HAWKINS PROPERTIES LTD.

PHASE II
ENVIRONMENTAL SITE ASSESSMENT

5646 and 5650 MANOTICK MAIN STREET
MANOTICK (OTTAWA), ONTARIO

FINAL REPORT

December 16, 2022

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EXECUTIVE SUMMARY

Terrapex Environmental Ltd. (Terrapex) was retained by 595831 Ontario Inc., otherwise known as Hawkins Properties Ltd. (Hawkins), to conduct a Phase II Environmental Site Assessment (ESA) at the properties located at 5646 and 5650 Manotick Main Street in Manotick (Ottawa), Ontario ("the Site"). A geotechnical investigation was completed by Terrapex concurrently with the Phase II ESA and the results are reported under a separate cover. The investigations were completed as part of the planned redevelopment of the properties.

The Site is located on the west side of Manotick Main Street, approximately 250 m south of Eastman Avenue north of Mahogany Harbour Lane in Manotick, Ontario. The Site is irregular in shape and occupies a footprint of 4,090 m^2. The Site is composed of two municipal addresses - 5646 Manotick Main Street pertaining to the northern portion of the Site and 5646 Manotick Main Street pertaining to the southern portion of the Site.

The objective of the Phase II ESA was to investigate soil and groundwater quality at areas of actual and potential environmental concern previously identified at the Site arising from current and/or historical activities on the Site and on neighbouring properties. It is our understanding that a Record of Site Condition (RSC) is not required as this time as there is no proposed change to a more sensitive land use.

The site condition standards (SCS) for Industrial/Commercial/Community land use in a potable groundwater situation, with medium to fine textured soil, as specified in Table 2 of the Ministry of the Environment, Conservation, and Parks (MECP) April 15, 2011, *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the "Environmental Protection Act"* document (hereafter referenced as the *Standards*) were used to evaluate the laboratory analytical results. The SCS were determined using the criteria established by Ontario Regulation (O. Reg.) 153/04 *Records of Site Condition - Part XV.1 of the Act*.

Between October 11 and 12, 2022, a total of thirteen boreholes (MW101, BH102 to BH108, MW109, BH 110, MW111, MW112 and BH113) were drilled across the Site to depths between 1.2 and 9.3 metres below grade (mbg) with four of the twelve boreholes completed as monitoring wells (MW101, MW109, MW111, and MW112). Select soil samples were submitted for laboratory analysis of benzene, toluene, ethylbenzene, and xylenes (collectively BTEX), petroleum hydrocarbon (PHC) F1 to F4 fractions, metals and inorganics. The results of the laboratory analysis indicated that concentrations of the analytes in the soil samples submitted for analysis did not exceed the applicable Table 2 SCS with the following exceptions:

- Concentrations of ethylbenzene and PHC F1 fraction was greater than the Table 2 SCS in sample MW112-2 and its blind duplicate sample (MW112-12);
- Concentration of vanadium was greater than the Table 2 SCS in sample MW109-1B; and,
- Electrical conductivity was greater than the Table 2 SCS in sample BH105-2.

Monitoring of all four monitoring wells was completed on October 27 and 28, 2022 with an additional monitoring event completed on December 2, 2022. The CV concentrations in the well headspaces were all less than 10 ppm, with the exception of monitoring MW112 which had CV concentrations of 10% LEL (October 27, 2022) and 8% LEL (October 28, and December 2, 2022). LNAPL was not detected in any of these monitoring events. Depth to groundwater ranged from 2.02 mbg at MW112 to 2.90 mbg at MW109 during the October 27, 2022, monitoring event, 2.87 mbg at MW101 to 5.27 mbg at MW111 during the October 28, 2022 monitoring event and 1.56 mbg at MW111 to 3.19 mbg at MW109 during the December 2, 2022 monitoring event. Based on December 2, 2022 data, shallow horizontal groundwater flow is interpreted to be towards the southwest.

Groundwater samples were submitted for laboratory analysis of BTEX and PHC F1 to F4 fractions. Laboratory analysis indicated that concentrations of the analytes in all groundwater samples submitted for analysis did not exceed the applicable Table 2 SCS except for sample MW112 and its blind duplicate sample (MW-122) which had concentrations of benzene and ethylbenzene greater than the Table 2 SCS.

Based on the results of the soil investigation and groundwater monitoring and sampling program from this Phase II ESA, PHC impacted soil and groundwater has been identified at borehole MW112 in the vicinity of the former pump island located on the 5646 Manotick Main Street property. Metals or inorganics impacts were also identified in the soil at MW109 (for vanadium) and BH105 (electrical conductivity).

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1.0 INTRODUCTION

Terrapex Environmental Ltd. (Terrapex) was retained by 595831 Ontario Inc., otherwise known as Hawkins Properties Ltd. (Hawkins), to conduct a Phase II Environmental Site Assessment (ESA) at the property located at 5646 and 5650 Manotick Main Street, Manotick (Ottawa), Ontario ("the Site"). It was Terrapex's understanding that the study was required for due diligence purposes, and not for the submission of a Record of Site Condition (RSC). The Site location is provided in Figure 1.

Terrapex previously completed a Phase I ESA at the Site for due diligence purposes prior to Hawkins planned redevelopment of the properties. The Phase II ESA was requested by Hawkins to investigate areas of potential environmental concern and/or data gaps identified by the Phase I ESA. A geotechnical investigation was completed by Terrapex concurrently with the Phase II ESA and the results are reported separately.

1.1 SITE DESCRIPTION

The Site is located on the west side of Manotick Main Street, approximately 250 m south of Eastman Avenue and north of Mahogany Harbour Lane in Manotick, Ontario. The Site is irregular in shape and occupies a footprint of 4,090 m^2. The Site is composed of two municipal addresses: 5646 Manotick Main Street pertaining to the northern portion of the Site, and 5646 Manotick Main Street pertaining to the southern portion of the Site. A further description of each property is provided below.

5646 Manotick Main Street

The 5646 Manotick Main Street property is irregular in shape and occupies a footprint of approximately 2,566 m^2. The property is occupied by a two-storey building that consists of:

- A vacant former commercial space located on the ground floor of the building;
- Two apartment units (Units 2 and 3, there is no Unit 1) on the second storey; and,
- A two-bay car wash that was constructed on the north end of the building.

Based on information from the Phase I ESA, the northern portion of the property was a retail fuel outlet from 1965 to 2004. The eastern portion of the property is covered with asphalt except for the southeast portion which is covered with gravel (the apparent location of the former tank nest). A former concrete pump island with a light standard is located to the east of the main building.

The western portion of the Site is grass covered and contains the Sites septic tanks and weeping bed. The rear of the building had a wooden staircase and deck which provided access to the two second storey apartments. A vinyl shed, which was unable to be accessed during the site inspection was located in the middle of the backyard. The backyard was not fenced except for the northern property boundary. It was noted that trees were located on the periphery of the backyard.

5650 Manotick Main Street Property

The 5650 Manotick Main Street property is irregular in shape and occupies a footprint of approximately 1,523 m^2, located adjacent to the southeast of the 5646 Manotick Main Street property. A single storey residence occupies the central portion of the property. The front yard of the property (located to the east of the residence) has a gravel surface cover while the backyard is largely landscaped with grass cover. Two sheds are located in the backyard of the property. The property is not fenced however a stand of trees are located between the Site and Mahogany Harbour Lane to the south.

The Site location and general Site layout are shown in Figures 1 and 2, respectively.

1.2 OBJECTIVE

The objective of the Phase II ESA was to investigate soil and groundwater quality at locations in the vicinity of the historical retail fuel outlet infrastructure, as well as the existing automotive car wash. The Phase II ESA work program was completed in general accordance with the principles set out in Canadian Standards Association (CSA) Standard Z769-00, Phase II Environmental Site Assessment. t is our understanding that a RSC is not required for the Site as there is no intended change to a more sensitive land use.

1.3 SCOPE OF WORK

The scope of work for the Phase II ESA included the following:

- supervising the drilling of thirteen boreholes (MW101, BH102 to BH108. MW109, BH110, MW111, MW112, and BH113) to depths ranging between approximately 1.2 and 9.3 m below grade (mbg), by a subcontractor (Strata Drilling Group) using a geoprobe 7822 DT drill rig, equipped with hollow-stem augers;
- supervising the installation of monitoring wells by a licensed well technician in four of the boreholes (MW101, MW109, MW111, and MW112);
- collecting representative soil samples during drilling;
- logging soil samples for visual, olfactory, and tactile characteristics, as well as any evidence of impacts (if present);
- measuring combustible soil vapours (CSV) in recovered soil samples;
- submitting selected soil samples from each of the boreholes for laboratory analyses of two or more of benzene, toluene, ethylbenzene, xylenes (collectively, BTEX), petroleum hydrocarbon (PHC) F1 to F4 fractions, and metals and inorganic parameters;

- measuring depth to water, presence/thickness of light, non-aqueous phase liquid (LNAPL), headspace combustible vapours (CVs) and total organic vapours (TOVs) at each monitoring well location;
- sampling groundwater from each of the installed monitoring wells;
- submitting collected groundwater samples for laboratory analyses of BTEX and PHC F1 to F4 fractions;
- determining the appropriate soil and groundwater standards in accordance with the O. Reg, 153/04 *Records of Site Condition – Part XV.1 of the "Environmental Protection Act"*;
- evaluating soil and groundwater analytical results using applicable generic site condition standards (SCS) from the Ontario Ministry of the Environment, Conservation and Parks (MECP) *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act* document, dated April 15, 2011 (hereafter referenced as the *Standards*); and,
- preparing a report detailing the findings and results of the Phase II ESA.

For the purpose of this project, Terrapex subcontracted the services of other firms to complete specialized assignments for the project, as follows:

- private locating services were provided by Premier Locates Inc. (PLI) of Aurora, Ontario; and,
- drilling and monitoring well installation services were provided by Strata Drilling Group (Strata) of Carleton Place, Ontario, a MECP licensed well drilling contractor.

Laboratory analytical services were provided by AGAT Laboratories (AGAT) of Mississauga, Ontario. At the time of this investigation, AGAT is accredited by the Standards Council of Canada (SCC) for each of the analyses it conducted as part of this work program.

This Phase II is not intended to fulfill the requirements to file a Record of Site Condition (RSC). Based upon a review of documents provided by Hawkins, it is Terrapex's understanding that the City of Ottawa will not require an RSC to support the site development.

2.0 FIELD PROGRAM

The on-site field components of the Phase II ESA were conducted between October 11 and 28, 2022. The work program described herein was generally completed in accordance with the protocols described in O. Reg 153/04 and industry-standard practices.

2.1 FIELD PREPARATION

Prior to conducting intrusive field work, Terrapex contacted the appropriate public agencies to identify the locations of buried utilities at and near the subject Site. Terrapex also retained PLI to locate private buried utilities and provide clearances for buried services at the sampling locations. Consideration was given to the locations of buried and overhead services and the existing Site building when selecting the placement of boreholes in the field.

A site-specific health and safety plan (HASP) and a job safety analysis (JSA) form were prepared by Terrapex prior to commencing the field work. One copy of the HASP and JSA remained with the field crew on the subject Site for the duration of the field activities. The project team members and subcontractors that conducted the field activities read and signed the HASP and JSA before commencing work at the subject Site.

2.2 BOREHOLE DRILLING AND SOIL SAMPLING

Between October 11 and 12, 2022, a total of thirteen boreholes (MW101, BH102 to BH108. MW109, BH110, MW111, MW112 and BH113) were advanced by Strata to the depths between approximately 1.2 and 9.3 mbg, with four of the boreholes completed as monitoring wells (MW101, MW109, MW111, and MW112). The locations of the boreholes and monitoring wells were selected to assess the soil and groundwater conditions in the vicinity of the historical retail fuel outlet infrastructure. There was also consideration to assessing the geotechnical properties related to the proposed redevelopment of the property (the geotechnical report is provided under a separate cover), The borehole locations are shown in Figure 2.

During drilling, 51-mm diameter split-spoon samplers were advanced into the subsurface to facilitate the collection of relatively undisturbed soil samples. Terrapex collected soil samples at depth intervals of approximately 0.76 m, and immediately logged the geologic properties of each sample. Each soil sample was examined for visual and/or olfactory evidence of contamination. A vapour sample was collected from each spoon and CSV concentrations were measured in the headspace of each sampling bag with an RKI Eagle 2 Hydrocarbon Surveyor (RKI Eagle) calibrated to n-hexane and operated in the methane elimination mode. Additionally, select soil samples were screened using a photoionization detector (PID) MiniRAE 3000, calibrated to isobutylene. Soil samples which were screened for vapours were not submitted for laboratory analysis; a separate split sample of the soil was collected and stored for possible laboratory analysis.

To mitigate cross-contamination disposable dual tube samplers were used to collect soil samples. Field personnel wore fresh nitrile gloves for the handling of each soil sample. The soil samples that were submitted for laboratory chemical analyses were collected in pre-cleaned, laboratory-supplied containers, placed in a cooler with ice, and delivered with signed chain-of-custody forms to AGAT.

Soil samples were submitted for the following laboratory analysis:

- sixteen soil samples (including two field duplicate sample for QA/QC purposes) were submitted for analyses for BTEX and PHC F1 to F4 fractions;
- four soil samples (including one field duplicate) were submitted for analysis of metals and inorganic parameters; and,
- four soil samples were submitted for analysis of pH (in addition to samples submitted for analysis of metals and inorganics).

Samples for laboratory analysis were selected to represent apparent “worst-case” conditions based on CSV measurements, visual/olfactory evidence of impact, and/or from the depth of the assumed groundwater table.

Graphic borehole logs illustrating the stratigraphy encountered, measured CSV concentrations and documenting the soil sample submitted for laboratory analyses are included in Appendix I.

2.3 MONITORING WELL INSTALLATION

Monitoring wells, constructed of 51-mm diameter polyvinyl chloride (PVC) well pipe and screen, were installed into four of the boreholes. The annulus of each well was backfilled with washed silica sand to a minimum depth of approximately 0.3 m above the screened interval, and a bentonite seal was placed above the sand pack in each well to prevent infiltration of surface water. A bolt-down protective casing was installed on each well, flush with the ground surface and cemented in place. The locations of the monitoring wells are shown in Figure 2. Monitoring well construction details are provided in the borehole logs included in Appendix I.

On October 27, 2022 Terrapex surveyed the positions and ground surface elevations of all monitoring wells and boreholes using a survey rod and level. A temporary benchmark (top of spindle, fire hydrant located on Manotick Main Street) was assigned an elevation of 100 m and used for the survey.

2.4 WELL DEVELOPMENT, GROUNDWATER MONITORING AND SAMPLING

Well development was conducted on October 27, 2022, and groundwater monitoring and sampling was conducted on October 28, 2022.

Prior to development, the wells were monitored for depth to water depth and to the bottom of the well using a Solinst water level meter.

The wells were developed in order to remove entrained particulate in the well standpipe, well screen and filter pack as well surrounding formation materials. The development was conducted until a "dry" condition was encountered for three consecutive cycles. A total of between 11 L and 51 L of groundwater were removed from the monitoring wells. Following the development, groundwater from all monitoring wells was free of visible particulate.

Groundwater monitoring of the newly installed wells was completed two occasions (October 27 and 28, 2022). Immediately upon removal of the well cap, headspace CVs were measured at each monitoring well using the RKI Eagle 2 hydrocarbon surveyor. The depth to water in each monitoring well was measured using a Solinst interface probe. The presence and apparent thickness of LNAPL in each well, if any, was also measured using the interface probe. To mitigate cross-contamination between monitoring wells, the interface probe was washed with a solution of Alconox detergent and water and then rinsed with water prior to use in each well.

Groundwater samples were collected from monitoring wells MW101, MW109, MW111, and MW112 on October 28, 2022. In order to ensure that the groundwater samples obtained would be representative of the formation water, each monitoring well was developed prior to sampling by removing ten well volumes, or until the well went “dry” three times, of groundwater using Waterra tubing equipped with a dedicated footvalve.

Groundwater samples were placed directly into pre-cleaned laboratory-supplied sampling containers. Samples were placed in coolers with ice and shipped with a chain of custody to AGAT. A total of five groundwater samples (including one field duplicate) were submitted for analysis of BTEX and PHC F1 to F4 fractions.

3.0 SUBSURFACE CONDITIONS

3.1 SOIL

The stratigraphy encountered during the work program comprised sand and gravel to silty sand fill material between approximately 0.5 and 1.5 mbg. Borehole BH106 was drilled in the former underground storage tank nest where 3 m of sand fill material was encountered. The fill material was underlain by native silty clay to bedrock which was encountered at depths from approximately 8.1 to 9.3 mbg. Bedrock was encountered by boreholes MW101, BH102, BH103, BH106 and MW109 during the work program.

Visual and/or olfactory evidence of PHC impacts were observed in the soil samples collected from borehole MW112 drilled in the location of the former pump island. Measured CSV concentrations in collected soil samples were all less than 10 parts per million (ppm) except for samples MW112-2 which had a concentration of 8% of the lower explosive limit (LEL).

The soil stratigraphy and corresponding soil sample CSV concentrations for each borehole are shown in the graphic borehole logs provided in Appendix I.

3.2 GROUNDWATER

Monitoring of all four monitoring wells was completed on October 27 and 28, 2022 with an additional monitoring event completed on December 2, 2022. The CV concentrations in the well headspaces were all less than 10 ppm, with the exception of monitoring well MW112 which had CV concentrations of 10% LEL (October 27, 2022) and 8% LEL (October 28, 2022, and December 2, 2022).

