Phase Two Environmental Site Assessment

10533 Keele Street
Vaughan, Ontario

Keele Street (10533) Ltd.

June 11, 2024

→ The Power of Commitment

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1. Executive Summary

GHD Limited (GHD) was retained by Keele Street (10533) Ltd. to conduct a Phase Two Environmental Site Assessment (ESA) of the property located at 10533 Keele Street in Vaughan, Ontario (hereinafter referred to as the Site or Property). The Site is part of PIN 03343-0323 (LT) described as Part of Lot 24, Concession 3, City of Vaughan, Regional Municipality of York. The Site is currently owned by Brovi Investments Ltd. and is occupied by a vacant residential structure, built in 1890 with an addition completed in the 1970s.

It is GHD's understanding that the Phase Two ESA was completed in support of the redevelopment of the Site, and that a Record of Site Condition (RSC) is not anticipated to be required at this time.

The Site is located in an area of Vaughan, Ontario that has been developed for mixed industrial, commercial, residential and/or agricultural purposes since the late 1800s. The Site is approximately 0.21 hectares (0.52 acres) in size and fronts onto Keele Street opposite of a low-rise residential subdivision.

GHD completed a Phase One ESA of the Site in April 2024. The purpose of the Phase One ESA was to identify, through a non-intrusive investigation, the existence of any Potentially Contaminating Activities (PCAs) and Areas of Potential Environmental Concern (APECs) associated with the Site. The Phase One ESA was completed in accordance with O. Reg. 153/04, which defines PCAs and APECs. The Phase One ESA identified the following APECs to be associated with the Site:

- **APEC #1 – Historical Adjacent Land Use:** From the 1980s to 1990s, a property located at 10547 Keele Street, approximately 30 m north of the Site, was utilized as a concrete manufacturing facility. In June 2021, approximately 360,000 L of douse water was applied to a waste fire at 10525 Keele Street, adjacent to the east of the Site. In January 2010, approximately 200 L of diesel fuel spilled onto the ground at 10525 Keele Street, adjacent to the east of the Site. Waste management systems were registered to 7346646 Canada Inc. operating as Maple Logistic Solutions, Maple Logistic Solutions, Waste Excellence Holdings Corp., Jonathan Logistic Inc. and KNR Equipment Inc., located adjacent to the east of the Site at 10525 Keele Street. The presence of waste transfer, cement manufacturing and spill incidents adjacent to the east of the Site was identified as PCAs (#12 – Concrete, Cement and Lime Manufacturing; #58 – Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners; and PCA B – Spill Incidents) in accordance with O. Reg. 153/04. As such, the entire Site was identified as **APEC #1**.
- **APEC #2 – Application of De-Icing Agents:** Road salt has been applied on the parking areas at the Site as well as along adjacent/nearby roadways during winter months for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both. Bulk salt has not been stored at the Site. The application of road salt on Site and in the vicinity of the Site has the potential to result in elevated sodium adsorption ratio (SAR) and electrical conductivity (EC) in soil, and sodium and chloride in groundwater, and would have the potential to contribute to an APEC at the Site and was identified as **APEC #2**. However, in accordance with paragraph 1 of Section 49.1 of O. Reg. 153/04, any potential on Site exceedances of SAR, EC, sodium, or chloride associated with the application of the road salt would be deemed as having met the applicable Site Condition Standards for Record of Site Condition filing purposes.

The purpose of the Phase Two ESA was to investigate the above-noted APECs identified during the Phase One ESA. The Phase Two ESA included the advancement of boreholes and installation of monitoring wells. Soil and groundwater samples were collected and analyzed for specific parameters, which included metals and inorganics, polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbon fractions (PHC) F1 to F4 and volatile organic compounds (VOCs). Inorganics analyses for soil samples included electrical conductivity (EC), pH, and sodium adsorption ratio (SAR). Inorganics analyses for groundwater samples included chloride.

The following parameters had concentrations above the Table 3 Generic Standards and are identified as COCs in soil at the Site:

- **Metals:** Lead
- **PAHs:** Benzo(a)pyrene

A summary of the soil analytical data with respect to the APECs investigated as part of the Phase Two ESA is provided below:

- **Metals:** Lead was detected at concentrations above the Table 3 Standards in a soil sample collected between 0.32 and 0.61 mBGS at MW1-24. Fill material was encountered between approximately 0.0 and 3.05 mBGS at MW1-24. The lead impact is inferred to be localized to the fill present at the Site. Lead impacts were not identified in any of the other borehole locations. The lead impacts to soil could be attributed to APEC #1 or the importation of fill material of unknown quality.
- **PAHs:** Benzo(a)pyrene was detected at concentrations above the Table 3 Standards in a soil sample collected between 0.76 and 1.52 mBGS at MW4-24. Fill material was encountered between approximately 0.0 and 1.37 mBGS at MW4-24. The PAH impact is localized to the fill present at the Site. PAH impacts were not identified in any of the other borehole locations. The PAH impacts to soil could be attributed to APEC #1 or the importation of fill material of unknown quality.

Based on the investigations completed, there is no evidence of soil impacts related to any other APECs identified at the Site.

All groundwater samples submitted for chemical analysis met the applicable standard. Based on the investigations completed, there is no evidence of groundwater impacts related to any other APECs identified at the Site.

2. Introduction

GHD Limited (GHD) was retained by Keele Street (10533) Ltd. to conduct a Phase Two Environmental Site Assessment (ESA) of the property located at 10533 Keele Street in Vaughan, Ontario (hereinafter referred to as the Site or Property). The Site is part of PIN 03343-0323 (LT) described as Part of Lot 24, Concession 3, City of Vaughan, Regional Municipality of York. The Site is currently owned by Brovi Investments Ltd. and is occupied by a vacant residential structure, built in 1890 with an addition completed in the 1970s. A Site Location Map and a Site Plan are provided on **Figure 1** and **Figure 2**, respectively.

GHD previously completed a Phase One ESA of the Site in April 2024. The results of the Phase One ESA are summarized in the report entitled "*Phase One Environmental Site Assessment, 10533 Keele Street, Vaughan, Ontario*," prepared for Keele Street (10533) Ltd., dated April 30, 2024.

The Phase Two ESA was undertaken in accordance with the requirements of Ontario Regulation 153/04, as amended (O. Reg. 153/04 or the Regulation). It is GHD's understanding that the Phase Two ESA was completed in support of the redevelopment of the Site, and that a Record of Site Condition (RSC) is not anticipated to be required at this time.

The objective of this Phase Two ESA was to investigate soil and groundwater quality, as applicable, in areas of potential environmental concern (APECs) identified during the Phase One ESA. This report summarizes the investigative activities completed and presents the data generated therefrom.

2.1 Site Description

The Site is approximately 0.22 hectares (0.55 acres) in size and is vacant.

The Site is occupied by a vacant two-story structure (former residence) constructed in 1890, with an addition completed in the 1970s. The exterior surfaces of the Site primarily consist of a grassy yard, asphalt and gravel parking areas and a concrete patio. No water bodies are located on the Site.

The building is constructed with a fieldstone foundation, wood frame, and a sloped wood joist roof finished with asphalt shingles. The building is not currently heated or cooled.

2.2 Property Ownership

The Site is currently owned by Brovi Investments Ltd. Contact information for the representative of the Property owner's representative is listed below:

Mr. Mario Greco
Highside Companies
20 Floral Parkway
Vaughan, Ontario
L4K 4R1
(647) 669-1092
greco@highsidecompanies.com

2.3 Current and Proposed Future Uses

Based on the Phase One ESA, the Site is currently commercial property fronting onto Keele Street.

It is GHD's understanding that the Site is proposed for redevelopment, which will include commercial land use.

2.4 Applicable Site Condition Standards

The soil and groundwater analytical results were assessed to the generic standards provided in the document entitled "*Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act*", dated April 15, 2011 (hereinafter referred to as the 2011 Generic Standards)[1]. The 2011 Generic Standards provide generic soil and groundwater quality standards for certain chemicals, based on combinations of the following Site-specific conditions:

- **Property use type** – Industrial/Commercial/Community (ICC). The proposed future land use of the Property will include commercial land use. Based on this, the standards for ICC property use are considered applicable to the Site.
- **Restoration of groundwater quality** – Non-potable. The Site obtains its potable water from the City of Vaughan's water distribution system, which obtains its raw water supply from Lake Ontario. Based on this, non-potable groundwater conditions are considered applicable to the Site.
- **Restoration depth – full depth and stratified depth**. For comparative purposes, results were compared to full depth standards.
- **Soil texture** – Coarse or medium/fine. Based on the investigative activities conducted at the Site, the predominant soil texture at the Site is medium/fine-textured; therefore, the soil and groundwater data were compared to the standards for medium/fine-textured soil.
- **Shallow Soil Property** – A shallow soil property means a property of which 1/3 or more of the area consists of soil equal to or less than 2 metres (m) in depth beneath the soil surface, excluding any non-soil surface treatment. Greater than 2.0 m of overburden soil exists across the Site. Therefore, the Property is not considered a shallow soil property.
- **Within 30 metres (m) of a Water Body** – A water body is not located on the Site and the Site is not located within 30 m of a water body.

[1] Previously the Ministry of the Environment (MOE) and now the Ministry of the Environment, Parks and Conservation (MECP).

The 2011 Generic Standards are not applicable if the Site is considered to be an environmentally sensitive area. The conditions for the above are presented in Section 41 of O. Reg. 153/04. Review of these conditions with respect to the Site indicated that the Site is not considered to be an environmentally sensitive area based on the following:

– The Site is not located within an area of natural significance;
– The Site does not include or is not adjacent to an area of natural significance, nor is it a part of such area; and,
– The Site does not include land that is within 30 m of an area of natural significance nor is part of such an area. The Ontario Ministry of Natural Resources and Forestry's - "Natural Heritage Information Centre (NHIC)" database was reviewed to identify areas registered as Areas of Natural or Scientific Interest (ANSI) or for known occurrences of Species at Risk (NHIC Rare Occurrences) within a 1-kilometre (km) radius of the Site. No records were identified in the ANSI database to be within 1-km of the Site.
– The soil pH in surface (0 to 1.5 mBGS) and subsurface (greater than 1.5 mBGS) soils was within the acceptable range of 5 and 9 for surface soils, and within acceptable range of 5 and 11 for subsurface soils, as outlined in Section 41 of O. Reg. 153/04.

Based on the above Site-specific information, the applicable standards were determined to be the Table 3: Full Depth Site Condition Standards in a Non-Potable Ground Water Condition (Table 3 Generic Standards). The soil analytical data were assessed with respect to the Table 3 Generic Standards for ICC Property Use for medium/fine-textured soil. The groundwater analytical data were assessed to the Table 3 Generic Standards for All Types of Property Use for medium/fine-textured soil.

3. Background Information

3.1 Physical Setting

Review of historical records indicated that the Site is located in an area of Vaughan, Ontario that has been developed for mixed industrial, commercial, residential and/or agricultural purposes since the late 1800s.

The elevation of the Site is approximately 257 metres above mean sea level (mAMSL)[2]. Regional topography generally slopes to the south towards a tributary of the West Don River, located approximately 2 kilometres (km) south of Site.

The Site is located in the broad physiographic region known as the Drumlinized till Plains[3]. A review of published quaternary geologic mapping for the area of the Site indicates that the overburden on the Site consists predominantly of clay to silt-textured till derived from glaciolacustrine deposits or shale[3]. Beneath the overburden deposits is bedrock consisting of shale, limestone, dolostone and siltstone of the Georgian Bay, Blue Mountain and Billings Formations[4]. Based on a review of available MECP well records, bedrock is expected to be encountered at depths greater than 87.2 mBGS.

No water bodies are located on the Site. The closest water body to the Site is a tributary of the West Don River, which is located approximately 2 km south of the Site. The Site is not within or adjacent to an "area of natural significance" as defined by O. Reg. 153/04, and there are no areas of natural significance within the Phase One ESA study area. The following are the adjacent property uses:

[2] Natural Resources Canada [map]. "The Atlas of Canada - Toporama", governed by version 2.3 of the Open Government License – Canada. November 27, 2020. http://atlas.gc.ca/toporama/en/index.html
[3] Chapman, L. J., and D. F., Putnam (1984), "The Physiography of Southern Ontario", Ontario Geological Survey.
[4] "Bedrock Geology of Ontario" [map]. Scale 1:250,000. OGS Earth Geoscience Data [computer files]. Sudbury, Ontario: Ontario Geological Survey & Ministry of Northern Development and Mines, 2010.

North: The Site is bound to the north by a one-storey structure which appears to be used for construction equipment storage (industrial land use), followed by vacant land which appears to be used for construction equipment storage (industrial land use).

East: The Site is bound to the east by Maple Transfer & Recycling Inc. (industrial land use), followed by the Canadian National Railway (CNR) (industrial land use).

South: The Site is bound to the south by Maple Transfer & Recycling Inc. (industrial land use), followed by Direct Underground, Main Infrastructure Ltd. and Blair Building Materials Inc. (industrial land use).

West: The Site is bound to the west by Keele Street (community land use), followed by a low-rise residential subdivision (residential land use).

3.2 Past Investigations

GHD completed a Phase One ESA of the Site in April 2024. The purpose of the Phase One ESA was to identify, through a non-intrusive investigation, the existence of any Potentially Contaminating Activities (PCAs) and Areas of Potential Environmental Concern (APECs) associated with the Site. The Phase One ESA was completed in accordance with O. Reg. 153/04, which defines PCAs and APECs. The Phase One ESA identified the following APECs to be associated with the Site:

- **APEC #1 – Historical Adjacent Land Use:** From the 1980s to 1990s, a property located at 10547 Keele Street, approximately 30 m north of the Site, was utilized as a concrete manufacturing facility. In June 2021, approximately 360,000 L of douse water was applied to a waste fire at 10525 Keele Street, adjacent to the east of the Site. In January 2010, approximately 200 L of diesel fuel spilled onto the ground at 10525 Keele Street, adjacent to the east of the Site. Waste management systems were registered to 7346646 Canada Inc. operating as Maple Logistic Solutions, Maple Logistic Solutions, Waste Excellence Holdings Corp., Jonathan Logistic Inc. and KNR Equipment Inc., located adjacent to the east of the Site at 10525 Keele Street. The presence of waste transfer, cement manufacturing and spill incidents adjacent to the east of the Site was identified as PCAs (#12 – Concrete, Cement and Lime Manufacturing; #58 – Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners; and PCA B – Spill Incidents) in accordance with O. Reg. 153/04. As such, the entire Site was identified as **APEC #1**.
- **APEC #2 – Application of De-Icing Agents:** Road salt has been applied on the parking areas at the Site as well as along adjacent/nearby roadways during winter months for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both. Bulk salt has not been stored at the Site. The application of road salt on Site and in the vicinity of the Site has the potential to result in elevated sodium adsorption ratio (SAR) and electrical conductivity (EC) in soil, and sodium and chloride in groundwater, and would have the potential to contribute to an APEC at the Site and was identified as **APEC #2**. However, in accordance with paragraph 1 of Section 49.1 of O. Reg. 153/04, any potential on Site exceedances of SAR, EC, sodium, or chloride associated with the application of the road salt would be deemed as having met the applicable Site Condition Standards for Record of Site Condition filing purposes.

4. Scope of the Investigation

4.1 Overview of Site Investigation

The objective of the Phase Two ESA was to investigate the APECs identified during the Phase One ESA. The Phase Two ESA Sampling and Analysis Plan (SAP) is provided in **Appendix A**. The following section provides a summary of the investigative activities that were completed during the Phase Two ESA.

4.2 Media Investigated

GHD completed soil and groundwater investigations at the Site. Sediment sampling was not completed as no water bodies or associated sediment are present at the Site. The following field investigation activities were completed to characterize the Site:

– Advancement of four (4) boreholes concurrently with a geotechnical investigation;
– Instrumentation of all boreholes as groundwater monitoring wells;
– Field screening of soil and groundwater;
– Hydraulic monitoring (groundwater level measurements and free-product measurements); and,
– Laboratory analysis of fifteen (15) soil samples (including three (3) field duplicate samples), and five (5) groundwater sample sets (including one (1) field duplicate sample).

Soil and groundwater samples were submitted for laboratory analysis of one or more of the following: metals & inorganics, PAHs, PHC F1 to F4 and VOCs. Inorganics analyses for soil samples included EC, pH, and SAR. Inorganics analyses for groundwater samples included chloride.

A summary of soil and groundwater sampling locations and chemical analysis is provided in **Table 1**. The investigative locations are shown on **Figure 4**.

4.3 Phase One Conceptual Site Model

The Site is located in an area of Vaughan, Ontario that has been developed for mixed industrial, commercial, residential and/or agricultural purposes since the late 1800s. The Site is approximately 0.21 hectares (0.52 acres) in size and fronts onto Keele Street opposite of a low-rise residential subdivision.

The Site is approximately 0.22 hectares (0.55 acres) in size and is vacant. The Site is occupied by a vacant two-story residential structure constructed in 1890, with an addition completed in the 1970s. The exterior surfaces of the Site primarily consist of a grassy yard, asphalt and gravel parking areas and a concrete patio. No water bodies are located on the Site. The building is constructed with a fieldstone foundation, wood frame, and a sloped wood joist roof finished with asphalt shingles. The building is not currently heated or cooled.

The elevation of the Site is approximately 257 mAMSL. Regional topography generally slopes to the south towards a tributary of the West Don River, located approximately 2 km south of Site. The Site is located in the broad physiographic region known as the Drumlinized till Plains. A review of published quaternary geologic mapping for the area of the Site indicates that the overburden on the Site consists predominantly of clay to silt-textured till derived from glaciolacustrine deposits or shale. Beneath the overburden deposits is bedrock consisting of shale, limestone, dolostone and siltstone of the Georgian Bay, Blue Mountain and Billings Formations. Based on a review of available MECP well records, bedrock is expected to be encountered at depths greater than 87.2 mBGS.

Based on discussions with the Site representative and review of Site records, all utilities to the Site were disconnected at an unknown date. Buried utilities formally included natural gas, electricity, and fibre optic communications to the Site building. No back up generators are located on the Site. The Site was also formally serviced with municipally supplied potable water and storm and sanitary sewer services. The Site representative was not aware of the past presence of any septic systems at the Site. GHD did not observe evidence of any active or abandoned septic systems at the Site during the Site inspection.

The following APECs associated with the Site were identified by the Phase One ESA records review, interviews, and Site reconnaissance:

APEC	Location of the APEC on Phase One Property	PCA(s)	Location of PCA (on-site or off-site)
APEC #1 – Historical Adjacent Land Use	Entire Site	PCA 12 – Concrete, Cement and Lime Manufacturing PCA 58 – Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners. PCA B – Spill Incidents	Off-Site
APEC #2 – Application of De-icing Agents	Entire Site	PCA A – Application of De-icing Agents	On-Site

Road salt has been applied on the parking areas at the Site as well as along adjacent/nearby roadways during winter months for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both. Bulk salt has not been stored at the Site. The application of road salt on-Site and in the vicinity of the Site has the potential to result in elevated sodium adsorption ratio (SAR) and electrical conductivity (EC) in soil, and sodium and chloride in groundwater, and would have the potential to contribute to an APEC at the Site and was identified as **APEC #2**. However, in accordance with paragraph 1 of Section 49.1 of O. Reg. 153/04, any potential on-Site exceedances of SAR, EC, sodium, or chloride associated with the application of the road salt would be deemed as having met the applicable Site Condition Standards for the purposes of RSC filing.

Several off-Site PCAs were identified to be associated with properties located within the Phase One ESA study area (as noted on **Figure 3**) that were not interpreted to have the potential to contribute to an APEC at the Site. A summary of the off-Site PCAs that did not result in an APEC at the Site is provided below:

Property Address(es)	PCA(s), in accordance with O. Reg. 153/04	PCA(s) contributing to an APEC at the Property (Yes/No)	Rationale
Approximately 160 m southeast of Site at 10475 Keele Street	PCA 12 – Concrete, Cement and Lime Manufacturing	No	Due to the distance from Site and the inferred groundwater flow direction, this record is not anticipated to have affected the environmental quality of Site and is therefore not contributing to and APEC.
Approximately 185 m south of Site at 10445 Keele Street	PCA 28 – Gasoline and Associated Products Storage in Fixed Tanks	No	Due to the distance from Site and the inferred groundwater flow direction, this record is not anticipated to have affected the environmental quality of Site and is therefore not contributing to and APEC.
Approximately 245 m south of Site at 10431 Keele Street	PCA 28 – Gasoline and Associated Products Storage in Fixed Tanks	No	Due to the distance from Site and the inferred groundwater flow direction, this record is not anticipated to have affected the environmental quality of Site and is

Property Address(es)	PCA(s), in accordance with O. Reg. 153/04	PCA(s) contributing to an APEC at the Property (Yes/No)	Rationale
			therefore not contributing to and APEC.
Approximately 160 m east of Site	PCA 46 – Rail Yards, Tracks and Spurs	No	Due to the distance from Site and the inferred groundwater flow direction, this record is not anticipated to have affected the environmental quality of Site and is therefore not contributing to and APEC.
Approximately 60 m south of Site at 10495 Keele Street	PCA B – Spill Incidents	No	Due to the distance from Site and the inferred groundwater flow direction, this record is not anticipated to have affected the environmental quality of Site and is therefore not contributing to and APEC.

Based on the results of the Phase One ESA, the contaminants of concern at the Site include metals, PHCs, VOCs and PAHs.

The Phase One ESA Conceptual Site Model for the Site and the Phase One ESA Study Area are shown on **Figure 3** and **Figure 4**.

4.4 Deviations from Sampling and Analysis Plan

No deviations from the Sampling and Analysis Plan occurred during the Phase Two ESA.

4.5 Impediments

No impediments or denials of access were encountered by GHD during the Phase Two ESA.

5. Investigation Methods

5.1 General

GHD completed the Phase Two ESA field activities between March 27 to April 5, 2024. Investigations completed included the following:

– Completion of public and private utility locates;
– Advancement of boreholes;
– Installation of groundwater monitoring wells;
– Collection of field soil screening measurements and observations;
– Collection of soil and groundwater samples;
– Field measurements of groundwater quality parameters;

– Hydraulic monitoring (groundwater level measurements and measurements for non-aqueous phase liquid [NAPL], if present);
– Quality assurance and quality control (QA/QC) measures;
– Elevation Surveying;
– Analytical testing; and,
– Residue management.

The field investigation activities were completed in accordance with MECP protocols[5], GHD's standard operating procedures (SOPs), and standard good practice.

Prior to the start of the investigation activities, GHD prepared a Site-specific Health and Safety Plan (HASP). The purpose of the HASP was to provide specific guidelines and established procedures for the protection of personnel performing the Site investigation activities. In addition, GHD also completed the public utility notifications and retained a private utility locator to assist with on-Site utility clearance.

5.2 Drilling and Excavating

Drilling activities, in conjunction with a geotechnical investigation, were completed between March 27 and 28, 2024. Landshark Drilling Inc. (Landshark) was retained by GHD to advance four (4) boreholes to a depth of 6.7 mBGS.

Landshark used a truck-mounted Mobile B57 drill rig equipped with hollow stem augers (HSAs) to advance the boreholes. At all investigative locations, soil samples were collected every 0.6 m per 0.8 m to the termination of the borehole using a 51-mm outside diameter stainless steel split-spoon sampler.

Prior to use, and between each borehole location, the drilling and sampling equipment was thoroughly cleaned using a hard bristled scrub brush with Alconox® soap and potable water followed by a potable water rinse. A rinsed split-spoon was used for each sampling interval.

No test pits were excavated as part of the Phase Two ESA.

5.3 Soil Sampling

The sampling and analysis plan and rationale for the soil sampling locations are presented in **Appendix A**. Soils recovered from each borehole were logged using the Unified Soil Classification System (USCS), making special note of any visual or olfactory evidence of potential impacts. Soil samples were qualitatively and quantitatively screened in the field for the presence of impact. Qualitative screening was based on visual and olfactory observations, while quantitative screening was based on the measurement of undifferentiated volatile organic vapours in the headspace of the soil samples collected. GHD field personnel screened the soil from the boreholes by placing a portion of the soil core in a Ziploc® bag and measuring relative concentrations of undifferentiated volatile organic vapour readings in the headspace inside the bag using a photoionization detector (PID). The soil sample exhibiting the strongest field evidence of impact (i.e., high PID readings and visual and/or olfactory evidence of impact) was submitted for laboratory analyses. Soil samples were collected in laboratory-supplied glass containers which were placed in a cooler containing ice for sample preservation. Undisturbed soil samples for PHC fraction F1 and VOC analyses were placed directly in sample containers provided by the laboratory. Field screening measurement methods are described in Section 5.4. The geological conditions and qualitative and quantitative information (including PID measurements) collected at each investigative location are presented on stratigraphic and instrumentations logs provided in **Appendix B**. The borehole locations are shown on **Figure 5**.

[5] *Rules for Soil Management and Excess Soil Quality Standards*, *O. Reg. 153/04 Section 47 (Analytical Procedures)* and the *Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*

5.4 Field Screening Measurements

Prior to use, the PID was inspected and calibrated according to the manufacturer's recommendations. Calibrating the RKI Eagle 2 is a two-point process using "fresh air" and the standard reference gas (also known as span gas). A "fresh air" calibration, which contained no detectable VOC (0.0 parts per million [ppm]), was used to set the zero point for the sensor. Then, a standard reference gas (isobutylene) of known concentration (100 ppm) was used to set the second point of reference.

The PID model specifications are listed below:

Detector:	Photo ionization detector with 10.6 eV UV lamp
Measurement Accuracy (Isobutylene):	0 - 2,000 ppm: ±2 ppm or 10% of reading >2,000 ppm: ±20% of reading
Calibration:	Two-point field calibration of zero and standard reference gas

The PID measurements from field screening the soil samples are presented on the borehole stratigraphic and instrumentation logs provided in **Appendix B**.

5.5 Groundwater: Monitoring Well Installation

Groundwater monitoring wells were installed within all four (4) boreholes that were advanced during this investigation.

The groundwater monitoring wells were constructed with a 51-millimetre (2-inch) diameter, Schedule 40 polyvinyl chloride (PVC) riser with a 3.0 m (10 feet) long, No. 10 slot size well screen. The well screens were installed to straddle the groundwater table based on wet/saturated soil conditions encountered during borehole advancement activities.

A silica sand pack was placed in the annular space between the PVC screen/riser pipe and the borehole to a height of approximately 0.6 m above the top of the screen. A bentonite seal was placed directly above the sand pack and extended to within 0.3 m of the ground surface. To complete the instrumentation, an expandable J-plug was installed on the riser pipe of the monitoring well. A protective flush-mount casing with a concrete collar was placed around each of the monitoring wells upon completion. Each groundwater monitoring well was equipped with dedicated sampling equipment consisting of Waterra™ tubing and inertial foot valves for monitoring well development.

In accordance with Ontario Regulation 903 (O. Reg. 903), the monitoring wells were registered with the MECP. A summary of monitoring well construction details, including ground surface, top of riser, and screened interval elevations, is provided in **Table 2**. The locations of the monitoring wells are shown on **Figure 4**. The stratigraphic and instrumentation logs are provided in **Appendix B**.

5.6 Groundwater: Field Measurements of Water Quality Parameters

In order to ensure that samples representative of on-Site groundwater conditions was obtained, each monitoring well was developed upon completion of installation. GHD implemented the following protocol during well development activities:

– The groundwater monitoring wells were equipped with dedicated Waterra™ tubing and an inertial foot valve for well development activities.

– The groundwater monitoring wells were purged of a minimum of three (3) well volumes to remove the standing groundwater volume in the well.

The purged water was temporarily contained in 205-litre drums.

5.7 Groundwater: Sampling

Prior to initiating groundwater sampling activities, depth to groundwater measurements, and a NAPL or free product check were completed at each of the monitoring wells.

Subsequent to well development activities, each monitoring well was purged using low-flow sampling techniques in order to ensure that representative samples of the groundwater condition were obtained. Peristaltic pumps were used to purge and sample each of the monitoring wells. GHD implemented the following protocol during groundwater sample collection:

– The groundwater monitoring wells were equipped with dedicated 0.25-inch polyethylene tubing for well purging and sampling activities;
– Field measurements of pumping rate, depth to water, drawdown from initial water level, pH, temperature, turbidity, EC, dissolved oxygen, and oxidation reduction potential were monitored over time until consistent field measurements were recorded, indicating that water in the well was representative of groundwater conditions. The water quality parameters were measured using a Horiba water quality meter equipped with a flow-through cell;
– Purging was continued until field parameters stabilized in order to attain a representative groundwater sample; and,
– Groundwater samples collected for metals analysis were field filtered using a 0.45-micron filter prior to sample collection.

Groundwater samples were collected in laboratory-supplied sample containers specific to the analytical parameters, stored in coolers chilled with ice, and submitted under chain-of-custody protocol for laboratory analysis. All groundwater samples were collected using the appropriate sampling techniques.

5.8 Sediment Sampling

Sediment sampling was not completed during the Supplemental Phase Two ESA as no surface water bodies are located on the Site.

5.9 Analytical Testing

All soil and groundwater samples were submitted under chain-of-custody protocol to AGAT Laboratories (AGAT) for chemical analysis. AGAT is accredited by Canadian Association for Laboratory Accreditation (CALA), a MECP-approved accreditation body.

Copies of all the analytical laboratory reports are provided in **Appendix C** and **D**.

5.10 Residue Management Procedures

Soil cuttings, groundwater purge water, and equipment decontamination wash water generated during drilling and sampling activities were contained in 205-litre (45-gallon) metal or plastic drums and stored on-Site, pending future off-Site disposal in accordance with applicable regulations.

GHD collected one (1) representative soil sample for toxicity characteristic leaching procedure (TCLP) analysis to characterize the soil for off-Site disposal at a MECP-approved waste disposal facility. The analytical data were assessed with respect to O. Reg. 347, Schedule 4 Leachate Quality Criteria and are summarized in **Table 5**. Based on the analytical results, the soil cuttings generated during the drilling activities are classified as non-hazardous solid waste.

5.11 Elevation Surveying

All investigative locations were surveyed for vertical control. The ground surface and top of riser pipe elevation of each of the groundwater monitoring wells completed during the Phase Two ESA were surveyed. The ground surface and top of riser elevations for the groundwater monitoring wells are presented in **Table 2**.

5.12 Quality Assurance and Quality Control Measures

A QA/QC program was implemented during the Phase Two ESA to ensure quality data was generated.

This program involved both field and laboratory QA/QC measures. The QA/QC program was initiated to ensure that if any form of sample contamination occurs, or if any lack of precision in the analytical methods employed is evident, the potential source and degree of the contamination or analytical imprecision can be identified and adequately addressed.

Samples were collected in clean laboratory supplied sampling containers with the appropriate preservative and submitted under chain of custody protocol to ALS for chemical analysis. Soil samples that were submitted for analysis of volatile parameters (e.g., VOCs and PHC fraction F1) were collected using the methanol preservation method. From the time of sample collection to the time of submission to the laboratory, samples were stored in a cooler with ice or ice packs to maintain sample integrity.

The following field measures were taken for QA purposes:

– Between collection of each soil and groundwater sample, GHD field personnel donned a new pair of disposable nitrile gloves;
– Prior to use, and between each borehole location, the drilling and non-dedicated sampling equipment was scrubbed clean using a hard bristled brush (where needed), Alconox® soap, and potable water followed by a potable water rinse;
– Wherever possible, dedicated sampling equipment (e.g., low density polyethylene (LDPE) tubing, fittings, Ziploc® bags, etc.) was used to reduce the potential for cross contamination; and,
– Groundwater samples collected for metals analysis were field filtered using dedicated 0.45-micron filters during sample collection.

To validate the field analysis, a minimum of one (1) QA/QC field duplicate sample was collected for every ten (10) samples for each analytical parameter of each media (soil and groundwater) and submitted for laboratory analysis. Trip blanks were also submitted (approximately one (1) per laboratory submission) for soil and groundwater samples where analysis of volatile parameters was required.

QC samples were also analyzed by the laboratory as required by their analytical methods. Analytical results received by GHD were reviewed. The review consisted of the following parameters:

– Sample holding times;
– Surrogate spike recoveries;
– Method blank analysis;
– Matrix spike and matrix spike duplicate recoveries;
– Laboratory control sample analysis;
– Calibration verification sample analysis;
– Laboratory duplicate analysis;
– Field duplicate analysis; and,
– Trip blank analysis.

6. Review and Evaluation

6.1 Geology

The interpreted geological conditions at the Site are based on the review of the stratigraphic logs.

In general, the stratigraphy encountered at the Site consists of asphalt, gravel, or paving stones. Surficial asphalt having a thickness of approximately 100 mm was encountered at MW2-24. At MW3-24 and MW4-24, advanced east of the existing building, a gravel layer was encountered at the ground surface with a thickness of 125 mm and 150 mm, respectively. MW1-24 was advanced north of the existing building and encountered a layer of interlock stone with a thickness of 75 mm. A granular base layer consisting of sand and gravel (mixed with silty sand fill material) was encountered at all locations and extended to a depth ranging between 0.3 to 1.5 mBGS. A clayey silt to silty clay fill material was encountered in all boreholes immediately below the silty sand and extended to depth of ranging between 0.8 to 3.0 mBGS, except for MW4-24, where native soils were encountered at a depth of 1.5 mBGS. The fill layer also contained traces of rootlets, asphalt fragments, brick, and glass pieces. A cohesive sandy silty clay to silty clay deposit containing traces of gravel was encountered in all the boreholes, except at MW1-24. This deposit was found underlying the fill material and extended from an approximate depth of 1.5 to 3.0 mBGS. A native sandy silty clay/silty clay with sand deposit containing traces of gravel were encountered in all boreholes, exhibiting a till like structure. This till deposit was found underlying the native silty clay material at boreholes MW1-24, MW2-24, MW3-24 and underlying the fill material at MW4-24. This till deposit was encountered at a depth of 3.0 mBGS and extended to the termination depth in all the boreholes, except at MW3-24, where it extended to a depth of 6.1 mBGS. A non-cohesive sandy silt till layer with traces of gravel and clay was encountered in MW3-24 and found at a depth between 6.1 mBGS to the maximum depth of investigation (6.7 mBGS).

Two (2) geologic cross-sections were prepared for the Site. These geologic cross-sections depict the generalized stratigraphy across the Site as well as the groundwater elevation. The locations of the geologic cross-sections are shown on **Figures 9** and **10**. The elevations presented on the cross-sections are in mAMSL.

6.2 Groundwater Elevations and Flow Direction

The interpreted hydrogeological conditions at the Site are based on a review of the stratigraphic logs and groundwater elevations for the Site. The monitoring well completion details are provided in **Table 2** and a summary of the groundwater level measurements and elevations is presented in **Table 3**.

GHD measured the depth to groundwater and used an Interface Probe to determine the presence for non-aqueous phase liquids (NAPL) at each monitoring well on April 5, 2024. The depth to groundwater was measured relative to a specific reference point for the monitoring well (i.e., the top of the monitoring well riser pipe).

Based on the survey information of the top of riser pipe elevation, the groundwater table or potentiometric elevation was determined and used to prepare groundwater elevation contours for the Site. The April 5, 2024 groundwater level measurements indicate that the groundwater table within the overburden soils is present at depths ranging from 1.04 mBGS at MW3-24 to 2.51 mBGS at MW1-24. The elevations of the groundwater table vary from 255.5 mAMSL at MW4-24 to 257.26 mAMSL at MW3-24. The groundwater levels are found within the overburden soils at the Site.

Groundwater elevation contours were prepared based on the groundwater level measurements collected on April 5, 2024, and are presented on **Figure 6**. The groundwater elevation contours indicate that groundwater flow is generally in a southwestern direction.

The potential presence of NAPL or free product was investigated through the use of an oil/water interface probe at each monitoring well location. There was no evidence of NAPL at any of the monitoring well locations.

6.3 Groundwater Hydraulic Gradients

The horizontal hydraulic gradient across the Site, based on groundwater elevations, is approximately 0.07 metres per metre (m/m) towards the southwest. Vertical hydraulic gradients were not calculated as nested monitoring wells were not advanced during this investigation.

6.4 Soil Texture

Grain size distribution analysis was carried out on three (3) select soil samples within the native material and laboratory results are summarized below and reported in **Appendix D**. The results for all three (3) samples show that the samples contain greater than 50%, by mass, particles that are smaller than 75 micrometres in mean diameter, therefore medium/fine textured soil. The Qualified Person (QP_{ESA}) has determined from the grain size results that less than 1/3 of the soil at the Site, measured by volume, consist of coarse textured soil. Therefore, when evaluating soil and groundwater analytical results, GHD applied the Table 3 Generic Standards for medium/fine-textured soil.

Grainsize Distribution Analysis Test Results – Cohesive Deposit

Borehole Identification Number	Sample Number	Depth (mBGS)	Gravel (%)	Sand (%)	Silt & Clay (%)
MW2-24	SS4	2.3 – 2.9	0	32	68
MW3-24	SS5	3.1 – 3.7	0	26	74
MW4-24	SS8	5.3 – 5.9	0	37	63

6.5 Soil: Field Screening

During borehole advancement, GHD completed soil field screening by monitoring the soil samples for organic vapours with a PID and documenting any visual or olfactory evidence of potential impacts, as discussed in Section 5.3.

The results of the soil field screening and corresponding sample depth intervals are provided on the stratigraphic and instrumentation logs provided in **Appendix B**. Volatile organic vapour readings ranged from 0.0 to 3.0 parts per million (ppm) across the Site.

