



193 Nautical Boulevard, Oakville

Final

Phase II Environmental Site Assessment

Project Location:

193 Nautical Boulevard, Oakville, ON

Prepared for:

Halton District School Board
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Executive Summary

MTE Consultants Inc. (MTE) was retained by Halton District School Board to conduct a Phase II Environmental Site Assessment (ESA) for the property located at municipal address 193 Nautical Boulevard (Block 220, Plan 20M840, formerly Part of Lot 33 & 34, Concession 4) in Oakville, Ontario (the "Site"). The Phase II ESA was completed for due diligence purposes and is not intended for filing of an Ontario Ministry of the Environment, Conservation and Parks (MECP) Record of Site Condition (RSC) under Ontario Regulation (O.Reg.) 153/04.

Site Description and History

The Site is approximately 2.26 hectares (5.58 acres) in area and is located on the south side of Nautical Boulevard, between Allison Crescent and Innville Crescent in Oakville, ON. The Site is an approximately rectangular shaped parcel and is currently vacant land. A large soil berm is currently located along the western boundary of the Site.

The Site was occupied by agricultural fields since prior to 1954. By 1985, the fields were being revegetated with a woodlot. In 2002, the Site was graded and occupied by bare ground cover in preparation for the residential development of surrounding properties to the north, east and west. Between 2006 and 2012, the Site was used as a construction staging area for the surrounding residential development. This included stockpiling large quantities of soil within the north and central portions of the Site; construction trailers, equipment and supplies storage within the northeast corner of the Site; and an additional small materials storage pile near the north property boundary. In 2012, the Site was re-graded and has remained as such until the present day.

Phase II ESA Scope of Work

The scope of work for the Phase II ESA was developed based on the results of a previous Phase I ESA (MTE, 2021). The results of the Phase I ESA identified potential environmental concerns at the Site as a result of the former use as a construction staging area, previous soil stockpiling activities and the potential that fill was historically imported to the Site during re-grading and/or to construct the soil berms. Previous environmental reports (2001 and 2013) also identified fill as the upper soil unit. The potential for the migration of contaminants in groundwater to the Site from a current oil refinery located approximately 700m north of the Site was also identified.

The Phase II ESA scope of work included the collection and submission of selected soil samples for analysis from 14 boreholes advanced across the Site and in the areas of potential concern. Groundwater samples were collected from three existing monitoring wells to evaluate general groundwater quality. Soil samples were submitted for analysis of one or more of the following parameters: metals, hydride-forming metals (arsenic (As), antimony (Sb), selenium (Se)), pH, polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons (PHCs) and benzene, toluene, ethylbenzene and xylenes (BTEX). Groundwater samples were submitted for analysis of metals, As, Sb, Se, PHCs, BTEX and volatile organic compounds (VOCs).

The analytical results were compared to the Ministry of Environment, Conservation and Parks (MECP) 2011 Table 3 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition, and those for residential/parkland/institutional property use and coarse textured soil (the "2011 Table 3 RPI SCSs"). The analytical results were also compared to the MECP Table 7 Site Condition Standards (SCSs) for Residential/Parkland/Institutional property use (the "2011 Table 7 RPI SCSs"). The 2011 Table 7 RPI SCSs are applicable due to a potential shallow groundwater condition.

Phase II ESA Results

Soil Sampling Results

The subsurface stratigraphy on the Site generally consisted of 0.6m to 2.1m of clayey silt fill, overlying native clayey silt till to refusal on inferred bedrock at depths ranging from 2.3m to 3.0m below ground surface (bgs). Non-soil material including glass, was observed in one borehole (BH102-21). The soil analytical results were below the 2011 Table 3 RPI SCSs and the 2011 Table 7 RPI SCSs.

Groundwater Sampling Results

The measured depth to groundwater in the monitoring wells was between 2.59m and 3.27m bgs and the water table occurs in the bedrock. The inferred groundwater flow direction was south-southwesterly. No evidence to suggest groundwater contamination was observed during the sampling activities and the groundwater analytical results were below the 2011 Table 3 RPI SCSs and the 2011 Table 7 RPI SCSs.

Summary and Conclusions

The results of the Phase II ESA identified no contaminants of concern in soil or groundwater at the Site. No further Phase II ESA investigations are recommended at this time.

If the proposed development of the Site will involve excess soil removal, additional soil sampling beyond that completed during this Phase II ESA may be needed to meet the additional requirements of O.Reg. 406/10 (“On-Site and Excess Soil Management”).

In accordance with Ontario Regulation (O.Reg.) 903, the monitoring wells on the Site must be maintained (i.e., such that the seals of the wells are kept intact so that no foreign material and/or surface water enters the wells). If the wells are no longer required or will not be maintained, they must be decommissioned by a licensed well technician or well contractor in accordance with O.Reg.903.

1.0 Introduction

1.1 Background

MTE Consultants Inc. (MTE) was retained by Halton District School Board to conduct a Phase II Environmental Site Assessment (ESA) for the property located at municipal address 193 Nautical Boulevard (Block 220, Plan 20M840, formerly Part of Lot 33 & 34, Concession 4) in Oakville, Ontario (the “Site”). The Site location is illustrated on **Figure 1**.

The purpose of the Phase II ESA was to further assess potential environmental concerns identified in a previous Phase I ESA of the Site (MTE, 2021). The Phase II ESA was completed for due diligence purposes and is not intended for filing of an Ontario Ministry of the Environment, Conservation and Parks (MECP) Record of Site Condition (RSC) under Ontario Regulation (O.Reg.) 153/04.

Authorization to proceed with the Phase II ESA was received from Mr. Frederick Thibeault of Halton District School Board following acceptance of MTE's proposal for services dated June 11, 2021. The assignment was completed by MTE under Reference Number 49485-200.

The Phase II ESA report is organized into the following sections:

- Section 1.0 - Introduction;
- Section 2.0 - Phase II ESA Investigation Methodology;
- Section 3.0 - Phase II ESA Results;
- Section 4.0 - Summary and Conclusions; and,
- Section 5.0 to 7.0 - Limitations, References and Assessor Qualifications.

Analytical data summary tables, report figures and appendices follow the text portion of the report. All directions in this report are in reference to “Project North” as indicated on **Figure 2**.

It is noted that the Ontario Ministry of the Environment, Conservation and Parks (MECP) was previously named the Ontario Ministry of the Environment (MOE), the Ministry of Environment and Energy (MOEE) and the Ontario Ministry of the Environment and Climate Change (MOECC). For ease of discussion in this report, “MECP” is used to represent this provincial ministry and is inclusive of MOE, MOEE and MOECC.

1.2 General Site Description and History

The Site is approximately 2.26 hectares (5.58 acres) in area and is located on the south side of Nautical Boulevard, between Allison Crescent and Innville Crescent in Oakville, ON. The Site is an approximately rectangular shaped parcel and is currently vacant land. A large soil berm is currently located along the western boundary of the Site.

The Site was occupied by agricultural fields since prior to 1954. By 1985, the fields were being revegetated with a woodlot. In 2002, the Site was graded and occupied by bare ground cover in preparation for the residential development of surrounding properties to the north, east and west. Between 2006 and 2012, the Site was used as a construction staging area for the surrounding residential development. This included stockpiling large quantities of soil within the north and central portions of the Site; construction trailers, equipment and supplies storage within the northeast corner of the Site; and an additional small materials storage pile adjacent to the north property boundary. In 2012, the Site was re-graded and has remained as such until the present day. Refer to **Figure 2** for the Site Layout and Sampling Locations.

1.3 Phase I ESA Results

The scope of work was developed based on the results of a Phase I ESA report completed by MTE (MTE, 2021). The results of the Phase I ESA identified the following potential environmental concerns at the Site:

- Between 2006 and 2012, the Site was used as a construction staging area for the surrounding residential development. This included large quantities of soil stockpiling activities; and construction trailers, equipment and supplies storage.
- Fill material of unknown quality may have been imported to the Site between prior to 2001 and 2012 based on the following:
 - In 2002, the Site was graded prior to the use of the Site as a construction staging area for the surrounding residential development;
 - Soil stockpiles were observed on the Site in the 2008 and 2010 aerial photographs;
 - In 2012, the Site was re-graded following the completion of the surrounding residential development;
 - A large soil berm was observed during the Site visit running along the west property boundary;
 - Pieces of concrete were observed during the Site visit within the southwest portion of the Site;
 - Previous environmental reports (2001 and 2013) indicted fill as the upper soil unit; and
 - A large soil berm, likely comprised of fill material of unknown quality, is observed along the western property boundary during site visit.
- There was also a potential environmental concern for the migration of contaminants in groundwater to the Site from a current oil refinery on a property located approximately 700m north of the Site.

1.4 Scope of Work

The objective of this Phase II ESA was to further assess the potential sources of contamination to the Site through the collection and analysis of soil and groundwater samples. The Phase II ESA was conducted in general accordance with CSA document Z769-00 (R2018) Phase II Environmental Site Assessments, December 2000. The Phase II ESA scope of work included the following:

- Preparing a Site Specific Health & Safety Plan;
- Completing utility locates prior to any on-Site work, including retaining a private utility locator;
- Advancing 14 boreholes on the Site to depths of up to 3.0m below ground surface (bgs) (refusal on inferred bedrock);
- Collecting soil samples from the boreholes for laboratory analysis of one or more of the following parameters: metals, hydride-forming metals (antimony (As), arsenic (Sb), selenium (Se)), pH, polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons (PHCs), and/or benzene, toluene, ethylbenzene and xylenes (BTEX);

- Developing and purging three existing monitoring wells, and collecting field parameters including pH, electrical conductivity and temperature during purging to determine when adequate purging is achieved;
- Collection of groundwater samples for metals, As, Sb, Se, PHCs, BTEX and volatile organic compounds (VOCs);
- Analysis of quality assurance/quality control (QA/QC) samples including approximately 10% field duplicates;
- Collecting groundwater levels and elevation data to estimate the groundwater flow direction; and,
- Interpreting and documenting the results of the Phase II ESA in this report supported by figures, photographs and laboratory Certificates of Analysis.

The Phase II ESA report was completed by Mr. Zachary Thomson, B.Eng. and Mr. Kelvin Lee, P. Eng., M.Eng., QP_{ESA} of MTE. The qualifications of Mr. Thomson and Mr. Lee are included in **Section 7.0**.

The soil and groundwater analyses were completed by Bureau Veritas (formerly Maxxam Analytics) of Mississauga, Ontario. Bureau Veritas is accredited by the Standards Council of Canada (SCC) in accordance with ISO/IEC 17025:2005 for the analyses completed during this Phase II ESA. The drilling work was completed by Tri-Phase Group (Tri-Phase) of Mississauga, Ontario. Tri-Phase is an MECP-licensed well contractor. Photographs taken at the time of the Phase II ESA are included in **Appendix A**.

1.5 Applicable Site Condition Standards

The analytical results for soil and groundwater samples collected by MTE during this Phase II ESA were compared to the Site Condition Standards (SCSs) in the document *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, Ministry of the Environment, April 15, 2011*. The results were compared to the SCSs listed in Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, and those for residential/parkland/institutional land use and coarse textured soils (2011 Table 3 RPI SCSs) based on the following:

- Subsurface investigations on the Site determined there is more than 2 metres of overburden above bedrock and the Site is not a “shallow soil property”;
- There are no surface water bodies on or within 30 metres of the Site;
- The average depth to groundwater was greater than 3m;
- The Site is not on or within 30m of an area of natural significance and soil pH values were within the acceptable range of both surface and subsurface soils. The Site was not considered to be an “Environmentally Sensitive Area” as defined by O.Reg.153/04;
- Although the geological conditions were observed to consist of clayey silt fill over clayey silt, the SCSs for coarse textured were conservatively applied; and,
- The proposed future land use of the Site will be residential.

It was noted that the groundwater level was less than 3m bgs at monitoring well MWC. Although the average water level is 3.02m bgs, the assumptions used to develop the 2011 Table 3 RPI SCSs may not be applicable for some parameters if a shallow groundwater condition exists. As a result, the analytical data collected during this Phase II ESA were also conservatively compared to the Ministry of Environment, Conservation and Parks (MECP) Table 7 Site

Condition Standards (SCSs) from Soil, Groundwater and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, and those for Residential/Parkland/Institutional property use (the “2011 Table 7 RPI SCSs”).

2.0 Phase II ESA Investigation Methodology

2.1 Borehole Drilling and Surface Soil Sampling

The drilling activities for the Phase II ESA included the advancement of 14 boreholes at the Site on July 30, 2021. The locations of the boreholes were selected to assess the potential environmental concerns and evaluate the general soil and groundwater quality on the Site. The sampling locations are illustrated on **Figure 2** and included:

Sampling Location	Rationale
BH101-21 BH104-21 BH106-21 BH107-21 BH108-21	<ul style="list-style-type: none"> Determine the depth of fill material and assess soil fill quality.
BH102-21 BH103-21	<ul style="list-style-type: none"> Determine the depth of fill material and assess soil quality within the berm located in the western portion of the property.
BH105-21	<ul style="list-style-type: none"> Determine the depth of fill material and assess soil fill quality near concrete debris.
BH109-21 BH110-21 BH111-21	<ul style="list-style-type: none"> Determine the depth of fill material and assess soil fill quality within the area of a former fill pile located in the central portion of the Site
BH112-21 BH113-21 BH114-21	<ul style="list-style-type: none"> Determine the depth of fill material and assess soil fill quality in the former construction staging areas within the northern portions of the Site.

Boreholes were advanced by Tri-Phase using a track-mounted Geoprobe 7822DT drill rig. Continuous soil cores were recovered from borehole location using either split-spoon or direct push macro-core samplers and logged by MTE for geological characteristics as well as visual and olfactory evidence of environmental impacts such as staining, odours or the presence of non-soil materials. New macro-core samplers were used for each sampling interval. Other sampling equipment, including split-spoons, were cleaned between locations using soapy water and a tap water rinse to minimize the potential for cross contamination between boreholes. Borehole logs were prepared for each location and are included in **Appendix B**.

2.2 Soil Sampling

Soil samples were collected for field headspace screening and for possible laboratory analysis. Soil samples for potential BTEX and F1 PHC analyses were collected following USEPA SW-846 Method 5035 (field methanol preservation). This soil sampling procedure included collecting approximately 5 grams of sample from the undisturbed soil core using a Terra Core™ sampling device and placing the sample in a laboratory supplied glass vial containing 5mL of methanol.

Soil samples for other analyses including metals, As, Sb, Se, pH, PAHs, and F2-F4 PHCs were collected directly from the soil core and placed into new laboratory supplied soil jars.

New nitrile gloves were worn during the handling of all samples, sampling equipment and sample jars and changed between each sample.

2.3 Field Headspace Screening

A portion of each soil sample was placed into a new zip-top plastic bag for field headspace screening. The organic vapour concentrations in the headspace of each soil sample were measured using an RKI Eagle II field meter. The RKI Eagle II is a combination hydrocarbon detector and a Photo Ionization Detector (PID), providing an indication of both hydrocarbon and VOC vapours. Equipment calibration and maintenance was performed by MTE according to manufacturers' recommendations prior to arriving at the Site and in the field to ensure proper operation.

The procedure for collection of field headspace measurements included waiting approximately 15 minutes for the soil/vapour in the zip-top plastic bag to equilibrate and allow for headspace development, and inserting the Eagle II sampling probe into a small opening in the bag. The maximum meter readings were recorded, with 40 ppm (hexane) being the highest reading. The vapour readings for isobutylene remained 0 ppm through the entire investigation.

The field headspace readings are summarized on the borehole logs in **Appendix B**.

2.4 Monitoring Well Installation

No new monitoring wells were installed during this Phase II ESA.

2.5 Monitoring Well Condition Survey

A well condition survey was completed to evaluate the condition of four existing wells observed on the Site. Monitoring wells MWA, MWB and MWC were located and found to be in good condition and suitable for sampling. Monitoring well MWD did not have a casing or j-plug and was not considered suitable for sampling, however, a water level was collected. The depths of the well screens were viewed and measured by MTE during the condition survey using an underwater camera. Monitoring well details are summarized in **Table 1**.

2.6 Groundwater Level Measurement

The depth to groundwater was measured using an interface probe in each of the four existing wells on June 28, 2021 and August 12, 2021. The water levels were measured by lowering the probe into the well until the tone sounded and recording the depth to water from the highest point on the well riser pipe (the groundwater level measuring reference point). Measurements were recorded to the nearest 0.01m. The probe was cleaned with successive rinses of soapy and distilled water between each well. Groundwater level measurements are summarized in **Table 2**.

2.7 Groundwater Sample Collection

Monitoring wells were developed to remove stagnant water and fine grain materials that may have been introduced during drilling. Prior to collecting groundwater samples, the monitoring wells were purged to obtain a groundwater sample representative of the surrounding formation. During purging, field parameter measurements (temperature, pH and conductivity) were recorded after each well volume. Groundwater samples were collected after stabilized parameters had been measured and a minimum of three well volumes had been removed. All groundwater samples were placed directly into pre-preserved laboratory supplied bottles. Groundwater samples analyzed for metals, arsenic, antimony and selenium were field filtered with a single-use 0.45-micron filter. Well development was completed using dedicated LDPE watterra tubing and foot valve, while purging and sampling were completed using dedicated LDPE tubing and a peristaltic pump.

2.8 Sample Storage Handling and Custody

Soil and groundwater samples were labelled, given a unique sample identifier and placed in a sealed cooler with ice for transportation to Bureau Veritas. The samples were transported to the laboratory by MTE and accompanied by a Chain of Custody form.

2.9 Quality Control/Quality Assurance

A QA/QC program was implemented during this Phase II ESA to demonstrate that the data collected was representative of the Site conditions and suitable to meet the sampling program objectives. The QA/QC program included field QA/QC procedures and laboratory QA/QC procedures.

Field QA procedures included:

- Adherence to MTE's standard operating procedures (SOPs), which meet industry standards and MECP guidance for field sample data collection;
- The use of new laboratory-supplied sample containers;
- The use of new and dedicated sampling equipment;
- The wearing of a new pair of nitrile gloves during and between the handling of all samples and field equipment; and
- Implementing equipment cleaning procedures.

Laboratory QA/QC procedures were implemented internally by the laboratory and validated through a review of the sample Chain-of-Custody forms and Laboratory Certificates of Analysis. The laboratory QA/QC assessment included a review of the following:

- Sample holding times and arrival temperatures;
- Laboratory analytical methods (i.e., MECP approved methods were used);
- Results were received for all of the requested samples and analyses;
- Laboratory surrogate recovery and spike sample results;
- Dilution factors and method detection limits;
- Duplicate sample analytical results;
- Laboratory Certificate of Analysis notes; and
- Analytical results as compared to visual/olfactory observations.

QC samples (field duplicates) were also submitted for analysis. The analytical data precision was assessed by calculating the Relative Percent Difference (RPD) between the investigation sample results (C1) and the field duplicate sample results (C2). The RPD was calculated as follows:

$$\text{RPD} = 2 | \text{C1} - \text{C2} | / (\text{C1} + \text{C2}) \times 100\%$$

The RPD acceptance criteria were 50% for soil samples and 30% for groundwater.

3.0 Phase II ESA Results

3.1 Geology and Hydrogeology

3.1.1 Geology

The subsurface stratigraphy on the Site generally consisted of 0.6m to 2.1m of clayey silt fill, overlying native clayey silt till to refusal on inferred bedrock at depths ranging from 2.3m to 3.0m below ground surface (bgs). Non-soil material including glass, was observed in one borehole (BH102-21).

Copies of the borehole logs illustrating the stratigraphy and soil sample headspace readings are included in **Appendix B**.

3.1.2 Hydrogeology

The depth to groundwater in the monitoring wells was measured on June 28, 2021 and August 12, 2021 and ranged from approximately 2.59m bgs to 3.27m bgs.

An elevation survey of each borehole and monitoring well was completed by MTE using a Leica Rugby 610 laser level. The elevation survey was completed to a common datum and included the ground surface at each location and the highest point at the top of each monitoring well riser pipe (the groundwater level measuring point). The common datum monitoring well elevations are provided in **Table 2**.

Groundwater elevations and contours, based on the August 12, 2021 measurements, are illustrated on **Figure 3**. The inferred groundwater flow direction based on the elevation contours is south-southwest.

3.2 Soil Analytical Results

Soil samples were selected for laboratory analysis of one or more of the following parameters: metals, As, Sb, Se, pH, PAHs, PHCs and/or BTEX. The soil analytical results, as compared to the 2011 Table 3 RPI SCSs and 2011 Table 7 RPI SCSs are summarized in **Table 3** to **Table 6**. The laboratory Certificates of Analysis are included in **Appendix C**.

The analytical results for all soil samples submitted were below the 2011 Table 3 RPI SCSs and 2011 Table 7 RPI SCSs.

3.3 Groundwater Analytical Results

Groundwater samples were selected for laboratory analysis of metals, As, Sb, Se, PHCs, BTEX and VOCs. The groundwater analytical results as compared to the 2011 Table 3 RPI SCSs and 2011 Table 7 RPI SCSs are summarized in **Table 7** to **Table 9**. The laboratory Certificates of Analysis are included in **Appendix C**.

The analytical results for all groundwater samples submitted were below the 2011 Table 3 RPI SCSs and 2011 Table 7 RPI SCSs.