Depth to groundwater ranged from 2.02 mbg at MW112 to 2.90 mbg at MW109 during the October 27, 2022 monitoring event, 2.87 mbg at MW101 to 5.27 mbg at MW111 during the October 28, 2022 monitoring event and 1.56 mbg at MW111 to 3.19 mbg at MW109 during the December 2, 2022 monitoring event. LNAPL was not detected during any of these monitoring events.

Interpreted groundwater elevation contours and the inferred groundwater flow, based on December 2, 2022, data, are shown in Figure 3. As shown in the figure, shallow horizontal groundwater flow is interpreted to be towards the southwest.

4.0 RESULTS

4.1 SOIL AND GROUNDWATER STANDARDS

The site-specific details which formed the basis of the selection of the soil and groundwater SCS 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 II ESA ranged from 7.24 to 7.84, which is between the prescribed values of 5 to 9 for the application of generic Site Condition Standards;
- 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 II ESA ranged from 7.27 to 8.09, which is between the prescribed values of 5 to 11 for the application of generic Site Condition Standards;
- 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;
- the use of the Site will be changed from mixed use residential-commercial to commercial only; change to a more sensitive land use is not anticipated at this time;
- potable water at the Site, and all other properties located (in whole or in part) within 250 m of the Site, is not supplied by a municipal drinking water system (as defined in the *Safe Drinking Water Act, 2002*);
- the Site and properties located (in whole or in part) within 250 m of the Site have a well that is used or intended for use as a source of water for human consumption or for agriculture; and,
- soil texture at the Site has been classified as “fine- to medium-textured” based on the result of grain size analysis conducted for three representative soil samples.

Based on the preceding information and assumptions, the SCS applicable for industrial/commercial/community land use for fine- to medium-textured soil in a potable groundwater condition that are described in Table 2 of the *Standards* have been selected for evaluating laboratory analytical results from the Site at this time.

4.2 ANALYTICAL RESULTS

4.2.1 SOIL

Laboratory results for soil samples analyzed for BTEX, PHC F1 to F4 fractions, and metals and inorganic parameters are summarized in Table 2 and 3 respectively. The Laboratory Certificate of Analyses for the analysed soil samples are included in Appendix II. Visual representation of the soil sample analytical results are shown in Figure 4.

Concentrations of analysed parameters in all soil samples collected from the boreholes and submitted for laboratory analysis were less than the applicable Table 2 SCS with the following exceptions:

- Concentrations of ethylbenzene and PHC F1 fraction was greater than the Table 2 SCS in sample MW112-2 and its blind duplicate sample (MW112-12);
- Concentration of vanadium was greater than the Table 2 SCS in sample MW109-1B; and,
- Electrical conductivity was greater than the Table 2 SCS in sample BH105-2.

4.2.2 GROUNDWATER

Laboratory results for groundwater samples analyzed for BTEX and PHC F1 to F4 fractions are summarized in Table 4, respectively. The Laboratory Certificate of Analyses for the analysed groundwater samples are included in Appendix II. Visual representation of the groundwater analytical results are shown in Figure 5.

Concentrations of analysed parameters in the groundwater samples collected from the monitoring wells and submitted for laboratory analysis were less than the applicable Table 2 SCS with one exception. Concentrations of benzene and ethylbenzene was greater than the Table 2 SCS in the groundwater sample collected at MW112 and its blind duplicate sample (MW122).

4.2.3 QUALITY ASSURANCE/QUALITY CONTROL

AGAT's quality assurance/quality control (QA/QC) program consisted of the analysis of laboratory replicates, method blanks, percent recoveries, matrix spikes, and surrogate percent recoveries as appropriate for the particular analysis protocol. A review of the quality assurance reports attached to the laboratory certificates of analysis indicate that the laboratory QA/QC program results were generally within quality control limits.

QA/QC samples submitted by Terrapex to AGAT for this work program consisted of:

- two blind duplicate soil samples (MW109-14, blind duplicate of MW109-4, and MW112-12, blind duplicate of MW112-2) that were submitted for laboratory analysis of BTEX and PHC F1 to F4 fractions;
- one blind duplicate soil sample (BH107-12, blind duplicate of BH107-2B) that was submitted fort laboratory analysis of metals and inorganics; and,
- one blind duplicate groundwater sample (MW122, blind duplicate of MW112) was submitted for analysis of BTEX and PHC F1 to F4 fractions.

Good correlation was observed between the analytical results for the soil and groundwater samples submitted for analyses. Relative percentage differences (RPDs) for submitted samples and their duplicate pair with within acceptable levels.

On the basis of the above, the laboratory QA/QC results for this work program are generally considered acceptable. The laboratory certificates of analyses are provided in Appendix II.

5.0 SUMMARY

Terrapex conducted a Phase II ESA at the property located at 5646 Manotick Main Street, Manotick (Ottawa), Ontario, to investigate soil and groundwater quality in areas of actual and potential environmental concern arising from current and/or historical activities on the Site and on neighbouring properties. A geotechnical investigation was completed by Terrapex concurrently with Phase II ESA and the results are reported separately.

Between October 11 and 12, 2022, a total of thirteen boreholes (MW101, BH102 to BH108. MW109, BH110, MW111, MW112 and BH113) were drilled to depths between 1.2 and 9.3 mbg with four of the boreholes were completed as monitoring wells (MW101, MW109, MW111, and MW112).

The stratigraphy encountered during the work program comprised sand and gravel to silty sand fill material between approximately 0.5 and 1.5 mbg. Borehole BH106 was drilled in the former underground storage tank nest where 3 m of sand fill material was encountered. The fill material was underlain by native silty clay to bedrock which ranged from 8.1 mbg to 9.3 mbg. Bedrock was encountered by boreholes MW101, BH102, BH103, BH106 and MW109 during the work program.

Monitoring of all four monitoring wells was completed on October 27 and 28, 2022 with an additional monitoring event completed on December 2, 2022. The CV concentrations in the well headspaces were all less than 10 ppm, with the exception of monitoring MW112 which had CV concentrations of 10% LEL (October 27, 2022) and 8% LEL (October 28, and December 2, 2022). LNAPL was not detected in any of these monitoring events. Depth to groundwater ranged from 2.02 mbg at MW112 to 2.90 mbg at MW109 during the October 27, 2022 monitoring event, 2.87 mbg at MW101 to 5.27 mbg at MW111 during the October 28, 2022 monitoring event and 1.56 mbg at MW111 to 3.19 mbg at MW109 during the December 2, 2022 monitoring event. Based on December 2, 2022 data, shallow horizontal groundwater flow is interpreted to be towards the southwest.

Concentrations of BTEX and PHC F1 to F4 fractions, metals and inorganic parameters were less than the applicable Table 2 SCS with the following exceptions:

- Concentrations of ethylbenzene and PHC F1 fraction was greater than the Table 2 SCS in sample MW112-2 and its blind duplicate sample (MW112-12);
- Concentration of vanadium was greater than the Table 2 SCS in sample MW109-1B; and,
- Electrical conductivity was greater than the Table 2 SCS in sample BH105-2.

Concentrations of BTEX and PHC F1 to F4 fractions in all groundwater samples submitted for laboratory analysis were less than the applicable Table 2 SCS with one exception. Concentrations of benzene and ethylbenzene exceeded the Table 2 SCS in sample MW112 and its duplicate sample (MW122).

Based on the results of the soil investigation and groundwater monitoring and sampling program from this Phase II ESA, PHC impacted soil and groundwater has been identified at borehole MW112 in the vicinity of the former pump island located on the 5646 Manotick Main Street property. Metals or inorganics impacts were also identified in the soil at MW109 (for vanadium) and BH105 (electrical conductivity).

6.0 CLOSURE

The environmental assessment described herein was conducted in accordance with the terms of reference for this project as agreed upon by 595831 Ontario Inc./Hawkins Properties Ltd. and Terrapex Environmental Ltd. and to generally accept engineering or environmental consulting practices in this area.

Uncertainty is inherent in the risk evaluation process and is introduced by the use of assumptions concerning various aspects or characteristics of the system that cannot be measured accurately. Incomplete understanding of environmental processes is inherent in any environmental risk evaluation. Uncertainty is acknowledged, documented, and addressed primarily by the use of conservative assumptions that ensure risk is overestimated rather than underestimated. The estimates of risk are only valid for the assumptions and exposure scenarios as detailed in this report. Should Site conditions or toxicity information change, the risk associated with the initial assumptions may differ than that presented.

Terrapex Environmental Ltd. has exercised due care, diligence, and judgement in the performance of this subsurface investigation; however, studies of this nature have inherent limitations. The reported information is believed to provide a reasonable representation of the general environmental conditions at the site at the time of the assessment, however, the data were collected at discrete locations and conditions may vary at other locations or may change with the passage of time. The assessment was also limited to a study of those chemical parameters specifically addressed in this report.

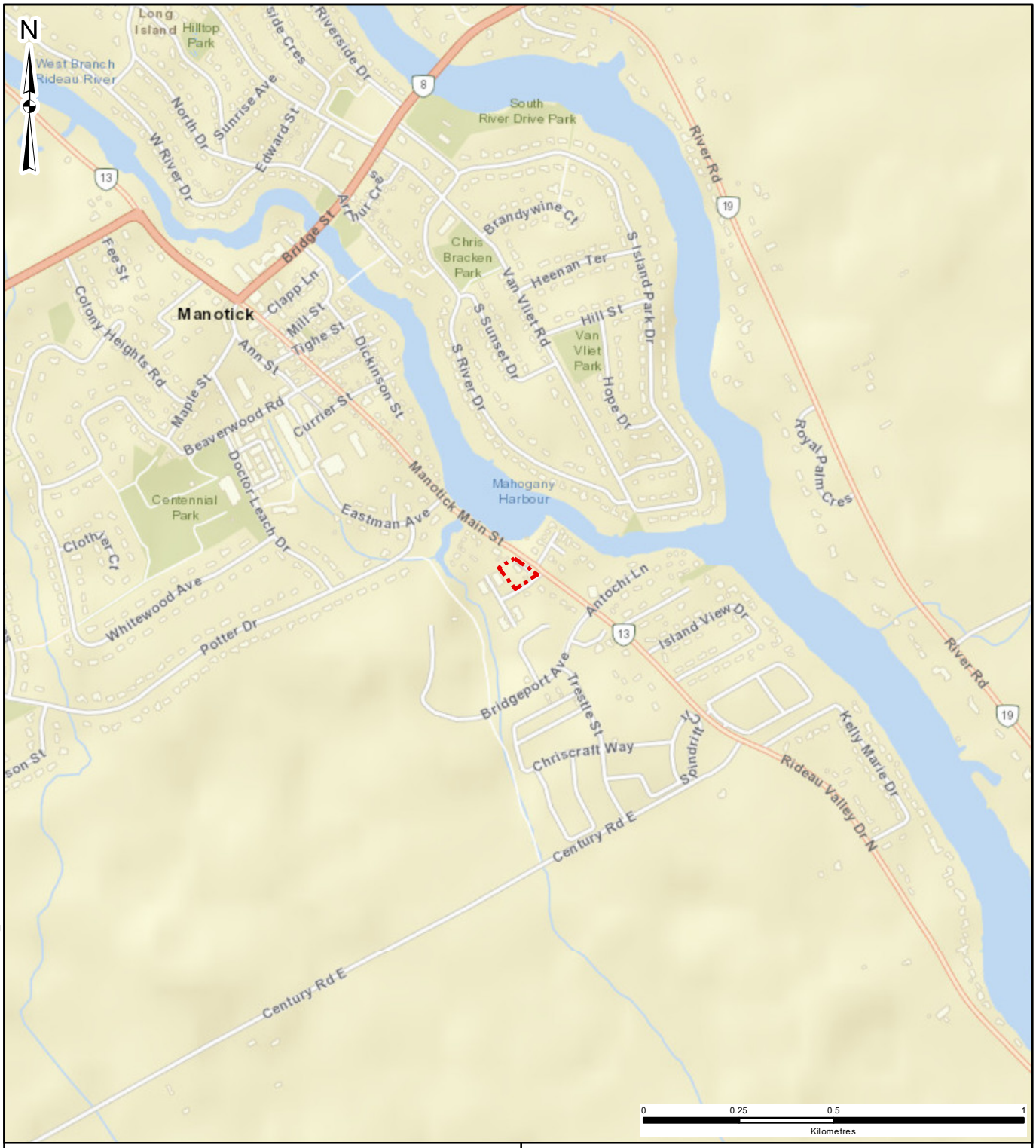
This report was prepared for the sole use of 595831 Ontario Inc./Hawkins Properties Ltd. Terrapex Environmental Ltd. accepts no liability for claims arising from the use of this report, or from decisions made or actions taken as a result of this report, by parties other than 595831 Ontario Inc./Hawkins Properties Ltd.

TERRAPEX ENVIRONMENTAL LTD.

Mike Grinnell, P.Eng., QP_{ESA}
Senior Project Manager

Keith Brown, P.Eng., QP_{ESA}
Senior Reviewer

FIGURES



LEGEND

PROPERTY BOUNDARY

DATA SOURCE: ESRI
MAP PROJECTION: NAD 1983 UTM Zone 18N

CLIENT: 595831 ONTARIO INC.

SITE LOCATION: 5646 AND 5650 MANOTICK MAIN STREET, MANOTICK, ONTARIO

TERRAPEX

TITLE: **SITE LOCATION**

DRAWN BY: JS	PROJECT NO.: CO884.01	CHECKED BY: MG
REVISION: 00	DATE: DECEMBER 2022	**FIGURE: 1**

jserroul C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Ottawa\CO800\CO884.01 5646_5650 Manotick Main St, Manotick\MXD\FIG 1 SITE LOCATION.mxd

LEGEND

- PROPERTY BOUNDARY
- BOREHOLE
- MONITORING WELL

0 10 20 30
Metres

DATA SOURCE: CITY OF OTTAWA
MAP PROJECTION: NAD 1983 UTM ZONE 18N

CLIENT:
595831 ONTARIO INC.

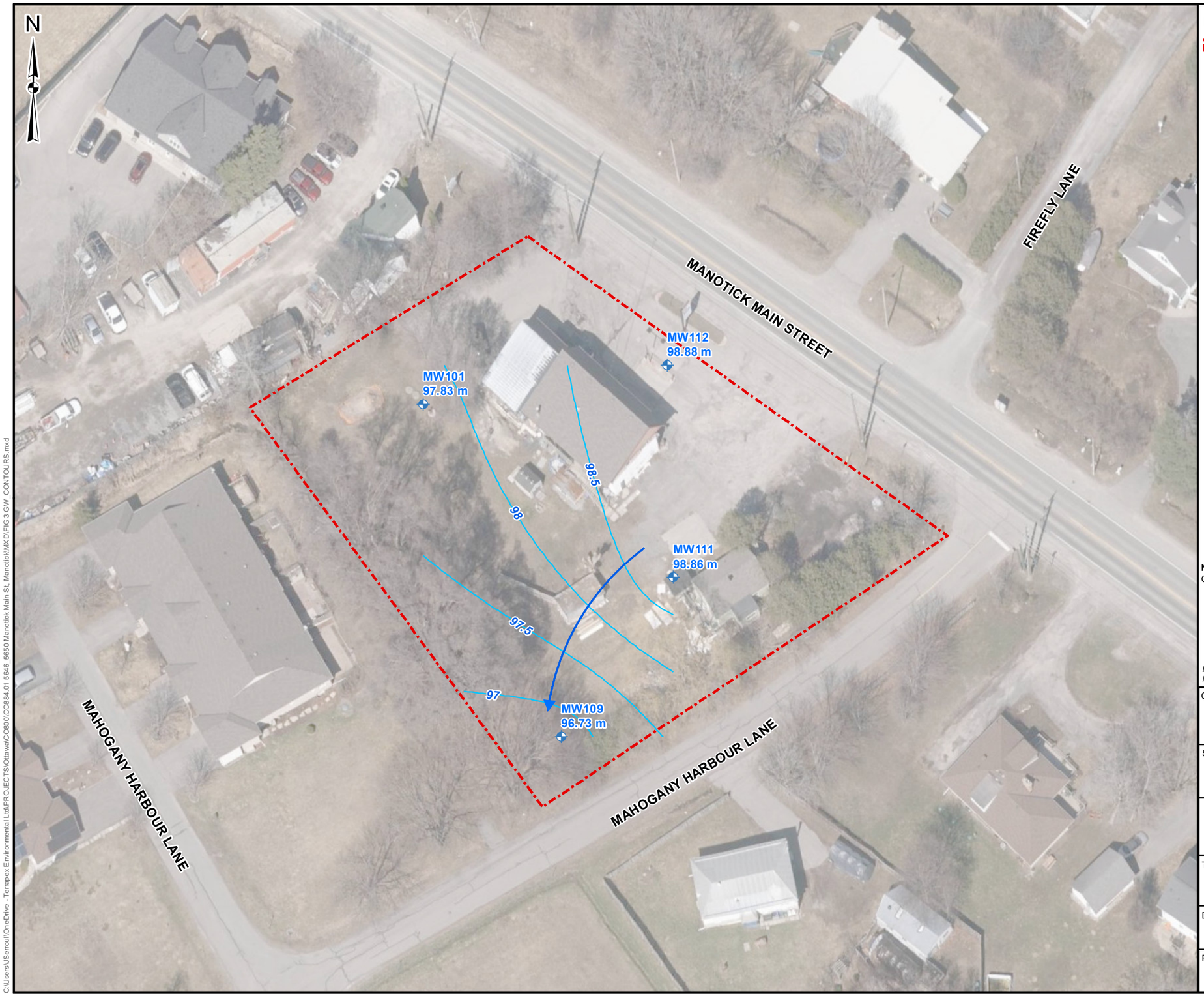
SITE LOCATION:
5646 AND 5650 MANOTICK MAIN STREET, MANOTICK, ONTARIO

TERRAPEX

TITLE:
GENERAL SITE LAYOUT

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CO884.01	MG
REVISION: 00	DATE: DECEMBER 2022	FIGURE: **2**

C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Ottawa\CO800\CO884.01 5646_5650 Manotick Main St, Manotick\MXD\FIG 2 GENERAL SITE LAYOUT.mxd



LEGEND

- PROPERTY BOUNDARY
- MONITORING WELL
- INTERPRETED GROUNDWATER CONTOURS
- GROUNDWATER FLOW DIRECTION

NOTE:
GROUNDWATER ELEVATIONS WERE OBSERVED ON DECEMBER 2, 2022

0 10 20 30
Metres

DATA SOURCE: CITY OF OTTAWA
MAP PROJECTION: NAD 1983 UTM ZONE 18N

CLIENT:
595831 ONTARIO INC.