6.6 Soil Quality

A total of fifteen (15) soil samples (including three (3) field duplicate samples) were collected and submitted for chemical analysis of one or more of the following parameters:

– Metals (including As, Sb, Se, Cr (VI), Hg, CN)
– Inorganics (EC, SAR, pH)
– Petroleum hydrocarbon (PHC) fractions F1 to F4
– Volatile organic compounds (VOCs)
– Polycyclic aromatic hydrocarbons (PAHs)

A summary of the investigative locations associated with each APEC is provided below and are also presented in the SAP in **Appendix A**:

Area of Potential Environmental Concern	Contaminants of Potential Concern in Soil	Investigative Locations
APEC #1 – Historical Adjacent Land Use	Metals, As, Sb, Se, Hg, pH, PHCs, VOCs, PAHs	MW1-24, MW2-24, MW3-24, MW4-24
APEC #2 – Application of De-icing Agents	Na, Cl-, Electrical Conductivity, SAR	MW1-24, MW2-24, MW3-24, MW4-24

The following parameters had concentrations above the Table 3 Generic Standards and are identified as COCs in soil at the Site:

– **Metals:** Lead

– **PAHs:** Benzo(a)pyrene

A summary of the soil analytical data with respect to the APECs investigated as part of the Phase Two ESA is provided below:

– **Metals:** Lead was detected at concentrations above the Table 3 Standards in a soil sample collected between 0.32 and 0.61 mBGS at MW1-24. Fill material was encountered between approximately 0.0 and 3.05 mBGS at MW1-24. The lead impact is inferred to be localized to the fill present at the Site. Lead impacts were not identified in any of the other borehole locations. The lead impacts to soil could be attributed to APEC #1 or the importation of fill material of unknown quality.

– **PAHs:** Benzo(a)pyrene was detected at concentrations above the Table 3 Standards in a soil sample collected between 0.76 and 1.52 mBGS at MW4-24. Fill material was encountered between approximately 0.0 and 1.37 mBGS at MW4-24. The PAH impact is localized to the fill present at the Site. PAH impacts were not identified in any of the other borehole locations. The PAH impacts to soil could be attributed to APEC #1 or the importation of fill material of unknown quality.

Based on the investigations completed, there is no evidence of soil impacts related to any other APECs identified at the Site.

6.7 Groundwater Quality

Five (5) groundwater samples (including one (1) field duplicate sample) were collected and submitted for chemical analysis of one or more the following parameters:

– Metals (including As, Sb, Se, Cr (VI), Hg, CN)

– Inorganics (Na, Cl-, pH)

– PHC fractions F1 to F4

– VOCs

– PAHs

A summary of the investigative locations associated with each APEC is provided below:

Area of Potential Environmental Concern	Contaminants of Potential Concern in Soil	Investigative Locations
APEC #1 – Historical Adjacent Land Use	Metals, As, Sb, Se, Hg, pH, PHCs, VOCs, PAHs	MW1-24, MW2-24, MW3-24, MW4-24
APEC #2 – Application of De-icing Agents	Na, Cl-, Electrical Conductivity, SAR	MW1-24, MW2-24, MW3-24, MW4-24

All groundwater samples submitted for chemical analysis met the applicable standard. Based on the investigations completed, there is no evidence of groundwater impacts related to any other APECs identified at the Site.

6.8 Sediment Quality

Sediment sampling was not completed during the Phase Two ESA as no surface water bodies are located on the Site.

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

A total of three (3) soil field duplicate samples and one (1) groundwater field duplicate sample were analyzed during the Phase Two ESA. One (1) trip blank sample was submitted for each groundwater sample submission that contained samples to be analyzed for either PHC fraction F1 or VOCs. The QA/QC samples were also analyzed by the laboratory as required by their analytical methods.

6.10 Phase Two Conceptual Site Model

The following presents a Conceptual Site Model (CSM) of the Phase Two Environmental Site Assessment (ESA) Property located at 10533 Keele Street in Vaughan, Ontario (Site or Property).

The Site is located in an area of Vaughan, Ontario that has been developed for mixed industrial, commercial, residential and/or agricultural purposes since the late 1800s. The Site is approximately 0.21 hectares (0.52 acres) in size and fronts onto Keele Street opposite of a low-rise residential subdivision.

The Site is occupied by a vacant two-story structure (former residence) constructed in 1890, with an addition completed in the 1970s. The exterior surfaces of the Site primarily consist of a grassy yard, asphalt and gravel parking areas and a concrete patio. No water bodies are located on the Site. The building is constructed with a fieldstone foundation, wood frame, and a sloped wood joist roof finished with asphalt shingles. The building is not currently heated or cooled.

A Site Location Map and a Site Plan are provided on **Figure 1** and **Figure 2**, respectively.

GHD previously completed a Phase One ESA of the Site in April 2024. The results of the Phase One ESA are summarized in the report entitled "*Phase One Environmental Site Assessment, 10533 Keele Street, Vaughan, Ontario*," prepared for Keele Street (10533) Ltd., dated April 30, 2024. Potentially contaminating activities (PCAs), as defined in O. Reg. 153/04, that have been identified on, in, or under the Phase One ESA property, or located within the Phase One ESA study area and having the potential to contribute to an area of potential environmental concern (APEC), were identified in the Phase One ESA. A Phase Two ESA was completed by GHD to investigate soil and groundwater quality at the Site associated with the APECs identified during the Phase One ESA. The Phase Two ESA activities completed at the Site included the following:

- Completion of public and private utility locates;
- Advancement of boreholes;
- Installation of groundwater monitoring wells;
- Collection of field measurements and observations for screening soil;
- Collection of soil and groundwater samples;
- Field measurements of groundwater quality parameters;
- Hydraulic monitoring [groundwater level measurements and measurements for non-aqueous phase liquid (NAPL), if present];
- Quality assurance and quality control (QA/QC) measures;
- Elevation Surveying;

– Analytical testing; and,
– Residue management.

The QP_{ESA} determined that the sampling program (including the QA/QC program) undertaken during the Phase Two ESA met the requirements of O. Reg. 153/04 and was sufficient to ensure the quality and reliability of the analytical results. A summary of the APECs identified at the Site and the associated PCAs is provided in the section below.

The purpose of the Phase Two ESA was to investigate the APECs identified in the Phase One ESA. The objective of the Phase Two ESA was to investigate soil and groundwater quality, as applicable, in the APECs identified at the Site. The locations of the APECs identified at the Site and the locations of PCAs identified within the Phase One ESA Study Area are shown on **Figure 3** and **Figure 4**. A summary of the APECs identified at the Site and associated PCA(s) is provide below:

Summary of PCAs Contributing to APECs on the Phase One Property

PCA No. 12 Concrete, Cement and Lime Manufacturing	**Phase One Study Area** – Based on a records review, the following records were identified: From the 1980s to 1990s, a property located at 10547 Keele Street, approximately 30 m north of the Site, was utilized as a concrete manufacturing facility (**APEC 1**).
PCA No. 58 Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	**Phase One Study Area** – Based on a review of the ERIS report, the following records were identified: A waste management system was registered to 7346646 Canada Inc. operating as Maple Logistic Solutions, located east adjacent to the Site at 10525 Keele Street, approved in 2012 (**APEC 1**); A waste management system was registered to Maple Logistic Solutions, located east adjacent to the Site at 10525 Keele Street, approved in 2019 (**APEC 1**); A waste management system was registered to Waste Excellence Holdings Corp., located east adjacent to the Site at 10525 Keele Street, approved in 2006 (**APEC 1**); A waste management system was registered to Jonathan Logistic Inc., located east adjacent to the Site at 10525 Keele Street, approved in 2010 (**APEC 1**); and, A waste management system was registered to KNR Equipment Inc., located east adjacent to the Site at 10525 Keele Street, approved in 2010 (**APEC 1**).
PCA A Application of De-icing Agents	**Phase One Property** – Based on the Site interview, the following records were identified: Road salt has been applied on the parking areas at the Site as well as along adjacent/nearby roadways during winter months for the safety of vehicular or pedestrian traffic under conditions of snow or ice or both. Bulk salt has not been stored at the Site. The application of road salt on Site and in the vicinity of the Site has the potential to result in elevated sodium adsorption ratio (SAR) and electrical conductivity (EC) in soil, and sodium and chloride in groundwater, and would have the potential to contribute to an APEC at the Site and was identified as **APEC #2**. However, in accordance with paragraph 1 of Section 49.1 of O. Reg. 153/04, any potential on Site exceedances of SAR, EC, sodium, or chloride associated with the application of the road salt would be deemed as having met the applicable Site Condition Standards. As a result, the QP has determined that further investigation of **APEC #2** is not warranted during a Phase Two ESA.
PCA B Spill Incidents	**Phase One Study Area** – Based on a review of the ERIS report, the following records were identified: In June 2021, approximately 360,000 L of douse water was applied to a fire at 10525 Keele Street, east adjacent to the Site (**APEC 1**); and,

	In January 2010, approximately 200 L of diesel fuel spilled onto the ground at 10525 Keele Street, east adjacent to the Site (**APEC 1**).

Based on a review of the above-noted PCAs, the following APECs were identified on the Site. The table of APECs presented in the form as approved by the Director is provided below. The table was prepared in accordance with clause 16(2) (a), Schedule D, O. Reg. 153/04.

Summary of APECs Identified on the Phase One Property

Area of Potential Environmental Concern[1]	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity[2]	Location of PCA (on-site or off-site)	Contaminants of Potential Concern[3]	Media Potentially Impacted (Ground Water, Soil and/or Sediment)
APEC #1 – Historical Adjacent Land Use	Entire Site	PCA 12 – Concrete, Cement and Lime Manufacturing	Off-Site	Metals, pH	Soil & Groundwater
		PCA 58 – Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners		Metals, As, Sb, Se, Hg, PHCs, VOCs, PAHs	
		PCA B – Spill Incidents		PHCs, BTEX, PAHs	
APEC #2 – Application of De-icing Agents	Entire Site	A – Application of De-icing Agents	On-Site	Na, Cl-, Electrical Conductivity, SAR	Soil & Groundwater

Notes:

1 Area of Potential Environmental Concern means the area on, in or under a phase one property where one or more contaminants are potentially present, as determined through the phase one environmental site assessment, including through:

(a) Identification of past or present uses on, in or under the phase one property.

(b) Identification of potentially contaminating activity.

2 Potentially Contaminating Activity means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a phase one study area.

3 When completing this column, identify all contaminants of potential concern using the Method Groups as identified in the "Protocol for Analytical Methods in the Assessment of Properties under Part XV.1 of the Environmental Protection Act, March 9, 2004, amended as of July 1, 2011, as specified below:

Acid base neutral extractable (ABNs)	Petroleum hydrocarbons (PHCs)	Benzene, toluene, ethylbenzene and xylenes (BTEX)	Boron, hot water soluble (B-HWS)	Mercury (Hg)
Chlorophenols (CPs)	Polychlorinated biphenyls (PCBs)	Calcium (Ca), magnesium (Mg)	Chloride (Cl^-)	Methyl Mercury

Area of Potential Environmental Concern[1]	Location of Area of Potential Environmental Concern on Phase One Property	Potentially Contaminating Activity[2]	Location of PCA (on-site or off-site)	Contaminants of Potential Concern[3]	Media Potentially Impacted (Ground Water, Soil and/or Sediment)
1,4-Dioxane	Polycyclic aromatic hydrocarbons (PAHs)	Metals	Cyanide (CN^-)	high pH	
Dioxins/Furans, PCDDs/PCDFs	Trihalomethanes (THMs)	Arsenic (As), antimony (Sb), selenium (Se)	Electrical conductivity (EC)	low pH	
Organochlorine pesticides (OCs)	Volatile organic compounds (VOCs)	Sodium (Na)	Chromium (hexavalent) [Cr (VI)]	Sodium adsorption ratio (SAR)	

The Phase One CSM **(Figure 1** through **Figure 4**) and the Phase Two CSM (**Figure 5** through **Figure 10**) prepared for the Site incorporates the information and data collected as part of the Phase One and Phase Two ESAs. The following table provides a narrative description and assessment of the information and data incorporated into the Phase Two CSM.

Summary of Phase Two CSM

Criteria	Discussion
1. A description and assessment of:	
i. Areas where a PCA has occurred	i. The Phase One ESA completed by GHD concurrently with this Phase Two ESA identified PCAs on the Site and within the Phase One Study Area, as outlined in the PCA Table above, and depicted on **Figure 1** and **Figure 2**.
ii. APECs	ii. The PCAs that were identified as contributing to on-site APECs are discussed in the PCA Table above. The table of APECs presented in the form as approved by the Director is provided in the APEC Table above.
iii. Any subsurface structures and utilities on, in or under the phase two property that may affect contaminant distribution and transport	iii. Underground utilities at the Site include storm and sanitary sewers, potable water, natural gas, electrical power, and telecommunication lines. During the Phase Two ESA, groundwater at the Site was encountered to be at a depth ranging from 1.04 to 2.51 mBGS. Since the groundwater table is located within the anticipated depth of any underground utilities, the below grade utilities could act as preferential migration pathways. No other preferential migration pathways were identified.
2. A narrative description of and, as appropriate, figures illustrating, the physical setting of the phase two property and any areas under it including:	
i. Stratigraphy from ground surface to the deepest aquifer or aquitard investigated	i. In general, the stratigraphy encountered at the Site consists of asphalt, gravel, or paving stones. Surficial asphalt having a thickness of approximately 100 mm was encountered at MW2-24. At MW3-24 and MW4-24, advanced east of the existing building, a gravel layer was encountered at the ground surface with a thickness of 125 mm and 150 mm, respectively. MW1-24 was advanced north of the existing building

Criteria	Discussion
	and encountered a layer of interlock stone with a thickness of 75 mm. A granular base layer consisting of sand and gravel (mixed with silty sand fill material) was encountered at all locations and extended to a depth ranging between 0.3 to 1.5 mBGS. A clayey silt to silty clay fill material was encountered in all boreholes immediately below the silty sand and extended to depth of ranging between 0.8 to 3.0 mBGS, except for MW4-24, where native soils were encountered at a depth of 1.5 mBGS. The fill layer also contained traces of rootlets, asphalt fragments, brick, and glass pieces. A cohesive sandy silty clay to silty clay deposit containing traces of gravel was encountered in all the boreholes, except at MW1-24. This deposit was found underlying the fill material and extended from an approximate depth of 1.5 to 3.0 mBGS. A native sandy silty clay/silty clay with sand deposit containing traces of gravel were encountered in all boreholes, exhibiting a till like structure. This till deposit was found underlying the native silty clay material at boreholes MW1-24, MW2-24, MW3-24 and underlying the fill material at MW4-24. This till deposit was encountered at a depth of 3.0 mBGS and extended to the termination depth in all the boreholes, except at MW3-24, where it extended to a depth of 6.1 mBGS. A non-cohesive sandy silt till layer with traces of gravel and clay was encountered in MW3-24 and found at a depth between 6.1 mBGS to the maximum depth of investigation (6.7 mBGS).
ii. Hydrogeological characteristics, including aquifers, aquitards and, in each hydrostratigraphic unit where one or more contaminants is present at concentrations above the applicable site condition standards, lateral and vertical gradients	ii. The sandy silty clay to silty clay is considered an unconfined overburden aquifer. The horizontal hydraulic gradient was calculated to be 0.07 m/m towards the southwest. Vertical hydraulic gradients were not calculated as nested monitoring wells were not advanced during this investigation.
iii. Approximate depth to bedrock	iii. Bedrock was not encountered during this investigation.
iv. Approximate depth to water table	iv. The April 5, 2024 groundwater level measurements indicate that the groundwater table within the overburden soils is present at depths ranging from 1.04 mBGS at MW3-24 to 2.51 mBGS at MW1-24. The elevations of the groundwater table vary from 255.5 mAMSL at MW4-24 to 257.26 mAMSL at MW3-24.
v. Any respect in which section 35, 41 or 43.1 of the regulation applies to the property	v. Non-potable groundwater standards were used during this investigation, as outlined below: – The property, and all other properties located in whole or in part, within 250 m of the boundaries of the property are supplied by a municipal drinking water system as defined in the Safe Drinking Water Act, 2002. – The proposed property use is commercial (i.e., not agricultural or other). – The Property is not located in an area designated in the municipal official plan as a well-head protection area or other designation identified by the municipality for the protection of ground water.

Criteria	Discussion
	– The property or one of the properties in the phase one study area does not have a well used or intended for use as a source of water for human consumption or agriculture. Section 41 does not apply to the Site as: – No areas of natural significance were present on the Site, or within 30 m of the Site. – No water bodies were located on the Site, or within 30 m of the Site. – The soil at the property has a pH value between 5 and 9. Section 43.1 does not apply to the Site and it is not considered a shallow soil site.
vi. Areas on, in or under the phase two property where excess soil is finally placed	vi. Excess soil was not finally placed on, in, or under the Site, as part of this Phase Two ESA.
vii. Approximate locations, if known, of any proposed buildings and other structures	vii. The Site is proposed for redevelopment as a storage facility. The location of the proposed building is located on the central portion of the Site.
3. Where a contaminant is present on, in or under the phase two property at a concentration greater than the applicable site condition standard, identification of:	
i. Each area where a contaminant is present on, in or under the phase two property at a concentration greater than the applicable site condition standard	**i. Soil** Elevated concentrations of metals and PAH parameters were found in soil on the Site. The area of these impacts is illustrated on **Figure 7** and **Figure 8**, respectively.
ii. The contaminants associated with each of the areas referred to in subparagraph i	**ii. Soil - Contaminants of Concern** Metals - lead PAHs - benzo(a)pyrene
iii. Each medium in which a contaminant associated with an area referred to in subparagraph i is present	**iii.** Metal and PAH contaminants were found in localized areas of soil at the Site. No contaminants were found in groundwater at the Site.
iv. A description and assessment of what is known about each of the areas referred to in subparagraph i	**iv. Soil** **Metals**: Lead was detected at concentrations above the Table 3 Standards in a soil sample collected between 0.32 and 0.61 mBGS at MW1-24. Fill material was encountered between approximately 0.0 and 3.05 mBGS at MW1-24. The lead impact is inferred to be localized to the fill present at the Site. Lead impacts were not identified in any of the other borehole locations. The lead impacts to soil could be attributed to APEC #1 or the importation of fill material of unknown quality. **PAHs**: Benzo(a)pyrene was detected at concentrations above the Table 3 Standards in a soil sample collected between 0.76 and 1.52 mBGS at MW4-24. Fill material was encountered between approximately 0.0 and 1.37 mBGS at MW4-24. The PAH impact is localized to the fill present at the Site. PAH impacts were not identified in any of the other borehole locations. The PAH impacts to soil could be

Criteria	Discussion
	attributed to APEC #1 or the importation of fill material of unknown quality.
v. For each parameter group as defined in the Analytical Protocol for which a contaminant has been analyzed, the distribution, in each of the areas referred to in subparagraph i, of each contaminant present in the area at a concentration greater than the applicable site condition standard, for each medium in which the contaminant is present, together with figures showing the distribution	**v. Soil** The metal impact to soil at MW1-24 is inferred to be localized to the fill present at the Site. Lead impacts were not identified in any of the other borehole locations. The distribution of the impacts is illustrated on **Figures 7** and **9**. The PAH impact to soil at MW4-24 is localized to the fill present at the Site. PAH impacts were not identified in any of the other borehole locations. The distribution of the impacts is illustrated on **Figures 8** and **10**.
vi. Anything known about the reason for the discharge into the natural environment of the contaminants present on, in or under the phase two property at a concentration greater than the applicable site condition standard	**vi. <u>Soil</u>** Nothing is known about the reason for the discharge of the contaminants into the natural environment. The associated APECs are only based on the potential activities in the area investigated in the Phase One ESA.
vii. Anything known about migration away from any APEC of the contaminants present on, in or under the phase two property at a concentration greater than the applicable site condition standard, including the identification of any preferential pathways,	**vii. Soil** Based on the horizontal delineation within soil, the metals and PAH impacts appear to be localized to the two (2) borehole locations and there is no evidence of migration from these areas. There are no known preferential pathways for migration.
viii. Climatic or meteorological conditions that may have influenced distribution and migration of the contaminants, such as temporal fluctuations in groundwater levels, and	viii. The Site is generally hard surfaced with asphalt and limited landscaping in addition to the building coverage on the Site. Climatic or meteorological conditions are not considered to have greatly influenced the distribution or migration of the contaminants, although stormwater infiltration will affect the infiltration of de-icing agents.
ix. If applicable, information concerning soil vapour intrusion of the contaminants into buildings including, A. Relevant construction features of a building, such as a basement or crawl space	ix. Vapour intrusion into the indoor air space of the proposed building is not anticipated.

Criteria	Discussion
B. Building heating, ventilating and air conditioning design and operation C. Subsurface utilities.	
4. Where contaminants on, in or under the phase two property are present at concentrations greater than the applicable site condition standard, two or more cross-sections showing, by parameter group as defined in the Analytical Protocol for which a contaminant has been analyzed.	
i. The lateral and vertical distribution of a contaminant in each area where the contaminants is present at concentrations greater than the applicable site condition standard in soil, groundwater, and sediment	**i. Soil** The lateral and vertical distribution of the metals contaminants in soil are illustrated on **Figures 7** and **9**. The lateral and vertical distribution of the PAH contaminants in soil are illustrated on **Figures 8** and **10**.
ii. Approximate depth to water table in each area referred to in subparagraph i	ii. The April 5, 2024 groundwater level measurements indicate that the groundwater table within the overburden soils is present at depths ranging from 1.04 mBGS at MW3-24 to 2.51 mBGS at MW1-24. The elevations of the groundwater table vary from 255.5 mAMSL at MW4-24 to 257.26 mAMSL at MW3-24. Groundwater depths are illustrated on **Figure 6**.
iii. Stratigraphy from ground surface to the deepest aquifer or aquitard investigated	iii. Stratigraphy from ground surface to the deepest aquifer and aquitard investigated is illustrated on **Figures 9** and **10**.
iv. Any subsurface structures and utilities that may affect contaminant distribution and transport in each area referred to in subparagraph i	iv. Underground utilities at the Site include storm and sanitary sewers, potable water, natural gas, electrical power, and telecommunication lines. During the Phase Two ESA, the location and depths of these utilities were not confirmed. Underground utilities could not be illustrated on **Figures 9** and **10**. No other subsurface structures were identified.
5. For each area where a contaminant is present on, in or under the property at a concentration greater than the applicable site condition standard for the contaminant, a diagram identifying, with narrative explanatory notes,	
i. The release mechanisms	The elevated concentrations of lead and benzo (a) pyrene were detected in fill material beneath surficial driving and parking surfaces. The presence of shallow barriers (asphalt, paving stone, and granular surfaces) prevents contact by human receptors. Based on the use of the Site for parking/storage, and the lack of natural habitat in the area, there is no indication that the elevated lead and benzo(a)pyrene concentrations represent an exposure risk to ecological receptors.
ii. Contaminant transport pathway	
iii. The human and ecological receptors located on, in or under the phase two property	
iv. Receptor exposure points	
v. Routes of exposure	

Criteria		Discussion
6. If a non-standard delineation was conducted in accordance with section 7.1 of this Schedule as part of preparing the phase two environmental site assessment report, provide a narrative description of how the non-standard delineation satisfies the requirements in that section.		
Not applicable		
7. If the exemption set out in paragraph 1, 1.1 or 2 of section 49.1 of the regulation is being relied upon, provide a statement as to the reliance upon the exemption and a narrative description of the rationale for relying upon the exemption, which may be based on information gathered during the site investigation.		
Not applicable		
8. If the exemption set out in paragraph 3 of section 49.1 of the regulation is being relied upon, provide,		
	i. A statement as to the reliance upon the exemption	Not applicable
	ii. A narrative description of the rationale for relying upon the exemption, which may be based on information gathered during the site investigation	Not applicable
	iii. One or more cross-sections and one or more figures in plan view of the phase two property that demonstrate, through identification of sample locations, sample depths and contaminant concentrations, the distribution of the contaminant in question laterally and vertically and the range of concentrations of that contaminant on, in or under the phase two property	Not applicable

7. Conclusions

The following conclusions are provided based on the results of the Phase Two ESA:

Contaminants of Concern (COCs) in Soil

The following parameters had concentrations above the Table 3 Generic Standards and are identified as COCs in soil at the Site:

– **Metals:** Lead

– **PAHs:** Benzo(a)pyrene

A summary of the soil analytical data with respect to the APECs investigated as part of the Phase Two ESA is provided below:

– **Metals:** Lead was detected at concentrations above the Table 3 Standards in a soil sample collected between 0.32 and 0.61 mBGS at MW1-24. Fill material was encountered between approximately 0.0 and 3.05 mBGS at MW1-24. The lead impact is inferred to be localized to the fill present at the Site. Lead impacts were not identified in any of the other borehole locations. The lead impacts to soil could be attributed to APEC #1 or the importation of fill material of unknown quality.

– **PAHs:** Benzo(a)pyrene was detected at concentrations above the Table 3 Standards in a soil sample collected between 0.76 and 1.52 mBGS at MW4-24. Fill material was encountered between approximately 0.0 and 1.37 mBGS at MW4-24. The PAH impact is localized to the fill present at the Site. PAH impacts were not identified in any of the other borehole locations. The PAH impacts to soil could be attributed to APEC #1 or the importation of fill material of unknown quality.

Based on the investigations completed, there is no evidence of soil impacts related to any other APECs identified at the Site.

COCs in Groundwater

All groundwater samples submitted for chemical analysis met the applicable standard. Based on the investigations completed, there is no evidence of groundwater impacts related to any other APECs identified at the Site.

Recommendations

Based a review of the analytical results compared to the MECP Table 3 Standards, remediation of soil impacts is recommended prior to redevelopment of the Site.

All of Which is Respectfully Submitted,

GHD



David Blair, M.Sc.



Warren Croft, P. Eng., QP_{ESA}

8. Limitations of the Investigation

This report is intended solely for Keele Street (10533) Ltd. and is prohibited for use by others without GHD's prior written consent. This report is considered GHD's professional work product and shall remain the sole property of GHD. Any unauthorized reuse, redistribution of or reliance on the report shall be at the Client and recipient's sole risk, without liability to GHD. No portion of this report may be used as a separate entity; it is to be read in its entirety and shall include all supporting drawings and appendices.

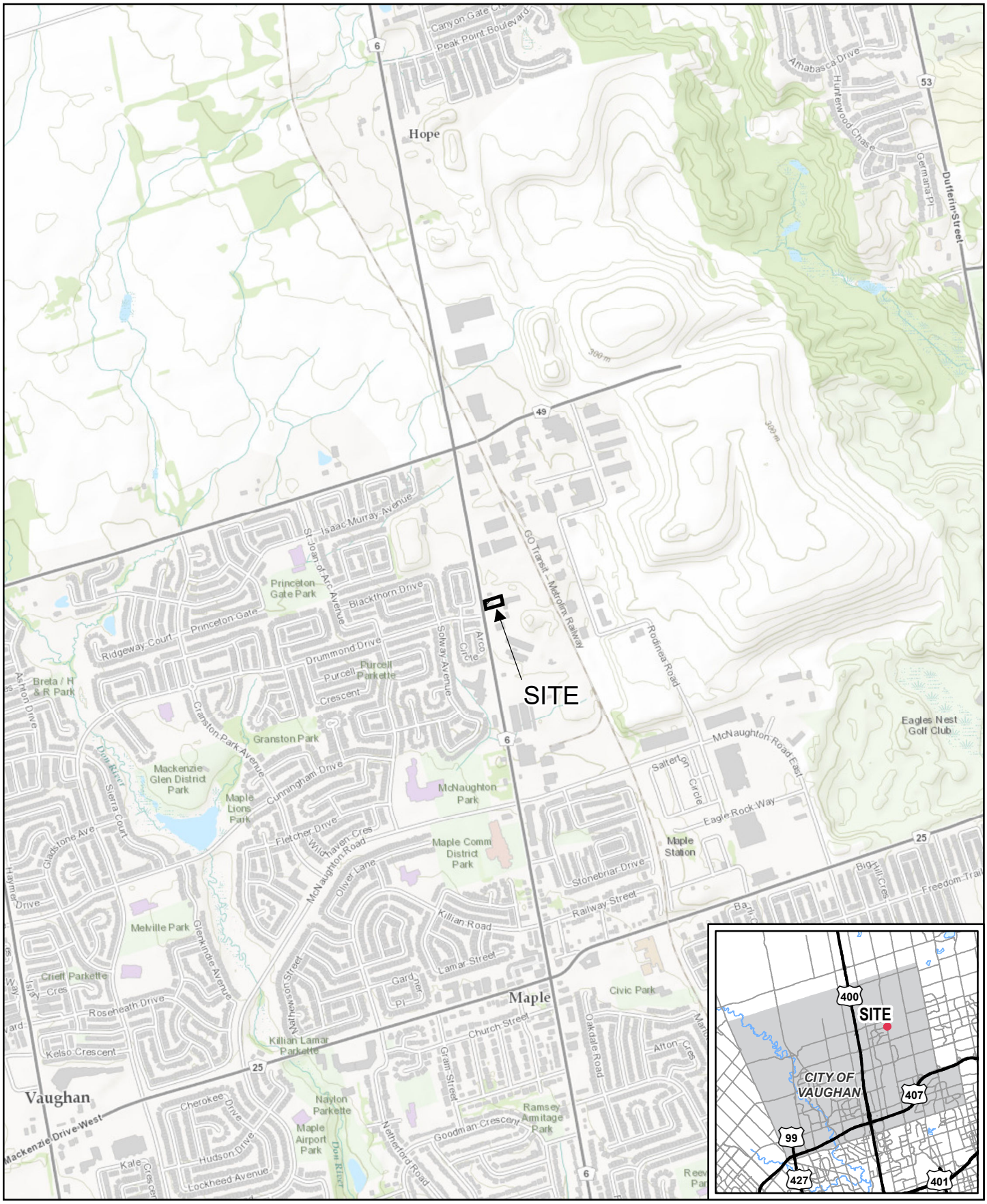
The recommendations made in this report are in accordance with our present understanding of the project, the current site use, ground surface elevation and conditions, and are based on the work scope approved by the Client and described in the report. The services were performed in a manner consistent with that level of care and skill ordinarily exercised by members of geotechnical engineering professions currently practicing under similar conditions in the same locality. No other representations, and no warranties or representations of any kind, either expressed or implied, are made. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties.

All details of design and construction are rarely known at the time of completion of a geotechnical study. The recommendations and comments made in the study report are based on our subsurface investigation and resulting understanding of the project, as defined at the time of the study. We should be retained to review our recommendations when the drawings and specifications are complete. Without this review, GHD will not be liable for any misunderstanding of our recommendations or their application and adaptation into the final design.

By issuing this report, GHD is the geotechnical engineer of record. It is recommended that GHD be retained during construction of all foundations and during earthwork operations to confirm the conditions of the subsoil are actually similar to those observed during our study. The intent of this requirement is to verify that conditions encountered during construction are consistent with the findings in the report and that inherent knowledge developed as part of our study is correctly carried forward to the construction phases.

It is important to emphasize that a soil investigation is, in fact, a random sampling of a site and the comments included in this report are based on the results obtained at the test locations only. The subsurface conditions confirmed at the test locations may vary at other locations. The subsurface conditions can also be significantly modified by the construction activities on site (e.g., excavation, dewatering and drainage, blasting, pile driving, etc.). These conditions can also be modified by exposure of soils or bedrock to humidity, dry periods or frost. Soil and groundwater conditions between and beyond the test locations may differ both horizontally and vertically from those encountered at the test locations and conditions may become apparent during construction which could not be detected or anticipated at the time of our investigation. Should any conditions at the site be encountered which differ from those found at the test locations, we request that we be notified immediately in order to permit a reassessment of our recommendations. If changed conditions are identified during construction, no matter how minor, the recommendations in this report shall be considered invalid until sufficient review and written assessment of said conditions by GHD is completed.

Figures



Paper Size ANSI A

0 200 400 600

Metres

Map Projection: Transverse Mercator
Horizontal Datum: North American 1983
Grid: NAD 1983 UTM Zone 17N

N

GHD

10533 KEELE STREET, VAUGHAN, ONTARIO
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

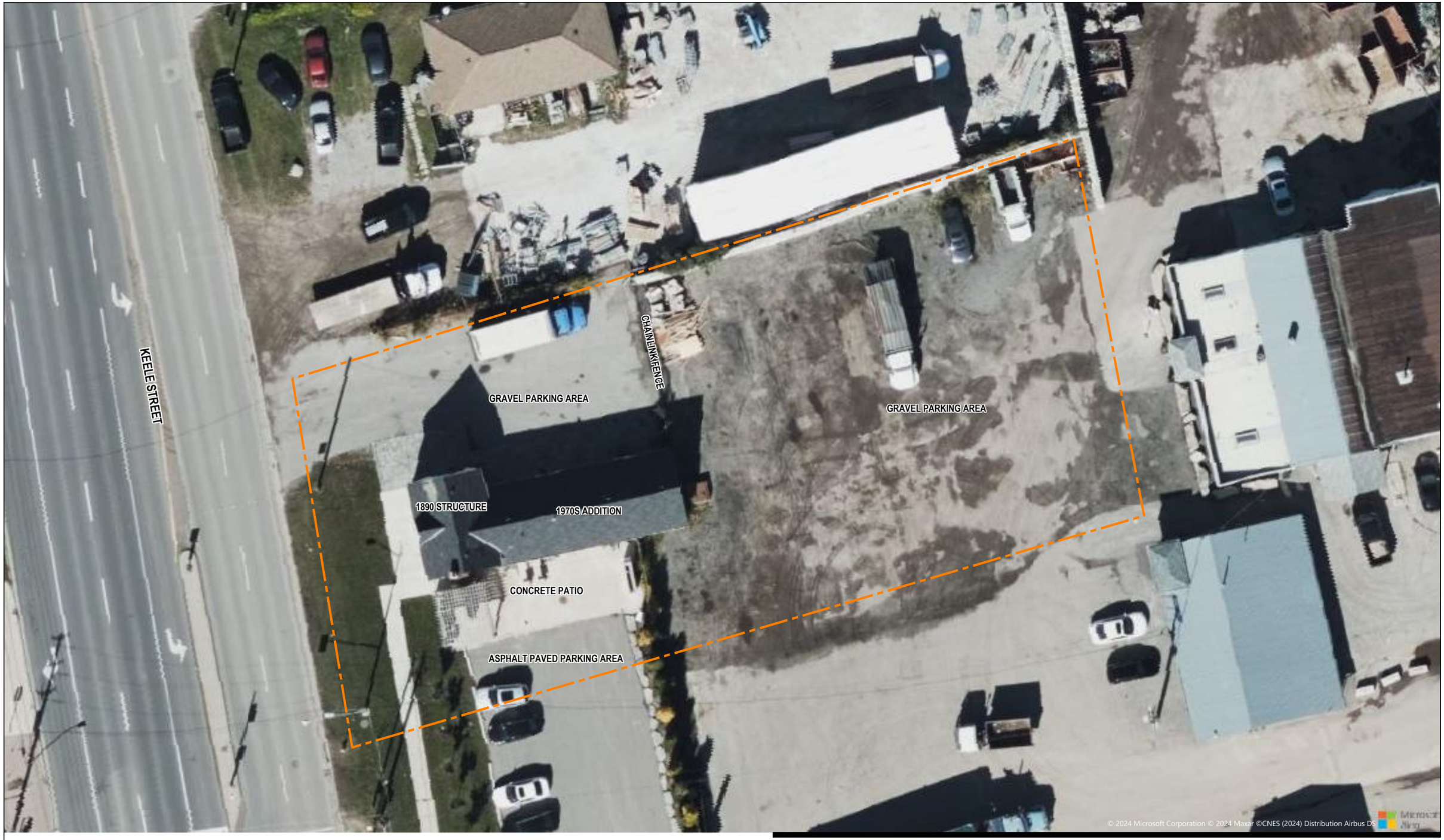
Project No. **12636323**
Revision No. **-**
Date **May 17, 2024**

SITE LOCATION MAP

FIGURE 1

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Print date: 17 May 2024 - 08:57

Data source: MNRF NRVIS, 2018. Produced by GHD under licence from Ontario Ministry of Natural Resources and Forestry, © Queen's Printer 2024. Esri World Topographic Basemap, 2024.



