04	98	60 - 140	94	60 - 130	<0.040	ug/g	NC	50
7864695	1,2-Dichlorobenzene	2022/03/04	93	60 - 140	94	60 - 130	<0.040	ug/g	NC	50
7864695	1,2-Dichloroethane	2022/03/04	95	60 - 140	97	60 - 130	<0.049	ug/g	NC	50
7864695	1,2-Dichloropropane	2022/03/04	104	60 - 140	103	60 - 130	<0.040	ug/g	NC	50
7864695	1,3-Dichlorobenzene	2022/03/04	93	60 - 140	81	60 - 130	<0.040	ug/g	NC	50
7864695	1,4-Dichlorobenzene	2022/03/04	105	60 - 140	97	60 - 130	<0.040	ug/g	NC	50
7864695	Acetone (2-Propanone)	2022/03/04	101	60 - 140	108	60 - 140	<0.49	ug/g	NC	50
7864695	Benzene	2022/03/04	97	60 - 140	95	60 - 130	<0.0060	ug/g	NC	50
7864695	Bromodichloromethane	2022/03/04	104	60 - 140	104	60 - 130	<0.040	ug/g	NC	50
7864695	Bromoform	2022/03/04	102	60 - 140	106	60 - 130	<0.040	ug/g	NC	50
7864695	Bromomethane	2022/03/04	110	60 - 140	108	60 - 140	<0.040	ug/g	NC	50
7864695	Carbon Tetrachloride	2022/03/04	102	60 - 140	100	60 - 130	<0.040	ug/g	NC	50
7864695	Chlorobenzene	2022/03/04	95	60 - 140	93	60 - 130	<0.040	ug/g	NC	50
7864695	Chloroform	2022/03/04	102	60 - 140	101	60 - 130	<0.040	ug/g	NC	50
7864695	cis-1,2-Dichloroethylene	2022/03/04	102	60 - 140	101	60 - 130	<0.040	ug/g	NC	50
7864695	cis-1,3-Dichloropropene	2022/03/04	89	60 - 140	87	60 - 130	<0.030	ug/g	NC	50
7864695	Dibromochloromethane	2022/03/04	99	60 - 140	104	60 - 130	<0.040	ug/g	NC	50



BUREAU
VERITAS

Bureau Veritas Job #: C256889

Report Date: 2022/03/10

QUALITY ASSURANCE REPORT(CONT'D)

Terrapex Environmental Ltd

Client Project #: CT3414.00

Site Location: 640 LIVERPOOL

Sampler Initials: AD

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7864695	Dichlorodifluoromethane (FREON 12)	2022/03/04	91	60 - 140	90	60 - 140	<0.040	ug/g	NC	50
7864695	Ethylbenzene	2022/03/04	85	60 - 140	81	60 - 130	<0.010	ug/g	NC	50
7864695	Ethylene Dibromide	2022/03/04	98	60 - 140	103	60 - 130	<0.040	ug/g	NC	50
7864695	F1 (C6-C10) - BTEX	2022/03/04					<10	ug/g	1.8	30
7864695	F1 (C6-C10)	2022/03/04	62	60 - 140	91	80 - 120	<10	ug/g	1.8	30
7864695	Hexane	2022/03/04	118	60 - 140	113	60 - 130	<0.040	ug/g	NC	50
7864695	Methyl Ethyl Ketone (2-Butanone)	2022/03/04	105	60 - 140	109	60 - 140	<0.40	ug/g	NC	50
7864695	Methyl Isobutyl Ketone	2022/03/04	104	60 - 140	107	60 - 130	<0.40	ug/g	NC	50
7864695	Methyl t-butyl ether (MTBE)	2022/03/04	88	60 - 140	87	60 - 130	<0.040	ug/g	NC	50
7864695	Methylene Chloride(Dichloromethane)	2022/03/04	123	60 - 140	124	60 - 130	<0.049	ug/g	NC	50
7864695	o-Xylene	2022/03/04	101	60 - 140	89	60 - 130	<0.020	ug/g	NC	50
7864695	p+m-Xylene	2022/03/04	91	60 - 140	84	60 - 130	<0.020	ug/g	NC	50
7864695	Styrene	2022/03/04	113	60 - 140	103	60 - 130	<0.040	ug/g	NC	50
7864695	Tetrachloroethylene	2022/03/04	87	60 - 140	89	60 - 130	<0.040	ug/g	NC	50
7864695	Toluene	2022/03/04	92	60 - 140	93	60 - 130	<0.020	ug/g	NC	50
7864695	Total Xylenes	2022/03/04					<0.020	ug/g	NC	50
7864695	trans-1,2-Dichloroethylene	2022/03/04	98	60 - 140	97	60 - 130	<0.040	ug/g	NC	50
7864695	trans-1,3-Dichloropropene	2022/03/04	100	60 - 140	101	60 - 130	<0.040	ug/g	NC	50
7864695	Trichloroethylene	2022/03/04	97	60 - 140	95	60 - 130	<0.010	ug/g	NC	50
7864695	Trichlorofluoromethane (FREON 11)	2022/03/04	106	60 - 140	104	60 - 130	<0.040	ug/g	NC	50
7864695	Vinyl Chloride	2022/03/04	112	60 - 140	109	60 - 130	<0.019	ug/g	NC	50
7865407	Chromium (VI)	2022/03/08	74	70 - 130	91	80 - 120	<0.18	ug/g	NC	35
7867137	1-Methylnaphthalene	2022/03/08	90	50 - 130	99	50 - 130	<0.0050	ug/g	NC	40
7867137	2-Methylnaphthalene	2022/03/08	87	50 - 130	96	50 - 130	<0.0050	ug/g	NC	40
7867137	Acenaphthene	2022/03/08	85	50 - 130	90	50 - 130	<0.0050	ug/g	NC	40
7867137	Acenaphthylene	2022/03/08	79	50 - 130	85	50 - 130	<0.0050	ug/g	NC	40
7867137	Anthracene	2022/03/08	88	50 - 130	93	50 - 130	<0.0050	ug/g	NC	40
7867137	Benzo(a)anthracene	2022/03/08	91	50 - 130	93	50 - 130	<0.0050	ug/g	11	40
7867137	Benzo(a)pyrene	2022/03/08	89	50 - 130	94	50 - 130	<0.0050	ug/g	12	40
7867137	Benzo(b/j)fluoranthene	2022/03/08	85	50 - 130	94	50 - 130	<0.0050	ug/g	12	40
7867137	Benzo(g,h,i)perylene	2022/03/08	93	50 - 130	99	50 - 130	<0.0050	ug/g	13	40



BUREAU
VERITAS

Bureau Veritas Job #: C256889

Report Date: 2022/03/10

QUALITY ASSURANCE REPORT(CONT'D)

Terrapex Environmental Ltd

Client Project #: CT3414.00

Site Location: 640 LIVERPOOL

Sampler Initials: AD

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7867137	Benzo(k)fluoranthene	2022/03/08	89	50 - 130	97	50 - 130	<0.0050	ug/g	NC	40
7867137	Chrysene	2022/03/08	90	50 - 130	95	50 - 130	<0.0050	ug/g	12	40
7867137	Dibenzo(a,h)anthracene	2022/03/08	96	50 - 130	95	50 - 130	<0.0050	ug/g	NC	40
7867137	Fluoranthene	2022/03/08	99	50 - 130	105	50 - 130	<0.0050	ug/g	11	40
7867137	Fluorene	2022/03/08	90	50 - 130	94	50 - 130	<0.0050	ug/g	NC	40
7867137	Indeno(1,2,3-cd)pyrene	2022/03/08	94	50 - 130	104	50 - 130	<0.0050	ug/g	12	40
7867137	Naphthalene	2022/03/08	77	50 - 130	88	50 - 130	<0.0050	ug/g	NC	40
7867137	Phenanthrene	2022/03/08	89	50 - 130	94	50 - 130	<0.0050	ug/g	14	40
7867137	Pyrene	2022/03/08	98	50 - 130	104	50 - 130	<0.0050	ug/g	9.8	40
7867392	WAD Cyanide (Free)	2022/03/07	97	75 - 125	97	80 - 120	<0.01	ug/g	NC	35
7867435	F2 (C10-C16 Hydrocarbons)	2022/03/07	98	60 - 130	96	80 - 120	<10	ug/g	NC	30
7867435	F3 (C16-C34 Hydrocarbons)	2022/03/07	97	60 - 130	96	80 - 120	<50	ug/g	NC	30
7867435	F4 (C34-C50 Hydrocarbons)	2022/03/07	101	60 - 130	98	80 - 120	<50	ug/g	NC	30
7867485	Hot Water Ext. Boron (B)	2022/03/07	105	75 - 125	105	75 - 125	<0.050	ug/g	8.0	40
7867580	Available (CaCl2) pH	2022/03/07			101	97 - 103			0.30	N/A
7867631	Acid Extractable Antimony (Sb)	2022/03/08	106	75 - 125	101	80 - 120	<0.20	ug/g	NC	30
7867631	Acid Extractable Arsenic (As)	2022/03/08	102	75 - 125	99	80 - 120	<1.0	ug/g	5.0	30
7867631	Acid Extractable Barium (Ba)	2022/03/08	110	75 - 125	104	80 - 120	<0.50	ug/g	0.68	30
7867631	Acid Extractable Beryllium (Be)	2022/03/08	105	75 - 125	100	80 - 120	<0.20	ug/g	6.9	30
7867631	Acid Extractable Boron (B)	2022/03/08	100	75 - 125	97	80 - 120	<5.0	ug/g	6.0	30
7867631	Acid Extractable Cadmium (Cd)	2022/03/08	103	75 - 125	98	80 - 120	<0.10	ug/g	NC	30
7867631	Acid Extractable Chromium (Cr)	2022/03/08	101	75 - 125	99	80 - 120	<1.0	ug/g	3.8	30
7867631	Acid Extractable Cobalt (Co)	2022/03/08	100	75 - 125	98	80 - 120	<0.10	ug/g	3.9	30
7867631	Acid Extractable Copper (Cu)	2022/03/08	97	75 - 125	97	80 - 120	<0.50	ug/g	2.4	30
7867631	Acid Extractable Lead (Pb)	2022/03/08	98	75 - 125	98	80 - 120	<1.0	ug/g	0.54	30
7867631	Acid Extractable Mercury (Hg)	2022/03/08	86	75 - 125	86	80 - 120	<0.050	ug/g	NC	30
7867631	Acid Extractable Molybdenum (Mo)	2022/03/08	104	75 - 125	97	80 - 120	<0.50	ug/g	NC	30
7867631	Acid Extractable Nickel (Ni)	2022/03/08	99	75 - 125	100	80 - 120	<0.50	ug/g	1.9	30
7867631	Acid Extractable Selenium (Se)	2022/03/08	103	75 - 125	102	80 - 120	<0.50	ug/g	NC	30
7867631	Acid Extractable Silver (Ag)	2022/03/08	97	75 - 125	92	80 - 120	<0.20	ug/g	NC	30
7867631	Acid Extractable Thallium (Tl)	2022/03/08	99	75 - 125	98	80 - 120	<0.050	ug/g	3.2	30



BUREAU
VERITAS

Bureau Veritas Job #: C256889

Report Date: 2022/03/10

QUALITY ASSURANCE REPORT(CONT'D)

Terrapex Environmental Ltd

Client Project #: CT3414.00

Site Location: 640 LIVERPOOL

Sampler Initials: AD

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7867631	Acid Extractable Uranium (U)	2022/03/08	100	75 - 125	97	80 - 120	<0.050	ug/g	4.4	30
7867631	Acid Extractable Vanadium (V)	2022/03/08	108	75 - 125	101	80 - 120	<5.0	ug/g	2.3	30
7867631	Acid Extractable Zinc (Zn)	2022/03/08	NC	75 - 125	95	80 - 120	<5.0	ug/g	0.87	30
7869520	Conductivity	2022/03/08			101	90 - 110	<0.002	mS/cm	1.1	10

N/A = Not Applicable

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

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

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

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

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

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

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



BUREAU
VERITAS

Bureau Veritas Job #: C256889
Report Date: 2022/03/10

Terrapex Environmental Ltd
Client Project #: CT3414.00
Site Location: 640 LIVERPOOL
Sampler Initials: AD

VALIDATION SIGNATURE PAGE

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

Eva Pranjic

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

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #4398 Terrapex Environmental Ltd	Company Name: <u>Natasha Proud</u> <u>David Crawford</u>	Quotation #: <u>001024</u>	BV Labs Job #:	Bottle Order #:			
Attention: Accounts Payable	Attention: <u>Natasha Proud</u> <u>David Crawford</u>	P.O. #:	850856				
Address: 90 Scarsdale Rd Toronto ON M3B 2R7	Address:	Project: <u>673570.00 CT3414.00</u> <u>640 Liverpool</u>	COC #:	Project Manager:			
Tel: (416) 245-0011 Fax: (416) 245-0012	Tel: (416) 245-0011 Fax:	Project Name: <u>640 Liverpool</u>	C#850856-49-01		Ema Gitej		
Email: accounts.payable@terrapex.com	Email: <u>a.proud@terrapex.com</u> <u>D.Crawford@Terrapex.com</u>	Site #: <u>A.P.</u>					

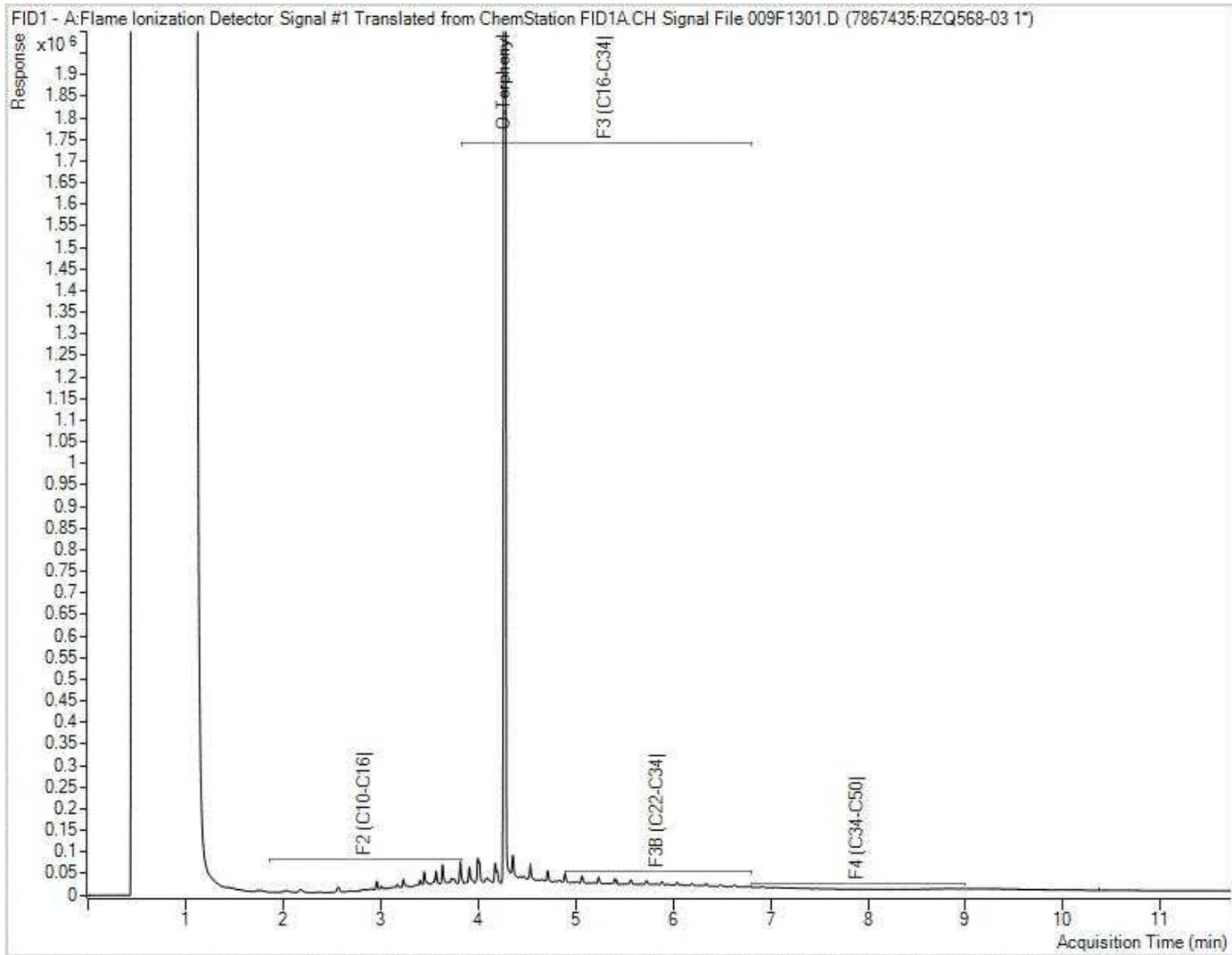
MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BV LABS DRINKING WATER CHAIN OF CUSTODY					ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required: Please provide advance notice for rush projects		
Regulation 153 (2011)		Other Regulations		Special Instructions	Field Filtered (please circle): Metals / Hg / Cr / VI											Regular (Standard) TAT: (will be applied if Rush TAT is not specified): Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.	
<input type="checkbox"/> Table 1	<input checked="" type="checkbox"/> Res/Park	<input type="checkbox"/> Medium/Fine	<input type="checkbox"/> CCME	<input type="checkbox"/> Sanitary Sewer Bylaw													
<input checked="" type="checkbox"/> Table 2	<input type="checkbox"/> Ind/Comm	<input checked="" type="checkbox"/> Coarse	<input type="checkbox"/> Reg 558	<input type="checkbox"/> Storm Sewer Bylaw													
<input type="checkbox"/> Table 3	<input type="checkbox"/> Agri/Other	<input checked="" type="checkbox"/> For RSC	<input type="checkbox"/> MISA	Municipality _____													
<input type="checkbox"/> Table _____			<input type="checkbox"/> PWQO	Reg 406 Table _____													
Include Criteria on Certificate of Analysis (Y/N)? <u>N</u>																	
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix													
1	MW113-5	2022/03/02	12:35	Soil		X	X	X	X								5
2	MW1000	↓	12:35	Soil		X	X	X	X								5
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

03-Mar-22 15:10
Ema Gitej
 C256889
URE ENV-1229

RELINQUISHED BY: (Signature/Print) <u>Alex Deborgh</u>	Date: (YY/MM/DD) <u>22/03/03</u>	Time <u>10:30am</u>	RECEIVED BY: (Signature/Print) <u>Parceel Kheud</u>	Date: (YY/MM/DD) <u>22/03/03</u>	Time <u>15:10</u>	# jars used and not submitted	Laboratory Use Only		Time Sensitive	Temperature (°C) on Recept <u>12.4</u>	Custody Seal Present Intact	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
---	-------------------------------------	------------------------	--	-------------------------------------	----------------------	-------------------------------	---------------------	--	----------------	---	--------------------------------	---

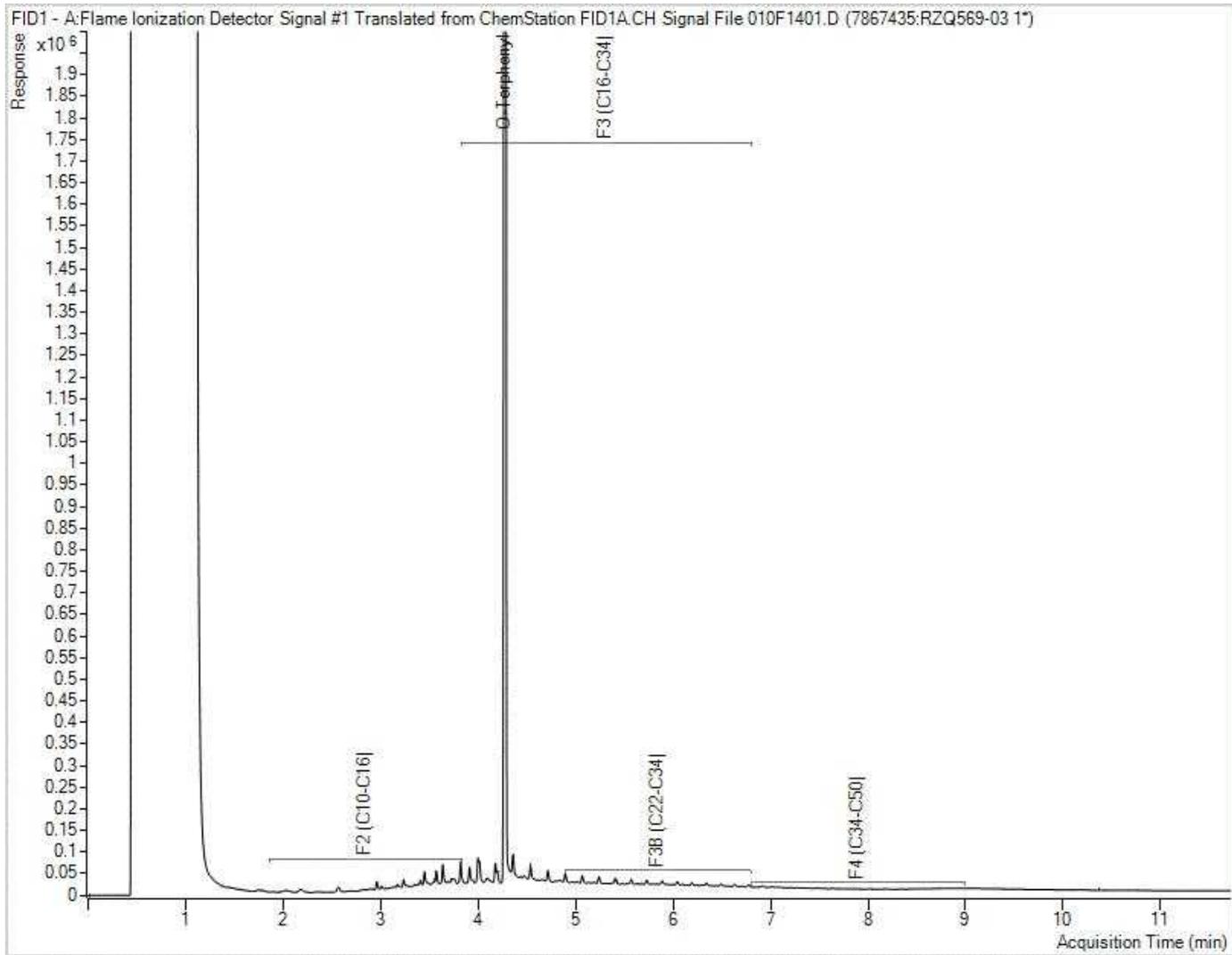
* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BV LABS' STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVLABS.COM/TERMS-AND-CONDITIONS.
* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.
** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVLABS.COM/RESOURCES/CHAIN-OF-CUSTODY-FORMS.