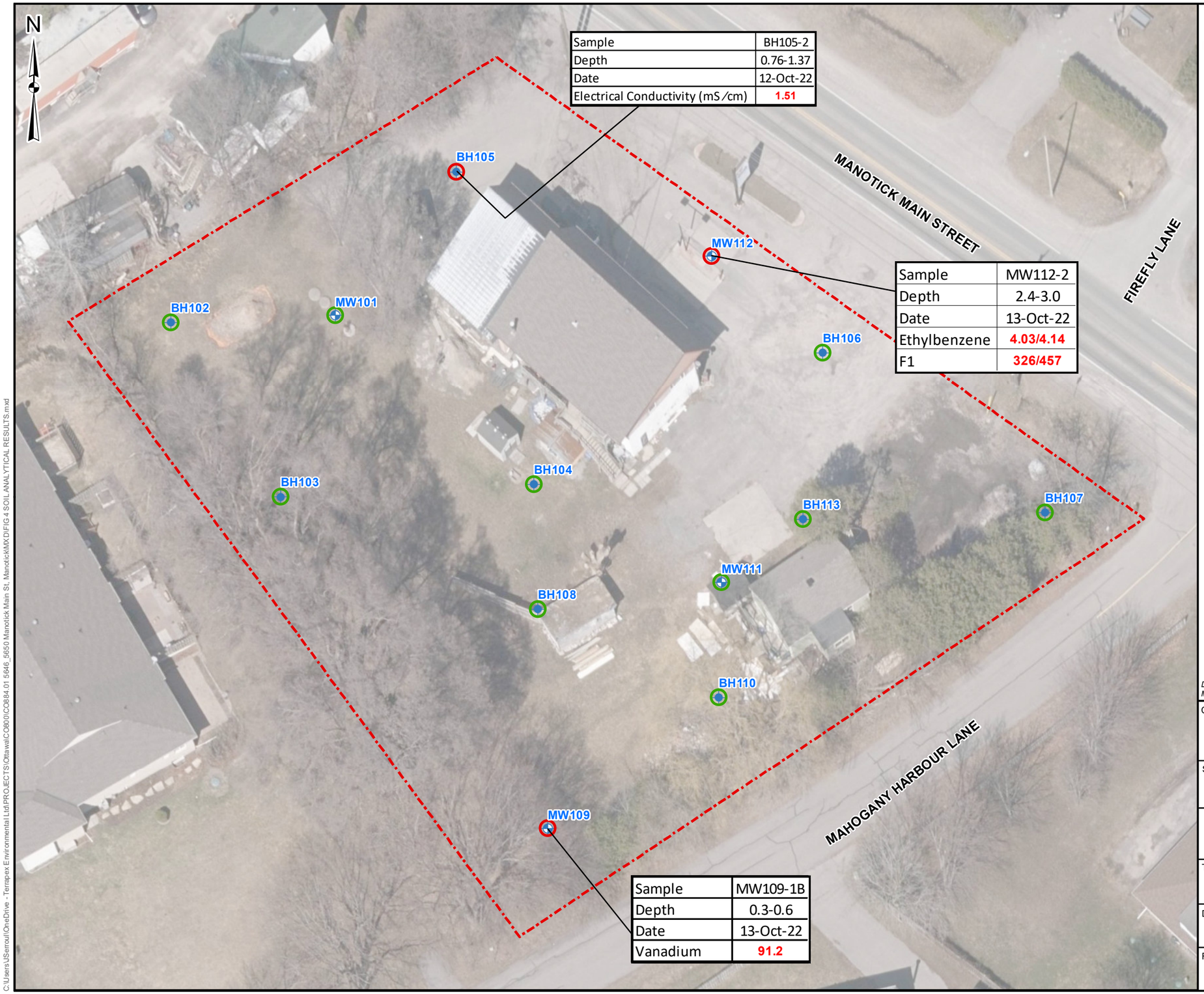
SITE LOCATION:
5646 AND 5650 MANOTICK MAIN STREET,
MANOTICK, ONTARIO

TERRAPEX

TITLE:
INTERPRETED GROUNDWATER FLOW

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CO884.01	MG
REVISION:	DATE:	FIGURE:
00	DECEMBER 2022	**3**

C:\Users\JSerrou\OneDrive - Terrapex Environmental Ltd\PROJECTS\Ottawa\CO800\CO884.01 5646_5650 Manotick Main St, Manotick\MXD\FIG 3 GW_CONTOURS.mxd



C:\Users\JSerroul\OneDrive - Terrapex Environmental Ltd\PROJECTS\Ottawa\CO800\CO884.01 5646_5650 Manotick Main St, Manotick\MXD\FIG 4 SOIL ANALYTICAL RESULTS.mxd

LEGEND

- PROPERTY BOUNDARY
- BOREHOLE
- MONITORING WELL

ANALYSIS INFORMATION

- LESS AND OR EQUAL TO MECP TABLE 2 SCS
- GREATER THAN MECP TABLE 2 SCS

STANDARD INFORMATION

SAMPLE		
DEPTH		
DATE		
PARAMETER	RESULT	**MECP TABLE 2 SCS**
Vanadium		86
Electrical Conductivity (mS/cm)		1.4
Ethylbenzene		1.6
F1		65

VALUE GREATER THAN SCS
VALUE LESS THAN OR EQUAL TO SCS
MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE WITH FINE TO MEDIUM TEXTURED SOIL.

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.
4. PROPOSED DEVELOPMENT PLAN PROVIDED BY CLIENT.

0 5 10 15 20
Metres

DATA SOURCE: CITY OF OTTAWA
MAP PROJECTION: NAD 1983 UTM ZONE 18N

CLIENT:
595831 ONTARIO INC.

SITE LOCATION:
5646 AND 5650 MANOTICK MAIN STREET, MANOTICK, ONTARIO

TERRAPEX

TITLE:
SOIL ANALYTICAL RESULTS

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CO884.01	MG
REVISION:	**DATE:**	**FIGURE:**
00	DECEMBER 2022	**4**

C:\Users\JSemrau\OneDrive - Terrapex Environmental Ltd\PROJECTS\Ottawa\CO800\CO884.01 5646_5650 Manotick Main St, Manotick\MXD\FIG 5 GW ANALYTICAL RESULTS.mxd

LEGEND

PROPERTY BOUNDARY

MONITORING WELL

ANALYSIS INFORMATION

LESS AND OR EQUAL TO MECP TABLE 2 SCS

GREATER THAN MECP TABLE 2 SCS

STANDARD INFORMATION

SAMPLE		MECP TABLE 2 SCS
SCREEN INTERVAL		
DATE		
PARAMETER	RESULT	
Benzene		5
Ethylbenzene		2.4

MECP TABLE 2: FULL DEPTH GENERIC SCS IN A POTABLE GROUND WATER CONDITION FOR ALL TYPES OF PROPERTY USE WITH FINE TO MEDIUM 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.
4. PROPOSED DEVELOPMENT PLAN PROVIDED BY CLIENT.

0 5 10 15 20

Metres

DATA SOURCE: CITY OF OTTAWA

MAP PROJECTION: NAD 1983 UTM ZONE 18N

CLIENT:

595831 ONTARIO INC.

SITE LOCATION:

5646 AND 5650 MANOTICK MAIN STREET, MANOTICK, ONTARIO

TERRAPEX

TITLE:

GROUNDWATER ANALYTICAL RESULTS

DRAWN BY:	PROJECT NO.:	CHECKED BY:
JS	CO884.01	MG
REVISION:	DATE:	FIGURE:
00	DECEMBER 2022	**5**

TABLES

TABLE 1 GROUNDWATER MONITORING DATA

5646/5650 Manotick Main Street, Manotick, ON

WELL NUMBER	DATE	GROUND ELEVATION[1] (m)	T.O.P. ELEVATION[2] (m)	CV[4]	DEPTH TO WATER FROM T.O.P. (m)	DEPTH TO WATER FROM GROUND (m)	GROUNDWATER ELEVATION[3] (m)	LNAPL THICKNESS[4] (m)
MW101	27-Oct-22	100.63	100.56	<10 ppm	2.49	2.56	98.07	None
	28-Oct-22			<10 ppm	2.79	2.87	97.76	None
	02-Dec-22			<10 ppm	2.73	2.79	97.83	
BH102	27-Oct-22	100.49	-	-	-	-	-	-
BH103	27-Oct-22	100.50	-	-	-	-	-	-
BH104	27-Oct-22	100.60	-	-	-	-	-	-
BH105	27-Oct-22	100.61	-	-	-	-	-	-
BH106	27-Oct-22	100.63	-	-	-	-	-	-
BH107	27-Oct-22	100.82	-	-	-	-	-	-
BH108	27-Oct-22	100.16	-	-	-	-	-	-
MW109	27-Oct-22	99.91	99.86	<10 ppm	2.85	2.90	97.01	None
	28-Oct-22			<10 ppm	2.96	3.01	96.90	None
	02-Dec-22			<10 ppm	3.14	3.19	96.73	
BH110	27-Oct-22	100.23	-	-	-	-	-	-
MW111	27-Oct-22	100.41	100.33	<10 ppm	1.97	2.06	98.36	None
	28-Oct-22			<10 ppm	5.18	5.27	95.14	None
	02-Dec-22			<10 ppm	1.47	1.56	98.86	
MW112	27-Oct-22	100.58	100.47	10% LEL	1.90	2.02	98.57	None
	28-Oct-22			8% LEL	4.39	4.50	96.08	None
				8% LEL	1.60	1.71	98.88	
BH113	27-Oct-22	100.86	-	-	-	-	-	-

[2] Elevation of highest point of well pipe ("top of pipe"), 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)

[3] Static water level elevation, relatve to site benchmark

[4] Measured thickness of light, non-aqueous phase liquid, if any

TABLE 3 SOIL ANALYTICAL RESULTS - Metals and Inorganics

5646 and 5650 Manotick Main Street, Manotick, Ontario

Sample Name	Units	STANDARDS Table 2 I/C/C coarse	MW101-4	BH102-3	BH105-2	BH106-3	BH107-2B	BH107-12 Field Duplicate of BH107-2B	BH108-2	MW109-1B
Vapour Reading	see note	-	<10ppm	<10ppm	<10 ppm	<10 ppm	<10 ppm	<10 ppm	<10ppm	<10 ppm
Sample Depth	m bg	-	3.1-3.7	1.5-2.1	0.76-1.37	1.5-2.1	0.8-1.2	0.8-1.2	0.6-1.2	0.3-0.6
Sampling Date	dd-mmm-yy	-	11-Oct-22	11-Oct-22	12-Oct-22	12-Oct-22	12-Oct-22	12-Oct-22	12-Oct-22	13-Oct-22
Analysis Date (on or before)	dd-mmm-yy	-	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22
Certificate of Analysis No.	-	-	22Z958134	22Z958134	22Z958134	22Z958134	22Z958134	22Z958134	22Z958134	22Z958134
pH	-	NV	8.09	7.27	7.53	8.00	7.84	7.66	8.16	7.24
Antimony	-	40	-	-	<0.8	-	<0.8	<0.8	-	<0.8
Arsenic	-	18	-	-	3	-	4	4	-	4
Barium	-	670	-	-	139	-	252	265	-	268
Beryllium	-	8.0	-	-	0.7	-	0.9	0.9	-	1.2
Boron (total)	-	120	-	-	9	-	10	11	-	13
Boron (Hot Water Soluble)[1]	-	2.0	-	-	0.19	-	0.15	0.19	-	0.13
Cadmium	-	1.9	-	-	<0.5	-	<0.5	<0.5	-	<0.5
Chromium Total	-	160	-	-	39	-	73	69	-	103
Chromium VI	-	8.0	-	-	<0.2	-	<0.2	<0.2	-	<0.2
Cobalt	-	80	-	-	11.7	-	18.7	18.7	-	22.2
Copper	-	230	-	-	20.6	-	35.6	35.9	-	33.9
Cyanide (CN-)	-	0.051	-	-	<0.040	-	<0.040	<0.040	-	<0.040
Lead	-	120	-	-	7	-	9	9	-	11
Mercury	-	3.9	-	-	<0.10	-	<0.10	<0.10	-	<0.10
Molybdenum	-	40	-	-	<0.5	-	<0.5	<0.5	-	<0.5
Nickel	-	270	-	-	22	-	43	40	-	52
Selenium	-	5.5	-	-	<0.8	-	<0.8	<0.8	-	<0.8
Silver	-	40	-	-	<0.5	-	<0.5	<0.5	-	<0.5
Thallium	-	3.3	-	-	<0.5	-	<0.5	<0.5	-	<0.5
Uranium	-	33	-	-	0.75	-	0.79	0.77	-	0.92
Vanadium	-	86	-	-	57.5	-	76.8	79.7	-	**91.2**
Zinc	-	340	-	-	59	-	96	99	-	131
Electrical Conductivity (mS/cm)	-	1.4	-	-	**1.51**	-	0.609	0.640	-	0.284
Sodium Adsorption Ratio	-	12	-	-	6.92	-	5.29	5.80	-	1.57

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

Industrial/Commercial/Community Property Use, Fine to Medium Textured Soils

- 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.

TABLE 2 SOIL ANALYTICAL RESULRS - Petroleum Hydrocarbon Parameters

5646 and 5650 Manotick Main Street, Manotick, Ontario

Sample Name	Units	STANDARDS Table 2 I/C/C fine/medium	MW101-4	BH102-4	BH103-4	BH104-3	BH105-2	BH106-5B	BH107-3	BH108-2
Vapour Reading	see note	-	<10 ppm	<10 ppm	<10 ppm	<10 ppm	<10 ppm	<10 ppm	<10 ppm	<10 ppm
Sample Depth	m bg	-	3.1-3.7	3.1-3.7	3.1-3.7	1.2-1.5	0.7-1.4	3.4-3.7	1.2-1.8	0.6-1.2
Sampling Date	dd-mmm-yy	-	11-Oct-22	11-Oct-22	12-Oct-22	12-Oct-22	12-Oct-22	12-Oct-22	12-Oct-22	12-Oct-22
Analysis Date (on or before)	dd-mmm-yy	-	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22
Certificate of Analysis No.	-	-	22Z958134	22Z958134	22Z958134	22Z958134	22Z958134	22Z958134	22Z958134	22Z958134
Benzene	ug/g	0.40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Toluene	ug/g	9.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylene Mixture	ug/g	30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Petroleum Hydrocarbons F1[1]	ug/g	65	<5	<5	<5	<5	<5	<5	<5	<5
Petroleum Hydrocarbons F2	ug/g	250	<10	<10	<10	<10	<10	<10	<10	<10
Petroleum Hydrocarbons F3	ug/g	2,500	<50	<50	<50	<50	<50	<50	<50	<50
Petroleum Hydrocarbons F4	ug/g	6,600	<50	<50	<50	<50	<50	<50	<50	<50

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
Industrial/Commercial/Community Property-Use, Fine- to Medium-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
[1] F1 fraction does not include BTEX.

TABLE 2 SOIL ANALYTICAL RESULRS - Petroleum Hydrocarbon Parameters

5646 and 5650 Manotick Main Street, Manotick, Ontario

Sample Name	Units	STANDARDS Table 2 I/C/C fine/medium	MW109-4	MW109-14 Field Duplicate of MW109-4	BH110-3B	MW111-3	MW112-2	MW112-12 Field Duplicate of MW112-2	MW112-3	BH113-3
Vapour Reading	see note	-	<10 ppm	<10 ppm	<10 ppm	<10 ppm	8% LEL	8% LEL	10 ppm	<10 ppm
Sample Depth	m bg	-	3.1-3.7	3.1-3.7	1.5-1.8	3.1-4.6	2.4-3.0	2.4-3.0	3.0-3.3	1.2-1.8
Sampling Date	dd-mmm-yy	-	13-Oct-22	13-Oct-22	13-Oct-22	13-Oct-22	13-Oct-22	13-Oct-22	13-Oct-22	13-Oct-22
Analysis Date (on or before)	dd-mmm-yy	-	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22	21-Oct-22
Certificate of Analysis No.	-	-	22Z958134	22Z958134	22Z958134	22Z958134	22Z958134	22Z958134	22Z958134	22Z958134
Benzene	ug/g	0.40	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Toluene	ug/g	9.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.6	<0.05	<0.05	<0.05	<0.05	**4.03**	**4.14**	0.81	<0.05
Xylene Mixture	ug/g	30	<0.05	<0.05	<0.05	<0.05	2.93	4.07	0.40	<0.05
Petroleum Hydrocarbons F1[1]	ug/g	65	<5	<5	<5	<5	**326**	**457**	21	<5
Petroleum Hydrocarbons F2	ug/g	250	<10	<10	<10	<10	25	22	<10	<10
Petroleum Hydrocarbons F3	ug/g	2,500	<50	<50	<50	<50	<50	<50	<50	<50
Petroleum Hydrocarbons F4	ug/g	6,600	<50	<50	<50	<50	<50	<50	<50	<50

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
Industrial/Commercial/Community Property-Use, Fine- to Medium-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
[1]	F1 fraction does not include BTEX.