LEGEND

PROPERTY BOUNDARY

0 3 6 9m

1:300

Coordinate System: UTM83-17

N

GHD

10533 KEELE STREET, VAUGHAN, ONTARIO
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

SITE PLAN

Project No. **12636323**
Date **May 2024**

FIGURE 2

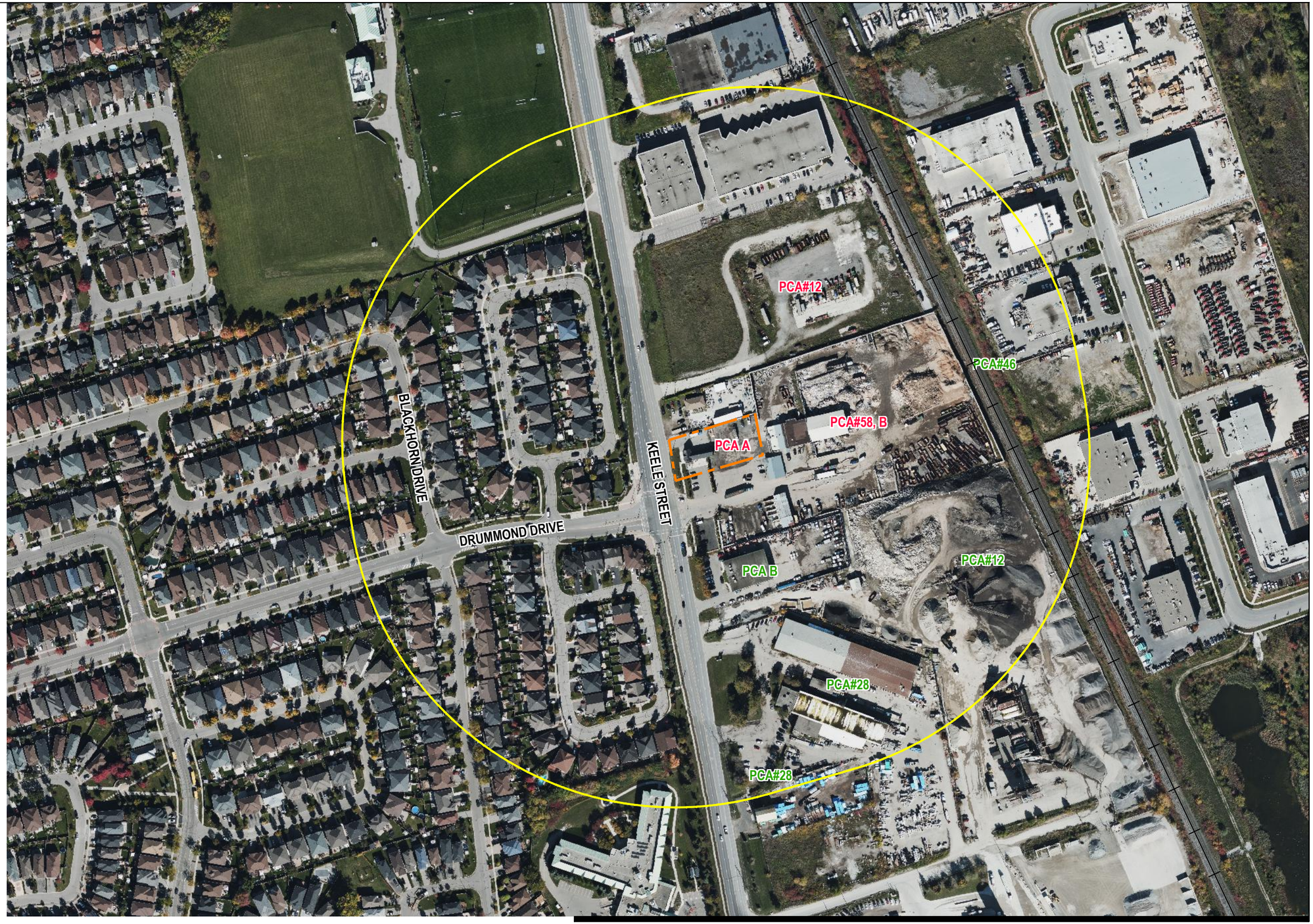
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Plot Date: 24 May 2024 7:29 AM

LEGEND

- PROPERTY BOUNDARY
- STUDY AREA
- CANADIAN NATIONAL RAILWAY
- PCA#55 CONTRIBUTING PCA
- PCA#28 NON-CONTRIBUTING PCA

PCAS POTENTIALLY CONTRIBUTING TO APECS ON THE SITE

12 - CONCRETE, CEMENT AND LIME MANUFACTURING
28 - GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS
46. RAIL YARDS, TRACKS AND SPURS
58. WASTE DISPOSAL AND WASTE MANAGEMENT, INCLUDING THERMAL TREATMENT, LANDFILLING AND TRANSFER OF WASTE, OTHER THAN USE OF BIOSOILS AS SOIL CONDITIONERS
A. APPLICATION OF DE-ICING AGENTS
B. SPILL INCIDENTS



0 30 60 90m

1:3000

Coordinate System: UTM83-17

N

GHD

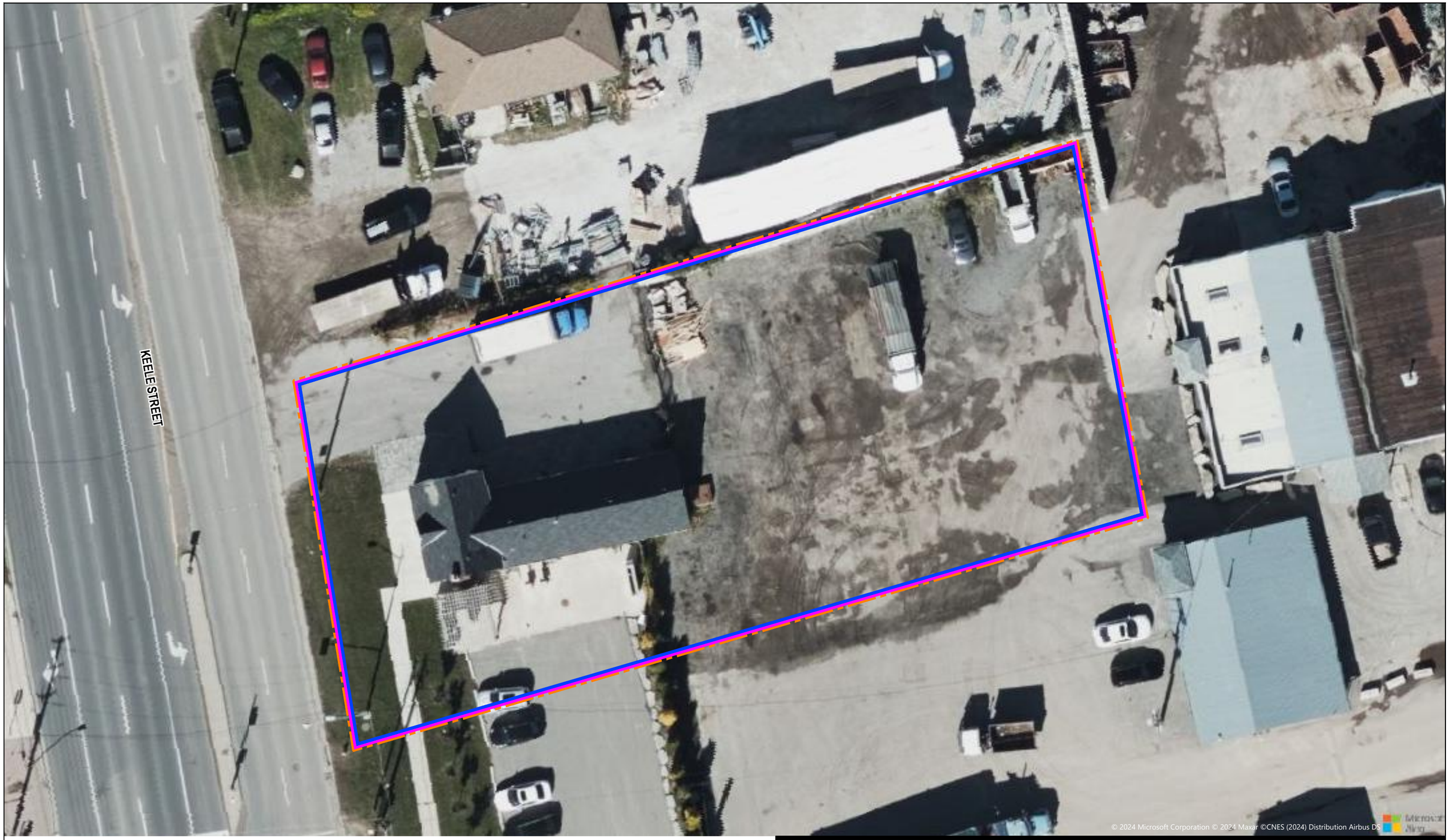
10533 KEELE STREET, VAUGHAN, ONTARIO
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

PHASE ONE CONCEPTUAL SITE MODEL

Project No. **12636323**
Date **May 2024**

FIGURE 3

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Plot Date: 24 May 2024 7:29 AM



LEGEND

PROPERTY BOUNDARY

APEC #1 - OFF-SITE INDUSTRIAL ACTIVITIES
PCA 12, 58, B

APEC #2 - APPLICATION OF DE-ICING AGENTS
PCA A

PCAS POTENTIALLY CONTRIBUTING TO APECS ON THE SITE

12 - CONCRETE, CEMENT AND LIME MANUFACTURING
28 - GASOLINE AND ASSOCIATED PRODUCTS STORAGE IN FIXED TANKS
46. RAIL YARDS, TRACKS AND SPURS
58. WASTE DISPOSAL AND WASTE MANAGEMENT, INCLUDING THERMAL TREATMENT, LANDFILLING AND TRANSFER OF WASTE, OTHER THAN USE OF BIOSOILS AS SOIL CONDITIONERS
A. APPLICATION OF DE-ICING AGENTS
B. SPILL INCIDENTS

0 3 6 9m

1:300

Coordinate System:
UTM83-17

N

GHD

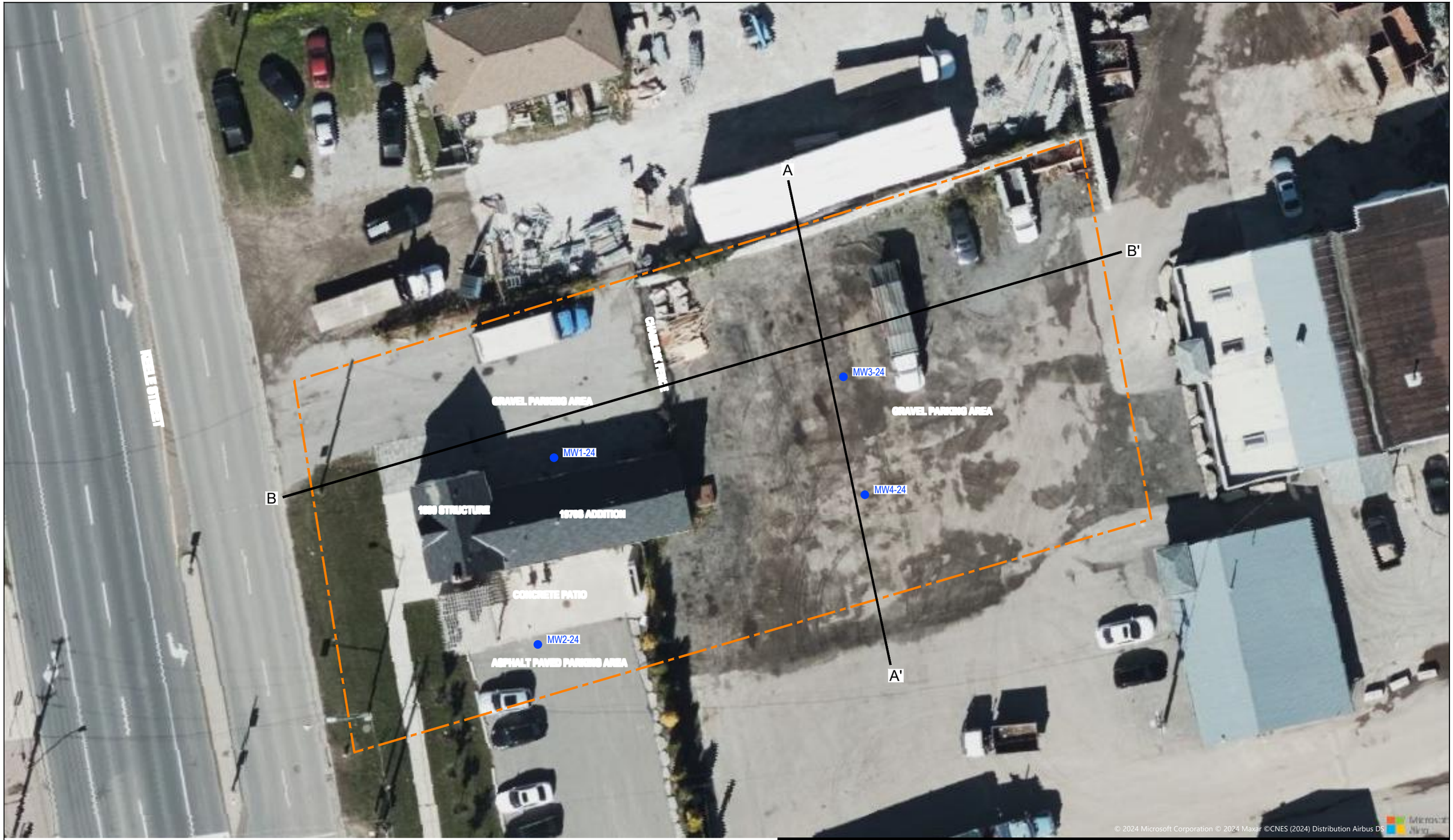
10533 KEELE STREET, VAUGHAN, ONTARIO
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

Project No. **12636323**
Date **May 2024**

FIGURE 4

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Plot Date: 24 May 2024 7:29 AM



LEGEND

PROPERTY BOUNDARY

MONITORING WELL LOCATION

A — A' LOCATION OF CROSS-SECTION

0 3 6 9m

1:300

Coordinate System: UTM83-17

N

GHD

10533 KEELE STREET, VAUGHAN, ONTARIO
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

MONITORING WELL LOCATION PLAN

Project No. **12636323**
Date **May 2024**

FIGURE 5

Filename: N:\CA\Mississauga\Projects\662\12636323\Digital_Design\ACAD\Figures\RPT003-PhaseTWO\12636323-GHD-00-00-RPT-EN-D104_WA-003-PhaseTWO.dwg
Plot Date: 24 May 2024 7:29 AM

LEGEND

- PROPERTY BOUNDARY
- MONITORING WELL LOCATION
- (255.69) GROUNDWATER ELEVATION
- 256.00 GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION



0 3 6 9m

1:300

Coordinate System: UTM83-17

N

GHD

10533 KEELE STREET, VAUGHAN, ONTARIO
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

GROUNDWATER ELEVATION CONTOURS (APRIL 5, 2024)

Project No. **12636323**
Date **May 2024**

FIGURE 6

Filename: N:\CA\Mississauga\Projects\662\12636323\Digital_Design\ACAD\Figures\RPT003-PhaseTWO\12636323-GHD-00-00-RPT-EN-D105_WA-003-PhaseTWO.dwg
Plot Date: 24 May 2024 7:29 AM

LEGEND

- PROPERTY BOUNDARY
- MONITORING WELL LOCATION
- SAMPLE LOCATION
- SAMPLE DATE
- SAMPLE DEPTH
- RESULT
- PARAMETER
- DUPLICATE SAMPLE
- EXCEEDS STANDARDS
- MEETS STANDARDS

MW1-24	3/28/2024
	0.32 - 0.61 m BGS
Lead	228

25/27

228

PARAMETER	TABLE 3 (ICC) MEDIUM FINE	UNITS
LEAD	120.0	µg/g



NOTE:

"SOIL, GROUND WATER AND SEDIMENT STANDARDS FOR USE UNDER PART XV.1 OF THE ENVIRONMENTAL PROTECTION ACT", DATED APRIL 15, 2011. TABLE 2: FULL DEPTH GENERIC SITE CONDITION STANDARDS IN A POTABLE GROUND WATER CONDITION FOR COARSE-TEXTURED SOILS AND INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE.

0 3 6 9m

1:300

Coordinate System: UTM83-17

N

GHD

10533 KEELE STREET, VAUGHAN, ONTARIO
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

HORIZONTAL EXTENT OF SOIL IMPACTS (METALS)

Project No. 12636323
Date May 2024

FIGURE 7

Filename: N:\CA\Mississauga\Projects\662\12636323\Digital_Design\ACAD\Figures\RPT003-PhaseTWO\12636323-GHD-00-00-RPT-EN-D106_WA-003-PhaseTWO.dwg
Plot Date: 24 May 2024 7:29 AM

LEGEND

- PROPERTY BOUNDARY
- MONITORING WELL LOCATION
- SAMPLE LOCATION
- SAMPLE DATE
- SAMPLE DEPTH
- RESULT
- PARAMETER
- DUPLICATE SAMPLE
- EXCEEDS STANDARDS
- MEETS STANDARDS

MW1-24	3/28/2024
	1.67 - 2.28 m BGS
Benzo(a)pyrene	ND (0.05)

0.08/0.07

0.46

PARAMETER	TABLE 3 (ICC) MEDIUM FINE	UNITS
BENZO(A)PYRENE	0.3	µg/g



NOTE:

"SOIL, GROUND WATER AND SEDIMENT STANDARDS FOR USE UNDER PART XV.1 OF THE ENVIRONMENTAL PROTECTION ACT", DATED APRIL 15, 2011. TABLE 2: FULL DEPTH GENERIC SITE CONDITION STANDARDS IN A POTABLE GROUND WATER CONDITION FOR COARSE-TEXTURED SOILS AND INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE.

0 3 6 9m

1:300

Coordinate System: UTM83-17

N

GHD

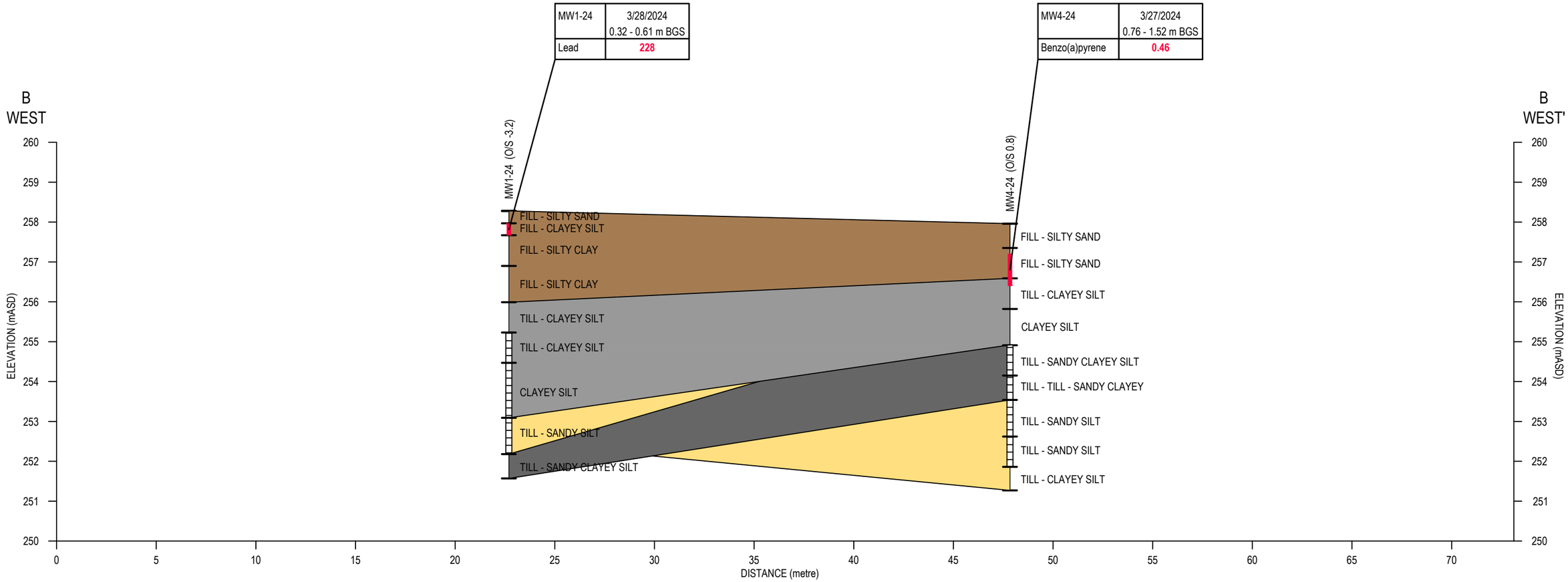
10533 KEELE STREET, VAUGHAN, ONTARIO
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

HORIZONTAL EXTENT OF SOIL IMPACTS (PAHs)

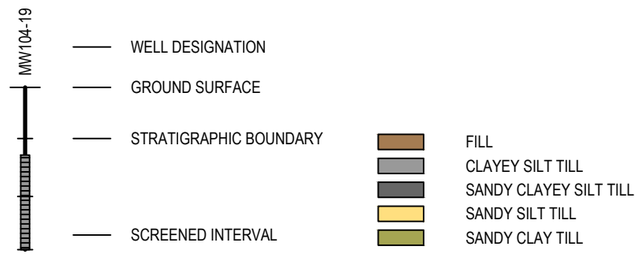
Project No. **12636323**
Date **May 2024**

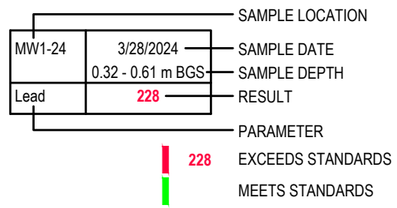
FIGURE 8

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Plot Date: 24 May 2024 7:29 AM



LEGEND





NOTE:
"SOIL, GROUND WATER AND SEDIMENT STANDARDS FOR USE UNDER PART XV.1 OF THE ENVIRONMENTAL PROTECTION ACT", DATED APRIL 15, 2011. TABLE 2: FULL DEPTH GENERIC SITE CONDITION STANDARDS IN A POTABLE GROUND WATER CONDITION FOR COARSE-TEXTURED SOILS AND INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE.

PARAMETER	TABLE 3 (ICC) MEDIUM FINE	UNITS
LEAD	120.0	µg/g

HORIZONTAL
1:200
0 2 4 6
0 1 2 3
1:100
VERTICAL

GHD

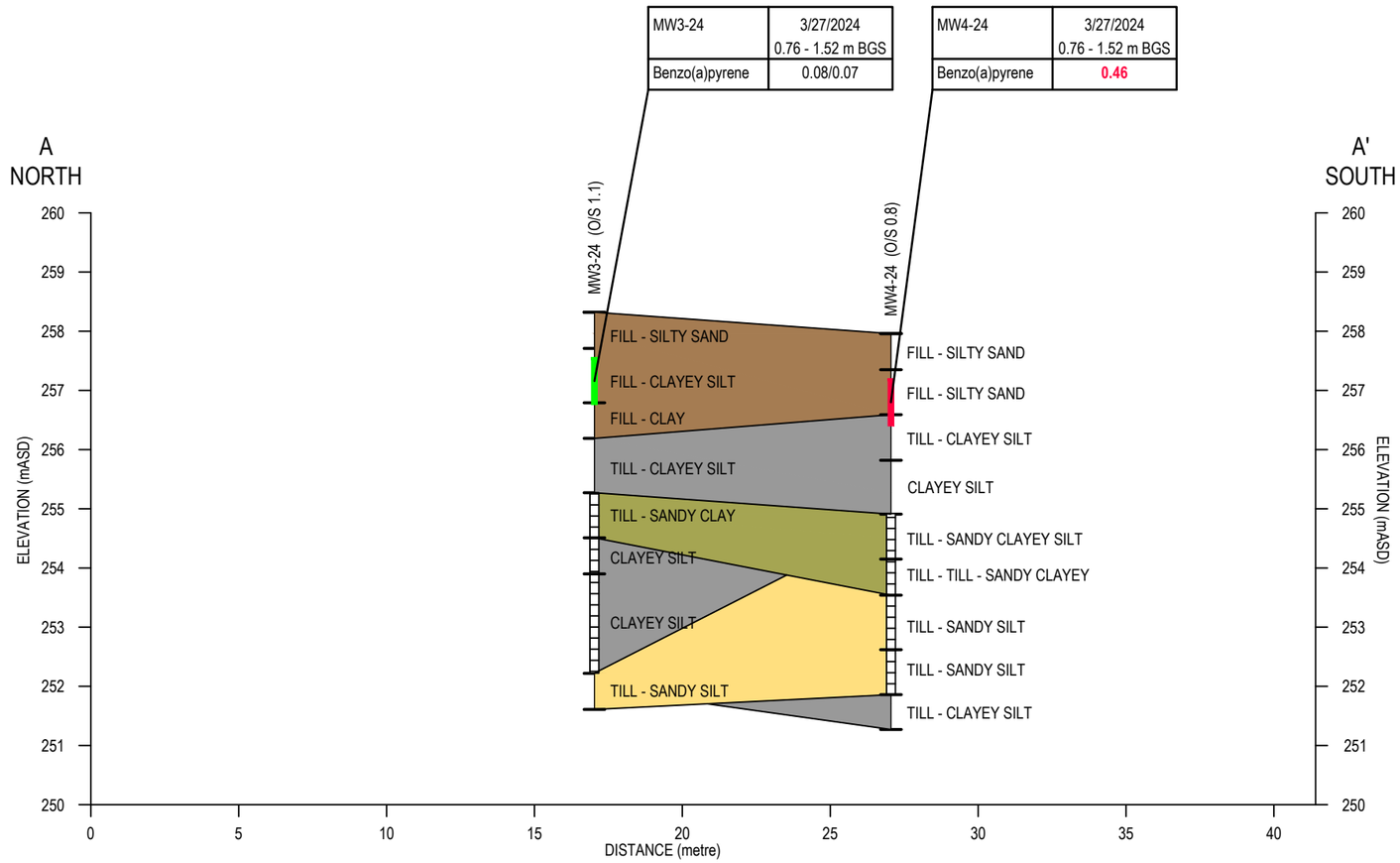
10533 KEELE STREET, VAUGHAN, ONTARIO
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

VERTICAL EXTENT OF SOIL IMPACTS (METALS)
CROSS-SECTION B-B'

Project No. **12636323**
Date **May 2024**

FIGURE 9

Filename: N:\CA\Mississauga\Projects\662\12636323\Digital_Design\ACAD\Figures\RPT003-PhaseTWO\12636323-GHD-00-00-RPT-EN-D108_WA-003-PhaseTWO.dwg
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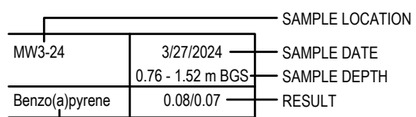


LEGEND



- WELL DESIGNATION
- GROUND SURFACE
- STRATIGRAPHIC BOUNDARY
- SCREENED INTERVAL

- FILL
- CLAYEY SILT TILL
- SANDY CLAYEY SILT TILL
- SANDY SILT TILL
- SANDY CLAY TILL



0.08/0.07 DUPLICATE SAMPLE

0.46 EXCEEDS STANDARDS

MEETS STANDARDS

NOTE:

"SOIL, GROUND WATER AND SEDIMENT STANDARDS FOR USE UNDER PART XV.1 OF THE ENVIRONMENTAL PROTECTION ACT", DATED APRIL 15, 2011. TABLE 2: FULL DEPTH GENERIC SITE CONDITION STANDARDS IN A POTABLE GROUND WATER CONDITION FOR COARSE-TEXTURED SOILS AND INDUSTRIAL/COMMERCIAL/COMMUNITY PROPERTY USE.

PARAMETER	TABLE 3 (ICC) MEDIUM FINE	UNITS
BENZO(A)PYRENE	0.3	µg/g

HORIZONTAL
1:200
0 2 4 6

1:100
VERTICAL
0 1 2 3

10533 KEELE STREET, VAUGHAN, ONTARIO
PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

VERTICAL EXTENT OF SOIL IMPACTS (PAHs)
CROSS-SECTION A-A'

Project No. **12636323**
Date **May 2024**

FIGURE 10

Filename: N:\CA\Mississauga\Projects\662\12636323\Digital_Design\ACAD\Figures\RPT003-PhaseTWO\12636323-GHD-00-00-RPT-EN-D109_WA-003-PhaseTWO.dwg
Plot Date: 24 May 2024 7:29 AM

Tables

Table 1

Summary of Sampling Locations and Chemical Analysis
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Sample Location	Sample Identification	Sample Date	Laboratory Certificate of Analysis	Metals	PHCs	VOCs	PAHs
Soil							
MW1-24 SS1B	MW1-24 SS1B			√	√		
MW1-24 SS2	MW1-24 SS2	28/03/2024				√	
MW1-24 SS3	MW1-24 SS3						√
MW2-24 SS1	MW2-24 SS1			√			√
MW2-24 SS2	MW2-24 SS2	28/03/2024			√		
MW2-24 SS3	MW2-24 SS3					√	
MW3-24 SS1	MW3-24 SS1			√			
	QAQC-1		24T134512	√			
MW3-24 SS2	MW3-24 SS2	27/03/2024					√
	QAQC-2						√
MW3-24 SS3	MW3-24 SS3				√	√	
	QAQC-3				√	√	
MW4-24 SS1	MW4-24 SS1			√			
MW4-24 SS2	MW4-24 SS2	27/03/2024					√
MW4-24 SS3	MW4-24 SS3				√	√	
Groundwater							
MW1-24	MW1-24			√	√	√	√
MW2-24	MW2-24			√	√	√	√
MW3-24	MW3-24	5/4/2024	24T136609	√	√	√	√
	QAQC-1			√	√	√	√
MW4-24	MW4-24			√	√	√	√

Notes:

VOCs	Volatile Organic Compounds
PAHs	Polycyclic Aromatic Hydrocarbons
PHCs	Petroluem Hydrocarbons
-	not applicable

Table 2

Monitoring Well Completion Details
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Well No.	Completion Date	Ground Elevation	Top of Riser Elevation	Total Depth Drilled	Screened Interval				Sand Pack Interval				Screened Geologic Material
					Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	
		(mAMSL)	(mAMSL)	(mBGS)	(mBGS)		(mAMSL)		(mBGS)		(mAMSL)		
MW1-24	28/03/2024	258.20	258.10	6.70	3.60	6.70	254.60	251.50	2.94	6.70	255.26	251.50	Sandy Silty Clay Till
MW2-24	28/03/2024	257.50	257.35	6.70	3.60	6.70	253.90	250.80	2.94	6.70	254.56	250.80	Sandy Silty Clay Till
MW3-24	27/03/2024	258.30	258.11	6.70	3.60	6.70	254.70	251.60	2.94	6.70	255.36	251.60	Silty Clay Till
MW4-24	27/03/2024	258.00	257.89	6.70	3.60	6.70	254.40	251.30	2.94	6.70	255.06	251.30	Sandy Silty Clay Till

Notes:

mAMSL	metres Above Mean Sea Level
mBGS	metres Below Ground Surface
-	no value

Table 3

Monitoring Well Development and Low-Flow Purging Activities
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Well No.	Date	Purge Rate (mL/min)	Time (hh:min)	Temperature (°C)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	pH	ORP (mV)
MW1-24	5/4/2024	100	12:00 PM	8.37	1.22	360.0	8.95	7.21	95
				8.19	1.22	162.0	8.41	7.19	93
				8.06	1.22	31.4	7.90	7.18	90
				7.99	1.21	15.2	7.89	7.18	85
				7.97	1.21	12.4	7.85	7.17	83
MW2-24	5/4/2024	100	12:40 PM	8.87	1.02	134.0	4.45	7.26	118
				8.84	1.00	37.9	4.10	7.26	115
				8.76	1.01	8.2	3.66	7.26	112
				8.06	1.01	9.6	3.63	7.27	108
MW3-24	5/4/2024	100	10:50 AM	8.20	1.88	68.5	5.48	6.92	127
				8.33	1.89	43.9	5.31	6.91	111
				8.20	1.89	36.3	5.26	6.92	105
				8.06	1.90	28.9	5.16	6.92	103
				7.98	1.90	28.1	5.13	6.92	102
MW4-24	5/4/204	100	9:55 AM	9.17	1.79	229.0	10.67	7.07	156
				8.52	1.81	232.0	9.30	7.06	127
				8.26	1.83	187.0	8.88	7.07	116
				8.14	1.86	120.0	8.44	7.06	110
				7.99	1.88	77.8	8.14	7.07	107
				7.90	1.90	62.9	7.91	7.06	105
				7.90	1.91	58.7	7.84	7.05	104
				7.89	1.92	45.2	7.60	7.05	102

Notes:

mL/min	millilitres per minute
hh:min	hours:minutes
mS/cm	milliSiemens per centimetre
°C	degrees Celcius
NTU	Nephelometric Turbidity Units
DO	Dissolved Oxygen
mg/L	milligrams per litre
ORP	Oxygen Reduction Potential
mV	milliVolts
-	no value/measured

Table 4

Groundwater Elevation Measurements
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Well No.	Ground Elevation (mAMSL)	Top of Riser Elevation (mAMSL)	Groundwater Elevation		
			April 5, 2024		
			(mBTOR)	(mBGS)	(mAMSL)
MW1-24	258.20	258.10	2.41	2.51	255.69
MW2-24	257.50	257.35	1.75	1.90	255.60
MW3-23	258.30	258.11	0.85	1.04	257.26
MW4-24	258.00	257.89	2.39	2.50	255.50

Notes:

mAMSL	metres Above Mean Sea Level.
mBGS	metres Below Ground Surface.
mBTOR	metres Below Top of Riser.
-	no value

Table 5

Summary of Leachate Analytical Results
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Sample Location:			**TCLP**
Sample ID:			**TCLP-1**
Sample Date:			**3/27/2024**
Field SDG:			**24T134512**
Parameters	**Units**	**Leachate Quality Criteria (1)**	
Volatile Organic Compounds			
1,1-Dichloroethene	mg/L	1.4	ND (0.020)
1,2-Dichlorobenzene	mg/L	20	ND (0.010)
1,2-Dichloroethane	mg/L	0.5	ND (0.020)
1,4-Dichlorobenzene	mg/L	0.5	ND (0.010)
2-Butanone (Methyl ethyl ketone) (MI	mg/L	200	ND (0.090)
Benzene	mg/L	0.5	ND (0.020)
Carbon tetrachloride	mg/L	0.5	ND (0.020)
Chlorobenzene	mg/L	8	ND (0.010)
Chloroform (Trichloromethane)	mg/L	10	ND (0.020)
Methylene chloride	mg/L	5	ND (0.030)
Tetrachloroethene	mg/L	3	ND (0.050)
Trichloroethene	mg/L	5	ND (0.020)
Vinyl chloride	mg/L	0.2	ND (0.030)
TCLP PAHs			
Benzo(a)pyrene	mg/L	0.001	ND (0.001)
TCLP Metals			
Arsenic	mg/L	2.5	ND (0.010)
Barium	mg/L	100	0.439
Boron	mg/L	500	0.062
Cadmium	mg/L	0.5	ND (0.010)
Chromium	mg/L	5	ND (0.050)
Lead	mg/L	5	ND (0.010)
Mercury	mg/L	0.1	ND (0.01)
Selenium	mg/L	1	ND (0.020)
Silver	mg/L	5	ND (0.010)
Uranium	mg/L	10	ND (0.050)
TCLP General Chemistry			
Cyanide, weak acid dissociable	mg/L	20.0	ND (0.05)
Extraction fluid	none	-	2
Final pH	none	-	5.61
Fluoride	mg/L	150.0	0.23
Initial pH	none	-	9.24
Nitrite/Nitrate	mg/L	1000.0	ND (0.70)

Footnotes:
(1) Ontario Regulation 347, Schedule 4 Leachate Quality Criteria
ND - Not detected at the associated reporting limit.

Table 6

Summary of Soil Analytical Results
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Sample Location:			MW1-24	MW1-24	MW1-24	MW2-24	MW2-24	MW2-24	MW3-24	MW3-24	MW3-24	MW3-24
Sample ID:			MW1-24 SS1B	MW1-24 SS2	MW1-24 SS3	MW2-24 SS1	MW2-24 SS2	MW2-24 SS3	MW3-24 SS1	QAQC-1	MW3-24 SS2	QAQC-2
Sample Date:			3/28/2024	3/28/2024	3/28/2024	3/28/2024	3/28/2024	3/28/2024	3/27/2024	3/27/2024	3/27/2024	3/27/2024
Sample Depth (mBGS):			0.32 - 0.61	0.76 - 1.52	1.67 - 2.28	0.0 - 0.61	0.76 - 1.52	1.67 - 2.28	0.0 - 0.61	0.0 - 0.61	0.76 - 1.52	0.76 - 1.52
Field SDG:			24T134512	24T134512	24T134512	24T134512	24T134512	24T134512	24T134512	24T134512 Duplicate	24T134512	24T134512 Duplicate
Parameters	**Units**	**Tbl 3 (ICC)~medFine**										
Volatile Organic Compounds												
1,1,1,2-Tetrachloroethane	ug/g	0.11	--	ND (0.04)	--	--	--	ND (0.04)	--	--	--	--
1,1,1-Trichloroethane	ug/g	12	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
1,1,2,2-Tetrachloroethane	ug/g	0.094	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
1,1,2-Trichloroethane	ug/g	0.11	--	ND (0.04)	--	--	--	ND (0.04)	--	--	--	--
1,1-Dichloroethane	ug/g	21	--	ND (0.02)	--	--	--	ND (0.02)	--	--	--	--
1,1-Dichloroethene	ug/g	0.48	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
1,2-Dibromoethane (Ethylene dibromide)	ug/g	0.05	--	ND (0.04)	--	--	--	ND (0.04)	--	--	--	--
1,2-Dichlorobenzene	ug/g	8.5	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
1,2-Dichloroethane	ug/g	0.05	--	ND (0.03)	--	--	--	ND (0.03)	--	--	--	--
1,2-Dichloropropane	ug/g	0.68	--	ND (0.03)	--	--	--	ND (0.03)	--	--	--	--
1,3-Dichlorobenzene	ug/g	12	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
1,3-Dichloropropene	ug/g	0.21	--	ND (0.04)	--	--	--	ND (0.04)	--	--	--	--
1,4-Dichlorobenzene	ug/g	0.84	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
2-Butanone (Methyl ethyl ketone) (MEK)	ug/g	88	--	ND (0.50)	--	--	--	ND (0.50)	--	--	--	--
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/g	210	--	ND (0.50)	--	--	--	ND (0.50)	--	--	--	--
Acetone	ug/g	28	--	ND (0.50)	--	--	--	ND (0.50)	--	--	--	--
Benzene	ug/g	0.4	ND (0.02)	ND (0.02)	--	--	ND (0.02)	ND (0.02)	--	--	--	--
Bromodichloromethane	ug/g	18	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
Bromoform	ug/g	1.7	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
Bromomethane (Methyl bromide)	ug/g	0.05	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
Carbon tetrachloride	ug/g	1.5	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
Chlorobenzene	ug/g	2.7	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
Chloroform (Trichloromethane)	ug/g	0.18	--	ND (0.04)	--	--	--	ND (0.04)	--	--	--	--
cis-1,2-Dichloroethene	ug/g	37	--	ND (0.02)	--	--	--	ND (0.02)	--	--	--	--
Dibromochloromethane	ug/g	13	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
Dichlorodifluoromethane (CFC-12)	ug/g	25	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
Ethylbenzene	ug/g	19	ND (0.05)	ND (0.05)	--	--	ND (0.05)	ND (0.05)	--	--	--	--
Hexane	ug/g	88	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
m&p-Xylenes	ug/g	-	ND (0.05)	ND (0.05)	--	--	ND (0.05)	ND (0.05)	--	--	--	--
Methyl tert butyl ether (MTBE)	ug/g	3.2	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
Methylene chloride	ug/g	2	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
o-Xylene	ug/g	-	ND (0.05)	ND (0.05)	--	--	ND (0.05)	ND (0.05)	--	--	--	--
Styrene	ug/g	43	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
Tetrachloroethene	ug/g	21	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
Toluene	ug/g	78	ND (0.05)	ND (0.05)	--	--	ND (0.05)	ND (0.05)	--	--	--	--
trans-1,2-Dichloroethene	ug/g	9.3	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
Trichloroethene	ug/g	0.61	--	ND (0.03)	--	--	--	ND (0.03)	--	--	--	--
Trichlorofluoromethane (CFC-11)	ug/g	5.8	--	ND (0.05)	--	--	--	ND (0.05)	--	--	--	--
Vinyl chloride	ug/g	0.25	--	ND (0.02)	--	--	--	ND (0.02)	--	--	--	--
Xylenes (total)	ug/g	30	ND (0.05)	ND (0.05)	--	--	ND (0.05)	ND (0.05)	--	--	--	--
PAHs												
1+2-Methylnaphthalene	ug/g	85	--	--	ND (0.05)	ND (0.05)	--	--	--	--	ND (0.05)	ND (0.05)
Acenaphthene	ug/g	96	--	--	ND (0.05)	ND (0.05)	--	--	--	--	ND (0.05)	ND (0.05)
Acenaphthylene	ug/g	0.17	--	--	ND (0.05)	ND (0.05)	--	--	--	--	ND (0.05)	ND (0.05)
Anthracene	ug/g	0.74	--	--	ND (0.05)	0.07	--	--	--	--	ND (0.05)	ND (0.05)
Benzo(a)anthracene	ug/g	0.96	--	--	ND (0.05)	0.16	--	--	--	--	0.10	0.09
Benzo(a)pyrene	ug/g	0.3	--	--	ND (0.05)	0.09	--	--	--	--	0.08	0.07

Table 6

Summary of Soil Analytical Results
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Sample Location:			**MW1-24**	**MW1-24**	**MW1-24**	**MW2-24**	**MW2-24**	**MW2-24**	**MW3-24**	**MW3-24**	**MW3-24**	**MW3-24**
Sample ID:			**MW1-24 SS1B**	**MW1-24 SS2**	**MW1-24 SS3**	**MW2-24 SS1**	**MW2-24 SS2**	**MW2-24 SS3**	**MW3-24 SS1**	**QAQC-1**	**MW3-24 SS2**	**QAQC-2**
Sample Date:			**3/28/2024**	**3/28/2024**	**3/28/2024**	**3/28/2024**	**3/28/2024**	**3/28/2024**	**3/27/2024**	**3/27/2024**	**3/27/2024**	**3/27/2024**
Sample Depth (mBGS):			**0.32 - 0.61**	**0.76 - 1.52**	**1.67 - 2.28**	**0.0 - 0.61**	**0.76 - 1.52**	**1.67 - 2.28**	**0.0 - 0.61**	**0.0 - 0.61**	**0.76 - 1.52**	**0.76 - 1.52**
Field SDG:			**24T134512**	**24T134512**	**24T134512**	**24T134512**	**24T134512**	**24T134512**	**24T134512**	**24T134512 Duplicate**	**24T134512**	**24T134512 Duplicate**
Parameters	**Units**	**Tbl 3 (ICC)~medFine**										
Benzo(b)fluoranthene	ug/g	0.96	--	--	ND (0.05)	0.13	--	--	--	--	0.12	0.11
Benzo(g,h,i)perylene	ug/g	9.6	--	--	ND (0.05)	0.06	--	--	--	--	ND (0.05)	ND (0.05)
Benzo(k)fluoranthene	ug/g	0.96	--	--	ND (0.05)	0.09	--	--	--	--	0.06	0.08
Chrysene	ug/g	9.6	--	--	ND (0.05)	0.18	--	--	--	--	0.10	0.09
Dibenz(a,h)anthracene	ug/g	0.1	--	--	ND (0.05)	ND (0.05)	--	--	--	--	ND (0.05)	ND (0.05)
Fluoranthene	ug/g	9.6	--	--	ND (0.05)	0.50	--	--	--	--	0.22	0.20
Fluorene	ug/g	69	--	--	ND (0.05)	ND (0.05)	--	--	--	--	ND (0.05)	ND (0.05)
Indeno(1,2,3-cd)pyrene	ug/g	0.95	--	--	ND (0.05)	ND (0.05)	--	--	--	--	0.05	ND (0.05)
Naphthalene	ug/g	28	--	--	ND (0.05)	ND (0.05)	--	--	--	--	ND (0.05)	ND (0.05)
Phenanthrene	ug/g	16	--	--	ND (0.05)	0.30	--	--	--	--	0.07	0.07
Pyrene	ug/g	96	--	--	ND (0.05)	0.39	--	--	--	--	0.19	0.17
Metals												
Antimony	ug/g	50	1.6	--	--	ND (0.8)	--	--	ND (0.8)	ND (0.8)	--	--
Arsenic	ug/g	18	11	--	--	4	--	--	2	3	--	--
Barium	ug/g	670	187	--	--	77.5	--	--	73.0	78.6	--	--
Beryllium	ug/g	10	ND (0.5)	--	--	ND (0.5)	--	--	ND (0.5)	ND (0.5)	--	--
Boron	ug/g	120	8	--	--	6	--	--	6	10	--	--
Cadmium	ug/g	1.9	ND (0.5)	--	--	ND (0.5)	--	--	ND (0.5)	ND (0.5)	--	--
Chromium	ug/g	160	22	--	--	22	--	--	16	21	--	--
Chromium VI (hexavalent)	ug/g	10	ND (0.2)	--	--	ND (0.2)	--	--	ND (0.2)	ND (0.2)	--	--
Cobalt	ug/g	100	7.8	--	--	6.9	--	--	4.5	5.2	--	--
Copper	ug/g	300	55.7	--	--	18.9	--	--	52.5	25.7	--	--
Lead	ug/g	120	**228**	--	--	55	--	--	25	27	--	--
Mercury	ug/g	20	0.29	--	--	ND (0.10)	--	--	ND (0.10)	ND (0.10)	--	--
Molybdenum	ug/g	40	0.8	--	--	0.6	--	--	2.6	2.4	--	--
Nickel	ug/g	340	17	--	--	16	--	--	16	18	--	--
Selenium	ug/g	5.5	ND (0.8)	--	--	ND (0.8)	--	--	ND (0.8)	ND (0.8)	--	--
Silver	ug/g	50	ND (0.5)	--	--	ND (0.5)	--	--	ND (0.5)	ND (0.5)	--	--
Thallium	ug/g	3.3	ND (0.5)	--	--	ND (0.5)	--	--	ND (0.5)	ND (0.5)	--	--
Uranium	ug/g	33	ND (0.50)	--	--	0.60	--	--	ND (0.50)	ND (0.50)	--	--
Vanadium	ug/g	86	31.4	--	--	33.9	--	--	24.5	22.5	--	--
Zinc	ug/g	340	273	--	--	137	--	--	124	105	--	--
Petroleum Products												
Petroleum hydrocarbons F1 (C6-C10)	ug/g	65	ND (5)	--	--	--	ND (5)	--	--	--	--	--
Petroleum hydrocarbons F1 minus BTEX	ug/g	65	ND (5)	--	--	--	ND (5)	--	--	--	--	--
Petroleum hydrocarbons F2 (C10-C16)	ug/g	250	ND (10)	--	--	--	ND (10)	--	--	--	--	--
Petroleum hydrocarbons F3 (C16-C34)	ug/g	2500	ND (50)	--	--	--	195	--	--	--	--	--
Petroleum hydrocarbons F4 (C34-C50)	ug/g	6600	ND (50)	--	--	--	151	--	--	--	--	--
General Chemistry												
Boron (hot water soluble)	ug/g	2	0.50	--	--	0.34	--	--	0.48	1.12	--	--
Conductivity	mS/cm	1.4	0.336	--	--	0.306	--	--	0.398	0.384	--	--
Cyanide, weak acid dissociable	ug/g	0.051	ND (0.040)	--	--	ND (0.040)	--	--	ND (0.040)	ND (0.040)	--	--
Moisture content (wet weight)	%	-	17.9	16.2	17.5	12.4	14.3	10.6	--	--	17.2	17.2
pH	s.u.	(5-11) 5-9	7.28	--	--	7.24	--	--	7.95	7.39	--	--
Sodium adsorption ratio (SAR)	none	12	1.20	--	--	0.565	--	--	1.60	2.45	--	--

Table 6

Summary of Soil Analytical Results
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Sample Location:			**MW1-24**	**MW1-24**	**MW1-24**	**MW2-24**	**MW2-24**	**MW2-24**	**MW3-24**	**MW3-24**	**MW3-24**	**MW3-24**
Sample ID:			**MW1-24 SS1B**	**MW1-24 SS2**	**MW1-24 SS3**	**MW2-24 SS1**	**MW2-24 SS2**	**MW2-24 SS3**	**MW3-24 SS1**	**QAQC-1**	**MW3-24 SS2**	**QAQC-2**
Sample Date:			**3/28/2024**	**3/28/2024**	**3/28/2024**	**3/28/2024**	**3/28/2024**	**3/28/2024**	**3/27/2024**	**3/27/2024**	**3/27/2024**	**3/27/2024**
Sample Depth (mBGS):			**0.32 - 0.61**	**0.76 - 1.52**	**1.67 - 2.28**	**0.0 - 0.61**	**0.76 - 1.52**	**1.67 - 2.28**	**0.0 - 0.61**	**0.0 - 0.61**	**0.76 - 1.52**	**0.76 - 1.52**
Field SDG:			**24T134512**	**24T134512**	**24T134512**	**24T134512**	**24T134512**	**24T134512**	**24T134512**	**24T134512**	**24T134512**	**24T134512**
										Duplicate		**Duplicate**
Parameters	**Units**	**Tbl 3 (ICC)~medFine**										
Footnotes:												
ND - Not detected at the associated reporting limit.												
(1) Ontario Ministry of the Environment, Conservation and Parks (MECP), "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act", April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition for Industrial/Commercial/Community property use and medium/fine-textured soils.												
NV	No Value											
-	Not Applicable											
ND(0.050)	Not detected at the associated reporting limit, indicated in brackets.											
µg/g	micrograms per gram											
mS/cm	microSiemens per centimetre											
s.u.	standard units											
1.10	Concentration is above Table 3 Standards.											

Table 6

Summary of Soil Analytical Results
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Sample Location:		**MW3-24**	**MW3-24**	**MW4-24**	**MW4-24**	**MW4-24**	**Trip Blank**
Sample ID:		**MW3-24 SS3**	**QAQC-3**	**MW4-24 SS1**	**MW4-24 SS2**	**MW4-24 SS3**	**Trip Blank**
Sample Date:		**3/27/2024**	**3/27/2024**	**3/27/2024**	**3/27/2024**	**3/27/2024**	**3/27/2024**
Sample Depth (mBGS):		**1.67 - 2.28**	**1.67 - 2.28**	**0.0 - 0.61**	**0.76 - 1.52**	**1.67 - 2.28**	**-**
Field SDG:		**24T134512**	**24T134512 Duplicate**	**24T134512**	**24T134512**	**24T134512**	**24T134512**
Parameters	**Units**						
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	ug/g	ND (0.04)	--	--	--	ND (0.04)	ND (0.04)
1,1,1-Trichloroethane	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
1,1,2,2-Tetrachloroethane	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
1,1,2-Trichloroethane	ug/g	ND (0.04)	--	--	--	ND (0.04)	ND (0.04)
1,1-Dichloroethane	ug/g	ND (0.02)	--	--	--	ND (0.02)	ND (0.02)
1,1-Dichloroethene	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
1,2-Dibromoethane (Ethylene dibromide)	ug/g	ND (0.04)	--	--	--	ND (0.04)	ND (0.04)
1,2-Dichlorobenzene	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
1,2-Dichloroethane	ug/g	ND (0.03)	--	--	--	ND (0.03)	ND (0.03)
1,2-Dichloropropane	ug/g	ND (0.03)	--	--	--	ND (0.03)	ND (0.03)
1,3-Dichlorobenzene	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
1,3-Dichloropropene	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.04)
1,4-Dichlorobenzene	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
2-Butanone (Methyl ethyl ketone) (MEK)	ug/g	ND (0.50)	--	--	--	ND (0.50)	ND (0.50)
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/g	ND (0.50)	--	--	--	ND (0.50)	ND (0.50)
Acetone	ug/g	ND (0.50)	--	--	--	ND (0.50)	ND (0.50)
Benzene	ug/g	ND (0.02)	ND (0.02)	--	--	ND (0.02)	ND (0.02) / ND (0.02)
Bromodichloromethane	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
Bromoform	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
Bromomethane (Methyl bromide)	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
Carbon tetrachloride	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
Chlorobenzene	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
Chloroform (Trichloromethane)	ug/g	ND (0.04)	--	--	--	ND (0.04)	ND (0.04)
cis-1,2-Dichloroethene	ug/g	ND (0.02)	--	--	--	ND (0.02)	ND (0.02)
Dibromochloromethane	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
Dichlorodifluoromethane (CFC-12)	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
Ethylbenzene	ug/g	ND (0.05)	ND (0.05)	--	--	ND (0.05)	ND (0.05) / ND (0.05)
Hexane	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
m&p-Xylenes	ug/g	ND (0.05)	ND (0.05)	--	--	ND (0.05)	ND (0.05) / ND (0.05)
Methyl tert butyl ether (MTBE)	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
Methylene chloride	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
o-Xylene	ug/g	ND (0.05)	ND (0.05)	--	--	ND (0.05)	ND (0.05) / ND (0.05)
Styrene	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
Tetrachloroethene	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
Toluene	ug/g	ND (0.05)	ND (0.05)	--	--	ND (0.05)	ND (0.05) / ND (0.05)
trans-1,2-Dichloroethene	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
Trichloroethene	ug/g	ND (0.03)	--	--	--	ND (0.03)	ND (0.03)
Trichlorofluoromethane (CFC-11)	ug/g	ND (0.05)	--	--	--	ND (0.05)	ND (0.05)
Vinyl chloride	ug/g	ND (0.02)	--	--	--	ND (0.02)	ND (0.02)
Xylenes (total)	ug/g	ND (0.05)	ND (0.05)	--	--	ND (0.05)	ND (0.05) / ND (0.05)
PAHs							
1+2-Methylnaphthalene	ug/g	--	--	--	ND (0.05)	--	--
Acenaphthene	ug/g	--	--	--	0.11	--	--
Acenaphthylene	ug/g	--	--	--	ND (0.05)	--	--
Anthracene	ug/g	--	--	--	0.32	--	--
Benzo(a)anthracene	ug/g	--	--	--	0.84	--	--
Benzo(a)pyrene	ug/g	--	--	--	**0.46**	--	--

Table 6

Summary of Soil Analytical Results
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Sample Location:		**MW3-24**	**MW3-24**	**MW4-24**	**MW4-24**	**MW4-24**	**Trip Blank**
Sample ID:		**MW3-24 SS3**	**QAQC-3**	**MW4-24 SS1**	**MW4-24 SS2**	**MW4-24 SS3**	**Trip Blank**
Sample Date:		**3/27/2024**	**3/27/2024**	**3/27/2024**	**3/27/2024**	**3/27/2024**	**3/27/2024**
Sample Depth (mBGS):		**1.67 - 2.28**	**1.67 - 2.28**	**0.0 - 0.61**	**0.76 - 1.52**	**1.67 - 2.28**	**-**
Field SDG:		**24T134512**	**24T134512 Duplicate**	**24T134512**	**24T134512**	**24T134512**	**24T134512**
Parameters	**Units**						
Benzo(b)fluoranthene	ug/g	--	--	--	0.72	--	--
Benzo(g,h,i)perylene	ug/g	--	--	--	0.18	--	--
Benzo(k)fluoranthene	ug/g	--	--	--	0.47	--	--
Chrysene	ug/g	--	--	--	0.73	--	--
Dibenz(a,h)anthracene	ug/g	--	--	--	ND (0.05)	--	--
Fluoranthene	ug/g	--	--	--	2.12	--	--
Fluorene	ug/g	--	--	--	0.17	--	--
Indeno(1,2,3-cd)pyrene	ug/g	--	--	--	0.17	--	--
Naphthalene	ug/g	--	--	--	0.09	--	--
Phenanthrene	ug/g	--	--	--	1.59	--	--
Pyrene	ug/g	--	--	--	1.59	--	--
Metals							
Antimony	ug/g	--	--	ND (0.8)	--	--	--
Arsenic	ug/g	--	--	3	--	--	--
Barium	ug/g	--	--	76.0	--	--	--
Beryllium	ug/g	--	--	ND (0.5)	--	--	--
Boron	ug/g	--	--	7	--	--	--
Cadmium	ug/g	--	--	ND (0.5)	--	--	--
Chromium	ug/g	--	--	27	--	--	--
Chromium VI (hexavalent)	ug/g	--	--	ND (0.2)	--	--	--
Cobalt	ug/g	--	--	5.4	--	--	--
Copper	ug/g	--	--	23.0	--	--	--
Lead	ug/g	--	--	31	--	--	--
Mercury	ug/g	--	--	ND (0.10)	--	--	--
Molybdenum	ug/g	--	--	1.2	--	--	--
Nickel	ug/g	--	--	16	--	--	--
Selenium	ug/g	--	--	ND (0.8)	--	--	--
Silver	ug/g	--	--	ND (0.5)	--	--	--
Thallium	ug/g	--	--	ND (0.5)	--	--	--
Uranium	ug/g	--	--	0.51	--	--	--
Vanadium	ug/g	--	--	31.6	--	--	--
Zinc	ug/g	--	--	180	--	--	--
Petroleum Products							
Petroleum hydrocarbons F1 (C6-C10)	ug/g	ND (5)	ND (5)	--	--	ND (5)	ND (5)
Petroleum hydrocarbons F1 minus BTEX	ug/g	ND (5)	ND (5)	--	--	ND (5)	ND (5)
Petroleum hydrocarbons F2 (C10-C16)	ug/g	ND (10)	ND (10)	--	--	ND (10)	--
Petroleum hydrocarbons F3 (C16-C34)	ug/g	ND (50)	ND (50)	--	--	ND (50)	--
Petroleum hydrocarbons F4 (C34-C50)	ug/g	ND (50)	ND (50)	--	--	ND (50)	--
General Chemistry							
Boron (hot water soluble)	ug/g	--	--	0.62	--	--	--
Conductivity	mS/cm	--	--	0.488	--	--	--
Cyanide, weak acid dissociable	ug/g	--	--	ND (0.040)	--	--	--
Moisture content (wet weight)	%	13.6	14.1	--	12.9	10.7	--
pH	s.u.	--	--	10.2	--	--	--
Sodium adsorption ratio (SAR)	none	--	--	3.21	--	--	--

Table 6

Summary of Soil Analytical Results
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Sample Location:		**MW3-24**	**MW3-24**	**MW4-24**	**MW4-24**	**MW4-24**	**Trip Blank**
Sample ID:		**MW3-24 SS3**	**QAQC-3**	**MW4-24 SS1**	**MW4-24 SS2**	**MW4-24 SS3**	**Trip Blank**
Sample Date:		**3/27/2024**	**3/27/2024**	**3/27/2024**	**3/27/2024**	**3/27/2024**	**3/27/2024**
Sample Depth (mBGS):		**1.67 - 2.28**	**1.67 - 2.28**	**0.0 - 0.61**	**0.76 - 1.52**	**1.67 - 2.28**	**-**
Field SDG:		**24T134512**	**24T134512**	**24T134512**	**24T134512**	**24T134512**	**24T134512**
			Duplicate				
Parameters	**Units**						

Footnotes:
ND - Not detected at the associated reporting limit.

(1) Ontario Ministry of the Environment, Conservation and Parks (MECP), "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act", April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition for Industrial/Commercial/Community property use and medium/fine-textured soils.

NV	No Valu
-	Not App
ND(0.050)	Not det
µg/g	microgr
mS/cm	microSi
s.u.	standar
1.10	Concen

Table 7

Summary of Maximum Soil Concentration Data
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Parameters	Units	Tbl3 (ICC)~medFine	MAX Concentration	Sample Location	Sample ID	Sample Date	Depth (mBGS)	Field SDG
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ug/g	0.11	ND(0.04)	-	-	-	-	-
1,1,1-Trichloroethane	ug/g	12	ND(0.05)	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/g	0.094	ND(0.05)	-	-	-	-	-
1,1,2-Trichloroethane	ug/g	0.11	ND(0.04)	-	-	-	-	-
1,1-Dichloroethane	ug/g	21	ND(0.02)	-	-	-	-	-
1,1-Dichloroethene	ug/g	0.48	ND(0.05)	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	ug/g	0.05	ND(0.04)	-	-	-	-	-
1,2-Dichlorobenzene	ug/g	8.5	ND(0.05)	-	-	-	-	-
1,2-Dichloroethane	ug/g	0.05	ND(0.03)	-	-	-	-	-
1,2-Dichloropropane	ug/g	0.68	ND(0.03)	-	-	-	-	-
1,3-Dichlorobenzene	ug/g	12	ND(0.05)	-	-	-	-	-
1,3-Dichloropropene	ug/g	0.21	ND(0.05)	-	-	-	-	-
1,4-Dichlorobenzene	ug/g	0.84	ND(0.05)	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	ug/g	88	ND(0.5)	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/g	210	ND(0.5)	-	-	-	-	-
Acetone	ug/g	28	ND(0.5)	-	-	-	-	-
Benzene	ug/g	0.4	ND(0.02)	-	-	-	-	-
Bromodichloromethane	ug/g	18	ND(0.05)	-	-	-	-	-
Bromoform	ug/g	1.7	ND(0.05)	-	-	-	-	-
Bromomethane (Methyl bromide)	ug/g	0.05	ND(0.05)	-	-	-	-	-
Carbon tetrachloride	ug/g	1.5	ND(0.05)	-	-	-	-	-
Chlorobenzene	ug/g	2.7	ND(0.05)	-	-	-	-	-
Chloroform (Trichloromethane)	ug/g	0.18	ND(0.04)	-	-	-	-	-
cis-1,2-Dichloroethene	ug/g	37	ND(0.02)	-	-	-	-	-
Dibromochloromethane	ug/g	13	ND(0.05)	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	ug/g	25	ND(0.05)	-	-	-	-	-
Ethylbenzene	ug/g	19	ND(0.05)	-	-	-	-	-
Hexane	ug/g	88	ND(0.05)	-	-	-	-	-
m&p-Xylenes	ug/g	-	ND(0.05)	-	-	-	-	-
Methyl tert butyl ether (MTBE)	ug/g	3.2	ND(0.05)	-	-	-	-	-
Methylene chloride	ug/g	2	ND(0.05)	-	-	-	-	-
o-Xylene	ug/g	-	ND(0.05)	-	-	-	-	-
Styrene	ug/g	43	ND(0.05)	-	-	-	-	-
Tetrachloroethene	ug/g	21	ND(0.05)	-	-	-	-	-
Toluene	ug/g	78	ND(0.05)	-	-	-	-	-
trans-1,2-Dichloroethene	ug/g	9.3	ND(0.05)	-	-	-	-	-
Trichloroethene	ug/g	0.61	ND(0.03)	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	ug/g	5.8	ND(0.05)	-	-	-	-	-
Vinyl chloride	ug/g	0.25	ND(0.02)	-	-	-	-	-
Xylenes (total)	ug/g	30	ND(0.05)	-	-	-	-	-
PAHs								
1+2-Methylnaphthalene	ug/g	85	ND(0.05)	-	-	-	-	-
Acenaphthene	ug/g	96	0.11	MW4-24	MW4-24 SS2	3/27/2024	0.76 - 1.52	24T134512
Acenaphthylene	ug/g	0.17	ND(0.05)	-	-	-	-	-
Anthracene	ug/g	0.74	0.32	MW4-24	MW4-24 SS2	3/27/2024	0.76 - 1.52	24T134512
Benzo(a)anthracene	ug/g	0.96	0.84	MW4-24	MW4-24 SS2	3/27/2024	0.76 - 1.52	24T134512
Benzo(a)pyrene	ug/g	0.3	**0.46**	MW4-24	MW4-24 SS2	3/27/2024	0.76 - 1.52	24T134512
Benzo(b)fluoranthene	ug/g	0.96	0.72	MW4-24	MW4-24 SS2	3/27/2024	0.76 - 1.52	24T134512
Benzo(g,h,i)perylene	ug/g	9.6	0.18	MW4-24	MW4-24 SS2	3/27/2024	0.76 - 1.52	24T134512
Benzo(k)fluoranthene	ug/g	0.96	0.47	MW4-24	MW4-24 SS2	3/27/2024	0.76 - 1.52	24T134512
Chrysene	ug/g	9.6	0.73	MW4-24	MW4-24 SS2	3/27/2024	0.76 - 1.52	24T134512
Dibenz(a,h)anthracene	ug/g	0.1	ND(0.05)	-	-	-	-	-
Fluoranthene	ug/g	9.6	2.12	MW4-24	MW4-24 SS2	3/27/2024	0.76 - 1.52	24T134512
Fluorene	ug/g	69	0.17	MW4-24	MW4-24 SS2	3/27/2024	0.76 - 1.52	24T134512

Table 7

Summary of Maximum Soil Concentration Data
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Parameters	Units	Tbl3 (ICC)~medFine	MAX Concentration	Sample Location	Sample ID	Sample Date	Depth (mBGS)	Field SDG
Indeno(1,2,3-cd)pyrene	ug/g	0.95	0.17	MW4-24	MW4-24 SS2	3/27/2024	0.76 - 1.52	24T134512
Naphthalene	ug/g	28	0.09	MW4-24	MW4-24 SS2	3/27/2024	0.76 - 1.52	24T134512
Phenanthrene	ug/g	16	1.59	MW4-24	MW4-24 SS2	3/27/2024	0.76 - 1.52	24T134512
Pyrene	ug/g	96	1.59	MW4-24	MW4-24 SS2	3/27/2024	0.76 - 1.52	24T134512
Metals								
Antimony	ug/g	50	1.6	MW1-24	MW1-24 SS1B	3/28/2024	0.31 - 0.61	24T134512
Arsenic	ug/g	18	11	MW1-24	MW1-24 SS1B	3/28/2024	0.31 - 0.61	24T134512
Barium	ug/g	670	187	MW1-24	MW1-24 SS1B	3/28/2024	0.31 - 0.61	24T134512
Beryllium	ug/g	10	ND(0.5)	-	-	-	-	-
Boron	ug/g	120	10	MW3-24	QAQC-1	3/27/2024	0.0 - 0.61	24T134512
Cadmium	ug/g	1.9	ND(0.5)	-	-	-	-	-
Chromium	ug/g	160	27	MW4-24	MW4-24 SS1	3/27/2024	0.0 - 0.61	24T134512
Chromium VI (hexavalent)	ug/g	10	ND(0.2)	-	-	-	-	-
Cobalt	ug/g	100	7.8	MW1-24	MW1-24 SS1B	3/28/2024	0.31 - 0.61	24T134512
Copper	ug/g	300	55.7	MW1-24	MW1-24 SS1B	3/28/2024	0.31 - 0.61	24T134512
Lead	ug/g	120	228	MW1-24	MW1-24 SS1B	3/28/2024	0.31 - 0.61	24T134512
Mercury	ug/g	20	0.29	MW1-24	MW1-24 SS1B	3/28/2024	0.31 - 0.61	24T134512
Molybdenum	ug/g	40	2.6	MW3-24	MW3-24 SS1	3/27/2024	0.0 - 0.61	24T134512
Nickel	ug/g	340	18	MW3-24	QAQC-1	3/27/2024	0.0 - 0.61	24T134512
Selenium	ug/g	5.5	ND(0.8)	-	-	-	-	-
Silver	ug/g	50	ND(0.5)	-	-	-	-	-
Thallium	ug/g	3.3	ND(0.5)	-	-	-	-	-
Uranium	ug/g	33	0.6	MW2-24	MW2-24 SS1	3/28/2024	0.0 - 0.61	24T134512
Vanadium	ug/g	86	33.9	MW2-24	MW2-24 SS1	3/28/2024	0.0 - 0.61	24T134512
Zinc	ug/g	340	273	MW1-24	MW1-24 SS1B	3/28/2024	0.31 - 0.61	24T134512
Petroleum Products								
Petroleum hydrocarbons F1 (C6-C10)	ug/g	65	ND(5)	-	-	-	-	-
Petroleum hydrocarbons F1 minus BTEX	ug/g	65	ND(5)	-	-	-	-	-
Petroleum hydrocarbons F2 (C10-C16)	ug/g	250	ND(10)	-	-	-	-	-
Petroleum hydrocarbons F3 (C16-C34)	ug/g	2500	195	MW2-24	MW2-24 SS2	3/28/2024	0.76 - 1.52	24T134512
Petroleum hydrocarbons F4 (C34-C50)	ug/g	6600	151	MW2-24	MW2-24 SS2	3/28/2024	0.76 - 1.52	24T134512
General Chemistry								
Boron (hot water soluble)	ug/g	2	1.12	MW3-24	QAQC-1	3/27/2024	0.0 - 0.61	24T134512
Conductivity	mS/cm	1.4	0.488	MW4-24	MW4-24 SS1	3/27/2024	0.0 - 0.61	24T134512
Cyanide, weak acid dissociable	ug/g	0.051	ND(0.04)	-	-	-	-	-
Moisture content (wet weight)	%	-	17.9	MW1-24	MW1-24 SS1B	3/28/2024	0.31 - 0.61	24T134512
pH	s.u.	(5-11) 5-9	10.2	MW4-24	MW4-24 SS1	3/27/2024	0.0 - 0.61	24T134512
Sodium adsorption ratio (SAR)	none	12	3.21	MW4-24	MW4-24 SS1	3/27/2024	0.0 - 0.61	24T134512

Footnotes:

(1)	Ontario Ministry of the Environment, Conservation and Parks (MECP), "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act", April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition for Industrial/Commercial/Community property use and medium/fine-textured soils.
NV	No Value
-	Not Applicable
ND(0.050)	Not detected at the associated reporting limit, indicated in brackets.
µg/g	micrograms per gram
mS/cm	microSiemens per centimetre
s.u.	standard units
1.10	Concentration is above Table 3 Standards.

Table 8

Summary of Groundwater Analytical Results
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Sample Location:			**MW1-24**	**MW2-24**	**MW3-24**	**MW3-24**	**MW4-24**	**Trip Blank**
Sample ID:			**MW1-24**	**MW2-24**	**MW3-24**	**QAQC-1**	**MW4-24**	**Trip Blank**
Sample Date:			**4/5/2024**	**4/5/2024**	**4/5/2024**	**4/5/2024**	**4/5/2024**	**4/5/2024**
Field SDG:			**24T136609**	**24T136609**	**24T136609**	**24T136609 Duplicate**	**24T136609**	**24T136609**
Parameters	**Units**	**Tbl3~medFine**						
Volatile Organic Compounds								
1,1,1,2-Tetrachloroethane	ug/L	28	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
1,1,1-Trichloroethane	ug/L	6700	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)
1,1,2,2-Tetrachloroethane	ug/L	15	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
1,1,2-Trichloroethane	ug/L	30	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
1,1-Dichloroethane	ug/L	3100	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)
1,1-Dichloroethene	ug/L	17	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)
1,2-Dibromoethane (Ethylene dibromide)	ug/L	0.83	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
1,2-Dichlorobenzene	ug/L	9600	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
1,2-Dichloroethane	ug/L	12	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
1,2-Dichloropropane	ug/L	140	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
1,3-Dichlorobenzene	ug/L	9600	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
1,3-Dichloropropene	ug/L	45	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)
1,4-Dichlorobenzene	ug/L	67	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	1500000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	580000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Acetone	ug/L	130000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Benzene	ug/L	430	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Bromodichloromethane	ug/L	85000	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Bromoform	ug/L	770	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Bromomethane (Methyl bromide)	ug/L	56	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Carbon tetrachloride	ug/L	8.4	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Chlorobenzene	ug/L	630	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Chloroform (Trichloromethane)	ug/L	22	0.87	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
cis-1,2-Dichloroethene	ug/L	17	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Dibromochloromethane	ug/L	82000	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Dichlorodifluoromethane (CFC-12)	ug/L	4400	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
Ethylbenzene	ug/L	2300	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Hexane	ug/L	520	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
m&p-Xylenes	ug/L	-	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Methyl tert butyl ether (MTBE)	ug/L	1400	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Methylene chloride	ug/L	5500	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)
o-Xylene	ug/L	-	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Styrene	ug/L	9100	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)
Tetrachloroethene	ug/L	17	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Toluene	ug/L	18000	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
trans-1,2-Dichloroethene	ug/L	17	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Trichloroethene	ug/L	17	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
Trichlorofluoromethane (CFC-11)	ug/L	2500	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)	ND (0.40)
Vinyl chloride	ug/L	1.7	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)	ND (0.17)
Xylenes (total)	ug/L	4200	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)
PAHs								
Acenaphthene	ug/L	1700	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	--
Acenaphthylene	ug/L	1.8	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	--
Anthracene	ug/L	2.4	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	--
Benzo(a)anthracene	ug/L	4.7	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	--
Benzo(a)pyrene	ug/L	0.81	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	ND (0.01)	--
Benzo(b)fluoranthene	ug/L	0.75	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	--
Benzo(g,h,i)perylene	ug/L	0.2	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	--
Benzo(k)fluoranthene	ug/L	0.4	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	--

Table 8

Summary of Groundwater Analytical Results
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Sample Location:			**MW1-24**	**MW2-24**	**MW3-24**	**MW3-24**	**MW4-24**	**Trip Blank**
Sample ID:			**MW1-24**	**MW2-24**	**MW3-24**	**QAQC-1**	**MW4-24**	**Trip Blank**
Sample Date:			**4/5/2024**	**4/5/2024**	**4/5/2024**	**4/5/2024**	**4/5/2024**	**4/5/2024**
Field SDG:			**24T136609**	**24T136609**	**24T136609**	**24T136609 Duplicate**	**24T136609**	**24T136609**
Parameters	**Units**	**Tbl3~medFine**						
Chrysene	ug/L	1	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	--
Dibenz(a,h)anthracene	ug/L	0.52	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	--
Fluoranthene	ug/L	130	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	--
Fluorene	ug/L	400	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	--
Indeno(1,2,3-cd)pyrene	ug/L	0.2	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	--
Methylnaphthalene	ug/L	-	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	--
Naphthalene	ug/L	6400	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	--
Phenanthrene	ug/L	580	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	ND (0.10)	--
Pyrene	ug/L	68	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	--
Dissolved Metals								
Antimony (dissolved)	ug/L	20000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	--
Arsenic (dissolved)	ug/L	1900	1.7	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	--
Barium (dissolved)	ug/L	29000	56.5	65.0	240	192	125	--
Beryllium (dissolved)	ug/L	67	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	--
Boron (dissolved)	ug/L	45000	127	199	139	126	321	--
Cadmium (dissolved)	ug/L	2.7	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	--
Chromium (dissolved)	ug/L	810	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	--
Chromium VI (hexavalent) (dissolved)	ug/L	140	ND (2.000)	ND (2.000)	ND (2.000)	ND (2.000)	ND (2.000)	--
Cobalt (dissolved)	ug/L	66	11.6	4.18	6.07	5.69	6.24	--
Copper (dissolved)	ug/L	87	ND (1.0)	ND (1.0)	1.4	1.3	1.2	--
Lead (dissolved)	ug/L	25	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	--
Mercury (dissolved)	ug/L	2.8	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	--
Molybdenum (dissolved)	ug/L	9200	1.87	ND (0.50)	ND (0.50)	0.58	10.1	--
Nickel (dissolved)	ug/L	490	7.9	6.4	8.9	9.0	12.2	--
Selenium (dissolved)	ug/L	63	3.4	2.6	2.8	3.0	2.3	--
Silver (dissolved)	ug/L	1.5	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.20)	--
Sodium (dissolved)	ug/L	2300000	56200	60300	93400	92700	174000	--
Thallium (dissolved)	ug/L	510	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	ND (0.30)	--
Uranium (dissolved)	ug/L	420	1.59	1.08	1.01	0.96	1.27	--
Vanadium (dissolved)	ug/L	250	0.48	0.45	ND (0.40)	ND (0.40)	ND (0.40)	--
Zinc (dissolved)	ug/L	1100	ND (5.0)	25.1	ND (5.0)	ND (5.0)	9.8	--
Petroleum Products								
Petroleum hydrocarbons F1 (C6-C10)	ug/L	750	ND (25)	ND (25)	ND (25)	ND (25)	ND (25)	--
Petroleum hydrocarbons F1 minus BTEX	ug/L	750	ND (25)	ND (25)	ND (25)	ND (25)	ND (25)	--
Petroleum hydrocarbons F2 (C10-C16)	ug/L	150	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	--
Petroleum hydrocarbons F3 (C16-C34)	ug/L	500	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	--
Petroleum hydrocarbons F3 minus PAH	ug/L	500	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	--
Petroleum hydrocarbons F4 (C34-C50)	ug/L	500	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	--
Total Petroleum Hydrocarbons (C10-C16) F2 less naphthalene	ug/L	150	ND (100)	ND (100)	ND (100)	ND (100)	ND (100)	--
General Chemistry								
Chloride	ug/L	2300000	106000	70200	291000	292000	314000	--
Conductivity	uS/cm	-	1120	937	1960	2200	2320	--
Cyanide, weak acid dissociable	ug/L	66	ND (2)	ND (2)	ND (2)	ND (2)	ND (2)	--
pH	s.u.	-	7.74	7.85	7.60	7.69	7.72	--

Footnotes:

Table 8

Summary of Groundwater Analytical Results
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Sample Location:			MW1-24	MW2-24	MW3-24	MW3-24	MW4-24	Trip Blank
Sample ID:			MW1-24	MW2-24	MW3-24	QAQC-1	MW4-24	Trip Blank
Sample Date:			4/5/2024	4/5/2024	4/5/2024	4/5/2024	4/5/2024	4/5/2024
Field SDG:			24T136609	24T136609	24T136609	24T136609	24T136609	24T136609
						Duplicate		
Parameters		**Units**	**Tbl3~medFine**					
	(1)		Ontario Ministry of the Environment, Conservation and Parks (MECP), "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act", April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition for All Types of Property Use.						
	NV		No Value					
	-		Not Applicable					
	ND(0.050)		Not detected at the associated reporting limit, indicated in brackets.					
		µg/L	micrograms per litre					
		1.1	Concentration is above Table 3 Standards.					

Table 9

Summary of Maximum Groundwater Concentration Data
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Parameters	Units	Tbl3~medFine	MAX Concentration	Sample Location	Sample ID	Sample Date	Field SDG
Volatile Organic Compounds							
1,1,1,2-Tetrachloroethane	ug/L	28	ND(0.1)	-	-	-	-
1,1,1-Trichloroethane	ug/L	6700	ND(0.3)	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	15	ND(0.1)	-	-	-	-
1,1,2-Trichloroethane	ug/L	30	ND(0.2)	-	-	-	-
1,1-Dichloroethane	ug/L	3100	ND(0.3)	-	-	-	-
1,1-Dichloroethene	ug/L	17	ND(0.3)	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	ug/L	0.83	ND(0.1)	-	-	-	-
1,2-Dichlorobenzene	ug/L	9600	ND(0.1)	-	-	-	-
1,2-Dichloroethane	ug/L	12	ND(0.2)	-	-	-	-
1,2-Dichloropropane	ug/L	140	ND(0.2)	-	-	-	-
1,3-Dichlorobenzene	ug/L	9600	ND(0.1)	-	-	-	-
1,3-Dichloropropene	ug/L	45	ND(0.3)	-	-	-	-
1,4-Dichlorobenzene	ug/L	67	ND(0.1)	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	ug/L	1500000	ND(1)	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ug/L	580000	ND(1)	-	-	-	-
Acetone	ug/L	130000	ND(1)	-	-	-	-
Benzene	ug/L	430	ND(0.2)	-	-	-	-
Bromodichloromethane	ug/L	85000	ND(0.2)	-	-	-	-
Bromoform	ug/L	770	ND(0.1)	-	-	-	-
Bromomethane (Methyl bromide)	ug/L	56	ND(0.2)	-	-	-	-
Carbon tetrachloride	ug/L	8.4	ND(0.2)	-	-	-	-
Chlorobenzene	ug/L	630	ND(0.1)	-	-	-	-
Chloroform (Trichloromethane)	ug/L	22	0.87	MW1-24	MW1-24	4/5/2024	24T136609
cis-1,2-Dichloroethene	ug/L	17	ND(0.2)	-	-	-	-
Dibromochloromethane	ug/L	82000	ND(0.1)	-	-	-	-
Dichlorodifluoromethane (CFC-12)	ug/L	4400	ND(0.4)	-	-	-	-
Ethylbenzene	ug/L	2300	ND(0.1)	-	-	-	-
Hexane	ug/L	520	ND(0.2)	-	-	-	-
m&p-Xylenes	ug/L	-	ND(0.2)	-	-	-	-
Methyl tert butyl ether (MTBE)	ug/L	1400	ND(0.2)	-	-	-	-
Methylene chloride	ug/L	5500	ND(0.3)	-	-	-	-
o-Xylene	ug/L	-	ND(0.1)	-	-	-	-
Styrene	ug/L	9100	ND(0.1)	-	-	-	-
Tetrachloroethene	ug/L	17	ND(0.2)	-	-	-	-
Toluene	ug/L	18000	ND(0.2)	-	-	-	-
trans-1,2-Dichloroethene	ug/L	17	ND(0.2)	-	-	-	-
Trichloroethene	ug/L	17	ND(0.2)	-	-	-	-
Trichlorofluoromethane (CFC-11)	ug/L	2500	ND(0.4)	-	-	-	-
Vinyl chloride	ug/L	1.7	ND(0.17)	-	-	-	-
Xylenes (total)	ug/L	4200	ND(0.2)	-	-	-	-
PAHs							
Acenaphthene	ug/L	1700	ND(0.2)	-	-	-	-
Acenaphthylene	ug/L	1.8	ND(0.2)	-	-	-	-
Anthracene	ug/L	2.4	ND(0.1)	-	-	-	-
Benzo(a)anthracene	ug/L	4.7	ND(0.2)	-	-	-	-
Benzo(a)pyrene	ug/L	0.81	ND(0.01)	-	-	-	-
Benzo(b)fluoranthene	ug/L	0.75	ND(0.1)	-	-	-	-
Benzo(g,h,i)perylene	ug/L	0.2	ND(0.2)	-	-	-	-
Benzo(k)fluoranthene	ug/L	0.4	ND(0.1)	-	-	-	-
Chrysene	ug/L	1	ND(0.1)	-	-	-	-
Dibenz(a,h)anthracene	ug/L	0.52	ND(0.2)	-	-	-	-
Fluoranthene	ug/L	130	ND(0.2)	-	-	-	-
Fluorene	ug/L	400	ND(0.2)	-	-	-	-
Indeno(1,2,3-cd)pyrene	ug/L	0.2	ND(0.2)	-	-	-	-

Table 9

Summary of Maximum Groundwater Concentration Data
Phase Two Environmental Site Assessment
10533 Keele Street, Vaughan, Ontario
Keele Street (10533) Ltd.

Parameters	Units	Tbl3~medFine	MAX Concentration	Sample Location	Sample ID	Sample Date	Field SDG
Methylnaphthalene	ug/L	-	ND(0.2)	-	-	-	-
Naphthalene	ug/L	6400	ND(0.2)	-	-	-	-
Phenanthrene	ug/L	580	ND(0.1)	-	-	-	-
Pyrene	ug/L	68	ND(0.2)	-	-	-	-
Dissolved Metals							
Antimony (dissolved)	ug/L	20000	ND(1)	-	-	-	-
Arsenic (dissolved)	ug/L	1900	1.7	MW1-24	MW1-24	4/5/2024	24T136609
Barium (dissolved)	ug/L	29000	240	MW3-24	MW3-24	4/5/2024	24T136609
Beryllium (dissolved)	ug/L	67	ND(0.5)	-	-	-	-
Boron (dissolved)	ug/L	45000	321	MW4-24	MW4-24	4/5/2024	24T136609
Cadmium (dissolved)	ug/L	2.7	ND(0.2)	-	-	-	-
Chromium (dissolved)	ug/L	810	ND(2)	-	-	-	-
Chromium VI (hexavalent) (dissolved)	ug/L	140	ND(2)	-	-	-	-
Cobalt (dissolved)	ug/L	66	11.6	MW1-24	MW1-24	4/5/2024	24T136609
Copper (dissolved)	ug/L	87	1.4	MW3-24	MW3-24	4/5/2024	24T136609
Lead (dissolved)	ug/L	25	ND(0.5)	-	-	-	-
Mercury (dissolved)	ug/L	2.8	ND(0.02)	-	-	-	-
Molybdenum (dissolved)	ug/L	9200	10.1	MW4-24	MW4-24	4/5/2024	24T136609
Nickel (dissolved)	ug/L	490	12.2	MW4-24	MW4-24	4/5/2024	24T136609
Selenium (dissolved)	ug/L	63	3.4	MW1-24	MW1-24	4/5/2024	24T136609
Silver (dissolved)	ug/L	1.5	ND(0.2)	-	-	-	-
Sodium (dissolved)	ug/L	2300000	174000	MW4-24	MW4-24	4/5/2024	24T136609
Thallium (dissolved)	ug/L	510	ND(0.3)	-	-	-	-
Uranium (dissolved)	ug/L	420	1.59	MW1-24	MW1-24	4/5/2024	24T136609
Vanadium (dissolved)	ug/L	250	0.48	MW1-24	MW1-24	4/5/2024	24T136609
Zinc (dissolved)	ug/L	1100	25.1	MW2-24	MW2-24	4/5/2024	24T136609
Petroleum Products							
Petroleum hydrocarbons F1 (C6-C10)	ug/L	750	ND(25)	-	-	-	-
Petroleum hydrocarbons F1 minus BTEX	ug/L	750	ND(25)	-	-	-	-
Petroleum hydrocarbons F2 (C10-C16)	ug/L	150	ND(100)	-	-	-	-
Petroleum hydrocarbons F3 (C16-C34)	ug/L	500	ND(100)	-	-	-	-
Petroleum hydrocarbons F3 minus PAH	ug/L	500	ND(100)	-	-	-	-
Petroleum hydrocarbons F4 (C34-C50)	ug/L	500	ND(100)	-	-	-	-
Total Petroleum Hydrocarbons (C10-C16) F2 less naphthalene	ug/L	150	ND(100)	-	-	-	-
General Chemistry							
Chloride	ug/L	2300000	314000	MW4-24	MW4-24	4/5/2024	24T136609
Conductivity	uS/cm	-	2320	MW4-24	MW4-24	4/5/2024	24T136609
Cyanide, weak acid dissociable	ug/L	66	ND(2)	-	-	-	-
pH	s.u.	-	7.85	MW2-24	MW2-24	4/5/2024	24T136609

Footnotes:

(1) Ontario Ministry of the Environment, Conservation and Parks (MECP), "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act", April 15, 2011. Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition for All Types of Property Use.

NV No Value
\- Not Applicable
ND(0.050) Not detected at the associated reporting limit, indicated in brackets.
µg/L micrograms per litre
1.1 Concentration is above Table 3 Standards.

Appendices

Appendix A

Sampling and Analysis Plan

Table 1

Project 12636323
Sampling Analysis Plan
10533 Keele Street
Vaughan, ON
Keele Street (10533) Ltd.

Soil Analysis							Soil Sample Directions			
BH Name	APEC Numbers	MW	O.Reg. metals & inorgancs	PHC / BTEX	VOC	PAH	O.Reg. metals & inorgancs	PAH	PHC / BTEX	VOC
BH1-24	1, 2	Y	1	1	1	1	Collect all soil samples from below the granular sub-base from fill material or shallow native < 1.5 mBGS.	Collect all soil samples from below the granular sub-base from fill material or shallow native < 1.5 mBGS OR black staining	Collect all soil samples from below the granular sub-base from highest PID reading or at surface of GW table	Collect all soil samples from below the granular sub-base from highest PID reading or at surface of GW table
BH2-24	1, 2	Y	1	1	1	1				
BH3-24	1, 2	Y	1	1	1	1				
BH4-24	1, 2	Y	1	1	1	1				
	QA/QC Duplicates		1	1	1	1				
	Total Samples		**5**	**5**	**5**	**5**				

GW Analysis							GW Sample Directions			
BH Name	APEC Numbers	MW	O.Reg. metals & inorgancs	PHC / BTEX	VOC	PAH	O.Reg. metals & inorgancs	PAH	PHC / BTEX	VOC
BH1-24	1, 2	Y	1	1	1	1	Filter bottles for metals, Cr(VI) and Mercury. Ensure GW has low turbidity and VOC bottles have zero headspace.			
BH2-24	1, 2	Y	1	1	1	1				
BH3-24	1, 2	Y	1	1	1	1				
BH4-24	1, 2	Y	1	1	1	1				
	QA/QC Duplicates		1	1	1	1				
	Total Samples		**5**	**5**	**5**	**5**				

Notes:

(1) Bring bags of ice to the site in the morning. As GW samples are collected place the bottles directly into the iced cooler. Keep samples chilled (>10ºC) until delivered to the lab.

(2) Collect 1 TCLP sample set for ignitability, metals/inorganics, benzo(a)pyrene and VOCs from the soil cuttings drum.

(1) Bring bags of ice to the site in the morning. As soil samples are collected place the jars directly into the iced cooler. Keep samples chilled (>10ºC) until delivered to the lab.

Appendix B

Stratigraphic and Instrumentation Logs

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

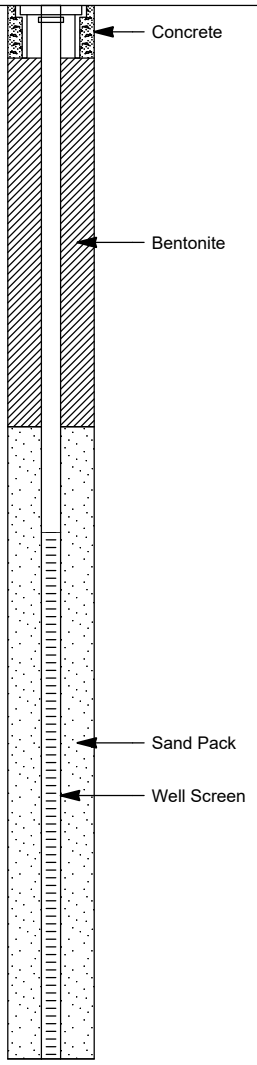
PROJECT NAME: Phase One Environmental Site Assessment
PROJECT NUMBER: 12636323
CLIENT: Keele Street (10533) Ltd.
LOCATION: 10533 Keele Street, Vaughan, Ontario

HOLE DESIGNATION: MW1-24
DATE COMPLETED: 28 March 2024
DRILLING METHOD: HSA
FIELD PERSONNEL: Reza Bay

NORTHING: 4858283.73
EASTING: 619327.25
GROUND SURFACE

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. BGS
		258.28
0	SILTY SAND (FILL), very loose, light grey, very moist	257.97
0.5	CLAYEY SILT (FILL), trace sand, soft, low plasticity, homogeneous, dark brown, very moist, rootlets	257.67
1.0	SILTY CLAY (FILL), very soft, low plasticity, homogeneous, brown, very moist, rootlets	
1.5	SILTY CLAY (FILL), some sand, trace gravel, firm, low plasticity, homogeneous, oxidized, brown, very moist	256.90
2.0		
2.5	CLAYEY SILT (FILL), trace sand, very soft, low plasticity, homogeneous, oxidized, brown, very moist	255.99
3.0	CLAYEY SILT (TILL), some sand, trace gravel, very stiff, low plasticity, homogeneous, oxidized, brown, moist to very moist	255.23
3.5		
4.0	CLAYEY SILT, trace sand, hard, low plasticity, homogeneous, oxidized, brown, moist	254.47
4.5	- some sand, rock fragment at 4.57m BGS	
5.0	SANDY SILT (TILL), hard, low plasticity, oxidized, brown, moist, rock fragments	253.09
5.5		
6.0	SANDY CLAYEY SILT (TILL), trace gravel, hard, low plasticity, homogeneous, oxidized, brown to grey, moist	252.18
6.5	END OF BOREHOLE @ 6.71m BGS	251.57
7.0		
7.5		

MONITOR INSTALLATION



WELL DETAILS
Screened interval:
255.23 to 252.18BGS
3.05 to 6.10m BGS
Length: 3.05m
Diameter: 51mm
Slot Size: #10
Material: PVC
Sand Pack:
255.84 to 252.18BGS
2.44 to 6.10m BGS
Material: #2 Silica

SAMPLE NUMBER	INTERVAL	REC (%)	'N' Value	PID (ppm)
1A		100	4	-
1B		100	4	0.3
2		100	0	0.8
3		100	6	0.5
4		100	2	0.0
5		100	16	0.1
6		15	50/3	0.0
7		75	>50	0.0
8		100	>50	0.0
9		100	>50	0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

File: \\GHDNET\GHD\CA\MISSISSAUGA\PROJECTS\662\12636323\TECH\GINT LOGS\12636323-ENV.GPJ Library File: GHD_ENVIRO_V04.GLB Report: OVERBURDEN LOG Date: 23/5/24

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

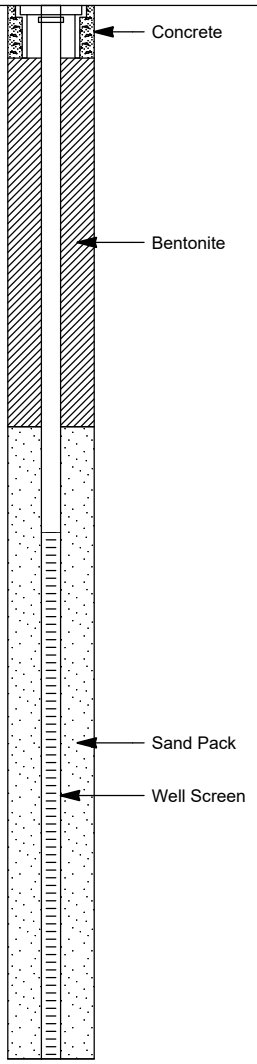
PROJECT NAME: Phase One Environmental Site Assessment
PROJECT NUMBER: 12636323
CLIENT: Keele Street (10533) Ltd.
LOCATION: 10533 Keele Street, Vaughan, Ontario

HOLE DESIGNATION: MW2-24
DATE COMPLETED: 28 March 2024
DRILLING METHOD: HSA
FIELD PERSONNEL: Reza Bay

NORTHING: 4858268.1
EASTING: 619325.9
GROUND SURFACE — 257.51

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. BGS
0.0	ASPHALT	257.38
	SILTY SAND (FILL), some gravel, compact, black, moist	
0.5		256.90
	CLAYEY SILT (FILL), some sand, trace gravel, stiff, low plasticity, dark brown, moist to very moist	
1.0		256.13
1.5	CLAYEY SILT, some gravel, some sand, stiff, low plasticity, homogeneous, oxidized, brown, very moist	
2.0	- very stiff at 2.13m BGS	
2.5		
3.0	- hard at 3.05m BGS	
3.5		
4.0		
4.5		
5.0		
5.5		
6.0	- brown to grey at 6.10m BGS	
6.5		250.80
	END OF BOREHOLE @ 6.71m BGS	
7.0		
7.5		

MONITOR INSTALLATION



WELL DETAILS
Screened interval:
254.46 to 251.41BGS
3.05 to 6.10m BGS
Length: 3.05m
Diameter: 51mm
Slot Size: #10
Material: PVC
Sand Pack:
255.07 to 251.41BGS
2.44 to 6.10m BGS
Material: #2 Silica

SAMPLE NUMBER	INTERVAL	REC (%)	'N' Value	PID (ppm)
1		50	13	0.4
2		75	9	0.3
3		100	11	0.6
4		100	16	0.1
5		100	33	0.0
6		75	50/2	0.0
7		100	33	0.0
8		100	44	0.0
9		100	47	0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

File: \\GHDNET\GHD\CA\MISSISSAUGA\PROJECTS\662\12636323\TECH\GINT LOGS\12636323-ENV.GPJ Library File: GHD_ENVIRO_V04.GLB Report: OVERBURDEN LOG Date: 23/5/24

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

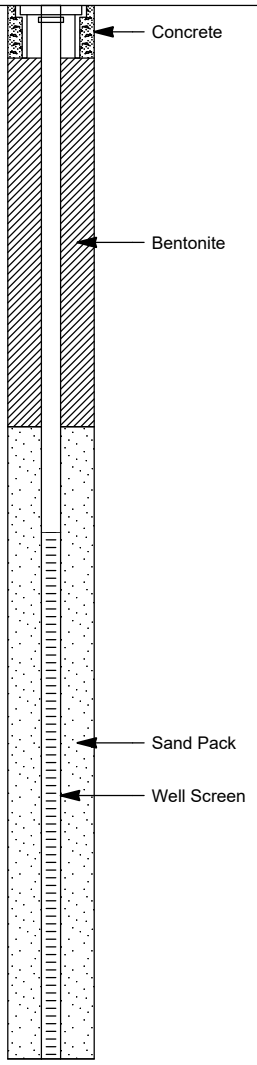
PROJECT NAME: Phase One Environmental Site Assessment
PROJECT NUMBER: 12636323
CLIENT: Keele Street (10533) Ltd.
LOCATION: 10533 Keele Street, Vaughan, Ontario

HOLE DESIGNATION: MW3-24
DATE COMPLETED: 27 March 2024
DRILLING METHOD: HSA
FIELD PERSONNEL: Reza Bay

NORTHING: 4858290.5
EASTING: 619351.47
GROUND SURFACE

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. BGS
		258.32
0.5	SILTY SAND (FILL), some gravel, dense, dark brown, moist	
		257.71
1.0	CLAYEY SILT (FILL), some sand, trace gravel, stiff, low plasticity, oxidized, black, moist, rootlets, brick fragments, metal, glass	
1.5		256.79
2.0	CLAY (FILL), some silt, some sand, trace gravel, soft, low plasticity, homogeneous, green to grey, very moist, rootlets, glass	
		256.19
2.5	CLAYEY SILT (TILL), some sand, trace gravel, stiff, low plasticity, homogeneous, brown, moist to very moist	
3.0		255.27
3.5	SANDY CLAY (TILL), silt, trace gravel, hard, low plasticity, homogeneous, brown, moist to very moist	
		254.51
4.0	CLAYEY SILT, some sand, hard, low plasticity, homogeneous, brown to grey, moist to very moist	
		253.90
4.5	CLAYEY SILT, some sand, rock fragments, hard, low plasticity, grey, moist	
5.0	- some sand, trace gravel at 5.33m BGS	
5.5		
6.0		252.22
6.5	SANDY SILT (TILL), some gravel, some clay, hard, homogeneous, grey, moist	
		251.61
7.0	END OF BOREHOLE @ 6.71m BGS	
7.5		

MONITOR INSTALLATION



WELL DETAILS
Screened interval:
255.27 to 252.22BGS
3.05 to 6.10m BGS
Length: 3.05m
Diameter: 51mm
Slot Size: #10
Material: PVC
Sand Pack:
255.88 to 252.22BGS
2.44 to 6.10m BGS
Material: #2 Silica

SAMPLE NUMBER	INTERVAL	REC (%)	'N' Value	PID (ppm)
1		95	38	3.0
2		100	10	0.5
3		75	3	0.0
4		100	11	0.0
5		100	30	0.0
6		100		0.0
7		70		0.3
8		10		0.0
9		100	>50	0.1

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

File: \\GHDNET\GHD\CA\MISSISSAUGA\PROJECTS\662\12636323\TECH\GINT LOGS\12636323-ENV.GPJ Library File: GHD_ENVIRO_V04.GLB Report: OVERBURDEN LOG Date: 23/5/24

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

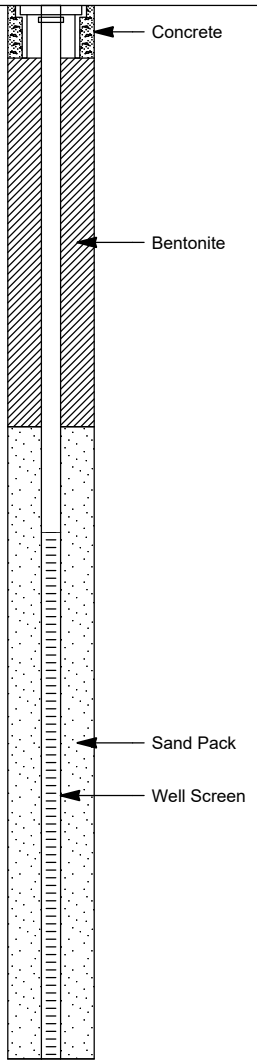
PROJECT NAME: Phase One Environmental Site Assessment
PROJECT NUMBER: 12636323
CLIENT: Keele Street (10533) Ltd.
LOCATION: 10533 Keele Street, Vaughan, Ontario

HOLE DESIGNATION: MW4-24
DATE COMPLETED: 27 March 2024
DRILLING METHOD: HSA
FIELD PERSONNEL: Reza Bay

NORTHING: 4858280.63
EASTING: 619353.27
GROUND SURFACE 257.96

DEPTH m BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. BGS
0.5	SILTY SAND (FILL), some gravel, very dense, black, moist, rootlets, brick, glass	
		257.35
1.0	SILTY SAND (FILL), some gravel, black, moist, brick, glass	
		256.59
1.5	CLAYEY SILT (TILL), some sand, trace gravel, stiff, low plasticity, black, moist, brick, glass	
2.0		255.82
2.5	CLAYEY SILT, some sand, trace gravel, stiff, low plasticity, homogeneous, brown, moist	
3.0		254.91
3.5	SANDY CLAYEY SILT (TILL), trace gravel, hard, low plasticity, homogeneous, oxidized, brown, moist	
4.0		254.15
4.5	SANDY CLAYEY SILT (TILL), some gravel, hard, low plasticity, homogeneous, oxidized, brown, moist	
		253.54
5.0	SANDY SILT (TILL), some clay, trace gravel, very dense, low plasticity, homogeneous, oxidized, brown, moist	
5.5		252.62
6.0	SANDY SILT (TILL), some clay, trace gravel, very dense, low plasticity, homogeneous, oxidized, brown, moist	
		251.86
6.5	CLAYEY SILT (TILL), some sand, some gravel, hard, low palsticity, homogeneous, oxidized, grey, moist	
		251.25
7.0	END OF BOREHOLE @ 6.71m BGS	
7.5		

MONITOR INSTALLATION



WELL DETAILS
Screened interval:
254.91 to 251.86BGS
3.05 to 6.10m BGS
Length: 3.05m
Diameter: 51mm
Slot Size: #10
Material: PVC
Sand Pack:
255.52 to 251.86BGS
2.44 to 6.10m BGS
Material: #2 Silica

SAMPLE NUMBER	INTERVAL	REC (%)	'N' Value	PID (ppm)
1		100	52	0.4
2		100	19	0.4
3		100	12	0.1
4		12	15	0.1
5		100	>50	0.3
6		100	>50	0.1
7		100	>50	0.6
8		100	30/4	0.4
9		100	48	0.5

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

File: \\GHDNET\GHD\CA\MISSISSAUGA\PROJECTS\662\12636323\TECH\GINT LOGS\12636323-ENV.GPJ Library File: GHD_ENVIRO_V04.GLB Report: OVERBURDEN LOG Date: 23/5/24

Appendix C

Soil Analytical Data Reports

AGAT Laboratories

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

CLIENT NAME: **GHD LIMITED**
455 Phillip St
WATERLOO, ON N2L 3X2
(519) 884-0510

ATTENTION TO: **Jennifer Balkwill**

PROJECT: **12636323-E1 Ph2 ESA (PO# 735-009803)**

AGAT WORK ORDER: **24T134512**

SOIL ANALYSIS REVIEWED BY: **Nivine Basily, Inorganic Team Lead**

TRACE ORGANICS REVIEWED BY: **Neli Popnikolova, Senior Chemist**

DATE REPORTED: **Apr 09, 2024**

PAGES (INCLUDING COVER): **35**

VERSION*: **2**

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

*Notes

VERSION 2:V2 issued 2024-04-09. Time marker corrected for WAD Cyanide. Supersedes version 1 issued 2024-04-08. (LB)

Disclaimer:

- *All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.*
- *All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.*
- *AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.*
- *This Certificate shall not be reproduced except in full, without the written approval of the laboratory.*
- *The test results reported herewith relate only to the samples as received by the laboratory.*
- *Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.*
- *All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.*
- *For environmental samples in the Province of Quebec: The analysis is performed on and results apply to samples as received. A temperature above 6°C upon receipt, as indicated in the Sample Reception Notification (SRN), could indicate the integrity of the samples has been compromised if the delay between sampling and submission to the laboratory could not be minimized.*

Member of: Association of Professional Engineers and Geoscientists of Alberta (APEGA)
Western Enviro-Agricultural Laboratory Association (WEALA)
Environmental Services Association of Alberta (ESAA)

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AGAT Laboratories

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

Certificate of Analysis

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

Ignitability in Soil

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

						SAMPLE DESCRIPTION:	TCLP-1
						SAMPLE TYPE:	Soil
						DATE SAMPLED:	2024-03-27 12:00
Parameter	**Unit**	**G / S**	**RDL**	**Date Prepared**	**Date Analyzed**		**5769625**
Ignitability				2024-04-08			N

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

5769625 N = Non-Flammable Solid
Non-ignitable-Wet soil sample with pebbles

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories

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

Certificate of Analysis

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

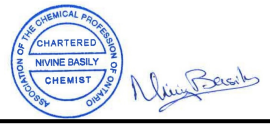
O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

						SAMPLE DESCRIPTION:	MW1-24 SS1B	MW2-24 SS1	MW3-24 SS1	MW4-24 SS1	QAQC-1
						SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil
						DATE SAMPLED:	2024-03-28 12:00	2024-03-28 12:00	2024-03-27 12:00	2024-03-27 12:00	2024-03-27 12:00
Parameter	Unit	G / S	RDL	Date Prepared	Date Analyzed		5769610	5769613	5769615	5769618	5769621
Antimony	µg/g	40	0.8	2024-04-03	2024-04-03		1.6	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	2024-04-03	2024-04-03		11	4	2	3	3
Barium	µg/g	670	2.0	2024-04-03	2024-04-03		187	77.5	73.0	76.0	78.6
Beryllium	µg/g	8	0.5	2024-04-03	2024-04-03		<0.5	<0.5	<0.5	<0.5	<0.5
Boron	µg/g	120	5	2024-04-03	2024-04-03		8	6	6	7	10
Boron (Hot Water Soluble)	µg/g	2	0.10	2024-04-03	2024-04-03		0.50	0.34	0.48	0.62	1.12
Cadmium	µg/g	1.9	0.5	2024-04-03	2024-04-03		<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	5	2024-04-03	2024-04-03		22	22	16	27	21
Cobalt	µg/g	80	0.8	2024-04-03	2024-04-03		7.8	6.9	4.5	5.4	5.2
Copper	µg/g	230	1.0	2024-04-03	2024-04-03		55.7	18.9	52.5	23.0	25.7
Lead	µg/g	120	1	2024-04-03	2024-04-03		**228**	55	25	31	27
Molybdenum	µg/g	40	0.5	2024-04-03	2024-04-03		0.8	0.6	2.6	1.2	2.4
Nickel	µg/g	270	1	2024-04-03	2024-04-03		17	16	16	16	18
Selenium	µg/g	5.5	0.8	2024-04-03	2024-04-03		<0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g	40	0.5	2024-04-03	2024-04-03		<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	3.3	0.5	2024-04-03	2024-04-03		<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	33	0.50	2024-04-03	2024-04-03		<0.50	0.60	<0.50	0.51	<0.50
Vanadium	µg/g	86	2.0	2024-04-03	2024-04-03		31.4	33.9	24.5	31.6	22.5
Zinc	µg/g	340	5	2024-04-03	2024-04-03		273	137	124	180	105
Chromium, Hexavalent	µg/g	8	0.2	2024-04-08	2024-04-08		<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide, WAD	µg/g	0.051	0.040	2024-04-08	2024-04-08		<0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	3.9	0.10	2024-04-03	2024-04-03		0.29	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	1.4	0.005	2024-04-03	2024-04-03		0.336	0.306	0.398	0.488	0.384
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	12	N/A	2024-04-04	2024-04-04		1.20	0.565	1.60	3.21	2.45
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	2024-04-05	2024-04-05		7.28	7.24	7.95	**10.2**	7.39

Certified By:



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Certificate of Analysis

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

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

DATE RECEIVED: 2024-03-28 **DATE REPORTED: 2024-04-09**

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5769610-5769621 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



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Certificate of Analysis

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

O. Reg. 558 - Metals & Inorganics

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

						SAMPLE DESCRIPTION:	TCLP-1
						SAMPLE TYPE:	Soil
						DATE SAMPLED:	2024-03-27 12:00
Parameter	Unit	G / S	RDL	Date Prepared	Date Analyzed		5769625
Arsenic Leachate	mg/L	2.5	0.010	2024-04-03	2024-04-03		<0.010
Barium Leachate	mg/L	100	0.020	2024-04-03	2024-04-03		0.439
Boron Leachate	mg/L	500	0.050	2024-04-03	2024-04-03		0.062
Cadmium Leachate	mg/L	0.5	0.010	2024-04-03	2024-04-03		<0.010
Chromium Leachate	mg/L	5	0.050	2024-04-03	2024-04-03		<0.050
Lead Leachate	mg/L	5	0.010	2024-04-03	2024-04-03		<0.010
Mercury Leachate	mg/L	0.1	0.01	2024-04-03	2024-04-03		<0.01
Selenium Leachate	mg/L	1	0.020	2024-04-03	2024-04-03		<0.020
Silver Leachate	mg/L	5	0.010	2024-04-03	2024-04-03		<0.010
Uranium Leachate	mg/L	10	0.050	2024-04-03	2024-04-03		<0.050
Fluoride Leachate	mg/L	150	0.10	2024-04-05	2024-04-05		0.23
Cyanide Leachate	mg/L	20	0.05	2024-04-03	2024-04-03		<0.05
(Nitrate + Nitrite) as N Leachate	mg/L	1000	0.70	2024-04-03	2024-04-03		<0.70

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to O. Reg. 558 - Schedule IV Leachate Quality Criteria
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



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AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

O. Reg. 558 - TCLP Preparation

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

						SAMPLE DESCRIPTION:	TCLP-1
						SAMPLE TYPE:	Soil
						DATE SAMPLED:	2024-03-27 12:00
Parameter	**Unit**	**G / S**	**RDL**	**Date Prepared**	**Date Analyzed**		**5769625**
Analysis Start Date							2024/04/02
pH (Initial)	pH Units		N/A				9.24
pH (Final)	pH Units		N/A				5.61
Extraction Fluid							2

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to O. Reg. 558 - Schedule IV Leachate Quality Criteria
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



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AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

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

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

						SAMPLE DESCRIPTION:	MW2-24 SS1	MW3-24 SS2	MW4-24 SS2	QAQC-2	MW1-24 SS3
						SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil
						DATE SAMPLED:	2024-03-28 12:00	2024-03-27 12:00	2024-03-27 12:00	2024-03-27 12:00	2024-03-28 12:00
Parameter	**Unit**	**G / S**	**RDL**	**Date Prepared**	**Date Analyzed**		**5769613**	**5769616**	**5769619**	**5769622**	**5769626**
Naphthalene	µg/g	9.6	0.05	2024-04-04	2024-04-04		<0.05	<0.05	0.09	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	2024-04-04	2024-04-04		<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	96	0.05	2024-04-04	2024-04-04		<0.05	<0.05	0.11	<0.05	<0.05
Fluorene	µg/g	62	0.05	2024-04-04	2024-04-04		<0.05	<0.05	0.17	<0.05	<0.05
Phenanthrene	µg/g	12	0.05	2024-04-04	2024-04-04		0.30	0.07	1.59	0.07	<0.05
Anthracene	µg/g	0.67	0.05	2024-04-04	2024-04-04		0.07	<0.05	0.32	<0.05	<0.05
Fluoranthene	µg/g	9.6	0.05	2024-04-04	2024-04-04		0.50	0.22	2.12	0.20	<0.05
Pyrene	µg/g	96	0.05	2024-04-04	2024-04-04		0.39	0.19	1.59	0.17	<0.05
Benz(a)anthracene	µg/g	0.96	0.05	2024-04-04	2024-04-04		0.16	0.10	0.84	0.09	<0.05
Chrysene	µg/g	9.6	0.05	2024-04-04	2024-04-04		0.18	0.10	0.73	0.09	<0.05
Benzo(b)fluoranthene	µg/g	0.96	0.05	2024-04-04	2024-04-04		0.13	0.12	0.72	0.11	<0.05
Benzo(k)fluoranthene	µg/g	0.96	0.05	2024-04-04	2024-04-04		0.09	0.06	0.47	0.08	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	2024-04-04	2024-04-04		0.09	0.08	**0.46**	0.07	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.76	0.05	2024-04-04	2024-04-04		<0.05	0.05	0.17	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	2024-04-04	2024-04-04		<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	9.6	0.05	2024-04-04	2024-04-04		0.06	<0.05	0.18	<0.05	<0.05
2-and 1-methyl Naphthalene	µg/g	76	0.05	2024-04-04	2024-04-04		<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	2024-04-04	2024-04-04		12.4	17.2	12.9	17.2	17.5
Surrogate	**Unit**	**Acceptable Limits**									
Naphthalene-d8	%	50-140		2024-04-04	2024-04-04		70	75	80	75	80
Acridine-d9	%	50-140		2024-04-04	2024-04-04		80	80	70	75	70
Terphenyl-d14	%	50-140		2024-04-04	2024-04-04		95	90	100	75	90

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5769613-5769626 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopnikolof

Results relate only to the items tested. Results apply to samples as received.