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



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

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



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

Certificate of Analysis

Terrapex Environmental Ltd. (Toronto)

90 Scarsdale Road
Toronto, ON M3B 2R7
Attn: Sara Sutherland

Client PO:
Project: CT3414.01
Custody: 135467

Report Date: 31-Aug-2022
Order Date: 24-Aug-2022

Order #: 2235314

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Parcel ID	Client ID
2235314-01	COMP-1

Approved By:



Dale Robertson, BSc

Laboratory Director

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Boron, available	MOE (HWE), EPA 200.8 - ICP-MS	29-Aug-22	29-Aug-22
Chromium, hexavalent - soil	MOE E3056 - Extraction, colourimetric	26-Aug-22	29-Aug-22
Mercury by CVAA	EPA 7471B - CVAA, digestion	29-Aug-22	30-Aug-22
PHC F1	CWS Tier 1 - P&T GC-FID	26-Aug-22	28-Aug-22
PHCs F2 to F4	CWS Tier 1 - GC-FID, extraction	25-Aug-22	28-Aug-22
REG 153: Metals by ICP/MS, soil	EPA 6020 - Digestion - ICP-MS	29-Aug-22	29-Aug-22
REG 153: PAHs by GC-MS	EPA 8270 - GC-MS, extraction	26-Aug-22	31-Aug-22
REG 153: VOCs by P&T GC/MS	EPA 8260 - P&T GC-MS	26-Aug-22	28-Aug-22
REG 558 - Mercury by CVAA	TCLP EPA 7470A, CVAA	30-Aug-22	30-Aug-22
REG 558 - Metals, ICP-MS	TCLP EPA 6020 - Digestion - ICP-MS	30-Aug-22	30-Aug-22
Solids, %	Gravimetric, calculation	29-Aug-22	30-Aug-22

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Summary of Criteria Exceedances

(If this page is blank then there are no exceedances)

Only those criteria that a sample exceeds will be highlighted in red

Regulatory Comparison:

Paracel Laboratories has provided regulatory guidelines on this report for informational purposes only and makes no representations or warranties that the data is accurate or reflects the current regulatory values. The user is advised to consult with the appropriate official regulations to evaluate compliance. Sample results that are highlighted have exceeded the selected regulatory limit. Calculated uncertainty estimations have not been applied for determining regulatory exceedances.

Sample	Analyte	MDL / Units	Result	Reg 153/04 -T2 Res/Park, coarse	Reg 558 Schedule 4
--------	---------	-------------	--------	------------------------------------	--------------------

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	COMP-1	-	-	-	Criteria:
Sample Date:	23-Aug-22 15:30	-	-	-	Reg 153/04 -T2
Sample ID:	2235314-01	-	-	-	Reg 558 Schedule 4
Matrix:	Soil	-	-	-	Res/Park, coarse
MDL/Units					

Physical Characteristics

% Solids	0.1 % by Wt.	87.0	-	-	-	-
----------	--------------	------	---	---	---	---

EPA 1311 - TCLP Leachate Metals

Arsenic	0.05 mg/L	<0.05	-	-	-	2.5 mg/L
Barium	0.05 mg/L	0.52	-	-	-	100 mg/L
Boron	0.05 mg/L	0.10	-	-	-	500 mg/L
Cadmium	0.01 mg/L	<0.01	-	-	-	0.5 mg/L
Chromium	0.05 mg/L	<0.05	-	-	-	5 mg/L
Lead	0.05 mg/L	<0.05	-	-	-	5 mg/L
Mercury	0.005 mg/L	<0.005	-	-	-	0.1 mg/L
Selenium	0.05 mg/L	<0.05	-	-	-	1 mg/L
Silver	0.05 mg/L	<0.05	-	-	-	5 mg/L
Uranium	0.05 mg/L	<0.05	-	-	-	10 mg/L

Metals

Antimony	1 ug/g	<1.0	-	-	-	7.5 ug/g	-
Arsenic	1 ug/g	2.3	-	-	-	18 ug/g	-
Barium	1 ug/g	71.4	-	-	-	390 ug/g	-
Beryllium	0.5 ug/g	0.5	-	-	-	4 ug/g	-
Boron	5 ug/g	8.3	-	-	-	120 ug/g	-
Boron, available	0.5 ug/g	<0.5	-	-	-	1.5 ug/g	-
Cadmium	0.5 ug/g	<0.5	-	-	-	1.2 ug/g	-
Chromium (VI)	0.2 ug/g	<0.2	-	-	-	8 ug/g	-
Chromium	5 ug/g	16.7	-	-	-	160 ug/g	-
Cobalt	1 ug/g	6.5	-	-	-	22 ug/g	-
Copper	5 ug/g	12.1	-	-	-	140 ug/g	-
Lead	1 ug/g	5.9	-	-	-	120 ug/g	-

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	COMP-1	-	-	-	Criteria:
Sample Date:	23-Aug-22 15:30	-	-	-	Reg 153/04 -T2
Sample ID:	2235314-01	-	-	-	Reg 558 Schedule 4
Matrix:	Soil	-	-	-	Res/Park, coarse
MDL/Units					

Metals

Mercury	0.1 ug/g	<0.1	-	-	-	0.27 ug/g	-
Molybdenum	1 ug/g	<1.0	-	-	-	6.9 ug/g	-
Nickel	5 ug/g	13.8	-	-	-	100 ug/g	-
Selenium	1 ug/g	<1.0	-	-	-	2.4 ug/g	-
Silver	0.3 ug/g	<0.3	-	-	-	20 ug/g	-
Thallium	1 ug/g	<1.0	-	-	-	1 ug/g	-
Uranium	1 ug/g	<1.0	-	-	-	23 ug/g	-
Vanadium	10 ug/g	24.6	-	-	-	86 ug/g	-
Zinc	20 ug/g	37.1	-	-	-	340 ug/g	-

Volatiles

Acetone	0.5 ug/g	<0.50	-	-	-	16 ug/g	-
Benzene	0.02 ug/g	<0.02	-	-	-	0.21 ug/g	-
Bromodichloromethane	0.05 ug/g	<0.05	-	-	-	1.5 ug/g	-
Bromoform	0.05 ug/g	<0.05	-	-	-	0.27 ug/g	-
Bromomethane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Carbon Tetrachloride	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Chlorobenzene	0.05 ug/g	<0.05	-	-	-	2.4 ug/g	-
Chloroform	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Dibromochloromethane	0.05 ug/g	<0.05	-	-	-	2.3 ug/g	-
Dichlorodifluoromethane	0.05 ug/g	<0.05	-	-	-	16 ug/g	-
1,2-Dichlorobenzene	0.05 ug/g	<0.05	-	-	-	1.2 ug/g	-
1,3-Dichlorobenzene	0.05 ug/g	<0.05	-	-	-	4.8 ug/g	-
1,4-Dichlorobenzene	0.05 ug/g	<0.05	-	-	-	0.083 ug/g	-
1,1-Dichloroethane	0.05 ug/g	<0.05	-	-	-	0.47 ug/g	-
1,2-Dichloroethane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	COMP-1	-	-	-	Criteria:
Sample Date:	23-Aug-22 15:30	-	-	-	Reg 153/04 -T2
Sample ID:	2235314-01	-	-	-	Reg 558 Schedule 4
Matrix:	Soil	-	-	-	Res/Park, coarse
MDL/Units					

Volatiles

1,1-Dichloroethylene	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
cis-1,2-Dichloroethylene	0.05 ug/g	<0.05	-	-	-	1.9 ug/g	-
trans-1,2-Dichloroethylene	0.05 ug/g	<0.05	-	-	-	0.084 ug/g	-
1,2-Dichloropropane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
cis-1,3-Dichloropropylene	0.05 ug/g	<0.05	-	-	-	-	-
trans-1,3-Dichloropropylene	0.05 ug/g	<0.05	-	-	-	-	-
1,3-Dichloropropene, total	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Ethylene dibromide (dibromoethane,	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Ethylbenzene	0.05 ug/g	<0.05	-	-	-	1.1 ug/g	-
Hexane	0.05 ug/g	<0.05	-	-	-	2.8 ug/g	-
Methyl Ethyl Ketone (2-Butanone)	0.5 ug/g	<0.50	-	-	-	16 ug/g	-
Methyl Isobutyl Ketone	0.5 ug/g	<0.50	-	-	-	1.7 ug/g	-
Methyl tert-butyl ether	0.05 ug/g	<0.05	-	-	-	0.75 ug/g	-
Methylene Chloride	0.05 ug/g	<0.05	-	-	-	0.1 ug/g	-
Styrene	0.05 ug/g	<0.05	-	-	-	0.7 ug/g	-
1,1,1,2-Tetrachloroethane	0.05 ug/g	<0.05	-	-	-	0.058 ug/g	-
1,1,2,2-Tetrachloroethane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Tetrachloroethylene	0.05 ug/g	<0.05	-	-	-	0.28 ug/g	-
Toluene	0.05 ug/g	<0.05	-	-	-	2.3 ug/g	-
1,1,1-Trichloroethane	0.05 ug/g	<0.05	-	-	-	0.38 ug/g	-
1,1,2-Trichloroethane	0.05 ug/g	<0.05	-	-	-	0.05 ug/g	-
Trichloroethylene	0.05 ug/g	<0.05	-	-	-	0.061 ug/g	-
Trichlorofluoromethane	0.05 ug/g	<0.05	-	-	-	4 ug/g	-
Vinyl chloride	0.02 ug/g	<0.02	-	-	-	0.02 ug/g	-
m,p-Xylenes	0.05 ug/g	<0.05	-	-	-	-	-

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	COMP-1	-	-	-	Criteria:
Sample Date:	23-Aug-22 15:30	-	-	-	Reg 153/04 -T2
Sample ID:	2235314-01	-	-	-	Reg 558 Schedule 4
Matrix:	Soil	-	-	-	Res/Park, coarse
MDL/Units					

Volatiles

o-Xylene	0.05 ug/g	<0.05	-	-	-	-
Xylenes, total	0.05 ug/g	<0.05	-	-	-	3.1 ug/g
Toluene-d8	Surrogate	116%	-	-	-	-
Dibromofluoromethane	Surrogate	107%	-	-	-	-
4-Bromofluorobenzene	Surrogate	114%	-	-	-	-

Hydrocarbons

F1 PHCs (C6-C10)	7 ug/g	<7	-	-	-	55 ug/g
F2 PHCs (C10-C16)	4 ug/g	<4	-	-	-	98 ug/g
F3 PHCs (C16-C34)	8 ug/g	<8	-	-	-	300 ug/g
F4 PHCs (C34-C50)	6 ug/g	<6	-	-	-	2800 ug/g

Semi-Volatiles

Acenaphthene	0.02 ug/g	<0.02	-	-	-	7.9 ug/g
Acenaphthylene	0.02 ug/g	<0.02	-	-	-	0.15 ug/g
Anthracene	0.02 ug/g	<0.02	-	-	-	0.67 ug/g
Benzo [a] anthracene	0.02 ug/g	<0.02	-	-	-	0.5 ug/g
Benzo [a] pyrene	0.02 ug/g	<0.02	-	-	-	0.3 ug/g
Benzo [b] fluoranthene	0.02 ug/g	<0.02	-	-	-	0.78 ug/g
Benzo [g,h,i] perylene	0.02 ug/g	<0.02	-	-	-	6.6 ug/g
Benzo [k] fluoranthene	0.02 ug/g	<0.02	-	-	-	0.78 ug/g
Chrysene	0.02 ug/g	<0.02	-	-	-	7 ug/g
Dibenzo [a,h] anthracene	0.02 ug/g	<0.02	-	-	-	0.1 ug/g
Fluoranthene	0.02 ug/g	<0.02	-	-	-	0.69 ug/g
Fluorene	0.02 ug/g	<0.02	-	-	-	62 ug/g
Indeno [1,2,3-cd] pyrene	0.02 ug/g	<0.02	-	-	-	0.38 ug/g
1-Methylnaphthalene	0.02 ug/g	<0.02	-	-	-	0.99 ug/g

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	COMP-1	-	-	-	Criteria:
Sample Date:	23-Aug-22 15:30	-	-	-	Reg 153/04 -T2
Sample ID:	2235314-01	-	-	-	Reg 558 Schedule 4
Matrix:	Soil	-	-	-	Res/Park, coarse
MDL/Units					

Semi-Volatiles

2-Methylnaphthalene	0.02 ug/g	<0.02	-	-	-	0.99 ug/g	-
Methylnaphthalene (1&2)	0.04 ug/g	<0.04	-	-	-	0.99 ug/g	-
Naphthalene	0.01 ug/g	<0.01	-	-	-	0.6 ug/g	-
Phenanthrene	0.02 ug/g	<0.02	-	-	-	6.2 ug/g	-
Pyrene	0.02 ug/g	<0.02	-	-	-	78 ug/g	-
2-Fluorobiphenyl	Surrogate	72.8%	-	-	-	-	-
Terphenyl-d14	Surrogate	78.6%	-	-	-	-	-

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
EPA 1311 - TCLP Leachate Metals								
Arsenic	ND	0.05	mg/L					
Barium	ND	0.05	mg/L					
Boron	ND	0.05	mg/L					
Cadmium	ND	0.01	mg/L					
Chromium	ND	0.05	mg/L					
Lead	ND	0.05	mg/L					
Mercury	ND	0.005	mg/L					
Selenium	ND	0.05	mg/L					
Silver	ND	0.05	mg/L					
Uranium	ND	0.05	mg/L					
Hydrocarbons								
F1 PHCs (C6-C10)	ND	7	ug/g					
F2 PHCs (C10-C16)	ND	4	ug/g					
F3 PHCs (C16-C34)	ND	8	ug/g					
F4 PHCs (C34-C50)	ND	6	ug/g					
Metals								
Antimony	ND	1.0	ug/g					
Arsenic	ND	1.0	ug/g					
Barium	ND	1.0	ug/g					
Beryllium	ND	0.5	ug/g					
Boron, available	ND	0.5	ug/g					
Boron	ND	5.0	ug/g					
Cadmium	ND	0.5	ug/g					
Chromium (VI)	ND	0.2	ug/g					
Chromium	ND	5.0	ug/g					
Cobalt	ND	1.0	ug/g					
Copper	ND	5.0	ug/g					
Lead	ND	1.0	ug/g					
Mercury	ND	0.1	ug/g					
Molybdenum	ND	1.0	ug/g					
Nickel	ND	5.0	ug/g					
Selenium	ND	1.0	ug/g					

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Silver	ND	0.3	ug/g					
Thallium	ND	1.0	ug/g					
Uranium	ND	1.0	ug/g					
Vanadium	ND	10.0	ug/g					
Zinc	ND	20.0	ug/g					
Semi-Volatiles								
Acenaphthene	ND	0.02	ug/g					
Acenaphthylene	ND	0.02	ug/g					
Anthracene	ND	0.02	ug/g					
Benzo [a] anthracene	ND	0.02	ug/g					
Benzo [a] pyrene	ND	0.02	ug/g					
Benzo [b] fluoranthene	ND	0.02	ug/g					
Benzo [g,h,i] perylene	ND	0.02	ug/g					
Benzo [k] fluoranthene	ND	0.02	ug/g					
Chrysene	ND	0.02	ug/g					
Dibenzo [a,h] anthracene	ND	0.02	ug/g					
Fluoranthene	ND	0.02	ug/g					
Fluorene	ND	0.02	ug/g					
Indeno [1,2,3-cd] pyrene	ND	0.02	ug/g					
1-Methylnaphthalene	ND	0.02	ug/g					
2-Methylnaphthalene	ND	0.02	ug/g					
Methylnaphthalene (1&2)	ND	0.04	ug/g					
Naphthalene	ND	0.01	ug/g					
Phenanthrene	ND	0.02	ug/g					
Pyrene	ND	0.02	ug/g					
Surrogate: 2-Fluorobiphenyl	1.17		ug/g	87.5	50-140			
Surrogate: Terphenyl-d14	1.60		ug/g	120	50-140			
Volatiles								
Acetone	ND	0.50	ug/g					
Benzene	ND	0.02	ug/g					
Bromodichloromethane	ND	0.05	ug/g					
Bromoform	ND	0.05	ug/g					

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromomethane	ND	0.05	ug/g					
Carbon Tetrachloride	ND	0.05	ug/g					
Chlorobenzene	ND	0.05	ug/g					
Chloroform	ND	0.05	ug/g					
Dibromochloromethane	ND	0.05	ug/g					
Dichlorodifluoromethane	ND	0.05	ug/g					
1,2-Dichlorobenzene	ND	0.05	ug/g					
1,3-Dichlorobenzene	ND	0.05	ug/g					
1,4-Dichlorobenzene	ND	0.05	ug/g					
1,1-Dichloroethane	ND	0.05	ug/g					
1,2-Dichloroethane	ND	0.05	ug/g					
1,1-Dichloroethylene	ND	0.05	ug/g					
cis-1,2-Dichloroethylene	ND	0.05	ug/g					
trans-1,2-Dichloroethylene	ND	0.05	ug/g					
1,2-Dichloropropane	ND	0.05	ug/g					
cis-1,3-Dichloropropylene	ND	0.05	ug/g					
trans-1,3-Dichloropropylene	ND	0.05	ug/g					
1,3-Dichloropropene, total	ND	0.05	ug/g					
Ethylbenzene	ND	0.05	ug/g					
Ethylene dibromide (dibromoethane, 1,2-)	ND	0.05	ug/g					
Hexane	ND	0.05	ug/g					
Methyl Ethyl Ketone (2-Butanone)	ND	0.50	ug/g					
Methyl Isobutyl Ketone	ND	0.50	ug/g					
Methyl tert-butyl ether	ND	0.05	ug/g					
Methylene Chloride	ND	0.05	ug/g					
Styrene	ND	0.05	ug/g					
1,1,1,2-Tetrachloroethane	ND	0.05	ug/g					
1,1,2,2-Tetrachloroethane	ND	0.05	ug/g					
Tetrachloroethylene	ND	0.05	ug/g					
Toluene	ND	0.05	ug/g					
1,1,1-Trichloroethane	ND	0.05	ug/g					
1,1,2-Trichloroethane	ND	0.05	ug/g					
Trichloroethylene	ND	0.05	ug/g					