TABLE 2 SOIL ANALYTICAL RESULRS - Petroleum Hydrocarbon Parameters
5646 and 5650 Manotick Main Street, Manotick, Ontario

Sample Name	Units	STANDARDS Table 2 I/C/C fine/medium	Methanol Blank
Vapour Reading	see note	-	<10 ppm
Sample Depth	m bg	-	-
Sampling Date	dd-mmm-yy	-	13-Oct-22
Analysis Date (on or before)	dd-mmm-yy	-	21-Oct-22
Certificate of Analysis No.	-	-	22Z958134
Benzene	ug/g	0.40	<0.02
Toluene	ug/g	9.0	<0.05
Ethylbenzene	ug/g	1.6	<0.05
Xylene Mixture	ug/g	30	<0.05
Petroleum Hydrocarbons F1[1]	ug/g	65	<5
Petroleum Hydrocarbons F2	ug/g	250	-
Petroleum Hydrocarbons F3	ug/g	2,500	-
Petroleum Hydrocarbons F4	ug/g	6,600	-

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
Industrial/Commercial/Community Property-Use, Fine- to Medium-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
[1]	F1 fraction does not include BTEX.

TABLE 4 GROUNDWATER ANALUTICAL RESULTS - Petroleum Hydrocarbon Parameters

5646 and 5650 Manotick Main Street, Manotick, Ontario

Sample Name	Units	STANDARDS Table 2 fine/medium	MW101	MW109	MW111	MW112	MW122 Field Duplicate of MW112	TRIP BLANK	TRIP SPIKE
Vapour Reading	see note	-	<10 ppm	<10 ppm	<10 ppm	8% LEL	8% LEL	-	-
Screen Interval	m bg	-	5.1-8.1	5.5-8.5	3.1-6.1	3.1-6.1	3.1-6.1	-	-
Sampling Date	dd-mmm-yy	-	28-Oct-22	28-Oct-22	28-Oct-22	28-Oct-22	28-Oct-22	26-Oct-22	26-Oct-22
Analysis Date (on or before)	dd-mmm-yy	-	7-Nov-22	7-Nov-22	7-Nov-22	7-Nov-22	7-Nov-22	3-Nov-22	31-Oct-22
Certificate of Analysis No.	-	-	22T963703	22T963703	22T963703	22T963703	22T963703	22T963703	22T963703
Benzene	ug/L	5.0	<0.20	<0.20	<0.20	**18.4**	**21.8**	<0.20	91%
Toluene	ug/L	24	<0.20	<0.20	<0.20	0.68	0.80	<0.20	89%
Ethylbenzene	ug/L	2.4	<0.10	<0.10	<0.10	**42.5**	**47.2**	<0.10	98%
Xylene Mixture	ug/L	300	<0.20	<0.20	<0.20	5.06	5.97	<0.20	97%
Petroleum Hydrocarbons F1[1]	ug/L	750	<25	<25	<25	156	154	<25	-
Petroleum Hydrocarbons F2	ug/L	150	<100	<100	<100	137	138	-	-
Petroleum Hydrocarbons F3	ug/L	500	<100	<100	<100	<100	<100	-	-
Petroleum Hydrocarbons F4	ug/L	500	<100	<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, Fine- to Medium-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
[1] F1 fraction does not include BTEX.

APPENDIX I

BOREHOLE/MONITORING WELL LOGS

CLIENT: Hawkins Properties	PROJECT NO.: CO884.01	**RECORD OF: MW101**
ADDRESS: 5646/5650 Manotick Main Street.		
CITY/PROVINCE: Ottawa,ON	NORTHING (m):	EASTING (m): ELEV. (m) 100.63
CONTRACTOR: Strata Drilling Group	METHOD: 7822 DT GEOPROBE EQUIPPED WITH HOLLOW STEM AUGERS	
BOREHOLE DIAMETER (cm): 9.5	WELL DIAMETER (cm): 5.08	SCREEN SLOT #: 10 SAND TYPE: No-2 SEALANT TYPE: Bentonite

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) / N-VALUE (Blows/300mm)	WATER CONTENT (%) PL W.C. LL	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL) (new title)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		asphaltic concrete and crusher run limestone FILL	0										
			0.53	100.17	12	20.1	1		55	<10 ppm			
		firm, moist, brown CLAYEY SILT trace sand some rootlets	1.06	99.64	4	25.1	2		56	<10 ppm			
		firm to soft SILTY CLAY	1.59	99.11	5 / 100	34.6	3		100	<10 ppm	BTEX F1-F4 pH		
		moist	2.12	98.58									
		brown	2.65	98.05									
		----											
		grey	3.18	97.52	2 / 50	43.6	4		100	<10 ppm			
			3.71	96.99	50+								
			4.24	96.46									
			4.77	95.93	50+								
			5.3	95.4	3	56.4	5		100	<10 ppm			
		wet	5.83	94.87									
		-----											
		very wet	6.36	94.34	0	36.9	6		100	<10 ppm			
			6.89	93.81									
			7.42	93.28									
		END OF BOREHOLE BOREHOLE TERMINATED ON ASSUMED BEDROCK	7.95	92.75	100	32.2	7			<10 ppm			

TERRAPEX

LOGGED BY: JM	DRILLING DATE: 11-Oct-2022
INPUT BY: UB	MONITORING DATE: 27-OCT-22
REVIEWED BY: JM	PAGE 1 OF 1

CLIENT: Hawkins Properties | PROJECT NO.: CO884.01 | **RECORD OF: BH102**

ADDRESS: 5646/5650 Manotick Main Street.

CITY/PROVINCE: Ottawa,ON | NORTHING (m): | EASTING (m): | ELEV. (m) 100.49

CONTRACTOR: Strata Drilling Group | METHOD: 7822 DT GEOPROBE EQUIPPED WITH HOLLOW STEM AUGERS

BOREHOLE DIAMETER (cm): 9.5 | WELL DIAMETER (cm): 5.08 | SCREEN SLOT #: 10 | SAND TYPE: No-2 | SEALANT TYPE: Bentonite

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) ● / N-VALUE (Blows/300mm) ▲ (40 80 120 160 / 20 40 60 80)	WATER CONTENT (%) PL W.C. LL (20 40 60 80)	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL) (new title)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		Topsoil	0	100.17	▲2	32.3 ■	1		100	<10 ppm			
		moist, dark brown clayey silt trace sand with organics FILL	0.53	99.64	▲1	24.4 ■	2		100	<10 ppm			
			1.06	99.11									
		firm to soft SILTY CLAY	1.59	98.58	▲4 ● 100	37.3 ■	3		100	<10 ppm	pH		
			2.12	98.05	● 50+								
			2.65	97.52									
			3.18	96.99	▲5 ● 75	38.2 ■	4		100	<10 ppm	BTEX F1-F4		
		olive brown	3.71	96.46	● 50+								
		----	4.24	95.93									
		grey	4.77	95.4	● 50+								
			5.3	94.87									
			5.83	94.34									
			6.36	93.81	▲1	37.8 ■	5		100	<10 ppm			
			6.89	93.28									
		wet	7.42	92.75									
		-----											
		very wet	7.95	92.22	▲0	30.3 ■	6			<10 ppm			
			8.48	91.69									
		END OF BOREHOLE BOREHOLE TERMINATED ON ASSUMED BEDROCK											

TERRAPEX

LOGGED BY: JM | DRILLING DATE: 11-Oct-2022

INPUT BY: UB | MONITORING DATE:

REVIEWED BY: JM | PAGE 1 OF 1

CLIENT: Hawkins Properties	PROJECT NO.: CO884.01	**RECORD OF: BH103**
ADDRESS: 5646/5650 Manotick Main Street.		
CITY/PROVINCE: Ottawa,ON	NORTHING (m):	EASTING (m): ELEV. (m) 100.5
CONTRACTOR: Strata Drilling Group	METHOD: 7822 DT GEOPROBE EQUIPPED WITH HOLLOW STEM AUGERS	
BOREHOLE DIAMETER (cm): 9.5	WELL DIAMETER (cm): 5.08	SCREEN SLOT #: 10 SAND TYPE: No-2 SEALANT TYPE: Bentonite

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) / N-VALUE (Blows/300mm)	WATER CONTENT (%) PL W.C. LL	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL) (new title)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		Topsoil	0	100.17	2		1		100	<10 ppm			
		dark brown clayey silt trace sand trace organics FILL	0.53	99.64	4		2		100	<10 ppm			
		saturated grey silty clay FILL	1.06	99.11	38 / 2		3		100	<10 ppm			
		Topsoil	1.59	98.58	50+								
		firm, brown, CLAYEY SILT trace rootlets sand and gravel	2.12	98.05									
		firm to soft, grey SILTY CLAY	2.65	97.52									
			3.18	96.99	4		4		100	<10 ppm	BTEX F1-F4		
			3.71	96.46	50+								
			4.24	95.93									
			4.77	95.4	50+ / 5		5		100	<10 ppm			
		moist ----- very wet	5.3	94.87									
			5.83	94.34									
			6.36	93.81	1		6		100	<10 ppm			
			6.89	93.28									
			7.42	92.75									
			7.95	92.22	0		7		100	<10 ppm			
			8.48	91.69									
		pieces of limestone	9.01				8			<10 ppm			
		END OF BOREHOLE BOREHOLE TERMINATED ON ASSUMED BEDROCK											

TERRAPEX

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CLIENT: Hawkins Properties	PROJECT NO.: CO884.01	**RECORD OF: BH104**
ADDRESS: 5646/5650 Manotick Main Street.		
CITY/PROVINCE: Ottawa,ON	NORTHING (m):	EASTING (m): ELEV. (m) 100.6
CONTRACTOR: Strata Drilling Group	METHOD: 7822 DT GEOPROBE EQUIPPED WITH HOLLOW STEM AUGERS	
BOREHOLE DIAMETER (cm): 9.5	WELL DIAMETER (cm): 5.08	SCREEN SLOT #: 10 SAND TYPE: No-2 SEALANT TYPE: Bentonite

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) / N-VALUE (Blows/300mm)	WATER CONTENT (%) PL W.C. LL	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL) (new title)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		TopSoil moist, dark brown clayey silt traces of sand and gravel some rootlets FILL	0 0.53 1.06	100.17 99.64 99.11	4 3 2	16.7 27.3 18	1 2 3		83 83 100	<10 ppm <10 ppm <10 ppm			
		END OF BOREHOLE											

TERRAPEX

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CLIENT: Hawkins Properties	PROJECT NO.: CO884.01	**RECORD OF: BH105**
ADDRESS: 5646/5650 Manotick Main Street.		
CITY/PROVINCE: Ottawa,ON	NORTHING (m):	EASTING (m): ELEV. (m) 100.61
CONTRACTOR: Strata Drilling Group	METHOD: 7822 DT GEOPROBE EQUIPPED WITH HOLLOW STEM AUGERS	
BOREHOLE DIAMETER (cm): 9.5	WELL DIAMETER (cm): 5.08	SCREEN SLOT #: 10 SAND TYPE: No-2 SEALANT TYPE: Bentonite

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) / N-VALUE (Blows/300mm)	WATER CONTENT (%) PL W.C. LL	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL) (new title)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		ASPHALTIC CONCRETE	0						66	<10 ppm			
		moist, grey, crusher run limestone		100.17	17		1						
		dark brown clayey silt trace sand and gravel FILL	0.53										
		brown, clayey silt FILL	1.06	99.64	4		2		50	<10 ppm	M+1 BTEX F1-F4		
		grey crusher run limestone		99.11	3		3		100	<10 ppm			
		END OF BOREHOLE											

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CLIENT: Hawkins Properties | PROJECT NO.: CO884.01 | **RECORD OF: BH106**

ADDRESS: 5646/5650 Manotick Main Street.

CITY/PROVINCE: Ottawa,ON | NORTHING (m): | EASTING (m): | ELEV. (m) 100.63

CONTRACTOR: Strata Drilling Group | METHOD: 7822 DT GEOPROBE EQUIPPED WITH HOLLOW STEM AUGERS

BOREHOLE DIAMETER (cm): 9.5 | WELL DIAMETER (cm): 5.08 | SCREEN SLOT #: 10 | SAND TYPE: No-2 | SEALANT TYPE: Bentonite

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) ● / N-VALUE (Blows/300mm) ▲ (40 80 120 160 / 20 40 60 80)	WATER CONTENT (%) PL W.C. LL (20 40 60 80)	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL) (new title)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		grey crusher run limestone	0										
		moist, brown silty sand FILL	0.53	100.17	17	5.8	1		66	<10 ppm			
			1.06	99.64	5	17.8	2		41	<10 ppm			
		wet, brown sand traces of silt and gravel FILL	1.59	99.11	5								
					0	16	3		83	<10 ppm	pH		
			2.12	98.58	0								
			2.65	98.05	0	17	4		83	<10 ppm			
		firm to soft SILTY CLAY	3.18	97.52	3	50.2	5		75	<10 ppm	BTEX F1-F4		
			3.71	96.99									
			4.24	96.46	2	58.7	6		100	<10 ppm			
		olive brown ---- grey	4.77	95.93									
			5.3	95.4	90/70								
			5.83	94.87									
		brown ---- grey	6.36	94.34	2	32	7		100	<10 ppm			
			6.89	93.81									
			7.42	93.28									
		limetone pieces	7.95	92.75	20	11.4	8		100	<10 ppm			
		END OF BOREHOLE BOREHOLE TERMINATED ON ASSUMED BEDROCK											

TERRAPEX

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CLIENT: Hawkins Properties | PROJECT NO.: CO884.01 | **RECORD OF: BH107**

ADDRESS: 5646/5650 Manotick Main Street.

CITY/PROVINCE: Ottawa,ON | NORTHING (m): | EASTING (m): | ELEV. (m) 100.82

CONTRACTOR: Strata Drilling Group | METHOD: 7822 DT GEOPROBE EQUIPPED WITH HOLLOW STEM AUGERS

BOREHOLE DIAMETER (cm): 9.5 | WELL DIAMETER (cm): 5.08 | SCREEN SLOT #: 10 | SAND TYPE: No-2 | SEALANT TYPE: Bentonite

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	RECOVERY (%)	SV/TOV (ppm or %LEL) (new title)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		moist grey crusher run limestone	0	100.7	▲13		1		50	<10 ppm			
		moist brown CLAYEY SILT	0.53	100.17	▲4		2		42	<10 ppm	M+I dup BH107-12 BTEX F1-F4		
			1.06	99.64									
		END OF BOREHOLE	1.59	99.11	▲8		3		42	<10 ppm			

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CLIENT: Hawkins Properties		PROJECT NO.: CO884.01	**RECORD OF: BH108**
ADDRESS: 5646/5650 Manotick Main Street.			
CITY/PROVINCE: Ottawa,ON	NORTHING (m):	EASTING (m):	ELEV. (m) 100.16
CONTRACTOR: Strata Drilling Group	METHOD: 7822 DT GEOPROBE EQUIPPED WITH HOLLOW STEM AUGERS		
BOREHOLE DIAMETER (cm): 9.5	WELL DIAMETER (cm): 5.08	SCREEN SLOT #: 10	SAND TYPE: No-2	SEALANT TYPE: Bentonite

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	RECOVERY (%)	SV/TOV (ppm or %LEL) (new title)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		Topsoil	0		4		1		66	<10 ppm			
		firm, brown CLAYEY SILT trace sand and gravel	0.53	99.64			2		92	<10 ppm	pH BTEX F1-F4		
		END OF BOREHOLE	1.06	99.11	4								

TERRAPEX

LOGGED BY: JM	DRILLING DATE: 12-Oct-22
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CLIENT: Hawkins Properties	PROJECT NO.: CO884.01	**RECORD OF: MW109**
ADDRESS: 5646/5650 Manotick Main Street.		
CITY/PROVINCE: Ottawa,ON	NORTHING (m):	EASTING (m): ELEV. (m) 99.91
CONTRACTOR: Strata Drilling Group	METHOD: 7822 DT GEOPROBE EQUIPPED WITH HOLLOW STEM AUGERS	
BOREHOLE DIAMETER (cm): 9.5	WELL DIAMETER (cm): 5.08	SCREEN SLOT #: 10 SAND TYPE: No-2 SEALANT TYPE: Bentonite

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) / N-VALUE (Blows/300mm)	WATER CONTENT (%) PL W.C. LL	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL) (new title)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
Topsoil	0	99.64	6	24.2	1		100	<10 ppm	M+I		
firm, moist, brown CLAYEY SILT trace sand	0.53	99.11	2	24.6	2		100	<10 ppm			
	1.06	98.58	2 60 70/50	40.3	3		100	<10 ppm			
	1.59	98.05									
	2.12	97.52									
	2.65	96.99									
firm to soft, moist SILTY CLAY	3.18	96.46	2 60 100/80	46.4	4		2	<10 ppm	BTEX F1-F4		
	3.71	95.93									
	4.24	95.4	80/50								
	4.77	94.87	4 50	42	5		100	<10 ppm			
olive brown	5.3	94.34									
----	5.83	93.81									
grey	6.36	93.28	25	38	6		100	<10 ppm			
	6.89	92.75									
	7.42	92.22	0	43	7		100	<10 ppm			
	7.95	91.69									
END OF BOREHOLE BOREHOLE TERMINATED ON ASSUMED BEDROCK	8.48										

TERRAPEX

LOGGED BY: JM	DRILLING DATE: 12-Oct-22
INPUT BY: UB	MONITORING DATE: 27-OCT-22
REVIEWED BY: JM	PAGE 1 OF 1

CLIENT: Hawkins Properties | PROJECT NO.: CO884.01 | **RECORD OF: BH110**

ADDRESS: 5646/5650 Manotick Main Street.