3.4 Quality Assurance/Quality Control

A QA/QC program was implemented during this Phase II ESA to demonstrate that the data collected was suitable to meet the sampling program objectives. The following is a summary of the QA/QC review:

- Soil and groundwater samples were collected using industry standard methods in laboratory supplied containers, and transported in insulated coolers containing ice under Chain-of-Custody to the laboratory. No concerns with respect to temperature, handling and control were noted.
- All samples were analyzed by the laboratory using MECP approved analytical methods and within the required holding times.
- Analytical results were received for all samples submitted for analysis. No concerns were noted with respect to lab internal quality indicators (e.g., surrogate recovers) or Certificate of Analysis.

MTE submitted a field duplicate soil sample from BH107-21 (BH1107-21 0-2') for analysis of metals As, Sb and Se. MTE submitted a field duplicate groundwater sample from MWA for analysis of BTEX and VOCs. The calculated RPDs for the original and duplicate samples were less than 50% (for soil) and 30% (for groundwater) for all parameters where a calculation could be completed.

A trip blank sample of ultra-pure water was prepared by the laboratory and submitted by MTE with the groundwater samples collected on August 3, 2021. The trip blanks remained with the sample containers prior to and after sampling, were pre-labeled "TRIP BLANK" and submitted for analysis of BTEX and VOCs. There were no detections of BTEX or VOCs in the samples suggesting no outside influences by BTEX or VOCs during sample container and sample storage and transport.

4.0 Summary and Conclusions

MTE was retained by Halton District School Board to conduct a Phase II Environmental Site Assessment (ESA) for the property located at municipal address 193 Nautical Boulevard (Block 220, Plan 20M840, formerly Part of Lot 33 & 34, Concession 4) in Oakville, Ontario (the "Site"). The scope of work for the Phase II ESA was developed based on the results of a previous Phase I ESA (MTE, 2021). The Phase II ESA was completed for due diligence purposes and is not intended for filing of an Ontario Ministry of the Environment, Conservation and Parks (MECP) Record of Site Condition (RSC) under Ontario Regulation (O.Reg.) 153/04.

Phase II ESA Results

Soil Sampling Results

The subsurface stratigraphy on the Site generally consisted of 0.6m to 2.1m of clayey silt fill, overlying native clayey silt till to refusal on inferred bedrock at depths ranging from 2.3m to 3.0m below ground surface (bgs). Non-soil material including glass, was observed in one borehole (BH102-21). The soil analytical results were below the 2011 Table 3 RPI SCSs and the 2011 Table 7 RPI SCSs.

Groundwater Sampling Results

The measured depth to groundwater in the monitoring wells was between 2.59m and 3.27m bgs and the water table occurs in the bedrock. The inferred groundwater flow direction was south-

southwesterly. No evidence to suggest groundwater contamination was observed during the sampling activities and the groundwater analytical results were below the 2011 Table 3 RPI SCSs and the 2011 Table 7 RPI SCSs.

Summary and Conclusions

The results of the Phase II ESA identified no contaminants of concern in soil or groundwater at the Site. No further Phase II ESA investigations are recommended at this time.

If the proposed development of the Site will involve excess soil removal, additional soil sampling beyond that completed during this Phase II ESA may be needed to meet the additional requirements of O.Reg. 406/10 (“On-Site and Excess Soil Management”).

In accordance with Ontario Regulation (O.Reg.) 903, the monitoring wells on the Site must be maintained (i.e., such that the seals of the wells are kept intact so that no foreign material and/or surface water enters the wells). If the wells are no longer required or will not be maintained, they must be decommissioned by a licensed well technician or well contractor in accordance with O.Reg.903.

5.0 Limitations

Services performed by **MTE Consultants Inc. (MTE)** were conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the Environmental Engineering & Consulting profession. No other warranty or representation expressed or implied as to the accuracy of the information, conclusions or recommendations is included or intended in this report.

This report was completed for the sole use of MTE and Halton District School Board. It was completed in accordance with the Scope of Work referred to in Section 1.4. As such, this report may not deal with all issues potentially applicable to the Site and may omit issues, which are or may be of interest to the reader. Reasonable care was exercised to identify the important features, including the important environmental features, and this report addresses only those features as provided in the Scope of Work. All findings and conclusions presented in this report are based on the Site conditions as they existed during the time period of the investigation. This report is not intended to be exhaustive in scope or to imply a risk-free facility or conditions.

Any use which a third party makes of this report, or any reliance on, or decisions to be made based upon it, are the responsibility of such third parties. MTE accepts no responsibility for liabilities incurred by or damages, if any, suffered by any third party as a result of decisions made or actions taken, based upon this report. Others with interest in the Site should undertake their own investigations and studies to determine how or if the condition affects them or their plans.

It should be recognized that the passage of time may affect the views, conclusions and recommendations (if any) provided in this report because environmental conditions of a property can change. Should additional or new information become available, MTE recommends that it be brought to our attention in order that we may re-assess the contents of this report.

All of which is respectfully submitted,

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6.0 References

1. Canadian Standards Association, December 2000, Z769-00 (R2013) Phase II Environmental Site Assessments.
2. Draft MTE Consultants Inc., dated July 16, 2021. Phase I Environmental Site Assessment, 193 Nautical Boulevard, Oakville, ON.
3. Ontario Ministry of the Environment; May 1996. MOE Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario.
4. Ontario Ministry of the Environment, April 15, 2011, Rationale For the Development of Soil and Ground Water Standards For Use at Contaminated Sites in Ontario.
5. Ontario Ministry of the Environment, April 15, 2011, Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act.
6. USEPA, December 1996, SW-846 Method 5035 Closed-system Purge-and-Trap and Extraction for Volatile Organics in Soil and Waste.
7. USEPA, 2013, Operating Procedure SESDPROC-301-R3 "Sampling Guidance".

7.0 Qualifications of Assessors

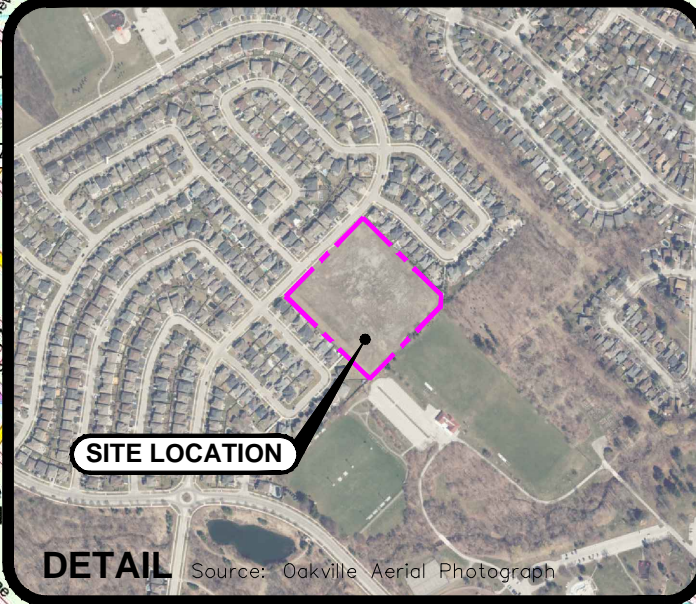
As required by CSA Standard Z768-01, Clause 3.4, an appropriate combination of formal education, skills, experience and training is required in order to provide a technically sound and rational Phase II ESA. The key participants involved in performing the components of the Phase II ESA are Mr. Zachary Thomson, B.Eng. and Mr. Kelvin Lee, P. Eng., M.Eng., QP_{ESA} of MTE Consultants Inc.

Mr. Thomson is a graduate of the Royal Military College of Canada with a Bachelor of Engineering in Chemical Engineering. He also has a graduate diploma from Conestoga College in Environmental Engineering Applications. Mr. Thomson has over two years of experience in the environmental consulting industry and has conducted numerous due diligence Phase I and II Environmental Site Assessments and a variety of soil and groundwater remediation projects.

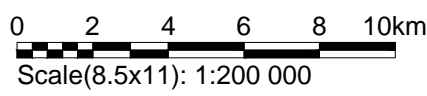
Mr. Lee is a graduate of the University of Toronto with a Master of Chemical Engineering degree. He also has an Undergraduate degree in Chemical Engineering from McMaster University. Mr. Lee is a Senior Environmental Engineer at MTE with over 12 years of environmental consulting experience across Canada and USA. Mr. Lee is a licensed Professional in the provinces of Ontario, Manitoba, and Saskatchewan, and a Qualified Person for Environmental Site Assessment as defined in O.Reg. 153/04. His technical experience includes conducting and managing Phase I and II environmental site assessments, remediation, risk management plan, fill management, and filing of Records of Site Condition.

Figures

Project: 49485-200 CAD: P:\49485\200\49485-200-ESA2.DWG
 August 20, 2021 - 9:39 AM - Plotted By: TSchneider



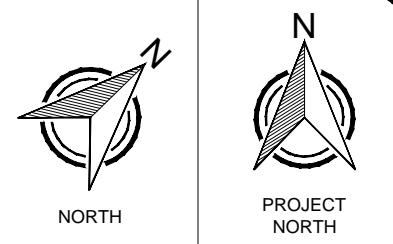
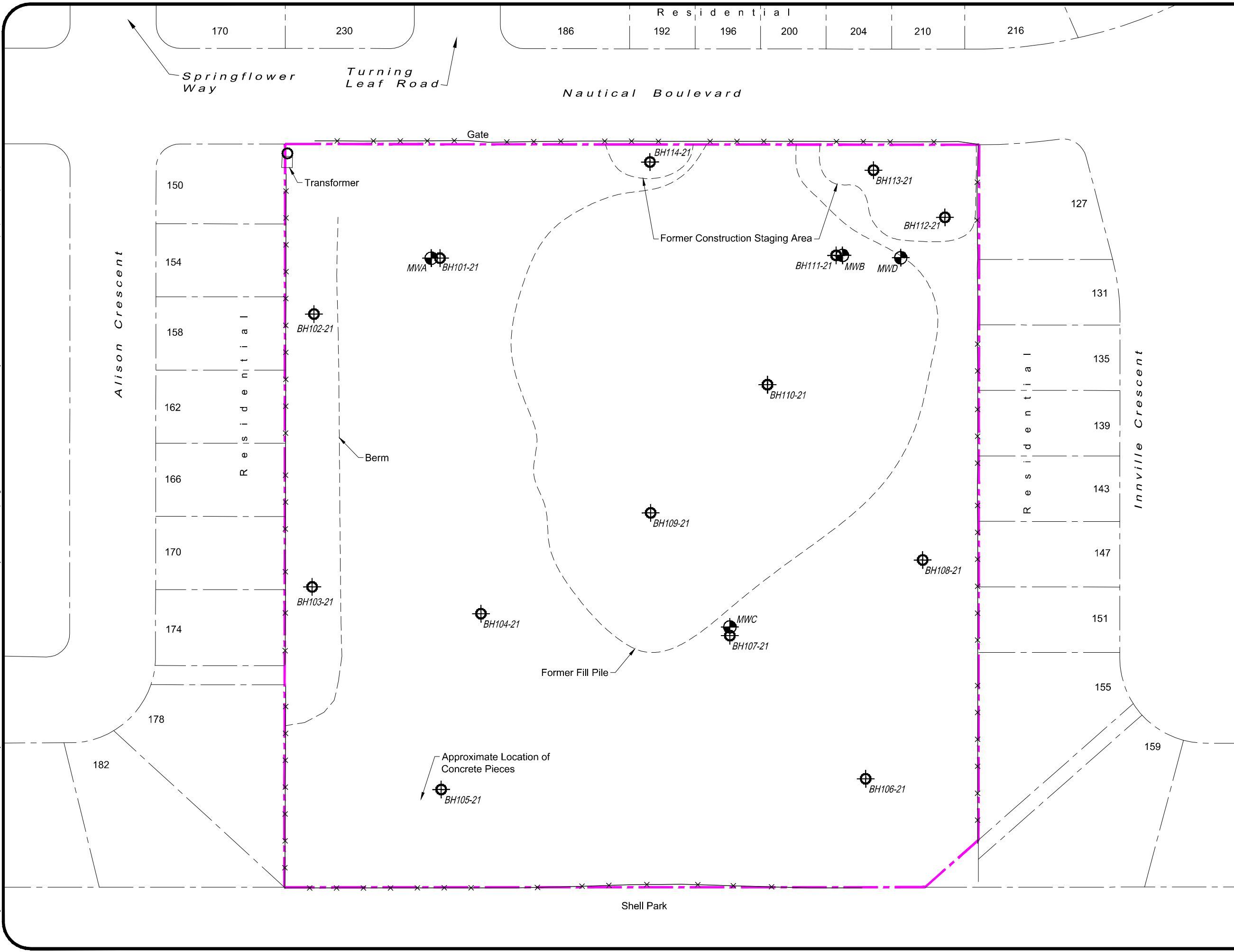
Engineers, Scientists, Surveyors
 Ph. (905) 639-2552



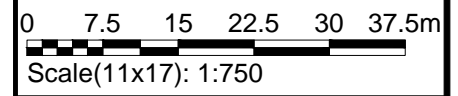
CLIENT	Halton District School Board	
PROJECT	Phase II ESA	
SITE	193 Nautical Boulevard Oakville, Ontario	

TITLE	Site Location Map	
Reviewed By	TJJ	
Prepared By	MFG	
Drawn By	TXS	
Date	August 2021	
Project No.	49485-200	
Figure No.	1	

August 20, 2021 - 9:39 AM - Plotted By: TSchneider
 Project: 49485-200 CAD: P:\49485\200\49485-200-ESA2.DWG
 2 Site Layout and Sampling Locations

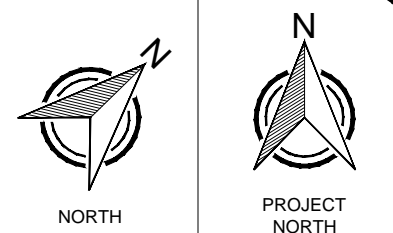
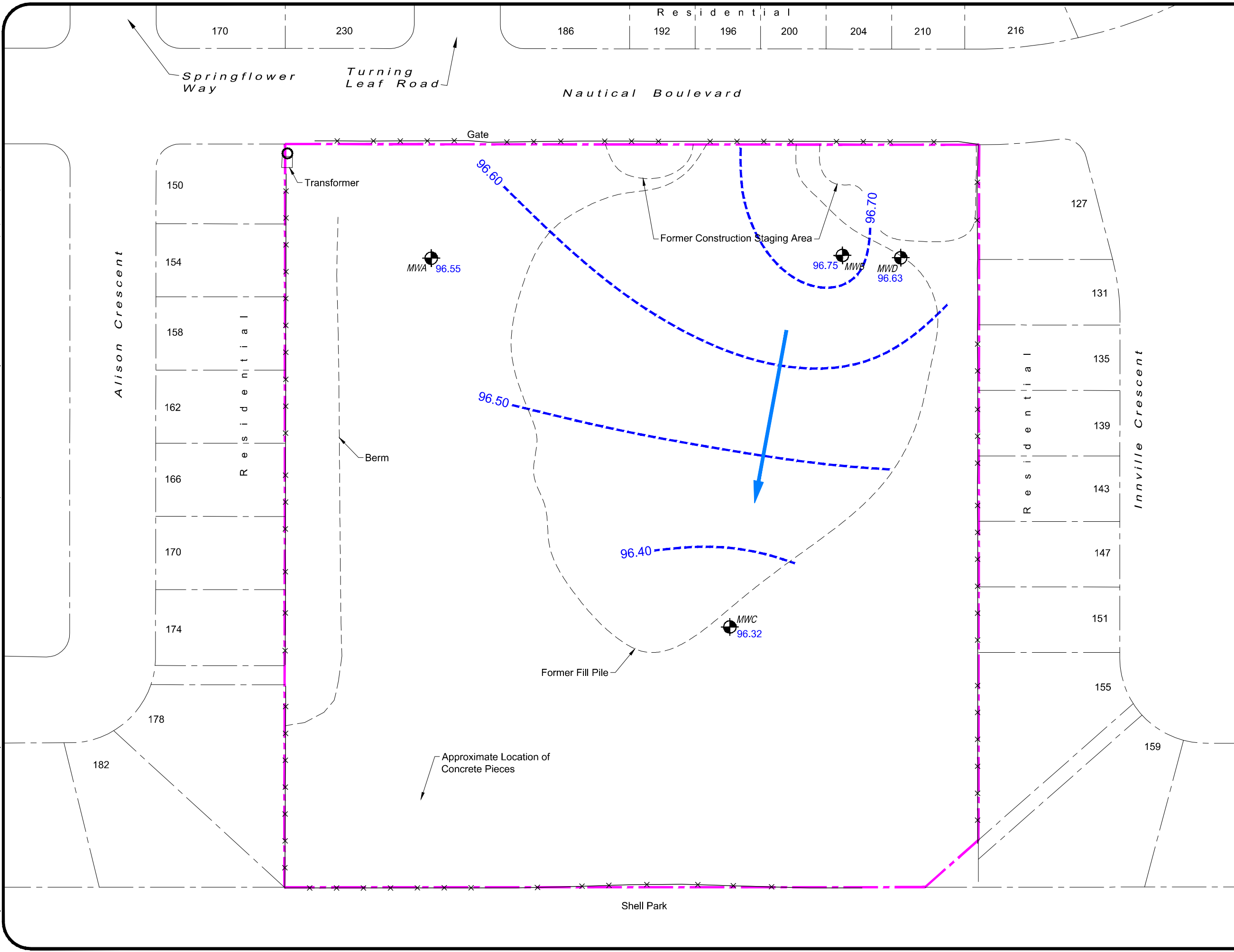


- LEGEND**
- - - Property Line
 - - - Adjoining Property Line
 - x - x - Fence
 - Manhole
 - ⊕ Monitoring Well
 - ⊕ Borehole



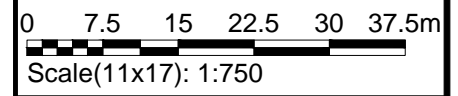
CLIENT	Halton District School Board
PROJECT	Phase II ESA
SITE	193 Nautical Boulevard Oakville, Ontario
TITLE	Site Layout and Sampling Locations

Reviewed By	TJJ	Project No.	49485-200
Prepared By	MFG	Figure No.	2
Drawn By	TXS		
Date	August 2021		



- LEGEND**
- - - - - Property Line
 - - - - - Adjoining Property Line
 - x x x x Fence
 - Manhole
 - ⊕ Monitoring Well
 - 96.63 Groundwater Elevation (M)
 - - - - - 96.70 Groundwater Contour (M)
 - ➔ Inferred Direction of Groundwater Flow

NOTES:
 Water levels measured on 2021/08/12
 M - metres



CLIENT	Halton District School Board	
PROJECT	Phase II ESA	
SITE	193 Nautical Boulevard Oakville, Ontario	
TITLE	Groundwater Flow Map	

Reviewed By	TJJ	Project No.	49485-200
Prepared By	MFG	Figure No.	3
Drawn By	TXS		
Date	August 2021		

Tables

Table 1: Monitoring Well Construction Details

Well ID	Completed By	Ground Surface Elevation (m)	Top of Pipe Elevation (m)	Well Depth (mbgs)	Screen Length (m)	Well Construction Details						Type of Casing
						Depth of Screen (m)		Sand Pack (m)		Bentonite (m)		
						Top	Bottom	Top	Bottom	Top	Bottom	
MWA	Unkown	99.69	100.51	6.1	3.1	3.0	6.1	2.7	6.1	0.0	2.7	Monument
MWB	Unkown	99.95	100.95	6.0	3.1	3.0	6.0	2.7	6.0	0.0	2.7	Monument
MWC	Unkown	98.92	99.97	4.6	3.1	1.5	4.6	1.2	4.6	0.0	1.2	Monument
MWD	Unkown	99.77	100.62	6.4	3.1	3.3	6.4	3.0	6.4	0.0	3.0	None

Notes:

Date of elevation survey: August 12, 2021

Elevations relative to manhole cover on Nautical Boulevard set to 100.00m

"m" - meters

"mbgs" - meters below ground surface

"-" not measured or not applicable

Table 2: Summary of Groundwater Elevations

Well ID	Ground Surface Elevation (m)	Top of Pipe Elevation (m)	28-Jun-21			12-Aug-21		
			Water Level (mbtop)	Water Level (mbgs)	Elevation (m)	Water Level (mbtop)	Water Level (mbgs)	Elevation (m)
MWA	99.69	100.51	4.09	3.27	96.42	3.96	3.14	96.55
MWB	99.95	100.95	4.27	3.27	96.68	4.20	3.20	96.75
MWC	98.92	99.97	3.75	2.70	96.22	3.65	2.59	96.32
MWD	99.77	100.62	4.08	3.22	96.54	3.99	3.13	96.63

Notes:

Date of elevation survey: Aug 12, 2021

'Elevations relative to manhole cover on Nautical Boulevard set to 100.00m

"m" - meters

"mbgs" - meters below ground surface

"-" not measured or not applicable

Table 3: Metals and Hydride-Forming Metals Analysis in Soil

Parameters	Unit	RDL	2011 Table 3 SCS (R/P/I, Coarse)	2011 Table 7 SCS (R/P/I, Coarse)	Sample Location									
					Sample Name	BH102-21	BH102-21	BH103-21	BH104-21	BH105-21	BH106-21	BH107-21	BH107-21	
					Lab Job #	BH102-21 0-2'	BH102-21 5-7'	BH103-21 0-2'	BH104-21 0-2'	BH105-21 0-2'	BH106-21 0-2'	BH107-21 0-2'	BH1107-21 0-2'	
					Laboratory ID	C1L5821	C1L5821	C1L5821	C1L5821	C1L5821	C1L5821	C1L5821	C1L5821	
					Sampling Date	QGJ341	QGJ342	QGJ343	QGJ345	QGJ347	QGJ349	QGJ351	QGJ352	
					Sample Depth (m bgs)	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	
					Maximum Concentration	0.0-0.6	1.5-2.1	0.0-0.6	0.0-0.6	0.0-0.6	0.0-0.6	0.0-0.6	0.0-0.6	
Metals and Hydride-Forming Metals														
Antimony	µg/g	0.2 - 1	7.5	7.5		0.33	0.33	-	0.22	0.22	<0.20	-	0.21	<0.20
Arsenic	µg/g	1	18	18		4.9	4.6	-	4.9	4	3.4	-	3.5	3.7
Barium	µg/g	0.5 - 1	390	390		110	97	-	110	61	52	79	70	69
Beryllium	µg/g	0.2 - 0.5	4	4		0.73	0.67	-	0.73	0.69	0.47	0.64	0.67	0.59
Boron	µg/g	5	120	120		12	10	-	11	12	7.4	10	12	9.3
Cadmium	µg/g	0.1 - 0.5	1.2	1.2		0.41	0.41	-	0.15	<0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/g	1	160	160		25	22	-	20	22	16	25	21	20
Cobalt	µg/g	0.1 - 1	22	22		12	10	-	11	12	8.9	12	12	11
Copper	µg/g	0.5 - 1	140	140		35	35	-	19	23	21	24	17	19
Lead	µg/g	1	120	120		27	27	-	15	11	9.2	9.6	9.5	9.5
Molybdenum	µg/g	0.5 - 1	6.9	6.9		1	1	-	1	<0.50	0.55	<0.50	1	0.53
Nickel	µg/g	0.5 - 1	100	100		25	21	-	23	24	17	25	25	21
Selenium	µg/g	0.5 - 1	2.4	2.4	<	0.5	<0.50	-	<0.50	<0.50	<0.50	-	<0.50	<0.50
Silver	µg/g	0.2	20	20	<	0.2	<0.20	-	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Thallium	µg/g	0.05 - 0.5	1	1		0.14	0.11	-	0.11	0.12	0.11	0.13	0.096	0.1
Uranium	µg/g	0.05 - 1	23	23		0.91	0.86	-	0.91	0.61	0.56	0.61	0.61	0.56
Vanadium	µg/g	1 - 5	86	86		31	30	-	30	30	23	31	30	28
Zinc	µg/g	5	340	340		110	110	-	67	59	47	56	57	54
pH	pH units	0.1	NR	NR		7.72	7.58	7.45	-	-	-	-	-	-

Notes:

2011 Site Condition Standards (SCS) - As identified in 'Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act' (as amended April 15, 2011)

2020 Excess Soil Quality Standards (ESQS) - As identified in Appendix 1 of the Rules for Soil Management adopted by reference in O.Reg. 406/19 made under the Environmental Protection Act (December 8, 2020)

Bold	- Exceeds 2011 Table 3 SCS
Bold	- Exceeds 2011 Table 7 SCS

- "-" - parameter not analyzed
- RDL - Reported detection limit
- NR - Not Relevant
- NV- No Value
- NA - Not Applicable
- "<" - Less than the Reporting Detection Limit

Table 3: Metals and Hydride-Forming Metals Analysis in Soil

Parameters	Unit	RDL	2011 Table 3 SCS (R/P/I, Coarse)	2011 Table 7 SCS (R/P/I, Coarse)	BH109-21	BH110-21	BH110-21	BH111-21	BH112-21	BH114-21
					BH109-21 0-2'	BH110-21 0-2'	BH110-21 5-7'	BH111-21 0-2'	BH112-21 0-2'	BH114-21 0-2'
					C1L5821	C1L5821	C1L5821	C1L5821	C1L5821	C1L5821
					QGJ357	QGJ359	QGJ360	QGJ361	QGJ363	QGJ367
					30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021
					0.0-0.6	0.0-0.6	1.5-2.1	0.0-0.6	0.0-0.6	0.0-0.6
Metals and Hydride-Forming Metals										
Antimony	µg/g	0.2 - 1	7.5	7.5	<0.20	-	-	<0.20	0.23	<0.20
Arsenic	µg/g	1	18	18	4.6	-	-	3.5	4.1	1.8
Barium	µg/g	0.5 - 1	390	390	55	-	-	64	76	28
Beryllium	µg/g	0.2 - 0.5	4	4	0.67	-	-	0.54	0.64	0.24
Boron	µg/g	5	120	120	11	-	-	8.9	10	<5.0
Cadmium	µg/g	0.1 - 0.5	1.2	1.2	0.11	-	-	<0.10	0.16	<0.10
Chromium	µg/g	1	160	160	20	-	-	19	20	9.4
Cobalt	µg/g	0.1 - 1	22	22	12	-	-	9.8	11	4.6
Copper	µg/g	0.5 - 1	140	140	23	-	-	19	22	12
Lead	µg/g	1	120	120	9.4	-	-	10	22	4.4
Molybdenum	µg/g	0.5 - 1	6.9	6.9	0.54	-	-	0.61	0.65	<0.50
Nickel	µg/g	0.5 - 1	100	100	24	-	-	20	24	8.1
Selenium	µg/g	0.5 - 1	2.4	2.4	<0.50	-	-	<0.50	<0.50	<0.50
Silver	µg/g	0.2	20	20	<0.20	-	-	<0.20	<0.20	<0.20
Thallium	µg/g	0.05 - 0.5	1	1	0.13	-	-	0.12	0.14	0.064
Uranium	µg/g	0.05 - 1	23	23	0.62	-	-	0.56	0.63	0.37
Vanadium	µg/g	1 - 5	86	86	29	-	-	27	28	17
Zinc	µg/g	5	340	340	56	-	-	51	74	21
pH	pH units	0.1	NR	NR	-	7.70	7.72	-	-	-

Notes:

2011 Site Condition Standards (SCS) - As identified in 'Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act' (as amended April 15, 2011)

2020 Excess Soil Quality Standards (ESQS) - As identified in Appendix 1 of the Rules for Soil Management adopted by reference in O.Reg. 406/19 made under the Environmental Protection Act (December 8, 2020)

Bold - Exceeds 2011 Table 3 SCS
Bold - Exceeds 2011 Table 7 SCS

- " - parameter not analyzed
- RDL - Reported detection limit
- NR - Not Relevant
- NV - No Value
- NA - Not Applicable
- "<" - Less than the Reporting Detection Limit

Table 4: Polycyclic Aromatic Hydrocarbons (PAHs) Analysis in Soil

Parameters	Unit	RDL	2011 Table 3 SCS (R/P/I, Coarse)	2011 Table 7 SCS (R/P/I, Coarse)	Sample Location						
					Sample Name	BH102-21	BH103-21	BH105-21	BH109-21	BH110-21	
					Lab Job #	C1L5821	C1L5821	C1L5821	C1L5821	C1L5821	
					Laboratory ID	QGJ341	QGJ343	QGJ347	QGJ357	QGJ359	
					Sampling Date	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	
					Sample Depth (m bgs)	0.0-0.6	0.0-0.6	0.0-0.6	0.0-0.6	0.0-0.6	
					Maximum Concentration						
Polycyclic Aromatic Hydrocarbons (PAHs)											
Acenaphthene	µg/g	0.005 - 0.4	7.9	7.9		0.016	<0.0050	0.016	<0.0050	<0.0050	<0.0050
Acenaphthylene	µg/g	0.005 - 0.125	0.15	0.15	<	0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Anthracene	µg/g	0.005 - 0.125	0.67	0.67		0.039	0.012	0.039	<0.0050	<0.0050	<0.0050
Benz(a)anthracene	µg/g	0.005 - 0.125	0.5	0.5		0.13	0.058	0.13	<0.0050	0.0076	0.0087
Benzo(a)pyrene	µg/g	0.005 - 0.125	0.3	0.3		0.14	0.068	0.14	<0.0050	0.0075	0.0085
Benzo(b)fluoranthene	µg/g	0.005 - 0.125	0.78	0.78		0.18	0.1	0.18	0.0055	0.012	0.013
Benzo(g,h,i)perylene	µg/g	0.005 - 0.15	6.6	6.6		0.095	0.061	0.095	<0.0050	0.0093	0.0087
Benzo(k)fluoranthene	µg/g	0.005 - 0.125	0.78	0.78		0.062	0.032	0.062	<0.0050	<0.0050	<0.0050
Chrysene	µg/g	0.005 - 0.125	7	7		0.12	0.056	0.12	0.0063	0.011	0.012
Dibenz(a,h)anthracene	µg/g	0.005 - 0.125	0.1	0.1		0.022	0.011	0.022	<0.0050	<0.0050	<0.0050
Fluoranthene	µg/g	0.005 - 0.5	0.69	0.69		0.28	0.12	0.28	0.0054	0.018	0.016
Fluorene	µg/g	0.005 - 0.125	62	62		0.013	<0.0050	0.013	<0.0050	<0.0050	<0.0050
Indeno(1,2,3-cd)pyrene	µg/g	0.005 - 0.125	0.38	0.38		0.1	0.059	0.1	<0.0050	0.0051	0.0056
1-Methylnaphthalene	µg/g	0.005 - 0.075	0.99	0.99		0.0094	<0.0050	<0.0050	<0.0050	0.0094	0.0068
2-Methylnaphthalene	µg/g	0.005 - 0.075	0.99	0.99		0.0096	<0.0050	<0.0050	<0.0050	0.0096	0.0073
1+2-Methylnaphthalene	µg/g	0.0071 - 0.106	0.99	0.99		0.019	<0.0071	<0.0071	<0.0071	0.019	0.014
Naphthalene	µg/g	0.005 - 0.32	0.6	0.6	<	0.005	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Phenanthrene	µg/g	0.005 - 0.46	6.2	6.2		0.12	0.042	0.12	<0.0050	0.023	0.014
Pyrene	µg/g	0.005 - 0.5	78	78		0.23	0.1	0.23	0.0054	0.018	0.016

Notes:

2011 Site Condition Standards (SCS) - As identified in 'Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act' (as amended April 15, 2011)

2020 Excess Soil Quality Standards (ESQS) - As identified in Appendix 1 of the Rules for Soil Management adopted by reference in O.Reg. 406/19 made under the Environmental Protection Act (December 8, 2020)

Bold	- Exceeds 2011 Table 3 SCS
Bold	- Exceeds 2011 Table 7 SCS

- "-" - parameter not analyzed
- RDL - Reported detection limit
- NR - Not Relevant
- NV- No Value
- NA - Not Applicable
- "<" - Less than the Reporting Detection Limit

Table 5: Petroleum Hydrocarbons (PHCs) Analysis in Soil

Parameters	Unit	RDL	2011 Table 3 SCS (R/P/I, Coarse)	2011 Table 7 SCS (R/P/I, Coarse)	Sample Location								
					Sample Name	BH102-21	BH103-21	BH105-21	BH106-21	BH110-21	BH112-21	BH114-21	
					Lab Job #	C1L5821	C1L5821	C1L5821	C1L5821	C1L5821	C1L5821	C1L5821	
					Laboratory ID	QGJ341	QGJ343	QGJ347	QGJ349	QGJ359	QGJ363	QGJ367	
					Sampling Date	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	
					Sample Depth (m bgs)	0.0-0.6	0.0-0.6	0.0-0.6	0.0-0.6	0.0-0.6	0.0-0.6	0.0-0.6	
					Maximum Concentration								
Petroleum Hydrocarbons (PHCs)													
F1 (C6 to C10)	µg/g	5 - 10	55	55	<	10	<10	<10	<10	<10	<10	<10	<10
F1 (C6 to C10) minus BTEX	µg/g	5 - 10	55	55	<	10	<10	<10	<10	<10	<10	<10	<10
F2 (C10 to C16)	µg/g	10 - 50	98	98		15	<10	<10	15	10	<10	<10	<10
F3 (C16 to C34)	µg/g	50 - 250	300	300		60	<50	<50	60	<50	<50	<50	<50
F4 (C34 to C50)	µg/g	50 - 250	2800	2800	<	50	<50	<50	<50	<50	<50	<50	<50
Reached Baseline at C50	unitless		NR	NR		NA	YES	YES	YES	YES	YES	YES	YES

Notes:

2011 Site Condition Standards (SCS) - As identified in 'Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act' (as amended April 15, 2011)

2020 Excess Soil Quality Standards (ESQS) - As identified in Appendix 1 of the Rules for Soil Management adopted by reference in O.Reg. 406/19 made under the Environmental Protection Act (December 8, 2020)

Bold	- Exceeds 2011 Table 3 SCS
Bold	- Exceeds 2011 Table 7 SCS

"-" - parameter not analyzed

RDL - Reported detection limit

NR - Not Relevant

NV- No Value

NA - Not Applicable

"<" - Less than the Reporting Detection Limit

Table 6: Benzene, Ethylbenzene, Toluene and Xylene (BTEX) Analysis in Soil

Parameters	Unit	RDL	2011 Table 3 SCS (R/P/I, Coarse)	2011 Table 7 SCS (R/P/I, Coarse)	Sample Location								
					Sample Name	BH102-21	BH103-21	BH105-21	BH106-21	BH110-21	BH112-21	BH114-21	
					Lab Job #	C1L5821	C1L5821	C1L5821	C1L5821	C1L5821	C1L5821	C1L5821	
					Laboratory ID	QGJ341	QGJ343	QGJ347	QGJ349	QGJ359	QGJ363	QGJ367	
					Sampling Date	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	30-Jul-2021	
					Sample Depth (m bgs)	0.0-0.6	0.0-0.6	0.0-0.6	0.0-0.6	0.0-0.6	0.0-0.6	0.0-0.6	
					Maximum Concentration								
Benzene, Toluene, Ethylbenzene, Xylene (BTEX)													
Benzene	µg/g	0.0068 - 0.02	0.21	0.21	<	0.02	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Ethylbenzene	µg/g	0.018 - 0.02	2	2	<	0.02	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Toluene	µg/g	0.02 - 0.08	2.3	2.3	<	0.02	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
o-Xylene	µg/g	0.02	NR	NR	<	0.02	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
m+p-Xylene	µg/g	0.03 - 0.04	NR	NR	<	0.04	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Xylene Mixture	µg/g	0.04 - 0.05	3.1	3.1	<	0.04	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040

Notes:

2011 Site Condition Standards (SCS) - As identified in 'Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act' (as amended April 15, 2011)
 2020 Excess Soil Quality Standards (ESQS) - As identified in Appendix 1 of the Rules for Soil Management adopted by reference in O.Reg. 406/19 made under the Environmental Protection Act (December 8, 2020)

Bold	- Exceeds 2011 Table 3 SCS
Bold	- Exceeds 2011 Table 7 SCS

- "-" - parameter not analyzed
- RDL - Reported detection limit
- NR - Not Relevant
- NV- No Value
- NA - Not Applicable
- "<" - Less than the Reporting Detection Limit

Table 7: Metals and Hydride-Forming Metals Analysis in Groundwater

Parameters	Unit	RDL	2011 Table 3 SCS (R/P/I, Coarse)	2011 Table 7 SCS (R/P/I, Coarse)	Sample Location					
					Sample Name	MWA	MWB	MWC	MWC	
					Lab Job #	C1L8758	C1L8758	C1L8758	C1L8758	
					Laboratory ID	QHA613	QHA615	QHA616	QHA616	
					Sampling Date	03-Aug-2021	03-Aug-2021	03-Aug-2021	03-Aug-2021	
					Well Screen Interval (m bgs)	3.0-6.1	3.0-6.0	1.5-4.6	1.5-4.6	
					Maximum Concentration				Laboratory Duplicate	
Metals and Hydride-Forming Metals										
Antimony	µg/L	0.5	20000	16000	<	0.5	<0.50	<0.50	<0.50	<0.50
Arsenic	µg/L	1	1900	1500		2.5	2.5	1.7	1.7	1.4
Barium	µg/L	2	29000	23000		150	32	72	150	150
Beryllium	µg/L	0.4	67	53	<	0.4	<0.40	<0.40	<0.40	<0.40
Boron	µg/L	10	45000	36000		960	960	220	380	380
Cadmium	µg/L	0.09	2.7	2.1	<	0.09	<0.090	<0.090	<0.090	<0.090
Chromium	µg/L	5	810	640	<	5	<5.0	<5.0	<5.0	<5.0
Cobalt	µg/L	0.5	66	52		0.83	<0.50	<0.50	0.83	0.8
Copper	µg/L	0.9	87	69		3.1	<0.90	3.1	<0.90	<0.90
Lead	µg/L	0.5	25	20	<	0.5	<0.50	<0.50	<0.50	<0.50
Molybdenum	µg/L	0.5	9200	7300		4.4	4.4	3.7	1.5	1.5
Nickel	µg/L	1	490	390		1.5	<1.0	<1.0	1.5	1.5
Selenium	µg/L	2	63	50	<	2	<2.0	<2.0	<2.0	<2.0
Silver	µg/L	0.09	1.5	1.2		0.16	0.16	<0.090	<0.090	<0.090
Thallium	µg/L	0.05	510	400	<	0.05	<0.050	<0.050	<0.050	<0.050
Uranium	µg/L	0.1	420	330		5.4	1.9	4.4	5.4	5.4
Vanadium	µg/L	0.5	250	200		0.67	<0.50	0.67	<0.50	<0.50
Zinc	µg/L	5	1100	890	<	5	<5.0	<5.0	<5.0	<5.0

Notes:

2011 Site Condition Standards (SCS) - As identified in 'Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act' (as amended April 15, 2011)

2020 Excess Soil Quality Standards (ESQS) - As identified in Appendix 1 of the Rules for Soil Management adopted by reference in O.Reg. 406/19 made under the Environmental Protection Act (December 8, 2020)

Bold	- Exceeds 2011 Table 3 SCS
Bold	- Exceeds 2011 Table 7 SCS

- "-" - parameter not analyzed
- RDL - Reported detection limit
- NR - Not Relevant
- NV- No Value
- NA - Not Applicable
- "<" - Less than the Reporting Detection Limit

Table 8: Petroleum Hydrocarbons (PHCs) Analysis in Groundwater

Parameters	Unit	RDL	2011 Table 3 SCS (R/P/I, Coarse)	2011 Table 7 SCS (R/P/I, Coarse)	Sample Location				
					Sample Name	MWA	MWB	MWC	
					Lab Job #	C1L8758	C1L8758	C1L8758	
					Laboratory ID	QHA613	QHA615	QHA616	
					Sampling Date	03-Aug-2021	03-Aug-2021	03-Aug-2021	
					Well Screen Interval (m bgs)	3.0-6.1	3.0-6.0	1.5-4.6	
					Maximum Concentration				
Petroleum Hydrocarbons (PHCs)									
F1 (C6 to C10)	µg/L	25	750	420		39	<25	39	<25
F1 (C6 to C10) minus BTEX	µg/L	25	750	420		39	<25	39	<25
F2 (C10 to C16)	µg/L	100	150	150	<	100	<100	<100	<100
F3 (C16 to C34)	µg/L	200	500	500	<	200	<200	<200	<200
F4 (C34 to C50)	µg/L	200	500	500	<	200	<200	<200	<200
Reached Baseline at C50	unitless		NR	NR		NA	YES	YES	YES

Notes:

2011 Site Condition Standards (SCS) - As identified in 'Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act' (as amended April 15, 2011)
 2020 Excess Soil Quality Standards (ESQS) - As identified in Appendix 1 of the Rules for Soil Management adopted by reference in O.Reg. 406/19 made under the Environmental Protection Act

Bold	- Exceeds 2011 Table 3 SCS
Bold	- Exceeds 2011 Table 7 SCS

- "-" - parameter not analyzed
- RDL - Reported detection limit
- NR - Not Relevant
- NV- No Value
- NA - Not Applicable
- "<" - Less than the Reporting Detection Limit

Table 9: Volatile Organic Compounds (VOCs) Analysis in Groundwater

Parameters	Unit	RDL	2011 Table 3 SCS (R/P/I, Coarse)	2011 Table 7 SCS (R/P/I, Coarse)	Sample Location						
					Sample Name	MWA	MWA	MWB	MWC	TRIP BLANK	
					Lab Job #	C1L8758	C1L8758	C1L8758	C1L8758	C1L8758	
					Laboratory ID	QHA613	QHA614	QHA615	QHA616	QHA617	
					Sampling Date	03-Aug-2021	03-Aug-2021	03-Aug-2021	03-Aug-2021		
					Well Screen Interval (m bgs)	3.0-6.1	3.0-6.1	3.0-6.0	1.5-4.6		
					Maximum Concentration		Field Duplicate			Trip Blank	
Volatile Organic Compounds (VOCs)											
Acetone	µg/L	10	130000	100000	<	10	<10	<10	<10	<10	<10
Benzene	µg/L	0.2	44	0.5	<	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
Bromodichloromethane	µg/L	0.5	85000	67000	<	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Bromoform	µg/L	1	380	5	<	1	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	µg/L	0.5	5.6	0.89	<	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	µg/L	0.19 - 0.2	0.79	0.2	<	0.2	<0.20	<0.19	<0.20	<0.20	<0.19
Chlorobenzene	µg/L	0.2	630	140	<	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	µg/L	0.2	2.4	2	<	0.22	<0.20	<0.20	0.22	<0.20	<0.20
Dibromochloromethane	µg/L	0.5	82000	65000	<	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	µg/L	0.4 - 0.5	4600	150	<	0.5	<0.50	<0.40	<0.50	<0.50	<0.40
1,3-Dichlorobenzene	µg/L	0.4 - 0.5	9600	7600	<	0.5	<0.50	<0.40	<0.50	<0.50	<0.40
1,4-Dichlorobenzene	µg/L	0.4 - 0.5	8	0.5	<	0.5	<0.50	<0.40	<0.50	<0.50	<0.40
Dichlorodifluoromethane	µg/L	1	4400	3500	<	1	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	µg/L	0.2	320	11	<	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	0.49 - 0.5	1.6	0.5	<	0.5	<0.50	<0.49	<0.50	<0.50	<0.49
1,1-Dichloroethylene	µg/L	0.2	1.6	0.5	<	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
Ethylbenzene	µg/L	0.2	2300	54	<	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
cis-1,2-Dichloroethylene	µg/L	0.5	1.6	1.6	<	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,2-Dichloroethylene	µg/L	0.5	1.6	1.6	<	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloropropane	µg/L	0.2	16	0.58	<	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
cis-1,3-Dichloropropene	µg/L	0.3	NR	NR	<	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
trans-1,3-Dichloropropene	µg/L	0.4	NR	NR	<	0.4	<0.40	<0.40	<0.40	<0.40	<0.40
1,3-Dichloropropene	µg/L	0.5	5.2	0.5	<	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylene Dibromide	µg/L	0.19 - 0.2	0.25	0.2	<	0.2	<0.20	<0.19	<0.20	<0.20	<0.19
Hexane (n)	µg/L	1	51	5	<	1	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl Ethyl Ketone	µg/L	10	470000	21000	<	10	<10	<10	<10	<10	<10
Methyl Isobutyl Ketone	µg/L	5	140000	5200	<	5	<5.0	<5.0	<5.0	<5.0	<5.0
Methyl Tert-Butyl Ether	µg/L	0.5	190	15	<	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene Chloride	µg/L	2	610	26	<	2	<2.0	<2.0	<2.0	<2.0	<2.0
Styrene	µg/L	0.4 - 0.5	1300	43	<	0.5	<0.50	<0.40	<0.50	<0.50	<0.40
1,1,1,2-Tetrachloroethane	µg/L	0.5	3.3	1.1	<	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	µg/L	0.4 - 0.5	3.2	0.5	<	0.5	<0.50	<0.40	<0.50	<0.50	<0.40
Tetrachloroethylene	µg/L	0.2	1.6	0.5	<	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
Toluene	µg/L	0.2	18000	320	<	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	0.2	640	23	<	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane	µg/L	0.4 - 0.5	4.7	0.5	<	0.5	<0.50	<0.40	<0.50	<0.50	<0.40
Trichloroethylene	µg/L	0.2	1.6	0.5	<	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L	0.5	2500	2000	<	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Vinyl Chloride	µg/L	0.2	0.5	0.5	<	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	µg/L	0.2	NR	NR	<	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
m+p-Xylene	µg/L	0.2	NR	NR	<	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
Xylene Mixture	µg/L	0.2	4200	72	<	0.2	<0.20	<0.20	<0.20	<0.20	<0.20

Notes:

2011 Site Condition Standards (SCS) - As identified in 'Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act' (as amended April 15, 2011)
 2020 Excess Soil Quality Standards (ESQS) - As identified in Appendix 1 of the Rules for Soil Management adopted by reference in O.Reg. 406/19 made under the Environmental Protection Act (December 8, 2020)

Bold - Exceeds 2011 Table 3 SCS
Bold - Exceeds 2011 Table 7 SCS

"-" - parameter not analyzed
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 NR - Not Relevant
 NV- No Value
 NA - Not Applicable
 "<" - Less than the Reporting Detection Limit

Appendix A

Site Photographs



Photograph No. 1 – Southwest facing view of the Site from the sidewalk along Nautical Boulevard. Including the berm along the western boundary.



Photograph No. 2 – Northeast facing view of the Site, including monitoring well MWC.



Photograph No. 3 – View of the advancement of borehole BH102-21 within the western soil berm.



Photograph No. 4 – View of the fill material at borehole BH102-21.



Photograph No. 5 – View of the general soil stratigraphy observed on the Site, including a clayey silt fill over a native clayey silt.



Photograph No. 6– View of the concrete debris in the southern portion of the Site and the location of borehole BH105-21.

Appendix B

Borehole Logs

ID No.: BH101-21

Project Name: Phase II ESA

MTE File No.: 49485-200

Client: Halton District School Board

Site Location: 193 Nautical Boulevard, Oakville, ON

Date Completed: 7/30/2021

Drilling Contractor: Tri-Phase Group

Drill Rig: Geoprobe 7822DT

Drill Method: Split Spoon

Protective Cover: N/A

Subsurface Profile			Sample					Well Completion Details	
Depth	Symbol	Soil Description	Elevation (masl) Depth (m)	Number	Type	Recovery (%)	Soil Sample Lab Analysis		
0		Ground Surface	99.7						
0		TOPSOIL	0.0						
		FILL Brown, clayey silt, trace gravel, rootlets, moist		1	SS	40		0	0
2									
4			98.5	2	SS	70			
		CLAYEY SILT TILL Red, trace shale, moist	1.2						
6				3	SS	100		0	0
8			97.3	4	SS	100			
		Drilling Terminated	2.4						
10									
12									

Field Technician: ZXT

Drafted by: ZXT

Reviewed by: KCL



Refusal at 2.4m bgs

ID No.: BH102-21

Project Name: Phase II ESA

MTE File No.: 49485-200

Client: Halton District School Board

Site Location: 193 Nautical Boulevard, Oakville, ON

Date Completed: 7/30/2021

Drilling Contractor: Tri-Phase Group

Drill Rig: Geoprobe 7822DT

Drill Method: Split Spoon

Protective Cover: N/A

Subsurface Profile			Sample					Well Completion Details		
Depth	Symbol	Soil Description	Elevation (masl) Depth (m)	Number	Type	Recovery (%)	Soil Sample Lab Analysis		PID (ppm)	Hydrocarbon (ppm)
0		Ground Surface	100.6							
0		TOPSOIL	0.0							
0		FILL Brown, clayey silt, trace gravel, rootlets, trace glass, moist		1	SS	40	Metals, As, Sb, Se, pH, PAHs, PHCs, BTEX	0	40	
2										
4		CLAYEY SILT TILL Red, trace shale, moist	99.4 1.2	2	SS	50				
6				3	SS	10	pH	0	25	
8				4	SS	0				
10		Drilling Terminated	97.8 2.7							
12										

Field Technician: ZXT

Drafted by: ZXT

Reviewed by: KCL



Refusal at 2.7m bgs

ID No.: BH103-21

Project Name: Phase II ESA

MTE File No.: 49485-200

Client: Halton District School Board

Site Location: 193 Nautical Boulevard, Oakville, ON

Date Completed: 7/30/2021

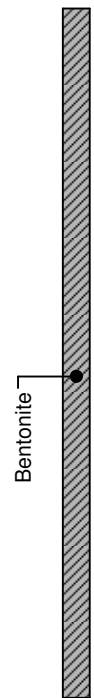
Drilling Contractor: Tri-Phase Group

Drill Rig: Geoprobe 7822DT

Drill Method: Split Spoon

Protective Cover: N/A

Subsurface Profile			Sample					Well Completion Details	
Depth	Symbol	Soil Description	Elevation (masl) Depth (m)	Number	Type	Recovery (%)	Soil Sample Lab Analysis		PID (ppm)
0		Ground Surface	100.0						
0		TOPSOIL	0.0						
		FILL Brown, clayey silt, trace gravel, rootlets, moist		1	SS	70	Metals, As, Sb, Se, PAHs, PHCs, BTEX	0	35
2									
4		CLAYEY SILT TILL Red, trace shale, trace organics, moist	98.8 1.2	2	SS	30			
6									
2				3	SS	60		0	20
8		Drilling Terminated	97.7 2.3						
10									
12									



Field Technician: ZXT

Drafted by: ZXT

Reviewed by: KCL



Refusal at 2.3m bgs

ID No.: BH104-21

Project Name: Phase II ESA

MTE File No.: 49485-200

Client: Halton District School Board

Site Location: 193 Nautical Boulevard, Oakville, ON

Date Completed: 7/30/2021

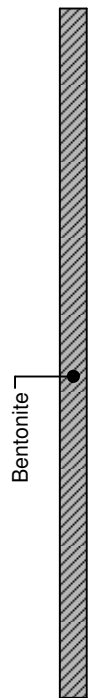
Drilling Contractor: Tri-Phase Group

Drill Rig: Geoprobe 7822DT

Drill Method: Direct Push

Protective Cover: N/A

Subsurface Profile			Sample					Well Completion Details	
Depth	Symbol	Soil Description	Elevation (masl) Depth (m)	Number	Type	Recovery (%)	Soil Sample Lab Analysis		PID (ppm)
0		Ground Surface	98.8						
0		TOPSOIL	0.0						
		FILL Brown, clayey silt, trace gravel, rootlets, moist					Metals, As, Sb, Se	0	25
2				1	DP	70			
4		CLAYEY SILT TILL Red, trace shale, trace gravel, moist	97.6						
			1.2					0	10
6				2	DP	100			
8		Drilling Terminated	96.6						
			2.3						



Field Technician: ZXT

Drafted by: ZXT

Reviewed by: KCL



Refusal at 2.3m bgs

ID No.: BH105-21

Project Name: Phase II ESA

MTE File No.: 49485-200

Client: Halton District School Board

Site Location: 193 Nautical Boulevard, Oakville, ON

Date Completed: 7/30/2021

Drilling Contractor: Tri-Phase Group

Drill Rig: Geoprobe 7822DT

Drill Method: Direct Push

Protective Cover: N/A

Subsurface Profile			Sample					Well Completion Details		
Depth	Symbol	Soil Description	Elevation (masl) Depth (m)	Number	Type	Recovery (%)	Soil Sample Lab Analysis		PID (ppm)	Hydrocarbon (ppm)
0		Ground Surface	98.2							
0		TOPSOIL	0.0							
0		FILL Brown, grey mottling, clayey silt, trace gravel, rootlets, moist		1	DP	80	Metals, As, Sb, Se, PAHs, PHCs, BTEX	0	25	
2										
2		CLAYEY SILT TILL Red, trace shale, trace gravel, moist	96.0	2	DP	50		0	15	
2			2.1							
8										
10		Drilling Terminated	95.3							
10			2.9							
12										

Field Technician: ZXT

Drafted by: ZXT

Reviewed by: KCL



Refusal at 2.9m bgs

ID No.: BH106-21

Project Name: Phase II ESA

MTE File No.: 49485-200

Client: Halton District School Board

Site Location: 193 Nautical Boulevard, Oakville, ON

Date Completed: 7/30/2021

Drilling Contractor: Tri-Phase Group

Drill Rig: Geoprobe 7822DT

Drill Method: Direct Push

Protective Cover: N/A

Subsurface Profile			Sample					Well Completion Details		
Depth	Symbol	Soil Description	Elevation (masl) Depth (m)	Number	Type	Recovery (%)	Soil Sample Lab Analysis		PID (ppm)	Hydrocarbon (ppm)
0		Ground Surface	98.7							
0		TOPSOIL	0.0							
0		FILL Brown, grey mottling, clayey silt, trace gravel, rootlets, moist					Metals, PHCs, BTEX	0	35	
2		CLAYEY SILT TILL Red, trace shale, trace gravel, moist	98.0	1	DP	90				
2			0.6							
6				2	DP	70		0	15	
8		Drilling Terminated	96.2							
2.4			2.4							

Field Technician: ZXT

Drafted by: ZXT

Reviewed by: KCL



Refusal at 2.4m bgs

ID No.: BH107-21

Project Name: Phase II ESA

MTE File No.: 49485-200

Client: Halton District School Board

Site Location: 193 Nautical Boulevard, Oakville, ON

Date Completed: 7/30/2021

Drilling Contractor: Tri-Phase Group

Drill Rig: Geoprobe 7822DT

Drill Method: Direct Push

Protective Cover: N/A

Subsurface Profile			Sample					Well Completion Details	
Depth	Symbol	Soil Description	Elevation (masl) Depth (m)	Number	Type	Recovery (%)	Soil Sample Lab Analysis		PID (ppm)
0		Ground Surface	99.0						
0		TOPSOIL	0.0						
		FILL Brown, grey and red mottling, clayey silt, trace gravel, rootlets, moist					Metals, As, Sb, Se	0	15
2				1	DP	80			
4		CLAYEY SILT TILL Red, brown and grey mottling, moist	97.8						
			1.2						
6								0	0
2									
8				2	DP	90			
10		Drilling Terminated	95.9						
			3.0						
12									

Field Technician: ZXT

Drafted by: ZXT

Reviewed by: KCL



Refusal at 3.0m bgs

ID No.: BH108-21

Project Name: Phase II ESA

MTE File No.: 49485-200

Client: Halton District School Board

Site Location: 193 Nautical Boulevard, Oakville, ON

Date Completed: 7/30/2021

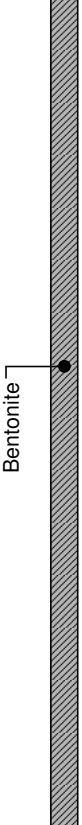
Drilling Contractor: Tri-Phase Group

Drill Rig: Geoprobe 7822DT

Drill Method: Direct Push

Protective Cover: N/A

Subsurface Profile			Sample					Well Completion Details	
Depth	Symbol	Soil Description	Elevation (masl) Depth (m)	Number	Type	Recovery (%)	Soil Sample Lab Analysis		
0		Ground Surface	99.2 0.0						
0		TOPSOIL							
0		FILL Brown, grey mottling, clayey silt, trace sand and gravel, rootlets, moist						0	0
2		Brown sand	98.5 0.6	1	DP	70			
4		CLAYEY SILT TILL Red, trace shale, trace organics, moist	97.8 1.4						
6				2	DP	100		0	0
10		Drilling Terminated	96.4 2.7						



Field Technician: ZXT

Drafted by: ZXT

Reviewed by: KCL



Refusal at 2.7m bgs

ID No.: BH109-21

Project Name: Phase II ESA

MTE File No.: 49485-200

Client: Halton District School Board

Site Location: 193 Nautical Boulevard, Oakville, ON

Date Completed: 7/30/2021

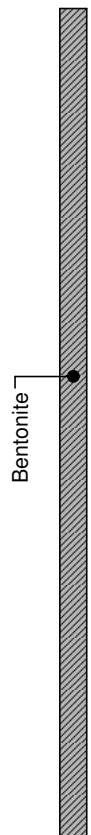
Drilling Contractor: Tri-Phase Group

Drill Rig: Geoprobe 7822DT

Drill Method: Direct Push

Protective Cover: N/A

Subsurface Profile			Sample					Well Completion Details	
Depth	Symbol	Soil Description	Elevation (masl) Depth (m)	Number	Type	Recovery (%)	Soil Sample Lab Analysis		PID (ppm)
0		Ground Surface	98.9						
0		TOPSOIL	0.0						
		FILL Brown, grey mottling, clayey silt, trace sand and gravel, rootlets, moist					Metals, As, Sb, Se, PAHs	0	0
2				1	DP	90			
4		CLAYEY SILT TILL Red, trace shale, trace organics, moist	97.7						
			1.2						
6				2	DP	70		0	0
2									
8									
10		Drilling Terminated	96.2						
			2.7						
12									



Field Technician: ZXT

Drafted by: ZXT

Reviewed by: KCL



Refusal at 2.7m bgs

ID No.: BH110-21

Project Name: Phase II ESA

MTE File No.: 49485-200

Client: Halton District School Board

Site Location: 193 Nautical Boulevard, Oakville, ON

Date Completed: 7/30/2021

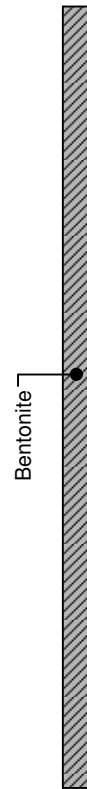
Drilling Contractor: Tri-Phase Group

Drill Rig: Geoprobe 7822DT

Drill Method: Direct Push

Protective Cover: N/A

Subsurface Profile			Sample					Well Completion Details	
Depth	Symbol	Soil Description	Elevation (masl) Depth (m)	Number	Type	Recovery (%)	Soil Sample Lab Analysis		PID (ppm)
0		Ground Surface	99.6						
0		TOPSOIL	0.0						
		FILL Brown, grey mottling, clayey silt, trace sand and gravel, trace organics, moist		1	DP	80	pH, PAHs, PHCs, BTEX	0	30
4		CLAYEY SILT TILL Red, trace gravel, trace shale, trace organics, moist	98.5						
1.1			1.1	2	DP	80	pH	0	10
2.6		Drilling Terminated	97.0						
2.6			2.6						



Field Technician: ZXT

Drafted by: ZXT

Reviewed by: KCL



Refusal at 2.6m bgs

ID No.: BH111-21

Project Name: Phase II ESA

MTE File No.: 49485-200

Client: Halton District School Board

Site Location: 193 Nautical Boulevard, Oakville, ON

Date Completed: 7/30/2021

Drilling Contractor: Tri-Phase Group

Drill Rig: Geoprobe 7822DT

Drill Method: Direct Push

Protective Cover: N/A

Subsurface Profile			Sample					Well Completion Details		
Depth	Symbol	Soil Description	Elevation (masl) Depth (m)	Number	Type	Recovery (%)	Soil Sample Lab Analysis		PID (ppm)	Hydrocarbon (ppm)
0		Ground Surface	99.9							
0		TOPSOIL	0.0							
0		FILL Brown, grey mottling, clayey silt, trace sand and gravel, trace organics, moist					Metals, As, Sb, Se	0	15	
2				1	DP	70				
4		CLAYEY SILT TILL Red, trace gravel, trace shale, trace organics, moist	98.8							
4			1.1					0	15	
6				2	DP	5				
8		Drilling Terminated	97.5							
8			2.4							
10										
12										

Field Technician: ZXT

Drafted by: ZXT

Reviewed by: KCL



Refusal at 2.4m bgs

ID No.: BH112-21

Project Name: Phase II ESA

MTE File No.: 49485-200

Client: Halton District School Board

Site Location: 193 Nautical Boulevard, Oakville, ON

Date Completed: 7/30/2021

Drilling Contractor: Tri-Phase Group

Drill Rig: Geoprobe 7822DT

Drill Method: Direct Push

Protective Cover: N/A

Subsurface Profile			Sample					Well Completion Details	
Depth	Symbol	Soil Description	Elevation (masl) Depth (m)	Number	Type	Recovery (%)	Soil Sample Lab Analysis		PID (ppm)
0		Ground Surface	100.0						
0		TOPSOIL	0.0						
		FILL Brown, grey and red mottling, clayey silt, trace sand and gravel, trace rootlets, moist		1	DP	70	Metals, As, Sb, Se, PHCs, BTEX	0	0
2									
4		CLAYEY SILT TILL Red, trace sand and gravel, trace shale, trace organics, moist	98.9						
			1.1						
6								0	0
2				2	DP	60			
8									
		Drilling Terminated	97.2						
			2.7						
10									
12									



Field Technician: ZXT

Drafted by: ZXT

Reviewed by: KCL



Refusal at 2.7m bgs

ID No.: BH113-21

Project Name: Phase II ESA

MTE File No.: 49485-200

Client: Halton District School Board

Site Location: 193 Nautical Boulevard, Oakville, ON

Date Completed: 7/30/2021

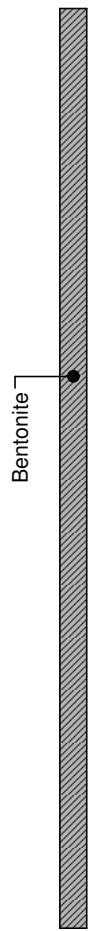
Drilling Contractor: Tri-Phase Group

Drill Rig: Geoprobe 7822DT

Drill Method: Direct Push

Protective Cover: N/A

Subsurface Profile			Sample					Well Completion Details	
Depth	Symbol	Soil Description	Elevation (masl) Depth (m)	Number	Type	Recovery (%)	Soil Sample Lab Analysis		
0		Ground Surface	100.1						
0		TOPSOIL	0.0						
		FILL Brown, grey and red mottling, clayey silt, trace sand and gravel, trace rootlets, moist						0	0
2		CLAYEY SILT TILL Red, trace sand and gravel, trace shale, trace organics, moist	99.4	1	DP	40			
6								0	0
8				2	DP	20			
10		Drilling Terminated	97.0						
			3.0						



Field Technician: ZXT

Drafted by: ZXT

Reviewed by: KCL



Refusal at 3.0m bgs

ID No.: BH114-21

Project Name: Phase II ESA

MTE File No.: 49485-200

Client: Halton District School Board

Site Location: 193 Nautical Boulevard, Oakville, ON

Date Completed: 7/30/2021

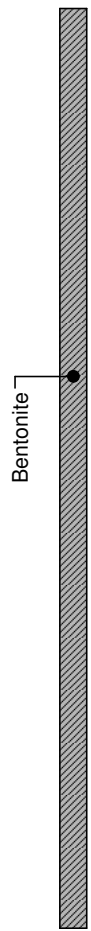
Drilling Contractor: Tri-Phase Group

Drill Rig: Geoprobe 7822DT

Drill Method: Direct Push

Protective Cover: N/A

Subsurface Profile			Sample					Well Completion Details	
Depth	Symbol	Soil Description	Elevation (masl) Depth (m)	Number	Type	Recovery (%)	Soil Sample Lab Analysis		
0		Ground Surface	99.9						
0		TOPSOIL	0.0						
		FILL Brown, grey and red mottling, clayey silt, trace sand and gravel, trace rootlets, moist					Metals, As, Sb, Se, PHCs, BTEX	0	0
2		CLAYEY SILT TILL Red, trace sand and gravel, trace shale, trace organics, moist	99.3	1	DP	90			
4			0.6						
6				2	DP	70		0	0
8		Drilling Terminated	97.4						
2.4			2.4						



Field Technician: ZXT

Drafted by: ZXT

Reviewed by: KCL



Refusal at 2.4m bgs

Appendix C

Laboratory Certificates of Analysis



Your Project #: 49485-200

Attention: Monique Gyba

MTE Consultants Inc
520 Bingham Centre Dr
Kitchener, ON
CANADA N2B 3X9

Your C.O.C. #: 837380-05-01, 837380-06-01, 837380-07-01, 837380-08-01

Report Date: 2021/08/19
Report #: R6772407
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C1L5821

Received: 2021/07/30, 17:51

Sample Matrix: Soil
Samples Received: 14

Analyses	Date		Laboratory Method	Analytical Method
	Quantity Extracted	Date Analyzed		
Methylnaphthalene Sum	5	N/A	2021/08/09 CAM SOP-00301	EPA 8270D m
Petroleum Hydro. CCME F1 & BTEX in Soil (1)	7	N/A	2021/08/08 CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Soil (2)	7	2021/08/06	2021/08/07 CAM SOP-00316	CCME CWS m
Acid Extractable Metals by ICPMS	11	2021/08/06	2021/08/10 CAM SOP-00447	EPA 6020B m
Moisture	8	N/A	2021/08/04 CAM SOP-00445	Carter 2nd ed 51.2 m
PAH Compounds in Soil by GC/MS (SIM)	5	2021/08/06	2021/08/07 CAM SOP-00318	EPA 8270D m
pH CaCl2 EXTRACT	4	2021/08/18	2021/08/18 CAM SOP-00413	EPA 9045 D m

Remarks:
Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

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

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

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested. This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.



Your Project #: 49485-200

Attention: Monique Gyba

MTE Consultants Inc
520 Bingham Centre Dr
Kitchener, ON
CANADA N2B 3X9

Your C.O.C. #: 837380-05-01, 837380-06-01, 837380-07-01, 837380-08-01

Report Date: 2021/08/19
Report #: R6772407
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BV LABS JOB #: C1L5821

Received: 2021/07/30, 17:51

- (1) No lab extraction date is given for F1BTEX & VOC samples that are field preserved with methanol. Extraction date is the date sampled unless otherwise stated.
- (2) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key

Ronklin Gracian
Project Manager
19 Aug 2021 17:23:53

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Ronklin Gracian, Project Manager
Email: Ronklin.Gracian@bureauveritas.com
Phone# (905)817-5752

=====
BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



BUREAU
VERITAS

BV Labs Job #: C1L5821
Report Date: 2021/08/19

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

O.REG 153 METALS GROUP 1.2.2 (SOIL)

BV Labs ID		QGJ349		
Sampling Date		2021/07/30 12:25		
COC Number		837380-06-01		
	UNITS	BH106-21 0-2'	RDL	QC Batch
Metals				
Acid Extractable Barium (Ba)	ug/g	79	0.50	7504747
Acid Extractable Beryllium (Be)	ug/g	0.64	0.20	7504747
Acid Extractable Boron (B)	ug/g	10	5.0	7504747
Acid Extractable Cadmium (Cd)	ug/g	<0.10	0.10	7504747
Acid Extractable Chromium (Cr)	ug/g	25	1.0	7504747
Acid Extractable Cobalt (Co)	ug/g	12	0.10	7504747
Acid Extractable Copper (Cu)	ug/g	24	0.50	7504747
Acid Extractable Lead (Pb)	ug/g	9.6	1.0	7504747
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	0.50	7504747
Acid Extractable Nickel (Ni)	ug/g	25	0.50	7504747
Acid Extractable Silver (Ag)	ug/g	<0.20	0.20	7504747
Acid Extractable Thallium (Tl)	ug/g	0.13	0.050	7504747
Acid Extractable Uranium (U)	ug/g	0.61	0.050	7504747
Acid Extractable Vanadium (V)	ug/g	31	5.0	7504747
Acid Extractable Zinc (Zn)	ug/g	56	5.0	7504747
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



BUREAU
VERITAS

BV Labs Job #: C1L5821
Report Date: 2021/08/19

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

O.REG 153 METALS GROUPS 1.2.2 & 1.2.3 (SOIL)

BV Labs ID		QGJ341	QGJ343	QGJ345	QGJ347	QGJ351		
Sampling Date		2021/07/30 10:10	2021/07/30 10:40	2021/07/30 11:30	2021/07/30 12:15	2021/07/30 13:40		
COC Number		837380-05-01	837380-05-01	837380-05-01	837380-05-01	837380-06-01		
	UNITS	BH102-21 0-2'	BH103-21 0-2'	BH104-21 0-2'	BH105-21 0-2'	BH107-21 0-2'	RDL	QC Batch
Metals								
Acid Extractable Antimony (Sb)	ug/g	0.33	0.22	0.22	<0.20	0.21	0.20	7504747
Acid Extractable Arsenic (As)	ug/g	4.6	4.9	4.0	3.4	3.5	1.0	7504747
Acid Extractable Barium (Ba)	ug/g	97	110	61	52	70	0.50	7504747
Acid Extractable Beryllium (Be)	ug/g	0.67	0.73	0.69	0.47	0.67	0.20	7504747
Acid Extractable Boron (B)	ug/g	10	11	12	7.4	12	5.0	7504747
Acid Extractable Cadmium (Cd)	ug/g	0.41	0.15	<0.10	<0.10	<0.10	0.10	7504747
Acid Extractable Chromium (Cr)	ug/g	22	20	22	16	21	1.0	7504747
Acid Extractable Cobalt (Co)	ug/g	10	11	12	8.9	12	0.10	7504747
Acid Extractable Copper (Cu)	ug/g	35	19	23	21	17	0.50	7504747
Acid Extractable Lead (Pb)	ug/g	27	15	11	9.2	9.5	1.0	7504747
Acid Extractable Molybdenum (Mo)	ug/g	1.0	1.0	<0.50	0.55	1.0	0.50	7504747
Acid Extractable Nickel (Ni)	ug/g	21	23	24	17	25	0.50	7504747
Acid Extractable Selenium (Se)	ug/g	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	7504747
Acid Extractable Silver (Ag)	ug/g	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	7504747
Acid Extractable Thallium (Tl)	ug/g	0.11	0.11	0.12	0.11	0.096	0.050	7504747
Acid Extractable Uranium (U)	ug/g	0.86	0.91	0.61	0.56	0.61	0.050	7504747
Acid Extractable Vanadium (V)	ug/g	30	30	30	23	30	5.0	7504747
Acid Extractable Zinc (Zn)	ug/g	110	67	59	47	57	5.0	7504747
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								



BUREAU
VERITAS

BV Labs Job #: C1L5821
Report Date: 2021/08/19

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

O.REG 153 METALS GROUPS 1.2.2 & 1.2.3 (SOIL)

BV Labs ID		QGJ352	QGJ357	QGJ361	QGJ363	QGJ367		
Sampling Date		2021/07/30 13:40	2021/07/30 14:15	2021/07/30 14:50	2021/07/30 15:00	2021/07/30 15:40		
COC Number		837380-06-01	837380-06-01	837380-07-01	837380-07-01	837380-07-01		
	UNITS	BH1107-21 0-2'	BH109-21 0-2'	BH111-21 0-2'	BH112-21 0-2'	BH114-21 0-2'	RDL	QC Batch
Metals								
Acid Extractable Antimony (Sb)	ug/g	<0.20	<0.20	<0.20	0.23	<0.20	0.20	7504747
Acid Extractable Arsenic (As)	ug/g	3.7	4.6	3.5	4.1	1.8	1.0	7504747
Acid Extractable Barium (Ba)	ug/g	69	55	64	76	28	0.50	7504747
Acid Extractable Beryllium (Be)	ug/g	0.59	0.67	0.54	0.64	0.24	0.20	7504747
Acid Extractable Boron (B)	ug/g	9.3	11	8.9	10	<5.0	5.0	7504747
Acid Extractable Cadmium (Cd)	ug/g	<0.10	0.11	<0.10	0.16	<0.10	0.10	7504747
Acid Extractable Chromium (Cr)	ug/g	20	20	19	20	9.4	1.0	7504747
Acid Extractable Cobalt (Co)	ug/g	11	12	9.8	11	4.6	0.10	7504747
Acid Extractable Copper (Cu)	ug/g	19	23	19	22	12	0.50	7504747
Acid Extractable Lead (Pb)	ug/g	9.5	9.4	10	22	4.4	1.0	7504747
Acid Extractable Molybdenum (Mo)	ug/g	0.53	0.54	0.61	0.65	<0.50	0.50	7504747
Acid Extractable Nickel (Ni)	ug/g	21	24	20	24	8.1	0.50	7504747
Acid Extractable Selenium (Se)	ug/g	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	7504747
Acid Extractable Silver (Ag)	ug/g	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	7504747
Acid Extractable Thallium (Tl)	ug/g	0.10	0.13	0.12	0.14	0.064	0.050	7504747
Acid Extractable Uranium (U)	ug/g	0.56	0.62	0.56	0.63	0.37	0.050	7504747
Acid Extractable Vanadium (V)	ug/g	28	29	27	28	17	5.0	7504747
Acid Extractable Zinc (Zn)	ug/g	54	56	51	74	21	5.0	7504747
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								



BUREAU
VERITAS

BV Labs Job #: C1L5821
Report Date: 2021/08/19

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

O.REG 153 PAHS (SOIL)

BV Labs ID		QGJ341	QGJ343	QGJ347			QGJ357		
Sampling Date		2021/07/30 10:10	2021/07/30 10:40	2021/07/30 12:15			2021/07/30 14:15		
COC Number		837380-05-01	837380-05-01	837380-05-01			837380-06-01		
	UNITS	BH102-21 0-2'	BH103-21 0-2'	BH105-21 0-2'	RDL	QC Batch	BH109-21 0-2'	RDL	QC Batch

Inorganics

Moisture	%						6.7	1.0	7499827
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Calculated Parameters

Methylnaphthalene, 2-(1-)	ug/g	<0.0071	<0.0071	<0.0071	0.0071	7499320	0.019	0.0071	7499320
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Polyaromatic Hydrocarbons

Acenaphthene	ug/g	<0.0050	0.016	<0.0050	0.0050	7505327	<0.0050	0.0050	7505327
Acenaphthylene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	7505327	<0.0050	0.0050	7505327
Anthracene	ug/g	0.012	0.039	<0.0050	0.0050	7505327	<0.0050	0.0050	7505327
Benzo(a)anthracene	ug/g	0.058	0.13	<0.0050	0.0050	7505327	0.0076	0.0050	7505327
Benzo(a)pyrene	ug/g	0.068	0.14	<0.0050	0.0050	7505327	0.0075	0.0050	7505327
Benzo(b/j)fluoranthene	ug/g	0.10	0.18	0.0055	0.0050	7505327	0.012	0.0050	7505327
Benzo(g,h,i)perylene	ug/g	0.061	0.095	<0.0050	0.0050	7505327	0.0093	0.0050	7505327
Benzo(k)fluoranthene	ug/g	0.032	0.062	<0.0050	0.0050	7505327	<0.0050	0.0050	7505327
Chrysene	ug/g	0.056	0.12	0.0063	0.0050	7505327	0.011	0.0050	7505327
Dibenzo(a,h)anthracene	ug/g	0.011	0.022	<0.0050	0.0050	7505327	<0.0050	0.0050	7505327
Fluoranthene	ug/g	0.12	0.28	0.0054	0.0050	7505327	0.018	0.0050	7505327
Fluorene	ug/g	<0.0050	0.013	<0.0050	0.0050	7505327	<0.0050	0.0050	7505327
Indeno(1,2,3-cd)pyrene	ug/g	0.059	0.10	<0.0050	0.0050	7505327	0.0051	0.0050	7505327
1-Methylnaphthalene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	7505327	0.0094	0.0050	7505327
2-Methylnaphthalene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	7505327	0.0096	0.0050	7505327
Naphthalene	ug/g	<0.0050	<0.0050	<0.0050	0.0050	7505327	<0.0050	0.0050	7505327
Phenanthrene	ug/g	0.042	0.12	<0.0050	0.0050	7505327	0.023	0.0050	7505327
Pyrene	ug/g	0.10	0.23	0.0054	0.0050	7505327	0.018	0.0050	7505327

Surrogate Recovery (%)

D10-Anthracene	%	90	87	88		7505327	87		7505327
D14-Terphenyl (FS)	%	87	84	87		7505327	87		7505327
D8-Acenaphthylene	%	89	85	87		7505327	85		7505327

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch



BUREAU
VERITAS

BV Labs Job #: C1L5821
Report Date: 2021/08/19

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

O.REG 153 PAHS (SOIL)

BV Labs ID		QGJ359		
Sampling Date		2021/07/30 14:30		
COC Number		837380-07-01		
	UNITS	BH110-21 0-2'	RDL	QC Batch
Calculated Parameters				
Methylnaphthalene, 2-(1-)	ug/g	0.014	0.0071	7499320
Polyaromatic Hydrocarbons				
Acenaphthene	ug/g	<0.0050	0.0050	7505327
Acenaphthylene	ug/g	<0.0050	0.0050	7505327
Anthracene	ug/g	<0.0050	0.0050	7505327
Benzo(a)anthracene	ug/g	0.0087	0.0050	7505327
Benzo(a)pyrene	ug/g	0.0085	0.0050	7505327
Benzo(b/j)fluoranthene	ug/g	0.013	0.0050	7505327
Benzo(g,h,i)perylene	ug/g	0.0087	0.0050	7505327
Benzo(k)fluoranthene	ug/g	<0.0050	0.0050	7505327
Chrysene	ug/g	0.012	0.0050	7505327
Dibenzo(a,h)anthracene	ug/g	<0.0050	0.0050	7505327
Fluoranthene	ug/g	0.016	0.0050	7505327
Fluorene	ug/g	<0.0050	0.0050	7505327
Indeno(1,2,3-cd)pyrene	ug/g	0.0056	0.0050	7505327
1-Methylnaphthalene	ug/g	0.0068	0.0050	7505327
2-Methylnaphthalene	ug/g	0.0073	0.0050	7505327
Naphthalene	ug/g	<0.0050	0.0050	7505327
Phenanthrene	ug/g	0.014	0.0050	7505327
Pyrene	ug/g	0.016	0.0050	7505327
Surrogate Recovery (%)				
D10-Anthracene	%	91		7505327
D14-Terphenyl (FS)	%	86		7505327
D8-Acenaphthylene	%	89		7505327
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				



BUREAU
VERITAS

BV Labs Job #: C1L5821
Report Date: 2021/08/19

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

O.REG 153 PHCS, BTEX/F1-F4 (SOIL)

BV Labs ID		QGJ341	QGJ343	QGJ347	QGJ349	QGJ359	QGJ363		
Sampling Date		2021/07/30 10:10	2021/07/30 10:40	2021/07/30 12:15	2021/07/30 12:25	2021/07/30 14:30	2021/07/30 15:00		
COC Number		837380-05-01	837380-05-01	837380-05-01	837380-06-01	837380-07-01	837380-07-01		
	UNITS	BH102-21 0-2'	BH103-21 0-2'	BH105-21 0-2'	BH106-21 0-2'	BH110-21 0-2'	BH112-21 0-2'	RDL	QC Batch
Inorganics									
Moisture	%	10	11	7.1	8.6	8.2	10	1.0	7499827
BTEX & F1 Hydrocarbons									
Benzene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	7506524
Toluene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	7506524
Ethylbenzene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	7506524
o-Xylene	ug/g	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.020	7506524
p+m-Xylene	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	7506524
Total Xylenes	ug/g	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	0.040	7506524
F1 (C6-C10)	ug/g	<10	<10	<10	<10	<10	<10	10	7506524
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	<10	<10	<10	10	7506524
F2-F4 Hydrocarbons									
F2 (C10-C16 Hydrocarbons)	ug/g	<10	<10	15	10	<10	<10	10	7506064
F3 (C16-C34 Hydrocarbons)	ug/g	<50	<50	60	<50	<50	<50	50	7506064
F4 (C34-C50 Hydrocarbons)	ug/g	<50	<50	<50	<50	<50	<50	50	7506064
Reached Baseline at C50	ug/g	Yes	Yes	Yes	Yes	Yes	Yes		7506064
Surrogate Recovery (%)									
1,4-Difluorobenzene	%	102	102	101	99	102	101		7506524
4-Bromofluorobenzene	%	89	95	90	94	91	89		7506524
D10-o-Xylene	%	95	89	84	80	96	95		7506524
D4-1,2-Dichloroethane	%	101	104	104	106	104	106		7506524
o-Terphenyl	%	80	78	82	81	84	81		7506064
RDL = Reportable Detection Limit									
QC Batch = Quality Control Batch									



O.REG 153 PHCS, BTEX/F1-F4 (SOIL)

BV Labs ID		QGJ367		
Sampling Date		2021/07/30 15:40		
COC Number		837380-07-01		
	UNITS	BH114-21 0-2'	RDL	QC Batch
Inorganics				
Moisture	%	7.3	1.0	7499827
BTEX & F1 Hydrocarbons				
Benzene	ug/g	<0.020	0.020	7506524
Toluene	ug/g	<0.020	0.020	7506524
Ethylbenzene	ug/g	<0.020	0.020	7506524
o-Xylene	ug/g	<0.020	0.020	7506524
p+m-Xylene	ug/g	<0.040	0.040	7506524
Total Xylenes	ug/g	<0.040	0.040	7506524
F1 (C6-C10)	ug/g	<10	10	7506524
F1 (C6-C10) - BTEX	ug/g	<10	10	7506524
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/g	<10	10	7506064
F3 (C16-C34 Hydrocarbons)	ug/g	<50	50	7506064
F4 (C34-C50 Hydrocarbons)	ug/g	<50	50	7506064
Reached Baseline at C50	ug/g	Yes		7506064
Surrogate Recovery (%)				
1,4-Difluorobenzene	%	102		7506524
4-Bromofluorobenzene	%	91		7506524
D10-o-Xylene	%	95		7506524
D4-1,2-Dichloroethane	%	102		7506524
o-Terphenyl	%	80		7506064
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



RESULTS OF ANALYSES OF SOIL

BV Labs ID		QGJ341	QGJ342	QGJ359	QGJ360	
Sampling Date		2021/07/30 10:10	2021/07/30 10:20	2021/07/30 14:30	2021/07/30 14:35	
COC Number		837380-05-01	837380-05-01	837380-07-01	837380-07-01	
	UNITS	BH102-21 0-2'	BH102-21 5-7'	BH110-21 0-2'	BH110-21 5-7'	QC Batch
Inorganics						
Available (CaCl2) pH	pH	7.58	7.45	7.70	7.72	7526263
QC Batch = Quality Control Batch						



BUREAU
VERITAS

BV Labs Job #: C1L5821
Report Date: 2021/08/19

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

TEST SUMMARY

BV Labs ID: QGJ341
Sample ID: BH102-21 0-2'
Matrix: Soil

Collected: 2021/07/30
Shipped:
Received: 2021/07/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	7499320	N/A	2021/08/09	Automated Statchk
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7506524	N/A	2021/08/08	Joe Paino
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7506064	2021/08/06	2021/08/07	(Kent) Maolin Li
Acid Extractable Metals by ICPMS	ICP/MS	7504747	2021/08/06	2021/08/10	Viviana Canzonieri
Moisture	BAL	7499827	N/A	2021/08/04	Prgya Panchal
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	7505327	2021/08/06	2021/08/07	Mitesh Raj
pH CaCl2 EXTRACT	AT	7526263	2021/08/18	2021/08/18	Neil Dassanayake

BV Labs ID: QGJ342
Sample ID: BH102-21 5-7'
Matrix: Soil

Collected: 2021/07/30
Shipped:
Received: 2021/07/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH CaCl2 EXTRACT	AT	7526263	2021/08/18	2021/08/18	Neil Dassanayake

BV Labs ID: QGJ343
Sample ID: BH103-21 0-2'
Matrix: Soil

Collected: 2021/07/30
Shipped:
Received: 2021/07/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	7499320	N/A	2021/08/09	Automated Statchk
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7506524	N/A	2021/08/08	Joe Paino
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7506064	2021/08/06	2021/08/07	(Kent) Maolin Li
Acid Extractable Metals by ICPMS	ICP/MS	7504747	2021/08/06	2021/08/10	Viviana Canzonieri
Moisture	BAL	7499827	N/A	2021/08/04	Prgya Panchal
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	7505327	2021/08/06	2021/08/07	Mitesh Raj

BV Labs ID: QGJ345
Sample ID: BH104-21 0-2'
Matrix: Soil

Collected: 2021/07/30
Shipped:
Received: 2021/07/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractable Metals by ICPMS	ICP/MS	7504747	2021/08/06	2021/08/10	Viviana Canzonieri

BV Labs ID: QGJ347
Sample ID: BH105-21 0-2'
Matrix: Soil

Collected: 2021/07/30
Shipped:
Received: 2021/07/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	7499320	N/A	2021/08/09	Automated Statchk
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7506524	N/A	2021/08/08	Joe Paino
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7506064	2021/08/06	2021/08/07	(Kent) Maolin Li
Acid Extractable Metals by ICPMS	ICP/MS	7504747	2021/08/06	2021/08/10	Viviana Canzonieri
Moisture	BAL	7499827	N/A	2021/08/04	Prgya Panchal
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	7505327	2021/08/06	2021/08/07	Mitesh Raj



BUREAU
VERITAS

BV Labs Job #: C1L5821
Report Date: 2021/08/19

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

TEST SUMMARY

BV Labs ID: QGJ349
Sample ID: BH106-21 0-2'
Matrix: Soil

Collected: 2021/07/30
Shipped:
Received: 2021/07/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7506524	N/A	2021/08/08	Joe Paino
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7506064	2021/08/06	2021/08/07	(Kent) Maolin Li
Acid Extractable Metals by ICPMS	ICP/MS	7504747	2021/08/06	2021/08/10	Viviana Canzonieri
Moisture	BAL	7499827	N/A	2021/08/04	Prgya Panchal

BV Labs ID: QGJ351
Sample ID: BH107-21 0-2'
Matrix: Soil

Collected: 2021/07/30
Shipped:
Received: 2021/07/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractable Metals by ICPMS	ICP/MS	7504747	2021/08/06	2021/08/10	Viviana Canzonieri

BV Labs ID: QGJ352
Sample ID: BH1107-21 0-2'
Matrix: Soil

Collected: 2021/07/30
Shipped:
Received: 2021/07/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractable Metals by ICPMS	ICP/MS	7504747	2021/08/06	2021/08/10	Viviana Canzonieri

BV Labs ID: QGJ357
Sample ID: BH109-21 0-2'
Matrix: Soil

Collected: 2021/07/30
Shipped:
Received: 2021/07/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	7499320	N/A	2021/08/09	Automated Statchk
Acid Extractable Metals by ICPMS	ICP/MS	7504747	2021/08/06	2021/08/10	Viviana Canzonieri
Moisture	BAL	7499827	N/A	2021/08/04	Prgya Panchal
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	7505327	2021/08/06	2021/08/07	Mitesh Raj

BV Labs ID: QGJ359
Sample ID: BH110-21 0-2'
Matrix: Soil

Collected: 2021/07/30
Shipped:
Received: 2021/07/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	7499320	N/A	2021/08/09	Automated Statchk
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7506524	N/A	2021/08/08	Joe Paino
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7506064	2021/08/06	2021/08/07	(Kent) Maolin Li
Moisture	BAL	7499827	N/A	2021/08/04	Prgya Panchal
PAH Compounds in Soil by GC/MS (SIM)	GC/MS	7505327	2021/08/06	2021/08/07	Mitesh Raj
pH CaCl2 EXTRACT	AT	7526263	2021/08/18	2021/08/18	Neil Dassanayake



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VERITAS

BV Labs Job #: C1L5821
Report Date: 2021/08/19

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

TEST SUMMARY

BV Labs ID: QGJ360
Sample ID: BH110-21 5-7'
Matrix: Soil

Collected: 2021/07/30
Shipped:
Received: 2021/07/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH CaCl2 EXTRACT	AT	7526263	2021/08/18	2021/08/18	Neil Dassanayake

BV Labs ID: QGJ361
Sample ID: BH111-21 0-2'
Matrix: Soil

Collected: 2021/07/30
Shipped:
Received: 2021/07/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractable Metals by ICPMS	ICP/MS	7504747	2021/08/06	2021/08/10	Viviana Canzonieri

BV Labs ID: QGJ363
Sample ID: BH112-21 0-2'
Matrix: Soil

Collected: 2021/07/30
Shipped:
Received: 2021/07/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7506524	N/A	2021/08/08	Joe Paino
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7506064	2021/08/06	2021/08/07	(Kent) Maolin Li
Acid Extractable Metals by ICPMS	ICP/MS	7504747	2021/08/06	2021/08/10	Viviana Canzonieri
Moisture	BAL	7499827	N/A	2021/08/04	Prgya Panchal

BV Labs ID: QGJ367
Sample ID: BH114-21 0-2'
Matrix: Soil

Collected: 2021/07/30
Shipped:
Received: 2021/07/30

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7506524	N/A	2021/08/08	Joe Paino
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7506064	2021/08/06	2021/08/07	(Kent) Maolin Li
Acid Extractable Metals by ICPMS	ICP/MS	7504747	2021/08/06	2021/08/10	Viviana Canzonieri
Moisture	BAL	7499827	N/A	2021/08/04	Prgya Panchal



GENERAL COMMENTS

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

Package 1	7.7°C
Package 2	7.0°C

Revised Report [2021/08/19]: Requested additional analysis for pH added to samples BH102-21 0-2', BH102-21 5-7', BH110-21 0-2' and BH110-21 5-7' as per client.

Results relate only to the items tested.



BUREAU
VERITAS

BV Labs Job #: C1L5821

Report Date: 2021/08/19

QUALITY ASSURANCE REPORT

MTE Consultants Inc

Client Project #: 49485-200

Sampler Initials: ZT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7505327	D10-Anthracene	2021/08/06	108	50 - 130	92	50 - 130	93	%		
7505327	D14-Terphenyl (FS)	2021/08/06	95	50 - 130	94	50 - 130	95	%		
7505327	D8-Acenaphthylene	2021/08/06	88	50 - 130	92	50 - 130	90	%		
7506064	o-Terphenyl	2021/08/07	84	60 - 130	83	60 - 130	83	%		
7506524	1,4-Difluorobenzene	2021/08/08	98	60 - 140	97	60 - 140	102	%		
7506524	4-Bromofluorobenzene	2021/08/08	103	60 - 140	105	60 - 140	92	%		
7506524	D10-o-Xylene	2021/08/08	95	60 - 140	84	60 - 140	84	%		
7506524	D4-1,2-Dichloroethane	2021/08/08	97	60 - 140	102	60 - 140	106	%		
7499827	Moisture	2021/08/04							1.6	20
7504747	Acid Extractable Antimony (Sb)	2021/08/11	94	75 - 125	99	80 - 120	<0.20	ug/g	14	30
7504747	Acid Extractable Arsenic (As)	2021/08/11	97	75 - 125	99	80 - 120	<1.0	ug/g	15	30
7504747	Acid Extractable Barium (Ba)	2021/08/11	NC	75 - 125	109	80 - 120	<0.50	ug/g	1.3	30
7504747	Acid Extractable Beryllium (Be)	2021/08/11	108	75 - 125	103	80 - 120	<0.20	ug/g	5.8	30
7504747	Acid Extractable Boron (B)	2021/08/11	108	75 - 125	99	80 - 120	<5.0	ug/g	3.2	30
7504747	Acid Extractable Cadmium (Cd)	2021/08/11	100	75 - 125	101	80 - 120	<0.10	ug/g	36 (1)	30
7504747	Acid Extractable Chromium (Cr)	2021/08/11	NC	75 - 125	100	80 - 120	<1.0	ug/g	6.4	30
7504747	Acid Extractable Cobalt (Co)	2021/08/11	97	75 - 125	99	80 - 120	<0.10	ug/g	20	30
7504747	Acid Extractable Copper (Cu)	2021/08/11	NC	75 - 125	104	80 - 120	<0.50	ug/g	0.72	30
7504747	Acid Extractable Lead (Pb)	2021/08/11	NC	75 - 125	100	80 - 120	<1.0	ug/g	0.033	30
7504747	Acid Extractable Molybdenum (Mo)	2021/08/11	101	75 - 125	104	80 - 120	<0.50	ug/g	6.9	30
7504747	Acid Extractable Nickel (Ni)	2021/08/11	96	75 - 125	98	80 - 120	<0.50	ug/g	2.1	30
7504747	Acid Extractable Selenium (Se)	2021/08/11	97	75 - 125	105	80 - 120	<0.50	ug/g	NC	30
7504747	Acid Extractable Silver (Ag)	2021/08/11	100	75 - 125	102	80 - 120	<0.20	ug/g	NC	30
7504747	Acid Extractable Thallium (Tl)	2021/08/11	96	75 - 125	97	80 - 120	<0.050	ug/g	14	30
7504747	Acid Extractable Uranium (U)	2021/08/11	102	75 - 125	101	80 - 120	<0.050	ug/g	2.9	30
7504747	Acid Extractable Vanadium (V)	2021/08/11	NC	75 - 125	103	80 - 120	<5.0	ug/g	3.5	30
7504747	Acid Extractable Zinc (Zn)	2021/08/11	NC	75 - 125	102	80 - 120	<5.0	ug/g	0.032	30
7505327	1-Methylnaphthalene	2021/08/07	92	50 - 130	95	50 - 130	<0.0050	ug/g	NC	40
7505327	2-Methylnaphthalene	2021/08/07	90	50 - 130	95	50 - 130	<0.0050	ug/g	NC	40
7505327	Acenaphthene	2021/08/07	96	50 - 130	98	50 - 130	<0.0050	ug/g	NC	40
7505327	Acenaphthylene	2021/08/07	92	50 - 130	95	50 - 130	<0.0050	ug/g	NC	40



BUREAU
VERITAS

BV Labs Job #: C1L5821
Report Date: 2021/08/19

QUALITY ASSURANCE REPORT(CONT'D)

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7505327	Anthracene	2021/08/07	104	50 - 130	99	50 - 130	<0.0050	ug/g	NC	40
7505327	Benzo(a)anthracene	2021/08/07	110	50 - 130	104	50 - 130	<0.0050	ug/g	12	40
7505327	Benzo(a)pyrene	2021/08/07	92	50 - 130	86	50 - 130	<0.0050	ug/g	14	40
7505327	Benzo(b/j)fluoranthene	2021/08/07	96	50 - 130	94	50 - 130	<0.0050	ug/g	16	40
7505327	Benzo(g,h,i)perylene	2021/08/07	110	50 - 130	101	50 - 130	<0.0050	ug/g	20	40
7505327	Benzo(k)fluoranthene	2021/08/07	97	50 - 130	95	50 - 130	<0.0050	ug/g	18	40
7505327	Chrysene	2021/08/07	110	50 - 130	101	50 - 130	<0.0050	ug/g	8.9	40
7505327	Dibenzo(a,h)anthracene	2021/08/07	98	50 - 130	90	50 - 130	<0.0050	ug/g	NC	40
7505327	Fluoranthene	2021/08/07	129	50 - 130	104	50 - 130	<0.0050	ug/g	7.8	40
7505327	Fluorene	2021/08/07	97	50 - 130	100	50 - 130	<0.0050	ug/g	NC	40
7505327	Indeno(1,2,3-cd)pyrene	2021/08/07	107	50 - 130	98	50 - 130	<0.0050	ug/g	16	40
7505327	Naphthalene	2021/08/07	88	50 - 130	91	50 - 130	<0.0050	ug/g	NC	40
7505327	Phenanthrene	2021/08/07	140 (1)	50 - 130	99	50 - 130	<0.0050	ug/g	38	40
7505327	Pyrene	2021/08/07	125	50 - 130	102	50 - 130	<0.0050	ug/g	8.2	40
7506064	F2 (C10-C16 Hydrocarbons)	2021/08/07	97	50 - 130	101	80 - 120	<10	ug/g	10	30
7506064	F3 (C16-C34 Hydrocarbons)	2021/08/07	106	50 - 130	102	80 - 120	<50	ug/g	NC	30
7506064	F4 (C34-C50 Hydrocarbons)	2021/08/07	103	50 - 130	102	80 - 120	<50	ug/g	NC	30
7506524	Benzene	2021/08/08	113	50 - 140	101	50 - 140	<0.020	ug/g	NC	50
7506524	Ethylbenzene	2021/08/08	123	50 - 140	107	50 - 140	<0.020	ug/g	NC	50
7506524	F1 (C6-C10) - BTEX	2021/08/08					<10	ug/g	NC	30
7506524	F1 (C6-C10)	2021/08/08	104	60 - 140	90	80 - 120	<10	ug/g	NC	30
7506524	o-Xylene	2021/08/08	118	50 - 140	104	50 - 140	<0.020	ug/g	NC	50
7506524	p+m-Xylene	2021/08/08	115	50 - 140	100	50 - 140	<0.040	ug/g	NC	50
7506524	Toluene	2021/08/08	107	50 - 140	95	50 - 140	<0.020	ug/g	NC	50
7506524	Total Xylenes	2021/08/08					<0.040	ug/g	NC	50



BUREAU
VERITAS

BV Labs Job #: C1L5821

Report Date: 2021/08/19

QUALITY ASSURANCE REPORT(CONT'D)

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7526263	Available (CaCl2) pH	2021/08/18			100	97 - 103			0.39	N/A

N/A = Not Applicable

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

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

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

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

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

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

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

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.



BUREAU
VERITAS

BV Labs Job #: C1L5821
Report Date: 2021/08/19

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

VALIDATION SIGNATURE PAGE

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

Anastassia Hamanov, Scientific Specialist

Brad Newman, B.Sc., C.Chem., Scientific Service Specialist

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

30-Jul-21 17:51

Ronklin Gracian

C1L5821

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

INVOICE TO:

Company Name: #6868 MTE Consultants Inc
 Attention: Accounts Payable
 Address: 520 Bingham Centre Dr
 Kitchener ON N2B 3X9
 Tel: (519) 743-6500 Fax: (519) 743-6513
 Email: accounting@mte85.com

REPORT TO:

Company Name:
 Attention: Oshin Gharabegian
 Address:
 Tel: (905) 639-2552 Ext: 2430 Fax:
 Email: Ogharabegian@mte85.com

PROJECT INFORMATION:

Quotation #: B90004
 P.O. #: IAS ENV-584
 Project: 44017-100-49485-200
 Project Name:
 Site #:
 Sampled By:

Use Only:

Bottle Order #: 837380
 Project Manager: Ronklin Gracian
 COC #: C#637380-05-01

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BV LABS DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011)	Other Regulations	Special Instructions
<input type="checkbox"/> Table 1 <input type="checkbox"/> Table 2 <input type="checkbox"/> Table 3 <input type="checkbox"/> Table	<input type="checkbox"/> Res/Park <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Agri/Other <input type="checkbox"/> Medium/Fine <input type="checkbox"/> Coarse <input type="checkbox"/> For RSC <input type="checkbox"/> PWQO <input type="checkbox"/> Other	<input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> MISA Municipality <input type="checkbox"/> Reg 406 Table

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

Field Filtered (please circle):
 Metals / Hg / Cr / V
 Reg 153 PHGs+BTEX
 Reg 153 VOCs
 Reg 153 Metals Scan 1, 2, 2 and 1, 2, 3 (Soil)
 Reg 153 EC (Soil)
 SAR - ICP Metals
 pH CaCl2 EXTRACT
 Hold

Turnaround Time (TAT) Required:
 Please provide advance notice for rush projects

Regular (Standard) TAT:
 (will be applied if Rush TAT is not specified)
 Standard TAT = 5-7 Working days for most tests.
 Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)
 Date Required: Time Required:
 Rush Confirmation Number: (call lab for #)

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr / V	<input type="checkbox"/> Reg 153 PHGs+BTEX	<input type="checkbox"/> Reg 153 VOCs	<input type="checkbox"/> Reg 153 Metals Scan 1, 2, 2 and 1, 2, 3 (Soil)	<input type="checkbox"/> Reg 153 EC (Soil)	SAR - ICP Metals	pH CaCl2 EXTRACT	# of Bottles	Comments
1	BH101-21 0-2'	21/07/30	9:25	Soil								4	
2	BH101-21 5-7'	21/07/30	9:35									4	
3	BH102-21 0-2'		10:10									4	
4	BH102-21 5-7'		10:20									3	
5	BH103-21 0-2'		10:40									4	
6	BH103-21 5-7'		10:40									4	
7	BH104-21 0-2'		11:30									4	
8	BH104-21 4-5'		11:40									4	
9	BH105-21 0-2'		12:15									4	
10	BH105-21 7-9'		12:20									4	

* RELINQUISHED BY: (Signature/Print) Tony Thompson	Date: (YY/MM/DD) 21/07/30	Time 17:50	RECEIVED BY: (Signature/Print) KAVITHA SELVAN	Date: (YY/MM/DD) 2021/07/30	Time 17:51	# jars used and not submitted	Laboratory Use Only 8117 7117	Custody Seal Present Intact	Yes No
---	------------------------------	---------------	--	--------------------------------	---------------	-------------------------------	----------------------------------	-----------------------------------	-----------

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** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVLABS.COM/RESOURCES/CHAIN-OF-CUSTODY-FORMS.

SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BV LABS

White: BV Labs Yellow: Client



INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #6868 MTE Consultants Inc		Company Name: Oshin Gharabegian <i>Mosigine</i>		Quotation #: B90004		BV Labs Job #:	
Attention: Accounts Payable		Attention: <i>Oshin Gharabegian</i>		P.O. #:		Bottle Order #:	
Address: 520 Bingemans Centre Dr		Address:		Project: 44017-100 <i>44455-200</i>		837380	
Kitchener ON N2B 3X9				Project Name:		COC #:	
Tel: (519) 743-6500 Fax: (519) 743-6513		Tel: (905) 639-2552 Ext: 2430 Fax:		Site #:		Project Manager:	
Email: accounting@mte85.com		Email: Ogharabegian@mte85.com <i>mgyb@pnt.com</i>		Sampled By:		Ronkin Gracian	

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BV LABS DRINKING WATER CHAIN OF CUSTODY

Regulation 153 (2011) <input type="checkbox"/> Table 1 <input type="checkbox"/> Res/Park <input type="checkbox"/> Medium/Fine <input type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> For RSC <input type="checkbox"/> Table _____		Other Regulations <input type="checkbox"/> CCME <input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Reg 558 <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> MISA Municipality _____ <input type="checkbox"/> PWQO <input type="checkbox"/> Reg 406 Table _____ <input type="checkbox"/> Other _____		Special Instructions 		Field Filtered (please circle): Metals / Hg / Cr / V O Reg 153 PHCs+BTEX O Reg 153 VOCs O Reg 153 Metals Scan 1, 2, 2 and 1, 2, 3 (Soil) O Reg 153 EC (Soil) SAR - ICP Metals pH/CACCE EXTRACT <i>Hold</i>	Turnaround Time (TAT) Required: Please provide advance notice for rush projects Regular (Standard) TAT: (will be applied if Rush TAT is not specified): Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.	
Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Time Required: _____ Rush Confirmation Number: _____ (call lab for #)								

Include Criteria on Certificate of Analysis (Y/N)?						Field Filtered (please circle): Metals / Hg / Cr / V	O Reg 153 PHCs+BTEX	O Reg 153 VOCs	O Reg 153 Metals Scan 1, 2, 2 and 1, 2, 3 (Soil)	O Reg 153 EC (Soil)	SAR - ICP Metals	pH/CACCE EXTRACT	# of Bottles	Comments
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix										
1	BH106-21 0-2'	2/6/20	12:25	Soil								4		
2	BH106-21 5-7'		12:30									4		
3	BH107-21 0-2'		13:40									4		
4	BH1107-21 0-2'		13:40									4		
5	BH107-21 5-7'		13:45									4		
6	BH1107-21 5-7'		13:45									4		
7	BH108-21 0-2'		13:50									4		
8	BH108-21 5-7'		13:55									4		
9	BH109-21 0-2'		14:15									4		
10	BH109-21 5-7'		14:20									4		

* RELINQUISHED BY: (Signature/Print)		Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only				
<i>[Signature]</i>		2/10/20	17:50	<i>[Signature]</i>				Time Sensitive	Temperature (°C) on Recci	Custody Seal Present	Yes	No
										Intact		

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BV LABS' STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVLABS.COM/TERMS-AND-CONDITIONS.