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Certificate of Analysis

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

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

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

						SAMPLE DESCRIPTION:	MW1-24 SS1B	MW2-24 SS2	QAQC-3
						SAMPLE TYPE:	Soil	Soil	Soil
						DATE SAMPLED:	2024-03-28 12:00	2024-03-28 12:00	2024-03-27 12:00
Parameter	**Unit**	**G / S**	**RDL**	**Date Prepared**	**Date Analyzed**		**5769610**	**5769614**	**5769623**
Benzene	µg/g	0.32	0.02	2024-04-03	2024-04-03		<0.02	<0.02	<0.02
Toluene	µg/g	68	0.05	2024-04-03	2024-04-03		<0.05	<0.05	<0.05
Ethylbenzene	µg/g	9.5	0.05	2024-04-03	2024-04-03		<0.05	<0.05	<0.05
m & p-Xylene	µg/g		0.05	2024-04-03	2024-04-03		<0.05	<0.05	<0.05
o-Xylene	µg/g		0.05	2024-04-03	2024-04-03		<0.05	<0.05	<0.05
Xylenes (Total)	µg/g	26	0.05	2024-04-03	2024-04-03		<0.05	<0.05	<0.05
F1 (C6 to C10)	µg/g	55	5	2024-04-03	2024-04-03		<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	55	5	2024-04-03	2024-04-03		<5	<5	<5
F2 (C10 to C16)	µg/g	230	10	2024-04-05	2024-04-05		<10	<10	<10
F3 (C16 to C34)	µg/g	1700	50	2024-04-05	2024-04-05		<50	195	<50
F4 (C34 to C50)	µg/g	3300	50	2024-04-05	2024-04-05		<50	151	<50
Gravimetric Heavy Hydrocarbons	µg/g	3300	50				NA	NA	NA
Moisture Content	%		0.1	2024-04-04	2024-04-04		17.9	14.3	14.1
Surrogate	**Unit**	**Acceptable Limits**							
Toluene-d8	% Recovery	60-140		2024-04-03	2024-04-03		71	86	84
Terphenyl	%	60-140		2024-04-05	2024-04-05		81	88	90

Certified By: N Popowich

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Certificate of Analysis

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

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

DATE RECEIVED: 2024-03-28 **DATE REPORTED: 2024-04-09**

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5769610-5769623 Results are based on sample dry weight.
The C6-C10 fraction is calculated using Toluene response factor.
Xylenes is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified with the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.
Quality Control Data is available upon request.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: 

Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

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

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

						SAMPLE DESCRIPTION:	MW3-24 SS3	MW4-24 SS3
						SAMPLE TYPE:	Soil	Soil
						DATE SAMPLED:	2024-03-27 12:00	2024-03-27 12:00
Parameter	**Unit**	**G / S**	**RDL**	**Date Prepared**	**Date Analyzed**		**5769617**	**5769620**
F1 (C6 to C10)	µg/g	55	5	2024-04-02	2024-04-02		<5	<5
F1 (C6 to C10) minus BTEX	µg/g	55	5	2024-04-02	2024-04-02		<5	<5
F2 (C10 to C16)	µg/g	230	10	2024-04-05	2024-04-05		<10	<10
F3 (C16 to C34)	µg/g	1700	50	2024-04-05	2024-04-05		<50	<50
F4 (C34 to C50)	µg/g	3300	50	2024-04-05	2024-04-05		<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	3300	50				NA	NA
Moisture Content	%		0.1	2024-04-04	2024-04-04		13.6	10.7
Surrogate	**Unit**	**Acceptable Limits**						
Toluene-d8	%	50-140		2024-04-02	2024-04-02		100	106
Terphenyl	%	60-140		2024-04-05	2024-04-05		92	91

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5769617-5769620 Results are based on sample dry weight.
The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified without the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowich

Results relate only to the items tested. Results apply to samples as received.

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AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

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

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

						SAMPLE DESCRIPTION:	Trip Blank
						SAMPLE TYPE:	MeOH
						DATE SAMPLED:	2024-03-27 12:00
Parameter	**Unit**	**G / S**	**RDL**	**Date Prepared**	**Date Analyzed**		**5769624**
Benzene	µg/g	0.32	0.02	2024-04-08	2024-04-08		<0.02
Toluene	µg/g	68	0.05	2024-04-08	2024-04-08		<0.05
Ethylbenzene	µg/g	9.5	0.05	2024-04-08	2024-04-08		<0.05
m & p-Xylene	µg/g		0.05	2024-04-08	2024-04-08		<0.05
o-Xylene	µg/g		0.05	2024-04-08	2024-04-08		<0.05
Xylenes (Total)	µg/g	26	0.05	2024-04-08	2024-04-08		<0.05
F1 (C6 to C10)	µg/g	55	5	2024-04-08	2024-04-08		<5
F1 (C6 to C10) minus BTEX	µg/g	55	5	2024-04-08	2024-04-08		<5
Surrogate	**Unit**	**Acceptable Limits**					
Toluene-d8	% Recovery	60-140		2024-04-08	2024-04-08		96

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5769624 A small amount of the methanol extract was diluted in water and the purge & trap GC/MS/FID analysis was performed.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

Results relate only to the items tested. Results apply to samples as received.

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AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

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

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

						SAMPLE DESCRIPTION:	Trip Blank
						SAMPLE TYPE:	MeOH
						DATE SAMPLED:	2024-03-27 12:00
Parameter	Unit	G / S	RDL	Date Prepared	Date Analyzed		5769624
Dichlorodifluoromethane	µg/g	16	0.05	2024-04-08	2024-04-08		<0.05
Vinyl Chloride	ug/g	0.032	0.02	2024-04-08	2024-04-08		<0.02
Bromomethane	ug/g	0.05	0.05	2024-04-08	2024-04-08		<0.05
Trichlorofluoromethane	ug/g	4	0.05	2024-04-08	2024-04-08		<0.05
Acetone	ug/g	16	0.50	2024-04-08	2024-04-08		<0.50
1,1-Dichloroethylene	ug/g	0.064	0.05	2024-04-08	2024-04-08		<0.05
Methylene Chloride	ug/g	1.6	0.05	2024-04-08	2024-04-08		<0.05
Trans- 1,2-Dichloroethylene	ug/g	1.3	0.05	2024-04-08	2024-04-08		<0.05
Methyl tert-butyl Ether	ug/g	11	0.05	2024-04-08	2024-04-08		<0.05
1,1-Dichloroethane	ug/g	17	0.02	2024-04-08	2024-04-08		<0.02
Methyl Ethyl Ketone	ug/g	70	0.50	2024-04-08	2024-04-08		<0.50
Cis- 1,2-Dichloroethylene	ug/g	55	0.02	2024-04-08	2024-04-08		<0.02
Chloroform	ug/g	0.47	0.04	2024-04-08	2024-04-08		<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	2024-04-08	2024-04-08		<0.03
1,1,1-Trichloroethane	ug/g	6.1	0.05	2024-04-08	2024-04-08		<0.05
Carbon Tetrachloride	ug/g	0.21	0.05	2024-04-08	2024-04-08		<0.05
Benzene	ug/g	0.32	0.02	2024-04-08	2024-04-08		<0.02
1,2-Dichloropropane	ug/g	0.16	0.03	2024-04-08	2024-04-08		<0.03
Trichloroethylene	ug/g	0.91	0.03	2024-04-08	2024-04-08		<0.03
Bromodichloromethane	ug/g	18	0.05	2024-04-08	2024-04-08		<0.05
Methyl Isobutyl Ketone	ug/g	31	0.50	2024-04-08	2024-04-08		<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	2024-04-08	2024-04-08		<0.04
Toluene	ug/g	68	0.05	2024-04-08	2024-04-08		<0.05
Dibromochloromethane	ug/g	13	0.05	2024-04-08	2024-04-08		<0.05
Ethylene Dibromide	ug/g	0.05	0.04	2024-04-08	2024-04-08		<0.04
Tetrachloroethylene	ug/g	4.5	0.05	2024-04-08	2024-04-08		<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.087	0.04	2024-04-08	2024-04-08		<0.04
Chlorobenzene	ug/g	2.4	0.05	2024-04-08	2024-04-08		<0.05
Ethylbenzene	ug/g	9.5	0.05	2024-04-08	2024-04-08		<0.05

Certified By: NPopowkolof

Results relate only to the items tested. Results apply to samples as received.

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Certificate of Analysis

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

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

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

						SAMPLE DESCRIPTION:	Trip Blank
						SAMPLE TYPE:	MeOH
						DATE SAMPLED:	2024-03-27 12:00
Parameter	**Unit**	**G / S**	**RDL**	**Date Prepared**	**Date Analyzed**		**5769624**
m & p-Xylene	ug/g		0.05	2024-04-08	2024-04-08		<0.05
Bromoform	ug/g	0.61	0.05	2024-04-08	2024-04-08		<0.05
Styrene	ug/g	34	0.05	2024-04-08	2024-04-08		<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	2024-04-08	2024-04-08		<0.05
o-Xylene	ug/g		0.05	2024-04-08	2024-04-08		<0.05
1,3-Dichlorobenzene	ug/g	9.6	0.05	2024-04-08	2024-04-08		<0.05
1,4-Dichlorobenzene	ug/g	0.2	0.05	2024-04-08	2024-04-08		<0.05
1,2-Dichlorobenzene	ug/g	6.8	0.05	2024-04-08	2024-04-08		<0.05
Xylenes (Total)	ug/g	26	0.05	2024-04-08	2024-04-08		<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g	0.18	0.04	2024-04-08	2024-04-08		<0.04
n-Hexane	µg/g	46	0.05	2024-04-08	2024-04-08		<0.05
Surrogate	**Unit**	**Acceptable Limits**					
Toluene-d8	% Recovery	50-140		2024-04-08	2024-04-08		96
4-Bromofluorobenzene	% Recovery	50-140		2024-04-08	2024-04-08		100

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5769624 A small amount of methanol extract was diluted in water and analyzed by purge & trap GC/MS.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

Results relate only to the items tested. Results apply to samples as received.

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Certificate of Analysis

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

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

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

					SAMPLE DESCRIPTION:	MW1-24 SS2	MW2-24 SS3
					SAMPLE TYPE:	Soil	Soil
					DATE SAMPLED:	2024-03-28 12:00	2024-03-28 12:00
Parameter	Unit	G / S	RDL	Date Prepared	Date Analyzed	5769611	5769612
Dichlorodifluoromethane	µg/g	16	0.05	2024-04-08	2024-04-08	<0.05	<0.05
Vinyl Chloride	ug/g	0.032	0.02	2024-04-08	2024-04-08	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	2024-04-08	2024-04-08	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	2024-04-08	2024-04-08	<0.05	<0.05
Acetone	ug/g	16	0.50	2024-04-08	2024-04-08	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.064	0.05	2024-04-08	2024-04-08	<0.05	<0.05
Methylene Chloride	ug/g	1.6	0.05	2024-04-08	2024-04-08	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	1.3	0.05	2024-04-08	2024-04-08	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	11	0.05	2024-04-08	2024-04-08	<0.05	<0.05
1,1-Dichloroethane	ug/g	17	0.02	2024-04-08	2024-04-08	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	70	0.50	2024-04-08	2024-04-08	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	55	0.02	2024-04-08	2024-04-08	<0.02	<0.02
Chloroform	ug/g	0.47	0.04	2024-04-08	2024-04-08	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	2024-04-08	2024-04-08	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	6.1	0.05	2024-04-08	2024-04-08	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.21	0.05	2024-04-08	2024-04-08	<0.05	<0.05
Benzene	ug/g	0.32	0.02	2024-04-08	2024-04-08	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.16	0.03	2024-04-08	2024-04-08	<0.03	<0.03
Trichloroethylene	ug/g	0.91	0.03	2024-04-08	2024-04-08	<0.03	<0.03
Bromodichloromethane	ug/g	18	0.05	2024-04-08	2024-04-08	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	31	0.50	2024-04-08	2024-04-08	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	2024-04-08	2024-04-08	<0.04	<0.04
Toluene	ug/g	68	0.05	2024-04-08	2024-04-08	<0.05	<0.05
Dibromochloromethane	ug/g	13	0.05	2024-04-08	2024-04-08	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	2024-04-08	2024-04-08	<0.04	<0.04
Tetrachloroethylene	ug/g	4.5	0.05	2024-04-08	2024-04-08	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.087	0.04	2024-04-08	2024-04-08	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	2024-04-08	2024-04-08	<0.05	<0.05
Ethylbenzene	ug/g	9.5	0.05	2024-04-08	2024-04-08	<0.05	<0.05

Certified By: NPopowkolof

Results relate only to the items tested. Results apply to samples as received.

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Certificate of Analysis

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

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

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

					SAMPLE DESCRIPTION:	MW1-24 SS2	MW2-24 SS3
					SAMPLE TYPE:	Soil	Soil
					DATE SAMPLED:	2024-03-28 12:00	2024-03-28 12:00
Parameter	**Unit**	**G / S**	**RDL**	**Date Prepared**	**Date Analyzed**	**5769611**	**5769612**
m & p-Xylene	ug/g		0.05	2024-04-08	2024-04-08	<0.05	<0.05
Bromoform	ug/g	0.61	0.05	2024-04-08	2024-04-08	<0.05	<0.05
Styrene	ug/g	34	0.05	2024-04-08	2024-04-08	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	2024-04-08	2024-04-08	<0.05	<0.05
o-Xylene	ug/g		0.05	2024-04-08	2024-04-08	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	9.6	0.05	2024-04-08	2024-04-08	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.2	0.05	2024-04-08	2024-04-08	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	6.8	0.05	2024-04-08	2024-04-08	<0.05	<0.05
Xylenes (Total)	ug/g	26	0.05	2024-04-08	2024-04-08	<0.05	<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g	0.18	0.04	2024-04-08	2024-04-08	<0.04	<0.04
n-Hexane	µg/g	46	0.05	2024-04-08	2024-04-08	<0.05	<0.05
Moisture Content	%		0.1	2024-04-04	2024-04-04	16.2	10.6
Surrogate	**Unit**	**Acceptable Limits**					
Toluene-d8	% Recovery	50-140		2024-04-08	2024-04-08	98	98
4-Bromofluorobenzene	% Recovery	50-140		2024-04-08	2024-04-08	102	102

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5769611-5769612 The sample was analyzed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popowich

Results relate only to the items tested. Results apply to samples as received.

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AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

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

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

					SAMPLE DESCRIPTION:	MW3-24 SS3	MW4-24 SS3
					SAMPLE TYPE:	Soil	Soil
					DATE SAMPLED:	2024-03-27 12:00	2024-03-27 12:00
Parameter	Unit	G / S	RDL	Date Prepared	Date Analyzed	5769617	5769620
Dichlorodifluoromethane	µg/g	16	0.05	2024-04-02	2024-04-02	<0.05	<0.05
Vinyl Chloride	ug/g	0.032	0.02	2024-04-02	2024-04-02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	2024-04-02	2024-04-02	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	2024-04-02	2024-04-02	<0.05	<0.05
Acetone	ug/g	16	0.50	2024-04-02	2024-04-02	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.064	0.05	2024-04-02	2024-04-02	<0.05	<0.05
Methylene Chloride	ug/g	1.6	0.05	2024-04-02	2024-04-02	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	1.3	0.05	2024-04-02	2024-04-02	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	11	0.05	2024-04-02	2024-04-02	<0.05	<0.05
1,1-Dichloroethane	ug/g	17	0.02	2024-04-02	2024-04-02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	70	0.50	2024-04-02	2024-04-02	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	55	0.02	2024-04-02	2024-04-02	<0.02	<0.02
Chloroform	ug/g	0.47	0.04	2024-04-02	2024-04-02	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	2024-04-02	2024-04-02	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	6.1	0.05	2024-04-02	2024-04-02	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.21	0.05	2024-04-02	2024-04-02	<0.05	<0.05
Benzene	ug/g	0.32	0.02	2024-04-02	2024-04-02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.16	0.03	2024-04-02	2024-04-02	<0.03	<0.03
Trichloroethylene	ug/g	0.91	0.03	2024-04-02	2024-04-02	<0.03	<0.03
Bromodichloromethane	ug/g	18	0.05	2024-04-02	2024-04-02	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	31	0.50	2024-04-02	2024-04-02	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	2024-04-02	2024-04-02	<0.04	<0.04
Toluene	ug/g	68	0.05	2024-04-02	2024-04-02	<0.05	<0.05
Dibromochloromethane	ug/g	13	0.05	2024-04-02	2024-04-02	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	2024-04-02	2024-04-02	<0.04	<0.04
Tetrachloroethylene	ug/g	4.5	0.05	2024-04-02	2024-04-02	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.087	0.04	2024-04-02	2024-04-02	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	2024-04-02	2024-04-02	<0.05	<0.05
Ethylbenzene	ug/g	9.5	0.05	2024-04-02	2024-04-02	<0.05	<0.05

Certified By: NPopowkolof

Results relate only to the items tested. Results apply to samples as received.

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Certificate of Analysis

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

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

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

						SAMPLE DESCRIPTION:	MW3-24 SS3	MW4-24 SS3
						SAMPLE TYPE:	Soil	Soil
						DATE SAMPLED:	2024-03-27 12:00	2024-03-27 12:00
Parameter	**Unit**	**G / S**	**RDL**	**Date Prepared**	**Date Analyzed**		**5769617**	**5769620**
m & p-Xylene	ug/g		0.05	2024-04-02	2024-04-02		<0.05	<0.05
Bromoform	ug/g	0.61	0.05	2024-04-02	2024-04-02		<0.05	<0.05
Styrene	ug/g	34	0.05	2024-04-02	2024-04-02		<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	2024-04-02	2024-04-02		<0.05	<0.05
o-Xylene	ug/g		0.05	2024-04-02	2024-04-02		<0.05	<0.05
1,3-Dichlorobenzene	ug/g	9.6	0.05	2024-04-02	2024-04-02		<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.2	0.05	2024-04-02	2024-04-02		<0.05	<0.05
1,2-Dichlorobenzene	ug/g	6.8	0.05	2024-04-02	2024-04-02		<0.05	<0.05
Xylenes (Total)	ug/g	26	0.05	2024-04-02	2024-04-02		<0.05	<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g	0.18	0.05	2024-04-02	2024-04-02		<0.05	<0.05
n-Hexane	µg/g	46	0.05	2024-04-02	2024-04-02		<0.05	<0.05
Moisture Content	%		0.1	2024-04-04	2024-04-04		13.6	10.7
Surrogate	**Unit**	**Acceptable Limits**						
Toluene-d8	% Recovery	50-140		2024-04-02	2024-04-02		100	106
4-Bromofluorobenzene	% Recovery	50-140		2024-04-02	2024-04-02		83	82

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Soil - Industrial/Commercial/Community Property Use - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5769617-5769620 The sample was analyzed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popnikolof

Results relate only to the items tested. Results apply to samples as received.

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Certificate of Analysis

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

O. Reg. 558 - Benzo(a) pyrene

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

					SAMPLE DESCRIPTION:	**TCLP-1**
					SAMPLE TYPE:	**Soil**
					DATE SAMPLED:	**2024-03-27 12:00**
Parameter	**Unit**	**G / S**	**RDL**	**Date Prepared**	**Date Analyzed**	**5769625**
Benzo(a)pyrene Leachate	mg/L	0.001	0.001	2024-04-05	2024-04-05	<0.001
Surrogate	**Unit**	**Acceptable Limits**				
Acridine-d9	%	50-140		2024-04-05	2024-04-05	71
Naphthalene-d8	%	50-140		2024-04-05	2024-04-05	76
Terphenyl-d14	%	50-140		2024-04-05	2024-04-05	94

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to O. Reg. 558 - Schedule IV Leachate Quality Criteria
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5769625 The sample was leached according to Regulation 558 protocol. Analysis was performed on the leachate.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

O. Reg. 558 - VOCs

DATE RECEIVED: 2024-03-28

DATE REPORTED: 2024-04-09

						SAMPLE DESCRIPTION:	TCLP-1
						SAMPLE TYPE:	Soil
						DATE SAMPLED:	2024-03-27 12:00
Parameter	**Unit**	**G / S**	**RDL**	**Date Prepared**	**Date Analyzed**		**5769625**
Vinyl Chloride Leachate	mg/L	0.2	0.030	2024-04-06	2024-04-06		<0.030
1,1 Dichloroethene Leachate	mg/L	1.4	0.020	2024-04-06	2024-04-06		<0.020
Dichloromethane Leachate	mg/L	5.0	0.030	2024-04-06	2024-04-06		<0.030
Methyl Ethyl Ketone Leachate	mg/L	200	0.090	2024-04-06	2024-04-06		<0.090
Chloroform Leachate	mg/L	10.0	0.020	2024-04-06	2024-04-06		<0.020
1,2-Dichloroethane Leachate	mg/L	0.5	0.020	2024-04-06	2024-04-06		<0.020
Carbon Tetrachloride Leachate	mg/L	0.5	0.020	2024-04-06	2024-04-06		<0.020
Benzene Leachate	mg/L	0.5	0.020	2024-04-06	2024-04-06		<0.020
Trichloroethene Leachate	mg/L	5.0	0.020	2024-04-06	2024-04-06		<0.020
Tetrachloroethene Leachate	mg/L	3.0	0.050	2024-04-06	2024-04-06		<0.050
Chlorobenzene Leachate	mg/L	8.0	0.010	2024-04-06	2024-04-06		<0.010
1,2-Dichlorobenzene Leachate	mg/L	20.0	0.010	2024-04-06	2024-04-06		<0.010
1,4-Dichlorobenzene Leachate	mg/L	0.5	0.010	2024-04-06	2024-04-06		<0.010
Surrogate	**Unit**	**Acceptable Limits**					
Toluene-d8	% Recovery	50-140		2024-04-06	2024-04-06		106
4-Bromofluorobenzene	% Recovery	50-140		2024-04-06	2024-04-06		104

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to O. Reg. 558 - Schedule IV Leachate Quality Criteria
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5769625 Sample was prepared using Regulation 558 protocol and a zero headspace extractor.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

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Exceedance Summary

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
5769610	MW1-24 SS1B	ON T3 S ICC CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Lead	µg/g	120	228
5769618	MW4-24 SS1	ON T3 S ICC CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	10.2
5769619	MW4-24 SS2	ON T3 S ICC CT	O. Reg. 153(511) - PAHs (Soil)	Benzo(a)pyrene	µg/g	0.3	0.46

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Quality Assurance

CLIENT NAME: GHD LIMITED

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

Soil Analysis

RPT Date: Apr 09, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	5772085		<0.8	<0.8	NA	< 0.8	120%	70%	130%	105%	80%	120%	89%	70%	130%
Arsenic	5772085		3	3	NA	< 1	109%	70%	130%	103%	80%	120%	107%	70%	130%
Barium	5772085		73.3	73.8	0.6%	< 2.0	98%	70%	130%	100%	80%	120%	101%	70%	130%
Beryllium	5772085		<0.5	<0.5	NA	< 0.5	75%	70%	130%	106%	80%	120%	104%	70%	130%
Boron	5772085		10	10	NA	< 5	90%	70%	130%	97%	80%	120%	86%	70%	130%
Boron (Hot Water Soluble)	5771076		<0.10	<0.10	NA	< 0.10	86%	60%	140%	106%	70%	130%	96%	60%	140%
Cadmium	5772085		<0.5	<0.5	NA	< 0.5	100%	70%	130%	102%	80%	120%	102%	70%	130%
Chromium	5772085		14	14	NA	< 5	98%	70%	130%	108%	80%	120%	114%	70%	130%
Cobalt	5772085		3.9	4.0	NA	< 0.8	104%	70%	130%	108%	80%	120%	107%	70%	130%
Copper	5772085		16.0	16.2	1.0%	< 1.0	96%	70%	130%	114%	80%	120%	121%	70%	130%
Lead	5772085		29	29	0.1%	< 1	103%	70%	130%	108%	80%	120%	110%	70%	130%
Molybdenum	5772085		0.6	0.6	NA	< 0.5	100%	70%	130%	101%	80%	120%	111%	70%	130%
Nickel	5772085		14	14	2.8%	< 1	103%	70%	130%	105%	80%	120%	113%	70%	130%
Selenium	5772085		<0.8	<0.8	NA	< 0.8	127%	70%	130%	101%	80%	120%	100%	70%	130%
Silver	5772085		<0.5	<0.5	NA	< 0.5	101%	70%	130%	106%	80%	120%	97%	70%	130%
Thallium	5772085		<0.5	<0.5	NA	< 0.5	103%	70%	130%	105%	80%	120%	99%	70%	130%
Uranium	5772085		0.63	0.62	NA	< 0.50	114%	70%	130%	106%	80%	120%	107%	70%	130%
Vanadium	5772085		17.5	17.8	1.8%	< 2.0	113%	70%	130%	112%	80%	120%	122%	70%	130%
Zinc	5772085		75	76	1.2%	< 5	101%	70%	130%	111%	80%	120%	121%	70%	130%
Chromium, Hexavalent	5769610	5769610	<0.2	<0.2	NA	< 0.2	91%	70%	130%	99%	80%	120%	78%	70%	130%
Cyanide, WAD	5769621	5769621	<0.040	<0.040	NA	< 0.040	95%	70%	130%	94%	80%	120%	96%	70%	130%
Mercury	5772085		<0.10	<0.10	NA	< 0.10	116%	70%	130%	103%	80%	120%	106%	70%	130%
Electrical Conductivity (2:1)	5772085		0.616	0.591	4.2%	< 0.005	95%	80%	120%						
Sodium Adsorption Ratio (2:1) (Calc.)	5771076		0.743	0.722	2.9%	NA									
pH, 2:1 CaCl2 Extraction	5774405		6.47	6.69	3.4%	NA	102%	80%	120%						

Comments: NA signifies Not Applicable.
pH duplicates QA acceptance criteria was met relative as stated in Table 5-15 of Analytical Protocol document.
Duplicate NA: results are under 5X the RDL and will not be calculated.

O. Reg. 153(511) - Metals & Inorganics (Soil)															
pH, 2:1 CaCl2 Extraction	5769621	5769621	7.29	7.52	3.2%	NA	104%	80%	120%						

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

O. Reg. 558 - Metals & Inorganics															
Arsenic Leachate	5769625	5769625	<0.010	<0.010	NA	< 0.010	102%	70%	130%	109%	80%	120%	115%	70%	130%
Barium Leachate	5769625	5769625	0.439	0.454	3.5%	< 0.020	97%	70%	130%	103%	80%	120%	110%	70%	130%
Boron Leachate	5769625	5769625	0.062	0.073	NA	< 0.050	101%	70%	130%	109%	80%	120%	122%	70%	130%
Cadmium Leachate	5769625	5769625	<0.010	<0.010	NA	< 0.010	100%	70%	130%	106%	80%	120%	113%	70%	130%
Chromium Leachate	5769625	5769625	<0.050	<0.050	NA	< 0.050	102%	70%	130%	105%	80%	120%	96%	70%	130%

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Quality Assurance

CLIENT NAME: GHD LIMITED

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

Soil Analysis (Continued)

RPT Date: Apr 09, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Lead Leachate	5769625	5769625	<0.010	<0.010	NA	< 0.010	103%	70%	130%	104%	80%	120%	109%	70%	130%
Mercury Leachate	5769625	5769625	<0.01	<0.01	NA	< 0.01	102%	70%	130%	109%	80%	120%	115%	70%	130%
Selenium Leachate	5769625	5769625	<0.020	<0.020	NA	< 0.020	98%	70%	130%	118%	80%	120%	111%	70%	130%
Silver Leachate	5769625	5769625	<0.010	<0.010	NA	< 0.010	101%	70%	130%	106%	80%	120%	106%	70%	130%
Uranium Leachate	5769625	5769625	<0.050	<0.050	NA	< 0.050	100%	70%	130%	111%	80%	120%	115%	70%	130%
Fluoride Leachate	5769625	5769625	0.23	0.23	NA	< 0.10	107%	90%	110%	100%	90%	110%	107%	70%	130%
Cyanide Leachate	5769625	5769625	<0.05	<0.05	NA	< 0.05	90%	70%	130%	92%	80%	120%	112%	70%	130%
(Nitrate + Nitrite) as N Leachate	5769625	5769625	<0.70	<0.70	NA	< 0.70	99%	80%	120%	94%	80%	120%	92%	70%	130%

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

Ignitability in Soil

Ignitability	5769625	5769625	N	N	NA

Comments: N = Non-Flammable Solid
NA = Not Applicable

Certified By:



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Quality Assurance

CLIENT NAME: GHD LIMITED

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

Trace Organics Analysis

RPT Date: Apr 09, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (Soil)															
Benzene	5775509		<0.02	<0.02	NA	< 0.02	78%	60%	140%	89%	60%	140%	75%	60%	140%
Toluene	5775509		<0.05	<0.05	NA	< 0.05	81%	60%	140%	83%	60%	140%	88%	60%	140%
Ethylbenzene	5775509		<0.05	<0.05	NA	< 0.05	86%	60%	140%	92%	60%	140%	88%	60%	140%
m & p-Xylene	5775509		<0.05	<0.05	NA	< 0.05	90%	60%	140%	90%	60%	140%	72%	60%	140%
o-Xylene	5775509		<0.05	<0.05	NA	< 0.05	90%	60%	140%	85%	60%	140%	93%	60%	140%
F1 (C6 to C10)	5775509		<5	<5	NA	< 5	95%	60%	140%	90%	60%	140%	92%	60%	140%
F2 (C10 to C16)	5772863		< 10	< 10	NA	< 10	116%	60%	140%	66%	60%	140%	70%	60%	140%
F3 (C16 to C34)	5772863		< 50	< 50	NA	< 50	102%	60%	140%	113%	60%	140%	123%	60%	140%
F4 (C34 to C50)	5772863		< 50	< 50	NA	< 50	77%	60%	140%	110%	60%	140%	106%	60%	140%
O. Reg. 153(511) - VOCs (Soil)															
Dichlorodifluoromethane	5772099		<0.05	<0.05	NA	< 0.05	85%	50%	140%	88%	50%	140%	108%	50%	140%
Vinyl Chloride	5772099		<0.02	<0.02	NA	< 0.02	82%	50%	140%	83%	50%	140%	87%	50%	140%
Bromomethane	5772099		<0.05	<0.05	NA	< 0.05	89%	50%	140%	92%	50%	140%	80%	50%	140%
Trichlorofluoromethane	5772099		<0.05	<0.05	NA	< 0.05	79%	50%	140%	78%	50%	140%	74%	50%	140%
Acetone	5772099		<0.50	<0.50	NA	< 0.50	101%	50%	140%	108%	50%	140%	99%	50%	140%
1,1-Dichloroethylene	5772099		<0.05	<0.05	NA	< 0.05	95%	50%	140%	101%	60%	130%	63%	50%	140%
Methylene Chloride	5772099		<0.05	<0.05	NA	< 0.05	98%	50%	140%	86%	60%	130%	85%	50%	140%
Trans- 1,2-Dichloroethylene	5772099		<0.05	<0.05	NA	< 0.05	91%	50%	140%	84%	60%	130%	64%	50%	140%
Methyl tert-butyl Ether	5772099		<0.05	<0.05	NA	< 0.05	71%	50%	140%	66%	60%	130%	64%	50%	140%
1,1-Dichloroethane	5772099		<0.02	<0.02	NA	< 0.02	90%	50%	140%	73%	60%	130%	63%	50%	140%
Methyl Ethyl Ketone	5772099		<0.50	<0.50	NA	< 0.50	92%	50%	140%	101%	50%	140%	113%	50%	140%
Cis- 1,2-Dichloroethylene	5772099		<0.02	<0.02	NA	< 0.02	88%	50%	140%	105%	60%	130%	71%	50%	140%
Chloroform	5772099		<0.04	<0.04	NA	< 0.04	92%	50%	140%	103%	60%	130%	72%	50%	140%
1,2-Dichloroethane	5772099		<0.03	<0.03	NA	< 0.03	96%	50%	140%	96%	60%	130%	80%	50%	140%
1,1,1-Trichloroethane	5772099		<0.05	<0.05	NA	< 0.05	79%	50%	140%	83%	60%	130%	88%	50%	140%
Carbon Tetrachloride	5772099		<0.05	<0.05	NA	< 0.05	100%	50%	140%	106%	60%	130%	70%	50%	140%
Benzene	5772099		<0.02	<0.02	NA	< 0.02	91%	50%	140%	95%	60%	130%	66%	50%	140%
1,2-Dichloropropane	5772099		<0.03	<0.03	NA	< 0.03	86%	50%	140%	89%	60%	130%	62%	50%	140%
Trichloroethylene	5772099		<0.03	<0.03	NA	< 0.03	102%	50%	140%	101%	60%	130%	68%	50%	140%
Bromodichloromethane	5772099		<0.05	<0.05	NA	< 0.05	94%	50%	140%	100%	60%	130%	70%	50%	140%
Methyl Isobutyl Ketone	5772099		<0.50	<0.50	NA	< 0.50	87%	50%	140%	105%	50%	140%	111%	50%	140%
1,1,2-Trichloroethane	5772099		<0.04	<0.04	NA	< 0.04	106%	50%	140%	104%	60%	130%	83%	50%	140%
Toluene	5772099		<0.05	<0.05	NA	< 0.05	93%	50%	140%	98%	60%	130%	68%	50%	140%
Dibromochloromethane	5772099		<0.05	<0.05	NA	< 0.05	91%	50%	140%	93%	60%	130%	68%	50%	140%
Ethylene Dibromide	5772099		<0.04	<0.04	NA	< 0.04	89%	50%	140%	90%	60%	130%	68%	50%	140%
Tetrachloroethylene	5772099		<0.05	<0.05	NA	< 0.05	85%	50%	140%	91%	60%	130%	61%	50%	140%
1,1,1,2-Tetrachloroethane	5772099		<0.04	<0.04	NA	< 0.04	69%	50%	140%	65%	60%	130%	87%	50%	140%
Chlorobenzene	5772099		<0.05	<0.05	NA	< 0.05	98%	50%	140%	105%	60%	130%	75%	50%	140%
Ethylbenzene	5772099		<0.05	<0.05	NA	< 0.05	82%	50%	140%	88%	60%	130%	67%	50%	140%

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Quality Assurance

CLIENT NAME: GHD LIMITED
AGAT WORK ORDER: 24T134512
PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)
ATTENTION TO: Jennifer Balkwill
SAMPLING SITE:10533 Keele St, Maple
SAMPLED BY:DB + RB

Trace Organics Analysis (Continued)

RPT Date: Apr 09, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
m & p-Xylene	5772099		<0.05	<0.05	NA	< 0.05	89%	50%	140%	97%	60%	130%	107%	50%	140%
Bromoform	5772099		<0.05	<0.05	NA	< 0.05	80%	50%	140%	83%	60%	130%	65%	50%	140%
Styrene	5772099		<0.05	<0.05	NA	< 0.05	88%	50%	140%	99%	60%	130%	67%	50%	140%
1,1,2,2-Tetrachloroethane	5772099		<0.05	<0.05	NA	< 0.05	72%	50%	140%	77%	60%	130%	74%	50%	140%
o-Xylene	5772099		<0.05	<0.05	NA	< 0.05	95%	50%	140%	104%	60%	130%	73%	50%	140%
1,3-Dichlorobenzene	5772099		<0.05	<0.05	NA	< 0.05	101%	50%	140%	100%	60%	130%	75%	50%	140%
1,4-Dichlorobenzene	5772099		<0.05	<0.05	NA	< 0.05	105%	50%	140%	100%	60%	130%	76%	50%	140%
1,2-Dichlorobenzene	5772099		<0.05	<0.05	NA	< 0.05	105%	50%	140%	97%	60%	130%	77%	50%	140%
n-Hexane	5772099		<0.05	<0.05	NA	< 0.05	73%	50%	140%	105%	60%	130%	78%	50%	140%
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	5775950		<0.05	<0.05	NA	< 0.05	103%	50%	140%	83%	50%	140%	103%	50%	140%
Acenaphthylene	5775950		<0.05	<0.05	NA	< 0.05	100%	50%	140%	93%	50%	140%	85%	50%	140%
Acenaphthene	5775950		<0.05	<0.05	NA	< 0.05	104%	50%	140%	78%	50%	140%	105%	50%	140%
Fluorene	5775950		<0.05	<0.05	NA	< 0.05	108%	50%	140%	75%	50%	140%	93%	50%	140%
Phenanthrene	5775950		<0.05	<0.05	NA	< 0.05	108%	50%	140%	98%	50%	140%	95%	50%	140%
Anthracene	5775950		<0.05	<0.05	NA	< 0.05	100%	50%	140%	80%	50%	140%	85%	50%	140%
Fluoranthene	5775950		<0.05	<0.05	NA	< 0.05	107%	50%	140%	85%	50%	140%	93%	50%	140%
Pyrene	5775950		<0.05	<0.05	NA	< 0.05	102%	50%	140%	78%	50%	140%	88%	50%	140%
Benz(a)anthracene	5775950		<0.05	<0.05	NA	< 0.05	79%	50%	140%	80%	50%	140%	80%	50%	140%
Chrysene	5775950		<0.05	<0.05	NA	< 0.05	112%	50%	140%	78%	50%	140%	75%	50%	140%
Benzo(b)fluoranthene	5775950		<0.05	<0.05	NA	< 0.05	86%	50%	140%	78%	50%	140%	78%	50%	140%
Benzo(k)fluoranthene	5775950		<0.05	<0.05	NA	< 0.05	90%	50%	140%	73%	50%	140%	73%	50%	140%
Benzo(a)pyrene	5775950		<0.05	<0.05	NA	< 0.05	85%	50%	140%	95%	50%	140%	105%	50%	140%
Indeno(1,2,3-cd)pyrene	5775950		<0.05	<0.05	NA	< 0.05	70%	50%	140%	78%	50%	140%	105%	50%	140%
Dibenz(a,h)anthracene	5775950		<0.05	<0.05	NA	< 0.05	66%	50%	140%	70%	50%	140%	80%	50%	140%
Benzo(g,h,i)perylene	5775950		<0.05	<0.05	NA	< 0.05	95%	50%	140%	75%	50%	140%	70%	50%	140%
O. Reg. 153(511) - PHCs F1 - F4 (with VOC) (Soil)															
F1 (C6 to C10)	5769675		<5	<5	NA	< 5	100%	60%	140%	95%	60%	140%	94%	60%	140%
O. Reg. 153(511) - VOCs (with PHC) (Soil)															
Dichlorodifluoromethane	5769675		<0.05	<0.05	NA	< 0.05	116%	50%	140%	95%	50%	140%	85%	50%	140%
Vinyl Chloride	5769675		<0.02	<0.02	NA	< 0.02	120%	50%	140%	96%	50%	140%	103%	50%	140%
Bromomethane	5769675		<0.05	<0.05	NA	< 0.05	120%	50%	140%	94%	50%	140%	106%	50%	140%
Trichlorofluoromethane	5769675		<0.05	<0.05	NA	< 0.05	110%	50%	140%	90%	50%	140%	85%	50%	140%
Acetone	5769675		<0.50	<0.50	NA	< 0.50	98%	50%	140%	98%	50%	140%	102%	50%	140%
1,1-Dichloroethylene	5769675		<0.05	<0.05	NA	< 0.05	85%	50%	140%	92%	60%	130%	68%	50%	140%
Methylene Chloride	5769675		<0.05	<0.05	NA	< 0.05	80%	50%	140%	100%	60%	130%	98%	50%	140%
Trans- 1,2-Dichloroethylene	5769675		<0.05	<0.05	NA	< 0.05	99%	50%	140%	83%	60%	130%	76%	50%	140%
Methyl tert-butyl Ether	5769675		<0.05	<0.05	NA	< 0.05	102%	50%	140%	110%	60%	130%	87%	50%	140%

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Quality Assurance

CLIENT NAME: GHD LIMITED
AGAT WORK ORDER: 24T134512
PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)
ATTENTION TO: Jennifer Balkwill
SAMPLING SITE:10533 Keele St, Maple
SAMPLED BY:DB + RB

Trace Organics Analysis (Continued)

RPT Date: Apr 09, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
1,1-Dichloroethane	5769675		<0.02	<0.02	NA	< 0.02	91%	50%	140%	90%	60%	130%	87%	50%	140%
Methyl Ethyl Ketone	5769675		<0.50	<0.50	NA	< 0.50	106%	50%	140%	111%	50%	140%	103%	50%	140%
Cis- 1,2-Dichloroethylene	5769675		<0.02	<0.02	NA	< 0.02	96%	50%	140%	97%	60%	130%	84%	50%	140%
Chloroform	5769675		<0.04	<0.04	NA	< 0.04	96%	50%	140%	97%	60%	130%	84%	50%	140%
1,2-Dichloroethane	5769675		<0.03	<0.03	NA	< 0.03	87%	50%	140%	80%	60%	130%	99%	50%	140%
1,1,1-Trichloroethane	5769675		<0.05	<0.05	NA	< 0.05	95%	50%	140%	76%	60%	130%	63%	50%	140%
Carbon Tetrachloride	5769675		<0.05	<0.05	NA	< 0.05	105%	50%	140%	63%	60%	130%	70%	50%	140%
Benzene	5769675		<0.02	<0.02	NA	< 0.02	91%	50%	140%	96%	60%	130%	82%	50%	140%
1,2-Dichloropropane	5769675		<0.03	<0.03	NA	< 0.03	86%	50%	140%	99%	60%	130%	82%	50%	140%
Trichloroethylene	5769675		<0.03	<0.03	NA	< 0.03	84%	50%	140%	97%	60%	130%	72%	50%	140%
Bromodichloromethane	5769675		<0.05	<0.05	NA	< 0.05	100%	50%	140%	90%	60%	130%	69%	50%	140%
Methyl Isobutyl Ketone	5769675		<0.50	<0.50	NA	< 0.50	106%	50%	140%	100%	50%	140%	106%	50%	140%
1,1,2-Trichloroethane	5769675		<0.04	<0.04	NA	< 0.04	97%	50%	140%	85%	60%	130%	106%	50%	140%
Toluene	5769675		<0.05	<0.05	NA	< 0.05	96%	50%	140%	93%	60%	130%	88%	50%	140%
Dibromochloromethane	5769675		<0.05	<0.05	NA	< 0.05	94%	50%	140%	110%	60%	130%	76%	50%	140%
Ethylene Dibromide	5769675		<0.04	<0.04	NA	< 0.04	96%	50%	140%	91%	60%	130%	93%	50%	140%
Tetrachloroethylene	5769675		<0.05	<0.05	NA	< 0.05	78%	50%	140%	90%	60%	130%	91%	50%	140%
1,1,1,2-Tetrachloroethane	5769675		<0.04	<0.04	NA	< 0.04	105%	50%	140%	88%	60%	130%	76%	50%	140%
Chlorobenzene	5769675		<0.05	<0.05	NA	< 0.05	92%	50%	140%	81%	60%	130%	88%	50%	140%
Ethylbenzene	5769675		<0.05	<0.05	NA	< 0.05	91%	50%	140%	99%	60%	130%	76%	50%	140%
m & p-Xylene	5769675		<0.05	<0.05	NA	< 0.05	97%	50%	140%	120%	60%	130%	85%	50%	140%
Bromoform	5769675		<0.05	<0.05	NA	< 0.05	100%	50%	140%	72%	60%	130%	92%	50%	140%
Styrene	5769675		<0.05	<0.05	NA	< 0.05	78%	50%	140%	93%	60%	130%	73%	50%	140%
1,1,2,2-Tetrachloroethane	5769675		<0.05	<0.05	NA	< 0.05	97%	50%	140%	65%	60%	130%	99%	50%	140%
o-Xylene	5769675		<0.05	<0.05	NA	< 0.05	94%	50%	140%	88%	60%	130%	88%	50%	140%
1,3-Dichlorobenzene	5769675		<0.05	<0.05	NA	< 0.05	92%	50%	140%	93%	60%	130%	89%	50%	140%
1,4-Dichlorobenzene	5769675		<0.05	<0.05	NA	< 0.05	92%	50%	140%	89%	60%	130%	86%	50%	140%
1,2-Dichlorobenzene	5769675		<0.05	<0.05	NA	< 0.05	88%	50%	140%	92%	60%	130%	87%	50%	140%
n-Hexane	5769675		<0.05	<0.05	NA	< 0.05	89%	50%	140%	80%	60%	130%	106%	50%	140%
O. Reg. 558 - VOCs															
Vinyl Chloride Leachate	5772352		<0.030	<0.030	NA	< 0.030	91%	50%	140%	102%	50%	140%	89%	50%	140%
1,1 Dichloroethene Leachate	5772352		<0.020	<0.020	NA	< 0.020	86%	50%	140%	99%	60%	130%	88%	50%	140%
Dichloromethane Leachate	5772352		<0.030	<0.030	NA	< 0.030	92%	50%	140%	95%	60%	130%	96%	50%	140%
Methyl Ethyl Ketone Leachate	5772352		<0.090	<0.090	NA	< 0.090	88%	50%	140%	93%	50%	140%	105%	50%	140%
Chloroform Leachate	5772352		<0.020	<0.020	NA	< 0.020	82%	50%	140%	99%	60%	130%	84%	50%	140%
1,2-Dichloroethane Leachate	5772352		<0.020	<0.020	NA	< 0.020	107%	50%	140%	89%	60%	130%	83%	50%	140%
Carbon Tetrachloride Leachate	5772352		<0.020	<0.020	NA	< 0.020	78%	50%	140%	87%	60%	130%	72%	50%	140%
Benzene Leachate	5772352		<0.020	<0.020	NA	< 0.020	91%	50%	140%	96%	60%	130%	89%	50%	140%
Trichloroethene Leachate	5772352		<0.020	<0.020	NA	< 0.020	86%	50%	140%	94%	60%	130%	89%	50%	140%

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Quality Assurance

CLIENT NAME: GHD LIMITED

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

Trace Organics Analysis (Continued)

RPT Date: Apr 09, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Tetrachloroethene Leachate	5772352		<0.050	<0.050	NA	< 0.050	89%	50%	140%	95%	60%	130%	81%	50%	140%
Chlorobenzene Leachate	5772352		<0.010	<0.010	NA	< 0.010	92%	50%	140%	95%	60%	130%	84%	50%	140%
1,2-Dichlorobenzene Leachate	5772352		<0.010	<0.010	NA	< 0.010	92%	50%	140%	95%	60%	130%	86%	50%	140%
1,4-Dichlorobenzene Leachate	5772352		<0.010	<0.010	NA	< 0.010	93%	50%	140%	97%	60%	130%	84%	50%	140%
O. Reg. 558 - Benzo(a) pyrene															
Benzo(a)pyrene Leachate	1577595		< 0.001	< 0.001	NA	< 0.001	85%	50%	140%	95%	50%	140%	105%	50%	140%

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

Certified By: N Popnikolof

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Method Summary

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PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Ignitability	INOR-93-6063	EPA SW-846 1030	BURN MOLD
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, WAD	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	SEGMENTED FLOW ANALYSIS
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6075	modified from MSA PART 3, CH 14 and SM 2510 B	PC TITRATE
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6075	modified from EPA 9045D, MCKEAGUE 3.11 E3137	PC TITRATE
Arsenic Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Barium Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Boron Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Cadmium Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS

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Method Summary

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PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

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PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Chromium Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Lead Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Mercury Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Selenium Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Silver Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Uranium Leachate	MET-93-6103	EPA 1311 & modified from EPA 6020B	ICP-MS
Fluoride Leachate	INOR-93-6000	EPA SW 846-1311; SM 4500F-C	ION SELECTIVE ELECTRODE
Cyanide Leachate	INOR-93-6052	EPA 1311 modified from MOE 3015 SM 4500 CN-I,G387	SEGMENTED FLOW ANALYSIS
(Nitrate + Nitrite) as N Leachate	INOR-93-6053	EPA SW 846-1311 & modified from SM 4500 - NO3- I	LACHAT FIA
Analysis Start Date			N/A
pH (Initial)	LAB 4025	EPA SW-846 1311	PH METER
pH (Final)	LAB 4025	EPA SW-846 1311	PH METER
Extraction Fluid	LAB-93-4025	EPA SW-846 1311	N/A

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ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

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PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
2-and 1-methyl Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Benzene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
Toluene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
Ethylbenzene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
m & p-Xylene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
o-Xylene	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
Xylenes (Total)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/MS
F1 (C6 to C10)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	P&T GC/FID
Toluene-d8	VOL-91-5009	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
F2 (C10 to C16)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F4 (C34 to C50)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID

Results relate only to the items tested. Results apply to samples as received.

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

Method Summary

CLIENT NAME: GHD LIMITED

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Gravimetric Heavy Hydrocarbons	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
Toluene-d8	VOL-91- 5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Benzene	VOL-91-5009	modified from EPA SW-846 5035C & 8260D	(P&T)GC/MS
Toluene	VOL-91-5009	modified from EPA SW-846 5035C & 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5009	modified from EPA SW-846 5035C & 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5009	modified from EPA SW-846 5035C & 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5009	modified from EPA SW-846 5035C & 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5009	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
F1 (C6 to C10) minus BTEX	VOL-91-5009	CCME Tier 1 Method	P&T GC/FID
Dichlorodifluoromethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Bromomethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Acetone	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Methylene Chloride	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Trans- 1,2-Dichloroethylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Methyl tert-butyl Ether	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Cis- 1,2-Dichloroethylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Chloroform	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Benzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Trichloroethylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS

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

Method Summary

CLIENT NAME: GHD LIMITED

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Bromodichloromethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Toluene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Dibromochloromethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Chlorobenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Bromoform	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Styrene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	modified from EPA SW-846 5035 & 8260D	(P&T)GC/MS
Dichlorodifluoromethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Bromomethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Acetone	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS

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Method Summary

CLIENT NAME: GHD LIMITED

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
1,1-Dichloroethylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Methylene Chloride	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Trans- 1,2-Dichloroethylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Methyl tert-butyl Ether	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Cis- 1,2-Dichloroethylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Chloroform	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Benzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Trichloroethylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Bromodichloromethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Toluene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Dibromochloromethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Chlorobenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
m & p-Xylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Bromoform	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS

Results relate only to the items tested. Results apply to samples as received.

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Method Summary

CLIENT NAME: GHD LIMITED

AGAT WORK ORDER: 24T134512

PROJECT: 12636323-E1 Ph2 ESA (PO# 735-009803)

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St, Maple

SAMPLED BY:DB + RB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
o-Xylene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5002	modified from EPA 5035A and EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5002	modified from EPA 5035A & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	modified from EPA 5035A & EPA 8260D	(P&T)GC/MS
Benzo(a)pyrene Leachate	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Vinyl Chloride Leachate	VOL-91-5001	EPA 1311, modified from EPA 5030C & EPA 8260D	(P&T)GC/MS
1,1 Dichloroethene Leachate	VOL-91-5001	EPA 1311, modified from EPA 5030C & EPA 8260D	(P&T)GC/MS
Dichloromethane Leachate	VOL-91-5001	EPA 1311, modified from EPA 5030C & EPA 8260D	(P&T)GC/MS
Methyl Ethyl Ketone Leachate	VOL-91-5001	EPA 1311, modified from EPA 5030C & EPA 8260D	(P&T)GC/MS
Chloroform Leachate	VOL-91-5001	EPA 1311, modified from EPA 5030C & EPA 8260D	(P&T)GC/MS
1,2-Dichloroethane Leachate	VOL-91-5001	EPA 1311, modified from EPA 5030C & EPA 8260D	(P&T)GC/MS
Carbon Tetrachloride Leachate	VOL-91-5001	EPA 1311, modified from EPA 5030C & EPA 8260D	(P&T)GC/MS
Benzene Leachate	VOL-91-5001	EPA 1311, modified from EPA 5030C & EPA 8260D	(P&T)GC/MS
Trichloroethene Leachate	VOL-91-5001	EPA 1311, modified from EPA 5030C & EPA 8260D	(P&T)GC/MS
Tetrachloroethene Leachate	VOL-91-5001	EPA 1311, modified from EPA 5030C & EPA 8260D	(P&T)GC/MS
Chlorobenzene Leachate	VOL-91-5001	EPA 1311, modified from EPA 5030C & EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene Leachate	VOL-91-5001	EPA 1311, modified from EPA 5030C & EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene Leachate	VOL-91-5001	EPA 1311, modified from EPA 5030C & EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91- 5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

Results relate only to the items tested. Results apply to samples as received.

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webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: GHD LTD
Contact: Jennifer Balkwill
Address: 455 phillip st, Unit 100A, Waterloo, ON N2L 3X2
Phone: Fax:
Reports to be sent to:
1. Email: Jennifer.Balkwill@GHD.com
2. Email: See SSOW

Project Information:

Project: Ph 2 ESA
Site Location: 10533 Keele st, Maple
Sampled By: DB + RB
AGAT Quote #: PO: 7-35-009803
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☑ No ☐
Company:
Contact:
Address:
Email:

Regulatory Requirements:

(Please check all applicable boxes)

☑ Regulation 153/04 — Table 3 (Indicate One) — ☑ Ind/Com ☐ Res/Park ☐ Agriculture
Soil Texture (Check One) ☐ Coarse ☐ Fine
☐ Regulation 406 — Table (Indicate One) — ☐ Ind/Com ☐ Res/Park ☐ Agriculture
☐ Regulation 558
☐ CCME
☐ Sewer Use ☐ Sanitary ☐ Storm — Region
☐ Prov. Water Quality Objectives (PWQO)
☐ Other — Indicate One

Is this submission for a **Record of Site Condition (RSC)**? ☐ Yes ☑ No

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

Legal Sample ☐

Sample Matrix Legend

GW	Ground Water	SD	Sediment
O	Oil	SW	Surface Water
P	Paint	R	Rock/Shale
S	Soil		

Laboratory Use Only

Work Order #: 24T134512
Cooler Quantity: 2 Lin
Arrival Temperatures: 2.3 2.1 1.8
Depot Temperatures: NR 3.0 2.7 2.6
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: Bagged Ice

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	BTEX, F1-F4 PHCs	VOC	PAHs	PCBs: Aroclors ☐	O. Reg 406: Regulation 406 Characterization Package	pH, Metals, BTEX, F1-F4	EC, SAR	Regulation 406 SPLP Rainwater Leach nSPLP: ☐ Metals ☐ VOCs ☐ SVOCs ☐ OC	O. Reg 558: Lindfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Corrosivity: ☐ Moisture ☐ Sulphide	PHC / VOC								Potentially Hazardous or High Concentration (Y/N)
1. MW1-24 SS1B	28/03/24	PM AM PM	4	Soil			X		X																	
2. MW1-24 SS2	↓	↓ AM PM	2	↓						X																
3. MW2-24 SS3		AM PM	2							X																
4. MW2-24 SS1		AM PM	2				X				X															
5. MW2-24 SS2		AM PM	3						X																	
6. MW3-24 SS1	27/03/24	PM AM PM	1				X																			
7. MW3-24 SS2		AM PM	1								X															
8. MW3-24 SS3		AM PM	3															X								
9. MW4-24 SS1		AM PM	1				X																			
10. MW4-24 SS2		AM PM	1								X															
11. MW4-24 SS3	↓	↓ AM PM	3	↓														X								

	Date	Time		Date	Time
Samples Relinquished By (Print Name and Sign):	Mar 28, 24	18:25	Samples Received By (Print Name and Sign):		
Samples Relinquished By (Print Name and Sign):			Samples Received By (Print Name and Sign):		
Samples Relinquished By (Print Name and Sign):			Samples Received By (Print Name and Sign):		

'24 MAR 28 6:25 PM

Page 1 of 2

N°: T-154923

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

Document ID: DW-78-1511.023

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Date Issued: Jan 18, 2024

AGAT Laboratories

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Chain of Custody Record

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

Laboratory Use Only

Work Order #: 24T134512

Cooler Quantity:

Arrival Temperatures:

Depot Temperatures:

Custody Seal Intact: ☐ Yes ☐ No ☐ N/A

Notes:

Report Information:

Company: GHD LTD

Contact: Jennifer Balkwill

Address: 455 Phillip St, Unit 100A, Waterloo, ON N2L 3X2

Phone: Fax:

Reports to be sent to:

1. Email: Jennifer.Balkwill@GHD.com
2. Email: See SSOW

Regulatory Requirements:

(Please check all applicable boxes)

☒ Regulation 153/04 — Table 3 (Indicate One) — ☒ Ind/Com ☐ Res/Park ☐ Agriculture

Soil Texture (Check One): ☐ Coarse ☐ Fine

☐ Regulation 406 — Table (Indicate One) — ☐ Ind/Com ☐ Res/Park ☐ Agriculture

☐ Regulation 558

☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm — Region

☐ Prov. Water Quality Objectives (PWQO)

☐ Other — Indicate One

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

Report Guideline on Certificate of Analysis ☒ Yes ☐ No

Turnaround Time (TAT) Required:

Regular TAT ☒ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT

*TAT is exclusive of weekends and statutory holidays

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

Project Information:

Project: Ph2 ESA

Site Location: 10533 Keele St, Maple

Sampled By: DB + RB

AGAT Quote #: PO: 735-009803

Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☒ No ☐

Company: [redacted]

Contact: [redacted]

Address: [redacted]

Email:

Legal Sample ☐

Sample Matrix Legend

GW	Ground Water	SD	Sediment
O	Oil	SW	Surface Water
P	Paint	R	Rock/Shale
S	Soil		

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	BTEX, F1-F4 PHCs	VOC	PAHs	PCBs: Aroclors ☐	O. Reg 406: Regulation 406 Characterization Package	pH, Metals, BTEX, F1-F4	EC, SAR	Regulation 406 SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs ☐ OC	O. Reg 558: Landfill Disposal Characterization TCLP: ☒ M&I ☒ VOCs ☐ ABNs ☒ BAP ☐ PCBs	Corrosivity: ☐ Moisture ☐ Sulphide	TCLP B(a)P	TCLP Ignitability	Potentially Hazardous or High Concentration (Y/N)
1. QAQC-1	23/03/24	PM	1	Soil			X														
2. QAQC-2			1								X										
3. QAQC-3			3						X												
4. Trip Blank			2							X											
5. TCLP-1			4													X		X	X		
6. MW1-24 SS3	28/03/24	PM	1								X										
7.																					
8.																					
9.																					
10.																					
11.																					

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Reza	Mar 28, 24	18:30	Neil Ramnarain		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

Page 2 of 2

N°: T-154922

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

Document ID: DW-78-1511.023

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Date Issued: Jan 19, 2024

Appendix D

Groundwater Analytical Data Reports

AGAT Laboratories

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

CLIENT NAME: GHD LIMITED
455 Phillip St
WATERLOO, ON N2L 3X2
(519) 884-0510
ATTENTION TO: Jennifer Balkwill
PROJECT: 12636323 (PO# 735-009803)
AGAT WORK ORDER: 24T136609
TRACE ORGANICS REVIEWED BY: Pinkal Patel, Report Reviewer
WATER ANALYSIS REVIEWED BY: Yris Verastegui, Inorganic Team Lead
DATE REPORTED: Apr 15, 2024
PAGES (INCLUDING COVER): 23
VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the guidelines contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.
- For environmental samples in the Province of Quebec: The analysis is performed on and results apply to samples as received. A temperature above 6°C upon receipt, as indicated in the Sample Reception Notification (SRN), could indicate the integrity of the samples has been compromised if the delay between sampling and submission to the laboratory could not be minimized.

Member of: Association of Professional Engineers and Geoscientists of Alberta (APEGA)
Western Enviro-Agricultural Laboratory Association (WEALA)
Environmental Services Association of Alberta (ESAA)

AGAT Laboratories is accredited to ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA) and/or Standards Council of Canada (SCC) for specific tests listed on the scope of accreditation. AGAT Laboratories (Mississauga) is also accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) for specific drinking water tests. Accreditations are location and parameter specific. A complete listing of parameters for each location is available from www.cala.ca and/or www.scc.ca. The tests in this report may not necessarily be included in the scope of accreditation. Measurement Uncertainty is not taken into consideration when stating conformity with a specified requirement.

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Certificate of Analysis

AGAT WORK ORDER: 24T136609

PROJECT: 12636323 (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St., Vaughan

SAMPLED BY:DB

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

DATE RECEIVED: 2024-04-05

DATE REPORTED: 2024-04-15

					SAMPLE DESCRIPTION:	MW1-24	MW2-24	MW3-24	MW4-24	QAQC-1
					SAMPLE TYPE:	Water	Water	Water	Water	Water
					DATE SAMPLED:	2024-04-05 12:00	2024-04-05 12:00	2024-04-05	2024-04-05	2024-04-05
Parameter	Unit	G / S	RDL	Date Prepared	Date Analyzed	5784650	5784656	5784657	5784662	5784663
Naphthalene	µg/L	1400	0.20	2024-04-15	2024-04-15	<0.20	<0.20	<0.20	<0.20	<0.20
Acenaphthylene	µg/L	1.8	0.20	2024-04-15	2024-04-15	<0.20	<0.20	<0.20	<0.20	<0.20
Acenaphthene	µg/L	600	0.20	2024-04-15	2024-04-15	<0.20	<0.20	<0.20	<0.20	<0.20
Fluorene	µg/L	400	0.20	2024-04-15	2024-04-15	<0.20	<0.20	<0.20	<0.20	<0.20
Phenanthrene	µg/L	580	0.10	2024-04-15	2024-04-15	<0.10	<0.10	<0.10	<0.10	<0.10
Anthracene	µg/L	2.4	0.10	2024-04-15	2024-04-15	<0.10	<0.10	<0.10	<0.10	<0.10
Fluoranthene	µg/L	130	0.20	2024-04-15	2024-04-15	<0.20	<0.20	<0.20	<0.20	<0.20
Pyrene	µg/L	68	0.20	2024-04-15	2024-04-15	<0.20	<0.20	<0.20	<0.20	<0.20
Benzo(a)anthracene	µg/L	4.7	0.20	2024-04-15	2024-04-15	<0.20	<0.20	<0.20	<0.20	<0.20
Chrysene	µg/L	1	0.10	2024-04-15	2024-04-15	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(b)fluoranthene	µg/L	0.75	0.10	2024-04-15	2024-04-15	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(k)fluoranthene	µg/L	0.4	0.10	2024-04-15	2024-04-15	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(a)pyrene	µg/L	0.81	0.01	2024-04-15	2024-04-15	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	µg/L	0.2	0.20	2024-04-15	2024-04-15	<0.20	<0.20	<0.20	<0.20	<0.20
Dibenz(a,h)anthracene	µg/L	0.52	0.20	2024-04-15	2024-04-15	<0.20	<0.20	<0.20	<0.20	<0.20
Benzo(g,h,i)perylene	µg/L	0.2	0.20	2024-04-15	2024-04-15	<0.20	<0.20	<0.20	<0.20	<0.20
2-and 1-methyl Napthalene	µg/L	1800	0.20	2024-04-15	2024-04-15	<0.20	<0.20	<0.20	<0.20	<0.20
Sediment				2024-04-12	2024-04-12	1	3	1	1	1
Surrogate	Unit	Acceptable Limits								
Naphthalene-d8	%	50-140		2024-04-15	2024-04-15	73	76	83	85	90
Acridine-d9	%	50-140		2024-04-15	2024-04-15	77	80	72	80	90
Terphenyl-d14	%	50-140		2024-04-15	2024-04-15	85	98	74	85	95

Certified By: Jinkal Patel

Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories

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

Certificate of Analysis

AGAT WORK ORDER: 24T136609

PROJECT: 12636323 (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St., Vaughan

SAMPLED BY:DB

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

DATE RECEIVED: 2024-04-05

DATE REPORTED: 2024-04-15

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Non-Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5784650-5784663 Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.
Legend: 1 = no sediment present; 2 = sediment present; 3 = sediment present in trace amount
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&(j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories

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AGAT WORK ORDER: 24T136609

PROJECT: 12636323 (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St., Vaughan

SAMPLED BY:DB

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

DATE RECEIVED: 2024-04-05

DATE REPORTED: 2024-04-15

						SAMPLE DESCRIPTION:	MW1-24	MW2-24	MW3-24	MW4-24	QAQC-1
						SAMPLE TYPE:	Water	Water	Water	Water	Water
						DATE SAMPLED:	2024-04-05 12:00	2024-04-05 12:00	2024-04-05	2024-04-05	2024-04-05
Parameter	Unit	G / S	RDL	Date Prepared	Date Analyzed		5784650	5784656	5784657	5784662	5784663
F1 (C6 to C10)	µg/L	750	25	2024-04-11	2024-04-11		<25	<25	<25	<25	<25
F1 (C6 to C10) minus BTEX	µg/L	750	25	2024-04-11	2024-04-11		<25	<25	<25	<25	<25
F2 (C10 to C16)	µg/L	150	100	2024-04-12	2024-04-12		<100	<100	<100	<100	<100
F2 (C10 to C16) minus Naphthalene	µg/L		100	2024-04-15	2024-04-15		<100	<100	<100	<100	<100
F3 (C16 to C34)	µg/L	500	100	2024-04-12	2024-04-12		<100	<100	<100	<100	<100
F3 (C16 to C34) minus PAHs	µg/L		100	2024-04-15	2024-04-15		<100	<100	<100	<100	<100
F4 (C34 to C50)	µg/L	500	100	2024-04-12	2024-04-12		<100	<100	<100	<100	<100
Gravimetric Heavy Hydrocarbons	µg/L		500				NA	NA	NA	NA	NA
Sediment				2024-04-12	2024-04-12		1	3	1	1	1
Surrogate	Unit	Acceptable Limits									
Toluene-d8	%	50-140		2024-04-11	2024-04-11		96	103	103	106	105
Terphenyl	% Recovery	60-140		2024-04-12	2024-04-12		63	62	73	70	65

Certified By: Jinkal Patel

Results relate only to the items tested. Results apply to samples as received.

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AGAT WORK ORDER: 24T136609

PROJECT: 12636323 (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St., Vaughan

SAMPLED BY:DB

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

DATE RECEIVED: 2024-04-05

DATE REPORTED: 2024-04-15

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Non-Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5784650-5784663 The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX and PAH contributions.
C>10 – C16 (F2- Naphthalene) is a calculated parameter. The calculated value is F2 - Naphthalene.
C>16 - C34 (F3-PAH) is a calculated parameter. The calculated value is F3-PAH (PAH: sum of Phenanthrene, Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-c,d)pyrene and Pyrene).
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.

Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.
Legend: 1 = no sediment present; 2 = sediment present; 3 = sediment present in trace amounts

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Jinkal Patel

Results relate only to the items tested. Results apply to samples as received.

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AGAT WORK ORDER: 24T136609

PROJECT: 12636323 (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St., Vaughan

SAMPLED BY:DB

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

DATE RECEIVED: 2024-04-05

DATE REPORTED: 2024-04-15

				SAMPLE DESCRIPTION:		Trip Blank
				SAMPLE TYPE:		Water
				DATE SAMPLED:		
Parameter	Unit	G / S	RDL	Date Prepared	Date Analyzed	5784667
Dichlorodifluoromethane	µg/L	4400	0.40	2024-04-11	2024-04-11	<0.40
Vinyl Chloride	µg/L	0.5	0.17	2024-04-11	2024-04-11	<0.17
Bromomethane	µg/L	5.6	0.20	2024-04-11	2024-04-11	<0.20
Trichlorofluoromethane	µg/L	2500	0.40	2024-04-11	2024-04-11	<0.40
Acetone	µg/L	130000	1.0	2024-04-11	2024-04-11	<1.0
1,1-Dichloroethylene	µg/L	1.6	0.30	2024-04-11	2024-04-11	<0.30
Methylene Chloride	µg/L	610	0.30	2024-04-11	2024-04-11	<0.30
trans- 1,2-Dichloroethylene	µg/L	1.6	0.20	2024-04-11	2024-04-11	<0.20
Methyl tert-butyl ether	µg/L	190	0.20	2024-04-11	2024-04-11	<0.20
1,1-Dichloroethane	µg/L	320	0.30	2024-04-11	2024-04-11	<0.30
Methyl Ethyl Ketone	µg/L	470000	1.0	2024-04-11	2024-04-11	<1.0
cis- 1,2-Dichloroethylene	µg/L	1.6	0.20	2024-04-11	2024-04-11	<0.20
Chloroform	µg/L	2.4	0.20	2024-04-11	2024-04-11	<0.20
1,2-Dichloroethane	µg/L	1.6	0.20	2024-04-11	2024-04-11	<0.20
1,1,1-Trichloroethane	µg/L	640	0.30	2024-04-11	2024-04-11	<0.30
Carbon Tetrachloride	µg/L	0.79	0.20	2024-04-11	2024-04-11	<0.20
Benzene	µg/L	44	0.20	2024-04-11	2024-04-11	<0.20
1,2-Dichloropropane	µg/L	16	0.20	2024-04-11	2024-04-11	<0.20
Trichloroethylene	µg/L	1.6	0.20	2024-04-11	2024-04-11	<0.20
Bromodichloromethane	µg/L	85000	0.20	2024-04-11	2024-04-11	<0.20
Methyl Isobutyl Ketone	µg/L	140000	1.0	2024-04-11	2024-04-11	<1.0
1,1,2-Trichloroethane	µg/L	4.7	0.20	2024-04-11	2024-04-11	<0.20
Toluene	µg/L	18000	0.20	2024-04-11	2024-04-11	<0.20
Dibromochloromethane	µg/L	82000	0.10	2024-04-11	2024-04-11	<0.10
Ethylene Dibromide	µg/L	0.25	0.10	2024-04-11	2024-04-11	<0.10
Tetrachloroethylene	µg/L	1.6	0.20	2024-04-11	2024-04-11	<0.20
1,1,1,2-Tetrachloroethane	µg/L	3.3	0.10	2024-04-11	2024-04-11	<0.10
Chlorobenzene	µg/L	630	0.10	2024-04-11	2024-04-11	<0.10
Ethylbenzene	µg/L	2300	0.10	2024-04-11	2024-04-11	<0.10
m & p-Xylene	µg/L		0.20	2024-04-11	2024-04-11	<0.20

Certified By:



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Certificate of Analysis

AGAT WORK ORDER: 24T136609

PROJECT: 12636323 (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St., Vaughan

SAMPLED BY:DB

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

DATE RECEIVED: 2024-04-05

DATE REPORTED: 2024-04-15

				SAMPLE DESCRIPTION:		Trip Blank
				SAMPLE TYPE:		Water
				DATE SAMPLED:		
Parameter	Unit	G / S	RDL	Date Prepared	Date Analyzed	5784667
Bromoform	µg/L	380	0.10	2024-04-11	2024-04-11	<0.10
Styrene	µg/L	1300	0.10	2024-04-11	2024-04-11	<0.10
1,1,2,2-Tetrachloroethane	µg/L	3.2	0.10	2024-04-11	2024-04-11	<0.10
o-Xylene	µg/L		0.10	2024-04-11	2024-04-11	<0.10
1,3-Dichlorobenzene	µg/L	9600	0.10	2024-04-11	2024-04-11	<0.10
1,4-Dichlorobenzene	µg/L	8	0.10	2024-04-11	2024-04-11	<0.10
1,2-Dichlorobenzene	µg/L	4600	0.10	2024-04-11	2024-04-11	<0.10
1,3-Dichloropropene	µg/L	5.2	0.30	2024-04-11	2024-04-11	<0.30
Xylenes (Total)	µg/L	4200	0.20	2024-04-11	2024-04-11	<0.20
n-Hexane	µg/L	51	0.20	2024-04-11	2024-04-11	<0.20
Surrogate	Unit	Acceptable Limits				
Toluene-d8	% Recovery	50-140		2024-04-11	2024-04-11	106
4-Bromofluorobenzene	% Recovery	50-140		2024-04-11	2024-04-11	92

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Non-Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5784667 Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Jinkal Patel

Results relate only to the items tested. Results apply to samples as received.

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Certificate of Analysis

AGAT WORK ORDER: 24T136609

PROJECT: 12636323 (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St., Vaughan

SAMPLED BY:DB

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

DATE RECEIVED: 2024-04-05

DATE REPORTED: 2024-04-15

					SAMPLE DESCRIPTION:	MW1-24	MW2-24	MW3-24	MW4-24	QAQC-1
					SAMPLE TYPE:	Water	Water	Water	Water	Water
					DATE SAMPLED:	2024-04-05 12:00	2024-04-05 12:00	2024-04-05	2024-04-05	2024-04-05
Parameter	Unit	G / S	RDL	Date Prepared	Date Analyzed	5784650	5784656	5784657	5784662	5784663
Dichlorodifluoromethane	µg/L	4400	0.40	2024-04-11	2024-04-11	<0.40	<0.40	<0.40	<0.40	<0.40
Vinyl Chloride	µg/L	0.5	0.17	2024-04-11	2024-04-11	<0.17	<0.17	<0.17	<0.17	<0.17
Bromomethane	µg/L	5.6	0.20	2024-04-11	2024-04-11	<0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L	2500	0.40	2024-04-11	2024-04-11	<0.40	<0.40	<0.40	<0.40	<0.40
Acetone	µg/L	130000	1.0	2024-04-11	2024-04-11	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	1.6	0.30	2024-04-11	2024-04-11	<0.30	<0.30	<0.30	<0.30	<0.30
Methylene Chloride	µg/L	610	0.30	2024-04-11	2024-04-11	<0.30	<0.30	<0.30	<0.30	<0.30
trans- 1,2-Dichloroethylene	µg/L	1.6	0.20	2024-04-11	2024-04-11	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl tert-butyl ether	µg/L	190	0.20	2024-04-11	2024-04-11	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane	µg/L	320	0.30	2024-04-11	2024-04-11	<0.30	<0.30	<0.30	<0.30	<0.30
Methyl Ethyl Ketone	µg/L	470000	1.0	2024-04-11	2024-04-11	<1.0	<1.0	<1.0	<1.0	<1.0
cis- 1,2-Dichloroethylene	µg/L	1.6	0.20	2024-04-11	2024-04-11	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	µg/L	2.4	0.20	2024-04-11	2024-04-11	0.87	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	1.6	0.20	2024-04-11	2024-04-11	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	640	0.30	2024-04-11	2024-04-11	<0.30	<0.30	<0.30	<0.30	<0.30
Carbon Tetrachloride	µg/L	0.79	0.20	2024-04-11	2024-04-11	<0.20	<0.20	<0.20	<0.20	<0.20
Benzene	µg/L	44	0.20	2024-04-11	2024-04-11	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane	µg/L	16	0.20	2024-04-11	2024-04-11	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	µg/L	1.6	0.20	2024-04-11	2024-04-11	<0.20	<0.20	<0.20	<0.20	<0.20
Bromodichloromethane	µg/L	85000	0.20	2024-04-11	2024-04-11	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L	140000	1.0	2024-04-11	2024-04-11	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	µg/L	4.7	0.20	2024-04-11	2024-04-11	<0.20	<0.20	<0.20	<0.20	<0.20
Toluene	µg/L	18000	0.20	2024-04-11	2024-04-11	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane	µg/L	82000	0.10	2024-04-11	2024-04-11	<0.10	<0.10	<0.10	<0.10	<0.10
Ethylene Dibromide	µg/L	0.25	0.10	2024-04-11	2024-04-11	<0.10	<0.10	<0.10	<0.10	<0.10
Tetrachloroethylene	µg/L	1.6	0.20	2024-04-11	2024-04-11	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1,2-Tetrachloroethane	µg/L	3.3	0.10	2024-04-11	2024-04-11	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	µg/L	630	0.10	2024-04-11	2024-04-11	<0.10	<0.10	<0.10	<0.10	<0.10
Ethylbenzene	µg/L	2300	0.10	2024-04-11	2024-04-11	<0.10	<0.10	<0.10	<0.10	<0.10

Certified By: Pinkal Patel

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Certificate of Analysis

AGAT WORK ORDER: 24T136609

PROJECT: 12636323 (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St., Vaughan

SAMPLED BY:DB

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

DATE RECEIVED: 2024-04-05

DATE REPORTED: 2024-04-15

						SAMPLE DESCRIPTION:	MW1-24	MW2-24	MW3-24	MW4-24	QAQC-1
						SAMPLE TYPE:	Water	Water	Water	Water	Water
						DATE SAMPLED:	2024-04-05 12:00	2024-04-05 12:00	2024-04-05	2024-04-05	2024-04-05
Parameter	Unit	G / S	RDL	Date Prepared	Date Analyzed		5784650	5784656	5784657	5784662	5784663
m & p-Xylene	µg/L		0.20	2024-04-11	2024-04-11		<0.20	<0.20	<0.20	<0.20	<0.20
Bromoform	µg/L	380	0.10	2024-04-11	2024-04-11		<0.10	<0.10	<0.10	<0.10	<0.10
Styrene	µg/L	1300	0.10	2024-04-11	2024-04-11		<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane	µg/L	3.2	0.10	2024-04-11	2024-04-11		<0.10	<0.10	<0.10	<0.10	<0.10
o-Xylene	µg/L		0.10	2024-04-11	2024-04-11		<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene	µg/L	9600	0.10	2024-04-11	2024-04-11		<0.10	<0.10	<0.10	<0.10	<0.10
1,4-Dichlorobenzene	µg/L	8	0.10	2024-04-11	2024-04-11		<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dichlorobenzene	µg/L	4600	0.10	2024-04-11	2024-04-11		<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichloropropene	µg/L	5.2	0.30	2024-04-11	2024-04-11		<0.30	<0.30	<0.30	<0.30	<0.30
Xylenes (Total)	µg/L	4200	0.20	2024-04-11	2024-04-11		<0.20	<0.20	<0.20	<0.20	<0.20
n-Hexane	µg/L	51	0.20	2024-04-11	2024-04-11		<0.20	<0.20	<0.20	<0.20	<0.20
Surrogate	Unit	Acceptable Limits									
Toluene-d8	% Recovery	50-140		2024-04-11	2024-04-11		96	103	103	106	105
4-Bromofluorobenzene	% Recovery	50-140		2024-04-11	2024-04-11		93	90	96	99	95

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Non-Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5784650-5784663 Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Pinkal Patel

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Certificate of Analysis

AGAT WORK ORDER: 24T136609

PROJECT: 12636323 (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St., Vaughan

SAMPLED BY:DB

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

DATE RECEIVED: 2024-04-05

DATE REPORTED: 2024-04-15

					SAMPLE DESCRIPTION:	MW1-24	MW2-24	MW3-24	MW4-24
					SAMPLE TYPE:	Water	Water	Water	Water
					DATE SAMPLED:	2024-04-05 12:00	2024-04-05 12:00	2024-04-05	2024-04-05
Parameter	Unit	G / S	RDL	Date Prepared	Date Analyzed	5784650	5784656	5784657	5784662
Dissolved Antimony	µg/L	20000	1.0	2024-04-08	2024-04-08	<1.0	<1.0	<1.0	<1.0
Dissolved Arsenic	µg/L	1900	1.0	2024-04-08	2024-04-08	1.7	<1.0	<1.0	<1.0
Dissolved Barium	µg/L	29000	2.0	2024-04-08	2024-04-08	56.5	65.0	240	125
Dissolved Beryllium	µg/L	67	0.50	2024-04-08	2024-04-08	<0.50	<0.50	<0.50	<0.50
Dissolved Boron	µg/L	45000	10.0	2024-04-08	2024-04-08	127	199	139	321
Dissolved Cadmium	µg/L	2.7	0.20	2024-04-08	2024-04-08	<0.20	<0.20	<0.20	<0.20
Dissolved Chromium	µg/L	810	2.0	2024-04-08	2024-04-08	<2.0	<2.0	<2.0	<2.0
Dissolved Cobalt	µg/L	66	0.50	2024-04-08	2024-04-08	11.6	4.18	6.07	6.24
Dissolved Copper	µg/L	87	1.0	2024-04-08	2024-04-08	<1.0	<1.0	1.4	1.2
Dissolved Lead	µg/L	25	0.50	2024-04-08	2024-04-08	<0.50	<0.50	<0.50	<0.50
Dissolved Molybdenum	µg/L	9200	0.50	2024-04-08	2024-04-08	1.87	<0.50	<0.50	10.1
Dissolved Nickel	µg/L	490	1.0	2024-04-08	2024-04-08	7.9	6.4	8.9	12.2
Dissolved Selenium	µg/L	63	1.0	2024-04-08	2024-04-08	3.4	2.6	2.8	2.3
Dissolved Silver	µg/L	1.5	0.20	2024-04-08	2024-04-08	<0.20	<0.20	<0.20	<0.20
Dissolved Thallium	µg/L	510	0.30	2024-04-08	2024-04-08	<0.30	<0.30	<0.30	<0.30
Dissolved Uranium	µg/L	420	0.50	2024-04-08	2024-04-08	1.59	1.08	1.01	1.27
Dissolved Vanadium	µg/L	250	0.40	2024-04-08	2024-04-08	0.48	0.45	<0.40	<0.40
Dissolved Zinc	µg/L	1100	5.0	2024-04-08	2024-04-08	<5.0	25.1	<5.0	9.8
Mercury	µg/L	0.29	0.02	2024-04-08	2024-04-08	<0.02	<0.02	<0.02	<0.02
Chromium VI	µg/L	140	2.000	2024-04-08	2024-04-08	<2.000	<2.000	<2.000	<2.000
Cyanide, WAD	µg/L	66	2	2024-04-11	2024-04-11	<2	<2	<2	<2
Dissolved Sodium	µg/L	2300000	50	2024-04-08	2024-04-08	56200	60300	93400	174000
Chloride	µg/L	2300000	100	2024-04-09	2024-04-09	106000	70200	291000	314000
Electrical Conductivity	uS/cm	NA	2	2024-04-08	2024-04-08	1120	937	1960	2320
pH	pH Units		NA	2024-04-08	2024-04-08	7.74	7.85	7.60	7.72

Certified By: Iris Verástegui

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Certificate of Analysis

AGAT WORK ORDER: 24T136609

PROJECT: 12636323 (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St., Vaughan

SAMPLED BY:DB

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

DATE RECEIVED: 2024-04-05

DATE REPORTED: 2024-04-15

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Non-Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5784650-5784662 Metals analysis completed on a filtered sample.
pH is a recommended field analysis taken within 15 minutes of sample collection. Due to the potential for rapid change in sample equilibrium chemistry laboratory results may differ from field measured results
Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Iris Verástegui

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AGAT WORK ORDER: 24T136609

PROJECT: 12636323 (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St., Vaughan

SAMPLED BY:DB

O. Reg. 153(511) - Metals & Inorganics (Water) - Lab Filtered

DATE RECEIVED: 2024-04-05

DATE REPORTED: 2024-04-15

				SAMPLE DESCRIPTION:	QAQC-1
				SAMPLE TYPE:	Water
				DATE SAMPLED:	2024-04-05
Parameter	Unit	G / S	RDL	Date Prepared	Date Analyzed	5784663
Dissolved Antimony	µg/L	20000	1.0	2024-04-12	2024-04-12	<1.0
Dissolved Arsenic	µg/L	1900	1.0	2024-04-12	2024-04-12	<1.0
Dissolved Barium	µg/L	29000	2.0	2024-04-12	2024-04-12	192
Dissolved Beryllium	µg/L	67	0.50	2024-04-12	2024-04-12	<0.50
Dissolved Boron	µg/L	45000	10.0	2024-04-12	2024-04-12	126
Dissolved Cadmium	µg/L	2.7	0.20	2024-04-12	2024-04-12	<0.20
Dissolved Chromium	µg/L	810	2.0	2024-04-12	2024-04-12	<2.0
Dissolved Cobalt	µg/L	66	0.50	2024-04-12	2024-04-12	5.69
Dissolved Copper	µg/L	87	1.0	2024-04-12	2024-04-12	1.3
Dissolved Lead	µg/L	25	0.50	2024-04-12	2024-04-12	<0.50
Dissolved Molybdenum	µg/L	9200	0.50	2024-04-12	2024-04-12	0.58
Dissolved Nickel	µg/L	490	1.0	2024-04-12	2024-04-12	9.0
Dissolved Selenium	µg/L	63	1.0	2024-04-12	2024-04-12	3.0
Dissolved Silver	µg/L	1.5	0.20	2024-04-12	2024-04-12	<0.20
Dissolved Thallium	µg/L	510	0.30	2024-04-12	2024-04-12	<0.30
Dissolved Uranium	µg/L	420	0.50	2024-04-12	2024-04-12	0.96
Dissolved Vanadium	µg/L	250	0.40	2024-04-12	2024-04-12	<0.40
Dissolved Zinc	µg/L	1100	5.0	2024-04-12	2024-04-12	<5.0
Mercury	µg/L	0.29	0.02	2024-04-08	2024-04-08	<0.02
Chromium VI	µg/L	140	2.000	2024-04-08	2024-04-08	<2.000
Cyanide, WAD	µg/L	66	2	2024-04-11	2024-04-11	<2
Dissolved Sodium	µg/L	2300000	50	2024-04-12	2024-04-12	92700
Chloride	µg/L	2300000	100	2024-04-09	2024-04-09	292000
Electrical Conductivity	uS/cm	NA	2	2024-04-08	2024-04-08	2200
pH	pH Units		NA	2024-04-08	2024-04-08	7.69
Lab Filtration Metals						2024/04/11

Certified By: Iris Verástegui

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AGAT WORK ORDER: 24T136609

PROJECT: 12636323 (PO# 735-009803)

CLIENT NAME: GHD LIMITED

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St., Vaughan

SAMPLED BY:DB

O. Reg. 153(511) - Metals & Inorganics (Water) - Lab Filtered

DATE RECEIVED: 2024-04-05

DATE REPORTED: 2024-04-15

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 3: Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition - Non-Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

5784663 Metals analysis completed on a lab filtered sample.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Iris Verástegui

Results relate only to the items tested. Results apply to samples as received.

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Quality Assurance

CLIENT NAME: GHD LIMITED
PROJECT: 12636323 (PO# 735-009803)
SAMPLING SITE:10533 Keele St., Vaughan

AGAT WORK ORDER: 24T136609
ATTENTION TO: Jennifer Balkwill
SAMPLED BY:DB

Trace Organics Analysis

RPT Date: Apr 15, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Water)															
F1 (C6 to C10)	5791562		<25	<25	NA	< 25	92%	60%	140%	80%	60%	140%	76%	60%	140%
F2 (C10 to C16)	5784870		< 100	< 100	NA	< 100	120%	60%	140%	62%	60%	140%	79%	60%	140%
F3 (C16 to C34)	5784870		< 100	< 100	NA	< 100	112%	60%	140%	64%	60%	140%	76%	60%	140%
F4 (C34 to C50)	5784870		< 100	< 100	NA	< 100	108%	60%	140%	79%	60%	140%	80%	60%	140%
O. Reg. 153(511) - PAHs (Water)															
Naphthalene	5784384		< 0.20	< 0.20	NA	< 0.20	97%	50%	140%	77%	50%	140%	102%	50%	140%
Acenaphthylene	5784384		< 0.20	< 0.20	NA	< 0.20	107%	50%	140%	86%	50%	140%	111%	50%	140%
Acenaphthene	5784384		< 0.20	< 0.20	NA	< 0.20	102%	50%	140%	86%	50%	140%	112%	50%	140%
Fluorene	5784384		< 0.20	< 0.20	NA	< 0.20	99%	50%	140%	89%	50%	140%	116%	50%	140%
Phenanthrene	5784384		< 0.10	< 0.10	NA	< 0.10	106%	50%	140%	95%	50%	140%	112%	50%	140%
Anthracene	5784384		< 0.10	< 0.10	NA	< 0.10	98%	50%	140%	93%	50%	140%	101%	50%	140%
Fluoranthene	5784384		< 0.20	< 0.20	NA	< 0.20	113%	50%	140%	96%	50%	140%	112%	50%	140%
Pyrene	5784384		< 0.20	< 0.20	NA	< 0.20	114%	50%	140%	93%	50%	140%	94%	50%	140%
Benzo(a)anthracene	5784384		< 0.20	< 0.20	NA	< 0.20	124%	50%	140%	107%	50%	140%	119%	50%	140%
Chrysene	5784384		< 0.10	< 0.10	NA	< 0.10	107%	50%	140%	90%	50%	140%	114%	50%	140%
Benzo(b)fluoranthene	5784384		< 0.10	< 0.10	NA	< 0.10	106%	50%	140%	81%	50%	140%	101%	50%	140%
Benzo(k)fluoranthene	5784384		< 0.10	< 0.10	NA	< 0.10	121%	50%	140%	90%	50%	140%	113%	50%	140%
Benzo(a)pyrene	5784384		< 0.01	< 0.01	NA	< 0.01	83%	50%	140%	76%	50%	140%	94%	50%	140%
Indeno(1,2,3-cd)pyrene	5784384		< 0.20	< 0.20	NA	< 0.20	86%	50%	140%	82%	50%	140%	98%	50%	140%
Dibenz(a,h)anthracene	5784384		< 0.20	< 0.20	NA	< 0.20	89%	50%	140%	75%	50%	140%	89%	50%	140%
Benzo(g,h,i)perylene	5784384		< 0.20	< 0.20	NA	< 0.20	94%	50%	140%	86%	50%	140%	103%	50%	140%
O. Reg. 153(511) - VOCs (with PHC) (Water)															
Dichlorodifluoromethane	5791562		<0.40	<0.40	NA	< 0.40	81%	50%	140%	93%	50%	140%	93%	50%	140%
Vinyl Chloride	5791562		<0.17	<0.17	NA	< 0.17	78%	50%	140%	69%	50%	140%	92%	50%	140%
Bromomethane	5791562		<0.20	<0.20	NA	< 0.20	115%	50%	140%	95%	50%	140%	111%	50%	140%
Trichlorofluoromethane	5791562		<0.40	<0.40	NA	< 0.40	103%	50%	140%	114%	50%	140%	90%	50%	140%
Acetone	5791562		<1.0	<1.0	NA	< 1.0	103%	50%	140%	91%	50%	140%	85%	50%	140%
1,1-Dichloroethylene	5791562		<0.30	<0.30	NA	< 0.30	79%	50%	140%	80%	60%	130%	109%	50%	140%
Methylene Chloride	5791562		<0.30	<0.30	NA	< 0.30	116%	50%	140%	109%	60%	130%	119%	50%	140%
trans- 1,2-Dichloroethylene	5791562		<0.20	<0.20	NA	< 0.20	96%	50%	140%	97%	60%	130%	102%	50%	140%
Methyl tert-butyl ether	5791562		<0.20	<0.20	NA	< 0.20	113%	50%	140%	97%	60%	130%	94%	50%	140%
1,1-Dichloroethane	5791562		<0.30	<0.30	NA	< 0.30	102%	50%	140%	99%	60%	130%	103%	50%	140%
Methyl Ethyl Ketone	5791562		<1.0	<1.0	NA	< 1.0	100%	50%	140%	95%	50%	140%	97%	50%	140%
cis- 1,2-Dichloroethylene	5791562		<0.20	<0.20	NA	< 0.20	103%	50%	140%	99%	60%	130%	89%	50%	140%
Chloroform	5791562		<0.20	<0.20	NA	< 0.20	113%	50%	140%	111%	60%	130%	98%	50%	140%
1,2-Dichloroethane	5791562		<0.20	<0.20	NA	< 0.20	111%	50%	140%	101%	60%	130%	83%	50%	140%
1,1,1-Trichloroethane	5791562		<0.30	<0.30	NA	< 0.30	111%	50%	140%	105%	60%	130%	102%	50%	140%
Carbon Tetrachloride	5791562		<0.20	<0.20	NA	< 0.20	110%	50%	140%	103%	60%	130%	94%	50%	140%

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Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories

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Quality Assurance

CLIENT NAME: GHD LIMITED
PROJECT: 12636323 (PO# 735-009803)
SAMPLING SITE:10533 Keele St., Vaughan

AGAT WORK ORDER: 24T136609
ATTENTION TO: Jennifer Balkwill
SAMPLED BY:DB

Trace Organics Analysis (Continued)

RPT Date: Apr 15, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Benzene	5791562		<0.20	<0.20	NA	< 0.20	101%	50%	140%	98%	60%	130%	88%	50%	140%
1,2-Dichloropropane	5791562		<0.20	<0.20	NA	< 0.20	103%	50%	140%	98%	60%	130%	83%	50%	140%
Trichloroethylene	5791562		<0.20	<0.20	NA	< 0.20	102%	50%	140%	100%	60%	130%	97%	50%	140%
Bromodichloromethane	5791562		<0.20	<0.20	NA	< 0.20	107%	50%	140%	103%	60%	130%	80%	50%	140%
Methyl Isobutyl Ketone	5791562		<1.0	<1.0	NA	< 1.0	96%	50%	140%	101%	50%	140%	83%	50%	140%
1,1,2-Trichloroethane	5791562		<0.20	<0.20	NA	< 0.20	106%	50%	140%	102%	60%	130%	93%	50%	140%
Toluene	5791562		<0.20	<0.20	NA	< 0.20	104%	50%	140%	102%	60%	130%	79%	50%	140%
Dibromochloromethane	5791562		<0.10	<0.10	NA	< 0.10	107%	50%	140%	101%	60%	130%	72%	50%	140%
Ethylene Dibromide	5791562		<0.10	<0.10	NA	< 0.10	104%	50%	140%	102%	60%	130%	77%	50%	140%
Tetrachloroethylene	5791562		<0.20	<0.20	NA	< 0.20	107%	50%	140%	105%	60%	130%	89%	50%	140%
1,1,1,2-Tetrachloroethane	5791562		<0.10	<0.10	NA	< 0.10	93%	50%	140%	107%	60%	130%	110%	50%	140%
Chlorobenzene	5791562		<0.10	<0.10	NA	< 0.10	105%	50%	140%	102%	60%	130%	77%	50%	140%
Ethylbenzene	5791562		<0.10	<0.10	NA	< 0.10	111%	50%	140%	105%	60%	130%	80%	50%	140%
m & p-Xylene	5791562		<0.20	<0.20	NA	< 0.20	111%	50%	140%	110%	60%	130%	84%	50%	140%
Bromoform	5791562		<0.10	<0.10	NA	< 0.10	114%	50%	140%	94%	60%	130%	103%	50%	140%
Styrene	5791562		<0.10	<0.10	NA	< 0.10	113%	50%	140%	95%	60%	130%	74%	50%	140%
1,1,2,2-Tetrachloroethane	5791562		<0.10	<0.10	NA	< 0.10	87%	50%	140%	111%	60%	130%	71%	50%	140%
o-Xylene	5791562		<0.10	<0.10	NA	< 0.10	113%	50%	140%	111%	60%	130%	82%	50%	140%
1,3-Dichlorobenzene	5791562		<0.10	<0.10	NA	< 0.10	112%	50%	140%	105%	60%	130%	79%	50%	140%
1,4-Dichlorobenzene	5791562		<0.10	<0.10	NA	< 0.10	111%	50%	140%	103%	60%	130%	76%	50%	140%
1,2-Dichlorobenzene	5791562		<0.10	<0.10	NA	< 0.10	108%	50%	140%	103%	60%	130%	74%	50%	140%
n-Hexane	5791562		<0.20	<0.20	NA	< 0.20	118%	50%	140%	98%	60%	130%	105%	50%	140%
O. Reg. 153(511) - VOCs (Water)															
Dichlorodifluoromethane	5791562		<0.40	<0.40	NA	< 0.40	81%	50%	140%	93%	50%	140%	93%	50%	140%
Vinyl Chloride	5791562		<0.17	<0.17	NA	< 0.17	78%	50%	140%	69%	50%	140%	92%	50%	140%
Bromomethane	5791562		<0.20	<0.20	NA	< 0.20	115%	50%	140%	95%	50%	140%	111%	50%	140%
Trichlorofluoromethane	5791562		<0.40	<0.40	NA	< 0.40	103%	50%	140%	114%	50%	140%	90%	50%	140%
Acetone	5791562		<1.0	<1.0	NA	< 1.0	103%	50%	140%	91%	50%	140%	85%	50%	140%
1,1-Dichloroethylene	5791562		<0.30	<0.30	NA	< 0.30	79%	50%	140%	80%	60%	130%	109%	50%	140%
Methylene Chloride	5791562		<0.30	<0.30	NA	< 0.30	116%	50%	140%	109%	60%	130%	119%	50%	140%
trans- 1,2-Dichloroethylene	5791562		<0.20	<0.20	NA	< 0.20	96%	50%	140%	97%	60%	130%	102%	50%	140%
Methyl tert-butyl ether	5791562		<0.20	<0.20	NA	< 0.20	113%	50%	140%	97%	60%	130%	94%	50%	140%
1,1-Dichloroethane	5791562		<0.30	<0.30	NA	< 0.30	102%	50%	140%	99%	60%	130%	103%	50%	140%
Methyl Ethyl Ketone	5791562		<1.0	<1.0	NA	< 1.0	100%	50%	140%	95%	50%	140%	97%	50%	140%
cis- 1,2-Dichloroethylene	5791562		<0.20	<0.20	NA	< 0.20	103%	50%	140%	99%	60%	130%	89%	50%	140%
Chloroform	5791562		<0.20	<0.20	NA	< 0.20	113%	50%	140%	111%	60%	130%	98%	50%	140%
1,2-Dichloroethane	5791562		<0.20	<0.20	NA	< 0.20	111%	50%	140%	101%	60%	130%	83%	50%	140%
1,1,1-Trichloroethane	5791562		<0.30	<0.30	NA	< 0.30	111%	50%	140%	105%	60%	130%	102%	50%	140%
Carbon Tetrachloride	5791562		<0.20	<0.20	NA	< 0.20	110%	50%	140%	103%	60%	130%	94%	50%	140%

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Quality Assurance

CLIENT NAME: GHD LIMITED
PROJECT: 12636323 (PO# 735-009803)
SAMPLING SITE:10533 Keele St., Vaughan

AGAT WORK ORDER: 24T136609
ATTENTION TO: Jennifer Balkwill
SAMPLED BY:DB

Trace Organics Analysis (Continued)

RPT Date: Apr 15, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Benzene	5791562		<0.20	<0.20	NA	< 0.20	101%	50%	140%	98%	60%	130%	88%	50%	140%
1,2-Dichloropropane	5791562		<0.20	<0.20	NA	< 0.20	103%	50%	140%	98%	60%	130%	83%	50%	140%
Trichloroethylene	5791562		<0.20	<0.20	NA	< 0.20	102%	50%	140%	100%	60%	130%	97%	50%	140%
Bromodichloromethane	5791562		<0.20	<0.20	NA	< 0.20	107%	50%	140%	103%	60%	130%	80%	50%	140%
Methyl Isobutyl Ketone	5791562		<1.0	<1.0	NA	< 1.0	96%	50%	140%	101%	50%	140%	83%	50%	140%
1,1,2-Trichloroethane	5791562		<0.20	<0.20	NA	< 0.20	106%	50%	140%	102%	60%	130%	93%	50%	140%
Toluene	5791562		<0.20	<0.20	NA	< 0.20	104%	50%	140%	102%	60%	130%	79%	50%	140%
Dibromochloromethane	5791562		<0.10	<0.10	NA	< 0.10	107%	50%	140%	101%	60%	130%	72%	50%	140%
Ethylene Dibromide	5791562		<0.10	<0.10	NA	< 0.10	104%	50%	140%	102%	60%	130%	77%	50%	140%
Tetrachloroethylene	5791562		<0.20	<0.20	NA	< 0.20	107%	50%	140%	105%	60%	130%	89%	50%	140%
1,1,1,2-Tetrachloroethane	5791562		<0.10	<0.10	NA	< 0.10	93%	50%	140%	107%	60%	130%	110%	50%	140%
Chlorobenzene	5791562		<0.10	<0.10	NA	< 0.10	105%	50%	140%	102%	60%	130%	77%	50%	140%
Ethylbenzene	5791562		<0.10	<0.10	NA	< 0.10	111%	50%	140%	105%	60%	130%	80%	50%	140%
m & p-Xylene	5791562		<0.20	<0.20	NA	< 0.20	111%	50%	140%	110%	60%	130%	84%	50%	140%
Bromoform	5791562		<0.10	<0.10	NA	< 0.10	114%	50%	140%	94%	60%	130%	103%	50%	140%
Styrene	5791562		<0.10	<0.10	NA	< 0.10	113%	50%	140%	95%	60%	130%	74%	50%	140%
1,1,2,2-Tetrachloroethane	5791562		<0.10	<0.10	NA	< 0.10	87%	50%	140%	111%	60%	130%	71%	50%	140%
o-Xylene	5791562		<0.10	<0.10	NA	< 0.10	113%	50%	140%	111%	60%	130%	82%	50%	140%
1,3-Dichlorobenzene	5791562		<0.10	<0.10	NA	< 0.10	112%	50%	140%	105%	60%	130%	79%	50%	140%
1,4-Dichlorobenzene	5791562		<0.10	<0.10	NA	< 0.10	111%	50%	140%	103%	60%	130%	76%	50%	140%
1,2-Dichlorobenzene	5791562		<0.10	<0.10	NA	< 0.10	108%	50%	140%	103%	60%	130%	74%	50%	140%
n-Hexane	5791562		<0.20	<0.20	NA	< 0.20	118%	50%	140%	98%	60%	130%	105%	50%	140%

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

Certified By:



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Quality Assurance

CLIENT NAME: GHD LIMITED
PROJECT: 12636323 (PO# 735-009803)
SAMPLING SITE:10533 Keele St., Vaughan

AGAT WORK ORDER: 24T136609
ATTENTION TO: Jennifer Balkwill
SAMPLED BY:DB

Water Analysis

RPT Date: Apr 15, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Water)															
Dissolved Antimony	5764392		<1.0	<1.0	NA	< 1.0	105%	70%	130%	110%	80%	120%	115%	70%	130%
Dissolved Arsenic	5764392		<1.0	<1.0	NA	< 1.0	97%	70%	130%	102%	80%	120%	101%	70%	130%
Dissolved Barium	5764392		78.5	79.8	1.6%	< 2.0	105%	70%	130%	114%	80%	120%	116%	70%	130%
Dissolved Beryllium	5764392		<0.50	<0.50	NA	< 0.50	107%	70%	130%	115%	80%	120%	113%	70%	130%
Dissolved Boron	5764392		<10.0	<10.0	NA	< 10.0	109%	70%	130%	112%	80%	120%	113%	70%	130%
Dissolved Cadmium	5764392		<0.20	<0.20	NA	< 0.20	99%	70%	130%	95%	80%	120%	110%	70%	130%
Dissolved Chromium	5764392		<2.0	<2.0	NA	< 2.0	98%	70%	130%	108%	80%	120%	93%	70%	130%
Dissolved Cobalt	5764392		<0.50	<0.50	NA	< 0.50	97%	70%	130%	100%	80%	120%	91%	70%	130%
Dissolved Copper	5764392		1.3	2.5	NA	< 1.0	101%	70%	130%	100%	80%	120%	94%	70%	130%
Dissolved Lead	5764392		<0.50	<0.50	NA	< 0.50	103%	70%	130%	99%	80%	120%	97%	70%	130%
Dissolved Molybdenum	5764392		<0.50	<0.50	NA	< 0.50	97%	70%	130%	102%	80%	120%	94%	70%	130%
Dissolved Nickel	5764392		1.1	1.9	NA	< 1.0	97%	70%	130%	102%	80%	120%	94%	70%	130%
Dissolved Selenium	5764392		1.6	2.8	NA	< 1.0	99%	70%	130%	108%	80%	120%	107%	70%	130%
Dissolved Silver	5764392		<0.20	<0.20	NA	< 0.20	90%	70%	130%	98%	80%	120%	84%	70%	130%
Dissolved Thallium	5764392		<0.30	<0.30	NA	< 0.30	101%	70%	130%	103%	80%	120%	97%	70%	130%
Dissolved Uranium	5764392		0.74	0.78	NA	< 0.50	98%	70%	130%	101%	80%	120%	94%	70%	130%
Dissolved Vanadium	5764392		<0.40	<0.40	NA	< 0.40	106%	70%	130%	109%	80%	120%	102%	70%	130%
Dissolved Zinc	5764392		7.1	13.8	NA	< 5.0	102%	70%	130%	101%	80%	120%	93%	70%	130%
Mercury	5784848		<0.02	<0.02	NA	< 0.02	103%	70%	130%	100%	80%	120%	97%	70%	130%
Chromium VI	5784650	5784650	<2.000	<2.000	NA	< 2	103%	70%	130%	103%	80%	120%	96%	70%	130%
Cyanide, WAD	5789233		<2	<2	NA	< 2	98%	70%	130%	106%	80%	120%	97%	70%	130%
Dissolved Sodium	5764392		2260	2680	17.0%	< 50	119%	70%	130%	94%	80%	120%	94%	70%	130%
Chloride	5784656	5784656	70200	70100	0.1%	< 100	95%	70%	130%	98%	80%	120%	104%	70%	130%
Electrical Conductivity	5784384		2790	2620	6.3%	< 2	100%	90%	110%						
pH	5784384		7.87	7.93	0.8%	NA	98%	90%	110%						
O. Reg. 153(511) - Metals & Inorganics (Water) - Lab Filtered															
Dissolved Antimony	5786366		<1.0	<1.0	NA	< 1.0	101%	70%	130%	100%	80%	120%	99%	70%	130%
Dissolved Arsenic	5786366		<1.0	<1.0	NA	< 1.0	101%	70%	130%	106%	80%	120%	107%	70%	130%
Dissolved Barium	5786366		62.0	61.6	0.6%	< 2.0	101%	70%	130%	101%	80%	120%	97%	70%	130%
Dissolved Beryllium	5786366		<0.50	<0.50	NA	< 0.50	99%	70%	130%	109%	80%	120%	98%	70%	130%
Dissolved Boron	5786366		59.4	55.3	7.1%	< 10.0	99%	70%	130%	109%	80%	120%	96%	70%	130%
Dissolved Cadmium	5786366		<0.20	<0.20	NA	< 0.20	100%	70%	130%	104%	80%	120%	101%	70%	130%
Dissolved Chromium	5786366		<2.0	<2.0	NA	< 2.0	99%	70%	130%	102%	80%	120%	102%	70%	130%
Dissolved Cobalt	5786366		1.20	1.28	NA	< 0.50	109%	70%	130%	104%	80%	120%	102%	70%	130%
Dissolved Copper	5786366		<1.0	<1.0	NA	< 1.0	103%	70%	130%	102%	80%	120%	101%	70%	130%
Dissolved Lead	5786366		<0.50	<0.50	NA	< 0.50	102%	70%	130%	99%	80%	120%	96%	70%	130%
Dissolved Molybdenum	5786366		18.3	16.7	9.1%	< 0.50	107%	70%	130%	108%	80%	120%	106%	70%	130%
Dissolved Nickel	5786366		2.7	4.1	NA	< 1.0	108%	70%	130%	103%	80%	120%	101%	70%	130%
Dissolved Selenium	5786366		2.2	1.6	NA	< 1.0	102%	70%	130%	110%	80%	120%	103%	70%	130%

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Quality Assurance

CLIENT NAME: GHD LIMITED
PROJECT: 12636323 (PO# 735-009803)
SAMPLING SITE:10533 Keele St., Vaughan

AGAT WORK ORDER: 24T136609
ATTENTION TO: Jennifer Balkwill
SAMPLED BY:DB

Water Analysis (Continued)

RPT Date: Apr 15, 2024			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Dissolved Silver	5786366		<0.20	<0.20	NA	< 0.20	109%	70%	130%	103%	80%	120%	92%	70%	130%
Dissolved Thallium	5786366		<0.30	<0.30	NA	< 0.30	99%	70%	130%	99%	80%	120%	96%	70%	130%
Dissolved Uranium	5786366		3.24	3.22	0.6%	< 0.50	99%	70%	130%	105%	80%	120%	107%	70%	130%
Dissolved Vanadium	5786366		0.44	0.48	NA	< 0.40	108%	70%	130%	108%	80%	120%	108%	70%	130%
Dissolved Zinc	5786366		<5.0	<5.0	NA	< 5.0	100%	70%	130%	106%	80%	120%	102%	70%	130%
Mercury	5784848		<0.02	<0.02	NA	< 0.02	103%	70%	130%	100%	80%	120%	97%	70%	130%
Chromium VI	5784650	5784650	<2.000	<2.000	NA	< 2	103%	70%	130%	103%	80%	120%	96%	70%	130%
Cyanide, WAD	5789233		<2	<2	NA	< 2	98%	70%	130%	106%	80%	120%	97%	70%	130%
Dissolved Sodium	5786366		89900	91700	2.0%	< 50	102%	70%	130%	104%	80%	120%	95%	70%	130%
Chloride	5784656	5784656	70200	70100	0.1%	< 100	95%	70%	130%	98%	80%	120%	104%	70%	130%
Electrical Conductivity	5784384		2790	2620	6.3%	< 2	100%	90%	110%						
pH	5784384		7.87	7.93	0.8%	NA	98%	90%	110%						

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

Certified By: Iris Verástegui

AGAT Laboratories is accredited to ISO/IEC 17025 by the Canadian Association for Laboratory Accreditation Inc. (CALA) and/or Standards Council of Canada (SCC) for specific tests listed on the scope of accreditation. AGAT Laboratories (Mississauga) is also accredited by the Canadian Association for Laboratory Accreditation Inc. (CALA) for specific drinking water tests. Accreditations are location and parameter specific. A complete listing of parameters for each location is available from www.cala.ca and/or www.scc.ca. The tests in this report may not necessarily be included in the scope of accreditation. RPDs calculated using raw data. The RPD may not be reflective of duplicate values shown, due to rounding of final results.

Results relate only to the items tested. Results apply to samples as received.

AGAT Laboratories

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http://www.agatlabs.com

Method Summary

CLIENT NAME: GHD LIMITED

AGAT WORK ORDER: 24T136609

PROJECT: 12636323 (PO# 735-009803)

ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St., Vaughan

SAMPLED BY:DB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Fluorene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(a)anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Chrysene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
2-and 1-methyl Napthalene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Sediment			N/A
F1 (C6 to C10)	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	modified from MOE PHC-E3421	P&T GC/FID
Toluene-d8	VOL-91- 5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
F2 (C10 to C16)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F2 (C10 to C16) minus Naphthalene	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F3 (C16 to C34)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F3 (C16 to C34) minus PAHs	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F4 (C34 to C50)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5010	modified from MOE PHC-E3421	BALANCE
Terphenyl	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Dichlorodifluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

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Method Summary

CLIENT NAME: GHD LIMITED
AGAT WORK ORDER: 24T136609
PROJECT: 12636323 (PO# 735-009803)
ATTENTION TO: Jennifer Balkwill
SAMPLING SITE:10533 Keele St., Vaughan
SAMPLED BY:DB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Vinyl Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromomethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Acetone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methylene Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
trans- 1,2-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl tert-butyl ether	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
cis- 1,2-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chloroform	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Benzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromodichloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Toluene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Dibromochloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chlorobenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Ethylbenzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

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Method Summary

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ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St., Vaughan

SAMPLED BY:DB

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

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AGAT WORK ORDER: 24T136609

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ATTENTION TO: Jennifer Balkwill

SAMPLING SITE:10533 Keele St., Vaughan

SAMPLED BY:DB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Water Analysis			
Dissolved Antimony	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Arsenic	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Barium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Beryllium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Boron	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cadmium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Chromium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cobalt	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Copper	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Lead	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Molybdenum	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Nickel	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Selenium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Silver	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Thallium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Uranium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Vanadium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Zinc	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Mercury	MET-93-6100	modified from EPA 245.2 and SM 3112 B	CVAAS
Chromium VI	INOR-93-6073	modified from SM 3500-CR B	LACHAT FIA
Cyanide, WAD	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	SEGMENTED FLOW ANALYSIS
Dissolved Sodium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP/MS
Chloride	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Electrical Conductivity	INOR-93-6000	SM 2510 B	PC TITRATE
pH	INOR-93-6000	modified from SM 4500-H+ B	PC TITRATE
Lab Filtration Metals	SR-78-9001		FILTRATION

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Have feedback? Scan here for a quick survey!

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
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webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: GHD Ltd.
Contact: Jenn Balkwill
Address: 455 Phillip St., Waterloo, ON N2L 3X2
Phone: Fax:
Reports to be sent to:
1. Email: Jennifer.Balkwill@GHD.com
2. Email: see SSOW

Project Information:

Project: 12636323
Site Location: 10533 Keele St., Vaughan
Sampled By: DB
AGAT Quote #: PO: 735-001803
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☒ No ☐
Company:
Contact:
Address:
Email:

Regulatory Requirements:

(Please check all applicable boxes)

☒ Regulation 153/04
Table 3 (Indicate One)
☒ Ind/Com
☐ Res/Park
☐ Agriculture
Soil Texture (Check One)
☒ Coarse
☐ Fine

☐ Regulation 406
Table (Indicate One)
☐ Ind/Com
☐ Res/Park
☐ Agriculture

☐ Regulation 558
☐ CCME

☐ Sewer Use
☐ Sanitary ☐ Storm
Region

☐ Prov. Water Quality Objectives (PWQO)
☐ Other
Indicate One

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

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

Legal Sample ☐

Sample Matrix Legend

GW	Ground Water	**SD**	Sediment
O	Oil	**SW**	Surface Water
P	Paint	**R**	Rock/Shale
S	Soil		

Laboratory Use Only

Work Order #: 24 T136609
Cooler Quantity: 1 large
Arrival Temperatures: 0.9 | 1.2 | 1.5
Depot Temperatures: | | |
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: loose ice

Turnaround Time (TAT) Required:

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs	VOC	O. Reg 153: PAHs	O. Reg 153: PCBs: Aroclors ☐	O. Reg 406: Regulation 406 Characterization Package	O. Reg 406: pH, Metals, BTEX, F1-F4	O. Reg 406: EC, SAR	O. Reg 406: Regulation 406 SPLP Rainwater Leach	O. Reg 406: mSPLP: ☐ Metals ☐ VOCs ☐ SVOCs ☐ OC	O. Reg 558: Landfill Disposal Characterization TCLP:	O. Reg 558: TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Corrosivity: ☐ Moisture ☐ Sulphide	PHCs / VOCs	Trip Blank (VOCs)	Potentially Hazardous or High Concentration (Y/N)
1. MW1-24	5M124	PM AM PM	13	GW		Y	X				X										X		
2. MW2-24	"	↓ AM PM	13	"		Y	X				X										X		
3. MW3-24	"	AM AM PM	13	"		Y	X				X										X		
4. MW4-24	"	↓ AM PM	13	"		Y	X				X										X		
5. DUP-1	↓	- AM PM	13	↓	Total metals not filtered	Y	X				X										X		
6. Trip Blank	-	- AM PM	2	-																		X	
7.		AM PM																					
8.		AM PM																					
9.		AM PM																					
10.		AM PM																					
11.		AM PM																					

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
DB	5/4/24	1100	Andy Jin	April 5th, 2024	3:55 p.m
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

Page 1 of 1

N°: T-155215

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

Document ID: DIV-TR-1513_023

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Date Issued: Jan 16, 2024