CITY/PROVINCE: Ottawa,ON | NORTHING (m): | EASTING (m): | ELEV. (m) 100.23

CONTRACTOR: Strata Drilling Group | METHOD: 7822 DT GEOPROBE EQUIPPED WITH HOLLOW STEM AUGERS

BOREHOLE DIAMETER (cm): 9.5 | WELL DIAMETER (cm): 5.08 | SCREEN SLOT #: 10 | SAND TYPE: No-2 | SEALANT TYPE: Bentonite

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	RECOVERY (%)	SV/TOV (ppm or %LEL) (new title)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		Topsoil	0	100.17	4 ▲ 4								
		moist dark brown sandy silt trace clay organics FILL	0.53	99.64			1		100	<10 ppm			
		firm moist brown CLAYEY SILT trace sand some rootlets	1.06	99.11	▲ 5		2		100	<10 ppm			
			1.59	98.58	▲ 5		3		100	<10 ppm	BTEX F1-F4		
		END OF BOREHOLE											

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CLIENT: Hawkins Properties | PROJECT NO.: CO884.01 | **RECORD OF: MW111**

ADDRESS: 5646/5650 Manotick Main Street.

CITY/PROVINCE: Ottawa,ON | NORTHING (m): | EASTING (m): | ELEV. (m) 100.41

CONTRACTOR: Strata Drilling Group | METHOD: 7822 DT GEOPROBE EQUIPPED WITH HOLLOW STEM AUGERS

BOREHOLE DIAMETER (cm): 9.5 | WELL DIAMETER (cm): 5.08 | SCREEN SLOT #: 10 | SAND TYPE: No-2 | SEALANT TYPE: Bentonite

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	RECOVERY (%)	SV/TOV (ppm or %LEL) (new title)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		crusher run limestone	0	100.17									
			0.53	99.64			1		13	<10 ppm			
		brown CLAYEY SILT trace sand	1.06	99.11									
			1.59	98.58									
			2.12	98.05			2		100	<10 ppm			
			2.65	97.52									
		moist olive brown SILTY CLAY	3.18	96.99									
			3.71	96.46			3		100	<10 ppm	BTEX F1-F4		
			4.24	95.93									
			4.77	95.4									
			5.3	94.87			4		100	<10 ppm			
			5.83	94.34									
		END OF BOREHOLE											

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LOGGED BY: JM | DRILLING DATE: 12-Oct-22

INPUT BY: UB | MONITORING DATE: 27-OCT-22

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CLIENT: Hawkins Properties | PROJECT NO.: CO884.01 | **RECORD OF: MW112**

ADDRESS: 5646/5650 Manotick Main Street.

CITY/PROVINCE: Ottawa,ON | NORTHING (m): | EASTING (m): | ELEV. (m) 100.58

CONTRACTOR: Strata Drilling Group | METHOD: 7822 DT GEOPROBE EQUIPPED WITH HOLLOW STEM AUGERS

BOREHOLE DIAMETER (cm): 9.5 | WELL DIAMETER (cm): 5.08 | SCREEN SLOT #: 10 | SAND TYPE: No-2 | SEALANT TYPE: Bentonite

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	RECOVERY (%)	SV/TOV (ppm or %LEL) (new title)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		Topsoil	0	100.17					100	<10			
		moist grey CLAYEY SILT	0.53	99.64			1		100	<10 ppm			
			1.06	99.11									
			1.59	98.58			2		100	8% LEL	BTEX F1-F4 dup MW112-12		
			2.12	98.05									
			2.65	97.52									
			3.18	96.99			3		100	10 ppm	BTEX F1-F4		
			3.71	96.46									
			4.24	95.93									
		olive brown SILTY CLAY	4.77	95.4			4		100	<10 ppm			
			5.3	94.87									
			5.83										
		END OF BOREHOLE											

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LOGGED BY: JM | DRILLING DATE: 12-Oct-22

INPUT BY: UB | MONITORING DATE: 27-OCT-22

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CLIENT: Hawkins Properties | PROJECT NO.: CO884.01 | **RECORD OF: BH113**

ADDRESS: 5646/5650 Manotick Main Street.

CITY/PROVINCE: Ottawa,ON | NORTHING (m): | EASTING (m): | ELEV. (m) 100.86

CONTRACTOR: Strata Drilling Group | METHOD: 7822 DT GEOPROBE EQUIPPED WITH HOLLOW STEM AUGERS

BOREHOLE DIAMETER (cm): 9.5 | WELL DIAMETER (cm): 5.08 | SCREEN SLOT #: 10 | SAND TYPE: No-2 | SEALANT TYPE: Bentonite

SAMPLE TYPE: AUGER | DRIVEN | CORING | DYNAMIC CONE | SHELBY | SPLIT SPOON

GWL (m)	SOIL SYMBOL	SOIL DESCRIPTION	DEPTH (m)	ELEVATION (m)	SHEAR STRENGTH (kPa) ● / N-VALUE (Blows/300mm) ▲	WATER CONTENT (%) PL W.C. LL	SAMPLE NO.	SAMPLE TYPE	RECOVERY (%)	SV/TOV (ppm or %LEL) (new title)	LABORATORY TESTING	WELL INSTALLATION	REMARKS
		asphaltic concrete and crusher run limestone	0	100.7	6	20.9	1		46	<10 ppm			
		dark brown clayey silt FILL	0.53	100.17									
		firm brown CLAYEY SILT trace sand			5	34.2	2		66	<10 ppm			
			1.06	99.64									
					3	36.8	3		100	<10 ppm			
			1.59	99.11									
		END OF BOREHOLE											

TERRAPEX

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INPUT BY: UB | MONITORING DATE:

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KEY TO SYMBOLS

Symbol Description

Strata symbols


Fill


Description not given for:
"OZ"


Description not given for:
"0T"


Low plasticity
clay


Silty sand


Description not given for:
"ST"


Description not given for:
"OZS8"


Limestone


Topsoil


Paving


Description not given for:
"8SZ"


Description not given for:
"ZOS"

Symbol Description


Description not given for:
"SZOJ"


Description not given for:
"S8"


Silty low plasticity
clay

Misc. Symbols


Description not given for:
"GWATER2"


Description not given for:
"FTRANGLE"


Description not given for:
"FSQUARE"

Soil Samplers


Split Spoon

Monitor Well Details


top of well,
recessed pipe


bentonite pellets


silica sand, blank PVC


slotted pipe w/ sand

Notes:

1. Exploratory borings were drilled on 12-Oct-22 using a 4-inch diameter continuous flight power auger.

2. No free water was encountered at the time of drilling or when re-checked the following day.

3. Boring locations were taped from existing features and elevations extrapolated from the final design schematic plan.

4. These logs are subject to the limitations, conclusions, and recommendations in this report.

5. Results of tests conducted on samples recovered are reported on the logs.

APPENDIX II

LABORATORY CERTIFICATES OF ANALYSIS

AGAT Laboratories

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

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD
20 GURDWARA ROAD, UNIT 1
OTTAWA, ON K2E 8B3
(613) 745-6471

ATTENTION TO: Mike Grinnell

PROJECT: CO884.01

AGAT WORK ORDER: 22Z958134

SOIL ANALYSIS REVIEWED BY: Amanjot Bhela, Inorganic Lab Manager

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Oct 24, 2022

PAGES (INCLUDING COVER): 30

VERSION*: 1

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

*Notes

Disclaimer:

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

AGAT Laboratories

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

Certificate of Analysis

AGAT WORK ORDER: 22Z958134

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

(Soil) Sulphate

DATE RECEIVED: 2022-10-17

DATE REPORTED: 2022-10-24

				SAMPLE DESCRIPTION:	BH102-3	BH106-3
				SAMPLE TYPE:	Soil	Soil
				DATE SAMPLED:	2022-10-11 14:40	2022-10-12 14:05
Parameter	Unit	G / S	RDL		4426699	4426700
Sulphate (2:1)	µg/g		2		84	33

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

4426699-4426700 Sulphate was determined on the extract obtained from the 2:1 leaching procedure (2 parts DI water: 1 part soil). Resistivity is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

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

Certificate of Analysis

AGAT WORK ORDER: 22Z958134

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

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

DATE RECEIVED: 2022-10-17

DATE REPORTED: 2022-10-24

SAMPLE DESCRIPTION:				BH105-2	MW109-1B	BH107-2B	BH107-12
SAMPLE TYPE:				Soil	Soil	Soil	Soil
DATE SAMPLED:				2022-10-12 13:05	2022-10-13 08:30	2022-10-12 16:20	2022-10-12 16:20
Parameter	Unit	G / S	RDL	4426655	4426691	4426694	4426695
Antimony	µg/g	50	0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	3	4	4	4
Barium	µg/g	670	2.0	139	268	252	265
Beryllium	µg/g	10	0.4	0.7	1.2	0.9	0.9
Boron	µg/g	120	5	9	13	10	11
Boron (Hot Water Soluble)	µg/g	2	0.10	0.19	0.13	0.15	0.19
Cadmium	µg/g	1.9	0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	5	39	103	73	69
Cobalt	µg/g	100	0.5	11.7	22.2	18.7	18.7
Copper	µg/g	300	1.0	20.6	33.9	35.6	35.9
Lead	µg/g	120	1	7	11	9	9
Molybdenum	µg/g	40	0.5	<0.5	<0.5	<0.5	<0.5
Nickel	µg/g	340	1	22	52	43	40
Selenium	µg/g	5.5	0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g	50	0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	3.3	0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	33	0.50	0.75	0.92	0.79	0.77
Vanadium	µg/g	86	0.4	57.5	91.2	76.8	79.7
Zinc	µg/g	340	5	59	131	96	99
Chromium, Hexavalent	µg/g	10	0.2	<0.2	<0.2	<0.2	<0.2
Cyanide, WAD	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	20	0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	1.4	0.005	1.51	0.284	0.609	0.640
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	12	N/A	6.92	1.57	5.29	5.80
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	7.53	7.24	7.84	7.66

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 22Z958134

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

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

DATE RECEIVED: 2022-10-17

DATE REPORTED: 2022-10-24

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

4426655-4426695 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

Amanjot Bhela

ASSOCIATION OF THE CHEMICAL PROFESSION OF ONTARIO
CHARTERED
AMANJOT BHELA
CHEMIST

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AGAT WORK ORDER: 22Z958134
PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

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

DATE RECEIVED: 2022-10-17

DATE REPORTED: 2022-10-24

				SAMPLE DESCRIPTION:	MW101-4	BH108-2	BH102-3	BH106-3
				SAMPLE TYPE:	Soil	Soil	Soil	Soil
				DATE SAMPLED:	2022-10-11 11:25	2022-10-12 16:50	2022-10-11 14:40	2022-10-12 14:05
Parameter	Unit	G / S	RDL		4426645	4426646	4426699	4426700
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA		8.09	8.16	7.27	8.00

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

4426645-4426700 pH was determined on the 0.01M CaCl2 extract obtained from 2:1 leaching procedure (2 parts extraction fluid:1 part wet soil).

Analysis performed at AGAT Toronto (unless marked by *)

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AGAT WORK ORDER: 22Z958134

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

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

DATE RECEIVED: 2022-10-17

DATE REPORTED: 2022-10-24

				SAMPLE DESCRIPTION:	BH102-4	BH107-3	MW101-4	BH108-2	MW109-4	MW109-14	BH106-5B	BH104-3
				SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
				DATE SAMPLED:	2022-10-11 15:00	2022-10-12 16:25	2022-10-11 11:25	2022-10-12 16:50	2022-10-13 08:50	2022-10-13 08:50	2022-10-12 14:20	2022-10-12 12:40
Parameter	Unit	G / S	RDL		4426640	4426644	4426645	4426646	4426647	4426648	4426649	4426650
Benzene	µg/g	0.4	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Toluene	µg/g	9	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	µg/g	1.6	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
m & p-Xylene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
o-Xylene	µg/g		0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylenes (Total)	µg/g	30	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
F1 (C6 - C10)	µg/g	65	5		<5	<5	<5	<5	<5	<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	65	5		<5	<5	<5	<5	<5	<5	<5	<5
F2 (C10 to C16)	µg/g	250	10		<10	<10	<10	<10	<10	<10	<10	<10
F3 (C16 to C34)	µg/g	2500	50		<50	<50	<50	<50	<50	<50	<50	<50
F4 (C34 to C50)	µg/g	6600	50		<50	<50	<50	<50	<50	<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	6600	50		NA	NA	NA	NA	NA	NA	NA	NA
Moisture Content	%		0.1		31.4	18.0	29.9	18.3	32.2	31.7	30.7	15.9
Surrogate	Unit	Acceptable Limits										
Toluene-d8	% Recovery	60-140			82	80	72	71	75	76	74	71
Terphenyl	%	60-140			67	71	68	65	63	76	74	67

Certified By:

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AGAT WORK ORDER: 22Z958134
PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD
ATTENTION TO: Mike Grinnell
SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario
SAMPLED BY:JM

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

DATE RECEIVED: 2022-10-17
DATE REPORTED: 2022-10-24

SAMPLE DESCRIPTION:				BH105-2	MW112-2	MW112-12	MW112-3	BH113-3	MW111-3	BH110-3B	BH103-4
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2022-10-12 13:05	2022-10-13 13:45	2022-10-13 13:45	2022-10-13 14:00	2022-10-13 15:05	2022-10-13 12:35	2022-10-13 11:50	2022-10-12 09:20
Parameter	Unit	G / S	RDL	4426655	4426670	4426671	4426687	4426688	4426689	4426690	4426701
Benzene	µg/g	0.4	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Toluene	µg/g	9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	µg/g	1.6	0.05	<0.05	4.03	4.14	0.81	<0.05	<0.05	<0.05	<0.05
m & p-Xylene	µg/g		0.05	<0.05	2.93	4.07	0.40	<0.05	<0.05	<0.05	<0.05
o-Xylene	µg/g		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylenes (Total)	µg/g	30	0.05	<0.05	2.93	4.07	0.40	<0.05	<0.05	<0.05	<0.05
F1 (C6 - C10)	µg/g	65	5	<5	333	465	22	<5	<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	65	5	<5	326	457	21	<5	<5	<5	<5
F2 (C10 to C16)	µg/g	250	10	<10	25	22	<10	<10	<10	<10	<10
F3 (C16 to C34)	µg/g	2500	50	<50	<50	<50	<50	<50	<50	<50	<50
F4 (C34 to C50)	µg/g	6600	50	<50	<50	<50	<50	<50	<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	6600	50	NA	NA	NA	NA	NA	NA	NA	NA
Moisture Content	%		0.1	16.6	27.7	27.0	32.8	27.4	31.2	22.1	30.6
Surrogate	Unit	Acceptable Limits									
Toluene-d8	% Recovery	60-140		95	99	114	100	120	107	82	86
Terphenyl	%	60-140		71	68	67	69	65	67	73	70

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 22Z958134

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

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

DATE RECEIVED: 2022-10-17

DATE REPORTED: 2022-10-24

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

4426640-4426701 Results are based on sample dry weight.
The C6-C10 fraction is calculated using Toluene response factor.
Xylenes is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified with the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.
Quality Control Data is available upon request.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: 

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AGAT WORK ORDER: 22Z958134

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

O. Reg. 153(511) - PHCs F1/BTEX (MEOH)

DATE RECEIVED: 2022-10-17

DATE REPORTED: 2022-10-24

				SAMPLE DESCRIPTION:	Methanol Blank
				SAMPLE TYPE:	MeOH
				DATE SAMPLED:	2022-10-13 16:00
Parameter	Unit	G / S	RDL		4426702
Benzene	µg/g	0.4	0.02		<0.02
Toluene	µg/g	9	0.05		<0.05
Ethylbenzene	µg/g	1.6	0.05		<0.05
m & p-Xylene	µg/g		0.05		<0.05
o-Xylene	µg/g		0.05		<0.05
Xylenes (Total)	µg/g	30	0.05		<0.05
F1 (C6 - C10)	µg/g	65	5		<5
F1 (C6 to C10) minus BTEX	µg/g	65	5		<5
Surrogate	Unit	Acceptable Limits			
Toluene-d8	% Recovery	60-140			81

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

4426702 A small amount of the methanol extract was diluted in water and the purge & trap GC/MS/FID analysis was performed.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowich

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Exceedance Summary

AGAT WORK ORDER: 22Z958134

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
4426655	BH105-2	ON T2 S ICC MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	mS/cm	1.4	1.51
4426670	MW112-2	ON T2 S ICC MFT	O. Reg. 153(511) - PHCs F1 - F4 (Soil)	Ethylbenzene	µg/g	1.6	4.03
4426670	MW112-2	ON T2 S ICC MFT	O. Reg. 153(511) - PHCs F1 - F4 (Soil)	F1 (C6 - C10)	µg/g	65	333
4426670	MW112-2	ON T2 S ICC MFT	O. Reg. 153(511) - PHCs F1 - F4 (Soil)	F1 (C6 to C10) minus BTEX	µg/g	65	326
4426671	MW112-12	ON T2 S ICC MFT	O. Reg. 153(511) - PHCs F1 - F4 (Soil)	Ethylbenzene	µg/g	1.6	4.14
4426671	MW112-12	ON T2 S ICC MFT	O. Reg. 153(511) - PHCs F1 - F4 (Soil)	F1 (C6 - C10)	µg/g	65	465
4426671	MW112-12	ON T2 S ICC MFT	O. Reg. 153(511) - PHCs F1 - F4 (Soil)	F1 (C6 to C10) minus BTEX	µg/g	65	457
4426691	MW109-1B	ON T2 S ICC MFT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Vanadium	µg/g	86	91.2

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 22Z958134

PROJECT: CO884.01

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

Soil Analysis

RPT Date: Oct 24, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - ORPs (Soil)															
pH, 2:1 CaCl2 Extraction	4428131		7.35	7.45	1.4%		103%	80%	120%	NA			NA		
Comments: NA signifies Not Applicable. pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document. Duplicate NA: results are under 5X the RDL and will not be calculated.															
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	4426655	4426655	<0.8	<0.8	NA	< 0.8	112%	70%	130%	96%	80%	120%	88%	70%	130%
Arsenic	4426655	4426655	3	3	NA	< 1	128%	70%	130%	114%	80%	120%	117%	70%	130%
Barium	4426655	4426655	139	137	1.4%	< 2.0	110%	70%	130%	101%	80%	120%	102%	70%	130%
Beryllium	4426655	4426655	0.7	0.6	NA	< 0.4	111%	70%	130%	109%	80%	120%	112%	70%	130%
Boron	4426655	4426655	9	7	NA	< 5	104%	70%	130%	116%	80%	120%	123%	70%	130%
Boron (Hot Water Soluble)	4426840		0.22	0.24	NA	< 0.10	93%	60%	140%	104%	70%	130%	100%	60%	140%
Cadmium	4426655	4426655	<0.5	<0.5	NA	< 0.5	106%	70%	130%	109%	80%	120%	110%	70%	130%
Chromium	4426655	4426655	39	38	2.6%	< 5	117%	70%	130%	119%	80%	120%	110%	70%	130%
Cobalt	4426655	4426655	11.7	11.9	1.7%	< 0.5	123%	70%	130%	115%	80%	120%	113%	70%	130%
Copper	4426655	4426655	20.6	20.6	0.0%	< 1.0	108%	70%	130%	118%	80%	120%	111%	70%	130%
Lead	4426655	4426655	7	7	0.0%	< 1	110%	70%	130%	110%	80%	120%	109%	70%	130%
Molybdenum	4426655	4426655	<0.5	<0.5	NA	< 0.5	123%	70%	130%	115%	80%	120%	117%	70%	130%
Nickel	4426655	4426655	22	21	4.7%	< 1	117%	70%	130%	113%	80%	120%	108%	70%	130%
Selenium	4426655	4426655	<0.8	<0.8	NA	< 0.8	90%	70%	130%	106%	80%	120%	108%	70%	130%
Silver	4426655	4426655	<0.5	<0.5	NA	< 0.5	104%	70%	130%	106%	80%	120%	104%	70%	130%
Thallium	4426655	4426655	<0.5	<0.5	NA	< 0.5	118%	70%	130%	103%	80%	120%	102%	70%	130%
Uranium	4426655	4426655	0.75	0.67	NA	< 0.50	114%	70%	130%	104%	80%	120%	108%	70%	130%
Vanadium	4426655	4426655	57.5	54.9	4.6%	< 0.4	128%	70%	130%	113%	80%	120%	108%	70%	130%
Zinc	4426655	4426655	59	59	0.0%	< 5	123%	70%	130%	118%	80%	120%	121%	70%	130%
Chromium, Hexavalent	4426627		<0.2	<0.2	NA	< 0.2	98%	70%	130%	92%	80%	120%	104%	70%	130%
Cyanide, WAD	4421238		<0.040	<0.040	NA	< 0.040	109%	70%	130%	97%	80%	120%	88%	70%	130%
Mercury	4426655	4426655	<0.10	<0.10	NA	< 0.10	123%	70%	130%	108%	80%	120%	115%	70%	130%
Electrical Conductivity (2:1)	4422113		0.121	0.120	0.8%	< 0.005	109%	80%	120%	NA			NA		
Sodium Adsorption Ratio (2:1) (Calc.)	4428128		0.047	0.046	2.2%	N/A	NA			NA			NA		
pH, 2:1 CaCl2 Extraction	4428131		7.35	7.45	1.4%	NA	103%	80%	120%	NA			NA		
Comments: NA signifies Not Applicable. pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document. Duplicate NA: results are under 5X the RDL and will not be calculated.															
(Soil) Sulphate															
Sulphate (2:1)	4420293		8	8	NA	< 2	101%	70%	130%	98%	80%	120%	92%	70%	130%
Comments: NA signifies Not Applicable. Duplicate NA: results are under 5X the RDL and will not be calculated.															

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 22Z958134

PROJECT: CO884.01

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

Soil Analysis (Continued)

RPT Date: Oct 24, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

Certified By:

AGAT Laboratories

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 22Z958134

PROJECT: CO884.01

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

Trace Organics Analysis

RPT Date: Oct 24, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (Soil)															
Benzene	4426701	4426701	<0.02	<0.02	NA	< 0.02	92%	60%	140%	88%	60%	140%	104%	60%	140%
Toluene	4426701	4426701	<0.05	<0.05	NA	< 0.05	88%	60%	140%	90%	60%	140%	107%	60%	140%
Ethylbenzene	4426701	4426701	<0.05	<0.05	NA	< 0.05	95%	60%	140%	87%	60%	140%	101%	60%	140%
m & p-Xylene	4426701	4426701	<0.05	<0.05	NA	< 0.05	97%	60%	140%	93%	60%	140%	113%	60%	140%
o-Xylene	4426701	4426701	<0.05	<0.05	NA	< 0.05	96%	60%	140%	90%	60%	140%	96%	60%	140%
F1 (C6 - C10)	4426701	4426701	<5	<5	NA	< 5	87%	60%	140%	83%	60%	140%	83%	60%	140%
F2 (C10 to C16)	4426688	4426688	<10	<10	NA	< 10	98%	60%	140%	68%	60%	140%	66%	60%	140%
F3 (C16 to C34)	4426688	4426688	<50	<50	NA	< 50	101%	60%	140%	76%	60%	140%	63%	60%	140%
F4 (C34 to C50)	4426688	4426688	<50	<50	NA	< 50	96%	60%	140%	119%	60%	140%	102%	60%	140%

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

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AGAT WORK ORDER: 22Z958134
PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426640	BH102-4	Soil	11-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS
Toluene-d8	20-OCT-2022	20-OCT-2022	CK
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426644	BH107-3	Soil	12-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS
Toluene-d8	20-OCT-2022	20-OCT-2022	CK
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426645	MW101-4	Soil	11-OCT-2022	17-OCT-2022

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426645	MW101-4	Soil	11-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
pH, 2:1 CaCl2 Extraction	20-OCT-2022	20-OCT-2022	SR

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS
Toluene-d8	20-OCT-2022	20-OCT-2022	CK
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426646	BH108-2	Soil	12-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
pH, 2:1 CaCl2 Extraction	20-OCT-2022	20-OCT-2022	SR

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS
Toluene-d8	20-OCT-2022	20-OCT-2022	CK
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426646	BH108-2	Soil	12-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426647	MW109-4	Soil	13-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS
Toluene-d8	20-OCT-2022	20-OCT-2022	CK
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426648	MW109-14	Soil	13-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS
Toluene-d8	20-OCT-2022	20-OCT-2022	CK

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Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426648	MW109-14	Soil	13-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426649	BH106-5B	Soil	12-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS
Toluene-d8	20-OCT-2022	20-OCT-2022	CK
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426650	BH104-3	Soil	12-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK

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AGAT WORK ORDER: 22Z958134
PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426650	BH104-3	Soil	12-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS
Toluene-d8	20-OCT-2022	20-OCT-2022	CK
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426655	BH105-2	Soil	12-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	20-OCT-2022	20-OCT-2022	SE
Arsenic	20-OCT-2022	20-OCT-2022	SE
Barium	20-OCT-2022	20-OCT-2022	SE
Beryllium	20-OCT-2022	20-OCT-2022	SE
Boron	20-OCT-2022	20-OCT-2022	SE
Boron (Hot Water Soluble)	20-OCT-2022	20-OCT-2022	AA
Cadmium	20-OCT-2022	20-OCT-2022	SE
Chromium	20-OCT-2022	20-OCT-2022	SE
Cobalt	20-OCT-2022	20-OCT-2022	SE
Copper	20-OCT-2022	20-OCT-2022	SE
Lead	20-OCT-2022	20-OCT-2022	SE
Molybdenum	20-OCT-2022	20-OCT-2022	SE
Nickel	20-OCT-2022	20-OCT-2022	SE
Selenium	20-OCT-2022	20-OCT-2022	SE
Silver	20-OCT-2022	20-OCT-2022	SE
Thallium	20-OCT-2022	20-OCT-2022	SE
Uranium	20-OCT-2022	20-OCT-2022	SE
Vanadium	20-OCT-2022	20-OCT-2022	SE
Zinc	20-OCT-2022	20-OCT-2022	SE
Chromium, Hexavalent	20-OCT-2022	20-OCT-2022	DG
Cyanide, WAD	20-OCT-2022	20-OCT-2022	BG
Mercury	20-OCT-2022	20-OCT-2022	SE
Electrical Conductivity (2:1)	20-OCT-2022	20-OCT-2022	VD
Sodium Adsorption Ratio (2:1) (Calc.)	20-OCT-2022	20-OCT-2022	XH
pH, 2:1 CaCl2 Extraction	20-OCT-2022	20-OCT-2022	SR

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AGAT WORK ORDER: 22Z958134
PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426655	BH105-2	Soil	12-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS
Toluene-d8	20-OCT-2022	20-OCT-2022	CK
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426670	MW112-2	Soil	13-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS
Toluene-d8	20-OCT-2022	20-OCT-2022	CK
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426671	MW112-12	Soil	13-OCT-2022	17-OCT-2022

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AGAT WORK ORDER: 22Z958134
PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426671	MW112-12	Soil	13-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	22-OCT-2022	22-OCT-2022	CK
Toluene	22-OCT-2022	22-OCT-2022	CK
Ethylbenzene	22-OCT-2022	22-OCT-2022	CK
m & p-Xylene	22-OCT-2022	22-OCT-2022	CK
o-Xylene	22-OCT-2022	22-OCT-2022	CK
Xylenes (Total)	22-OCT-2022	22-OCT-2022	SYS
F1 (C6 - C10)	22-OCT-2022	22-OCT-2022	CK
F1 (C6 to C10) minus BTEX	22-OCT-2022	22-OCT-2022	SYS
Toluene-d8	22-OCT-2022	22-OCT-2022	CK
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426687	MW112-3	Soil	13-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS
Toluene-d8	20-OCT-2022	20-OCT-2022	CK
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426688	BH113-3	Soil	13-OCT-2022	17-OCT-2022

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AGAT WORK ORDER: 22Z958134
PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426688	BH113-3	Soil	13-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS
Toluene-d8	20-OCT-2022	20-OCT-2022	CK
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426689	MW111-3	Soil	13-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS
Toluene-d8	20-OCT-2022	20-OCT-2022	CK
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426690	BH110-3B	Soil	13-OCT-2022	17-OCT-2022

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ATTENTION TO: Mike Grinnell

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426690	BH110-3B	Soil	13-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS
Toluene-d8	20-OCT-2022	20-OCT-2022	CK
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426691	MW109-1B	Soil	13-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	20-OCT-2022	20-OCT-2022	SE
Arsenic	20-OCT-2022	20-OCT-2022	SE
Barium	20-OCT-2022	20-OCT-2022	SE
Beryllium	20-OCT-2022	20-OCT-2022	SE
Boron	20-OCT-2022	20-OCT-2022	SE
Boron (Hot Water Soluble)	20-OCT-2022	20-OCT-2022	AA
Cadmium	20-OCT-2022	20-OCT-2022	SE
Chromium	20-OCT-2022	20-OCT-2022	SE
Cobalt	20-OCT-2022	20-OCT-2022	SE
Copper	20-OCT-2022	20-OCT-2022	SE
Lead	20-OCT-2022	20-OCT-2022	SE
Molybdenum	20-OCT-2022	20-OCT-2022	SE
Nickel	20-OCT-2022	20-OCT-2022	SE
Selenium	20-OCT-2022	20-OCT-2022	SE
Silver	20-OCT-2022	20-OCT-2022	SE
Thallium	20-OCT-2022	20-OCT-2022	SE
Uranium	20-OCT-2022	20-OCT-2022	SE
Vanadium	20-OCT-2022	20-OCT-2022	SE
Zinc	20-OCT-2022	20-OCT-2022	SE

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AGAT WORK ORDER: 22Z958134
PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426691	MW109-1B	Soil	13-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Chromium, Hexavalent	20-OCT-2022	20-OCT-2022	DG
Cyanide, WAD	20-OCT-2022	20-OCT-2022	BG
Mercury	20-OCT-2022	20-OCT-2022	SE
Electrical Conductivity (2:1)	20-OCT-2022	20-OCT-2022	VD
Sodium Adsorption Ratio (2:1) (Calc.)	20-OCT-2022	20-OCT-2022	XH
pH, 2:1 CaCl2 Extraction	20-OCT-2022	20-OCT-2022	SR

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426694	BH107-2B	Soil	12-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	20-OCT-2022	20-OCT-2022	SE
Arsenic	20-OCT-2022	20-OCT-2022	SE
Barium	20-OCT-2022	20-OCT-2022	SE
Beryllium	20-OCT-2022	20-OCT-2022	SE
Boron	20-OCT-2022	20-OCT-2022	SE
Boron (Hot Water Soluble)	20-OCT-2022	20-OCT-2022	AA
Cadmium	20-OCT-2022	20-OCT-2022	SE
Chromium	20-OCT-2022	20-OCT-2022	SE
Cobalt	20-OCT-2022	20-OCT-2022	SE
Copper	20-OCT-2022	20-OCT-2022	SE
Lead	20-OCT-2022	20-OCT-2022	SE
Molybdenum	20-OCT-2022	20-OCT-2022	SE
Nickel	20-OCT-2022	20-OCT-2022	SE
Selenium	20-OCT-2022	20-OCT-2022	SE
Silver	20-OCT-2022	20-OCT-2022	SE
Thallium	20-OCT-2022	20-OCT-2022	SE
Uranium	20-OCT-2022	20-OCT-2022	SE
Vanadium	20-OCT-2022	20-OCT-2022	SE
Zinc	20-OCT-2022	20-OCT-2022	SE
Chromium, Hexavalent	20-OCT-2022	20-OCT-2022	DG
Cyanide, WAD	20-OCT-2022	20-OCT-2022	BG
Mercury	20-OCT-2022	20-OCT-2022	SE
Electrical Conductivity (2:1)	20-OCT-2022	20-OCT-2022	VD
Sodium Adsorption Ratio (2:1) (Calc.)	20-OCT-2022	20-OCT-2022	XH
pH, 2:1 CaCl2 Extraction	20-OCT-2022	20-OCT-2022	SR

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426695	BH107-12	Soil	12-OCT-2022	17-OCT-2022

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ATTENTION TO: Mike Grinnell

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426695	BH107-12	Soil	12-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Antimony	20-OCT-2022	20-OCT-2022	SE
Arsenic	20-OCT-2022	20-OCT-2022	SE
Barium	20-OCT-2022	20-OCT-2022	SE
Beryllium	20-OCT-2022	20-OCT-2022	SE
Boron	20-OCT-2022	20-OCT-2022	SE
Boron (Hot Water Soluble)	20-OCT-2022	20-OCT-2022	AA
Cadmium	20-OCT-2022	20-OCT-2022	SE
Chromium	20-OCT-2022	20-OCT-2022	SE
Cobalt	20-OCT-2022	20-OCT-2022	SE
Copper	20-OCT-2022	20-OCT-2022	SE
Lead	20-OCT-2022	20-OCT-2022	SE
Molybdenum	20-OCT-2022	20-OCT-2022	SE
Nickel	20-OCT-2022	20-OCT-2022	SE
Selenium	20-OCT-2022	20-OCT-2022	SE
Silver	20-OCT-2022	20-OCT-2022	SE
Thallium	20-OCT-2022	20-OCT-2022	SE
Uranium	20-OCT-2022	20-OCT-2022	SE
Vanadium	20-OCT-2022	20-OCT-2022	SE
Zinc	20-OCT-2022	20-OCT-2022	SE
Chromium, Hexavalent	20-OCT-2022	20-OCT-2022	DG
Cyanide, WAD	20-OCT-2022	20-OCT-2022	BG
Mercury	20-OCT-2022	20-OCT-2022	SE
Electrical Conductivity (2:1)	20-OCT-2022	20-OCT-2022	VD
Sodium Adsorption Ratio (2:1) (Calc.)	20-OCT-2022	20-OCT-2022	XH
pH, 2:1 CaCl2 Extraction	20-OCT-2022	20-OCT-2022	SR