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SAMPLES MUST BE KEPT COOL (< 10° C.) FROM TIME OF SAMPLING UNTIL DELIVERY TO BV LABS

White: BV Labs Yellow: Client



INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #6668 MTE Consultants Inc	Company Name:	Attention: Oshin Gharabegian	Attention:	Quotation #: B90004	Quotation #:	BV Labs Job #:	Bottle Order #:
Attention: Accounts Payable	Address: 520 Bingemans Centre Dr Kitchener ON N2B 3X9	Address:	Address:	P.O. #:	Project: 44017-100 49485-200		
Tel: (519) 743-6500 Fax: (519) 743-6513	Tel: (905) 639-2552 Ext: 2430 Fax:	Tel:	Tel:	Project Name:	Site #:	COC #:	Project Manager:
Email: accounting@mte85.com	Email: OGarabegian@mte85.com	Email:	Email:	Sampled By:			Ronklin Gracian

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BV LABS DRINKING WATER CHAIN OF CUSTODY						ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required: Please provide advance notice for rush projects.					
Regulation 153 (2011)		Other Regulations		Special Instructions		Field Filtered (please circle): Metals / Hg / Cr-VI	O Reg 153 PHCs + BTEX	O Reg 153 VOCs	O Reg 153 Metals Scan 1, 2, 2 and 1, 2, 3 (Soil)	O Reg 153 EC (Soil)	SAR - ICP Metals	pH	Ca/C2 EXTRACT	Hold					Regular (Standard) TAT: (will be applied if Rush TAT is not specified): Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.		
Table 1	Res/Park	Table 2	Ind/Comm	Table 3	Agri/Other														CCME	Sanitary Sewer Bylaw	Reg 558
1		BH110-21 BH109-21 0-2'	21/07/30	14:30	Soil															4	
2		BH110-21 BH109-21 5-7'		14:35																4	
3		BH111-21 0-2'		14:50																4	
4		BH111-21 4-5'		14:55																4	
5		BH112-21 0-2'		15:00																4	
6		BH112-21 5-7'		15:05																4	
7		BH113-21 0-2'		15:20																4	
8		BH113-21 5-7'		15:30																4	
9		BH114-21 0-2'		15:40																4	
10		BH114-210-2'		15:40																1	

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only				
<i>[Signature]</i>	21/07/30	1750	<i>[Signature]</i>				Time Sensitive	Temperature (°C) on Receipt	Custody Seal Present	Yes	No
									Intact		

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

CHAIN OF CUSTODY RECORD

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #6868 MTE Consultants Inc	Attention: Accounts Payable	Company Name: Oshin-Gharabegian	Attention: Marique Gogba	Quotation #: B90004	P.O. #:	BV Labs Job #:	Bottle Order #:
Address: 520 Bingemans Centre Dr	Kitchener ON N2B 3X9	Address:		Project: 44017100-49485-200	Project Name:	COC #:	Project Manager:
Tel: (519) 743-6500	Fax: (519) 743-6513	Tel: (905) 639-2552 Ext: 2430	Fax:	Site #:	Sampled By:	Barcode: C#837380-08-01	Ronkin Graclan
Email: accounting@mte85.com		Email: OGharabegian@mte85.com	m Gogba @mte85.com				

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BV LABS DRINKING WATER CHAIN OF CUSTODY					ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required: Please provide advance notice for rush projects			
Regulation 153 (2011) <input type="checkbox"/> Table 1 <input type="checkbox"/> Res/Park <input type="checkbox"/> Medium/Fine <input type="checkbox"/> Table 2 <input type="checkbox"/> Ind/Comm <input type="checkbox"/> Coarse <input type="checkbox"/> Table 3 <input type="checkbox"/> Agri/Other <input type="checkbox"/> For RSC <input type="checkbox"/> Table _____		Other Regulations <input type="checkbox"/> CCME <input type="checkbox"/> Sanitary Sewer Bylaw <input type="checkbox"/> Reg 558 <input type="checkbox"/> Storm Sewer Bylaw <input type="checkbox"/> MISA Municipality _____ <input type="checkbox"/> PWQO <input type="checkbox"/> Reg 406 Table _____ <input type="checkbox"/> Other _____		Special Instructions _____ _____		Field Filtered (please circle): Metals / Hg / Cr / V	<input type="checkbox"/> O Reg 153 PHCs+BTEX <input type="checkbox"/> O Reg 153 VOCs <input type="checkbox"/> O Reg 153 Metals Scan 1, 2, 2 and 1, 2, 3 (Soil) <input type="checkbox"/> O Reg 153 EC (Soil)	SAR - ICP Metals pH CaCl2 EXTRACT	Hold	Regular (Standard) TAT: (will be applied if Rush TAT is not specified); Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.		<input checked="" type="checkbox"/>		Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Time Required: _____ Rush Confirmation Number: _____ (call lab for #)		<input type="checkbox"/>		
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix												# of Bottles	Comments	
1	BH114-21 5-7'	2/16/13	17:45	Soil												4		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

* RELINQUISHED BY: (Signature/Print)		Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)		Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only				
<i>[Signature]</i>		2/16/13	17:50	<i>[Signature]</i>					Time Sensitive	Temperature (°C) on Recci	Custody Seal Present	Yes	No
				See page 1							Intact		

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SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BV LABS

White: BV Labs Yellow: Client



Your Project #: 49485-200
 Your C.O.C. #: 838785-01-01

Attention: Monique Gyba

MTE Consultants Inc
 520 Bingham Centre Dr
 Kitchener, ON
 CANADA N2B 3X9

Report Date: 2021/08/10
 Report #: R6757742
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1L8758

Received: 2021/08/04, 15:13

Sample Matrix: Water
 # Samples Received: 5

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
1,3-Dichloropropene Sum	5	N/A	2021/08/09		EPA 8260C m
Petroleum Hydrocarbons F2-F4 in Water (1)	3	2021/08/06	2021/08/07	CAM SOP-00316	CCME PHC-CWS m
Dissolved Metals by ICPMS	3	N/A	2021/08/06	CAM SOP-00447	EPA 6020B m
Volatile Organic Compounds and F1 PHCs	3	N/A	2021/08/07	CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds in Water	2	N/A	2021/08/06	CAM SOP-00228	EPA 8260C m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

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

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

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

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Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.



Your Project #: 49485-200
Your C.O.C. #: 838785-01-01

Attention: Monique Gyba

MTE Consultants Inc
520 Bingemans Centre Dr
Kitchener, ON
CANADA N2B 3X9

Report Date: 2021/08/10
Report #: R6757742
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1L8758

Received: 2021/08/04, 15:13

Encryption Key

Ronklin Gracian
Project Manager
10 Aug 2021 17:51:03

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Ronklin Gracian, Project Manager
Email: Ronklin.Gracian@bureauveritas.com
Phone# (905)817-5752

=====
BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



O.REG 153 METALS GROUPS 1.2.2 & 1.2.3 (WATER)

BV Labs ID			QHA613	QHA615	QHA616	QHA616		
Sampling Date			2021/08/03 09:50	2021/08/03 11:45	2021/08/03 11:00	2021/08/03 11:00		
COC Number			838785-01-01	838785-01-01	838785-01-01	838785-01-01		
	UNITS	Criteria	MWA	MWB	MWC	MWC Lab-Dup	RDL	QC Batch
Metals								
Dissolved Antimony (Sb)	ug/L	20000	<0.50	<0.50	<0.50	<0.50	0.50	7502997
Dissolved Arsenic (As)	ug/L	1900	2.5	1.7	1.7	1.4	1.0	7502997
Dissolved Barium (Ba)	ug/L	29000	32	72	150	150	2.0	7502997
Dissolved Beryllium (Be)	ug/L	67	<0.40	<0.40	<0.40	<0.40	0.40	7502997
Dissolved Boron (B)	ug/L	45000	960	220	380	380	10	7502997
Dissolved Cadmium (Cd)	ug/L	2.7	<0.090	<0.090	<0.090	<0.090	0.090	7502997
Dissolved Chromium (Cr)	ug/L	810	<5.0	<5.0	<5.0	<5.0	5.0	7502997
Dissolved Cobalt (Co)	ug/L	66	<0.50	<0.50	0.83	0.80	0.50	7502997
Dissolved Copper (Cu)	ug/L	87	<0.90	3.1	<0.90	<0.90	0.90	7502997
Dissolved Lead (Pb)	ug/L	25	<0.50	<0.50	<0.50	<0.50	0.50	7502997
Dissolved Molybdenum (Mo)	ug/L	9200	4.4	3.7	1.5	1.5	0.50	7502997
Dissolved Nickel (Ni)	ug/L	490	<1.0	<1.0	1.5	1.5	1.0	7502997
Dissolved Selenium (Se)	ug/L	63	<2.0	<2.0	<2.0	<2.0	2.0	7502997
Dissolved Silver (Ag)	ug/L	1.5	0.16	<0.090	<0.090	<0.090	0.090	7502997
Dissolved Thallium (Tl)	ug/L	510	<0.050	<0.050	<0.050	<0.050	0.050	7502997
Dissolved Uranium (U)	ug/L	420	1.9	4.4	5.4	5.4	0.10	7502997
Dissolved Vanadium (V)	ug/L	250	<0.50	0.67	<0.50	<0.50	0.50	7502997
Dissolved Zinc (Zn)	ug/L	1100	<5.0	<5.0	<5.0	<5.0	5.0	7502997
No Fill	No Exceedance							
Grey	Exceeds 1 criteria policy/level							
Black	Exceeds both criteria/levels							
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Lab-Dup = Laboratory Initiated Duplicate								
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)								
Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition								
Non-Potable Ground Water - All Types of Property Uses - Medium and Fine Textured Soil								



BUREAU
VERITAS

BV Labs Job #: C1L8758
Report Date: 2021/08/10

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

O.REG 153 VOCS BY HS & F1-F4 (WATER)

BV Labs ID			QHA613	QHA615	QHA616		
Sampling Date			2021/08/03 09:50	2021/08/03 11:45	2021/08/03 11:00		
COC Number			838785-01-01	838785-01-01	838785-01-01		
	UNITS	Criteria	MWA	MWB	MWC	RDL	QC Batch
Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/L	45	<0.50	<0.50	<0.50	0.50	7501189
Volatile Organics							
Acetone (2-Propanone)	ug/L	130000	<10	<10	<10	10	7501946
Benzene	ug/L	430	<0.20	<0.20	<0.20	0.20	7501946
Bromodichloromethane	ug/L	85000	<0.50	<0.50	<0.50	0.50	7501946
Bromoform	ug/L	770	<1.0	<1.0	<1.0	1.0	7501946
Bromomethane	ug/L	56	<0.50	<0.50	<0.50	0.50	7501946
Carbon Tetrachloride	ug/L	8.4	<0.20	<0.20	<0.20	0.20	7501946
Chlorobenzene	ug/L	630	<0.20	<0.20	<0.20	0.20	7501946
Chloroform	ug/L	22	<0.20	0.22	<0.20	0.20	7501946
Dibromochloromethane	ug/L	82000	<0.50	<0.50	<0.50	0.50	7501946
1,2-Dichlorobenzene	ug/L	9600	<0.50	<0.50	<0.50	0.50	7501946
1,3-Dichlorobenzene	ug/L	9600	<0.50	<0.50	<0.50	0.50	7501946
1,4-Dichlorobenzene	ug/L	67	<0.50	<0.50	<0.50	0.50	7501946
Dichlorodifluoromethane (FREON 12)	ug/L	4400	<1.0	<1.0	<1.0	1.0	7501946
1,1-Dichloroethane	ug/L	3100	<0.20	<0.20	<0.20	0.20	7501946
1,2-Dichloroethane	ug/L	12	<0.50	<0.50	<0.50	0.50	7501946
1,1-Dichloroethylene	ug/L	17	<0.20	<0.20	<0.20	0.20	7501946
cis-1,2-Dichloroethylene	ug/L	17	<0.50	<0.50	<0.50	0.50	7501946
trans-1,2-Dichloroethylene	ug/L	17	<0.50	<0.50	<0.50	0.50	7501946
1,2-Dichloropropane	ug/L	140	<0.20	<0.20	<0.20	0.20	7501946
cis-1,3-Dichloropropene	ug/L	45	<0.30	<0.30	<0.30	0.30	7501946
trans-1,3-Dichloropropene	ug/L	45	<0.40	<0.40	<0.40	0.40	7501946
Ethylbenzene	ug/L	2300	<0.20	<0.20	<0.20	0.20	7501946
Ethylene Dibromide	ug/L	0.83	<0.20	<0.20	<0.20	0.20	7501946
Hexane	ug/L	520	<1.0	<1.0	<1.0	1.0	7501946
Methylene Chloride(Dichloromethane)	ug/L	5500	<2.0	<2.0	<2.0	2.0	7501946
Methyl Ethyl Ketone (2-Butanone)	ug/L	1500000	<10	<10	<10	10	7501946
Methyl Isobutyl Ketone	ug/L	580000	<5.0	<5.0	<5.0	5.0	7501946
No Fill	No Exceedance						
Grey	Exceeds 1 criteria policy/level						
Black	Exceeds both criteria/levels						
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)							
Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition							
Non-Potable Ground Water - All Types of Property Uses - Medium and Fine Textured Soil							



BUREAU
VERITAS

BV Labs Job #: C1L8758
Report Date: 2021/08/10

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

O.REG 153 VOCS BY HS & F1-F4 (WATER)

BV Labs ID			QHA613	QHA615	QHA616		
Sampling Date			2021/08/03 09:50	2021/08/03 11:45	2021/08/03 11:00		
COC Number			838785-01-01	838785-01-01	838785-01-01		
	UNITS	Criteria	MWA	MWB	MWC	RDL	QC Batch
Methyl t-butyl ether (MTBE)	ug/L	1400	<0.50	<0.50	<0.50	0.50	7501946
Styrene	ug/L	9100	<0.50	<0.50	<0.50	0.50	7501946
1,1,1,2-Tetrachloroethane	ug/L	28	<0.50	<0.50	<0.50	0.50	7501946
1,1,2,2-Tetrachloroethane	ug/L	15	<0.50	<0.50	<0.50	0.50	7501946
Tetrachloroethylene	ug/L	17	<0.20	<0.20	<0.20	0.20	7501946
Toluene	ug/L	18000	<0.20	<0.20	<0.20	0.20	7501946
1,1,1-Trichloroethane	ug/L	6700	<0.20	<0.20	<0.20	0.20	7501946
1,1,2-Trichloroethane	ug/L	30	<0.50	<0.50	<0.50	0.50	7501946
Trichloroethylene	ug/L	17	<0.20	<0.20	<0.20	0.20	7501946
Trichlorofluoromethane (FREON 11)	ug/L	2500	<0.50	<0.50	<0.50	0.50	7501946
Vinyl Chloride	ug/L	1.7	<0.20	<0.20	<0.20	0.20	7501946
p+m-Xylene	ug/L	-	<0.20	<0.20	<0.20	0.20	7501946
o-Xylene	ug/L	-	<0.20	<0.20	<0.20	0.20	7501946
Total Xylenes	ug/L	4200	<0.20	<0.20	<0.20	0.20	7501946
F1 (C6-C10)	ug/L	750	<25	39	<25	25	7501946
F1 (C6-C10) - BTEX	ug/L	750	<25	39	<25	25	7501946
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/L	150	<100	<100	<100	100	7504282
F3 (C16-C34 Hydrocarbons)	ug/L	500	<200	<200	<200	200	7504282
F4 (C34-C50 Hydrocarbons)	ug/L	500	<200	<200	<200	200	7504282
Reached Baseline at C50	ug/L	-	Yes	Yes	Yes		7504282
Surrogate Recovery (%)							
o-Terphenyl	%	-	100	100	96		7504282
4-Bromofluorobenzene	%	-	96	100	95		7501946
D4-1,2-Dichloroethane	%	-	106	106	106		7501946
D8-Toluene	%	-	99	95	99		7501946
No Fill	No Exceedance						
Grey	Exceeds 1 criteria policy/level						
Black	Exceeds both criteria/levels						
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)							
Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition							
Non-Potable Ground Water - All Types of Property Uses - Medium and Fine Textured Soil							



BUREAU
VERITAS

BV Labs Job #: C1L8758
Report Date: 2021/08/10

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

O.REG 153 VOCS BY HS (WATER)

BV Labs ID			QHA614	QHA617		
Sampling Date			2021/08/03 09:50			
COC Number			838785-01-01	838785-01-01		
	UNITS	Criteria	MW10A	TRIP BLANK	RDL	QC Batch
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	45	<0.50	<0.50	0.50	7501189
Volatile Organics						
Acetone (2-Propanone)	ug/L	130000	<10	<10	10	7501818
Benzene	ug/L	430	<0.20	<0.20	0.20	7501818
Bromodichloromethane	ug/L	85000	<0.50	<0.50	0.50	7501818
Bromoform	ug/L	770	<1.0	<1.0	1.0	7501818
Bromomethane	ug/L	56	<0.50	<0.50	0.50	7501818
Carbon Tetrachloride	ug/L	8.4	<0.19	<0.19	0.19	7501818
Chlorobenzene	ug/L	630	<0.20	<0.20	0.20	7501818
Chloroform	ug/L	22	<0.20	<0.20	0.20	7501818
Dibromochloromethane	ug/L	82000	<0.50	<0.50	0.50	7501818
1,2-Dichlorobenzene	ug/L	9600	<0.40	<0.40	0.40	7501818
1,3-Dichlorobenzene	ug/L	9600	<0.40	<0.40	0.40	7501818
1,4-Dichlorobenzene	ug/L	67	<0.40	<0.40	0.40	7501818
Dichlorodifluoromethane (FREON 12)	ug/L	4400	<1.0	<1.0	1.0	7501818
1,1-Dichloroethane	ug/L	3100	<0.20	<0.20	0.20	7501818
1,2-Dichloroethane	ug/L	12	<0.49	<0.49	0.49	7501818
1,1-Dichloroethylene	ug/L	17	<0.20	<0.20	0.20	7501818
cis-1,2-Dichloroethylene	ug/L	17	<0.50	<0.50	0.50	7501818
trans-1,2-Dichloroethylene	ug/L	17	<0.50	<0.50	0.50	7501818
1,2-Dichloropropane	ug/L	140	<0.20	<0.20	0.20	7501818
cis-1,3-Dichloropropene	ug/L	45	<0.30	<0.30	0.30	7501818
trans-1,3-Dichloropropene	ug/L	45	<0.40	<0.40	0.40	7501818
Ethylbenzene	ug/L	2300	<0.20	<0.20	0.20	7501818
Ethylene Dibromide	ug/L	0.83	<0.19	<0.19	0.19	7501818
Hexane	ug/L	520	<1.0	<1.0	1.0	7501818
Methylene Chloride(Dichloromethane)	ug/L	5500	<2.0	<2.0	2.0	7501818
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)						
Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition						
Non-Potable Ground Water - All Types of Property Uses - Medium and Fine Textured Soil						



BUREAU
VERITAS

BV Labs Job #: C1L8758
Report Date: 2021/08/10

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

O.REG 153 VOCS BY HS (WATER)

BV Labs ID			QHA614	QHA617		
Sampling Date			2021/08/03 09:50			
COC Number			838785-01-01	838785-01-01		
	UNITS	Criteria	MW10A	TRIP BLANK	RDL	QC Batch
Methyl Ethyl Ketone (2-Butanone)	ug/L	1500000	<10	<10	10	7501818
Methyl Isobutyl Ketone	ug/L	580000	<5.0	<5.0	5.0	7501818
Methyl t-butyl ether (MTBE)	ug/L	1400	<0.50	<0.50	0.50	7501818
Styrene	ug/L	9100	<0.40	<0.40	0.40	7501818
1,1,1,2-Tetrachloroethane	ug/L	28	<0.50	<0.50	0.50	7501818
1,1,2,2-Tetrachloroethane	ug/L	15	<0.40	<0.40	0.40	7501818
Tetrachloroethylene	ug/L	17	<0.20	<0.20	0.20	7501818
Toluene	ug/L	18000	<0.20	<0.20	0.20	7501818
1,1,1-Trichloroethane	ug/L	6700	<0.20	<0.20	0.20	7501818
1,1,2-Trichloroethane	ug/L	30	<0.40	<0.40	0.40	7501818
Trichloroethylene	ug/L	17	<0.20	<0.20	0.20	7501818
Trichlorofluoromethane (FREON 11)	ug/L	2500	<0.50	<0.50	0.50	7501818
Vinyl Chloride	ug/L	1.7	<0.20	<0.20	0.20	7501818
p+m-Xylene	ug/L	-	<0.20	<0.20	0.20	7501818
o-Xylene	ug/L	-	<0.20	<0.20	0.20	7501818
Total Xylenes	ug/L	4200	<0.20	<0.20	0.20	7501818
Surrogate Recovery (%)						
4-Bromofluorobenzene	%	-	97	96		7501818
D4-1,2-Dichloroethane	%	-	102	103		7501818
D8-Toluene	%	-	98	97		7501818
No Fill	No Exceedance					
Grey	Exceeds 1 criteria policy/level					
Black	Exceeds both criteria/levels					
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)						
Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition						
Non-Potable Ground Water - All Types of Property Uses - Medium and Fine Textured Soil						



BUREAU
VERITAS

BV Labs Job #: C1L8758
Report Date: 2021/08/10

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

TEST SUMMARY

BV Labs ID: QHA613
Sample ID: MWA
Matrix: Water

Collected: 2021/08/03
Shipped:
Received: 2021/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7501189	N/A	2021/08/09	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	7504282	2021/08/06	2021/08/07	Dennis Ngondou
Dissolved Metals by ICPMS	ICP/MS	7502997	N/A	2021/08/06	Azita Fazaeli
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7501946	N/A	2021/08/07	Rebecca McClean

BV Labs ID: QHA614
Sample ID: MW10A
Matrix: Water

Collected: 2021/08/03
Shipped:
Received: 2021/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7501189	N/A	2021/08/09	Automated Statchk
Volatile Organic Compounds in Water	GC/MS	7501818	N/A	2021/08/06	Ancheol Jeong

BV Labs ID: QHA615
Sample ID: MWB
Matrix: Water

Collected: 2021/08/03
Shipped:
Received: 2021/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7501189	N/A	2021/08/09	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	7504282	2021/08/06	2021/08/07	Dennis Ngondou
Dissolved Metals by ICPMS	ICP/MS	7502997	N/A	2021/08/06	Azita Fazaeli
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7501946	N/A	2021/08/07	Rebecca McClean

BV Labs ID: QHA616
Sample ID: MWC
Matrix: Water

Collected: 2021/08/03
Shipped:
Received: 2021/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7501189	N/A	2021/08/09	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	7504282	2021/08/06	2021/08/07	Dennis Ngondou
Dissolved Metals by ICPMS	ICP/MS	7502997	N/A	2021/08/06	Azita Fazaeli
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7501946	N/A	2021/08/07	Rebecca McClean

BV Labs ID: QHA616 Dup
Sample ID: MWC
Matrix: Water

Collected: 2021/08/03
Shipped:
Received: 2021/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Metals by ICPMS	ICP/MS	7502997	N/A	2021/08/06	Azita Fazaeli

BV Labs ID: QHA617
Sample ID: TRIP BLANK
Matrix: Water

Collected:
Shipped:
Received: 2021/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7501189	N/A	2021/08/09	Automated Statchk



BUREAU
VERITAS

BV Labs Job #: C1L8758
Report Date: 2021/08/10

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

TEST SUMMARY

BV Labs ID: QHA617
Sample ID: TRIP BLANK
Matrix: Water

Collected:
Shipped:
Received: 2021/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organic Compounds in Water	GC/MS	7501818	N/A	2021/08/06	Ancheol Jeong



BUREAU
VERITAS

BV Labs Job #: C1L8758
Report Date: 2021/08/10

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

GENERAL COMMENTS

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

Package 1	4.0°C
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Results relate only to the items tested.



**BUREAU
VERITAS**

BV Labs Job #: C1L8758
Report Date: 2021/08/10

QUALITY ASSURANCE REPORT

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7501818	4-Bromofluorobenzene	2021/08/06	99	70 - 130	99	70 - 130	98	%		
7501818	D4-1,2-Dichloroethane	2021/08/06	103	70 - 130	98	70 - 130	100	%		
7501818	D8-Toluene	2021/08/06	99	70 - 130	100	70 - 130	98	%		
7501946	4-Bromofluorobenzene	2021/08/07	102	70 - 130	104	70 - 130	97	%		
7501946	D4-1,2-Dichloroethane	2021/08/07	107	70 - 130	103	70 - 130	102	%		
7501946	D8-Toluene	2021/08/07	99	70 - 130	98	70 - 130	100	%		
7504282	o-Terphenyl	2021/08/06	101	60 - 130	93	60 - 130	93	%		
7501818	1,1,1,2-Tetrachloroethane	2021/08/06	98	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
7501818	1,1,1-Trichloroethane	2021/08/06	96	70 - 130	98	70 - 130	<0.20	ug/L	NC	30
7501818	1,1,2,2-Tetrachloroethane	2021/08/06	100	70 - 130	94	70 - 130	<0.40	ug/L	NC	30
7501818	1,1,2-Trichloroethane	2021/08/06	102	70 - 130	99	70 - 130	<0.40	ug/L	NC	30
7501818	1,1-Dichloroethane	2021/08/06	95	70 - 130	94	70 - 130	<0.20	ug/L	0.81	30
7501818	1,1-Dichloroethylene	2021/08/06	97	70 - 130	97	70 - 130	<0.20	ug/L	NC	30
7501818	1,2-Dichlorobenzene	2021/08/06	93	70 - 130	95	70 - 130	<0.40	ug/L	NC	30
7501818	1,2-Dichloroethane	2021/08/06	98	70 - 130	94	70 - 130	<0.49	ug/L	1.8	30
7501818	1,2-Dichloropropane	2021/08/06	97	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
7501818	1,3-Dichlorobenzene	2021/08/06	93	70 - 130	96	70 - 130	<0.40	ug/L	NC	30
7501818	1,4-Dichlorobenzene	2021/08/06	108	70 - 130	112	70 - 130	<0.40	ug/L	NC	30
7501818	Acetone (2-Propanone)	2021/08/06	100	60 - 140	88	60 - 140	<10	ug/L	NC	30
7501818	Benzene	2021/08/06	90	70 - 130	89	70 - 130	<0.20	ug/L	3.1	30
7501818	Bromodichloromethane	2021/08/06	100	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
7501818	Bromoform	2021/08/06	103	70 - 130	98	70 - 130	<1.0	ug/L	NC	30
7501818	Bromomethane	2021/08/06	99	60 - 140	93	60 - 140	<0.50	ug/L	NC	30
7501818	Carbon Tetrachloride	2021/08/06	96	70 - 130	98	70 - 130	<0.19	ug/L	NC	30
7501818	Chlorobenzene	2021/08/06	95	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
7501818	Chloroform	2021/08/06	97	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
7501818	cis-1,2-Dichloroethylene	2021/08/06	97	70 - 130	95	70 - 130	<0.50	ug/L	NC	30
7501818	cis-1,3-Dichloropropene	2021/08/06	96	70 - 130	90	70 - 130	<0.30	ug/L	NC	30
7501818	Dibromochloromethane	2021/08/06	98	70 - 130	95	70 - 130	<0.50	ug/L	NC	30
7501818	Dichlorodifluoromethane (FREON 12)	2021/08/06	89	60 - 140	90	60 - 140	<1.0	ug/L	NC	30
7501818	Ethylbenzene	2021/08/06	88	70 - 130	90	70 - 130	<0.20	ug/L	NC	30



BUREAU
VERITAS

BV Labs Job #: C118758
Report Date: 2021/08/10

QUALITY ASSURANCE REPORT(CONT'D)

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7501818	Ethylene Dibromide	2021/08/06	100	70 - 130	95	70 - 130	<0.19	ug/L	NC	30
7501818	Hexane	2021/08/06	99	70 - 130	100	70 - 130	<1.0	ug/L	NC	30
7501818	Methyl Ethyl Ketone (2-Butanone)	2021/08/06	109	60 - 140	98	60 - 140	<10	ug/L	NC	30
7501818	Methyl Isobutyl Ketone	2021/08/06	105	70 - 130	98	70 - 130	<5.0	ug/L	NC	30
7501818	Methyl t-butyl ether (MTBE)	2021/08/06	88	70 - 130	87	70 - 130	<0.50	ug/L	NC	30
7501818	Methylene Chloride(Dichloromethane)	2021/08/06	111	70 - 130	106	70 - 130	<2.0	ug/L	NC	30
7501818	o-Xylene	2021/08/06	88	70 - 130	91	70 - 130	<0.20	ug/L	NC	30
7501818	p+m-Xylene	2021/08/06	90	70 - 130	93	70 - 130	<0.20	ug/L	NC	30
7501818	Styrene	2021/08/06	100	70 - 130	102	70 - 130	<0.40	ug/L	NC	30
7501818	Tetrachloroethylene	2021/08/06	89	70 - 130	91	70 - 130	<0.20	ug/L	NC	30
7501818	Toluene	2021/08/06	91	70 - 130	93	70 - 130	<0.20	ug/L	0.69	30
7501818	Total Xylenes	2021/08/06					<0.20	ug/L	NC	30
7501818	trans-1,2-Dichloroethylene	2021/08/06	98	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
7501818	trans-1,3-Dichloropropene	2021/08/06	110	70 - 130	100	70 - 130	<0.40	ug/L	NC	30
7501818	Trichloroethylene	2021/08/06	98	70 - 130	99	70 - 130	<0.20	ug/L	NC	30
7501818	Trichlorofluoromethane (FREON 11)	2021/08/06	94	70 - 130	95	70 - 130	<0.50	ug/L	NC	30
7501818	Vinyl Chloride	2021/08/06	96	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
7501946	1,1,1,2-Tetrachloroethane	2021/08/07	101	70 - 130	93	70 - 130	<0.50	ug/L	NC	30
7501946	1,1,1-Trichloroethane	2021/08/07	97	70 - 130	94	70 - 130	<0.20	ug/L	NC	30
7501946	1,1,2,2-Tetrachloroethane	2021/08/07	117	70 - 130	103	70 - 130	<0.50	ug/L	NC	30
7501946	1,1,2-Trichloroethane	2021/08/07	106	70 - 130	95	70 - 130	<0.50	ug/L	NC	30
7501946	1,1-Dichloroethane	2021/08/07	92	70 - 130	88	70 - 130	<0.20	ug/L	NC	30
7501946	1,1-Dichloroethylene	2021/08/07	92	70 - 130	91	70 - 130	<0.20	ug/L	NC	30
7501946	1,2-Dichlorobenzene	2021/08/07	96	70 - 130	86	70 - 130	<0.50	ug/L	NC	30
7501946	1,2-Dichloroethane	2021/08/07	104	70 - 130	95	70 - 130	<0.50	ug/L	NC	30
7501946	1,2-Dichloropropane	2021/08/07	101	70 - 130	94	70 - 130	<0.20	ug/L	NC	30
7501946	1,3-Dichlorobenzene	2021/08/07	97	70 - 130	90	70 - 130	<0.50	ug/L	NC	30
7501946	1,4-Dichlorobenzene	2021/08/07	105	70 - 130	96	70 - 130	<0.50	ug/L	NC	30
7501946	Acetone (2-Propanone)	2021/08/07	105	60 - 140	93	60 - 140	<10	ug/L	NC	30
7501946	Benzene	2021/08/07	90	70 - 130	86	70 - 130	<0.20	ug/L	NC	30
7501946	Bromodichloromethane	2021/08/07	105	70 - 130	96	70 - 130	<0.50	ug/L	NC	30



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BV Labs Job #: C118758
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QUALITY ASSURANCE REPORT(CONT'D)

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7501946	Bromoform	2021/08/07	101	70 - 130	90	70 - 130	<1.0	ug/L	NC	30
7501946	Bromomethane	2021/08/07	92	60 - 140	91	60 - 140	<0.50	ug/L	NC	30
7501946	Carbon Tetrachloride	2021/08/07	93	70 - 130	90	70 - 130	<0.20	ug/L	NC	30
7501946	Chlorobenzene	2021/08/07	99	70 - 130	91	70 - 130	<0.20	ug/L	NC	30
7501946	Chloroform	2021/08/07	101	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
7501946	cis-1,2-Dichloroethylene	2021/08/07	104	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
7501946	cis-1,3-Dichloropropene	2021/08/07	99	70 - 130	91	70 - 130	<0.30	ug/L	NC	30
7501946	Dibromochloromethane	2021/08/07	102	70 - 130	91	70 - 130	<0.50	ug/L	NC	30
7501946	Dichlorodifluoromethane (FREON 12)	2021/08/07	83	60 - 140	83	60 - 140	<1.0	ug/L	NC	30
7501946	Ethylbenzene	2021/08/07	88	70 - 130	84	70 - 130	<0.20	ug/L	NC	30
7501946	Ethylene Dibromide	2021/08/07	107	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
7501946	F1 (C6-C10) - BTEX	2021/08/07					<25	ug/L	NC	30
7501946	F1 (C6-C10)	2021/08/07	90	60 - 140	89	60 - 140	<25	ug/L	NC	30
7501946	Hexane	2021/08/07	88	70 - 130	89	70 - 130	<1.0	ug/L	NC	30
7501946	Methyl Ethyl Ketone (2-Butanone)	2021/08/07	109	60 - 140	95	60 - 140	<10	ug/L	NC	30
7501946	Methyl Isobutyl Ketone	2021/08/07	112	70 - 130	98	70 - 130	<5.0	ug/L	NC	30
7501946	Methyl t-butyl ether (MTBE)	2021/08/07	98	70 - 130	91	70 - 130	<0.50	ug/L	NC	30
7501946	Methylene Chloride(Dichloromethane)	2021/08/07	106	70 - 130	101	70 - 130	<2.0	ug/L	NC	30
7501946	o-Xylene	2021/08/07	90	70 - 130	85	70 - 130	<0.20	ug/L	NC	30
7501946	p+m-Xylene	2021/08/07	90	70 - 130	85	70 - 130	<0.20	ug/L	NC	30
7501946	Styrene	2021/08/07	105	70 - 130	97	70 - 130	<0.50	ug/L	NC	30
7501946	Tetrachloroethylene	2021/08/07	87	70 - 130	84	70 - 130	<0.20	ug/L	NC	30
7501946	Toluene	2021/08/07	88	70 - 130	84	70 - 130	<0.20	ug/L	NC	30
7501946	Total Xylenes	2021/08/07					<0.20	ug/L	NC	30
7501946	trans-1,2-Dichloroethylene	2021/08/07	95	70 - 130	95	70 - 130	<0.50	ug/L	NC	30
7501946	trans-1,3-Dichloropropene	2021/08/07	104	70 - 130	93	70 - 130	<0.40	ug/L	NC	30
7501946	Trichloroethylene	2021/08/07	102	70 - 130	98	70 - 130	<0.20	ug/L	3.0	30
7501946	Trichlorofluoromethane (FREON 11)	2021/08/07	90	70 - 130	90	70 - 130	<0.50	ug/L	NC	30
7501946	Vinyl Chloride	2021/08/07	87	70 - 130	87	70 - 130	<0.20	ug/L	NC	30
7502997	Dissolved Antimony (Sb)	2021/08/06	104	80 - 120	103	80 - 120	<0.50	ug/L	NC	20
7502997	Dissolved Arsenic (As)	2021/08/06	101	80 - 120	100	80 - 120	<1.0	ug/L	16	20



BUREAU
VERITAS

BV Labs Job #: C1L8758

Report Date: 2021/08/10

QUALITY ASSURANCE REPORT(CONT'D)

MTE Consultants Inc

Client Project #: 49485-200

Sampler Initials: ZT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7502997	Dissolved Barium (Ba)	2021/08/06	95	80 - 120	97	80 - 120	<2.0	ug/L	1.8	20
7502997	Dissolved Beryllium (Be)	2021/08/06	97	80 - 120	97	80 - 120	<0.40	ug/L	NC	20
7502997	Dissolved Boron (B)	2021/08/06	98	80 - 120	98	80 - 120	<10	ug/L	0.89	20
7502997	Dissolved Cadmium (Cd)	2021/08/06	97	80 - 120	98	80 - 120	<0.090	ug/L	NC	20
7502997	Dissolved Chromium (Cr)	2021/08/06	97	80 - 120	97	80 - 120	<5.0	ug/L	NC	20
7502997	Dissolved Cobalt (Co)	2021/08/06	95	80 - 120	96	80 - 120	<0.50	ug/L	3.8	20
7502997	Dissolved Copper (Cu)	2021/08/06	96	80 - 120	98	80 - 120	<0.90	ug/L	NC	20
7502997	Dissolved Lead (Pb)	2021/08/06	93	80 - 120	96	80 - 120	<0.50	ug/L	NC	20
7502997	Dissolved Molybdenum (Mo)	2021/08/06	102	80 - 120	100	80 - 120	<0.50	ug/L	2.9	20
7502997	Dissolved Nickel (Ni)	2021/08/06	95	80 - 120	98	80 - 120	<1.0	ug/L	0.94	20
7502997	Dissolved Selenium (Se)	2021/08/06	94	80 - 120	101	80 - 120	<2.0	ug/L	NC	20
7502997	Dissolved Silver (Ag)	2021/08/06	53 (1)	80 - 120	96	80 - 120	<0.090	ug/L	NC	20
7502997	Dissolved Thallium (Tl)	2021/08/06	94	80 - 120	96	80 - 120	<0.050	ug/L	NC	20
7502997	Dissolved Uranium (U)	2021/08/06	101	80 - 120	102	80 - 120	<0.10	ug/L	0.89	20
7502997	Dissolved Vanadium (V)	2021/08/06	98	80 - 120	98	80 - 120	<0.50	ug/L	NC	20
7502997	Dissolved Zinc (Zn)	2021/08/06	93	80 - 120	98	80 - 120	<5.0	ug/L	NC	20
7504282	F2 (C10-C16 Hydrocarbons)	2021/08/06	98	60 - 130	87	60 - 130	<100	ug/L	12	30
7504282	F3 (C16-C34 Hydrocarbons)	2021/08/06	105	60 - 130	95	60 - 130	<200	ug/L	NC	30
7504282	F4 (C34-C50 Hydrocarbons)	2021/08/06	108	60 - 130	95	60 - 130	<200	ug/L	NC	30

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

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

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

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

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

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

(1) Matrix Spike exceeds acceptance limits, probable matrix interference.



BUREAU
VERITAS

BV Labs Job #: C1L8758
Report Date: 2021/08/10

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

VALIDATION SIGNATURE PAGE

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

A handwritten signature in black ink, appearing to read "Brad Newman", written over a horizontal line.

Brad Newman, B.Sc., C.Chem., Scientific Service Specialist

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Ronklin Gracian
 C1L8758

ASR ENV-906

Presence of Visible Particulate/Sediment

Maxxam Analytics
 CAM FCD-01013/5
 Page 1 of 1

When there is >1cm of visible particulate/sediment, the amount will be recorded in the field below

Bottle Types

Sample ID	All	Inorganics							Organics							Hydrocarbons							Volatiles				Other		
		CrVI	CN	General	Hg	Metals (Diss.)	Organic 1 of 2	Organic 2 of 2	PCB 1 of 2	PCB 2 of 2	Pest/ Herb 1 of 2	Pest/ Herb 2 of 2	SVOC/ ABN 1 of 2	SVOC/ ABN 2 of 2	PAH 1 of 2	PAH 2 of 2	Dioxin /Furan	F1 Vial 1	F1 Vial 2	F1 Vial 3	F1 Vial 4	F2-F4 1 of 2	F2-F4 2 of 2	F4G	VOC Vial 1	VOC Vial 2		VOC Vial 3	VOC Vial 4
1 MWA	TS																												
2 MWIOA	TS																												
3 MWC	TS																												
4																													
5																													
6																													
7																													
8																													
9																													
10																													

Comments: EXCEPT ALL METALS

Legend:	
P	Suspended Particulate
TS	Trace Settled Sediment (just covers bottom of container or less)
S	Sediment greater than (>) Trace, but less than (<), 1 cm

Recorded By: (signature/print) *[Signature]* Y. THOMPSON



INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name: #6868 MTE Consultants Inc	Company Name: Monique Gyba	Quotation #: B90004	BV Labs Job #:	Bottle Order #:	Barcode: 838765		
Attention: Accounts Payable	Attention: Monique Gyba	P.O. #:	COC #:	Project Manager:	Barcode: Ronklin Gracian		
Address: 520 Bingemans Centre Dr Kitchener ON N2B 3X9	Address:	Project: 49485-200	Barcode: C#838765-01-01				
Tel: (519) 743-6500 Fax: (519) 743-6513	Tel: MCGyba@mte85.com Fax:	Project Name:					
Email: accounting@mte85.com	Email: MCGyba@mte85.com	Site #:					
		Sampled By:					

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BV LABS DRINKING WATER CHAIN OF CUSTODY						ANALYSIS REQUESTED (PLEASE BE SPECIFIC)						Turnaround Time (TAT) Required: Please provide advance notice for rush projects		
Regulation 153 (2011)		Other Regulations		Special Instructions		Field Filtered (please circle): (Metals) Hg / Cr / VI						Regular (Standard) TAT: (will be applied if Rush TAT is not specified). Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.		
<input type="checkbox"/> Table 1	<input checked="" type="checkbox"/> Res/Park	<input checked="" type="checkbox"/> Medium/Fine	<input type="checkbox"/> CCME	<input type="checkbox"/> Sanitary Sewer Bylaw		<input type="checkbox"/> Reg 153 Metals Scan 1,2,2.2 and 1,2.3 (Water)	<input type="checkbox"/> Reg 153 PHC+BTEX (Water)	<input type="checkbox"/> Reg 153 VOCs (Water)	Metals	As, Sb, Se	PHCs+BTEX	VOCs	<input checked="" type="checkbox"/>	Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Time Required: _____ Rush Confirmation Number: _____ (call lab for #)
<input type="checkbox"/> Table 2	<input type="checkbox"/> Ind/Comm	<input type="checkbox"/> Coarse	<input type="checkbox"/> Reg 558	<input type="checkbox"/> Storm Sewer Bylaw									# of Bottles	Comments
<input checked="" type="checkbox"/> Table 3	<input type="checkbox"/> Agri/Other	<input type="checkbox"/> For RSC	<input type="checkbox"/> MISA	Municipality _____										
<input type="checkbox"/> Table _____			<input type="checkbox"/> PWQO	<input type="checkbox"/> Reg 406 Table _____										
Include Criteria on Certificate of Analysis (Y/N)?														
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix										
1	MWA	21/08/03	9:50	Ground Water	✓				X	X	X		6	
2	MW10A		9:50										3	
3	MWB		11:45		✓				X	X	X		6	
4	MWC		11:00		✓				X	X	X		6	
5	Trip Blank			Water							X		2	
6														
7														
8														
9														
10														

04-Aug-21 15:13
Ronklin Gracian
Barcode: C118758

* RELINQUISHED BY: (Signature/Print) Thompson, C. Thomson	Date: (YY/MM/DD) 21/08/03	Time 16:00	RECEIVED BY: (Signature/Print) Monique Gyba	Date: (YY/MM/DD) 21/08/03	Time 15:13	# jars used and not submitted	Laboratory Use Only			
							Time Sensitive	Temperature (°C) on Receipt 5/5/2	Custody Seal Present Intact	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BV LABS' STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVLABS.COM/TERMS-AND-CONDITIONS.
* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.
** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVLABS.COM/RESOURCES/CHAIN-OF-CUSTODY-FORMS.
SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BV LABS
White: BV Labs Yellow: Client



BUREAU
VERITAS

BV Labs Job #: C1L8758
Report Date: 2021/08/10

MTE Consultants Inc
Client Project #: 49485-200
Sampler Initials: ZT

Exceedance Summary Table – Reg153/04 T3-GW-F/M
Result Exceedances

Sample ID	BV Labs ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						
The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to applicable regulatory guidelines.						