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Trichlorofluoromethane	ND	0.05	ug/g					
Vinyl chloride	ND	0.02	ug/g					
m,p-Xylenes	ND	0.05	ug/g					
o-Xylene	ND	0.05	ug/g					
Xylenes, total	ND	0.05	ug/g					
Surrogate: 4-Bromofluorobenzene	8.22		ug/g	103	50-140			
Surrogate: Dibromofluoromethane	5.82		ug/g	72.8	50-140			
Surrogate: Toluene-d8	8.38		ug/g	105	50-140			

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
EPA 1311 - TCLP Leachate Metals									
Arsenic	ND	0.05	mg/L	ND			NC	29	
Barium	0.563	0.05	mg/L	0.583			3.6	34	
Boron	0.060	0.05	mg/L	0.063			5.8	33	
Cadmium	ND	0.01	mg/L	ND			NC	33	
Chromium	ND	0.05	mg/L	ND			NC	32	
Lead	ND	0.05	mg/L	ND			NC	32	
Mercury	ND	0.005	mg/L	ND			NC	30	
Selenium	ND	0.05	mg/L	ND			NC	28	
Silver	ND	0.05	mg/L	ND			NC	28	
Uranium	ND	0.05	mg/L	ND			NC	27	
Hydrocarbons									
F1 PHCs (C6-C10)	ND	7	ug/g	ND			NC	40	
F2 PHCs (C10-C16)	18	4	ug/g	15			21.7	30	
F3 PHCs (C16-C34)	46	8	ug/g	34			29.6	30	
F4 PHCs (C34-C50)	13	6	ug/g	10			22.0	30	
Metals									
Antimony	ND	1.0	ug/g	ND			NC	30	
Arsenic	2.2	1.0	ug/g	2.2			2.3	30	
Barium	171	1.0	ug/g	166			3.0	30	
Beryllium	0.7	0.5	ug/g	0.7			2.4	30	
Boron, available	ND	0.5	ug/g	ND			NC	35	
Boron	ND	5.0	ug/g	ND			NC	30	
Cadmium	ND	0.5	ug/g	ND			NC	30	
Chromium (VI)	ND	0.2	ug/g	ND			NC	35	
Chromium	56.6	5.0	ug/g	57.5			1.6	30	
Cobalt	11.3	1.0	ug/g	11.5			1.1	30	
Copper	23.3	5.0	ug/g	23.8			2.2	30	
Lead	5.6	1.0	ug/g	5.8			3.7	30	
Mercury	ND	0.1	ug/g	ND			NC	30	
Molybdenum	ND	1.0	ug/g	ND			NC	30	

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Nickel	30.5	5.0	ug/g	31.8			4.1	30	
Selenium	ND	1.0	ug/g	ND			NC	30	
Silver	ND	0.3	ug/g	ND			NC	30	
Thallium	ND	1.0	ug/g	ND			NC	30	
Uranium	ND	1.0	ug/g	ND			NC	30	
Vanadium	54.5	10.0	ug/g	55.1			1.2	30	
Zinc	66.5	20.0	ug/g	67.0			0.8	30	
Physical Characteristics									
% Solids	86.5	0.1	% by Wt.	87.0			0.6	25	
Semi-Volatiles									
Acenaphthene	ND	0.02	ug/g	ND			NC	40	
Acenaphthylene	ND	0.02	ug/g	ND			NC	40	
Anthracene	ND	0.02	ug/g	ND			NC	40	
Benzo [a] anthracene	ND	0.02	ug/g	ND			NC	40	
Benzo [a] pyrene	ND	0.02	ug/g	ND			NC	40	
Benzo [b] fluoranthene	ND	0.02	ug/g	ND			NC	40	
Benzo [g,h,i] perylene	ND	0.02	ug/g	ND			NC	40	
Benzo [k] fluoranthene	ND	0.02	ug/g	ND			NC	40	
Chrysene	ND	0.02	ug/g	ND			NC	40	
Dibenzo [a,h] anthracene	ND	0.02	ug/g	ND			NC	40	
Fluoranthene	ND	0.02	ug/g	ND			NC	40	
Fluorene	ND	0.02	ug/g	ND			NC	40	
Indeno [1,2,3-cd] pyrene	ND	0.02	ug/g	ND			NC	40	
1-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
2-Methylnaphthalene	ND	0.02	ug/g	ND			NC	40	
Naphthalene	ND	0.01	ug/g	ND			NC	40	
Phenanthrene	ND	0.02	ug/g	ND			NC	40	
Pyrene	ND	0.02	ug/g	ND			NC	40	
Surrogate: 2-Fluorobiphenyl	1.32		ug/g		81.1	50-140			
Surrogate: Terphenyl-d14	1.38		ug/g		84.8	50-140			

Volatiles

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Acetone	ND	0.50	ug/g	ND			NC	50	
Benzene	ND	0.02	ug/g	ND			NC	50	
Bromodichloromethane	ND	0.05	ug/g	ND			NC	50	
Bromoform	ND	0.05	ug/g	ND			NC	50	
Bromomethane	ND	0.05	ug/g	ND			NC	50	
Carbon Tetrachloride	ND	0.05	ug/g	ND			NC	50	
Chlorobenzene	ND	0.05	ug/g	ND			NC	50	
Chloroform	ND	0.05	ug/g	ND			NC	50	
Dibromochloromethane	ND	0.05	ug/g	ND			NC	50	
Dichlorodifluoromethane	ND	0.05	ug/g	ND			NC	50	
1,2-Dichlorobenzene	ND	0.05	ug/g	ND			NC	50	
1,3-Dichlorobenzene	ND	0.05	ug/g	ND			NC	50	
1,4-Dichlorobenzene	ND	0.05	ug/g	ND			NC	50	
1,1-Dichloroethane	ND	0.05	ug/g	ND			NC	50	
1,2-Dichloroethane	ND	0.05	ug/g	ND			NC	50	
1,1-Dichloroethylene	ND	0.05	ug/g	ND			NC	50	
cis-1,2-Dichloroethylene	ND	0.05	ug/g	ND			NC	50	
trans-1,2-Dichloroethylene	ND	0.05	ug/g	ND			NC	50	
1,2-Dichloropropane	ND	0.05	ug/g	ND			NC	50	
cis-1,3-Dichloropropylene	ND	0.05	ug/g	ND			NC	50	
trans-1,3-Dichloropropylene	ND	0.05	ug/g	ND			NC	50	
Ethylbenzene	ND	0.05	ug/g	ND			NC	50	
Ethylene dibromide (dibromoethane, 1,2-)	ND	0.05	ug/g	ND			NC	50	
Hexane	ND	0.05	ug/g	ND			NC	50	
Methyl Ethyl Ketone (2-Butanone)	ND	0.50	ug/g	ND			NC	50	
Methyl Isobutyl Ketone	ND	0.50	ug/g	ND			NC	50	
Methyl tert-butyl ether	ND	0.05	ug/g	ND			NC	50	
Methylene Chloride	ND	0.05	ug/g	ND			NC	50	
Styrene	ND	0.05	ug/g	ND			NC	50	
1,1,1,2-Tetrachloroethane	ND	0.05	ug/g	ND			NC	50	
1,1,2,2-Tetrachloroethane	ND	0.05	ug/g	ND			NC	50	

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Tetrachloroethylene	ND	0.05	ug/g	ND			NC	50	
Toluene	ND	0.05	ug/g	ND			NC	50	
1,1,1-Trichloroethane	ND	0.05	ug/g	ND			NC	50	
1,1,2-Trichloroethane	ND	0.05	ug/g	ND			NC	50	
Trichloroethylene	ND	0.05	ug/g	ND			NC	50	
Trichlorofluoromethane	ND	0.05	ug/g	ND			NC	50	
Vinyl chloride	ND	0.02	ug/g	ND			NC	50	
m,p-Xylenes	ND	0.05	ug/g	ND			NC	50	
o-Xylene	ND	0.05	ug/g	ND			NC	50	
Surrogate: 4-Bromofluorobenzene	11.8		ug/g		116	50-140			
Surrogate: Dibromofluoromethane	11.6		ug/g		115	50-140			
Surrogate: Toluene-d8	11.7		ug/g		115	50-140			

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
EPA 1311 - TCLP Leachate Metals									
Arsenic	54.4	0.05	mg/L	0.125	109	83-119			
Barium	110	0.05	mg/L	58.3	103	80-120			
Boron	53.3	0.05	mg/L	6.32	93.9	71-128			
Cadmium	47.5	0.01	mg/L	0.112	94.9	78-119			
Chromium	57.7	0.05	mg/L	0.099	115	80-124			
Lead	45.9	0.05	mg/L	0.234	91.4	77-126			
Mercury	0.0292	0.005	mg/L	ND	97.2	70-130			
Selenium	44.8	0.05	mg/L	0.098	89.5	75-125			
Silver	47.0	0.05	mg/L	ND	94.1	70-128			
Uranium	50.2	0.05	mg/L	0.222	99.9	70-131			
Hydrocarbons									
F1 PHCs (C6-C10)	165	7	ug/g	ND	82.3	80-120			
F2 PHCs (C10-C16)	115	4	ug/g	15	107	60-140			
F3 PHCs (C16-C34)	301	8	ug/g	34	116	60-140			
F4 PHCs (C34-C50)	167	6	ug/g	10	108	60-140			
Metals									
Antimony	36.4	1.0	ug/g	ND	72.7	70-130			
Arsenic	48.3	1.0	ug/g	ND	94.8	70-130			
Barium	117	1.0	ug/g	66.6	101	70-130			
Beryllium	48.7	0.5	ug/g	ND	96.8	70-130			
Boron, available	4.39	0.5	ug/g	ND	87.9	70-122			
Boron	46.1	5.0	ug/g	ND	88.3	70-130			
Cadmium	42.1	0.5	ug/g	ND	84.1	70-130			
Chromium (VI)	0.2	0.2	ug/g	ND	83.0	70-130			
Chromium	78.9	5.0	ug/g	23.0	112	70-130			
Cobalt	55.4	1.0	ug/g	4.6	102	70-130			
Copper	58.5	5.0	ug/g	9.5	97.9	70-130			
Lead	49.7	1.0	ug/g	2.3	94.6	70-130			
Mercury	1.27	0.1	ug/g	ND	84.8	70-130			
Molybdenum	45.6	1.0	ug/g	ND	90.9	70-130			

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Nickel	60.3	5.0	ug/g	12.7	95.1	70-130			
Selenium	45.3	1.0	ug/g	ND	90.3	70-130			
Silver	42.2	0.3	ug/g	ND	84.3	70-130			
Thallium	46.8	1.0	ug/g	ND	93.4	70-130			
Uranium	50.4	1.0	ug/g	ND	100	70-130			
Vanadium	75.8	10.0	ug/g	22.1	108	70-130			
Zinc	71.9	20.0	ug/g	26.8	90.2	70-130			
Semi-Volatiles									
Acenaphthene	0.172	0.02	ug/g	ND	84.9	50-140			
Acenaphthylene	0.155	0.02	ug/g	ND	76.2	50-140			
Anthracene	0.179	0.02	ug/g	ND	88.0	50-140			
Benzo [a] anthracene	0.153	0.02	ug/g	ND	75.4	50-140			
Benzo [a] pyrene	0.164	0.02	ug/g	ND	80.7	50-140			
Benzo [b] fluoranthene	0.203	0.02	ug/g	ND	100	50-140			
Benzo [g,h,i] perylene	0.156	0.02	ug/g	ND	76.8	50-140			
Benzo [k] fluoranthene	0.198	0.02	ug/g	ND	97.4	50-140			
Chrysene	0.163	0.02	ug/g	ND	80.3	50-140			
Dibenzo [a,h] anthracene	0.162	0.02	ug/g	ND	79.9	50-140			
Fluoranthene	0.148	0.02	ug/g	ND	72.7	50-140			
Fluorene	0.168	0.02	ug/g	ND	82.9	50-140			
Indeno [1,2,3-cd] pyrene	0.162	0.02	ug/g	ND	79.6	50-140			
1-Methylnaphthalene	0.198	0.02	ug/g	ND	97.7	50-140			
2-Methylnaphthalene	0.216	0.02	ug/g	ND	106	50-140			
Naphthalene	0.192	0.01	ug/g	ND	94.8	50-140			
Phenanthrene	0.156	0.02	ug/g	ND	76.9	50-140			
Pyrene	0.153	0.02	ug/g	ND	75.3	50-140			
Surrogate: 2-Fluorobiphenyl	1.42		ug/g		87.8	50-140			
Surrogate: Terphenyl-d14	1.50		ug/g		92.5	50-140			
Volatiles									
Acetone	11.1	0.50	ug/g	ND	111	50-140			
Benzene	4.65	0.02	ug/g	ND	116	60-130			

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Bromodichloromethane	3.91	0.05	ug/g	ND	97.9	60-130			
Bromoform	4.56	0.05	ug/g	ND	114	60-130			
Bromomethane	4.50	0.05	ug/g	ND	113	50-140			
Carbon Tetrachloride	4.13	0.05	ug/g	ND	103	60-130			
Chlorobenzene	4.38	0.05	ug/g	ND	109	60-130			
Chloroform	4.58	0.05	ug/g	ND	114	60-130			
Dibromochloromethane	4.62	0.05	ug/g	ND	115	60-130			
Dichlorodifluoromethane	2.91	0.05	ug/g	ND	72.8	50-140			
1,2-Dichlorobenzene	3.86	0.05	ug/g	ND	96.6	60-130			
1,3-Dichlorobenzene	3.82	0.05	ug/g	ND	95.4	60-130			
1,4-Dichlorobenzene	3.82	0.05	ug/g	ND	95.5	60-130			
1,1-Dichloroethane	4.62	0.05	ug/g	ND	116	60-130			
1,2-Dichloroethane	4.13	0.05	ug/g	ND	103	60-130			
1,1-Dichloroethylene	3.52	0.05	ug/g	ND	88.0	60-130			
cis-1,2-Dichloroethylene	3.75	0.05	ug/g	ND	93.7	60-130			
trans-1,2-Dichloroethylene	3.88	0.05	ug/g	ND	97.1	60-130			
1,2-Dichloropropane	4.79	0.05	ug/g	ND	120	60-130			
cis-1,3-Dichloropropylene	4.36	0.05	ug/g	ND	109	60-130			
trans-1,3-Dichloropropylene	4.13	0.05	ug/g	ND	103	60-130			
Ethylbenzene	4.38	0.05	ug/g	ND	110	60-130			
Ethylene dibromide (dibromoethane, 1,2-)	4.45	0.05	ug/g	ND	111	60-130			
Hexane	2.63	0.05	ug/g	ND	65.7	60-130			
Methyl Ethyl Ketone (2-Butanone)	12.3	0.50	ug/g	ND	123	50-140			
Methyl Isobutyl Ketone	12.7	0.50	ug/g	ND	127	50-140			
Methyl tert-butyl ether	12.4	0.05	ug/g	ND	124	50-140			
Methylene Chloride	4.26	0.05	ug/g	ND	107	60-130			
Styrene	4.30	0.05	ug/g	ND	108	60-130			
1,1,1,2-Tetrachloroethane	4.46	0.05	ug/g	ND	112	60-130			
1,1,2,2-Tetrachloroethane	4.88	0.05	ug/g	ND	122	60-130			
Tetrachloroethylene	3.91	0.05	ug/g	ND	97.7	60-130			
Toluene	4.45	0.05	ug/g	ND	111	60-130			

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
1,1,1-Trichloroethane	4.78	0.05	ug/g	ND	120	60-130			
1,1,2-Trichloroethane	4.64	0.05	ug/g	ND	116	60-130			
Trichloroethylene	4.42	0.05	ug/g	ND	111	60-130			
Trichlorofluoromethane	4.00	0.05	ug/g	ND	99.9	50-140			
Vinyl chloride	4.62	0.02	ug/g	ND	116	50-140			
m,p-Xylenes	8.45	0.05	ug/g	ND	106	60-130			
o-Xylene	4.36	0.05	ug/g	ND	109	60-130			
Surrogate: 4-Bromofluorobenzene	8.38		ug/g		105	50-140			
Surrogate: Dibromofluoromethane	5.98		ug/g		74.8	50-140			
Surrogate: Toluene-d8	8.12		ug/g		102	50-140			

Certificate of Analysis

Report Date: 31-Aug-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 24-Aug-2022

Client PO:

Project Description: CT3414.01

Qualifier Notes:

Sample Data Revisions:

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

NC: Not Calculated

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.
- When reported, data for F4G has been processed using a silica gel cleanup.

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.

Parcel ID: 2235314



Parcel Order Number (Lab Use Only) 2235314	Chain Of Custody (Lab Use Only) No 135467
---	--

Client Name: Terrapex Environmental Ltd.	Project Ref: CT3414-01	Page 1 of 1
Contact Name: Sara Sutherland	Quote #: Terrapex S.O.	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular Date Required: _____
Address: 90 Scarisdale Rd, Toronto, ON M3B 2R7	PO #: _____	
Telephone: 416-245-0011 ext. 261	E-mail: s.sutherland@terrapex.com s.beatty@terrapex.com	

<input checked="" type="checkbox"/> REG 153/04 <input type="checkbox"/> REG 406/19 <input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Res/Park <input type="checkbox"/> Med/Fine <input checked="" type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input checked="" type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> Table _____ For RSC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other Regulation <input type="checkbox"/> REG 558 <input type="checkbox"/> PWQO <input type="checkbox"/> CCME <input type="checkbox"/> MISA <input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm Mun: _____ <input type="checkbox"/> Other: _____	Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)	Required Analysis PHCs F1-F4+BTEX VOCs PAHs Metals by ICP Hg CrVI B (HWS) X GFL Package													
Sample ID/Location Name		Matrix	Air Volume	# of Containers	Sample Taken											
					Date	Time										
1	COMP-1	S	-	3	Aug 23/22	15:30										
2																
3																
4																
5																
6																
7																
8																
9																
10																

Comments:			Method of Delivery: RABBOX		
Relinquished By (Sign): Sam Beatty	Received By Driver/Depot: AA	Received at Lab: Jurdeepam Dohra	Verified By: Sam		
Relinquished By (Print): Sam Beatty	Date/Time: 24-AUG-22 13:45	Date/Time: Aug 25, 2022 09:55	Date/Time: AUG 25, 22 11:03		
Date/Time: Aug 24/2022 11:30 AM	Temperature: 6.1 °C	Temperature: 6.3 °C	pH Verified: <input type="checkbox"/> By: _____		

Certificate of Analysis

Terrapex Environmental Ltd. (Toronto)

90 Scarsdale Road
Toronto, ON M3B 2R7
Attn: Sara Sutherland

Client PO:
Project: CT3414.01
Custody: 137568

Report Date: 5-Dec-2022
Order Date: 30-Aug-2022

Revised Report

Order #: 2236110

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Parcel ID	Client ID
2236110-02	MW107
2236110-04	MW113
2236110-05	MW207
2236110-06	MW208
2236110-07	MW1000
2236110-09	Trip Spike
2236110-10	Trip Blank

Approved By:



Milan Ralitsch, PhD

Senior Technical Manager

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
Anions	EPA 300.1 - IC	31-Aug-22	31-Aug-22
Chromium, hexavalent - water	MOE E3056 - colourimetric	1-Sep-22	2-Sep-22
Cyanide, free	MOE E3015 - Auto Colour	30-Aug-22	30-Aug-22
Mercury by CVAA	EPA 245.2 - Cold Vapour AA	6-Sep-22	6-Sep-22
pH	EPA 150.1 - pH probe @25 °C	6-Sep-22	6-Sep-22
PHC F1	CWS Tier 1 - P&T GC-FID	2-Sep-22	6-Sep-22
PHCs F2 to F4	CWS Tier 1 - GC-FID, extraction	2-Sep-22	6-Sep-22
REG 153: Metals by ICP/MS, water	EPA 200.8, ICP-MS	1-Sep-22	1-Sep-22
REG 153: PAHs by GC-MS	EPA 625 - GC-MS, extraction	2-Sep-22	2-Sep-22
REG 153: VOCs by P&T GC-MS	EPA 624 - P&T GC-MS	6-Sep-22	6-Sep-22

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Summary of Criteria Exceedances

(If this page is blank then there are no exceedances)

Only those criteria that a sample exceeds will be highlighted in red

Regulatory Comparison:

Paracel Laboratories has provided regulatory guidelines on this report for informational purposes only and makes no representations or warranties that the data is accurate or reflects the current regulatory values. The user is advised to consult with the appropriate official regulations to evaluate compliance. Sample results that are highlighted have exceeded the selected regulatory limit. Calculated uncertainty estimations have not been applied for determining regulatory exceedances.

Sample	Analyte	MDL / Units	Result	Reg 153/04 -T2 Potable Groundwater, fine	-
MW107	Benzo [a] pyrene	0.01 ug/L	0.07	0.01 ug/L	-

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW107	MW113	MW207	MW208	Criteria:
Sample Date:	29-Aug-22 13:20	29-Aug-22 12:30	29-Aug-22 11:05	29-Aug-22 14:10	Reg 153/04 -T2 -
Sample ID:	2236110-02	2236110-04	2236110-05	2236110-06	Potable
Matrix:	Ground Water	Ground Water	Ground Water	Ground Water	Groundwater, fine
MDL/Units					

General Inorganics

Cyanide, free	2 ug/L	<2	<2	<2	<2	66 ug/L	-
pH	0.1 pH Units	7.0	7.1	7.2	7.0	5.00 - 9.00 pH Units	-

Anions

Chloride	1 mg/L	64.9	226	54.6	55.9	790000 ug/L	-
----------	--------	------	-----	------	------	-------------	---

Metals

Mercury	0.1 ug/L	<0.1	<0.1	<0.1	<0.1	1 ug/L	-
Antimony	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	6 ug/L	-
Arsenic	1 ug/L	<1.0	<1.0	<1.0	<1.0	25 ug/L	-
Barium	1 ug/L	114	101	136	143	1000 ug/L	-
Beryllium	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	4 ug/L	-
Boron	10 ug/L	73.7	19.1	135	129	5000 ug/L	-
Cadmium	0.2 ug/L	<0.2	<0.2	<0.2	<0.2	2.7 ug/L	-
Chromium (VI)	10 ug/L	<10	<10	<10	<10	25 ug/L	-
Chromium	1 ug/L	<1.0	<1.0	<1.0	<1.0	50 ug/L	-
Cobalt	0.5 ug/L	<0.5	<0.5	0.9	0.6	3.8 ug/L	-
Copper	0.5 ug/L	2.0	0.8	1.1	1.4	87 ug/L	-
Lead	0.2 ug/L	<0.2	<0.2	<0.2	0.2	10 ug/L	-
Molybdenum	0.5 ug/L	1.9	1.3	20.4	2.3	70 ug/L	-
Nickel	1 ug/L	3.3	2.6	4.1	1.3	100 ug/L	-
Selenium	1 ug/L	<1.0	<1.0	2.2	<1.0	10 ug/L	-
Silver	0.2 ug/L	<0.2	<0.2	<0.2	<0.2	1.5 ug/L	-
Sodium	200 ug/L	44600	178000	70100	83900	490000 ug/L	-
Thallium	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	2 ug/L	-
Uranium	0.2 ug/L	1.0	1.9	3.1	0.5	20 ug/L	-
Vanadium	0.5 ug/L	<0.5	<0.5	<0.5	1.7	6.2 ug/L	-

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW107	MW113	MW207	MW208	Criteria:
Sample Date:	29-Aug-22 13:20	29-Aug-22 12:30	29-Aug-22 11:05	29-Aug-22 14:10	Reg 153/04 -T2 Potable Groundwater, fine
Sample ID:	2236110-02	2236110-04	2236110-05	2236110-06	
Matrix:	Ground Water	Ground Water	Ground Water	Ground Water	
MDL/Units					

Metals

Zinc	5 ug/L	<5.0	<5.0	<5.0	<5.0	1100 ug/L	-
------	--------	------	------	------	------	-----------	---

Volatiles

Acetone	5 ug/L	<5.0	<5.0	<5.0	<5.0	2700 ug/L	-
Benzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	5 ug/L	-
Bromodichloromethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	16 ug/L	-
Bromoform	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	25 ug/L	-
Bromomethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.89 ug/L	-
Carbon Tetrachloride	0.2 ug/L	<0.2	<0.2	<0.2	<0.2	5 ug/L	-
Chlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	30 ug/L	-
Chloroform	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	22 ug/L	-
Dibromochloromethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	25 ug/L	-
Dichlorodifluoromethane	1 ug/L	<1.0	<1.0	<1.0	<1.0	590 ug/L	-
1,2-Dichlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	3 ug/L	-
1,3-Dichlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	59 ug/L	-
1,4-Dichlorobenzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	1 ug/L	-
1,1-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	5 ug/L	-
1,2-Dichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	5 ug/L	-
1,1-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	14 ug/L	-
cis-1,2-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	17 ug/L	-
trans-1,2-Dichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	17 ug/L	-
1,2-Dichloropropane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	5 ug/L	-
cis-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	-	-
trans-1,3-Dichloropropylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	-	-
1,3-Dichloropropene, total	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	0.5 ug/L	-
Ethylene dibromide (dibromoethane,	0.2 ug/L	<0.2	<0.2	<0.2	<0.2	0.2 ug/L	-

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW107	MW113	MW207	MW208	Criteria:
Sample Date:	29-Aug-22 13:20	29-Aug-22 12:30	29-Aug-22 11:05	29-Aug-22 14:10	Reg 153/04 -T2 Potable Groundwater, fine
Sample ID:	2236110-02	2236110-04	2236110-05	2236110-06	
Matrix:	Ground Water	Ground Water	Ground Water	Ground Water	
MDL/Units					

Volatiles

Ethylbenzene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	2.4 ug/L	-
Hexane	1 ug/L	<1.0	<1.0	<1.0	<1.0	520 ug/L	-
Methyl Ethyl Ketone (2-Butanone)	5 ug/L	<5.0	<5.0	<5.0	<5.0	1800 ug/L	-
Methyl Isobutyl Ketone	5 ug/L	<5.0	<5.0	<5.0	<5.0	640 ug/L	-
Methyl tert-butyl ether	2 ug/L	<2.0	<2.0	<2.0	<2.0	15 ug/L	-
Methylene Chloride	5 ug/L	<5.0	<5.0	<5.0	<5.0	50 ug/L	-
Styrene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	5.4 ug/L	-
1,1,1,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	1.1 ug/L	-
1,1,2,2-Tetrachloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	1 ug/L	-
Tetrachloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	17 ug/L	-
Toluene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	24 ug/L	-
1,1,1-Trichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	200 ug/L	-
1,1,2-Trichloroethane	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	5 ug/L	-
Trichloroethylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	5 ug/L	-
Trichlorofluoromethane	1 ug/L	<1.0	<1.0	<1.0	<1.0	150 ug/L	-
Vinyl chloride	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	1.7 ug/L	-
m,p-Xylenes	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	-	-
o-Xylene	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	-	-
Xylenes, total	0.5 ug/L	<0.5	<0.5	<0.5	<0.5	300 ug/L	-
Dibromofluoromethane	Surrogate	84.8%	84.6%	81.9%	85.0%	-	-
4-Bromofluorobenzene	Surrogate	111%	111%	110%	112%	-	-
Toluene-d8	Surrogate	104%	105%	106%	102%	-	-

Hydrocarbons

F1 PHCs (C6-C10)	25 ug/L	<25	<25	<25	<25	750 ug/L	-
F2 PHCs (C10-C16)	100 ug/L	<100	<100	<100	<100	150 ug/L	-

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW107	MW113	MW207	MW208	Criteria:
Sample Date:	29-Aug-22 13:20	29-Aug-22 12:30	29-Aug-22 11:05	29-Aug-22 14:10	Reg 153/04 -T2
Sample ID:	2236110-02	2236110-04	2236110-05	2236110-06	Potable
Matrix:	Ground Water	Ground Water	Ground Water	Ground Water	Groundwater, fine
MDL/Units					

Hydrocarbons

F3 PHCs (C16-C34)	100 ug/L	<100	<100	<100	<100	500 ug/L	-
F4 PHCs (C34-C50)	100 ug/L	<100	<100	<100	<100	500 ug/L	-

Semi-Volatiles

Acenaphthene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	4.1 ug/L	-
Acenaphthylene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	1 ug/L	-
Anthracene	0.01 ug/L	0.04	<0.01	0.08	<0.01	2.4 ug/L	-
Benzo [a] anthracene	0.01 ug/L	0.10	<0.01	<0.01	<0.01	1 ug/L	-
Benzo [a] pyrene	0.01 ug/L	0.07	<0.01	<0.01	<0.01	0.01 ug/L	-
Benzo [b] fluoranthene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	0.1 ug/L	-
Benzo [g,h,i] perylene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	0.2 ug/L	-
Benzo [k] fluoranthene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	0.1 ug/L	-
Chrysene	0.05 ug/L	0.05	<0.05	<0.05	<0.05	0.1 ug/L	-
Dibenzo [a,h] anthracene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	0.2 ug/L	-
Fluoranthene	0.01 ug/L	0.05	<0.01	<0.01	<0.01	0.41 ug/L	-
Fluorene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	120 ug/L	-
Indeno [1,2,3-cd] pyrene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	0.2 ug/L	-
1-Methylnaphthalene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	3.2 ug/L	-
2-Methylnaphthalene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	3.2 ug/L	-
Methylnaphthalene (1&2)	0.1 ug/L	<0.10	<0.10	<0.10	<0.10	3.2 ug/L	-
Naphthalene	0.05 ug/L	<0.05	<0.05	<0.05	<0.05	11 ug/L	-
Phenanthrene	0.05 ug/L	<0.05	<0.05	0.05	<0.05	1 ug/L	-
Pyrene	0.01 ug/L	0.06	<0.01	<0.01	<0.01	4.1 ug/L	-
2-Fluorobiphenyl	Surrogate	80.6%	81.4%	76.8%	77.8%	-	-
Terphenyl-d14	Surrogate	89.6%	91.9%	93.6%	87.0%	-	-

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW1000	Trip Spike	Trip Blank		Criteria:
Sample Date:	29-Aug-22 11:05	25-Aug-22 12:50	26-Aug-22 10:53		Reg 153/04 -T2
Sample ID:	2236110-07	2236110-09	2236110-10		Potable
Matrix:	Ground Water	Water	Water		Groundwater, fine
MDL/Units					-

General Inorganics

Cyanide, free	2 ug/L	<2	-	-	-	66 ug/L	-
pH	0.1 pH Units	7.1	-	-	-	5.00 - 9.00 pH Units	-

Anions

Chloride	1 mg/L	54.7	-	-	-	790000 ug/L	-
----------	--------	------	---	---	---	-------------	---

Metals

Mercury	0.1 ug/L	<0.1	-	-	-	1 ug/L	-
Antimony	0.5 ug/L	<0.5	-	-	-	6 ug/L	-
Arsenic	1 ug/L	<1.0	-	-	-	25 ug/L	-
Barium	1 ug/L	137	-	-	-	1000 ug/L	-
Beryllium	0.5 ug/L	<0.5	-	-	-	4 ug/L	-
Boron	10 ug/L	141	-	-	-	5000 ug/L	-
Cadmium	0.2 ug/L	<0.2	-	-	-	2.7 ug/L	-
Chromium (VI)	10 ug/L	<10	-	-	-	25 ug/L	-
Chromium	1 ug/L	<1.0	-	-	-	50 ug/L	-
Cobalt	0.5 ug/L	0.9	-	-	-	3.8 ug/L	-
Copper	0.5 ug/L	1.1	-	-	-	87 ug/L	-
Lead	0.2 ug/L	<0.2	-	-	-	10 ug/L	-
Molybdenum	0.5 ug/L	21.2	-	-	-	70 ug/L	-
Nickel	1 ug/L	4.0	-	-	-	100 ug/L	-
Selenium	1 ug/L	2.1	-	-	-	10 ug/L	-
Silver	0.2 ug/L	<0.2	-	-	-	1.5 ug/L	-
Sodium	200 ug/L	70500	-	-	-	490000 ug/L	-
Thallium	0.5 ug/L	<0.5	-	-	-	2 ug/L	-
Uranium	0.2 ug/L	3.0	-	-	-	20 ug/L	-
Vanadium	0.5 ug/L	<0.5	-	-	-	6.2 ug/L	-

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW1000	Trip Spike	Trip Blank		Criteria:
Sample Date:	29-Aug-22 11:05	25-Aug-22 12:50	26-Aug-22 10:53		Reg 153/04 -T2
Sample ID:	2236110-07	2236110-09	2236110-10		Potable
Matrix:	Ground Water	Water	Water		Groundwater, fine
MDL/Units					

Metals

Zinc	5 ug/L	<5.0	-	-	-	1100 ug/L	-
------	--------	------	---	---	---	-----------	---

Volatiles

Acetone	5 ug/L	5.2	119 [4]	<5.0	-	2700 ug/L	-
Benzene	0.5 ug/L	<0.5	40.8 [4]	<0.5	-	5 ug/L	-
Bromodichloromethane	0.5 ug/L	<0.5	40.1 [4]	<0.5	-	16 ug/L	-
Bromoform	0.5 ug/L	<0.5	41.5 [4]	<0.5	-	25 ug/L	-
Bromomethane	0.5 ug/L	<0.5	40.5 [4]	<0.5	-	0.89 ug/L	-
Carbon Tetrachloride	0.2 ug/L	<0.2	39.5 [4]	<0.2	-	5 ug/L	-
Chlorobenzene	0.5 ug/L	<0.5	40.9 [4]	<0.5	-	30 ug/L	-
Chloroform	0.5 ug/L	<0.5	41.0 [4]	<0.5	-	22 ug/L	-
Dibromochloromethane	0.5 ug/L	<0.5	39.0 [4]	<0.5	-	25 ug/L	-
Dichlorodifluoromethane	1 ug/L	<1.0	37.7 [4]	<1.0	-	590 ug/L	-
1,2-Dichlorobenzene	0.5 ug/L	<0.5	40.1 [4]	<0.5	-	3 ug/L	-
1,3-Dichlorobenzene	0.5 ug/L	<0.5	39.1 [4]	<0.5	-	59 ug/L	-
1,4-Dichlorobenzene	0.5 ug/L	<0.5	38.8 [4]	<0.5	-	1 ug/L	-
1,1-Dichloroethane	0.5 ug/L	<0.5	39.7 [4]	<0.5	-	5 ug/L	-
1,2-Dichloroethane	0.5 ug/L	<0.5	39.3 [4]	<0.5	-	5 ug/L	-
1,1-Dichloroethylene	0.5 ug/L	<0.5	34.0 [4]	<0.5	-	14 ug/L	-
cis-1,2-Dichloroethylene	0.5 ug/L	<0.5	39.1 [4]	<0.5	-	17 ug/L	-
trans-1,2-Dichloroethylene	0.5 ug/L	<0.5	37.0 [4]	<0.5	-	17 ug/L	-
1,2-Dichloropropane	0.5 ug/L	<0.5	39.7 [4]	<0.5	-	5 ug/L	-
cis-1,3-Dichloropropylene	0.5 ug/L	<0.5	28.8 [4]	<0.5	-	-	-
trans-1,3-Dichloropropylene	0.5 ug/L	<0.5	29.2 [4]	<0.5	-	-	-
1,3-Dichloropropene, total	0.5 ug/L	<0.5	58.0 [4]	<0.5	-	0.5 ug/L	-
Ethylbenzene	0.5 ug/L	<0.5	39.3 [4]	<0.5	-	2.4 ug/L	-

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW1000	Trip Spike	Trip Blank		Criteria:
Sample Date:	29-Aug-22 11:05	25-Aug-22 12:50	26-Aug-22 10:53		Reg 153/04 -T2
Sample ID:	2236110-07	2236110-09	2236110-10		Potable
Matrix:	Ground Water	Water	Water		Groundwater, fine
MDL/Units					

Volatiles

Ethylene dibromide (dibromoethane,	0.2 ug/L	<0.2	38.0 [4]	<0.2	-	0.2 ug/L	-
Hexane	1 ug/L	<1.0	26.7 [4]	<1.0	-	520 ug/L	-
Methyl Ethyl Ketone (2-Butanone)	5 ug/L	<5.0	115 [4]	<5.0	-	1800 ug/L	-
Methyl Isobutyl Ketone	5 ug/L	<5.0	103 [4]	<5.0	-	640 ug/L	-
Methyl tert-butyl ether	2 ug/L	<2.0	110 [4]	<2.0	-	15 ug/L	-
Methylene Chloride	5 ug/L	<5.0	37.4 [4]	<5.0	-	50 ug/L	-
Styrene	0.5 ug/L	<0.5	39.3 [4]	<0.5	-	5.4 ug/L	-
1,1,1,2-Tetrachloroethane	0.5 ug/L	<0.5	38.8 [4]	<0.5	-	1.1 ug/L	-
1,1,2,2-Tetrachloroethane	0.5 ug/L	<0.5	44.7 [4]	<0.5	-	1 ug/L	-
Tetrachloroethylene	0.5 ug/L	<0.5	35.8 [4]	<0.5	-	17 ug/L	-
Toluene	0.5 ug/L	<0.5	39.2 [4]	<0.5	-	24 ug/L	-
1,1,1-Trichloroethane	0.5 ug/L	<0.5	38.8 [4]	<0.5	-	200 ug/L	-
1,1,2-Trichloroethane	0.5 ug/L	<0.5	39.3 [4]	<0.5	-	5 ug/L	-
Trichloroethylene	0.5 ug/L	<0.5	36.7 [4]	<0.5	-	5 ug/L	-
Trichlorofluoromethane	1 ug/L	<1.0	36.8 [4]	<1.0	-	150 ug/L	-
Vinyl chloride	0.5 ug/L	<0.5	39.0 [4]	<0.5	-	1.7 ug/L	-
m,p-Xylenes	0.5 ug/L	<0.5	77.3 [4]	<0.5	-	-	-
o-Xylene	0.5 ug/L	<0.5	40.2 [4]	<0.5	-	-	-
Xylenes, total	0.5 ug/L	<0.5	118 [4]	<0.5	-	300 ug/L	-
Toluene-d8	Surrogate	103%	99.0% [4]	105%	-	-	-
4-Bromofluorobenzene	Surrogate	110%	99.9% [4]	111%	-	-	-
Dibromofluoromethane	Surrogate	84.2%	92.4% [4]	84.5%	-	-	-

Hydrocarbons

F1 PHCs (C6-C10)	25 ug/L	<25	40 [4]	<25	-	750 ug/L	-
F2 PHCs (C10-C16)	100 ug/L	<100	-	-	-	150 ug/L	-

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Client ID:	MW1000	Trip Spike	Trip Blank		Criteria:
Sample Date:	29-Aug-22 11:05	25-Aug-22 12:50	26-Aug-22 10:53		Reg 153/04 -T2
Sample ID:	2236110-07	2236110-09	2236110-10		Potable
Matrix:	Ground Water	Water	Water		Groundwater, fine
MDL/Units					

Hydrocarbons

F3 PHCs (C16-C34)	100 ug/L	<100	-	-	-	500 ug/L	-
F4 PHCs (C34-C50)	100 ug/L	<100	-	-	-	500 ug/L	-

Semi-Volatiles

Acenaphthene	0.05 ug/L	<0.05	-	-	-	4.1 ug/L	-
Acenaphthylene	0.05 ug/L	<0.05	-	-	-	1 ug/L	-
Anthracene	0.01 ug/L	<0.01	-	-	-	2.4 ug/L	-
Benzo [a] anthracene	0.01 ug/L	<0.01	-	-	-	1 ug/L	-
Benzo [a] pyrene	0.01 ug/L	<0.01	-	-	-	0.01 ug/L	-
Benzo [b] fluoranthene	0.05 ug/L	<0.05	-	-	-	0.1 ug/L	-
Benzo [g,h,i] perylene	0.05 ug/L	<0.05	-	-	-	0.2 ug/L	-
Benzo [k] fluoranthene	0.05 ug/L	<0.05	-	-	-	0.1 ug/L	-
Chrysene	0.05 ug/L	<0.05	-	-	-	0.1 ug/L	-
Dibenzo [a,h] anthracene	0.05 ug/L	<0.05	-	-	-	0.2 ug/L	-
Fluoranthene	0.01 ug/L	<0.01	-	-	-	0.41 ug/L	-
Fluorene	0.05 ug/L	<0.05	-	-	-	120 ug/L	-
Indeno [1,2,3-cd] pyrene	0.05 ug/L	<0.05	-	-	-	0.2 ug/L	-
1-Methylnaphthalene	0.05 ug/L	<0.05	-	-	-	3.2 ug/L	-
2-Methylnaphthalene	0.05 ug/L	<0.05	-	-	-	3.2 ug/L	-
Methylnaphthalene (1&2)	0.1 ug/L	<0.10	-	-	-	3.2 ug/L	-
Naphthalene	0.05 ug/L	<0.05	-	-	-	11 ug/L	-
Phenanthrene	0.05 ug/L	<0.05	-	-	-	1 ug/L	-
Pyrene	0.01 ug/L	<0.01	-	-	-	4.1 ug/L	-
2-Fluorobiphenyl	Surrogate	73.5%	-	-	-	-	-
Terphenyl-d14	Surrogate	88.2%	-	-	-	-	-

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions								
Chloride	ND	1.0	mg/L					
General Inorganics								
Cyanide, free	ND	2	ug/L					
Hydrocarbons								
F1 PHCs (C6-C10)	ND	25	ug/L					
F2 PHCs (C10-C16)	ND	100	ug/L					
F3 PHCs (C16-C34)	ND	100	ug/L					
F4 PHCs (C34-C50)	ND	100	ug/L					
Metals								
Mercury	ND	0.1	ug/L					
Antimony	ND	0.5	ug/L					
Arsenic	ND	1.0	ug/L					
Barium	ND	1.0	ug/L					
Beryllium	ND	0.5	ug/L					
Boron	ND	10.0	ug/L					
Cadmium	ND	0.2	ug/L					
Chromium (VI)	ND	10	ug/L					
Chromium	ND	1.0	ug/L					
Cobalt	ND	0.5	ug/L					
Copper	ND	0.5	ug/L					
Lead	ND	0.2	ug/L					
Molybdenum	ND	0.5	ug/L					
Nickel	ND	1.0	ug/L					
Selenium	ND	1.0	ug/L					
Silver	ND	0.2	ug/L					
Sodium	ND	200	ug/L					
Thallium	ND	0.5	ug/L					
Uranium	ND	0.2	ug/L					
Vanadium	ND	0.5	ug/L					
Zinc	ND	5.0	ug/L					
Semi-Volatiles								
Acenaphthene	ND	0.05	ug/L					

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Acenaphthylene	ND	0.05	ug/L					
Anthracene	ND	0.01	ug/L					
Benzo [a] anthracene	ND	0.01	ug/L					
Benzo [a] pyrene	ND	0.01	ug/L					
Benzo [b] fluoranthene	ND	0.05	ug/L					
Benzo [g,h,i] perylene	ND	0.05	ug/L					
Benzo [k] fluoranthene	ND	0.05	ug/L					
Chrysene	ND	0.05	ug/L					
Dibenzo [a,h] anthracene	ND	0.05	ug/L					
Fluoranthene	ND	0.01	ug/L					
Fluorene	ND	0.05	ug/L					
Indeno [1,2,3-cd] pyrene	ND	0.05	ug/L					
1-Methylnaphthalene	ND	0.05	ug/L					
2-Methylnaphthalene	ND	0.05	ug/L					
Methylnaphthalene (1&2)	ND	0.10	ug/L					
Naphthalene	ND	0.05	ug/L					
Phenanthrene	ND	0.05	ug/L					
Pyrene	ND	0.01	ug/L					
Surrogate: 2-Fluorobiphenyl	7.76		ug/L	77.6	50-140			
Surrogate: Terphenyl-d14	8.30		ug/L	83.0	50-140			
Volatiles								
Acetone	ND	5.0	ug/L					
Benzene	ND	0.5	ug/L					
Bromodichloromethane	ND	0.5	ug/L					
Bromoform	ND	0.5	ug/L					
Bromomethane	ND	0.5	ug/L					
Carbon Tetrachloride	ND	0.2	ug/L					
Chlorobenzene	ND	0.5	ug/L					
Chloroform	ND	0.5	ug/L					
Dibromochloromethane	ND	0.5	ug/L					
Dichlorodifluoromethane	ND	1.0	ug/L					
1,2-Dichlorobenzene	ND	0.5	ug/L					

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
1,3-Dichlorobenzene	ND	0.5	ug/L					
1,4-Dichlorobenzene	ND	0.5	ug/L					
1,1-Dichloroethane	ND	0.5	ug/L					
1,2-Dichloroethane	ND	0.5	ug/L					
1,1-Dichloroethylene	ND	0.5	ug/L					
cis-1,2-Dichloroethylene	ND	0.5	ug/L					
trans-1,2-Dichloroethylene	ND	0.5	ug/L					
1,2-Dichloropropane	ND	0.5	ug/L					
cis-1,3-Dichloropropylene	ND	0.5	ug/L					
trans-1,3-Dichloropropylene	ND	0.5	ug/L					
1,3-Dichloropropene, total	ND	0.5	ug/L					
Ethylbenzene	ND	0.5	ug/L					
Ethylene dibromide (dibromoethane, 1,2-)	ND	0.2	ug/L					
Hexane	ND	1.0	ug/L					
Methyl Ethyl Ketone (2-Butanone)	ND	5.0	ug/L					
Methyl Isobutyl Ketone	ND	5.0	ug/L					
Methyl tert-butyl ether	ND	2.0	ug/L					
Methylene Chloride	ND	5.0	ug/L					
Styrene	ND	0.5	ug/L					
1,1,1,2-Tetrachloroethane	ND	0.5	ug/L					
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L					
Tetrachloroethylene	ND	0.5	ug/L					
Toluene	ND	0.5	ug/L					
1,1,1-Trichloroethane	ND	0.5	ug/L					
1,1,2-Trichloroethane	ND	0.5	ug/L					
Trichloroethylene	ND	0.5	ug/L					
Trichlorofluoromethane	ND	1.0	ug/L					
Vinyl chloride	ND	0.5	ug/L					
m,p-Xylenes	ND	0.5	ug/L					
o-Xylene	ND	0.5	ug/L					
Xylenes, total	ND	0.5	ug/L					
Surrogate: 4-Bromofluorobenzene	89.5		ug/L	111	50-140			

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	%REC	%REC Limit	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	70.6		ug/L	88.3	50-140			
Surrogate: Toluene-d8	82.0		ug/L	103	50-140			

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions									
Chloride	ND	1.0	mg/L	ND			NC	10	
General Inorganics									
Cyanide, free	ND	2	ug/L	ND			NC	20	
pH	7.0	0.1	pH Units	7.0			0.3	10	
Metals									
Mercury	ND	0.1	ug/L	ND			NC	20	
Antimony	ND	0.5	ug/L	ND			NC	20	
Arsenic	ND	1.0	ug/L	ND			NC	20	
Barium	115	1.0	ug/L	114			0.4	20	
Beryllium	ND	0.5	ug/L	ND			NC	20	
Boron	77.4	10.0	ug/L	73.7			4.9	20	
Cadmium	ND	0.2	ug/L	ND			NC	20	
Chromium (VI)	ND	10	ug/L	ND			NC	20	
Chromium	ND	1.0	ug/L	ND			NC	20	
Cobalt	ND	0.5	ug/L	ND			NC	20	
Copper	2.0	0.5	ug/L	2.0			1.4	20	
Lead	ND	0.2	ug/L	ND			NC	20	
Molybdenum	1.8	0.5	ug/L	1.9			6.8	20	
Nickel	3.3	1.0	ug/L	3.3			0.4	20	
Selenium	1.1	1.0	ug/L	ND			NC	20	
Silver	0.2	0.2	ug/L	ND			NC	20	
Sodium	44900	200	ug/L	44600			0.7	20	
Thallium	ND	0.5	ug/L	ND			NC	20	
Uranium	0.7	0.2	ug/L	1.0			NC	20	
Vanadium	ND	0.5	ug/L	ND			NC	20	
Zinc	ND	5.0	ug/L	ND			NC	20	

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Anions									
Chloride	10.3	1.0	mg/L	ND	103	85-115			
General Inorganics									
Cyanide, free	27.8	2	ug/L	ND	123	70-130			
Hydrocarbons									
F1 PHCs (C6-C10)	698	25	ug/L	ND	98.7	68-117			
F2 PHCs (C10-C16)	1700	100	ug/L	ND	103	60-140			
F3 PHCs (C16-C34)	4220	100	ug/L	ND	114	60-140			
F4 PHCs (C34-C50)	2900	100	ug/L	ND	109	60-140			
Metals									
Mercury	3.48	0.1	ug/L	ND	116	70-130			
Antimony	42.0	0.5	ug/L	ND	84.0	70-130			
Arsenic	61.1	1.0	ug/L	ND	122	70-130			
Barium	162	1.0	ug/L	114	94.5	70-130			
Beryllium	48.2	0.5	ug/L	ND	96.4	70-130			
Boron	125	10.0	ug/L	73.7	102	70-130			
Cadmium	55.1	0.2	ug/L	ND	110	70-130			
Chromium (VI)	206	10	ug/L	ND	103	70-130			
Chromium	53.9	1.0	ug/L	ND	108	70-130			
Cobalt	51.9	0.5	ug/L	ND	104	70-130			
Copper	54.1	0.5	ug/L	2.0	104	70-130			
Lead	46.8	0.2	ug/L	ND	93.7	70-130			
Molybdenum	54.2	0.5	ug/L	1.9	105	70-130			
Nickel	55.9	1.0	ug/L	3.3	105	70-130			
Selenium	64.9	1.0	ug/L	ND	130	70-130			
Silver	42.7	0.2	ug/L	ND	85.4	70-130			
Sodium	41500	200	ug/L	44600	-303	70-130			QM-4X
Thallium	49.9	0.5	ug/L	ND	99.7	70-130			
Uranium	57.7	0.2	ug/L	1.0	113	70-130			
Vanadium	54.3	0.5	ug/L	ND	109	70-130			
Zinc	59.9	5.0	ug/L	ND	120	70-130			

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Semi-Volatiles									
Acenaphthene	7.85	0.05	ug/L	ND	78.5	50-140			
Acenaphthylene	8.21	0.05	ug/L	ND	82.1	50-140			
Anthracene	9.33	0.01	ug/L	ND	93.3	50-140			
Benzo [a] anthracene	9.04	0.01	ug/L	ND	90.4	50-140			
Benzo [a] pyrene	9.13	0.01	ug/L	ND	91.3	50-140			
Benzo [b] fluoranthene	8.49	0.05	ug/L	ND	84.9	50-140			
Benzo [g,h,i] perylene	8.50	0.05	ug/L	ND	85.0	50-140			
Benzo [k] fluoranthene	7.73	0.05	ug/L	ND	77.3	50-140			
Chrysene	8.40	0.05	ug/L	ND	84.0	50-140			
Dibenzo [a,h] anthracene	8.98	0.05	ug/L	ND	89.8	50-140			
Fluoranthene	9.27	0.01	ug/L	ND	92.7	50-140			
Fluorene	8.93	0.05	ug/L	ND	89.3	50-140			
Indeno [1,2,3-cd] pyrene	9.16	0.05	ug/L	ND	91.6	50-140			
1-Methylnaphthalene	6.10	0.05	ug/L	ND	61.0	50-140			
2-Methylnaphthalene	5.90	0.05	ug/L	ND	59.0	50-140			
Naphthalene	6.32	0.05	ug/L	ND	63.2	50-140			
Phenanthrene	9.21	0.05	ug/L	ND	92.1	50-140			
Pyrene	8.99	0.01	ug/L	ND	89.9	50-140			
Surrogate: 2-Fluorobiphenyl	7.49		ug/L		74.9	50-140			
Surrogate: Terphenyl-d14	9.19		ug/L		91.9	50-140			
Volatiles									
Acetone	152	5.0	ug/L	ND	152	50-140			QS-02
Benzene	40.7	0.5	ug/L	ND	102	60-130			
Bromodichloromethane	37.3	0.5	ug/L	ND	93.3	60-130			
Bromoform	41.7	0.5	ug/L	ND	104	60-130			
Bromomethane	45.0	0.5	ug/L	ND	113	50-140			
Carbon Tetrachloride	38.9	0.2	ug/L	ND	97.2	60-130			
Chlorobenzene	42.4	0.5	ug/L	ND	106	60-130			
Chloroform	44.9	0.5	ug/L	ND	112	60-130			
Dibromochloromethane	37.9	0.5	ug/L	ND	94.7	60-130			

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Dichlorodifluoromethane	52.2	1.0	ug/L	ND	131	50-140			
1,2-Dichlorobenzene	42.3	0.5	ug/L	ND	106	60-130			
1,3-Dichlorobenzene	43.2	0.5	ug/L	ND	108	60-130			
1,4-Dichlorobenzene	42.6	0.5	ug/L	ND	107	60-130			
1,1-Dichloroethane	43.5	0.5	ug/L	ND	109	60-130			
1,2-Dichloroethane	41.5	0.5	ug/L	ND	104	60-130			
1,1-Dichloroethylene	38.0	0.5	ug/L	ND	95.1	60-130			
cis-1,2-Dichloroethylene	41.3	0.5	ug/L	ND	103	60-130			
trans-1,2-Dichloroethylene	40.7	0.5	ug/L	ND	102	60-130			
1,2-Dichloropropane	39.1	0.5	ug/L	ND	97.7	60-130			
cis-1,3-Dichloropropylene	38.0	0.5	ug/L	ND	94.9	60-130			
trans-1,3-Dichloropropylene	40.2	0.5	ug/L	ND	101	60-130			
Ethylbenzene	42.0	0.5	ug/L	ND	105	60-130			
Ethylene dibromide (dibromoethane, 1,2-)	36.1	0.2	ug/L	ND	90.2	60-130			
Hexane	45.9	1.0	ug/L	ND	115	60-130			
Methyl Ethyl Ketone (2-Butanone)	139	5.0	ug/L	ND	139	50-140			
Methyl Isobutyl Ketone	101	5.0	ug/L	ND	101	50-140			
Methyl tert-butyl ether	97.8	2.0	ug/L	ND	97.8	50-140			
Methylene Chloride	41.1	5.0	ug/L	ND	103	60-130			
Styrene	41.3	0.5	ug/L	ND	103	60-130			
1,1,1,2-Tetrachloroethane	36.8	0.5	ug/L	ND	92.0	60-130			
1,1,2,2-Tetrachloroethane	42.8	0.5	ug/L	ND	107	60-130			
Tetrachloroethylene	39.3	0.5	ug/L	ND	98.2	60-130			
Toluene	40.2	0.5	ug/L	ND	101	60-130			
1,1,1-Trichloroethane	38.2	0.5	ug/L	ND	95.5	60-130			
1,1,2-Trichloroethane	39.6	0.5	ug/L	ND	99.1	60-130			
Trichloroethylene	35.5	0.5	ug/L	ND	88.8	60-130			
Trichlorofluoromethane	42.3	1.0	ug/L	ND	106	60-130			
Vinyl chloride	39.9	0.5	ug/L	ND	99.8	50-140			
m,p-Xylenes	85.1	0.5	ug/L	ND	106	60-130			
o-Xylene	43.1	0.5	ug/L	ND	108	60-130			

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Surrogate: 4-Bromofluorobenzene	77.4		ug/L		96.3	50-140			
Surrogate: Dibromofluoromethane	85.7		ug/L		107	50-140			
Surrogate: Toluene-d8	78.4		ug/L		98.1	50-140			

Certificate of Analysis

Report Date: 05-Dec-2022

Client: Terrapex Environmental Ltd. (Toronto)

Order Date: 30-Aug-2022

Client PO:

Project Description: CT3414.01

Qualifier Notes:

Sample Qualifiers :

4: VOC Trip Spike prepared at 40 ug/L for all parameters, except for m/p-Xylene which is at 80 ug/L and ketones at 100 ug/L.

QC Qualifiers:

QM-4X The spike recovery was outside of QC acceptance limits due to elevated analyte concentration.

QS-02 Spike level outside of control limits. Analysis batch accepted based on other QC included in the batch.

Sample Data Revisions:

None

Work Order Revisions / Comments:

REVISION-01: Samples MW101 and MW109 were not analyzed at the request of the client.

Other Report Notes:

n/a: not applicable

ND: Not Detected

MDL: Method Detection Limit

Source Result: Data used as source for matrix and duplicate samples

%REC: Percent recovery.

RPD: Relative percent difference.

NC: Not Calculated

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.

- F1 range corrected for BTEX.

- F2 to F3 ranges corrected for appropriate PAHs where available.

- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.

- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.

- When reported, data for F4G has been processed using a silica gel cleanup.

Any use of these results implies your agreement that our total liability in connection with this work, however arising, shall be limited to the amount paid by you for this work, and that our employees or agents shall not under any circumstances be liable to you in connection with this work.



Parcel Order Number (Lab Use Only) 2236110	Chain Of Custody (Lab Use Only) Nº 137568
---	--

Client Name: Terrapex	Project Ref: CT344.01	Page <u> </u> of <u> </u>
Contact Name: Sara Sutherland	Quote #: TPEX2022	Turnaround Time <input type="checkbox"/> 1 day <input type="checkbox"/> 3 day <input type="checkbox"/> 2 day <input checked="" type="checkbox"/> Regular
Address: 90 Scarsdale Rd Toronto ON, M3B 2K7	PO #:	
Telephone: 416-529-9215	E-mail: S.Sutherland@terrapex.com	
Date Required: _____		

<input checked="" type="checkbox"/> REG 153/04 <input type="checkbox"/> REG 406/19 <input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Res/Park <input checked="" type="checkbox"/> Med/Fine <input type="checkbox"/> REG 558 <input type="checkbox"/> PWQO <input checked="" type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> CCME <input type="checkbox"/> MISA <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> Table _____ For RSC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Other Regulation <input type="checkbox"/> SU - Sani <input type="checkbox"/> SU - Storm Mun: _____ <input type="checkbox"/> Other: _____	Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)	Required Analysis PHCs F1-F4+BTEX VOCs PAHs Metals by ICP Hg CrVI B (HWS) M 3 I										
Sample ID/Location Name		Matrix	Air Volume	# of Containers	Sample Taken		PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	M 3 I
					Date	Time								
1	MW101	GW		8	Aug 29, 22	18:00	✓	✓						✓
2	MW107			9		13:20	✓	✓	✓					✓
3	MW109			9		15:50	✓	✓	✓					✓
4	MW113			9		12:30	✓	✓	✓					✓
5	MW207/MWH			9		11:05	✓	✓	✓					✓
6	MW208/MWB			9		14:10	✓	✓	✓					✓
7	MW1000			9		11:05	✓	✓	✓					✓
8	MW2000			9		15:50	✓	✓	✓					✓
9	Trip Spike			2	Aug 25, 22	12:50								
10	Trip Blank			4	Aug 26, 22	10:53								

Comments: MW101 not field filtered, others are field filtered

Method of Delivery: **RABBEX**

Relinquished By (Sign): <i>[Signature]</i>	Received By Driver/Depot: <i>[Signature]</i>	Received at Lab: <i>[Signature]</i>	Verified By: <i>[Signature]</i>
Relinquished By (Print): Vino Subhan	Date/Time: 30-AUG-22 10:15	Date/Time: Aug 30/22 13:46	Date/Time: Aug 30/22 14:50
Date/Time: Aug 30, 22	Temperature: 9.8 °C	Temperature: 9.7 °C	pH Verified: CP



Your Project #: CT3414.01
 Site Location: 640 LIVERPOOL ROAD.
 Your C.O.C. #: 885308-35-01

Attention: Sara Sutherland

Terrapex Environmental Ltd
 90 Scarsdale Rd
 Toronto, ON
 CANADA M3B 2R7

Report Date: 2022/10/25
 Report #: R7356301
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2T9680

Received: 2022/10/14, 16:02

Sample Matrix: Water
 # Samples Received: 2

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Methylnaphthalene Sum	2	N/A	2022/10/24	CAM SOP-00301	EPA 8270D m
PAH Compounds in Water by GC/MS (SIM)	2	2022/10/23	2022/10/24	CAM SOP-00318	EPA 8270D m

Remarks:

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

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

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

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

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

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

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



Your Project #: CT3414.01
Site Location: 640 LIVERPOOL ROAD.
Your C.O.C. #: 885308-35-01

Attention: Sara Sutherland

Terrapex Environmental Ltd
90 Scarsdale Rd
Toronto, ON
CANADA M3B 2R7

Report Date: 2022/10/25
Report #: R7356301
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2T9680

Received: 2022/10/14, 16:02

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Kudrat Bajwa, B.Sc., Project Manager
Email: Kudrat.Bajwa@bureauveritas.com
Phone# (905)817-5755

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



BUREAU
VERITAS

Bureau Veritas Job #: C2T9680
Report Date: 2022/10/25

Terrapex Environmental Ltd
Client Project #: CT3414.01
Site Location: 640 LIVERPOOL ROAD.
Sampler Initials: NT

O.REG 153 PAHS (WATER)

Bureau Veritas ID		TZZ457	TZZ458		
Sampling Date		2022/10/13 12:24	2022/10/13 12:24		
COC Number		885308-35-01	885308-35-01		
	UNITS	MW107	MW1000	RDL	QC Batch
Calculated Parameters					
Methylnaphthalene, 2-(1-)	ug/L	<0.071	<0.071	0.071	8283075
Polyaromatic Hydrocarbons					
Acenaphthene	ug/L	<0.050	<0.050	0.050	8300506
Acenaphthylene	ug/L	<0.050	<0.050	0.050	8300506
Anthracene	ug/L	<0.050	<0.050	0.050	8300506
Benzo(a)anthracene	ug/L	<0.050	<0.050	0.050	8300506
Benzo(a)pyrene	ug/L	<0.0090	<0.0090	0.0090	8300506
Benzo(b,j)fluoranthene	ug/L	<0.050	<0.050	0.050	8300506
Benzo(g,h,i)perylene	ug/L	<0.050	<0.050	0.050	8300506
Benzo(k)fluoranthene	ug/L	<0.050	<0.050	0.050	8300506
Chrysene	ug/L	<0.050	<0.050	0.050	8300506
Dibenzo(a,h)anthracene	ug/L	<0.050	<0.050	0.050	8300506
Fluoranthene	ug/L	<0.050	<0.050	0.050	8300506
Fluorene	ug/L	<0.050	<0.050	0.050	8300506
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	<0.050	0.050	8300506
1-Methylnaphthalene	ug/L	<0.050	<0.050	0.050	8300506
2-Methylnaphthalene	ug/L	<0.050	<0.050	0.050	8300506
Naphthalene	ug/L	<0.050	<0.050	0.050	8300506
Phenanthrene	ug/L	<0.030	<0.030	0.030	8300506
Pyrene	ug/L	<0.050	<0.050	0.050	8300506
Surrogate Recovery (%)					
D10-Anthracene	%	116	109		8300506
D14-Terphenyl (FS)	%	101	102		8300506
D8-Acenaphthylene	%	91	92		8300506
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					



BUREAU
VERITAS

Bureau Veritas Job #: C2T9680
Report Date: 2022/10/25

Terrapex Environmental Ltd
Client Project #: CT3414.01
Site Location: 640 LIVERPOOL ROAD.
Sampler Initials: NT

TEST SUMMARY

Bureau Veritas ID: TZZ457
Sample ID: MW107
Matrix: Water

Collected: 2022/10/13
Shipped:
Received: 2022/10/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8283075	N/A	2022/10/24	Automated Statchk
PAH Compounds in Water by GC/MS (SIM)	GC/MS	8300506	2022/10/23	2022/10/24	Yuan Zhou

Bureau Veritas ID: TZZ458
Sample ID: MW1000
Matrix: Water

Collected: 2022/10/13
Shipped:
Received: 2022/10/14

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8283075	N/A	2022/10/24	Automated Statchk
PAH Compounds in Water by GC/MS (SIM)	GC/MS	8300506	2022/10/23	2022/10/24	Yuan Zhou



BUREAU
VERITAS

Bureau Veritas Job #: C2T9680
Report Date: 2022/10/25

Terrapex Environmental Ltd
Client Project #: CT3414.01
Site Location: 640 LIVERPOOL ROAD.
Sampler Initials: NT

GENERAL COMMENTS

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

Package 1	4.3°C
-----------	-------

Results relate only to the items tested.



BUREAU
VERITAS

Bureau Veritas Job #: C2T9680

Report Date: 2022/10/25

QUALITY ASSURANCE REPORT

Terrapex Environmental Ltd

Client Project #: CT3414.01

Site Location: 640 LIVERPOOL ROAD.

Sampler Initials: NT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8300506	D10-Anthracene	2022/10/24	106	50 - 130	114	50 - 130	108	%		
8300506	D14-Terphenyl (FS)	2022/10/24	99	50 - 130	109	50 - 130	106	%		
8300506	D8-Acenaphthylene	2022/10/24	93	50 - 130	88	50 - 130	88	%		
8300506	1-Methylnaphthalene	2022/10/24	89	50 - 130	87	50 - 130	<0.050	ug/L	NC	30
8300506	2-Methylnaphthalene	2022/10/24	86	50 - 130	83	50 - 130	<0.050	ug/L	NC	30
8300506	Acenaphthene	2022/10/24	93	50 - 130	89	50 - 130	<0.050	ug/L	NC	30
8300506	Acenaphthylene	2022/10/24	104	50 - 130	98	50 - 130	<0.050	ug/L	NC	30
8300506	Anthracene	2022/10/24	116	50 - 130	103	50 - 130	<0.050	ug/L	NC	30
8300506	Benzo(a)anthracene	2022/10/24	114	50 - 130	114	50 - 130	<0.050	ug/L	NC	30
8300506	Benzo(a)pyrene	2022/10/24	110	50 - 130	109	50 - 130	<0.0090	ug/L	NC	30
8300506	Benzo(b/j)fluoranthene	2022/10/24	102	50 - 130	106	50 - 130	<0.050	ug/L	NC	30
8300506	Benzo(g,h,i)perylene	2022/10/24	99	50 - 130	103	50 - 130	<0.050	ug/L	NC	30
8300506	Benzo(k)fluoranthene	2022/10/24	107	50 - 130	113	50 - 130	<0.050	ug/L	NC	30
8300506	Chrysene	2022/10/24	102	50 - 130	105	50 - 130	<0.050	ug/L	NC	30
8300506	Dibenzo(a,h)anthracene	2022/10/24	100	50 - 130	106	50 - 130	<0.050	ug/L	NC	30
8300506	Fluoranthene	2022/10/24	106	50 - 130	107	50 - 130	<0.050	ug/L	NC	30
8300506	Fluorene	2022/10/24	98	50 - 130	96	50 - 130	<0.050	ug/L	NC	30
8300506	Indeno(1,2,3-cd)pyrene	2022/10/24	100	50 - 130	103	50 - 130	<0.050	ug/L	NC	30
8300506	Naphthalene	2022/10/24	88	50 - 130	88	50 - 130	<0.050	ug/L	NC	30
8300506	Phenanthrene	2022/10/24	101	50 - 130	102	50 - 130	<0.030	ug/L	NC	30
8300506	Pyrene	2022/10/24	105	50 - 130	106	50 - 130	<0.050	ug/L	NC	30

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

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

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

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

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

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



BUREAU
VERITAS

Bureau Veritas Job #: C2T9680
Report Date: 2022/10/25

Terrapex Environmental Ltd
Client Project #: CT3414.01
Site Location: 640 LIVERPOOL ROAD.
Sampler Initials: NT

VALIDATION SIGNATURE PAGE

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

Eva Pranjic


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

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



INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #4398 Terrapex Environmental Ltd		Company Name: TERRAPEX Environmental Ltd		Quotation #: C20955 TPEx 2022		Bureau Veritas Job #:	
Attention: Accounts Payable		Attention: SARA SUTHERLAND		P.O. #:		Bottle Order #:	
Address: 90 Scarsdale Rd		Address: 90 Scarsdale Road		Project: CT3414.0		Barcode: 885308	
Toronto ON M3B 2R7		Toronto, ON M3B 2K7		Project Name: 640 Liverpool Rd		COC #:	
Tel: (416) 245-0011 Fax: (416) 245-0012		Tel: 416-529-9215 Fax:		Site #:		Project Manager:	
Email: accounts.payable@terrapex.com		Email: S.sutherland@terrapex.com		Sampled By: NT/LC		Barcode: C#885308-35-01	
						Kudrat Bajwa	

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY						ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required: Please provide advance notice for rush projects								
Regulation 153 (2011)			Other Regulations			Special Instructions										Regular (Standard) TAT: (will be applied if Rush TAT is not specified):								
<input type="checkbox"/> Table 1	<input checked="" type="checkbox"/> Res/Park	<input checked="" type="checkbox"/> Medium/Fine	<input type="checkbox"/> CCME	<input type="checkbox"/> Sanitary Sewer Bylaw	Field Filtered (please circle): Metals / Hg / Cr / V PAHs											Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.								
<input checked="" type="checkbox"/> Table 2	<input type="checkbox"/> Ind/Comm	<input checked="" type="checkbox"/> Coarse	<input type="checkbox"/> Reg 558	<input type="checkbox"/> Storm Sewer Bylaw												Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Time Required: _____								
<input type="checkbox"/> Table 3	<input type="checkbox"/> Agri/Other	<input checked="" type="checkbox"/> For RSC	<input type="checkbox"/> MISA	<input type="checkbox"/> Municipality												Rush Confirmation Number: _____ (call lab for #)								
<input type="checkbox"/> Table			<input type="checkbox"/> PWQO	<input type="checkbox"/> Reg 406 Table												# of Bottles: _____								
			<input type="checkbox"/> Other													Comments								
Include Criteria on Certificate of Analysis (Y/N)?						Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix														
						1	MW107	Oct 13, 2022	12:24	GW	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											2	Trace Sediment Analysis as is
						2	MW1000	Oct 13, 2022	12:24	GW	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>											2	Trace sediment Analysis as is
						3																		
						4																		
						5																		
						6																		
						7																		
						8																		
						9																		
						10																		

14-Oct-22 16:02
Kudrat Bajwa
C2T9680
RJM ENV-1741

* RELINQUISHED BY: (Signature/Print)		Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only				
Narayan Ti		22/10/14	10:00	[Signature]	22/10/14	16:02	0	Time Sensitive	Temperature (°C) on Receiving	Custody Seal Present	Yes	No
									Intact			

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVNA.COM/RESOURCES/CHAIN-OF-CUSTODY-FORMS.

White: Bureau Veritas Yellow: Client

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

#615790



Your Project #: CT3414.01
 Site Location: 640 LIVERPOOL RD., PICKERING
 Your C.O.C. #: n/a

Attention: Sara Sutherland

Terrapex Environmental Ltd
 90 Scarsdale Rd
 Toronto, ON
 CANADA M3B 2R7

Report Date: 2022/11/07
 Report #: R7376696
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2V6534

Received: 2022/10/28, 14:40

Sample Matrix: Water
 # Samples Received: 2

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Methylnaphthalene Sum	2	N/A	2022/11/06	CAM SOP-00301	EPA 8270D m
PAH Compounds in Water by GC/MS (SIM)	1	2022/11/04	2022/11/04	CAM SOP-00318	EPA 8270D m
PAH Compounds in Water by GC/MS (SIM)	1	2022/11/04	2022/11/05	CAM SOP-00318	EPA 8270D m

Remarks:

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

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

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

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

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

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

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

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



Your Project #: CT3414.01
Site Location: 640 LIVERPOOL RD., PICKERING
Your C.O.C. #: n/a

Attention: Sara Sutherland

Terrapex Environmental Ltd
90 Scarsdale Rd
Toronto, ON
CANADA M3B 2R7

Report Date: 2022/11/07
Report #: R7376696
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2V6534

Received: 2022/10/28, 14:40

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Kudrat Bajwa, B.Sc., Project Manager
Email: Kudrat.Bajwa@bureauveritas.com
Phone# (905)817-5755

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



BUREAU
VERITAS

Bureau Veritas Job #: C2V6534
Report Date: 2022/11/07

Terrapex Environmental Ltd
Client Project #: CT3414.01
Site Location: 640 LIVERPOOL RD., PICKERING
Sampler Initials: VS

O.REG 153 PAHS (WATER)

Bureau Veritas ID		UDO344	UDO345		
Sampling Date		2022/10/27 10:50	2022/10/27 10:50		
COC Number		n/a	n/a		
	UNITS	MW107	MW1000	RDL	QC Batch
Calculated Parameters					
Methylnaphthalene, 2-(1-)	ug/L	<0.071	<0.071	0.071	8314407
Polyaromatic Hydrocarbons					
Acenaphthene	ug/L	<0.050	<0.050	0.050	8325942
Acenaphthylene	ug/L	<0.050	<0.050	0.050	8325942
Anthracene	ug/L	<0.050	<0.050	0.050	8325942
Benzo(a)anthracene	ug/L	<0.050	<0.050	0.050	8325942
Benzo(a)pyrene	ug/L	<0.0090	<0.0090	0.0090	8325942
Benzo(b/j)fluoranthene	ug/L	<0.050	<0.050	0.050	8325942
Benzo(g,h,i)perylene	ug/L	<0.050	<0.050	0.050	8325942
Benzo(k)fluoranthene	ug/L	<0.050	<0.050	0.050	8325942
Chrysene	ug/L	<0.050	<0.050	0.050	8325942
Dibenzo(a,h)anthracene	ug/L	<0.050	<0.050	0.050	8325942
Fluoranthene	ug/L	<0.050	<0.050	0.050	8325942
Fluorene	ug/L	<0.050	<0.050	0.050	8325942
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	<0.050	0.050	8325942
1-Methylnaphthalene	ug/L	<0.050	<0.050	0.050	8325942
2-Methylnaphthalene	ug/L	<0.050	<0.050	0.050	8325942
Naphthalene	ug/L	<0.050	<0.050	0.050	8325942
Phenanthrene	ug/L	<0.030	<0.030	0.030	8325942
Pyrene	ug/L	<0.050	<0.050	0.050	8325942
Surrogate Recovery (%)					
D10-Anthracene	%	107	103		8325942
D14-Terphenyl (FS)	%	104	99		8325942
D8-Acenaphthylene	%	102	98		8325942
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					



BUREAU
VERITAS

Bureau Veritas Job #: C2V6534
Report Date: 2022/11/07

Terrapex Environmental Ltd
Client Project #: CT3414.01
Site Location: 640 LIVERPOOL RD., PICKERING
Sampler Initials: VS

TEST SUMMARY

Bureau Veritas ID: UDO344
Sample ID: MW107
Matrix: Water

Collected: 2022/10/27
Shipped:
Received: 2022/10/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8314407	N/A	2022/11/06	Automated Statchk
PAH Compounds in Water by GC/MS (SIM)	GC/MS	8325942	2022/11/04	2022/11/04	Jonghan Yoon

Bureau Veritas ID: UDO345
Sample ID: MW1000
Matrix: Water

Collected: 2022/10/27
Shipped:
Received: 2022/10/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	8314407	N/A	2022/11/06	Automated Statchk
PAH Compounds in Water by GC/MS (SIM)	GC/MS	8325942	2022/11/04	2022/11/05	Jonghan Yoon



BUREAU
VERITAS

Bureau Veritas Job #: C2V6534
Report Date: 2022/11/07

Terrapex Environmental Ltd
Client Project #: CT3414.01
Site Location: 640 LIVERPOOL RD., PICKERING
Sampler Initials: VS

GENERAL COMMENTS

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

Package 1	4.0°C
-----------	-------

Results relate only to the items tested.



BUREAU
VERITAS

Bureau Veritas Job #: C2V6534

Report Date: 2022/11/07

QUALITY ASSURANCE REPORT

Terrapex Environmental Ltd

Client Project #: CT3414.01

Site Location: 640 LIVERPOOL RD., PICKERING

Sampler Initials: VS

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8325942	D10-Anthracene	2022/11/04	89	50 - 130	106	50 - 130	112	%		
8325942	D14-Terphenyl (FS)	2022/11/04	87	50 - 130	104	50 - 130	110	%		
8325942	D8-Acenaphthylene	2022/11/04	84	50 - 130	96	50 - 130	105	%		
8325942	1-Methylnaphthalene	2022/11/04	96	50 - 130	99	50 - 130	<0.050	ug/L	NC	30
8325942	2-Methylnaphthalene	2022/11/04	87	50 - 130	90	50 - 130	<0.050	ug/L	NC	30
8325942	Acenaphthene	2022/11/04	105	50 - 130	107	50 - 130	<0.050	ug/L	NC	30
8325942	Acenaphthylene	2022/11/04	104	50 - 130	108	50 - 130	<0.050	ug/L	NC	30
8325942	Anthracene	2022/11/04	112	50 - 130	115	50 - 130	<0.050	ug/L	NC	30
8325942	Benzo(a)anthracene	2022/11/04	110	50 - 130	113	50 - 130	<0.050	ug/L	NC	30
8325942	Benzo(a)pyrene	2022/11/04	107	50 - 130	110	50 - 130	<0.0090	ug/L	NC	30
8325942	Benzo(b/j)fluoranthene	2022/11/04	107	50 - 130	111	50 - 130	<0.050	ug/L	NC	30
8325942	Benzo(g,h,i)perylene	2022/11/04	124	50 - 130	127	50 - 130	<0.050	ug/L	NC	30
8325942	Benzo(k)fluoranthene	2022/11/04	108	50 - 130	113	50 - 130	<0.050	ug/L	NC	30
8325942	Chrysene	2022/11/04	111	50 - 130	115	50 - 130	<0.050	ug/L	NC	30
8325942	Dibenzo(a,h)anthracene	2022/11/04	110	50 - 130	111	50 - 130	<0.050	ug/L	NC	30
8325942	Fluoranthene	2022/11/04	113	50 - 130	117	50 - 130	<0.050	ug/L	NC	30
8325942	Fluorene	2022/11/04	106	50 - 130	108	50 - 130	<0.050	ug/L	NC	30
8325942	Indeno(1,2,3-cd)pyrene	2022/11/04	118	50 - 130	121	50 - 130	<0.050	ug/L	NC	30
8325942	Naphthalene	2022/11/04	86	50 - 130	92	50 - 130	<0.050	ug/L	NC	30
8325942	Phenanthrene	2022/11/04	111	50 - 130	115	50 - 130	<0.030	ug/L	NC	30
8325942	Pyrene	2022/11/04	113	50 - 130	117	50 - 130	<0.050	ug/L	NC	30

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

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

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

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

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

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



BUREAU
VERITAS

Bureau Veritas Job #: C2V6534
Report Date: 2022/11/07

Terrapex Environmental Ltd
Client Project #: CT3414.01
Site Location: 640 LIVERPOOL RD., PICKERING
Sampler Initials: VS

VALIDATION SIGNATURE PAGE

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

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

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



Your Project #: CT3414.00
 Site Location: 640 LIVERPOOL ROAD
 Your C.O.C. #: 839106-05-01

Attention: David Crawford

Terrapex Environmental Ltd
 90 Scarsdale Rd
 Toronto, ON
 CANADA M3B 2R7

Report Date: 2022/03/14
 Report #: R7042884
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C259474

Received: 2022/03/07, 15:06

Sample Matrix: Water
 # Samples Received: 2

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Methylnaphthalene Sum	1	N/A	2022/03/12	CAM SOP-00301	EPA 8270D m
Methylnaphthalene Sum	1	N/A	2022/03/14	CAM SOP-00301	EPA 8270D m
1,3-Dichloropropene Sum	2	N/A	2022/03/09		EPA 8260C m
Chloride by Automated Colourimetry	2	N/A	2022/03/09	CAM SOP-00463	SM 23 4500-Cl E m
Chromium (VI) in Water	2	N/A	2022/03/08	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	2	N/A	2022/03/10	CAM SOP-00457	OMOE E3015 m
Petroleum Hydrocarbons F2-F4 in Water (1)	2	2022/03/09	2022/03/10	CAM SOP-00316	CCME PHC-CWS m
Mercury	2	2022/03/10	2022/03/10	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	2	N/A	2022/03/09	CAM SOP-00447	EPA 6020B m
PAH Compounds in Water by GC/MS (SIM)	1	2022/03/11	2022/03/12	CAM SOP-00318	EPA 8270D m
PAH Compounds in Water by GC/MS (SIM)	1	2022/03/12	2022/03/12	CAM SOP-00318	EPA 8270D m
Volatile Organic Compounds and F1 PHCs	2	N/A	2022/03/09	CAM SOP-00230	EPA 8260C m

Remarks:

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

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

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

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

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

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



Your Project #: CT3414.00
Site Location: 640 LIVERPOOL ROAD
Your C.O.C. #: 839106-05-01

Attention: David Crawford

Terrapex Environmental Ltd
90 Scarsdale Rd
Toronto, ON
CANADA M3B 2R7

Report Date: 2022/03/14
Report #: R7042884
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C259474

Received: 2022/03/07, 15:06

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

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

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Kudrat Bajwa, B.Sc., Project Manager
Email: Kudrat.Bajwa@bureauveritas.com
Phone# (905)817-5755

=====
This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.
For Service Group specific validation please refer to the Validation Signature Page.



BUREAU
VERITAS

Bureau Veritas Job #: C259474
Report Date: 2022/03/14

Terrapex Environmental Ltd
Client Project #: CT3414.00
Site Location: 640 LIVERPOOL ROAD
Sampler Initials: AD

O.REG 153 METALS & INORGANICS PKG (WTR)

Bureau Veritas ID		SAG233	SAG234		
Sampling Date		2022/03/04 14:00	2022/03/04 14:00		
COC Number		839106-05-01	839106-05-01		
	UNITS	MW113	MW1001	RDL	QC Batch
Inorganics					
WAD Cyanide (Free)	ug/L	<1	<1	1	7875039
Dissolved Chloride (Cl-)	mg/L	150	150	2.0	7870193
Metals					
Chromium (VI)	ug/L	<0.50	<0.50	0.50	7869860
Mercury (Hg)	ug/L	<0.10	<0.10	0.10	7874681
Dissolved Antimony (Sb)	ug/L	<0.50	<0.50	0.50	7871205
Dissolved Arsenic (As)	ug/L	<1.0	<1.0	1.0	7871205
Dissolved Barium (Ba)	ug/L	120	130	2.0	7871205
Dissolved Beryllium (Be)	ug/L	<0.40	<0.40	0.40	7871205
Dissolved Boron (B)	ug/L	17	19	10	7871205
Dissolved Cadmium (Cd)	ug/L	<0.090	<0.090	0.090	7871205
Dissolved Chromium (Cr)	ug/L	<5.0	<5.0	5.0	7871205
Dissolved Cobalt (Co)	ug/L	0.81	0.82	0.50	7871205
Dissolved Copper (Cu)	ug/L	1.1	0.90	0.90	7871205
Dissolved Lead (Pb)	ug/L	<0.50	<0.50	0.50	7871205
Dissolved Molybdenum (Mo)	ug/L	1.7	1.8	0.50	7871205
Dissolved Nickel (Ni)	ug/L	2.8	2.8	1.0	7871205
Dissolved Selenium (Se)	ug/L	<2.0	<2.0	2.0	7871205
Dissolved Silver (Ag)	ug/L	<0.090	<0.090	0.090	7871205
Dissolved Sodium (Na)	ug/L	120000	130000	100	7871205
Dissolved Thallium (Tl)	ug/L	<0.050	<0.050	0.050	7871205
Dissolved Uranium (U)	ug/L	3.4	3.4	0.10	7871205
Dissolved Vanadium (V)	ug/L	<0.50	<0.50	0.50	7871205
Dissolved Zinc (Zn)	ug/L	<5.0	<5.0	5.0	7871205
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					



BUREAU
VERITAS

Bureau Veritas Job #: C259474
Report Date: 2022/03/14

Terrapex Environmental Ltd
Client Project #: CT3414.00
Site Location: 640 LIVERPOOL ROAD
Sampler Initials: AD

O.REG 153 PAHS (WATER)

Bureau Veritas ID		SAG233		SAG234		
Sampling Date		2022/03/04 14:00		2022/03/04 14:00		
COC Number		839106-05-01		839106-05-01		
	UNITS	MW113	QC Batch	MW1001	RDL	QC Batch
Calculated Parameters						
Methylnaphthalene, 2-(1-)	ug/L	<0.071	7867587	<0.071	0.071	7867587
Polyaromatic Hydrocarbons						
Acenaphthene	ug/L	<0.050	7878347	<0.050	0.050	7879337
Acenaphthylene	ug/L	<0.050	7878347	<0.050	0.050	7879337
Anthracene	ug/L	<0.050	7878347	<0.050	0.050	7879337
Benzo(a)anthracene	ug/L	<0.050	7878347	<0.050	0.050	7879337
Benzo(a)pyrene	ug/L	<0.0090	7878347	<0.0090	0.0090	7879337
Benzo(b/j)fluoranthene	ug/L	<0.050	7878347	<0.050	0.050	7879337
Benzo(g,h,i)perylene	ug/L	<0.050	7878347	<0.050	0.050	7879337
Benzo(k)fluoranthene	ug/L	<0.050	7878347	<0.050	0.050	7879337
Chrysene	ug/L	<0.050	7878347	<0.050	0.050	7879337
Dibenzo(a,h)anthracene	ug/L	<0.050	7878347	<0.050	0.050	7879337
Fluoranthene	ug/L	<0.050	7878347	<0.050	0.050	7879337
Fluorene	ug/L	<0.050	7878347	<0.050	0.050	7879337
Indeno(1,2,3-cd)pyrene	ug/L	<0.050	7878347	<0.050	0.050	7879337
1-Methylnaphthalene	ug/L	<0.050	7878347	<0.050	0.050	7879337
2-Methylnaphthalene	ug/L	<0.050	7878347	<0.050	0.050	7879337
Naphthalene	ug/L	<0.050	7878347	<0.050	0.050	7879337
Phenanthrene	ug/L	0.036	7878347	<0.030	0.030	7879337
Pyrene	ug/L	<0.050	7878347	<0.050	0.050	7879337
Surrogate Recovery (%)						
D10-Anthracene	%	104	7878347	99		7879337
D14-Terphenyl (FS)	%	87	7878347	90		7879337
D8-Acenaphthylene	%	96	7878347	85		7879337
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						



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

Bureau Veritas ID		SAG233	SAG234		
Sampling Date		2022/03/04 14:00	2022/03/04 14:00		
COC Number		839106-05-01	839106-05-01		
	UNITS	MW113	MW1001	RDL	QC Batch
Calculated Parameters					
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	0.50	7867639
Volatile Organics					
Acetone (2-Propanone)	ug/L	<10	<10	10	7869884
Benzene	ug/L	<0.17	<0.17	0.17	7869884
Bromodichloromethane	ug/L	<0.50	<0.50	0.50	7869884
Bromoform	ug/L	<1.0	<1.0	1.0	7869884
Bromomethane	ug/L	<0.50	<0.50	0.50	7869884
Carbon Tetrachloride	ug/L	<0.20	<0.20	0.20	7869884
Chlorobenzene	ug/L	<0.20	<0.20	0.20	7869884
Chloroform	ug/L	<0.20	<0.20	0.20	7869884
Dibromochloromethane	ug/L	<0.50	<0.50	0.50	7869884
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	7869884
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	7869884
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	7869884
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	1.0	7869884
1,1-Dichloroethane	ug/L	<0.20	<0.20	0.20	7869884
1,2-Dichloroethane	ug/L	<0.50	<0.50	0.50	7869884
1,1-Dichloroethylene	ug/L	<0.20	<0.20	0.20	7869884
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	7869884
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	7869884
1,2-Dichloropropane	ug/L	<0.20	<0.20	0.20	7869884
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	0.30	7869884
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	0.40	7869884
Ethylbenzene	ug/L	<0.20	<0.20	0.20	7869884
Ethylene Dibromide	ug/L	<0.20	<0.20	0.20	7869884
Hexane	ug/L	<1.0	<1.0	1.0	7869884
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	2.0	7869884
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	10	7869884
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	5.0	7869884
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	0.50	7869884
Styrene	ug/L	<0.50	<0.50	0.50	7869884
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	7869884
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	7869884
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					



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

Bureau Veritas ID		SAG233	SAG234		
Sampling Date		2022/03/04 14:00	2022/03/04 14:00		
COC Number		839106-05-01	839106-05-01		
	UNITS	MW113	MW1001	RDL	QC Batch
Tetrachloroethylene	ug/L	<0.20	<0.20	0.20	7869884
Toluene	ug/L	<0.20	<0.20	0.20	7869884
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	0.20	7869884
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	0.50	7869884
Trichloroethylene	ug/L	<0.20	<0.20	0.20	7869884
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	0.50	7869884
Vinyl Chloride	ug/L	<0.20	<0.20	0.20	7869884
p+m-Xylene	ug/L	<0.20	<0.20	0.20	7869884
o-Xylene	ug/L	<0.20	<0.20	0.20	7869884
Total Xylenes	ug/L	<0.20	<0.20	0.20	7869884
F1 (C6-C10)	ug/L	<25	<25	25	7869884
F1 (C6-C10) - BTEX	ug/L	<25	<25	25	7869884
F2-F4 Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	100	7873307
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	200	7873307
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	200	7873307
Reached Baseline at C50	ug/L	Yes	Yes		7873307
Surrogate Recovery (%)					
o-Terphenyl	%	94	95		7873307
4-Bromofluorobenzene	%	95	95		7869884
D4-1,2-Dichloroethane	%	100	100		7869884
D8-Toluene	%	97	97		7869884
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					



BUREAU
VERITAS

Bureau Veritas Job #: C259474
Report Date: 2022/03/14

Terrapex Environmental Ltd
Client Project #: CT3414.00
Site Location: 640 LIVERPOOL ROAD
Sampler Initials: AD

TEST SUMMARY

Bureau Veritas ID: SAG233
Sample ID: MW113
Matrix: Water

Collected: 2022/03/04
Shipped:
Received: 2022/03/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	7867587	N/A	2022/03/12	Automated Statchk
1,3-Dichloropropene Sum	CALC	7867639	N/A	2022/03/09	Automated Statchk
Chloride by Automated Colourimetry	KONE	7870193	N/A	2022/03/09	Avneet Kour Sudan
Chromium (VI) in Water	IC	7869860	N/A	2022/03/08	Theodora LI
Free (WAD) Cyanide	SKAL/CN	7875039	N/A	2022/03/10	Aditiben Patel
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	7873307	2022/03/09	2022/03/10	(Kent) Maolin Li
Mercury	CV/AA	7874681	2022/03/10	2022/03/10	Indira HarryPaul
Dissolved Metals by ICPMS	ICP/MS	7871205	N/A	2022/03/09	Arefa Dabhad
PAH Compounds in Water by GC/MS (SIM)	GC/MS	7878347	2022/03/11	2022/03/12	Mitesh Raj
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7869884	N/A	2022/03/09	Chandni Khawas

Bureau Veritas ID: SAG234
Sample ID: MW1001
Matrix: Water

Collected: 2022/03/04
Shipped:
Received: 2022/03/07

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	7867587	N/A	2022/03/14	Automated Statchk
1,3-Dichloropropene Sum	CALC	7867639	N/A	2022/03/09	Automated Statchk
Chloride by Automated Colourimetry	KONE	7870193	N/A	2022/03/09	Avneet Kour Sudan
Chromium (VI) in Water	IC	7869860	N/A	2022/03/08	Theodora LI
Free (WAD) Cyanide	SKAL/CN	7875039	N/A	2022/03/10	Aditiben Patel
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	7873307	2022/03/09	2022/03/10	(Kent) Maolin Li
Mercury	CV/AA	7874681	2022/03/10	2022/03/10	Indira HarryPaul
Dissolved Metals by ICPMS	ICP/MS	7871205	N/A	2022/03/09	Arefa Dabhad
PAH Compounds in Water by GC/MS (SIM)	GC/MS	7879337	2022/03/12	2022/03/12	Jonghan Yoon
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7869884	N/A	2022/03/09	Chandni Khawas



BUREAU
VERITAS

Bureau Veritas Job #: C259474
Report Date: 2022/03/14

Terrapex Environmental Ltd
Client Project #: CT3414.00
Site Location: 640 LIVERPOOL ROAD
Sampler Initials: AD

GENERAL COMMENTS

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

Package 1	4.0°C
-----------	-------

Results relate only to the items tested.



BUREAU
VERITAS

Bureau Veritas Job #: C259474

Report Date: 2022/03/14

QUALITY ASSURANCE REPORT

Terrapex Environmental Ltd

Client Project #: CT3414.00

Site Location: 640 LIVERPOOL ROAD

Sampler Initials: AD

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7869884	4-Bromofluorobenzene	2022/03/08	101	70 - 130	102	70 - 130	99	%		
7869884	D4-1,2-Dichloroethane	2022/03/08	101	70 - 130	98	70 - 130	97	%		
7869884	D8-Toluene	2022/03/08	100	70 - 130	101	70 - 130	98	%		
7873307	o-Terphenyl	2022/03/09	101	60 - 130	100	60 - 130	100	%		
7878347	D10-Anthracene	2022/03/12			90	50 - 130	108	%		
7878347	D14-Terphenyl (FS)	2022/03/12			81	50 - 130	93	%		
7878347	D8-Acenaphthylene	2022/03/12			85	50 - 130	95	%		
7879337	D10-Anthracene	2022/03/12	108	50 - 130	88	50 - 130	93	%		
7879337	D14-Terphenyl (FS)	2022/03/12	95	50 - 130	72	50 - 130	66	%		
7879337	D8-Acenaphthylene	2022/03/12	101	50 - 130	84	50 - 130	73	%		
7869860	Chromium (VI)	2022/03/08	100	80 - 120	104	80 - 120	<0.50	ug/L	NC	20
7869884	1,1,1,2-Tetrachloroethane	2022/03/09	93	70 - 130	93	70 - 130	<0.50	ug/L	NC	30
7869884	1,1,1-Trichloroethane	2022/03/09	95	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
7869884	1,1,2,2-Tetrachloroethane	2022/03/09	90	70 - 130	87	70 - 130	<0.50	ug/L	NC	30
7869884	1,1,2-Trichloroethane	2022/03/09	96	70 - 130	94	70 - 130	<0.50	ug/L	NC	30
7869884	1,1-Dichloroethane	2022/03/09	90	70 - 130	90	70 - 130	<0.20	ug/L	NC	30
7869884	1,1-Dichloroethylene	2022/03/09	94	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
7869884	1,2-Dichlorobenzene	2022/03/09	90	70 - 130	93	70 - 130	<0.50	ug/L	NC	30
7869884	1,2-Dichloroethane	2022/03/09	90	70 - 130	89	70 - 130	<0.50	ug/L	NC	30
7869884	1,2-Dichloropropane	2022/03/09	89	70 - 130	88	70 - 130	<0.20	ug/L	NC	30
7869884	1,3-Dichlorobenzene	2022/03/09	90	70 - 130	94	70 - 130	<0.50	ug/L	NC	30
7869884	1,4-Dichlorobenzene	2022/03/09	105	70 - 130	110	70 - 130	<0.50	ug/L	NC	30
7869884	Acetone (2-Propanone)	2022/03/09	93	60 - 140	86	60 - 140	<10	ug/L	NC	30
7869884	Benzene	2022/03/09	87	70 - 130	88	70 - 130	<0.17	ug/L	NC	30
7869884	Bromodichloromethane	2022/03/09	95	70 - 130	94	70 - 130	<0.50	ug/L	NC	30
7869884	Bromoform	2022/03/09	90	70 - 130	88	70 - 130	<1.0	ug/L	NC	30
7869884	Bromomethane	2022/03/09	101	60 - 140	91	60 - 140	<0.50	ug/L	NC	30
7869884	Carbon Tetrachloride	2022/03/09	95	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
7869884	Chlorobenzene	2022/03/09	92	70 - 130	93	70 - 130	<0.20	ug/L	NC	30
7869884	Chloroform	2022/03/09	95	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
7869884	cis-1,2-Dichloroethylene	2022/03/09	95	70 - 130	95	70 - 130	<0.50	ug/L	NC	30



BUREAU
VERITAS

Bureau Veritas Job #: C259474

Report Date: 2022/03/14

QUALITY ASSURANCE REPORT(CONT'D)

Terrapex Environmental Ltd

Client Project #: CT3414.00

Site Location: 640 LIVERPOOL ROAD

Sampler Initials: AD

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7869884	cis-1,3-Dichloropropene	2022/03/09	88	70 - 130	72	70 - 130	<0.30	ug/L	NC	30
7869884	Dibromochloromethane	2022/03/09	91	70 - 130	90	70 - 130	<0.50	ug/L	NC	30
7869884	Dichlorodifluoromethane (FREON 12)	2022/03/09	83	60 - 140	88	60 - 140	<1.0	ug/L	NC	30
7869884	Ethylbenzene	2022/03/09	86	70 - 130	88	70 - 130	<0.20	ug/L	NC	30
7869884	Ethylene Dibromide	2022/03/09	89	70 - 130	87	70 - 130	<0.20	ug/L	NC	30
7869884	F1 (C6-C10) - BTEX	2022/03/09					<25	ug/L	NC	30
7869884	F1 (C6-C10)	2022/03/09	96	60 - 140	92	60 - 140	<25	ug/L	NC	30
7869884	Hexane	2022/03/09	93	70 - 130	94	70 - 130	<1.0	ug/L	NC	30
7869884	Methyl Ethyl Ketone (2-Butanone)	2022/03/09	93	60 - 140	85	60 - 140	<10	ug/L	NC	30
7869884	Methyl Isobutyl Ketone	2022/03/09	84	70 - 130	81	70 - 130	<5.0	ug/L	NC	30
7869884	Methyl t-butyl ether (MTBE)	2022/03/09	85	70 - 130	85	70 - 130	<0.50	ug/L	NC	30
7869884	Methylene Chloride(Dichloromethane)	2022/03/09	104	70 - 130	103	70 - 130	<2.0	ug/L	NC	30
7869884	o-Xylene	2022/03/09	84	70 - 130	86	70 - 130	<0.20	ug/L	NC	30
7869884	p+m-Xylene	2022/03/09	87	70 - 130	90	70 - 130	<0.20	ug/L	NC	30
7869884	Styrene	2022/03/09	93	70 - 130	95	70 - 130	<0.50	ug/L	NC	30
7869884	Tetrachloroethylene	2022/03/09	89	70 - 130	93	70 - 130	<0.20	ug/L	NC	30
7869884	Toluene	2022/03/09	87	70 - 130	88	70 - 130	<0.20	ug/L	NC	30
7869884	Total Xylenes	2022/03/09					<0.20	ug/L	NC	30
7869884	trans-1,2-Dichloroethylene	2022/03/09	96	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
7869884	trans-1,3-Dichloropropene	2022/03/09	91	70 - 130	71	70 - 130	<0.40	ug/L	NC	30
7869884	Trichloroethylene	2022/03/09	98	70 - 130	101	70 - 130	<0.20	ug/L	NC	30
7869884	Trichlorofluoromethane (FREON 11)	2022/03/09	103	70 - 130	105	70 - 130	<0.50	ug/L	NC	30
7869884	Vinyl Chloride	2022/03/09	92	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
7870193	Dissolved Chloride (Cl-)	2022/03/09	NC	80 - 120	108	80 - 120	<1.0	mg/L	1.0	20
7871205	Dissolved Antimony (Sb)	2022/03/09	101	80 - 120	98	80 - 120	<0.50	ug/L	NC	20
7871205	Dissolved Arsenic (As)	2022/03/09	97	80 - 120	94	80 - 120	<1.0	ug/L	NC	20
7871205	Dissolved Barium (Ba)	2022/03/09	93	80 - 120	96	80 - 120	<2.0	ug/L	0.93	20
7871205	Dissolved Beryllium (Be)	2022/03/09	91	80 - 120	91	80 - 120	<0.40	ug/L	NC	20
7871205	Dissolved Boron (B)	2022/03/09	86	80 - 120	87	80 - 120	<10	ug/L	3.6	20
7871205	Dissolved Cadmium (Cd)	2022/03/09	97	80 - 120	96	80 - 120	<0.090	ug/L	NC	20
7871205	Dissolved Chromium (Cr)	2022/03/09	92	80 - 120	90	80 - 120	<5.0	ug/L	NC	20



BUREAU
VERITAS

Bureau Veritas Job #: C259474

Report Date: 2022/03/14

QUALITY ASSURANCE REPORT(CONT'D)

Terrapex Environmental Ltd

Client Project #: CT3414.00

Site Location: 640 LIVERPOOL ROAD

Sampler Initials: AD

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7871205	Dissolved Cobalt (Co)	2022/03/09	95	80 - 120	97	80 - 120	<0.50	ug/L	NC	20
7871205	Dissolved Copper (Cu)	2022/03/09	92	80 - 120	94	80 - 120	<0.90	ug/L	NC	20
7871205	Dissolved Lead (Pb)	2022/03/09	91	80 - 120	95	80 - 120	<0.50	ug/L	NC	20
7871205	Dissolved Molybdenum (Mo)	2022/03/09	98	80 - 120	94	80 - 120	<0.50	ug/L	NC	20
7871205	Dissolved Nickel (Ni)	2022/03/09	92	80 - 120	93	80 - 120	<1.0	ug/L	4.1	20
7871205	Dissolved Selenium (Se)	2022/03/09	97	80 - 120	98	80 - 120	<2.0	ug/L	NC	20
7871205	Dissolved Silver (Ag)	2022/03/09	81	80 - 120	93	80 - 120	<0.090	ug/L	NC	20
7871205	Dissolved Sodium (Na)	2022/03/09	NC	80 - 120	94	80 - 120	<100	ug/L	2.6	20
7871205	Dissolved Thallium (Tl)	2022/03/09	94	80 - 120	97	80 - 120	<0.050	ug/L	NC	20
7871205	Dissolved Uranium (U)	2022/03/09	97	80 - 120	97	80 - 120	<0.10	ug/L	0.61	20
7871205	Dissolved Vanadium (V)	2022/03/09	93	80 - 120	90	80 - 120	<0.50	ug/L	NC	20
7871205	Dissolved Zinc (Zn)	2022/03/09	93	80 - 120	93	80 - 120	<5.0	ug/L	NC	20
7873307	F2 (C10-C16 Hydrocarbons)	2022/03/10	96	60 - 130	98	60 - 130	<100	ug/L	0.47	30
7873307	F3 (C16-C34 Hydrocarbons)	2022/03/10	105	60 - 130	110	60 - 130	<200	ug/L	2.0	30
7873307	F4 (C34-C50 Hydrocarbons)	2022/03/10	108	60 - 130	109	60 - 130	<200	ug/L	NC	30
7874681	Mercury (Hg)	2022/03/10	90	75 - 125	93	80 - 120	<0.10	ug/L	NC	20
7875039	WAD Cyanide (Free)	2022/03/10	90	80 - 120	96	80 - 120	<1	ug/L	NC	20
7878347	1-Methylnaphthalene	2022/03/12			108	50 - 130	<0.050	ug/L	1.9	30
7878347	2-Methylnaphthalene	2022/03/12			107	50 - 130	<0.050	ug/L	1.2	30
7878347	Acenaphthene	2022/03/12			104	50 - 130	<0.050	ug/L	0.89	30
7878347	Acenaphthylene	2022/03/12			105	50 - 130	<0.050	ug/L	1.4	30
7878347	Anthracene	2022/03/12			113	50 - 130	<0.050	ug/L	7.4	30
7878347	Benzo(a)anthracene	2022/03/12			112	50 - 130	<0.050	ug/L	6.1	30
7878347	Benzo(a)pyrene	2022/03/12			112	50 - 130	<0.0090	ug/L	4.5	30
7878347	Benzo(b/j)fluoranthene	2022/03/12			109	50 - 130	<0.050	ug/L	6.2	30
7878347	Benzo(g,h,i)perylene	2022/03/12			121	50 - 130	<0.050	ug/L	6.0	30
7878347	Benzo(k)fluoranthene	2022/03/12			108	50 - 130	<0.050	ug/L	6.2	30
7878347	Chrysene	2022/03/12			114	50 - 130	<0.050	ug/L	4.0	30
7878347	Dibenzo(a,h)anthracene	2022/03/12			118	50 - 130	<0.050	ug/L	4.3	30
7878347	Fluoranthene	2022/03/12			110	50 - 130	<0.050	ug/L	8.5	30
7878347	Fluorene	2022/03/12			109	50 - 130	<0.050	ug/L	3.6	30



BUREAU
VERITAS

Bureau Veritas Job #: C259474

Report Date: 2022/03/14

QUALITY ASSURANCE REPORT(CONT'D)

Terrapex Environmental Ltd

Client Project #: CT3414.00

Site Location: 640 LIVERPOOL ROAD

Sampler Initials: AD

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7878347	Indeno(1,2,3-cd)pyrene	2022/03/12			124	50 - 130	<0.050	ug/L	4.5	30
7878347	Naphthalene	2022/03/12			101	50 - 130	<0.050	ug/L	1.1	30
7878347	Phenanthrene	2022/03/12			108	50 - 130	<0.030	ug/L	6.6	30
7878347	Pyrene	2022/03/12			112	50 - 130	<0.050	ug/L	8.4	30
7879337	1-Methylnaphthalene	2022/03/12	89	50 - 130	92	50 - 130	<0.050	ug/L	NC	30
7879337	2-Methylnaphthalene	2022/03/12	87	50 - 130	90	50 - 130	<0.050	ug/L	NC	30
7879337	Acenaphthene	2022/03/12	87	50 - 130	86	50 - 130	<0.050	ug/L	NC	30
7879337	Acenaphthylene	2022/03/12	85	50 - 130	84	50 - 130	<0.050	ug/L	NC	30
7879337	Anthracene	2022/03/12	89	50 - 130	87	50 - 130	<0.050	ug/L	NC	30
7879337	Benzo(a)anthracene	2022/03/12	88	50 - 130	89	50 - 130	<0.050	ug/L	NC	30
7879337	Benzo(a)pyrene	2022/03/12	88	50 - 130	98	50 - 130	<0.0090	ug/L	NC	30
7879337	Benzo(b/j)fluoranthene	2022/03/12	78	50 - 130	93	50 - 130	<0.050	ug/L	NC	30
7879337	Benzo(g,h,i)perylene	2022/03/12	93	50 - 130	106	50 - 130	<0.050	ug/L	NC	30
7879337	Benzo(k)fluoranthene	2022/03/12	90	50 - 130	101	50 - 130	<0.050	ug/L	NC	30
7879337	Chrysene	2022/03/12	88	50 - 130	90	50 - 130	<0.050	ug/L	NC	30
7879337	Dibenzo(a,h)anthracene	2022/03/12	93	50 - 130	102	50 - 130	<0.050	ug/L	NC	30
7879337	Fluoranthene	2022/03/12	96	50 - 130	85	50 - 130	<0.050	ug/L	NC	30
7879337	Fluorene	2022/03/12	89	50 - 130	91	50 - 130	<0.050	ug/L	NC	30
7879337	Indeno(1,2,3-cd)pyrene	2022/03/12	94	50 - 130	106	50 - 130	<0.050	ug/L	NC	30
7879337	Naphthalene	2022/03/12	91	50 - 130	90	50 - 130	<0.050	ug/L	NC	30
7879337	Phenanthrene	2022/03/12	90	50 - 130	89	50 - 130	<0.030	ug/L	NC	30
7879337	Pyrene	2022/03/12	92	50 - 130	84	50 - 130	<0.050	ug/L	NC	30

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

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

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

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

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

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

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



BUREAU
VERITAS

Bureau Veritas Job #: C259474
Report Date: 2022/03/14

Terrapex Environmental Ltd
Client Project #: CT3414.00
Site Location: 640 LIVERPOOL ROAD
Sampler Initials: AD

VALIDATION SIGNATURE PAGE

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

Ewa Pranjic

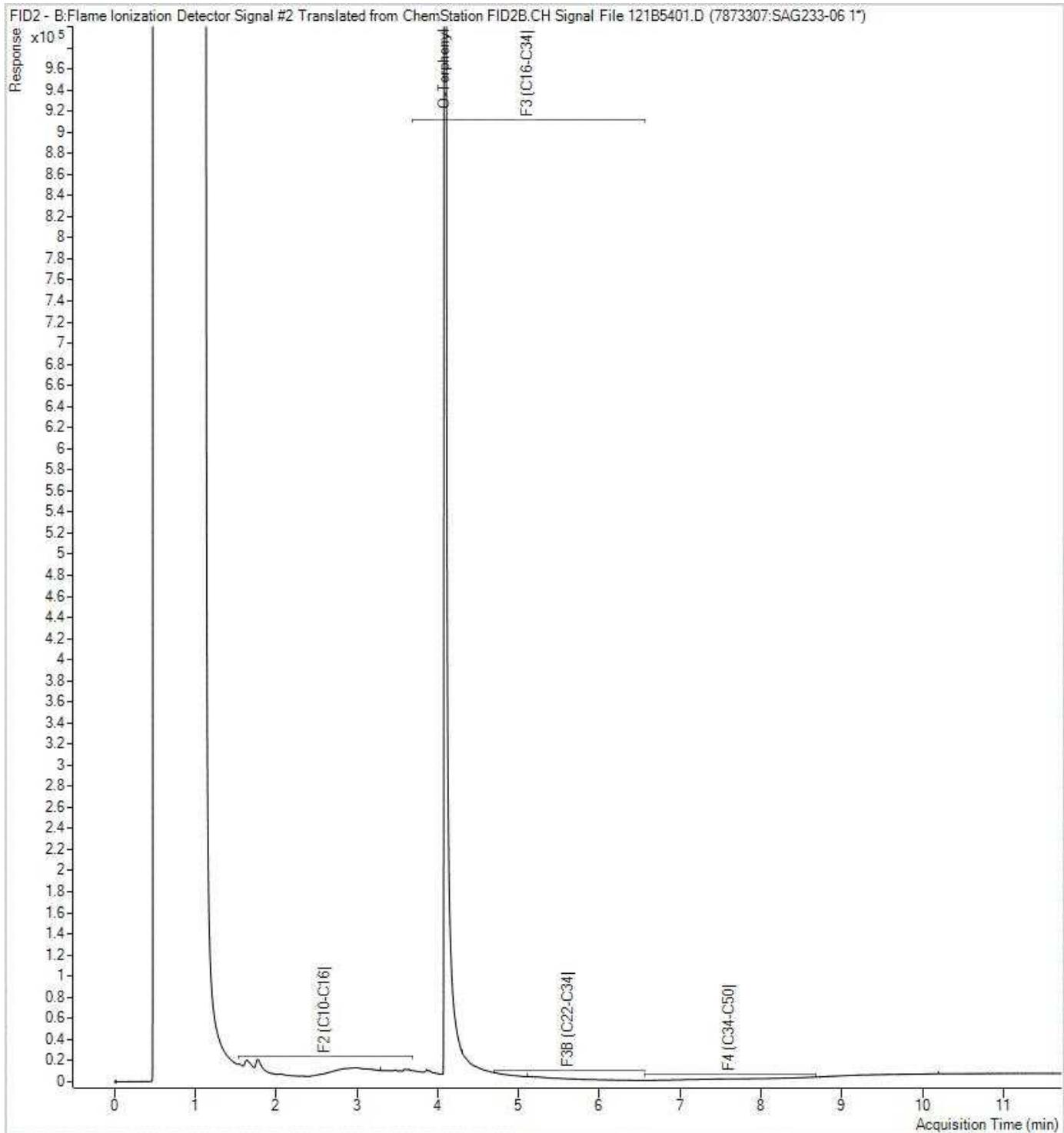

Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



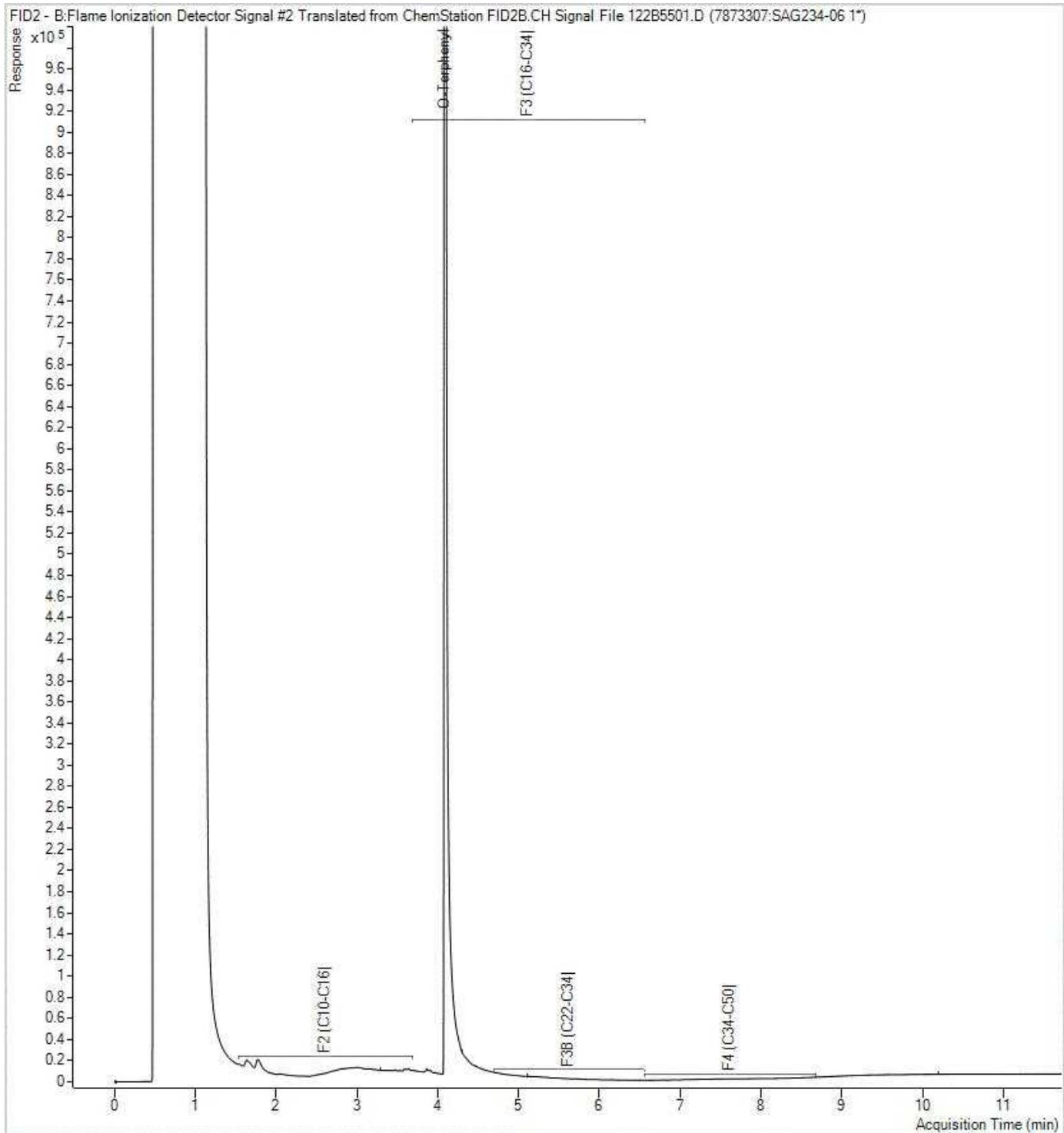
INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:							
Company Name: #4398 Terrapex Environmental Ltd	Company Name: Terrapex Environmental Ltd	Quotation #: 601024 Terrapex	BV Labs Job #:		Bottle Order #:								
Attention: Accounts Payable	Attention: Shabani David Crawford	P.O. #:	COC #:		Project Manager:								
Address: 90 Scarsdale Rd	Address: 90 Scarsdale Road	Project: 601024 CT 3414.00	COC #:		Project Manager:								
Tel: (416) 245-0011	Tel: (416) 245-0011	Project Name: 640 Liverpool Road	COC #:		Project Manager:								
Fax: (416) 245-0012	Fax: (416) 245-0012	Site #:	COC #:		Project Manager:								
Email: accounts.payable@terrapex.com	Email: shabani@terrapex.com dcrawford@terrapex.com	Sampled By: Alex Dobrogozd	COC #:		Project Manager:								
MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BV LABS DRINKING WATER CHAIN OF CUSTODY.		ANALYSIS REQUESTED (PLEASE BE SPECIFIC) <input checked="" type="checkbox"/>		Turnaround Time (TAT) Required: Please provide advance notice for rush projects									
<table border="1"> <tr> <th>Regulation 153 (2011)</th> <th>Other Regulations</th> <th>Special Instructions</th> </tr> <tr> <td> <input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Res/Park <input type="checkbox"/> Medium/Fine <input checked="" type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input checked="" type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input checked="" type="checkbox"/> For RSC <input type="checkbox"/> Table _____ </td> <td> <input type="checkbox"/> CCME <input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Reg 558 <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> MISA Municipality _____ <input type="checkbox"/> PWQO <input type="checkbox"/> Reg 406 Table _____ <input type="checkbox"/> Other _____ </td> <td></td> </tr> </table>		Regulation 153 (2011)	Other Regulations	Special Instructions	<input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Res/Park <input type="checkbox"/> Medium/Fine <input checked="" type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input checked="" type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input checked="" type="checkbox"/> For RSC <input type="checkbox"/> Table _____	<input type="checkbox"/> CCME <input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Reg 558 <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> MISA Municipality _____ <input type="checkbox"/> PWQO <input type="checkbox"/> Reg 406 Table _____ <input type="checkbox"/> Other _____		Field Filtered (please circle): Metals / Hg / Cr / V 6. Ry 153/104 Nitrates and Nitrogenics VOCs PHGs FI to FY PAHS		Regular (Standard) TAT: (will be applied if Rush TAT is not specified): Standard TAT = 5-7 Working days for most tests. <input checked="" type="checkbox"/> Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Time Required: _____ <input type="checkbox"/> Rush Confirmation Number: _____ (call lab for #)			
Regulation 153 (2011)	Other Regulations	Special Instructions											
<input type="checkbox"/> Table 1 <input checked="" type="checkbox"/> Res/Park <input type="checkbox"/> Medium/Fine <input checked="" type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input checked="" type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input checked="" type="checkbox"/> For RSC <input type="checkbox"/> Table _____	<input type="checkbox"/> CCME <input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Reg 558 <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> MISA Municipality _____ <input type="checkbox"/> PWQO <input type="checkbox"/> Reg 406 Table _____ <input type="checkbox"/> Other _____												
Include Criteria on Certificate of Analysis (Y/N)? <input checked="" type="checkbox"/> N				# of Bottles _____									
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix			Comments						
1	MW113	Mar 4/22	14:00	GW	Y	X	X	8					
2	MW1001	Mar 4/22	14:00	GW	Y	X	X	8					
3													
4													
5													
6													
7													
8													
9													
10													
* RELINQUISHED BY: (Signature/Print)		Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# Jars used and not submitted	Laboratory Use Only					
MID / Michael Deans		22/03/07	10:00AM		22/03/07	15:06	<input checked="" type="checkbox"/>	Time Sensitive Temperature (°C) on Recept: 2/4/6 Custody Seal Present: <input checked="" type="checkbox"/> Intact: <input checked="" type="checkbox"/>					
* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BV LABS' STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVLABS.COM/TERMS-AND-CONDITIONS. ** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVLABS.COM/RESOURCES/CHAIN-OF-CUSTODY-FORMS.								White: BV Labs Yellow: Client					

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



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

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



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