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426699	BH102-3	Soil	11-OCT-2022	17-OCT-2022

(Soil) Sulphate

Parameter	Date Prepared	Date Analyzed	Initials
Sulphate (2:1)	20-OCT-2022	20-OCT-2022	LC

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

Parameter	Date Prepared	Date Analyzed	Initials
pH, 2:1 CaCl2 Extraction	20-OCT-2022	20-OCT-2022	SR

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426700	BH106-3	Soil	12-OCT-2022	17-OCT-2022

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AGAT WORK ORDER: 22Z958134
PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426700	BH106-3	Soil	12-OCT-2022	17-OCT-2022

(Soil) Sulphate

Parameter	Date Prepared	Date Analyzed	Initials
Sulphate (2:1)	20-OCT-2022	20-OCT-2022	LC

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

Parameter	Date Prepared	Date Analyzed	Initials
pH, 2:1 CaCl2 Extraction	20-OCT-2022	20-OCT-2022	SR

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426701	BH103-4	Soil	12-OCT-2022	17-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS
Toluene-d8	20-OCT-2022	20-OCT-2022	CK
F2 (C10 to C16)	21-OCT-2022	21-OCT-2022	CA
F3 (C16 to C34)	21-OCT-2022	21-OCT-2022	CA
F4 (C34 to C50)	21-OCT-2022	21-OCT-2022	CA
Gravimetric Heavy Hydrocarbons			
Moisture Content	20-OCT-2022	20-OCT-2022	DM
Terphenyl	21-OCT-2022	21-OCT-2022	CA

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426702	Methanol Blank	MeOH	13-OCT-2022	17-OCT-2022

O. Reg. 153(511) - PHCs F1/BTEX (MEOH)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	20-OCT-2022	20-OCT-2022	CK
Toluene	20-OCT-2022	20-OCT-2022	CK
Ethylbenzene	20-OCT-2022	20-OCT-2022	CK
m & p-Xylene	20-OCT-2022	20-OCT-2022	CK
o-Xylene	20-OCT-2022	20-OCT-2022	CK
Xylenes (Total)	20-OCT-2022	20-OCT-2022	SYS
F1 (C6 - C10)	20-OCT-2022	20-OCT-2022	CK
F1 (C6 to C10) minus BTEX	20-OCT-2022	20-OCT-2022	SYS

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AGAT WORK ORDER: 22Z958134

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4426702	Methanol Blank	MeOH	13-OCT-2022	17-OCT-2022

O. Reg. 153(511) - PHCs F1/BTEX (MEOH)

Parameter	Date Prepared	Date Analyzed	Initials
Toluene-d8	20-OCT-2022	20-OCT-2022	CK

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 22Z958134

PROJECT: CO884.01

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Sulphate (2:1)	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, WAD	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6075	modified from MSA PART 3, CH 14 and SM 2510 B	PC TITRATE
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6075	modified from EPA 9045D, MCKEAGUE 3.11 E3137	PC TITRATE

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 22Z958134

PROJECT: CO884.01

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Benzene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
Toluene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
Ethylbenzene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
m & p-Xylene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
o-Xylene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
Xylenes (Total)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
F1 (C6 - C10)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	P&T GC/FID
Toluene-d8	VOL-91-5009	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
F2 (C10 to C16)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F4 (C34 to C50)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Benzene	VOL-91-5009	modified from EPA SW-846 5035C & 8260D	(P&T)GC/MS
Toluene	VOL-91-5009	modified from EPA SW-846 5035C & 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5009	modified from EPA SW-846 5035C & 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5009	modified from EPA SW-846 5035C & 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5009	modified from EPA SW-846 5035C & 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5009	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
F1 (C6 to C10) minus BTEX	VOL-91-5009	CCME Tier 1 Method	P&T GC/FID

AGAT Laboratories

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Chain of Custody Record

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

Report Information:

Company: TERRAPEX ENVIRONMENTAL LTD
Contact: Mike Grinnell
Address: 20 Gurdwara Road, Unit 1
Ottawa, ON K2E 8B3
Phone: 613-745-6471 Fax:
Reports to be sent to:
1. Email: m.grinnell@terrapex.com
2. Email: edd@terrapex.com

Project Information:

Project: CO884.01
Site Location: 5646 Manotick Main Street, Manotick, Ontario
Sampled By: JM
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☑ No ☐
Company: TERRAPEX ENVIRONMENTAL LTD
Contact: Mike Grinnell
Address:
Email:

Regulatory Requirements:

(Please check all applicable boxes)

☒ Regulation 153/04 — Table 2 (Indicate One) — ☒ Ind/Com ☐ Res/Park ☐ Agriculture
Soil Texture (Check One): ☐ Coarse ☒ Fine
☐ Excess Soils R406 — Table (Indicate One)
☐ Regulation 558
☐ CCME
☐ Sewer Use ☐ Sanitary ☐ Storm — Region
☐ Prov. Water Quality Objectives (PWQO)
☐ Other (Indicate One)

Is this submission for a **Record of Site Condition?** ☐ Yes ☒ No

Report Guideline on *Certificate of Analysis* ☒ Yes ☐ No

Laboratory Use Only

Work Order #: 2279581 34
Cooler Quantity: 1 large one - Dangerous Goods
Arrival Temperatures: 7.6 7.8 7.8 → 1.1 1.2 1.3
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: Bagged Ice

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days
Rush TAT (Rush Surcharges Apply)
☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day
OR Date Required (Rush Surcharges May Apply):
Please provide prior notification for rush TAT
**TAT is exclusive of weekends and statutory holidays -*
For 'Same Day' analysis, please contact your AGAT CPM

Sample Matrix Legend

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ TCLP, ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach ☐ SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	pH	Potentially Hazardous or High Concentration (Y/N)
BH102-4	11 OCT 22	15:10	2	S		N			X									
BH107-3	12 OCT 22	16:25	2	S		N			X									
MW101-4	11 OCT 22	11:25	2	S		N			X								X	
BH108-2	12 OCT 22	16:50	2	S		N			X								X	
MW109-4	13 OCT 22	8:50	2	S		N			X									
MW109-14	13 OCT 22	8:50	2	S		N			X									
BH106-5B	12 OCT 22	14:20	2	S		N			X									
BH104-3	12 OCT 22	12:40	2	S		N			X									
BH105-2	12 OCT 22	13:05	4	S		N	X		X									
MW112-2	13 OCT 22	13:45	2	S		N			X									
MW112-12	13 OCT 22	13:45	2	S		N			X									

Samples Relinquished By (Print Name and Sign): Jeff Murray	Date: 17 OCT 22	Time: 11:00	Samples Received By (Print Name and Sign): C. Griffith	Date: 17 OCT 2022	Time: 14h53
Samples Relinquished By (Print Name and Sign): CC to Pino	Date: 17 OCT 2022	Time: 16h00	Samples Received By (Print Name and Sign): Anthony Da Silva	Date:	Time:
Samples Relinquished By (Print Name and Sign):	Date:	Time:	Samples Received By (Print Name and Sign):	Date:	Time:

'22 OCT 18 10:22

Page 1 of 2

Nº:

Document ID: DIV-78-1511-021

Pink Copy - Client | Yellow Copy - AGAT | White Copy- AGAT

Date Issued: March 9, 2021

AGAT Laboratories

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Laboratory Use Only

Work Order #: 22Z958134

Cooler Quantity: one-bagged ice

Arrival Temperatures: 7.6 | 7.8 | 7.8

Custody Seal Intact: ☐Yes ☐No ☐N/A

Notes:

Chain of Custody Record

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

Report Information:

Company: TERRAPEX ENVIRONMENTAL LTD
Contact: Mike Grinnell
Address: 20 Gurdwara Road, Unit 1
Ottawa, ON K2E 8B3
Phone: 613-745-6471 Fax:
Reports to be sent to:
1. Email: m.grinnell@terrapex.com
2. Email: edd@terrapex.com

Regulatory Requirements:

(Please check all applicable boxes)

☒ Regulation 153/04
Table 2 (Indicate One)
☒ Ind/Com
☐ Res/Park
☐ Agriculture
Soil Texture (Check One)
☐ Coarse
☒ Fine

☐ Excess Soils R406
Table ___ (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use
☐ Sanitary ☐ Storm
Region
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
Indicate One

Is this submission for a **Record of Site Condition?** ☐ Yes ☐ No

Report Guideline on *Certificate of Analysis* ☐ Yes ☐ No

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day

OR Date Required (Rush Surcharges May Apply):

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

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

Project Information:

Project: CO884.01
Site Location: 5646 Manotick Main Street, Manotick, Ontario
Sampled By:
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☑ No ☐
Company: TERRAPEX ENVIRONMENTAL LTD
Contact: Mike Grinnell
Address:
Email:

Sample Matrix Legend

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐CrVI, ☐Hg, ☐HWSB	O. Reg 153: BTEX, F1-F4 PHCs / Analyze F4G if required ☐Yes ☐No	PAHs	PCBs	VOC	O. Reg 558: Landfill Disposal Characterization TCLP: TCLP: ☐M&I ☐VOCs ☐ABNs ☐B(a)P ☐PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐Metals ☐VOCs ☐SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	O. Reg 153 Metals Package	Corrosivity (sulphates)	BTEX: PHC F1	Sulphate Content; pH				Potentially Hazardous or High Concentration (Y/N)
MW112-3	13OCT22	14:00 PM	2	S		N			X															
BH113-3	13OCT22	15:05 PM	2	S		N			X															
~~MW111-3~~ MW111-3	13OCT22	12:35 PM	2	S		N			X															
BH110-3B	13OCT22	11:50 AM	2	S		N			X															
MW109-1B	13OCT22	8:30 AM	2	S	(incl. Hg CrVI etc)	N	X																	
BH107-2B	12OCT22	16:20 PM	2	S		N	X																	
BH107-12	12OCT22	16:20 PM	2	S		N	X																	
BH102-3	11OCT22	14:40 PM	2	S		N												~~X~~		X				
BH106-3	12OCT22	14:05 PM	2	S		N												~~X~~		X				
BH103-4	12OCT22	9:20 AM	2	S					X															
Methanol Blank	13OCT22	16:00 PM	1	—															X					

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Jeff Murray [signature]	17OCT22	11:45	C. Griffith [signature]	OCT 17 2022	14h53
CC to Anno	OCT 17 2022	16h00			

Page 2 of 2

Nº:

AGAT Laboratories

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

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED
20 GURDWARA ROAD, UNIT 1
OTTAWA, ON K2E 8B3
613-745-6471

ATTENTION TO: Ottawa Location

PROJECT: CO884.01

AGAT WORK ORDER: 22Z964139

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

DATE REPORTED: Nov 02, 2022

PAGES (INCLUDING COVER): 6

VERSION*: 1

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

*Notes

AGAT Laboratories

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CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 22Z964139

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Ottawa Location

SAMPLING SITE:Hawkin Properties

SAMPLED BY:

Inorganic Chemsitry (Soil)

DATE RECEIVED: 2022-10-31

DATE REPORTED: 2022-11-02

		SAMPLE DESCRIPTION:		BH-106-SS-6
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2022-10-12
Parameter	Unit	G / S	RDL	4477265
Sulphate (2:1)	µg/g		2	178
pH (2:1)	pH Units		NA	7.19

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

4477265 pH and Sulphate were determined on the extract obtained from the 2:1 leaching procedure (2 parts DI water: 1 part soil).

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories
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CANADA L4Z 1Y2
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FAX (905)712-5122
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED
AGAT WORK ORDER: 22Z964139
PROJECT: CO884.01
ATTENTION TO: Ottawa Location
SAMPLING SITE:Hawkin Properties
SAMPLED BY:

Soil Analysis

RPT Date: Nov 02, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Inorganic Chemsitry (Soil)															
Sulphate (2:1)	4474463		15	15	0.0%	< 2	94%	70%	130%	93%	80%	120%	96%	70%	130%
pH (2:1)	4345153		6.96	7.39	6.0%	NA	99%	80%	120%						

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.

Certified By:

AGAT Laboratories

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CANADA L4Z 1Y2
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http://www.agatlabs.com

Time Markers

AGAT WORK ORDER: 22Z964139

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

ATTENTION TO: Ottawa Location

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4477265	BH-106-SS-6	Soil	12-OCT-2022	31-OCT-2022

Inorganic Chemsitry (Soil)

Parameter	Date Prepared	Date Analyzed	Initials
Sulphate (2:1)	02-NOV-2022	02-NOV-2022	LC
pH (2:1)	02-NOV-2022	02-NOV-2022	SR

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MISSISSAUGA, ONTARIO
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FAX (905)712-5122
http://www.agatlabs.com

Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LIMITED

AGAT WORK ORDER: 22Z964139

PROJECT: CO884.01

ATTENTION TO: Ottawa Location

SAMPLING SITE:Hawkin Properties

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Sulphate (2:1)	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
pH (2:1)	INOR 93-6031	modified from EPA 9045D and MCKEAGUE 3.11	PH METER

AGAT Laboratories

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

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

Laboratory Use Only

Work Order #: 22Z964139

Cooler Quantity: One - ice

Arrival Temperatures: 6.0 6.2 5.9 / 1.3 2.0 1.5

Custody Seal Intact: ☐ Yes ☐ No ☐ N/A

Notes:

Report Information:

Company: Rescapex
Contact: 613-745-6471
Address: 20 Gurdwara Rd
Phone: Fax:
Reports to be sent to:
1. Email:
2. Email:

Regulatory Requirements: ☐ No Regulatory Requirement

(Please check all applicable boxes)

☐ Regulation 153/04
Table ___ Indicate One
☐ Ind/Com
☐ Res/Park
☐ Agriculture
Soil Texture (Check One)
☐ Coarse
☐ Fine

☐ Sewer Use
☐ Sanitary
☐ Storm
Region ___ Indicate One
☐ MISA

☐ Regulation 558
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
___ Indicate One

Is this submission for a **Record of Site Condition?** ☐ Yes ☐ No

Report Guideline on Certificate of Analysis ☐ Yes ☐ No

Turnaround Time (TAT) Required:

Regular TAT ☐ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☑ 3 Business Days ☐ 2 Business Days ☐ Next Business Day

OR Date Required (Rush Surcharges May Apply):

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

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

Project Information:

Project: CD 854.01
Site Location: Hawkin properties.
Sampled By:
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company:
Contact:
Address:
Email:

Sample Matrix Legend

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI (Y/N)	Metals and Inorganics	☐ All Metals ☐ 153 Metals (excl. Hydrides) ☐ Hydride Metals ☐ 153 Metals (incl. Hydrides)	ORPs: ☐ B-HWS ☐ Cl ☐ CN ☐ Cr^{6+} ☐ EC ☐ FOC ☐ Hg ☐ pH ☐ SAR	Full Metals Scan	Regulation/Custom Metals	Nutrients: ☐ TP ☐ NH_3 ☐ TKN ☐ NO_3 ☐ NO_2 ☐ NO_3+NO_2	Volatiles: ☐ VOC ☐ BTEX ☐ THM	PHCs F1 - F4	ABNs	PAHs	PCBs: ☐ Total ☐ Aroclors	Organochlorine Pesticides	TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Sewer Use	pH and Sulphates					
BH-106-SS-6	12-0ct-2022		1																		✓					

Samples Relinquished By (Print Name and Sign): Urraug — Date: 31-10-2022 — Time: 12:15pm
Samples Received By (Print Name and Sign): CBerthelet — Date: 22-10-31 — Time: 12h20

Samples Relinquished By (Print Name and Sign): UTB Puuw — Date: 22-10-31 — Time:
Samples Received By (Print Name and Sign): M. GRASIC — Date: — Time:

Samples Relinquished By (Print Name and Sign): — Date: — Time:
Samples Received By (Print Name and Sign): — Date: — Time:

'22 NOV 1 9:41

Page ___ of ___

Nº: T 085438

AGAT Laboratories

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

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD
20 GURDWARA ROAD, UNIT 1
OTTAWA, ON K2E 8B3
(613) 745-6471

ATTENTION TO: Mike Grinnell

PROJECT: CO884.01

AGAT WORK ORDER: 22T963703

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Nov 07, 2022

PAGES (INCLUDING COVER): 13

VERSION*: 1

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

*Notes

Disclaimer:

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

AGAT Laboratories

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MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
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Certificate of Analysis

AGAT WORK ORDER: 22T963703

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

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

DATE RECEIVED: 2022-10-29

DATE REPORTED: 2022-11-07

				SAMPLE DESCRIPTION:	TRIP SPIKE
				SAMPLE TYPE:	Water
				DATE SAMPLED:	2022-10-26
Parameter	Unit	G / S	RDL		4469818
Benzene	%				91
Toluene	%				89
Ethylbenzene	%				98
m & p-Xylene	%				102
o-Xylene	%				92
Surrogate	Unit	Acceptable Limits			
Toluene-d8	% Recovery	50-140			96
4-Bromofluorobenzene	% Recovery	50-140			101

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

4469818 Results relate only to the items tested.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowich

AGAT Laboratories

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

Certificate of Analysis

AGAT WORK ORDER: 22T963703

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

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

DATE RECEIVED: 2022-10-29

DATE REPORTED: 2022-11-07

				SAMPLE DESCRIPTION:	MW101	MW109	MW111	MW112	MW122
				SAMPLE TYPE:	Water	Water	Water	Water	Water
				DATE SAMPLED:	2022-10-28 10:30	2022-10-28 11:00	2022-10-28 11:30	2022-10-28 12:00	2022-10-28 12:00
Parameter	Unit	G / S	RDL		4469806	4469811	4469812	4469813	4469814
Benzene	µg/L	5.0	0.20		<0.20	<0.20	<0.20	18.4	21.8
Toluene	µg/L	24	0.20		<0.20	<0.20	<0.20	0.68	0.80
Ethylbenzene	µg/L	2.4	0.10		<0.10	<0.10	<0.10	42.5	47.2
m & p-Xylene	µg/L		0.20		<0.20	<0.20	<0.20	4.73	5.54
o-Xylene	µg/L		0.10		<0.10	<0.10	<0.10	0.33	0.43
Xylenes (Total)	µg/L	300	0.20		<0.20	<0.20	<0.20	5.06	5.97
F1 (C6 - C10)	µg/L	750	25		<25	<25	<25	223	230
F1 (C6 to C10) minus BTEX	µg/L	750	25		<25	<25	<25	156	154
F2 (C10 to C16)	µg/L	150	100		<100	<100	<100	137	138
F3 (C16 to C34)	µg/L	500	100		<100	<100	<100	<100	<100
F4 (C34 to C50)	µg/L	500	100		<100	<100	<100	<100	<100
Gravimetric Heavy Hydrocarbons	µg/L		500		NA	NA	NA	NA	NA
Sediment					1	1	1	1	1
Surrogate	Unit	Acceptable Limits							
Toluene-d8	% Recovery	60-140			74	99	102	77	96
Terphenyl	% Recovery	60-140			101	118	75	117	83

Certified By:

AGAT Laboratories

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

Certificate of Analysis

AGAT WORK ORDER: 22T963703

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

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

DATE RECEIVED: 2022-10-29

DATE REPORTED: 2022-11-07

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

4469806-4469814 The C6-C10 fraction is calculated using Toluene response factor.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and nC34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16 - C50 and are only determined if the chromatogram of the C34 - C50 Hydrocarbons indicated that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6-C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified with the contribution of PAHs. Under Ontario Regulation 153/04, results are considered valid without determining the PAH contribution if not requested by the client.
NA = Not Applicable

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

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: 

AGAT Laboratories

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

Certificate of Analysis

AGAT WORK ORDER: 22T963703

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

O. Reg. 153(511) - PHCs F1/BTEX (Water)

DATE RECEIVED: 2022-10-29

DATE REPORTED: 2022-11-07

		SAMPLE DESCRIPTION:		TRIP BLANK
		SAMPLE TYPE:		Water
		DATE SAMPLED:		2022-10-26
Parameter	Unit	G / S	RDL	4469817
Benzene	µg/L	5.0	0.20	<0.20
Toluene	µg/L	24	0.20	<0.20
Ethylbenzene	µg/L	2.4	0.10	<0.10
m & p-Xylene	µg/L		0.20	<0.20
o-Xylene	µg/L		0.10	<0.10
Xylenes (Total)	µg/L	300	0.20	<0.20
F1 (C6-C10)	µg/L	750	25	<25
F1 (C6 to C10) minus BTEX	µg/L	750	25	<25
Surrogate	Unit	Acceptable Limits		
Toluene-d8	% Recovery	60-140		75

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

4469817 The C6-C10 fraction is calculated using Toluene response factor.
Total C6-C10 results are corrected for BTEX contributions.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
Extraction and holding times were met for this sample.
NA = Not Applicable

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

AGAT Laboratories

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Exceedance Summary

AGAT WORK ORDER: 22T963703

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
4469813	MW112	ON T2 PGW MFT	O. Reg. 153(511) - PHCs F1 - F4 (Water)	Benzene	µg/L	5.0	18.4
4469813	MW112	ON T2 PGW MFT	O. Reg. 153(511) - PHCs F1 - F4 (Water)	Ethylbenzene	µg/L	2.4	42.5
4469814	MW122	ON T2 PGW MFT	O. Reg. 153(511) - PHCs F1 - F4 (Water)	Benzene	µg/L	5.0	21.8
4469814	MW122	ON T2 PGW MFT	O. Reg. 153(511) - PHCs F1 - F4 (Water)	Ethylbenzene	µg/L	2.4	47.2

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Quality Assurance

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 22T963703

PROJECT: CO884.01

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

Trace Organics Analysis

RPT Date: Nov 07, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (Water)															
Benzene	4474210		<0.20	<0.20	NA	< 0.20	84%	60%	140%	91%	60%	140%	97%	60%	140%
Toluene	4474210		<0.20	<0.20	NA	< 0.20	94%	60%	140%	101%	60%	140%	95%	60%	140%
Ethylbenzene	4474210		<0.10	<0.10	NA	< 0.10	93%	60%	140%	109%	60%	140%	96%	60%	140%
m & p-Xylene	4474210		<0.20	<0.20	NA	< 0.20	96%	60%	140%	103%	60%	140%	102%	60%	140%
o-Xylene	4474210		<0.10	<0.10	NA	< 0.10	89%	60%	140%	94%	60%	140%	90%	60%	140%
F1 (C6 - C10)	4474210		<25	<25	NA	< 25	81%	60%	140%	86%	60%	140%	79%	60%	140%
F2 (C10 to C16)	4465317		<100	<100	NA	< 100	97%	60%	140%	69%	60%	140%	74%	60%	140%
F3 (C16 to C34)	4465317		<100	<100	NA	< 100	105%	60%	140%	63%	60%	140%	77%	60%	140%
F4 (C34 to C50)	4465317		<100	<100	NA	< 100	83%	60%	140%	86%	60%	140%	71%	60%	140%

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

O. Reg. 153(511) - BTEX (Water)															
Benzene	4465246		<1	<1	NA	< 0.20	94%	50%	140%	101%	60%	130%	90%	50%	140%
Toluene	4465246		<1	<1	NA	< 0.20	82%	50%	140%	100%	60%	130%	109%	50%	140%
Ethylbenzene	4465246		<1	<1	NA	< 0.10	80%	50%	140%	95%	60%	130%	105%	50%	140%
m & p-Xylene	4465246		<1	<1	NA	< 0.20	78%	50%	140%	95%	60%	130%	105%	50%	140%
o-Xylene	4465246		<1	<1	NA	< 0.10	81%	50%	140%	95%	60%	130%	98%	50%	140%

Certified By: N Popnikolof

AGAT Laboratories

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Time Markers

AGAT WORK ORDER: 22T963703
PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4469806	MW101	Water	28-OCT-2022	29-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	03-NOV-2022	03-NOV-2022	CK
Toluene	03-NOV-2022	03-NOV-2022	CK
Ethylbenzene	03-NOV-2022	03-NOV-2022	CK
m & p-Xylene	03-NOV-2022	03-NOV-2022	CK
o-Xylene	03-NOV-2022	03-NOV-2022	CK
Xylenes (Total)	03-NOV-2022	03-NOV-2022	SYS
F1 (C6 - C10)	03-NOV-2022	03-NOV-2022	CK
F1 (C6 to C10) minus BTEX	03-NOV-2022	03-NOV-2022	SYS
Toluene-d8	03-NOV-2022	03-NOV-2022	CK
F2 (C10 to C16)	07-NOV-2022	07-NOV-2022	JJ
F3 (C16 to C34)	07-NOV-2022	07-NOV-2022	JJ
F4 (C34 to C50)	07-NOV-2022	07-NOV-2022	JJ
Gravimetric Heavy Hydrocarbons			
Terphenyl	07-NOV-2022	07-NOV-2022	JJ
Sediment	04-NOV-2022	04-NOV-2022	NH

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4469811	MW109	Water	28-OCT-2022	29-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	03-NOV-2022	03-NOV-2022	CK
Toluene	03-NOV-2022	03-NOV-2022	CK
Ethylbenzene	03-NOV-2022	03-NOV-2022	CK
m & p-Xylene	03-NOV-2022	03-NOV-2022	CK
o-Xylene	03-NOV-2022	03-NOV-2022	CK
Xylenes (Total)	03-NOV-2022	03-NOV-2022	SYS
F1 (C6 - C10)	03-NOV-2022	03-NOV-2022	CK
F1 (C6 to C10) minus BTEX	03-NOV-2022	03-NOV-2022	SYS
Toluene-d8	03-NOV-2022	03-NOV-2022	CK
F2 (C10 to C16)	07-NOV-2022	07-NOV-2022	JJ
F3 (C16 to C34)	07-NOV-2022	07-NOV-2022	JJ
F4 (C34 to C50)	07-NOV-2022	07-NOV-2022	JJ
Gravimetric Heavy Hydrocarbons			
Terphenyl	07-NOV-2022	07-NOV-2022	JJ
Sediment	04-NOV-2022	04-NOV-2022	NH

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4469812	MW111	Water	28-OCT-2022	29-OCT-2022

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4469812	MW111	Water	28-OCT-2022	29-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	03-NOV-2022	03-NOV-2022	CK
Toluene	03-NOV-2022	03-NOV-2022	CK
Ethylbenzene	03-NOV-2022	03-NOV-2022	CK
m & p-Xylene	03-NOV-2022	03-NOV-2022	CK
o-Xylene	03-NOV-2022	03-NOV-2022	CK
Xylenes (Total)	03-NOV-2022	03-NOV-2022	SYS
F1 (C6 - C10)	03-NOV-2022	03-NOV-2022	CK
F1 (C6 to C10) minus BTEX	03-NOV-2022	03-NOV-2022	SYS
Toluene-d8	03-NOV-2022	03-NOV-2022	CK
F2 (C10 to C16)	07-NOV-2022	07-NOV-2022	JJ
F3 (C16 to C34)	07-NOV-2022	07-NOV-2022	JJ
F4 (C34 to C50)	07-NOV-2022	07-NOV-2022	JJ
Gravimetric Heavy Hydrocarbons			
Terphenyl	07-NOV-2022	07-NOV-2022	JJ
Sediment	04-NOV-2022	04-NOV-2022	NH

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4469813	MW112	Water	28-OCT-2022	29-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	03-NOV-2022	03-NOV-2022	CK
Toluene	03-NOV-2022	03-NOV-2022	CK
Ethylbenzene	03-NOV-2022	03-NOV-2022	CK
m & p-Xylene	03-NOV-2022	03-NOV-2022	CK
o-Xylene	03-NOV-2022	03-NOV-2022	CK
Xylenes (Total)	03-NOV-2022	03-NOV-2022	SYS
F1 (C6 - C10)	03-NOV-2022	03-NOV-2022	CK
F1 (C6 to C10) minus BTEX	03-NOV-2022	03-NOV-2022	SYS
Toluene-d8	03-NOV-2022	03-NOV-2022	CK
F2 (C10 to C16)	07-NOV-2022	07-NOV-2022	JJ
F3 (C16 to C34)	07-NOV-2022	07-NOV-2022	JJ
F4 (C34 to C50)	07-NOV-2022	07-NOV-2022	JJ
Gravimetric Heavy Hydrocarbons			
Terphenyl	07-NOV-2022	07-NOV-2022	JJ
Sediment	04-NOV-2022	04-NOV-2022	NH

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4469814	MW122	Water	28-OCT-2022	29-OCT-2022

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CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4469814	MW122	Water	28-OCT-2022	29-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	03-NOV-2022	03-NOV-2022	CK
Toluene	03-NOV-2022	03-NOV-2022	CK
Ethylbenzene	03-NOV-2022	03-NOV-2022	CK
m & p-Xylene	03-NOV-2022	03-NOV-2022	CK
o-Xylene	03-NOV-2022	03-NOV-2022	CK
Xylenes (Total)	03-NOV-2022	03-NOV-2022	SYS
F1 (C6 - C10)	03-NOV-2022	03-NOV-2022	CK
F1 (C6 to C10) minus BTEX	03-NOV-2022	03-NOV-2022	SYS
Toluene-d8	03-NOV-2022	03-NOV-2022	CK
F2 (C10 to C16)	07-NOV-2022	07-NOV-2022	JJ
F3 (C16 to C34)	07-NOV-2022	07-NOV-2022	JJ
F4 (C34 to C50)	07-NOV-2022	07-NOV-2022	JJ
Gravimetric Heavy Hydrocarbons			
Terphenyl	07-NOV-2022	07-NOV-2022	JJ
Sediment	04-NOV-2022	04-NOV-2022	NH

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4469817	TRIP BLANK	Water	26-OCT-2022	29-OCT-2022

O. Reg. 153(511) - PHCs F1/BTEX (Water)

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	03-NOV-2022	03-NOV-2022	CK
Toluene	03-NOV-2022	03-NOV-2022	CK
Ethylbenzene	03-NOV-2022	03-NOV-2022	CK
m & p-Xylene	03-NOV-2022	03-NOV-2022	CK
o-Xylene	03-NOV-2022	03-NOV-2022	CK
Xylenes (Total)	03-NOV-2022	03-NOV-2022	SYS
F1 (C6-C10)	03-NOV-2022	03-NOV-2022	CK
F1 (C6 to C10) minus BTEX	03-NOV-2022	03-NOV-2022	SYS
Toluene-d8	03-NOV-2022	03-NOV-2022	CK

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4469818	TRIP SPIKE	Water	26-OCT-2022	29-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
Benzene	31-OCT-2022	31-OCT-2022	AG
Toluene	31-OCT-2022	31-OCT-2022	AG
Ethylbenzene	31-OCT-2022	31-OCT-2022	AG
m & p-Xylene	31-OCT-2022	31-OCT-2022	AG

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Time Markers

AGAT WORK ORDER: 22T963703

PROJECT: CO884.01

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

ATTENTION TO: Mike Grinnell

Sample ID	Sample Description	Sample Type	Date Sampled	Date Received
4469818	TRIP SPIKE	Water	26-OCT-2022	29-OCT-2022

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

Parameter	Date Prepared	Date Analyzed	Initials
o-Xylene	31-OCT-2022	31-OCT-2022	AG
Toluene-d8	31-OCT-2022	31-OCT-2022	AG
4-Bromofluorobenzene	31-OCT-2022	31-OCT-2022	AG

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Method Summary

CLIENT NAME: TERRAPEX ENVIRONMENTAL LTD

AGAT WORK ORDER: 22T963703

PROJECT: CO884.01

ATTENTION TO: Mike Grinnell

SAMPLING SITE:5646 Manotick Main Street, Manotick, Ontario

SAMPLED BY:JM

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Benzene	VOL-91-5001	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Toluene	VOL-91-5001	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5001	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5001	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5001	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91- 5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Benzene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
Toluene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
Ethylbenzene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
m & p-Xylene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
o-Xylene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
Xylenes (Total)	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
F1 (C6 - C10)	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/FID
Toluene-d8	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
F2 (C10 to C16)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F3 (C16 to C34)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F4 (C34 to C50)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5010	modified from MOE PHC-E3421	BALANCE
Terphenyl	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Sediment			N/A
Benzene	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Toluene	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5010	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
F1 (C6-C10)	VOL-91-5010	modified from MOE E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	modified from MOE E3421	(P&T)GC/FID
Toluene-d8	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS

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1 med

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webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: TERRAPEX ENVIRONMENTAL LTD
Contact: Mike Grinnell
Address: 20 Gurdwara Road, Unit 1
Ottawa, ON K2E 8B3
Phone: 613-745-6471 Fax:
Reports to be sent to:
1. Email: m.grinnell@terrapex.com
2. Email: edd@terrapex.com

Project Information:

Project: CO884.01
Site Location: 5646 Manotick Main Street, Manotick, Ontario
Sampled By: JM
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☑ No ☐
Company: TERRAPEX ENVIRONMENTAL LTD
Contact: Mike Grinnell
Address:
Email:

Regulatory Requirements:

(Please check all applicable boxes)

☒ Regulation 153/04 — Table 2 (Indicate One) — ☒ Ind/Com ☐ Res/Park ☐ Agriculture
Soil Texture (Check One): ☐ Coarse ☒ Fine
☐ Excess Soils R406 — Table (Indicate One)
☐ Regulation 558
☐ CCME
☐ Sewer Use ☐ Sanitary ☐ Storm — Region
☐ Prov. Water Quality Objectives (PWQO)
☐ Other (Indicate One)

Is this submission for a **Record of Site Condition?** ☒ Yes ☐ No

Report Guideline on *Certificate of Analysis* ☒ Yes ☐ No

Sample Matrix Legend

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

Laboratory Use Only

Work Order #: 22T963703

Cooler Quantity: one cooler-bagged ice
Arrival Temperatures: 3.2 | 3.1 | 3.2 / 6.6 | 5.8 | 6.2
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: Bagged ice.

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

☐ 3 Business Days ☐ 2 Business Days ☐ Next Business Day

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	Metals - ☐ CrVI ☐ Hg, ☐ HWSB	BTEX, F1-F4 PHCs Analyze F4G if required ☒ Yes ☐ No	PAHs	PCBs	VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	BTEX	F1							Potentially Hazardous or High Concentration (Y/N)
MW101	28OCT22	10:30 AM/PM	5	GW		N			X																
MW109	28OCT22	11:00 AM/PM	5	GW		N			X																
MW111	28OCT22	11:30 AM/PM	5	GW		N			X																
MW112	28OCT22	12:00 AM/PM	5	GW		N			X																
MW122	28OCT22	12:00 AM/PM	5	GW		N			X																
Trip Blank	26OCT22	— AM/PM	3															X	X						
Trip Spike	26OCT22	— AM/PM	3															X							
		AM/PM																							
		AM/PM																							
		AM/PM																							
		AM/PM																							

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Jeff Murray	28OCT22	14:00	C. Gwatkin	OCT 28 2022	15h18
Carlo Punzo	OCT 28 2022	16h00	Sana	Oct 29	10:52 am
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time

Page 1 of 1
N°: