Phase II Environmental Site Assessment
15374 and 15450 Woodbine Avenue
Gormley, Ontario

CLIENT:
Treasure Hill Homes
1-1681 Langstaff Road
Vaughan, Ontario, L4K 5T3

ATTENTION:
Mr. Jason Bottoni
Vice President

TYPE OF DOCUMENT:
Final Report

PROJECT NUMBER:
BRM-21010864-B0

PREPARED BY:
EXP Services Inc.
220 Commerce Valley Drive West, Suite 110
Markham, Ontario L3T 0A8
t: 905.695.3217
f: 905.695.0169

DATE SUBMITTED:
June 17, 2021

Legal Notification

This report was prepared by EXP Services Inc. for the account of *Treasure Hill Homes* (hereinafter referred to as 'the Client').

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. EXP Services Inc. accepts no responsibility for damages, if any, suffered by any third-party as a result of decisions made or actions based on this report.

Table of Contents

List of Appendices

Executive Summary

EXP Services Inc. (EXP) was retained by Treasure Hill Homes (hereinafter referred to as 'the Client') to conduct a Phase II Environmental Site Assessment (ESA) of the properties located at 15374 and 15450 Woodbine Avenue, Gormley, Ontario (hereinafter referred to as 'the Site') as shown on Figure 1: Site Location Plan.

EXP understands that this Phase II ESA is required for due diligence purposes in support of a proposed real estate transaction and that the filing of a Record of Site Condition (RSC) is not required at this time.

The purpose of this Phase II ESA was to assess whether the Areas of Potential Environmental Concern (APECs) identified in the 2021 EXP Phase I ESA had resulted in adverse subsurface environmental impacts to the Site. The methodologies of this investigation were completed in general accordance with Canadian Standards Association (CSA) Z769-00 (R2018) and in accordance with generally accepted professional practices. Subject to this standard of care, EXP makes no express or implied warranties regarding its services and no third-party beneficiaries are intended.

It is understood that the Site is proposed to be redeveloped for residential use, including single-family dwellings, townhouse blocks and associated municipal roads and underground services. It is noted that this report is not intended for geotechnical design, construction planning, filing a Record of Site Condition (RSC) or for excess soils disposal purposes during construction.

The Site is located on the west side of Woodbine Avenue, approximately 230 m north of Aurora Road at the properties with the municipal addresses of 15374 and 15450 Woodbine Avenue, Gormley, Ontario. The Site is roughly rectangular in shape and measures approximately 333,000 m^2 (82.29 acres) in area according to the York Region Interactive Map (YRIM). The Site is currently under agricultural or other use, consisting primarily of open cornfields with several structures near the northeast corner.

Based on the results of the Phase II ESA conducted at the Site, the following findings are presented:

1) The drilling fieldwork for this Phase II ESA was conducted in conjunction with the geotechnical investigation of the Site between the period of May 26 and June 2, 2021. The geotechnical investigation consisted of twenty (20) boreholes drilled to depths ranging from 7.7 to 8.1 mbgs. Due to the areas of potential environmental concerns identified during the Phase I ESA, eight (8) additional boreholes (designated as BH101 to BH108) were drilled on Site to depths of 3.7 and 6.7 mbgs. Monitoring wells were installed in the boreholes BH6, BH11, BH18, BH102, BH103 and BH106 for groundwater monitoring and/or sampling.

2) In general, the stratigraphy of the site, as revealed in the boreholes, generally comprised fill and/or topsoil overlying native deposits of silty sand, sandy silt, silt, clayey silt and sandy silt till.

3) Fill was encountered surficially in Boreholes 3, 4, 7, 8 and 14. The fill in Borehole 3 and the upper level of Borehole 7 varied from silty sand to silt with topsoil inclusions. The fill in Boreholes 4, 7, 8 and 14 primarily consisted of topsoil. Moisture contents of the moist to very moist fill ranged from 9 to 30%. The fill extended to depths of approximately 1.5 to 3.7 m below existing grade. The deepest fill (i.e. greater than 3.5 m) is topsoil fill in Boreholes 4 and 7 located at the west part of 15450 Woodbine Avenue (north property). Fill was encountered in all 100-series boreholes, with the exception of borehole BH103. In general, the fill in the 100-series boreholes composed of moist to very moist sandy silt, silt with topsoil inclusion; brick or wood pieces were also found in the fill in boreholes BH101 and BH104. The fill unit in borehole BH105 (located in the open field at the northwest portion of the Site) extended to 4.0 mbgs. However, the fill unit within the remaining 100-series boreholes (located within proximity of the site

buildings) extended from surface (or beneath the concrete slab at borehole BH102) to depths ranging from 0.8 m to 2.2 mbgs.

4) No visual or olfactory evidence of petroleum hydrocarbon impact was detected in the fill or native soil samples. Soil vapour readings from soil samples were generally measured to be at low to negligible levels with the exception of BH102 where elevated soil vapour levels were identified. The soil samples with elevated soil vapour concentrations were selected for laboratory analysis.

5) Water levels in the installed monitoring wells (BH102, BH103 and BH106) were recorded in subsequent monitoring events on June 7 and 8, 2021, as shown on Table 5. Based on the static water levels measured on June 7, 2021, the groundwater levels in monitoring wells in BH6, BH11, BH18, BH102, BH103 and BH106 ranged from approximately 0.56 to 3.41 mbgs (corresponding to elevations of approximately 291.01 to 300.07 metres above mean sea level.

6) No apparent petroleum odours, sheens or free-phased petroleum products were observed in any of the monitoring wells.

7) The soil and groundwater data were compared to the Ontario Ministry of Environment, Conservation and Parks (MECP) Table 1 Full Depth Generic Site Condition Standards (SCS) for Residential/Parkland/Institutional/Industrial/Commercial/Community (RPI and ICC) property uses, medium and fine-textured soil listed in the MECP document entitled "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act", dated April 15, 2011 (the "MECP Table 1 SCS");

8) Selected soil samples were submitted for analysis of volatile organic compounds (VOCs), benzene, toluene, ethylbenzene and xylene (BTEX), petroleum hydrocarbons (PHCs) F1 to F4, metals and inorganic parameters, organochlorine pesticides (OCPs), and polychlorinated biphenyls (PCBs). The concentrations of the analyzed parameters in all submitted soil samples met the MECP Table 1 SCS for Residential / Parkland / Institutional / Industrial / Commercial / Community property uses.

9) Selected groundwater samples were submitted for analysis of VOCs, BTEX, and PHCs. The concentrations of the analyzed parameters in all submitted groundwater samples met the MECP Table 1 SCS for Residential / Parkland / Institutional / Industrial / Commercial / Community property uses.

Based on the findings of this Phase II ESA, the following conclusion and recommendations are presented.

- The laboratory analytical results for all tested soil and groundwater samples met the applicable MECP Table 1 Site Condition Standards for Residential / Parkland / Institutional / Industrial / Commercial / Community property uses, medium to fine-textured soils. No further investigation is considered warranted for the Site at this time.
- Groundwater monitoring wells installed during this investigation on Site may be maintained for on-going monitoring purposes. If the monitoring wells are no longer required, they should be decommissioned by a licensed well contractor in accordance with Ontario Regulation 903.

1. Introduction

1.1 General

EXP Services Inc. (EXP) was retained by Treasure Hill Homes (hereinafter referred to as 'the Client') to conduct a Phase II Environmental Site Assessment (ESA) of the properties located at 15374 and 15450 Woodbine Avenue, Gormley, Ontario (hereinafter referred to as the 'Site') as shown on Figure 1: Site Location Plan.

The purpose of this Phase II ESA was to assess whether the Areas of Potential Environmental Concern (APECs) identified in the 2021 EXP Phase I ESA had resulted in adverse subsurface environmental impacts to the Site. EXP understands that this Phase II ESA is required for due diligence purposes in support of a proposed real estate transaction and that the filing of a Record of Site Condition (RSC) is not required at this time.

It is understood that the Site is proposed to be redeveloped for residential use, including single-family dwellings, townhouse blocks and associated municipal roads and underground services. It is noted that this report is not intended for geotechnical design, construction planning, filing a Record of Site Condition (RSC) or for excess soils disposal purposes during construction.

1.2 Site Description and Background

The Site is located on the west side of Woodbine Avenue, approximately 230 m north of Aurora Road at the properties with the municipal addresses of 15374 and 15450 Woodbine Avenue, Gormley, Ontario. The Site is roughly rectangular in shape and measures approximately 333,000 m^2 (82.29 acres) in area according to the York Region Interactive Map (YRIM).

The Site is currently under agricultural or other use, consisting primarily of open cornfields with several structures near the northeast corner. Clusters of trees were observed near the on-site structures and along the property limits. A tributary of Humber River (East Branch) situated in a south-to-north orientation transects the eastern extent of the Site. Structures at the northeast portion of the Site consisted of a residential structure (the 'House', currently boarded-up and inaccessible), a large barn/stable structure (the 'Barn/Stable', located southwest of the House), and a concrete pad which is presumably remnants of a storage area of a former barn/workshop structure located west of the House). No other permanent structures are present on the Site at the time of this Phase II ESA. As shown on the reviewed aerial photographs, a former residential dwelling, a former barn and a former shed appear to have been demolished in 2017 and 2018.

Throughout the years, the Site generally consisted of open agricultural fields with the northeast portion of the Site developed with existing and former structures dating from prior to the mid-1950s. Several of the rural structures were demolished in the late 1970s and replaced with the Barn/Stable and another structure (the former barn) located northeast of the Barn/Stable.

To the north and south, the Site is bounded by agricultural properties. To the east, the Site is bounded by Woodbine Avenue followed by agricultural properties. To the west, the Site is bounded by Highway 404 followed by a commercial retail plaza with office buildings.

1.3 Scope of Work

The Phase II ESA program is summarized below:

- Conduct underground utility clearance at the proposed borehole locations by Ontario One Call and a private utility locator to clear the boreholes of potential underground utilities prior to drilling;
- In conjunction with the geotechnical investigation which included the twenty (20) boreholes (designated as BH1 to BH20) drilled to depths ranging from 7.7 to 8.1 m below ground surface (mbgs), drill eight (8) boreholes (designated as BH101 to BH108) to depths of 3.6 m and 6.7 mbgs;
- In conjunction with the geotechnical investigation, install a total of six (6) monitoring wells in selected boreholes for groundwater level measurement and/or groundwater sampling;
- Conduct a field screening program on the recovered soil samples from selected boreholes for total organic vapours using a portable photo-ionizing detector (PID);
- Develop, purge and sample the newly installed monitoring wells to assess groundwater conditions and record water levels;
- Submit selected soil samples for chemical analysis of volatile organic compounds (VOCs), benzene, toluene, ethylbenzene and xylene (BTEX), petroleum hydrocarbons (PHCs) F1 to F4, organochlorine pesticides (OCPs), polychlorinated biphenyls (PCBs), as well as metals, hydrides-forming metals and other regulated parameters (collectively as metals and inorganic parameters);
- Submit groundwater samples from the monitoring wells for chemical analysis of VOCs, BTEX, PHCs (F1 to F4); and,
- Complete a report outlining the results of the investigation. The analytical results will be compared to the applicable standards listed in "Soil, Groundwater and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act."

EXP understands that this work is not being completed for the purposes of filing of an RSC with the Ontario MECP. Should an RSC filing be required for this Site in the future, additional work may be required to meet the requirements of the MECP RSC Regulation (O. Reg. 153/04).

1.4 Site Assessment Criteria

The assessment criteria, Site Condition Standards (SCS), applicable to a given site in Ontario are established under subsection 168.4(1) of the Environmental Protection Act. Tabulated generic criteria are provided in the Ministry of the Environment, Conservation and Parks (MECP) 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 MECP Standards"). These standards are based on site sensitivity (sensitive or non-sensitive), groundwater use (potable or non-potable), property use (residential, parkland, institutional, commercial, industrial, community and agricultural/other), soil type (coarse or medium to fine textured) and restoration depth (full or stratified restoration). In addition, site specific criteria may be established on the basis of the findings of a Risk Assessment carried out in accordance with Part IX and Schedule C of Ontario Regulation 153/04 (O. Reg. 153/04).

The MECP Standards specify Site Condition Standards (SCS) for soil, groundwater and sediment that are tabulated as follows:

Table 1 - Applicable to sites where background concentrations must be met (full depth) such as sensitive sites where site-specific criteria have not been derived;

Table 2 - Applicable to sites with potable groundwater and full depth restoration;

Table 3 - Applicable to sites with non-potable groundwater and full depth restoration;

Table 4 - Applicable to sites with potable groundwater and stratified restoration;

Table 5 - Applicable to sites with non-potable groundwater and stratified restoration;

Table 6 - Applicable to sites with potable groundwater and less than 2 metres of overburden above bedrock;

Table 7 - Applicable to sites with non-potable groundwater and less than 2 metres of overburden above bedrock;

Table 8 - Applicable to sites with potable groundwater and less than 30 metres from a water body; and,

Table 9 - Applicable to sites with non-potable groundwater and less than 30 metres from a water body.

For assessment purposes, the Table 1 Full Depth Generic Site Condition Standards for Residential/Parkland/ Institutional/Industrial/Commercial/Community (RPI and ICC) property uses were selected as representative of current conditions. The selection of these standards is based on the following factors:

- The current use of the Site is agricultural/other and residential;
- The intended future use of the Site is residential;
- The Site includes lands that are defined as an area of natural significance. The wetland on the east-end of the Site was identified by the Ministry of Natural Resources and Forestry (MNRF) as having environmental significance;
- The Site includes a tributary of the Holland River (East Branch), which transects the property on the east-end;
- No active water supply wells are suspected to be present on, adjacent to or within 30 m of the Site;
- There is no intention to carry out a stratified restoration at the Site;
- The pH levels of representative soil samples were generally between 5 and 9 for surface soils and between 5 and 11 for subsurface soils;
- Soil at the Site was generally observed to be medium and fine-textured; and,
- More than two-thirds of the Site has an overburden thickness greater than 2 metres.

2. Methodology

2.1 Drilling

Prior to the commencement of drilling activities, the locations of public and private underground utilities at the Site were located by Ontario One Call and by using a private locator to avoid contacting them during the subsurface investigation program.

The drilling fieldwork for this Phase II ESA was conducted in conjunction with the geotechnical investigation of the Site between the period of May 26 and June 2, 2021. The geotechnical investigation consisted of twenty (20) boreholes drilled to depths ranging from 7.7 to 8.1 mbgs. Due to the areas of potential environmental concerns identified during the Phase I ESA, eight (8) additional boreholes (designated as BH101 to BH108) were drilled on Site to depths of 3.7 and 6.7 mbgs. Monitoring wells were installed in the boreholes BH6, BH11, BH18, BH102, BH103 and BH106 for groundwater monitoring and/or sampling.

Approximate borehole locations are shown on Figure 2: Borehole Location Plan. The rationale for the borehole locations is summarized in the table below:

TABLE 1 – RATIONALE OF BOREHOLE LOCATIONS

BOREHOLE ID	MEDIA	LOCATION	SOURCE/RATIONALE
BH 101	Soil	Exterior borehole, located within footprint of former residential house	Assess the presence and environmental quality of fill within the footprint of former residential dwelling, and potential subsurface impacts from potential historical use of heating oil in the former residential structure.
BH 102	Soil Groundwater	Exterior borehole, located in the vicinity of a former barn/workshop and associated storage area	Assess the environmental quality of soil within the footprint of former Barn, and potential subsurface impacts from potential handling or storage materials in and around the former barn/workshop structure.
BH 103	Soil Groundwater	Exterior borehole, located adjacent to remnants of former fill and vent pipes of a potential AST in basement of residential house	Assess potential subsurface impacts from potential historical use of heating oil in the existing House.
BH 104	Soil	Exterior borehole, located adjacent to the grate drain inside the existing Barn/Stable	Assess potential subsurface impacts from the grate drain inside the Barn/Stable.
BH 105	Soil	Exterior borehole, within area where significant previous ground disturbance was noted	Assess the presence and environmental quality of fill within the area where fill may have been placed.
BH 106	Soil Groundwater	Exterior borehole, located adjacent to the grate drain inside the existing Barn/Stable	Assess potential subsurface impacts from the grate drain inside the Barn/Stable.

BOREHOLE ID	MEDIA	LOCATION	SOURCE/RATIONALE
BH 107	Soil	Exterior borehole, within area of former horse tracks	Assess near surface fill for near surface impacts from potential historical use of dust suppressant.
BH 108	Soil	Exterior borehole, located within footprint of former shed	Assess the presence and environmental quality of fill within the footprint of the former shed, and potential subsurface impacts from potential handling or storage materials in and around the former shed.
BH 3	Soil	Exterior borehole, southwest portion of the agricultural field	General characterization of fill / topsoil fill
BH 4	Soil	Exterior borehole, northwest portion of the agricultural field	General characterization of fill / topsoil fill
BH 7	Soil	Exterior borehole, southeast portion of the agricultural field	General characterization of fill / topsoil fill
BH 12	Soil	Exterior borehole, south-central portion of the agricultural field	General characterization of fill / topsoil fill
BH 14	Soil	Exterior borehole, east-central portion of the agricultural field	General characterization of fill / topsoil fill
BH 16	Soil	Exterior borehole, within area of former horse tracks	Assess near surface fill for near surface impacts from potential historical use of dust suppressant.

All boreholes were drilled by a specialist drilling contractor utilizing a track-mounted drilling rig with solid and hollow stem continuous flight augers.

The drilling activities were continuously monitored by EXP to record the physical characteristics of the soil, depth of soil sample collection and total depth of boreholes. No petroleum-based greases or solvents were used during the drilling procedures. Field observations are summarized on the borehole logs provided in Appendix B. Summaries of analytical results are presented in Appendix C. Copies of the laboratory Certificates of Analysis for the tested soil and groundwater samples are provided in Appendix D.

Representative samples of the subsoils were recovered in the boreholes at regular intervals using a split-spoon sampler. The sampling equipment was cleaned between sampling intervals using phosphate-free soap followed by rinsing with distilled water to reduce the potential for cross-contamination.

The fieldwork was supervised by an EXP environmental engineering staff member who monitored the drilling and sampling operations and logged the samples from the borings. The borehole locations were established by EXP personnel. Ground surface elevations at the borehole locations were derived from Can-Net elevations with the use of a Trimble TSC3 Controller.

2.2 Soil Sampling

Dedicated nitrile gloves (i.e., one pair per sample) were used during sample handling. In boreholes where volatile parameters may be present, a portion of each soil sample was placed in a sealed plastic bag and allowed to reach ambient temperature prior to field screening using a portable photo-ionizing detector (PID). The measurements were made by inserting the instrument's probe into the plastic bag while manipulating the sample to ensure volatilization of the soil gases. These readings provide a real-time indication of the relative concentration of combustible vapours encountered in the subsurface during drilling and are used to aid in the assessment of the

vertical and horizontal extent of soil contamination and the selection of soil samples for analysis. The vapour readings, in parts per million by volume (ppmv), are provided in the borehole logs in Appendix B. Samples were preserved in moisture tight containers and returned to EXP's laboratory for visual, textural and olfactory classification.

A portion of selected soil samples was field preserved using laboratory-supplied vials filled and pre-weighed with methanol. The field preservation reduces the potential for induced volatilization during storage/transport prior to analysis for VOCs, BTEX and PHC F1 parameters. Soil samples intended for other non-volatile chemical parameters were placed directly into pre-cleaned, laboratory-supplied glass sample jars or vials. All soil samples were placed in clean ice-packed coolers prior to and during transportation to the subcontract laboratory, *Bureau Veritas Laboratories* of Mississauga, Ontario. The samples were transported and submitted under Chain of Custody documentation.

Soil samples were selected for laboratory analysis based on their visual appearance, olfactory evidence of impacts, area of potential environmental concern being investigated, Site background and/or potential water-bearing zones, where applicable. The soil samples submitted for laboratory analysis are summarized in Table 2.

TABLE 2 – SUMMARY OF SOIL SAMPLES SUBMITTED FOR CHEMICAL ANALYSES

SAMPLE ID	DEPTH (m)	MATERIAL / STRATA	RATIONALE	ANALYSIS
BH 101				
BH-101 SS1	0.0 - 0.6	Fill	Assessment of fill materials	Metals & Inorganics
BH-101 SS4	2.3 - 2.7	Silt	Soil sample has highest CV reading	BTEX, PHCs
BH 102				
BH-102 SS5	3.1 - 3.7	Silt	Soil sample has highest CV reading	VOCs, PHCs
BH-102 SS5D	3.1 - 3.7	Silt	Field duplicate of BH-102 SS5	VOCs, PHCs
BH-102 SS6	3.8 - 4.4	Silt	Sample beneath soil sample with highest CV reading	VOCs, PHCs
BH-102 SS7	4.6 - 5.2	Silt	Sample beneath soil sample with highest CV reading	VOCs, PHCs
BH 103				
BH-103 SS6	3.8 - 4.4	Silt	Soil sample has highest CV reading, with consideration of location of AST in basement	BTEX, PHCs
BH 104				
BH-104 SS4	2.3-2.7	Silt	Assessment of soil from potential subsurface impacts from the grate drain inside the Barn/Stable	BTEX, PHCs
BH 105				
BH-105 SS1	0.0 - 0.6	Fill	Assessment of topsoil	OCPs

SAMPLE ID	DEPTH (m)	MATERIAL / STRATA	RATIONALE	ANALYSIS
BH-105 SS2	0.8 - 1.4	Fill	Assessment of fill materials	Metals & Inorganics
BH 106				
BH-106 SS4	2.3 - 2.7	Silt	Soil sample has highest CV reading. Assessment of soil from potential subsurface impacts from the grate drain inside the Barn/Stable	BTEX, PHCs
BH 107				
BH-107 SS2	0.8 - 1.4	Fill	Assessment of near surface fill for near surface impacts from potential historical use of dust suppressant	PCBs
BH-107 SS2D	0.8 - 1.4	Fill	Field duplicate of BH-107 SS2	PCBs
BH-107 SS3	1.5 - 2.1	Fill	Soil sample has highest CV reading. Assessment of near surface fill for near surface impacts from potential historical use of dust suppressant	BTEX, PHCs
BH 108				
BH-108 SS2	0.8 - 1.4	Silt	Soil sample has highest CV reading	BTEX, PHCs
BH 3*				
BH-3 SS3	1.5 - 2.1	Fill (topsoil fill)	General characterization of fill / topsoil fill	Metals & Inorganics
BH 4*				
BH-4 SS1	0.0 - 0.6	Fill (topsoil fill)	General characterization of fill / topsoil fill	OCPs
BH-4 SS1D	0.0 - 0.6	Fill (topsoil fill)	Field duplicate of BH-4 SS1	OCPs
BH-4 SS3	1.5 - 2.1	Fill (topsoil fill)	General characterization of fill / topsoil fill	Metals & Inorganics
BH-4 SS3D	1.5 - 2.1	Fill (topsoil fill)	Field duplicate of BH-4 SS3	Metals & Inorganics
BH 7*				
BH-7 SS1	0.0 - 0.6	Fill	General characterization of fill / topsoil fill	OCPs
BH-7 SS5	3.1 - 3.7	Fill (topsoil fill)	General characterization of fill / topsoil fill	Metals & Inorganics
BH 12*				
BH-12 SS2	0.8 - 1.4	Topsoil/Silty Sand	General characterization of soil	OCPs
BH-12 SS3	1.5 - 2.1	Silty Sand/Silt	General characterization of soil	Metals & Inorganics

SAMPLE ID	DEPTH (m)	MATERIAL / STRATA	RATIONALE	ANALYSIS
BH 14*				
BH-14 SS2	0.8 - 1.4	Fill (topsoil fill)	General characterization of fill / topsoil fill	OCPs
BH-14 SS3	1.5 - 2.1	Topsoil/Silty Sand	General characterization of soil	Metals & Inorganics
BH 16*				
BH-16 SS2	0.8 - 1.4	Silt	Assessment of near surface fill for near surface impacts from potential historical use of dust suppressant	PCBs
BH-16 SS3	1.5 - 2.1	Clayey Silt	Assessment of near surface fill for near surface impacts from potential historical use of dust suppressant	BTEX, PHCs

NOTES:
***** Borehole drilled as part of the geotechnical investigation
1) PHC - Petroleum Hydrocarbons
2) BTEX - Benzene, Toluene, Ethylbenzene and Xylenes
3) VOC – Volatile Organic Compounds
4) OCP – Organochlorine Pesticides
5) PCB – Polychlorinated biphenyls
6) Metals and inorganics – Metals, hydride-forming metals, other regulated parameters
7) CV – Combustible vapour

2.3 Monitoring Wells

Groundwater levels were observed in the open boreholes during fieldwork and measured in monitoring wells installed during this investigation.

Groundwater monitoring wells were installed in boreholes BH6, BH11, BH18, BH102, BH103 and BH106 upon the completion of drilling. The monitoring wells were installed in general accordance with the Ontario Water Resources Act - R.R.O. 1990, Regulation 903 - Amended by O. Reg. 128/03 by a licensed well driller.

Monitoring wells consisted of 50 mm diameter PVC screen of 1.5 or 3.0 metres in length and an appropriate length of PVC riser pipe, as shown on Table 3. The annular space around the wells was backfilled with sand to a height of approximately 0.3 metres above the top of the screen. A bentonite seal was added from the top of the sand pack to approximately 0.3 metres below ground surface. The monitoring wells were completed with aboveground protective casings.

After completion of the monitoring well installation, the wells intended for groundwater sampling (BH102, BH103 and BH106) were developed on June 7, 2021 to remove fine sediment particles from the sand pack and enhance hydraulic communication with the surrounding formation waters. The monitoring wells were developed manually using dedicated *Waterra®* tubing equipped with a check ball valve. Water levels and standing water volumes in the monitoring wells were measured using a *Solinst®* electronic water level meter. The well construction is shown on the left margin of the borehole logs in Appendix B.

When the monitoring wells are no longer required, they must be decommissioned in accordance with the procedure outlined in the Ontario Water Resources Act - R.R.O. 1990, Regulation 903 - Amended by O. Reg. 128/03.

The installation details of the monitoring wells are summarized in Table 3.

TABLE 3 – MONITORING WELL INSTALLATION DETAILS

MONITORING WELL	SCREENED INTERVAL (mbgs)	Length of Screen (m)	FORMATION(S) SCREENED
BH102	3.0 - 6.0	3.0	Silt
BH103	3.0 - 6.0	3.0	Silt
BH106	3.0 - 6.0	3.0	Silt
BH 6	4.4-7.4	3.0	Silt
BH 11	6.1-7.6	1.5	Sandy Silt Till
BH 18	4.6-7.6	3.0	Silt

NOTES:

1) mbgs – metres below ground surface

2.4 Groundwater Sampling

Groundwater level monitoring, purging and sampling was conducted during fieldwork in the monitoring wells installed at selected borehole locations.

On June 8, 2021, monitoring wells installed at BH102, BH103 and BH106 were purged using a low flow peristaltic pump while monitoring water quality parameters (i.e. pH, turbidity, specific conductivity and temperature) and groundwater levels for steady-state conditions. Representative groundwater samples were collected using a slow flow peristaltic pump once steady-state conditions occurred. No apparent petroleum odours, sheens or free-phased petroleum products were observed in the groundwater samples recovered from the monitoring wells.

Samples were collected in containers supplied by the laboratory and stored in a field cooler for transport. Analytical results are discussed in Section 4.4 of this report. A summary of the groundwater analyses carried out is provided in Table 4.

TABLE 4 – SUMMARY OF GROUNDWATER SAMPLES SUBMITTED FOR ANALYSIS

Monitoring Well	SAMPLE IDENTIFICATION	SAMPLE DATE (mm/dd/yyyy)	ANALYSIS
BH102	MW-102	06/08/2021	VOCs, PHCs
	MW-102D (duplicate)	06/08/2021	VOCs, PHCs
BH103	BH/MW-103	06/08/2021	BTEX, PHCs
BH106	BH/MW-106	06/08/2021	BTEX, PHCs
NA	Trip Blank Lot #3699	-	VOCs

3. Findings

3.1 Subsurface Conditions

The detailed soil profiles encountered in each borehole are provided on the attached borehole logs in Appendix B. Boundaries of soil indicated on the log sheets are inferred from non-continuous sampling and observations made in the field. They intended to reflect approximate transition zones for the purpose of environmental assessment and should not be interpreted as exact planes of geological change.

In general, the stratigraphy of the site, as revealed in the boreholes, generally comprised fill and/or topsoil overlying native deposits of silty sand, sandy silt, silt, clayey silt and sandy silt till.

A brief description of the stratigraphy, in order of depth, follows:

Surface Cover

A concrete slab of 150mm thick was encountered at surface in borehole BH102, within the footprint of the former Barn on Site. The remaining boreholes were drilled on unpaved ground surface on the exterior of the Site.

Topsoil

Original topsoil, consisting of approximately 200 to 360 mm dark brown sandy silt to silt with rootlets, was encountered surficially in Boreholes 1, 2, 5, 6, 9 to 13 and 15 to 20 and below the fill unit in Boreholes 4, 7, 8 and 14. A topsoil layer of 360mm thickness was encountered in borehole BH103, on the exterior of the existing residential house. No topsoil was encountered in the remaining 100-series boreholes

Topsoil measurements were carried out at the borehole locations only and were found to be variable.

Fill

Fill was encountered surficially in Boreholes 3, 4, 7, 8 and 14. The fill in Borehole 3 and the upper level of Borehole 7 varied from silty sand to silt with topsoil inclusions. The fill in Boreholes 4, 7, 8 and 14 primarily consisted of topsoil. Moisture contents of the moist to very moist fill ranged from 9 to 30%. The fill extended to depths of approximately 1.5 to 3.7 m below existing grade. The deepest fill (i.e. greater than 3.5 m) is topsoil fill in Boreholes 4 and 7 located at the west part of 15450 Woodbine Avenue (north property).

Fill was encountered in all 100-series boreholes, with the exception of borehole BH103. In general, the fill in the 100-series boreholes composed of moist to very moist sandy silt, silt with topsoil inclusion; brick or wood pieces were also found in the fill in boreholes BH101 and BH104. The fill unit in borehole BH105 (located in the open field at the northwest portion of the Site) extended to 4.0 mbgs. However, the fill unit within the remaining 100-series boreholes (located within proximity of the site buildings) extended from surface (or beneath the concrete slab at borehole BH102) to depths ranging from 0.8 m to 2.2 mbgs.

No visual or olfactory evidence of petroleum hydrocarbon impact was detected in the fill samples.

Native Soils

Native deposits of silty sand, sandy silt, silt, sandy silt till, sand, and clayey silt were encountered at varying depths in boreholes BH1-BH20. Native soil deposits encountered below the fill unit in the 100-series boreholes were predominantly silt which was generally brown, moist to saturated, and becoming grey in colour at depths of approximately 4.6 to 5.3 mbgs. In addition to silt, layers of native sandy silt, silty sand and sandy silt till were

encountered in three (3) borehole locations. Locally in BH103, the native sandy silt layer (approximately 400mm in thickness) overlies the silt stratum at depths of 0.3 to 0.7 mbgs. In BH105, the silty sand layer (approximately 500mm in thickness) overlies the silt stratum at depths of 4.0 to 4.5 mbgs. In BH107, the sandy silt till layer was found beneath the silt stratum at a depth of 3.0 mbgs to the terminating depth of the borehole.

No visual or olfactory evidence of petroleum hydrocarbon impact was detected in the native soil samples.

3.2 Groundwater

Upon completion of drilling, free groundwater was encountered in the open boreholes at depths of 5.49 mbgs and 2.44 mbgs in boreholes BH106 and BH107. All other 100-series boreholes were dry upon completion of drilling.

Water levels in the installed monitoring wells (BH102, BH103 and BH106) were recorded in subsequent monitoring events on June 7 and 8, 2021, as shown on Table 5. Based on the static water levels measured on June 7, 2021, the groundwater levels in monitoring wells in BH6, BH11, BH18, BH102, BH103 and BH106 ranged from approximately 0.56 to 3.41 mbgs (corresponding to elevations of approximately 291.01 to 300.07 metres above mean sea level).

It should be noted that groundwater levels are subject to seasonal fluctuations and can vary in response to prevailing climate conditions.

No apparent petroleum odours, sheens or free-phased petroleum products were observed in any of the monitoring wells.

TABLE 5 – SUMMARY OF GROUNDWATER LEVEL MEASUREMENTS

GROUNDWATER WELL SPECIFICATION				June 7, 2021		June 8, 2021	
BOREHOLE ID	WELL ELEVATION (masl)	SCREEN INTERVAL DEPTH (mbgs)	DEPOSIT SCREENED	DEPTH (mbgs)	ELEVATION (masl)	DEPTH (mbgs)	ELEVATION (masl)
BH102	299.56	3.0 - 6.0	Silt	2.55	295.41	2.56	294.25
BH103	296.07	3.0 - 6.0	Silt	3.03	292.49	4.19	292.48
BH106	299.79	3.0 - 6.0	Silt	3.18	295.56	3.41	295.33
BH6	301.43	4.4-7.4	Silt	1.68	299.75	-	-
BH11	303.48	6.1-7.6	Sandy Silt Till	3.41	300.07	-	-
BH18	291.57	4.6-7.6	Silt	0.56	291.01	-	-

NOTES:

1) mbgs – metres below ground surface
2) masl – metres above mean sea level

3.3 Total Organic Vapour Monitoring

Total organic vapour (TOV) testing for volatile organic soil vapours in the headspace of each soil sample from Boreholes BH BH101 to BH108 was performed using a MiniRae® photoionization device (PID) in the field. The measurements were made by inserting the probe of the instrument into the plastic bag while manipulating the sample to ensure volatilization of the soil gases. These readings provide a real-time indication of the relative

concentration of organic vapours encountered in the subsurface during drilling and are used to aid in the assessment of the vertical and horizontal extent of contamination and the selection of soil samples for analysis. The readings are provided on the borehole logs.

Soil vapour readings from soil samples were generally measured to be at low to negligible levels with the exception of BH102 where elevated soil vapour levels were identified. The soil samples with elevated soil vapour concentrations were selected for laboratory analysis.

4. Soil and Groundwater Quality

4.1 General

In accordance with the scope of work, chemical analyses were performed on selected soil samples recovered from the boreholes. The selection of representative 'worst case' soil samples from each borehole was based on field visual or olfactory evidence of impacts, potential sources of impact and the presence of potential water bearing zones. Tabulated laboratory analytical results are included in Appendix C. Copies of the laboratory Certificates of Analysis for the tested soil and groundwater samples are provided in Appendix D.

4.2 Soil Characterization

4.2.1 pH

Two (2) soil samples representative of the surface soils and six (6) soil samples representative of the subsurface soil encountered at the Site were analyzed for pH. The pH levels were generally between 5 and 9 for surface soil and between 5 and 11 for subsurface soil.

4.2.2 Soil Texture Analysis

The native soil deposits encountered in the boreholes on Site primarily consisted of silty sand, sandy silt, silt, sandy silt till, sand, and clayey silt. Grain size analysis was carried out on three (3) soil samples representative of the predominant native deposits as part of the geotechnical investigation. The results of the grain size analysis are included in Appendix E.

A summary of the results is presented in Table 6 below:

Table 6 – Summary of Grain Size Analysis

Location	Soil Type	Grain Size Results	Soil Texture*
Borehole BH6 (1.5 – 2.0 m)	Silt	Over 50% passing #200 sieve	Medium to fine
Borehole BH11 (1.5 – 2.0 m)	Sandy Silt Till	Over 50% passing #200 sieve	Medium to fine
Borehole BH12 (0.75 – 1.2 m)	Silty Sand	Over 50% passing #200 sieve	Medium to fine

*As defined by O.Reg. 153/04

Based on the grain size analyses completed, the soil texture on Site can be classified as medium to fine as defined by O.Reg. 153/04 (as amended).

4.3 Soil Quality

4.3.1 Benzene, Toluene, Ethylbenzene, Xylene (BTEX) and Petroleum Hydrocarbons (PHCs)

The concentrations of BTEX and PHCs in all analyzed soil samples met the MECP Table 1 SCS for Residential / Parkland / Institutional / Industrial / Commercial / Community property uses for medium to fine textured soils.

4.3.2 Volatile Organic Compounds (VOCs)

The concentrations of VOCs in all analyzed soil samples were below laboratory detection limits and met the MECP Table 1 SCS for Residential / Parkland / Institutional / Industrial / Commercial / Community property uses for medium to fine textured soils.

4.3.3 Metals and Inorganic Parameters

The concentrations of metals and inorganic parameters in all analyzed soil samples met the MECP Table 1 SCS for Residential / Parkland / Institutional / Industrial / Commercial / Community property uses for medium to fine textured soils.

4.3.4 Organochlorine Pesticides (OCPs)

The concentrations of OCPs in all analyzed soil samples were below laboratory detection limits and met the MECP Table 1 SCS for Residential / Parkland / Institutional / Industrial / Commercial / Community property uses for medium to fine textured soils.

4.3.5 Polychlorinated Biphenyls (PCBs)

The concentrations of PCBs in all analyzed soil samples were below laboratory detection limits and met the MECP Table 1 SCS for Residential / Parkland / Institutional / Industrial / Commercial / Community property uses for medium to fine textured soils.

4.4 Groundwater Quality

4.4.1 Benzene, Toluene, Ethylbenzene, Xylene (BTEX) and Petroleum Hydrocarbons (PHCs)

The concentrations of BTEX and PHCs in all analyzed groundwater samples met the MECP Table 1 SCS for Residential / Parkland / Institutional / Industrial / Commercial / Community property uses for medium to fine textured soils.

4.4.2 Volatile Organic Compounds (VOCs)

The concentrations of VOCs in all analyzed groundwater samples were either below laboratory limits or met the MECP Table 1 SCS for Residential / Parkland / Institutional / Industrial / Commercial / Community property uses for medium to fine textured soils.

4.5 Quality Assurance

Quality assurance and quality control measures were taken during the field activities to meet the objectives of the sampling and quality assurance plan to collect unbiased and representative samples to characterize existing conditions in the fill/upper overburden materials at the Site. QA/QC measures included:

- the collection of soil samples following standard operating procedures;
- the implementation of decontamination procedures to minimize the potential for sample cross-contamination;
- the collection of recommended analytical test group specific volumes into pre-cleaned laboratory supplied containers provided with necessary preservatives as required;
- sample preservation in insulated coolers pre-chilled with ice and meeting holding time requirements; and,
- sample documentation including Chain of Custody protocols

Review of field activity documentation indicated that recommended sample volumes were collected from soil for each analytical test group into appropriate containers and preserved with proper chemical reagents, where applicable, in accordance with the protocols set out in the *"Protocol for Analytical Methods used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act"*, MOE, March 9, 2004, amended by O.Reg. 179/11 as of July 1, 2011. Samples were preserved at the required temperatures in pre-chilled insulated coolers and met applicable holding time requirements, when relinquished to the receiving laboratory.

A field QA/QC protocol was incorporated during soil sampling, consisting of duplicate samples to evaluate sampling precision. Trip blanks were included during groundwater sampling to evaluate the potential for sample cross-contamination during handling and transport.

The field duplicate sample results were quantitatively evaluated by calculating the relative percent difference (RPD). Assessment of the duplicate soil and groundwater samples analytical results showed that the results generally met analytical test-group-specific requirements for the purpose of this Phase II ESA. The concentrations of VOCs in the trip blank analyzed as part of this Phase II ESA were all below laboratory detection limits.

The subcontract laboratory used during this investigation, *Bureau Veritas Laboratories* (BV Labs), is accredited by the Standards Council of Canada/Canadian Association for Laboratory Accreditation (Accredited Laboratory No. 97), in accordance with ISO/IEC 17025:1999 – *"General Requirements for the Competence of Testing and Calibration Laboratories"* for the analysis of all parameters for all samples in the scope of work for which SCS have been established under Ontario Regulation 153/04.

Certificates of Analysis were received from BV Labs reporting the results of all the chemical analyses performed on the submitted soil samples. Copies of the BV Labs Certificates of Analysis are provided in Appendix D. Review of the Certificates of Analysis prepared by BV Labs indicates that they were in compliance with the requirements set out under subsection 47(3) of O.Reg. 511/09.

The analytical program conducted by BV Labs included analytical test group specific QA/QC measures to evaluate the accuracy and precision of the analytical results and the efficiency of analyte recovery during solute extraction procedures. The BV Labs laboratory QA/QC program consisted (where applicable) of the preparation and analysis of laboratory duplicate samples to assess precision and sample homogeneity, method blanks to assess analytical bias, spiked blanks and QC standards to evaluate analyte recovery, matrix spikes to evaluate matrix interferences and surrogate compound recoveries (VOCs only) to evaluate extraction efficiency. The laboratory QA/QC results are presented in the Quality Assurance Report provided in the Certificate of Analysis prepared by BV Labs. The QA/QC results are reported as percent recoveries for matrix spikes, spike blanks and QC standards, relative percent difference for laboratory duplicates and analyte concentrations for method blanks.

The BV Labs QA/QC results were assessed against test group control limits in the case of spiked blanks, matrix spikes and surrogate recoveries and alert criteria in the case of method blanks and laboratory duplicates. Two QA/QC incidents were noted by BV Labs, as follows:

(1) The recovery or RPD for Cyanide in soil was outside control limits. However, BV Labs indicated that the overall quality control for this analysis met acceptability criteria. No outstanding issues were noted by BV Labs for this incident.
(2) The matrix spike recovery for Chromium (VI) in soil was below the lower control limit. However, BV Labs attributed this to the possibility of the reducing environment in the sample. BV Labs reanalyzed the matrix spike to confirm the result. No outstanding issues were noted by BV Labs for this incident.
(3) The recovery of tetrachloroethylene in groundwater was below the lower control limit and may represent a low bias in some results for this analyte. Since the concentration of tetrachloroethylene in all the tested groundwater samples were below laboratory detection limits, this QA/QC incident would not affect the interpretation of the groundwater sample results.

Review of the remaining laboratory QA/QC results reported by BV Labs indicated that they were within acceptable control limits or below applicable alert criteria for the sampled media and analytical test groups.

5. Summary of Findings

Based on the results of the Phase II ESA conducted at the Site, the following findings are presented:

1) The drilling fieldwork for this Phase II ESA was conducted in conjunction with the geotechnical investigation of the Site between the period of May 26 and June 2, 2021. The geotechnical investigation consisted of twenty (20) boreholes drilled to depths ranging from 7.7 to 8.1 mbgs. Due to the areas of potential environmental concerns identified during the Phase I ESA, eight (8) additional boreholes (designated as BH101 to BH108) were drilled on Site to depths of 3.7 and 6.7 mbgs. Monitoring wells were installed in the boreholes BH6, BH11, BH18, BH102, BH103 and BH106 for groundwater monitoring and/or sampling.

2) In general, the stratigraphy of the site, as revealed in the boreholes, generally comprised fill and/or topsoil overlying native deposits of silty sand, sandy silt, silt, clayey silt and sandy silt till.

3) Fill was encountered surficially in Boreholes 3, 4, 7, 8 and 14. The fill in Borehole 3 and the upper level of Borehole 7 varied from silty sand to silt with topsoil inclusions. The fill in Boreholes 4, 7, 8 and 14 primarily consisted of topsoil. Moisture contents of the moist to very moist fill ranged from 9 to 30%. The fill extended to depths of approximately 1.5 to 3.7 m below existing grade. The deepest fill (i.e. greater than 3.5 m) is topsoil fill in Boreholes 4 and 7 located at the west part of 15450 Woodbine Avenue (north property). Fill was encountered in all 100-series boreholes, with the exception of borehole BH103. In general, the fill in the 100-series boreholes composed of moist to very moist sandy silt, silt with topsoil inclusion; brick or wood pieces were also found in the fill in boreholes BH101 and BH104. The fill unit in borehole BH105 (located in the open field at the northwest portion of the Site) extended to 4.0 mbgs. However, the fill unit within the remaining 100-series boreholes (located within proximity of the site buildings) extended from surface (or beneath the concrete slab at borehole BH102) to depths ranging from 0.8 m to 2.2 mbgs.

4) No visual or olfactory evidence of petroleum hydrocarbon impact was detected in the fill or native soil samples. Soil vapour readings from soil samples were generally measured to be at low to negligible levels with the exception of BH102 where elevated soil vapour levels were identified. The soil samples with elevated soil vapour concentrations were selected for laboratory analysis.

5) Water levels in the installed monitoring wells (BH102, BH103 and BH106) were recorded in subsequent monitoring events on June 7 and 8, 2021, as shown on Table 5. Based on the static water levels measured on June 7, 2021, the groundwater levels in monitoring wells in BH6, BH11, BH18, BH102, BH103 and BH106 ranged from approximately 0.56 to 3.41 mbgs (corresponding to elevations of approximately 291.01 to 300.07 metres above mean sea level.

6) No apparent petroleum odours, sheens or free-phased petroleum products were observed in any of the monitoring wells.

7) The soil and groundwater data were compared to the Ontario Ministry of Environment, Conservation and Parks (MECP) Table 1 Full Depth Generic Site Condition Standards (SCS) for Residential/Parkland/Institutional/Industrial/Commercial/Community (RPI and ICC) property uses, medium and fine-textured soil listed in the MECP document entitled “Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act”, dated April 15, 2011 (the “MECP Table 1 SCS”);

8) Selected soil samples were submitted for analysis of volatile organic compounds (VOCs), benzene, toluene, ethylbenzene and xylene (BTEX), petroleum hydrocarbons (PHCs) F1 to F4, metals and inorganic parameters, organochlorine pesticides (OCPs), and polychlorinated biphenyls (PCBs). The concentrations of the analyzed parameters in all submitted soil samples met the MECP Table 1 SCS for Residential / Parkland / Institutional / Industrial / Commercial / Community property uses.

9) Selected groundwater samples were submitted for analysis of VOCs, BTEX, and PHCs. The concentrations of the analyzed parameters in all submitted groundwater samples met the MECP Table 1 SCS for Residential / Parkland / Institutional / Industrial / Commercial / Community property uses.

6. Conclusion and Recommendation

Based on the findings of this Phase II ESA, the following conclusion and recommendations are presented.

- The laboratory analytical results for all tested soil and groundwater samples met the applicable MECP Table 1 Site Condition Standards for Residential / Parkland / Institutional / Industrial / Commercial / Community property uses, medium to fine-textured soils. No further investigation is considered warranted for the Site at this time.
- Groundwater monitoring wells installed during this investigation on Site may be maintained for on-going monitoring purposes. If the monitoring wells are no longer required, they should be decommissioned by a licensed well contractor in accordance with Ontario Regulation 903.

7. References

This study was conducted in accordance with the applicable Regulations, Guidelines, Policies, Standards, Protocols and Objectives administered by the Ministry of the Environment. Specific reference is made to the following:

1. "Phase II Environmental Site Assessment Z769-00 (2018)", Canadian Standards Association, Canadian Standards Association (CSA), March 2000, Reaffirmed 2018.
2. "Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario," Ministry of the Environment of Ontario, December 1996;
3. The Ontario Water Resources Act - R.R.O. 1990, Regulation 903 - Amended by O. Reg. 128/03, August 2003;
4. "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act," April 15, 2011;
5. "Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act," March 2004 (as amended by O.Reg. 179/11);
6. Ontario Regulation 153/04 (made under the Environmental Protection Act), May 2004 (as amended by O.Reg. 179/11) (MOE);
7. Environmental Protection Act, R.S.O. 1990, Chapter E.19, as amended, September 2004;
8. "Phase I Environmental Site Assessment, 15374 and 15450 Woodbine Avenue, Gormley, Ontario" for Treasure Hill Homes, prepared by EXP, dated June 17, 2021.

8. General Limitations

The information presented in this report is based on a limited investigation designed to provide information to support an assessment of the current environmental conditions within the Site. The conclusions and recommendations presented in this report reflect Site conditions existing at the time of the investigation.

More specific information with respect to the conditions between samples, or the lateral and vertical extent of materials may become apparent during excavation operations. The interpretation of the borehole information must, therefore, be validated during any such excavation operations. Consequently, during the future development of the Site, conditions not observed during this investigation may become apparent. Should this occur, EXP should be contacted to assess the situation, and the need for additional testing and reporting. EXP has qualified personnel to provide assistance in regard to any future geotechnical and environmental issues related to this Site.

The environmental investigation was carried out to address the intent of applicable provincial Regulations, Guidelines, Policies, Standards, Protocols and Objectives administered by the Ministry of Environment, Conservation and Parks. It should also be noted that current environmental Regulations, Guidelines, Policies, Standards, Protocols and Objectives are subject to change, and such changes, when put into effect, could alter the conclusions and recommendations noted throughout this report. Achieving the study objectives stated in this report has required us to arrive at conclusions based upon the best information presently known to us. No investigative method can completely eliminate the possibility of obtaining partially imprecise or incomplete information; it can only reduce the possibility to an acceptable level. Professional judgment was exercised in gathering and analyzing the information obtained and in the formulation of the conclusions. Like all professional persons rendering advice we do not act as absolute insurers of the conclusions we reach, but we commit ourselves to care and competence in reaching those conclusions.

Our undertaking at EXP, therefore, is to perform our work within limits prescribed by our clients, with the usual thoroughness and competence of the engineering profession. It is intended that the outcome of this investigation assist in reducing the client's risk associated with environmental impairment. Our work should not be considered 'risk mitigation'. No other warranty or representation, either expressed or implied, is included or intended in this report.

This report was prepared for the exclusive use of Treasure Hill Homes and may not be reproduced in whole or in part, without the prior written consent of EXP, or used or relied upon in whole or in part by other parties for any purposes whatsoever. Any use which a third party makes of this report, or any part thereof, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. EXP accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

We trust this report is satisfactory for your purposes. Should you have any questions, please do not hesitate to contact this office.

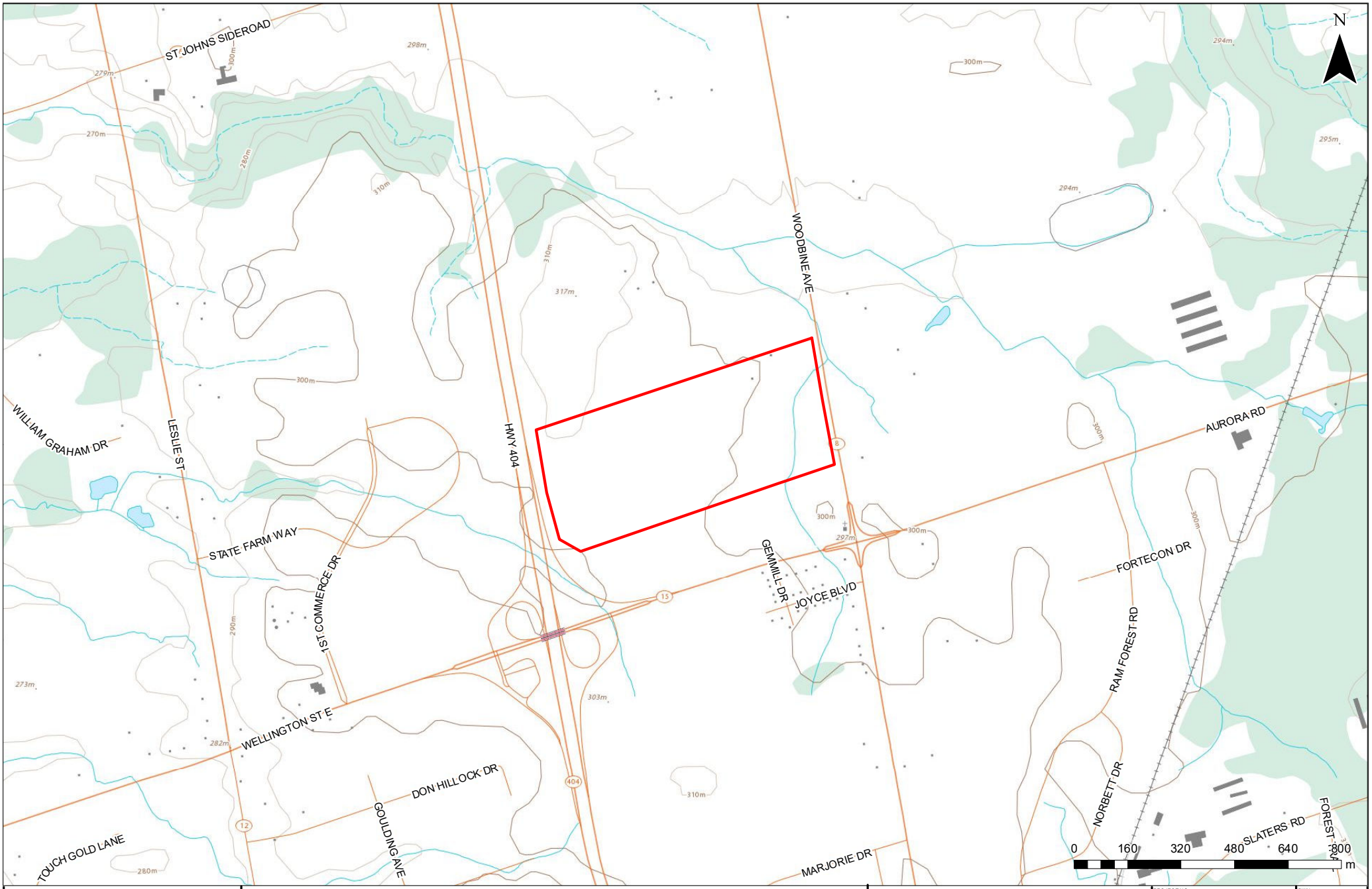
Yours truly,

EXP Services Inc.

So Ming Chiang, P.Eng.
Senior Project Manager
Earth and Environmental Group

Simon Lan, P.Eng.
Manager, Markham Geotechnical
Earth and Environmental Group

Appendix A - Figures



EXP Services Inc.
t: +1.905.695.3217 | f: +1.905.695.0169
220 Commerce Valley Drive West, Suite 110
Markham, ON L3T 0A8
Canada
www.exp.com

• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

LEGEND

APPROXIMATE SITE BOUNDARY

TITLE AND LOCATION:

SITE LOCATION PLAN

PHASE II ENVIRONMENTAL SITE ASSESSMENT
15374 AND 15450 WOODBINE AVENUE
WHITCHURCH-STOUFFVILLE, ONTARIO

PROJECT NO.: BRM-21010864-B0	DWN: JA
SCALE: AS NOTED	CHKD: SC
DATE: JUNE 2021	FIG. NO.: 1

EXP Services Inc.
t: +1.905.695.3217 | f: +1.905.695.0169
220 Commerce Valley Drive West, Suite 110
Markham, ON L3T 0A8
Canada
www.exp.com

• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

LEGEND

- APPROXIMATE SITE BOUNDARY
- BOREHOLE (ENVIRONMENTAL)
- BOREHOLE (GEOTECHNICAL)

TITLE AND LOCATION:

BOREHOLE LOCATION PLAN

PHASE II ENVIRONMENTAL SITE ASSESSMENT
15374 AND 15450 WOODBINE AVENUE
WHITCHURCH-STOUFFVILLE, ONTARIO

PROJECT NO.: BRM-21010864-B0	DWN: JA
SCALE: AS NOTED	CHKD: SC
DATE: JUNE 2021	FIG. NO.: 2

Appendix B – Borehole Logs

Log of Borehole 1

Project No. BRM-21010864-AO

Drawing No. 2

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 31, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test (S)

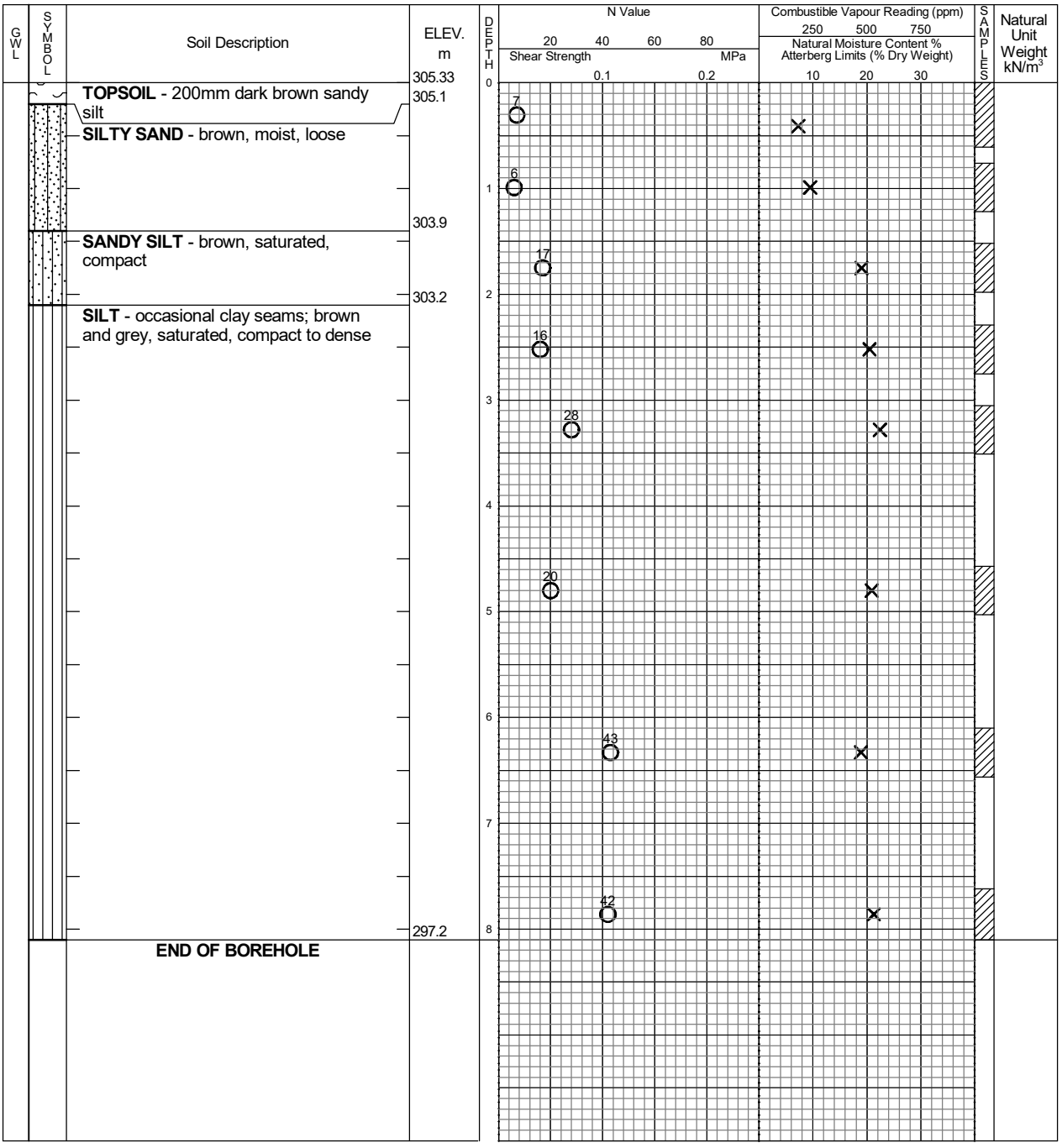
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	7.01	7.62

Log of Borehole 2

Project No. BRM-21010864-AO

Drawing No. 3

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 31, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test

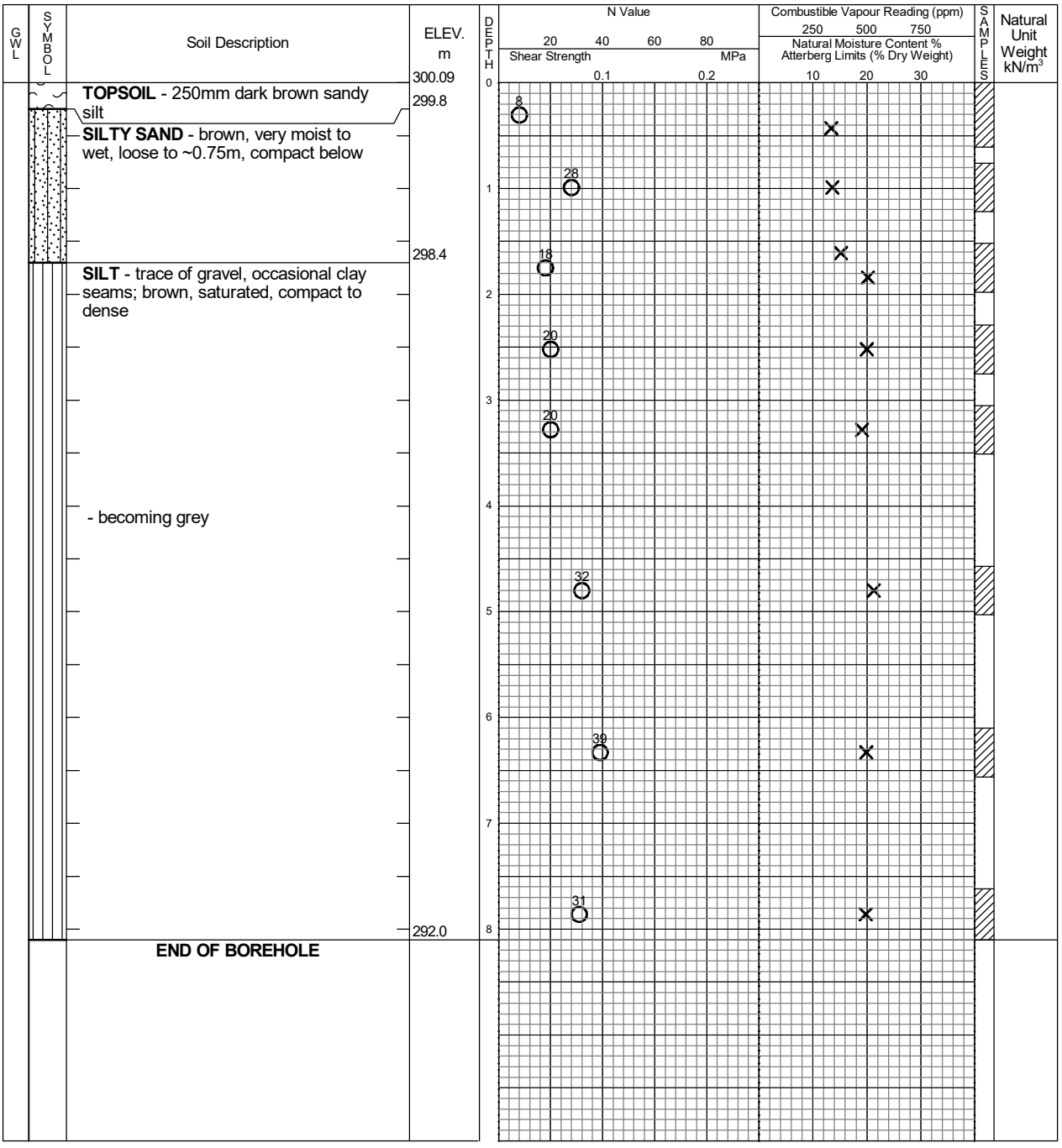
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	4.27	5.79

Log of Borehole 3

Project No. BRM-21010864-AO

Drawing No. 4

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

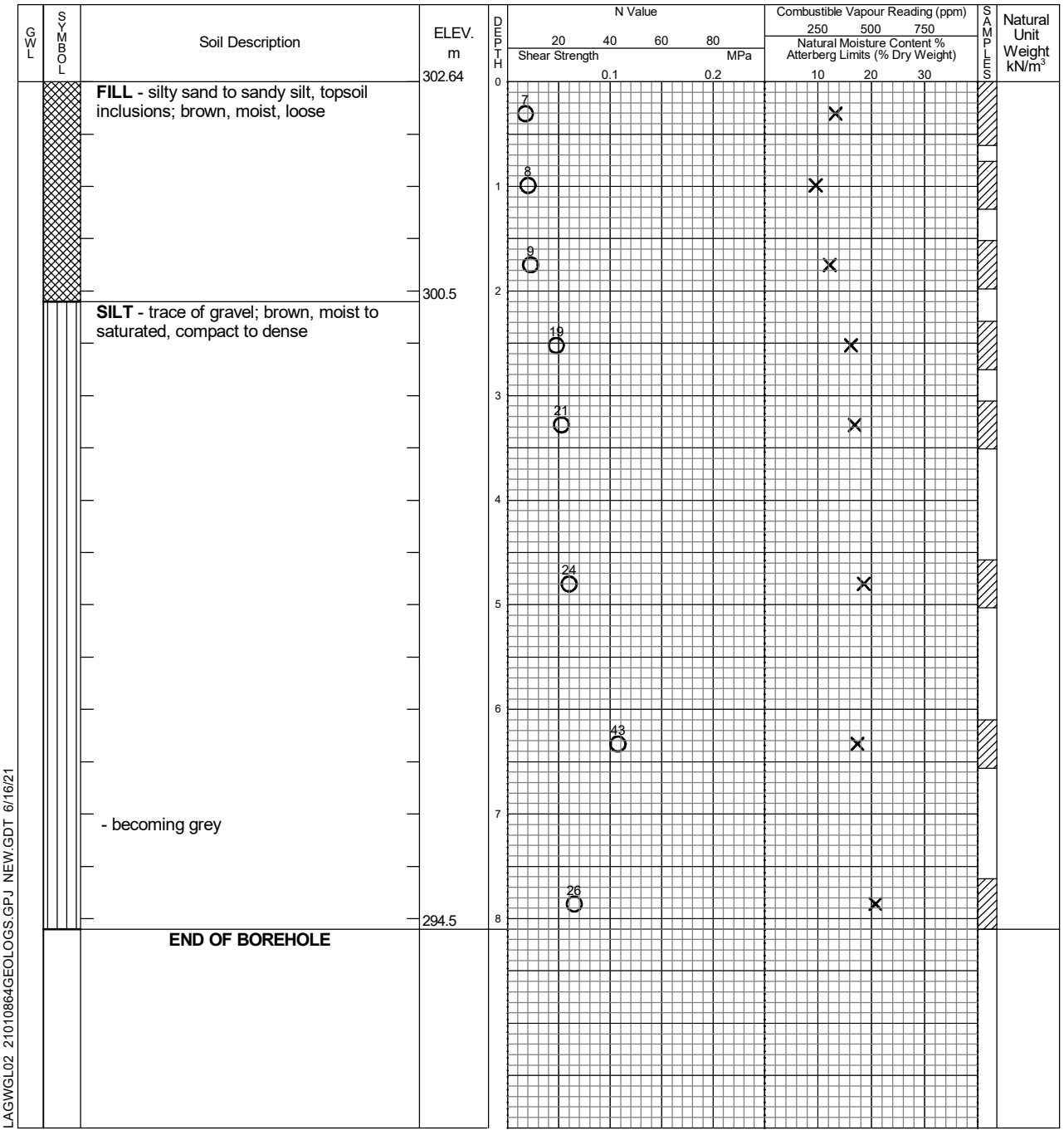
Date Drilled: May 27, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test (S)

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	7.37	7.37

Log of Borehole 4

Project No. BRM-21010864-AO

Drawing No. 5

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 28, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test (S)

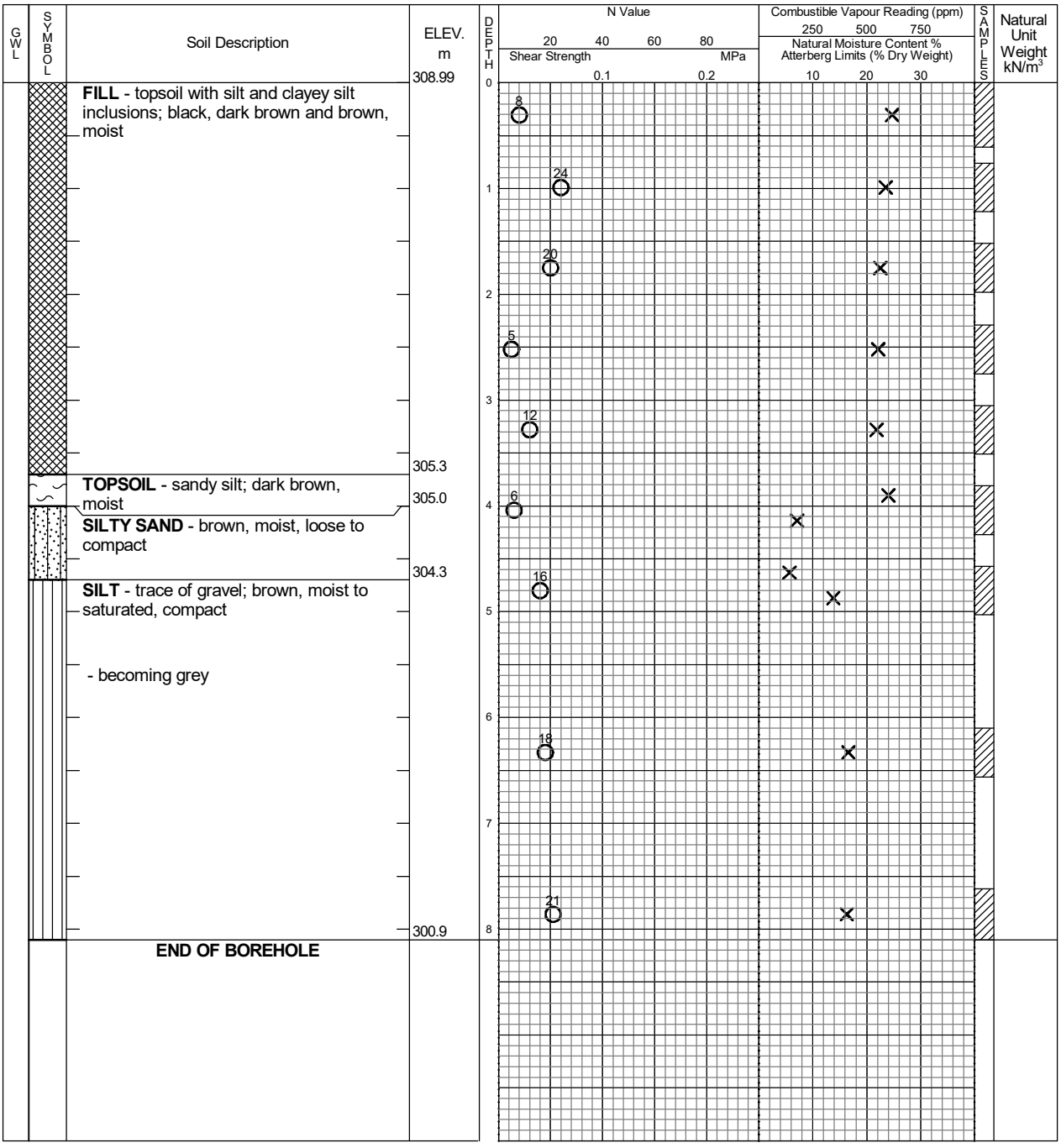
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	Dry	7.39

Log of Borehole 5

Project No. BRM-21010864-AO

Drawing No. 6

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 26, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test

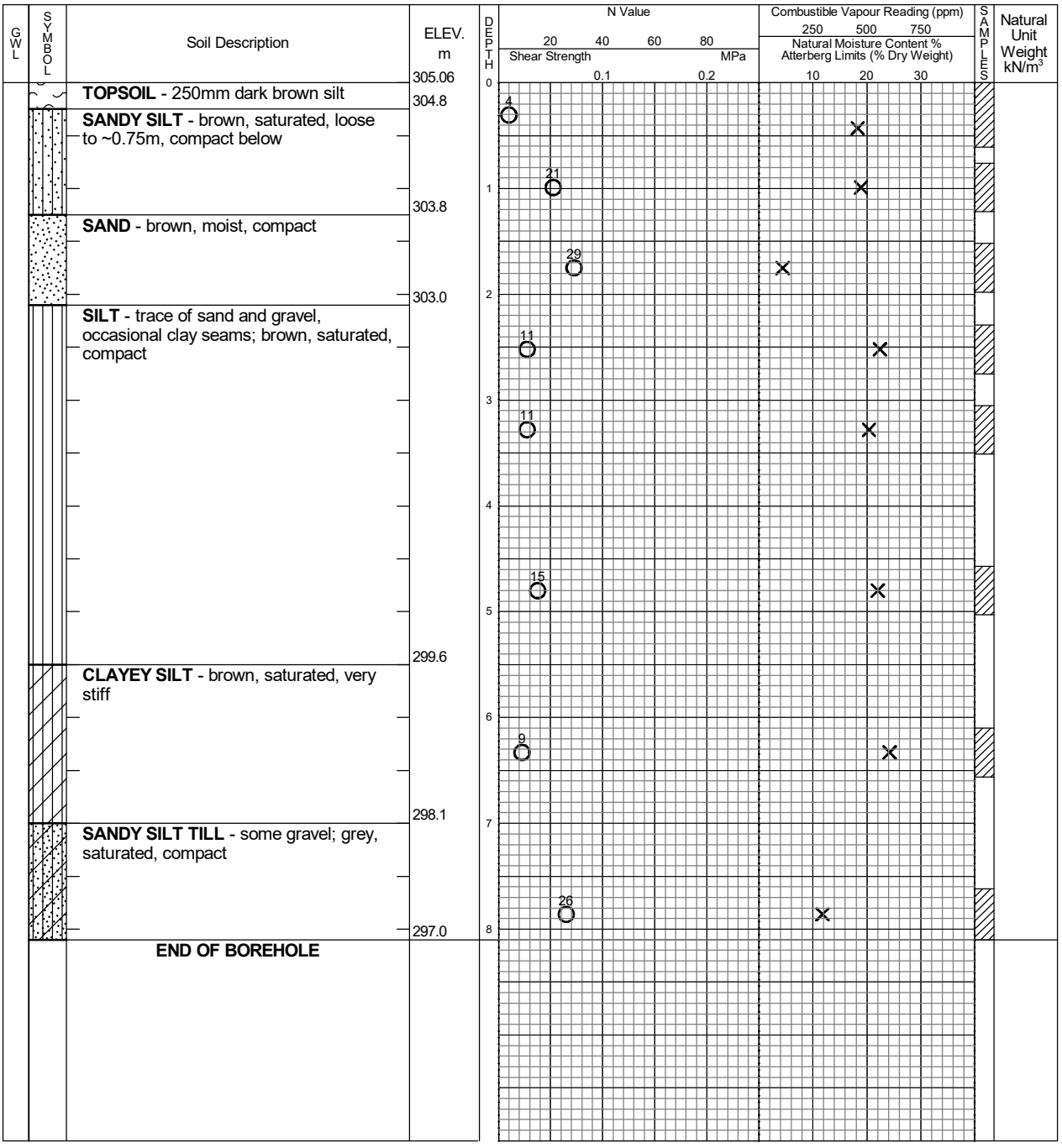
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	5.69	5.69

Log of Borehole 6

Project No. BRM-21010864-AO

Drawing No. 7

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 27, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test (S)

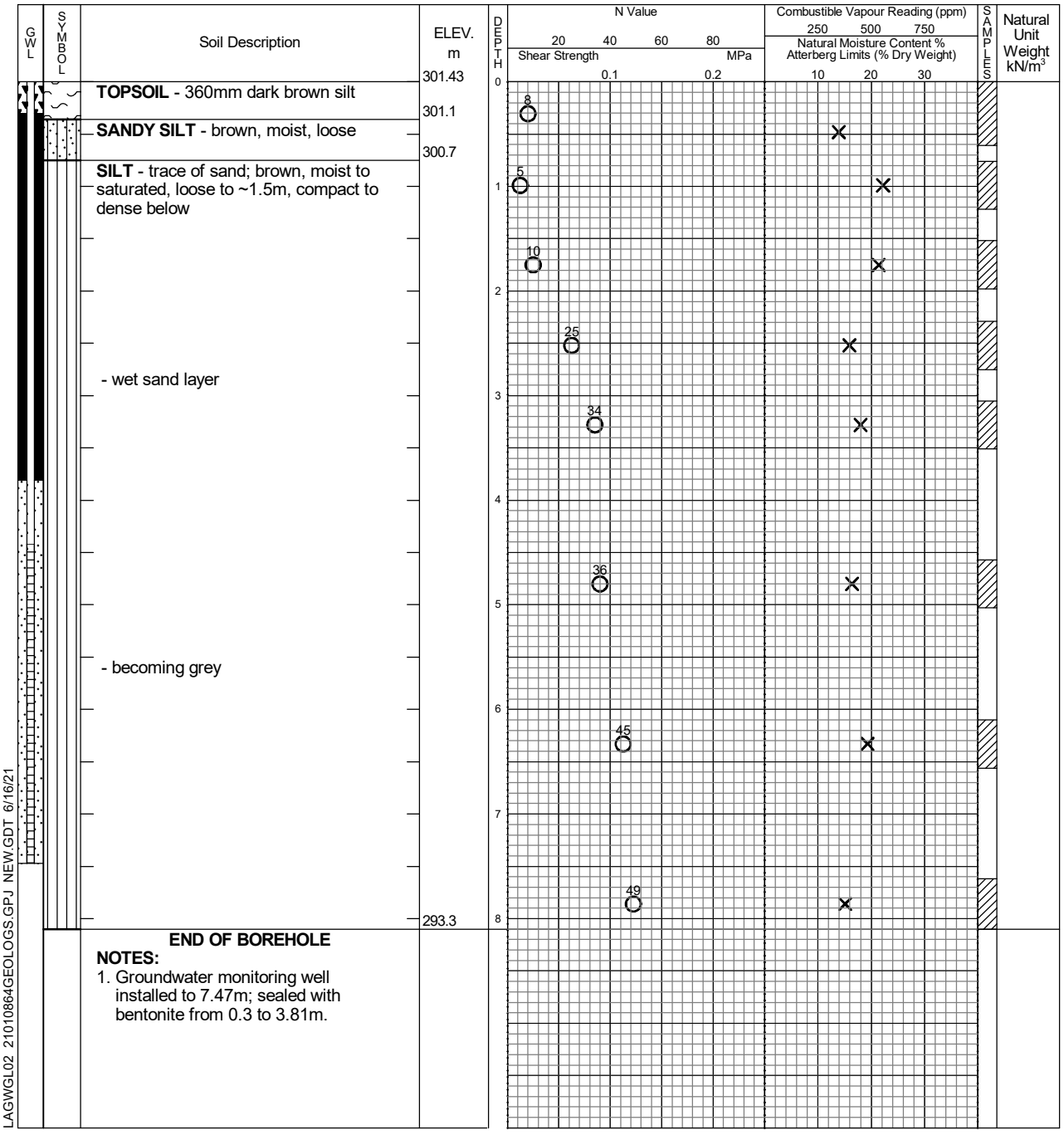
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	1.37	Borehole
After 11 days	1.68	Well

Log of Borehole 7

Project No. BRM-21010864-AO

Drawing No. 8

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 28, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test

Combustible Vapour Reading

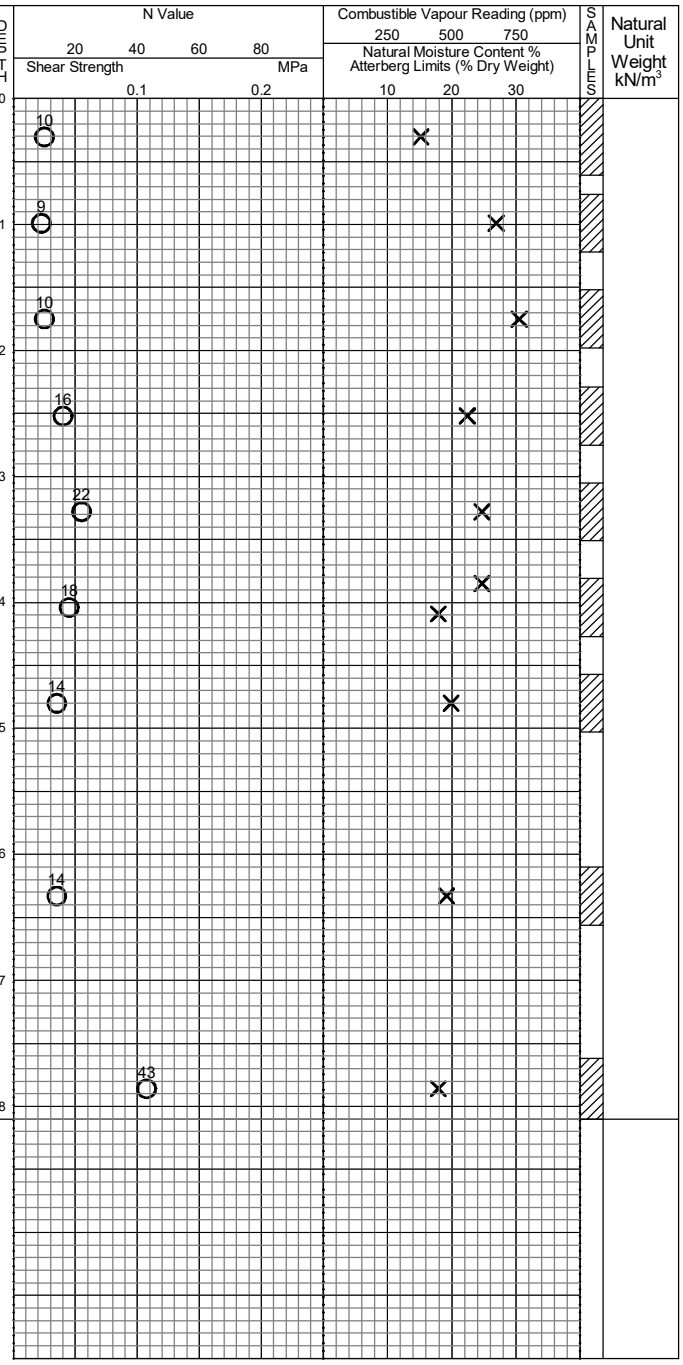
Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m
		FILL - sandy silt to silt, topsoil inclusions; brown, moist	306.92
		topsoil; dark brown and black, moist to very moist	306.2
			303.3
		TOPSOIL - silt; dark brown, moist	303.0
		SILT - brown and grey, saturated, compact to dense	
			298.8
		END OF BOREHOLE	



Time	Water Level (m)	Depth to Cave (m)
On completion	7.47	7.47

LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Log of Borehole 8

Project No. BRM-21010864-AO

Drawing No. 9

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

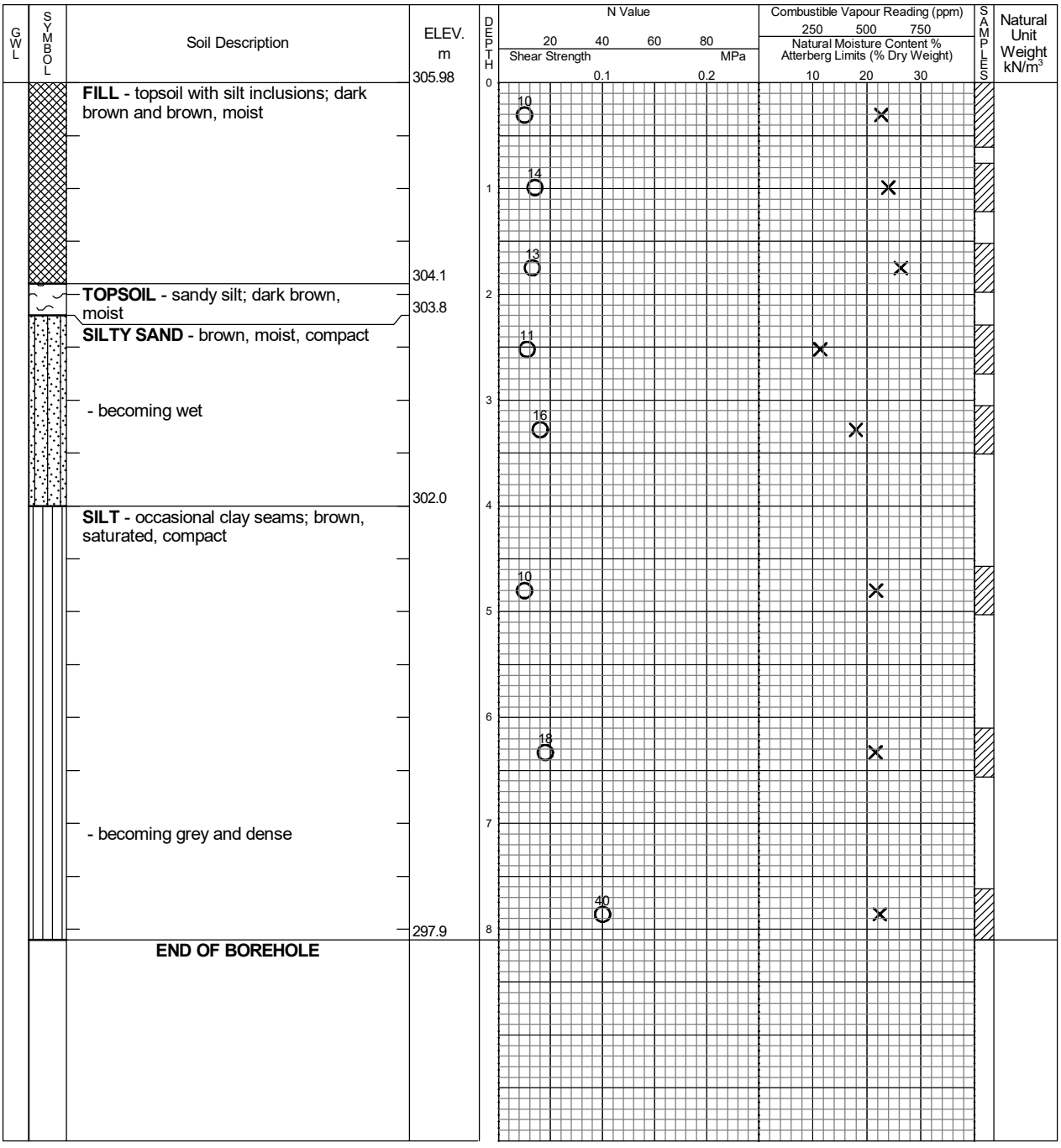
Date Drilled: May 31, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test (S)

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	3.96	5.49

Log of Borehole 9

Project No. BRM-21010864-AO

Drawing No. 10

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 27, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test

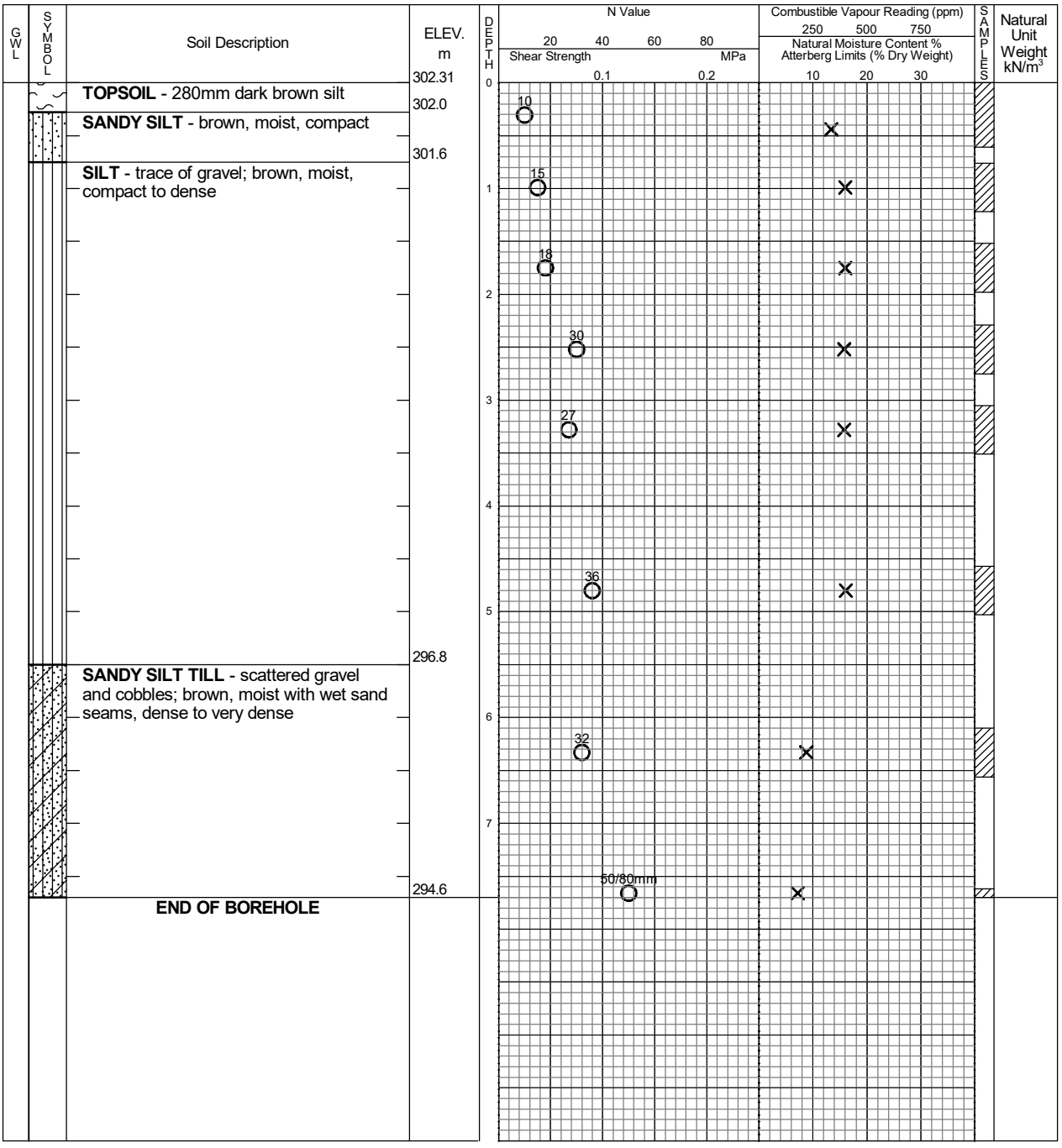
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	Dry	7.52

Log of Borehole 10

Project No. BRM-21010864-AO

Drawing No. 11

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 28, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test (S)

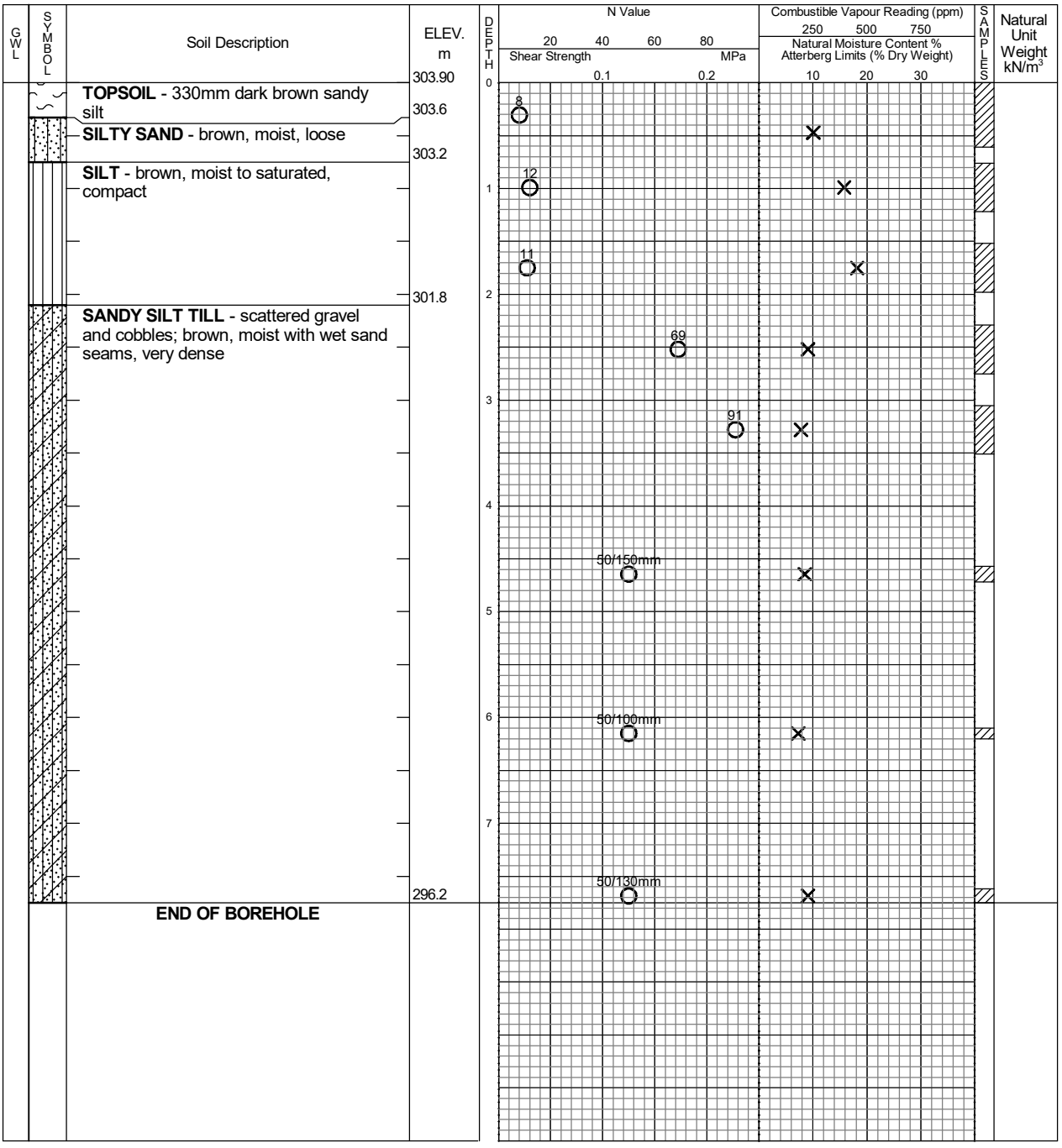
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	7.09	7.24

Log of Borehole 11

Project No. BRM-21010864-AO

Drawing No. 12

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 26, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test

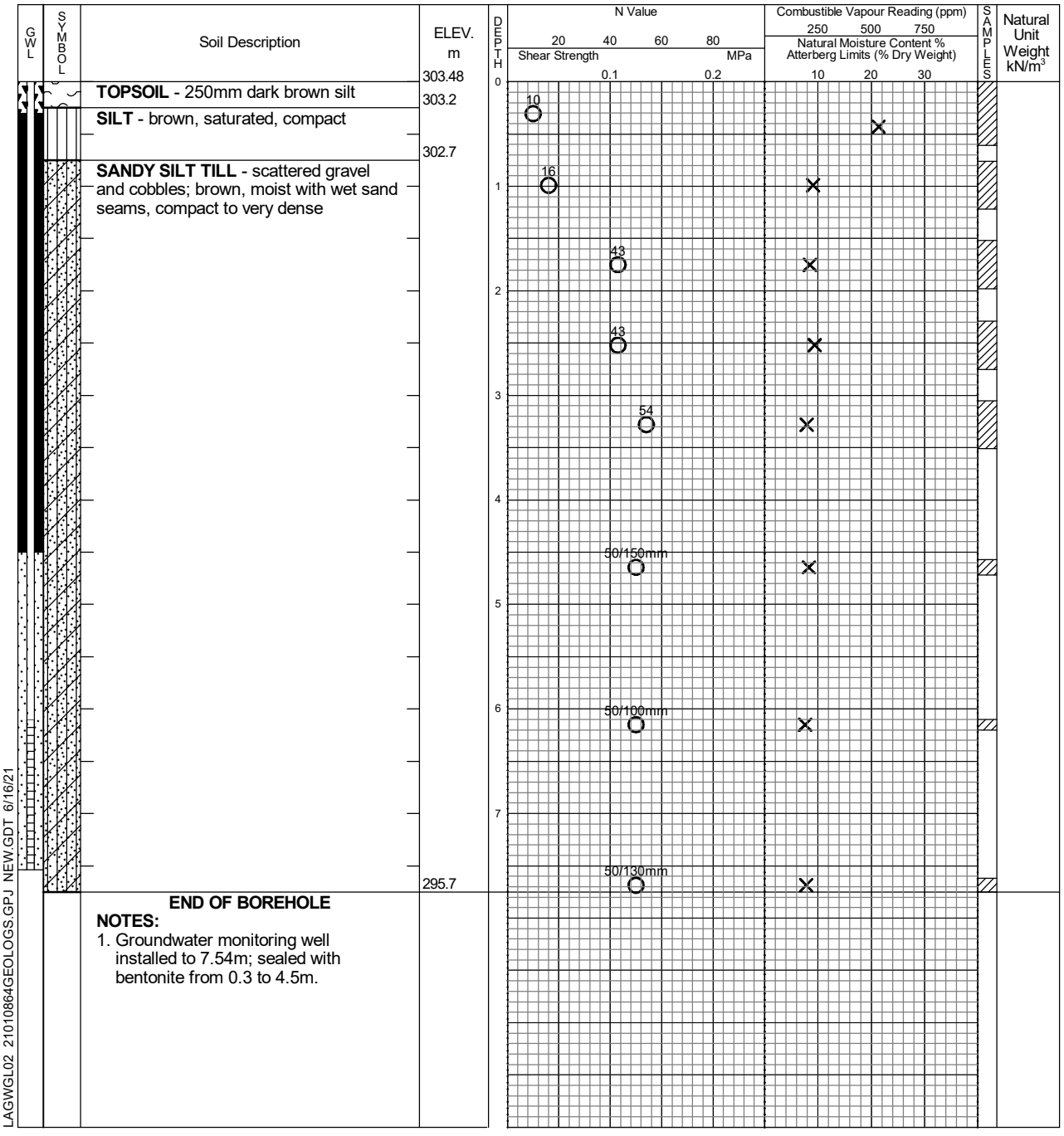
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



Time	Water Level (m)	Depth to Cave (m)
On completion	7.47	Borehole
After 12 days	3.41	Well

Log of Borehole 12

Project No. BRM-21010864-AO

Drawing No. 13

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 27, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test

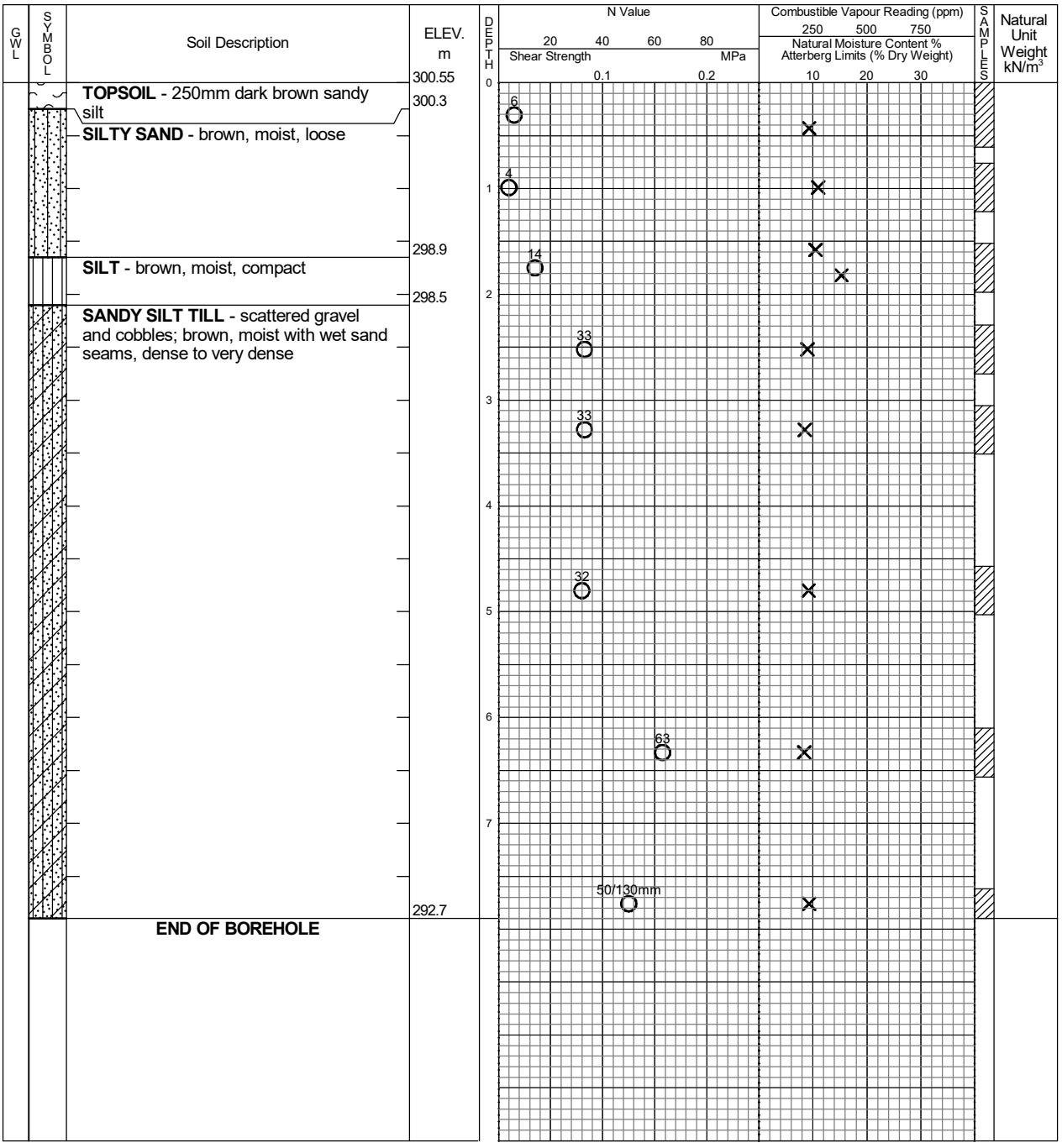
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	7.29	7.52

Log of Borehole 13

Project No. BRM-21010864-AO

Drawing No. 14

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 28, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test

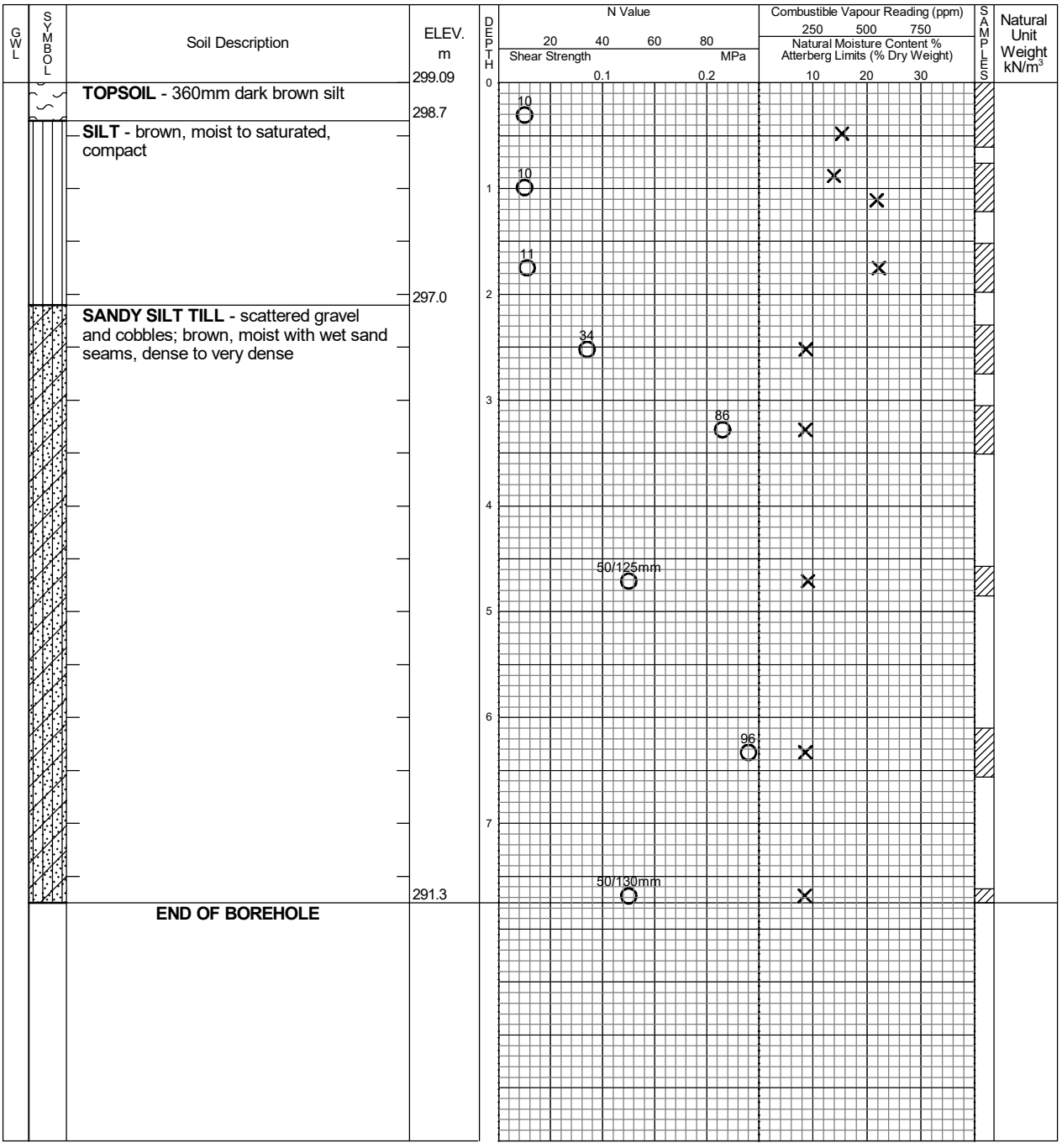
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

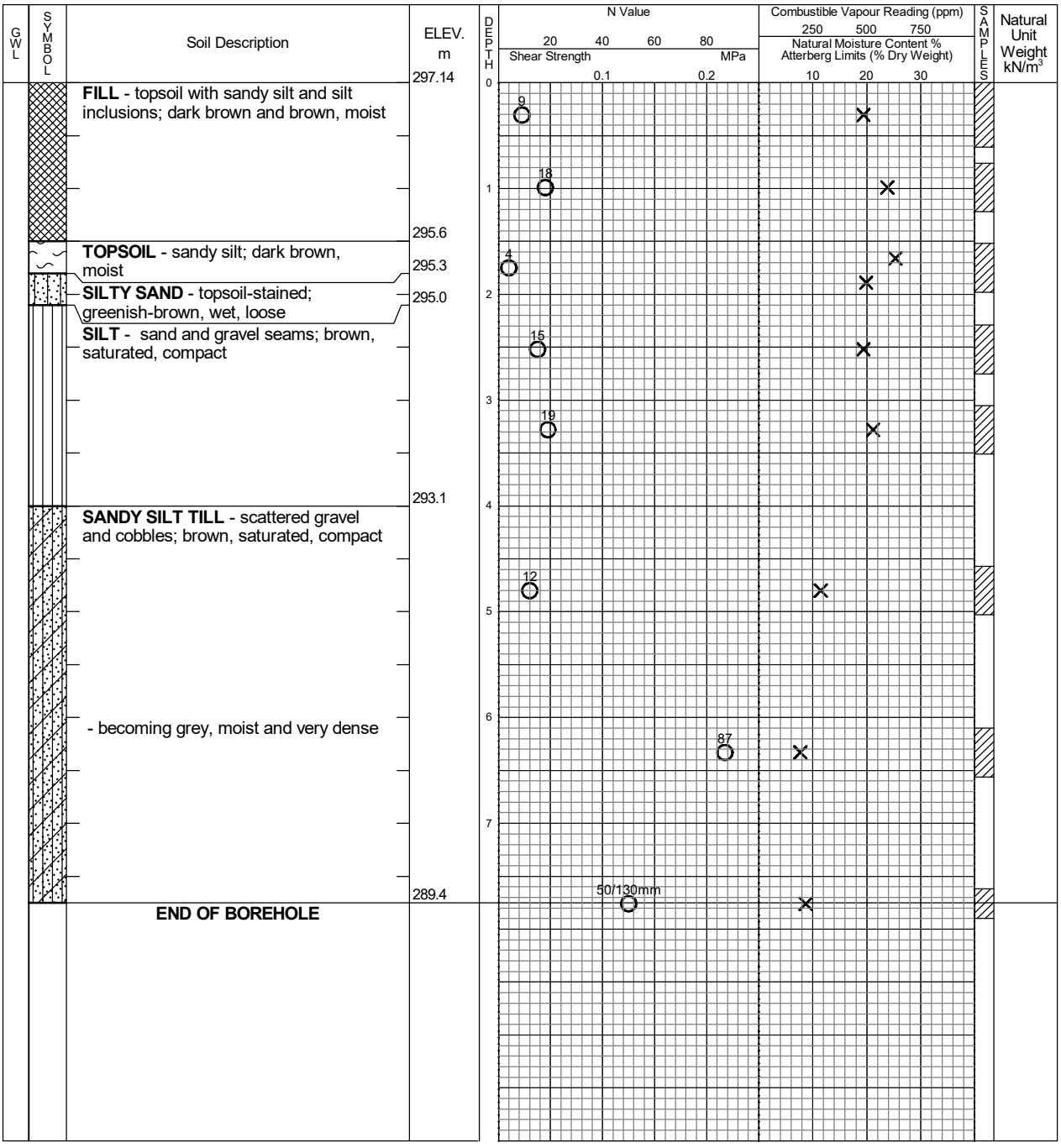
Time	Water Level (m)	Depth to Cave (m)
On completion	7.39	7.34

Log of Borehole 14

Project No. BRM-21010864-AO
Drawing No. 15
Project: Preliminary Geotechnical Investigation - Residential Development
Sheet No. 1 of 1
Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 26, 2021
Drill Type: CME 55
Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test
Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	4.39	5.59

Log of Borehole 15

Project No. BRM-21010864-AO

Drawing No. 16

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 27, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test (S)

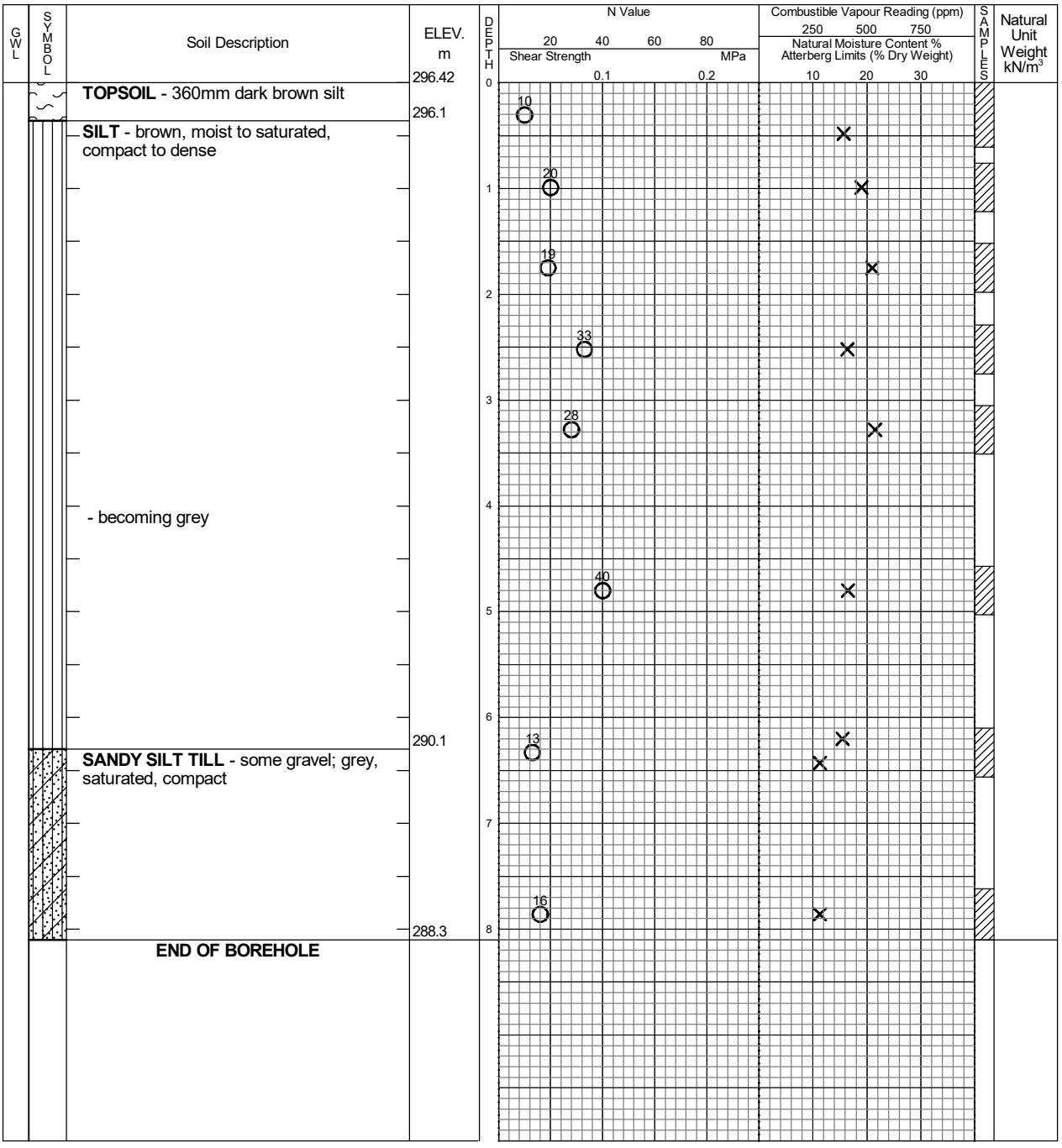
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	6.81	7.44

Log of Borehole 16

Project No. BRM-21010864-AO

Drawing No. 17

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 31, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test

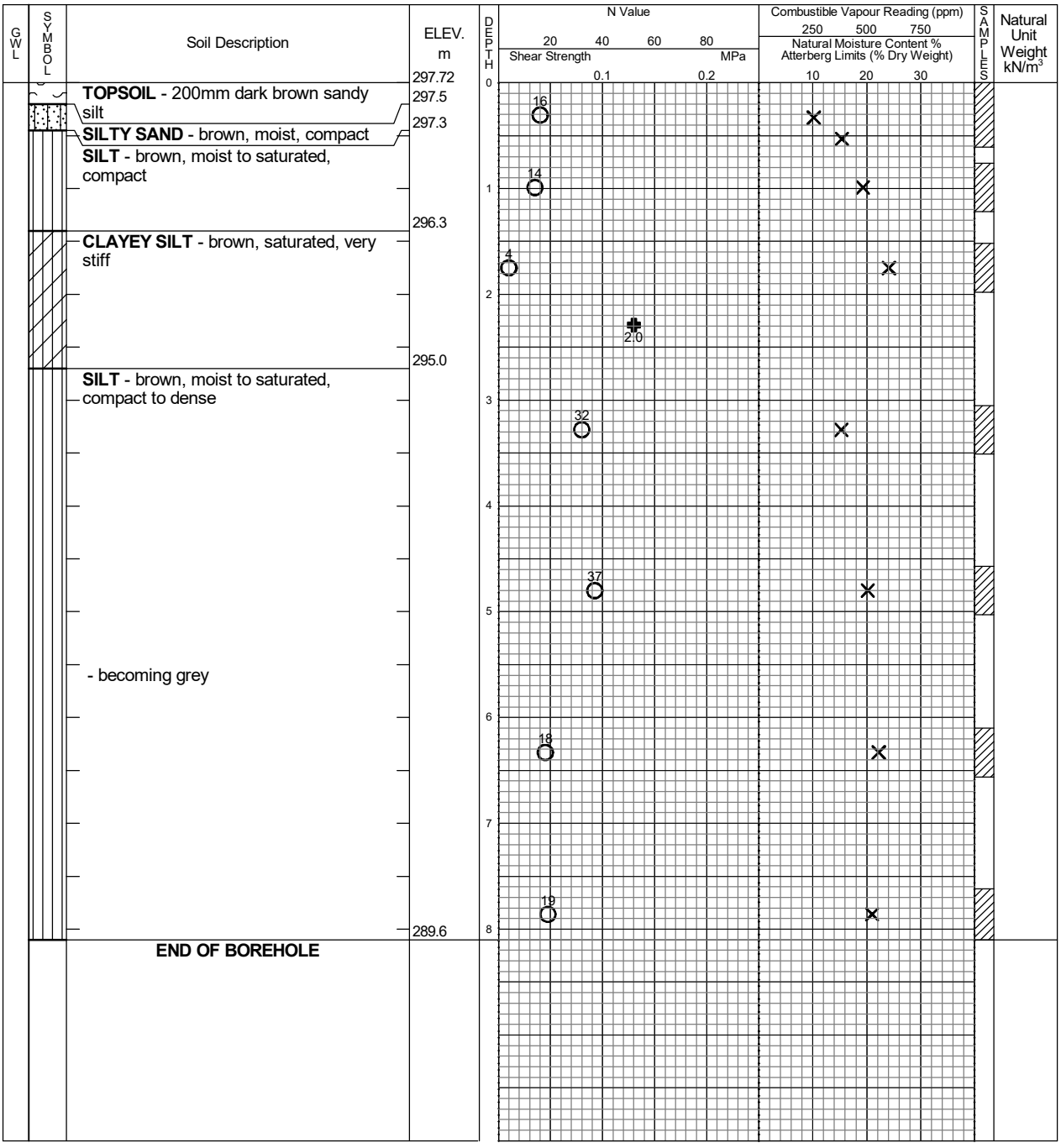
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	4.57	7.62

Log of Borehole 17

Project No. BRM-21010864-AO

Drawing No. 18

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 26, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test

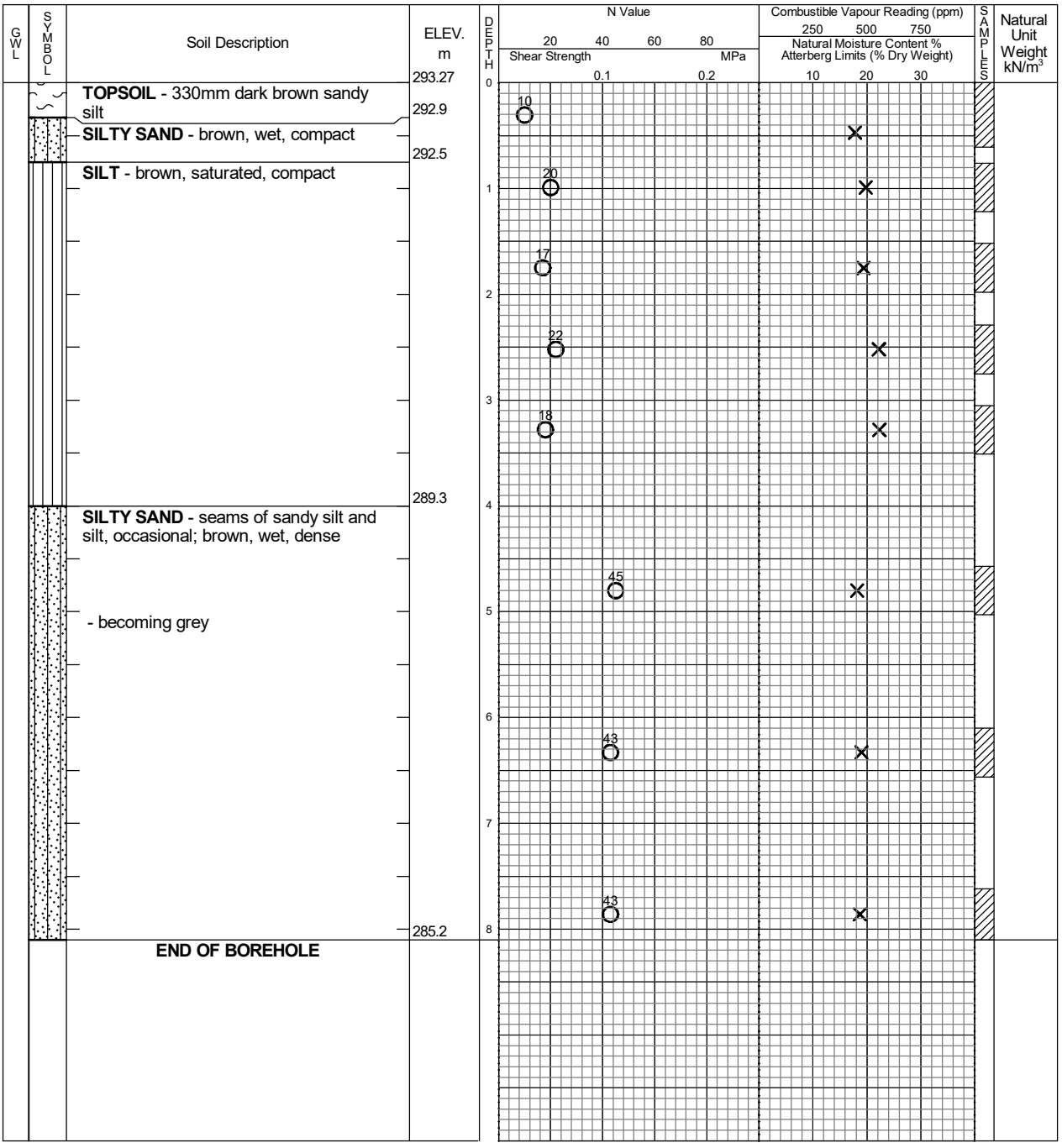
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	1.73	2.97

Log of Borehole 18

Project No. BRM-21010864-AO

Drawing No. 19

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 25, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test (S)

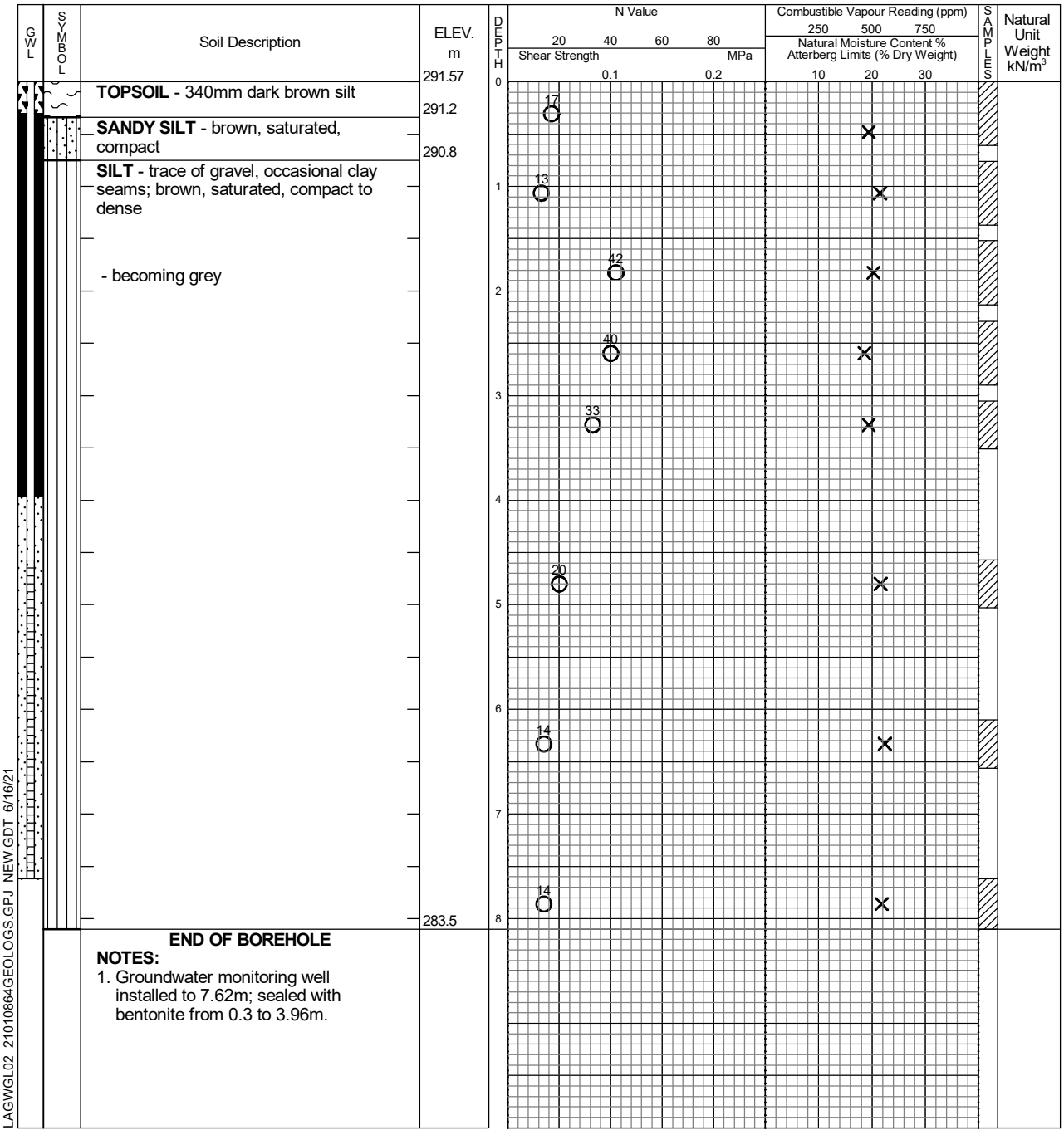
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	7.01	Borehole
After 13 days	0.56	Well

Log of Borehole 19

Project No. BRM-21010864-AO

Drawing No. 20

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 25, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test (S)

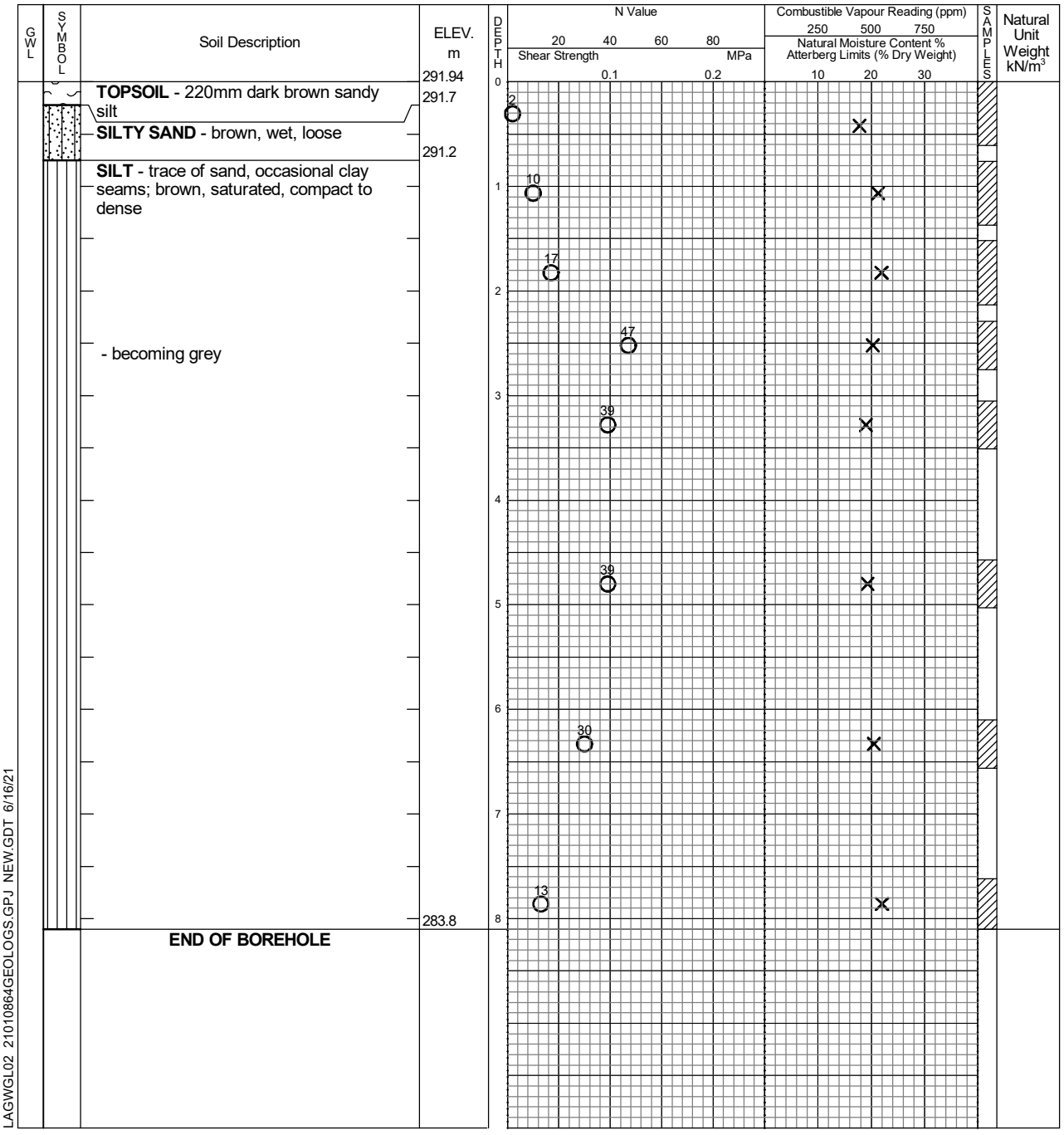
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	1.83	5.49

Log of Borehole 20

Project No. BRM-21010864-AO

Drawing No. 21

Project: Preliminary Geotechnical Investigation - Residential Development

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: May 25, 2021

Drill Type: CME 55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test

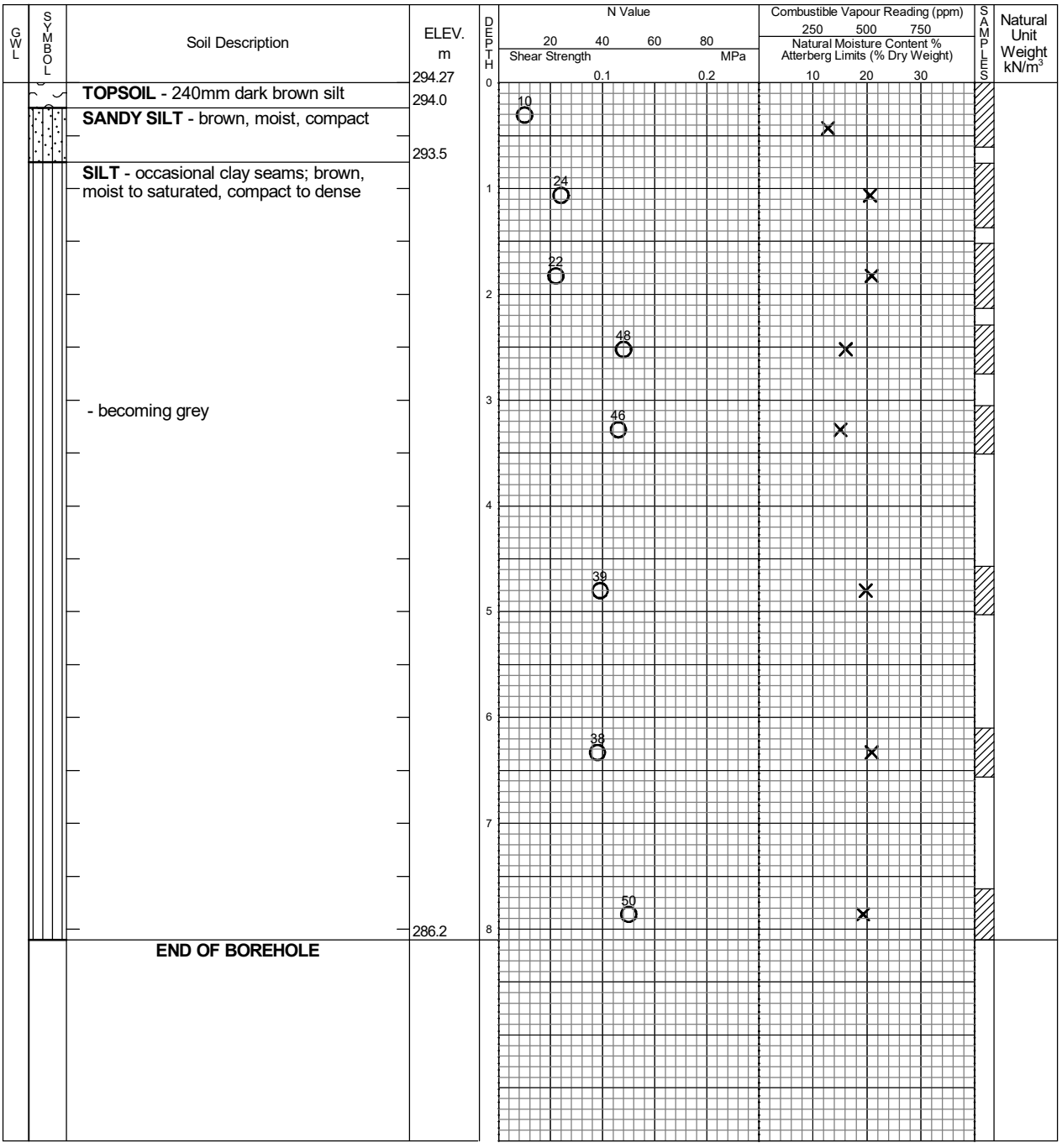
Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer



LAGWGL02 21010864GEOLOGS.GPJ NEW.GDT 6/16/21

Time	Water Level (m)	Depth to Cave (m)
On completion	7.31	7.62

Log of Borehole BH-101

Project No. BRM-21010864-BO

Drawing No. 2

Project: Phase II Environmental Site Assessment

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: June 1, 2021

Drill Type: Track Mounted CME-55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test (S)

Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m	DEPTH
		FILL - sand with some gravel; topsoil inclusions, pieces of brick and wood; brown, moist; no odour or staining; loose to compact	296.70	0
			295.3	1
		silt; topsoil inclusions, wood pieces; brown and dark brown, moist; no odour or staining; compact	294.5	2
		SILT - brown, saturated; no odour or staining; compact	293.1	3
		END OF BOREHOLE		

N Value: 20 40 60 80

Shear Strength: 0.1 0.2 MPa

Combustible Vapour Reading (ppm): 250 500 750

Natural Moisture Content % Atterberg Limits (% Dry Weight): 10 20 30

SAMPLES

Natural Unit Weight kN/m³

19 — 0.6ppm

7 — 0.8ppm

11 — 1.2ppm

24 — 1.4ppm

29 — 1.0ppm

LAGWGL02 21010864PHASE2LOGS.GPJ NEW.GDT 6/17/21

Time	Water Level (m)	Depth to Cave (m)
On Completion	Dry	3.05

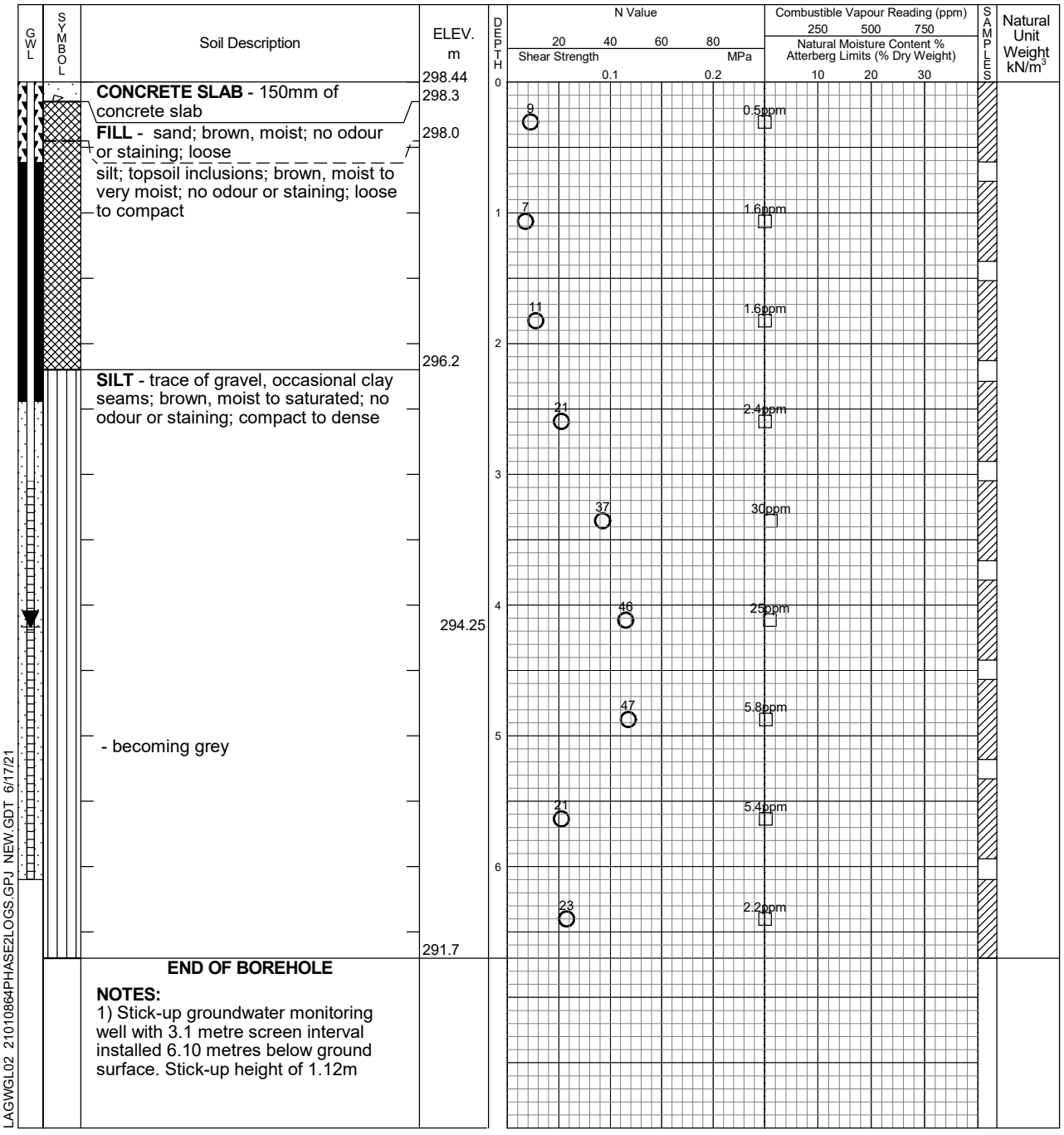
Log of Borehole BH-102

Project No. BRM-21010864-BO
Drawing No. 3
Project: Phase II Environmental Site Assessment
Sheet No. 1 of 1
Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: June 1, 2021
Drill Type: Track Mounted CME-55
Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test (S)

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer



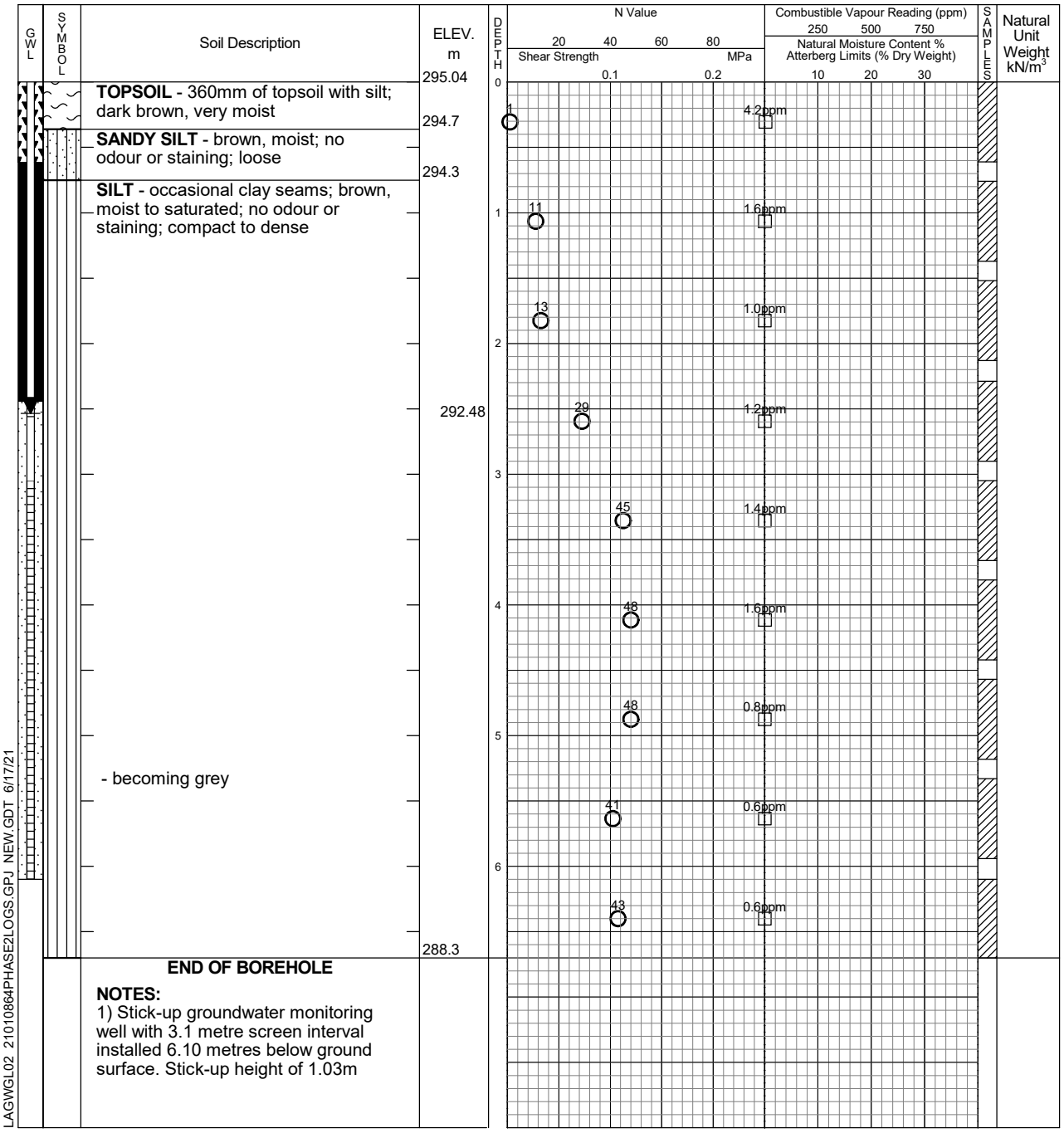
Time	Water Level (m)	Depth to Cave (m)
On Completion	5.43	(Well)
June 7, 2021	3.03	
June 8, 2021	4.19	

Log of Borehole BH-103

Project No. BRM-21010864-BO
Drawing No. 4
Project: Phase II Environmental Site Assessment
Sheet No. 1 of 1
Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: June 1, 2021
Drill Type: Track Mounted CME-55
Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test
Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer



NOTES:
1) Stick-up groundwater monitoring well with 3.1 metre screen interval installed 6.10 metres below ground surface. Stick-up height of 1.03m

Time	Water Level (m)	Depth to Cave (m)
On Completion	5.40	(Well)
June 7, 2021	2.55	
June 8, 2021	2.56	

LAGWGL02 21010864PHASE2LOGS.GPJ NEW.GDT 6/17/21

Log of Borehole BH-104

Project No. BRM-21010864-BO

Drawing No. 5

Project: Phase II Environmental Site Assessment

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: June 2, 2021

Drill Type: Track Mounted CME-55

Datum: Geodetic

Auger Sample

SPT (N) Value

Dynamic Cone Test

Shelby Tube

Field Vane Test (S)

Combustible Vapour Reading

Natural Moisture

Plastic and Liquid Limit

Undrained Triaxial at % Strain at Failure

Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m	DEPTH
		FILL - sandy silt, some gravel; topsoil inclusions, wood pieces; brown, moist; no odour or staining; compact	298.41	0
		silt, trace of gravel; topsoil inclusions; brown, very moist; no odour or staining; loose to compact	297.4	1
		SILT - brown and grey, moist to saturated; no odour or staining; compact to dense	296.2	2
		END OF BOREHOLE	294.8	3

N Value (Shear Strength, MPa): 20, 40, 60, 80; 0.1, 0.2

Combustible Vapour Reading (ppm): 250, 500, 750

Natural Moisture Content % Atterberg Limits (% Dry Weight): 10, 20, 30

SAMPLES

Natural Unit Weight kN/m³

Sample	N Value	Combustible Vapour Reading
1	37	0.8ppm
2	30	0.8ppm
3	4	0.6ppm
4	28	0.6ppm
5	45	0.4ppm

LAGWGL02 21010864PHASE2LOGS.GPJ NEW.GDT 6/17/21

Time	Water Level (m)	Depth to Cave (m)
On Completion	Dry	3.05

Log of Borehole BH-105

Project No. BRM-21010864-BO

Drawing No. 6

Project: Phase II Environmental Site Assessment

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: June 2, 2021

Drill Type: Track Mounted CME-55

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test (S)

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m	DEPTH
		FILL - topsoil; black and dark brown, moist to very moist; no odour or staining	306.66	0
		silt with topsoil; brown and dark brown, moist; no odour or staining	303.7	3
		SILTY SAND - brown, moist; no odour or staining; loose	302.7	4
		SILT - occasional clay seams; brown, saturated; no odour or staining; compact to dense	302.2	5
		END OF BOREHOLE	300.0	6

N Value (Shear Strength, MPa): 20, 40, 60, 80; 0.1, 0.2

Combustible Vapour Reading (ppm): 250, 500, 750

Natural Moisture Content % / Atterberg Limits (% Dry Weight): 10, 20, 30

SAMPLES

Natural Unit Weight kN/m³

Depth	N Value	Combustible Vapour Reading
0	22	0.5ppm
1	3	0.8ppm
2	1	1.0ppm
3	10	1.2ppm
4	22	0.8ppm
5	7	0.8ppm
6	17	1.2ppm
	20	0.6ppm
	31	0.8ppm

LAGWGL02 21010864PHASE2LOGS.GPJ NEW.GDT 6/17/21

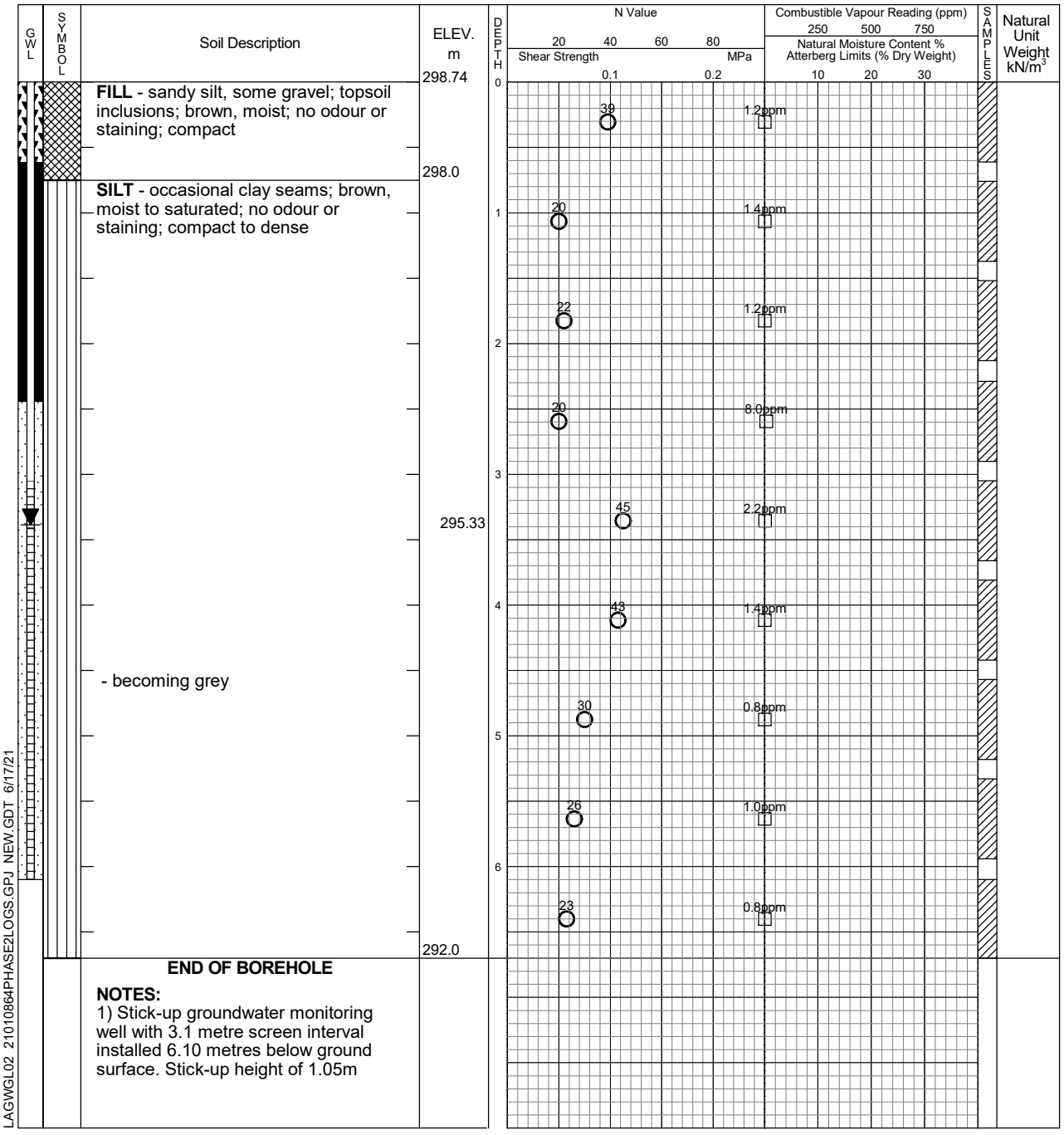
Time	Water Level (m)	Depth to Cave (m)
On Completion	Dry	6.10

Log of Borehole BH-106

Project No. BRM-21010864-BO
Drawing No. 7
Project: Phase II Environmental Site Assessment
Sheet No. 1 of 1
Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: June 2, 2021
Drill Type: Track Mounted CME-55
Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test
Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer



NOTES:
1) Stick-up groundwater monitoring well with 3.1 metre screen interval installed 6.10 metres below ground surface. Stick-up height of 1.05m

Time	Water Level (m)	Depth to Cave (m)
On Completion	5.49	(Well)
June 7, 2021	3.18	
June 8, 2021	3.41	

LAGWGL02 21010864PHASE2LOGS.GPJ NEW.GDT 6/17/21

Log of Borehole BH-107

Project No. BRM-21010864-BO
Drawing No. 8
Project: Phase II Environmental Site Assessment
Sheet No. 1 of 1
Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: June 2, 2021
Drill Type: Track Mounted CME-55
Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test (S)

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m	DEPTH
		FILL - silty sand; topsoil inclusions; brown, moist; no odour or staining; compact	297.63	0
		sandy silt, some gravel; topsoil inclusions; brown, very moist; no odour or staining; compact	296.9	1
		SILT - brown, saturated; no odour or staining; loose	295.6	2
		SANDY SILT TILL - some gravel; brown, saturated; no odour or staining; dense	294.6	3
		END OF BOREHOLE	294.0	

N Value (20 40 60 80)
Shear Strength (0.1 0.2 MPa)
Combustible Vapour Reading (ppm) (250 500 750)
Natural Moisture Content % Atterberg Limits (% Dry Weight) (10 20 30)
SAMPLES
Natural Unit Weight kN/m³

16 — 0.6ppm
26 — 0.6ppm
11 — 0.8ppm
6 — 0.8ppm
32 — 0.6ppm

LAGWGL02 21010864PHASE2LOGS.GPJ NEW.GDT 6/17/21

Time	Water Level (m)	Depth to Cave (m)
On Completion	2.44	3.05

Log of Borehole BH-108

Project No. BRM-21010864-BO

Drawing No. 9

Project: Phase II Environmental Site Assessment

Sheet No. 1 of 1

Location: 15374 and 15450 Woodbine Avenue, Gormley, Ontario

Date Drilled: June 1, 2021

Drill Type: Track Mounted CME-55

Datum: Geodetic

Auger Sample
SPT (N) Value
Dynamic Cone Test
Shelby Tube
Field Vane Test (S)

Combustible Vapour Reading
Natural Moisture
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure
Penetrometer

GWL	SYMBOL	Soil Description	ELEV. m	DEPTH	N Value / Shear Strength (MPa)	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Natural Unit Weight kN/m³
		FILL - sandy silt, some gravel; topsoil inclusions; brown, moist; no odour or staining; compact	298.65	0	19	0.6ppm		
			297.9	1	21	0.8ppm		
		SILT - brown, moist to saturated; no odour or staining; compact to dense		2	43	0.8ppm		
					43	0.6ppm		
				3	49	0.4ppm		
			295.0					
		END OF BOREHOLE						

N Value: 20 40 60 80
Shear Strength: 0.1 0.2 MPa
Combustible Vapour Reading (ppm): 250 500 750
Natural Moisture Content % / Atterberg Limits (% Dry Weight): 10 20 30

Time	Water Level (m)	Depth to Cave (m)
On Completion	Dry	3.05

LAGWGL02 21010864PHASE2LOGS.GPJ NEW.GDT 6/17/21

Appendix C – Summary of Analytical Results

Table C1 - Petroleum Hydrocarbons (PHCs) and Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) in Soil

Parameter	***MECP Table 1 RPIICC Criteria*** [1]	***Units***	***RDL***	*Sample ID*					
				BV Labs Job ID / Sample ID					
				Sample Collection Date					
				Sample Collection Time					
				BH-101 SS4 (2.3-2.7M)	BH-102 SS5 (3.1-3.7M)	BH-102 SS5D (3.1-3.7M)	BH-102 SS6 (3.8-4.4M)	BH-102 SS7 (4.6-5.2M)	BH-103 SS6 (3.8-4.4M)
				C1F3550 / PTI255	C1F3550 / PTI256	C1F3550 / PTI257	C1F3550 / PTI258	C1F3550 / PTI259	C1F3550 / PTI260
				Jun 01, 2021	Jun 01, 2021	Jun 01, 2021	Jun 01, 2021	Jun 01, 2021	Jun 01, 2021
				12:40 PM	09:00 AM	09:00 AM	08:15 AM	08:30 AM	02:00 PM
Petroleum Hydrocarbons									
F1 (C6-C10)	25	ug/g	10	<10	<10	<10	<10	<10	<10
F1 (C6-C10) - BTEX	25	ug/g	10	<10	<10	<10	<10	<10	<10
F2 (C10-C16)	10	ug/g	10	<10	<10	<10	<10	<10	<10
F3 (C16-C34)	240	ug/g	50	<50	51	<50	68	80	<50
F4 (C34-C50)	120	ug/g	50	<50	<50	<50	<50	<50	<50
Reached Baseline at C50		ug/g		YES	YES	YES	YES	YES	YES
F4G (Gravimetric)		ug/g		-	-	-	-	-	-
BTEX									
Benzene	0.02	ug/g	0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Toluene	0.2	ug/g	0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Ethylbenzene	0.05	ug/g	0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
m+p-Xylene		ug/g	0.020 - 0.040	<0.040	<0.020	<0.020	<0.020	<0.020	<0.040
o-Xylene		ug/g	0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Xylenes, Total	0.05	ug/g	0.020 - 0.040	<0.040	<0.020	<0.020	<0.020	<0.020	<0.040

Legend	
To Be Announced	TBA
Exceeds one Criteria	**Result**
DL > Criteria	Result
Criteria 1	Reg153/04 T1-Soil/Res

Table C1 - Petroleum Hydrocarbons (PHCs) and Benzene, Toluene, Ethylbenzene, Xylenes (BTEX) in Soil

Parameter	***MECP Table 1 RPIICC Criteria*** [1]	***Units***	***RDL***	*Sample ID*				
				BV Labs Job ID / Sample ID				
				Sample Collection Date				
				Sample Collection Time				
				BH-104 SS4 (2.3-2.7M) C1F3550 / PTI261 Jun 02, 2021 02:20 PM	BH-106 SS4 (0.8-1.4M) C1F3550 / PTI264 Jun 02, 2021 11:20 AM	BH-107 SS3 (1.5-2.1M) C1F3550 / PTI267 Jun 02, 2021 02:55 PM	BH-108 SS2 (0.8-1.4M) C1F3550 / PTI268 Jun 02, 2021 03:15 PM	BH-16 SS3 (1.5-2.1M) C1F3550 / PTI253 May 31, 2021
Petroleum Hydrocarbons								
F1 (C6-C10)	25	ug/g	10	<10	<10	<10	<10	<10
F1 (C6-C10) - BTEX	25	ug/g	10	<10	<10	<10	<10	<10
F2 (C10-C16)	10	ug/g	10	<10	<10	<10	<10	<10
F3 (C16-C34)	240	ug/g	50	<50	<50	<50	<50	54
F4 (C34-C50)	120	ug/g	50	<50	<50	<50	<50	<50
Reached Baseline at C50		ug/g		YES	YES	YES	YES	YES
F4G (Gravimetric)		ug/g		-	-	-	-	-
BTEX								
Benzene	0.02	ug/g	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Toluene	0.2	ug/g	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Ethylbenzene	0.05	ug/g	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
m+p-Xylene		ug/g	0.020 - 0.040	<0.040	<0.040	<0.040	<0.040	<0.040
o-Xylene		ug/g	0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Xylenes, Total	0.05	ug/g	0.020 - 0.040	<0.040	<0.040	<0.040	<0.040	<0.040

Legend	
To Be Announced	TBA
Exceeds one Criteria	**Result**
DL > Criteria	Result
Criteria 1	Reg153/04 T1-Soil/Res

Table C2 - Volatile Organic Compounds (VOCs) in Soil

Parameter	***MECP Table 1 RPIICC Criteria*** [1]	***Units***	***RDL***	*Sample ID*			
				BV Labs Job ID / Sample ID			
				Sample Collection Date			
				Sample Collection Time			
				BH-102 SS5 (3.1-3.7M) C1F3550 / PTI256 Jun 01, 2021 09:00 AM	BH-102 SS5D (3.1-3.7M) C1F3550 / PTI257 Jun 01, 2021 09:00 AM	BH-102 SS6 (3.8-4.4M) C1F3550 / PTI258 Jun 01, 2021 08:15 AM	BH-102 SS7 (4.6-5.2M) C1F3550 / PTI259 Jun 01, 2021 08:30 AM
Volatile Organic Compounds							
Benzene	0.02	ug/g	0.020	<0.020	<0.020	<0.020	<0.020
Toluene	0.2	ug/g	0.020	<0.020	<0.020	<0.020	<0.020
Ethylbenzene	0.05	ug/g	0.020	<0.020	<0.020	<0.020	<0.020
m+p-Xylene		ug/g	0.020 - 0.040	<0.020	<0.020	<0.020	<0.020
o-Xylene		ug/g	0.020	<0.020	<0.020	<0.020	<0.020
Xylenes, Total	0.05	ug/g	0.020 - 0.040	<0.020	<0.020	<0.020	<0.020
Acetone	0.5	ug/g	0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Bromoform	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Bromomethane	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Carbon Tetrachloride	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Chlorobenzene	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Chloroform	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Dibromochloromethane	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dichlorobenzene	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
1,3-Dichlorobenzene	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
1,4-Dichlorobenzene	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Dichlorodifluoromethane	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
1,1-Dichloroethane	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dichloroethane	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
1,1-Dichloroethylene	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
cis-1,2-Dichloroethylene	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
trans-1,2-Dichloroethylene	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dichloropropane	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
cis-1,3-Dichloropropene	0.05	ug/g	0.030	<0.030	<0.030	<0.030	<0.030
trans-1,3-Dichloropropene	0.05	ug/g	0.040	<0.040	<0.040	<0.040	<0.040
1,3-Dichloropropene (cis+trans)	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Ethylene Dibromide	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Hexane (n-Hexane)	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Methyl Ethyl Ketone (MEK)	0.5	ug/g	0.50	<0.50	<0.50	<0.50	<0.50
Methyl Isobutyl Ketone (MIBK)	0.5	ug/g	0.50	<0.50	<0.50	<0.50	<0.50
Methyl tert-butyl ether (MTBE)	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Methylene Chloride (Dichloromethane)	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Styrene	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
1,1,1,2-Tetrachloroethane	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
1,1,2,2-Tetrachloroethane	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Tetrachloroethylene	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
1,1,1-Trichloroethane	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
1,1,2-Trichloroethane	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Trichloroethylene	0.05	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Trichlorofluoromethane	0.25	ug/g	0.050	<0.050	<0.050	<0.050	<0.050
Vinyl Chloride	0.02	ug/g	0.020	<0.020	<0.020	<0.020	<0.020
1,4-Dioxane							
1,4-Dioxane		ug/g		-	-	-	-

Legend	
To Be Announced	TBA
Exceeds one Criteria	**Result**
DL > Criteria	Result
Criteria 1	Reg153/04 T1-Soil/Res

Table C3 - Organochlorine Pesticides (OCs) and Polychlorinated Biphenyls (PCBs) in Soil

Parameter	*MECP Table 1 RPIICC Criteria* [1]	*Units*	*RDL*	*Sample ID*					
				BV Labs Job ID / Sample ID					
				Sample Collection Date					
				Sample Collection Time					
				BH-105 SS1 (0.0-0.6M) C1F3550 / PTI262 Jun 02, 2021 08:30 AM	BH-107 SS2 (0.8-1.4M) C1F3550 / PTI265 Jun 02, 2021 02:45 PM	BH-107 SS2D (0.8-1.4M) C1F3550 / PTI266 Jun 02, 2021 02:45 PM	BH-12 SS2 (0.8-1.4M) C1F3550 / PTI241 May 27, 2021	BH-14 SS2 (0.8-1.4M) C1F3550 / PTI243 May 26, 2021	BH-16 SS2 (0.8-1.4M) C1F3550 / PTI252 May 31, 2021
Polychlorinated Biphenyls (PCBs)									
Aroclor 1242		ug/g	0.010 - 0.015	<0.015	<0.010	<0.010	<0.015	<0.015	<0.010
Aroclor 1248		ug/g	0.010 - 0.015	<0.015	<0.010	<0.010	<0.015	<0.015	<0.010
Aroclor 1254		ug/g	0.010 - 0.015	<0.015	<0.010	<0.010	<0.015	<0.015	<0.010
Aroclor 1260		ug/g	0.010 - 0.015	<0.015	<0.010	<0.010	<0.015	<0.015	<0.010
Total Polychlorinated Biphenyls (PCBs)	0.3	ug/g	0.010 - 0.015	<0.015	<0.010	<0.010	<0.015	<0.015	<0.010
Organochlorine Pesticides (OCs)									
Aldrin	0.05	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
alpha-Chlordane	0.05	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
gamma-Chlordane	0.05	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
Total Chlordane	0.05	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
o,p-DDD	0.05	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
p,p-DDD	0.05	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
Total DDD		ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
o,p-DDE	0.05	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
p,p-DDE	0.05	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
Total DDE		ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
o,p-DDT	1.4	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
p,p-DDT	1.4	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
Total DDT		ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
Dieldrin	0.05	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
Endosulfan I	0.04	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
Endosulfan II (beta)	0.04	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
Total Endosulfan		ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
Endrin	0.04	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
Heptachlor	0.05	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
Heptachlor epoxide	0.05	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
Hexachlorobenzene	0.01	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
Hexachlorobutadiene	0.01	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
gamma-Hexachlorocyclohexane (Lindane)	0.01	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
Hexachloroethane	0.01	ug/g	0.0020	<0.0020	-	-	<0.0020	<0.0020	-
Methoxychlor	0.05	ug/g	0.0050	<0.0050	-	-	<0.0050	<0.0050	-

Legend	
To Be Announced	TBA
Exceeds one Criteria	**Result**
DL > Criteria	Result
Criteria 1	Reg153/04 T1-Soil/Res

Table C3 - Organochlorine Pesticides (OCs) and Polychlorinated Biphenyls (PCBs) in Soil

Parameter	***MECP Table 1 RPIICC Criteria*** [1]	***Units***	***RDL***	*Sample ID*		
				BV Labs Job ID / Sample ID		
				Sample Collection Date		
				Sample Collection Time		
				BH-4 SS1 (0.0-0.6M) C1F3550 / PTI235 May 28, 2021	BH-4 SS1D (0.0-0.6M) C1F3550 / PTI236 May 28, 2021	BH-7 SS1 (0.0-0.6M) C1F3550 / PTI239 May 28, 2021
Polychlorinated Biphenyls (PCBs)						
Aroclor 1242		ug/g	0.010 - 0.015	<0.015	<0.015	<0.015
Aroclor 1248		ug/g	0.010 - 0.015	<0.015	<0.015	<0.015
Aroclor 1254		ug/g	0.010 - 0.015	<0.015	<0.015	<0.015
Aroclor 1260		ug/g	0.010 - 0.015	<0.015	<0.015	<0.015
Total Polychlorinated Biphenyls (PCBs)	0.3	ug/g	0.010 - 0.015	<0.015	<0.015	<0.015
Organochlorine Pesticides (OCs)						
Aldrin	0.05	ug/g	0.0020	<0.0020	<0.0020	<0.0020
alpha-Chlordane	0.05	ug/g	0.0020	<0.0020	<0.0020	<0.0020
gamma-Chlordane	0.05	ug/g	0.0020	<0.0020	<0.0020	<0.0020
Total Chlordane	0.05	ug/g	0.0020	<0.0020	<0.0020	<0.0020
o,p-DDD	0.05	ug/g	0.0020	<0.0020	<0.0020	<0.0020
p,p-DDD	0.05	ug/g	0.0020	<0.0020	<0.0020	<0.0020
Total DDD		ug/g	0.0020	<0.0020	<0.0020	<0.0020
o,p-DDE	0.05	ug/g	0.0020	<0.0020	<0.0020	<0.0020
p,p-DDE	0.05	ug/g	0.0020	<0.0020	<0.0020	<0.0020
Total DDE		ug/g	0.0020	<0.0020	<0.0020	<0.0020
o,p-DDT	1.4	ug/g	0.0020	<0.0020	<0.0020	<0.0020
p,p-DDT	1.4	ug/g	0.0020	<0.0020	<0.0020	<0.0020
Total DDT		ug/g	0.0020	<0.0020	<0.0020	<0.0020
Dieldrin	0.05	ug/g	0.0020	<0.0020	<0.0020	<0.0020
Endosulfan I	0.04	ug/g	0.0020	<0.0020	<0.0020	<0.0020
Endosulfan II (beta)	0.04	ug/g	0.0020	<0.0020	<0.0020	<0.0020
Total Endosulfan		ug/g	0.0020	<0.0020	<0.0020	<0.0020
Endrin	0.04	ug/g	0.0020	<0.0020	<0.0020	<0.0020
Heptachlor	0.05	ug/g	0.0020	<0.0020	<0.0020	<0.0020
Heptachlor epoxide	0.05	ug/g	0.0020	<0.0020	<0.0020	<0.0020
Hexachlorobenzene	0.01	ug/g	0.0020	<0.0020	<0.0020	<0.0020
Hexachlorobutadiene	0.01	ug/g	0.0020	<0.0020	<0.0020	<0.0020
gamma-Hexachlorocyclohexane (Lindane)	0.01	ug/g	0.0020	<0.0020	<0.0020	<0.0020
Hexachloroethane	0.01	ug/g	0.0020	<0.0020	<0.0020	<0.0020
Methoxychlor	0.05	ug/g	0.0050	<0.0050	<0.0050	<0.0050

Legend	
To Be Announced	TBA
Exceeds one Criteria	**Result**
DL > Criteria	Result
Criteria 1	Reg153/04 T1-Soil/Res

Table C4 - Metals and Inorganics in Soil

Parameter	***MECP Table 1 RPIICC Criteria*** [1]	*Units*	*RDL*	*Sample ID*							
				BV Labs Job ID / Sample ID							
				Sample Collection Date							
				Sample Collection Time							
				BH-101 SS1 (0.0-0.6M) C1F3550 / PTI254 Jun 01, 2021 12:15 PM	BH-105 SS2 (0.8-1.4M) C1F3550 / PTI263 Jun 02, 2021 08:40 AM	BH-105 SS2 (0.8-1.4M) Lab-Dup C1F3550 / PTI263 Jun 02, 2021 08:40 AM	BH-12 SS3 (1.5-2.1M) C1F3550 / PTI242 May 27, 2021	BH-14 SS3 (1.5-2.1M) C1F3550 / PTI251 May 26, 2021	BH-3 SS3 (1.5-2.1M) C1F3550 / PTI234 May 27, 2021	BH-4 SS3 (1.5-2.1M) C1F3550 / PTI237 May 28, 2021	BH-4 SS3D (1.5-2.1M) C1F3550 / PTI238 May 28, 2021
Metals (including Hydride-Forming Metals)											
Acid Extractable Antimony (Sb)	1.3	ug/g	0.20	<0.20	<0.20	-	<0.20	<0.20	<0.20	<0.20	<0.20
Acid Extractable Arsenic (As)	18	ug/g	1.0	1.4	1.7	-	1	1.3	<1.0	1.6	1.9
Acid Extractable Barium (Ba)	220	ug/g	0.50	42	48	-	30	29	15	46	50
Acid Extractable Beryllium (Be)	2.5	ug/g	0.20	0.25	0.37	-	0.26	0.25	<0.20	0.36	0.4
Acid Extractable Boron (B)	36	ug/g	5.0	5.6	5.2	-	<5.0	<5.0	<5.0	<5.0	<5.0
Acid Extractable Cadmium (Cd)	1.2	ug/g	0.10	0.16	0.14	-	<0.10	0.17	<0.10	<0.10	0.14
Acid Extractable Chromium (Cr)	70	ug/g	1.0	10	17	-	9.8	10	7.5	16	19
Acid Extractable Cobalt (Co)	21	ug/g	0.10	3.2	4.6	-	3.1	2.9	2.4	4.1	4.8
Acid Extractable Copper (Cu)	92	ug/g	0.50	9	9	-	5.7	4.3	3.5	7.7	9.1
Acid Extractable Lead (Pb)	120	ug/g	1.0	21	7.8	-	4.8	6.2	2.2	7.7	8
Acid Extractable Molybdenum (Mo)	2	ug/g	0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50
Acid Extractable Nickel (Ni)	82	ug/g	0.50	6.3	9.2	-	6	5.5	4.7	7.9	9.6
Acid Extractable Selenium (Se)	1.5	ug/g	0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50
Acid Extractable Silver (Ag)	0.5	ug/g	0.20	<0.20	<0.20	-	<0.20	<0.20	<0.20	<0.20	<0.20
Acid Extractable Thallium (Tl)	1	ug/g	0.050	0.062	0.089	-	0.055	0.055	<0.050	0.075	0.086
Acid Extractable Uranium (U)	2.5	ug/g	0.050	0.37	0.49	-	0.42	0.41	0.42	0.46	0.52
Acid Extractable Vanadium (V)	86	ug/g	5.0	19	25	-	20	21	17	24	26
Acid Extractable Zinc (Zn)	290	ug/g	5.0	40	31	-	15	24	9.9	30	35
Other Regulated Parameters											
Hot Water Extractable Boron		ug/g	0.050	0.92	0.51	-	0.056	0.44	<0.050	0.51	0.52
Soluble (20:1) Chloride (Cl-)		ug/g		-	-	-	-	-	-	-	-
WAD Cyanide (Free)	0.051	ug/g	0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01
Electrical Conductivity	0.57	mS/cm	0.002	0.25	0.24	-	0.12	0.26	0.12	0.28	0.29
Hexavalent Chromium (CrVI)	0.66	ug/g	0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18
Acid Extractable Mercury (Hg)	0.27	ug/g	0.050	0.061	<0.050	-	<0.050	<0.050	<0.050	<0.050	0.051
Available (CaCl2) pH		pH		7.64	7.08	-	7.67	7.21	7.79	7.27	7.31
Sodium Adsorption Ratio	2.4	N/A		0.21	0.26	-	0.3	0.21	0.31	0.29	0.29
Fraction of Organic Carbon		g/g		-	-	-	-	-	-	-	-
Fraction of Organic Carbon (rep.#1)		g/g		-	-	-	-	-	-	-	-
Fraction of Organic Carbon (rep.#2)		g/g		-	-	-	-	-	-	-	-
Average FOC Result		g/g		-	-	-	-	-	-	-	-

Legend	
To Be Announced	TBA
Exceeds one Criteria	**Result**
DL > Criteria	Result
Criteria 1	Reg153/04 T1-Soil/Res

Table C4 - Metals and Inorganics in Soil

Parameter	*MECP Table 1 RPIICC Criteria*[1]	*Units*	*RDL*	*Sample ID*	
				BV Labs Job ID / Sample ID	
				Sample Collection Date	
				Sample Collection Time	
				BH-4 SS3D (1.5-2.1M) Lab-Dup C1F3550 / PTI238 May 28, 2021	BH-7 SS5 (3.1-3.7) C1F3550 / PTI240 May 28, 2021
Metals (including Hydride-Forming Metals)					
Acid Extractable Antimony (Sb)	1.3	ug/g	0.20	<0.20	<0.20
Acid Extractable Arsenic (As)	18	ug/g	1.0	1.8	3
Acid Extractable Barium (Ba)	220	ug/g	0.50	50	90
Acid Extractable Beryllium (Be)	2.5	ug/g	0.20	0.38	0.64
Acid Extractable Boron (B)	36	ug/g	5.0	<5.0	8.3
Acid Extractable Cadmium (Cd)	1.2	ug/g	0.10	0.14	0.28
Acid Extractable Chromium (Cr)	70	ug/g	1.0	18	21
Acid Extractable Cobalt (Co)	21	ug/g	0.10	4.9	7.2
Acid Extractable Copper (Cu)	92	ug/g	0.50	8.8	16
Acid Extractable Lead (Pb)	120	ug/g	1.0	7.8	54
Acid Extractable Molybdenum (Mo)	2	ug/g	0.50	<0.50	<0.50
Acid Extractable Nickel (Ni)	82	ug/g	0.50	9.7	15
Acid Extractable Selenium (Se)	1.5	ug/g	0.50	<0.50	<0.50
Acid Extractable Silver (Ag)	0.5	ug/g	0.20	<0.20	<0.20
Acid Extractable Thallium (Tl)	1	ug/g	0.050	0.085	0.13
Acid Extractable Uranium (U)	2.5	ug/g	0.050	0.5	0.5
Acid Extractable Vanadium (V)	86	ug/g	5.0	27	32
Acid Extractable Zinc (Zn)	290	ug/g	5.0	35	68
Other Regulated Parameters					
Hot Water Extractable Boron		ug/g	0.050	-	0.82
Soluble (20:1) Chloride (Cl-)		ug/g		-	-
WAD Cyanide (Free)	0.051	ug/g	0.01	-	<0.01
Electrical Conductivity	0.57	mS/cm	0.002	-	0.27
Hexavalent Chromium (CrVI)	0.66	ug/g	0.18	-	<0.18
Acid Extractable Mercury (Hg)	0.27	ug/g	0.050	<0.050	0.13
Available (CaCl2) pH		pH		-	7.2
Sodium Adsorption Ratio	2.4	N/A		-	0.5
Fraction of Organic Carbon		g/g		-	-
Fraction of Organic Carbon (rep.#1)		g/g		-	-
Fraction of Organic Carbon (rep.#2)		g/g		-	-
Average FOC Result		g/g		-	-

ICPMS

Legend	
To Be Announced	TBA
Exceeds one Criteria	**Result**
DL > Criteria	Result
Criteria 1	Reg153/04 T1-Soil/Res

Table C5 - Petroleum Hydrocarbons (PHCs) and Volatile Organic Compounds (VOCs) in Water

Parameter	*MECP Table 1 RPIICC Criteria* [1]	*Units*	*RDL*	*Sample ID*			
				BV Labs Job ID / Sample ID			
				Sample Collection Date			
				Sample Collection Time			
				TRIP BLANK LOT#3699 C1F6446 / PTX975 Jun 08, 2021	MW-102 C1F6446 / PTX971 Jun 08, 2021 09:23 AM	MW-102D C1F6446 / PTX972 Jun 08, 2021 09:23 AM	MW-102D Lab-Dup C1F6446 / PTX972 Jun 08, 2021 09:23 AM
Petroleum Hydrocarbons (PHCs)							
F1 (C6-C10)	420	ug/L	25	-	53	46	38
F1 (C6-C10) - BTEX	420	ug/L	25	-	49	43	35
F2 (C10-C16)	150	ug/L	100	-	<100	<100	<100
F3 (C16-C34)	500	ug/L	200	-	<200	<200	<200
F4 (C34-C50)	500	ug/L	200	-	<200	<200	<200
Reached Baseline at C50		ug/L		-	YES	YES	YES
F4G (Gravimetric)		ug/L		-	-	-	-
Volatile Organic Compounds (VOCs)							
Benzene	0.5	ug/L	0.20	<0.20	<0.20	<0.20	<0.20
Toluene	0.8	ug/L	0.20	<0.20	0.42	0.4	0.33
Ethylbenzene	0.5	ug/L	0.20	<0.20	0.39	0.39	0.34
m+p-Xylene		ug/L	0.20 - 0.40	<0.20	0.56	0.53	0.47
o-Xylene		ug/L	0.20	<0.20	2.9	2.6	2.3
Xylenes, Total	72	ug/L	0.20 - 0.40	<0.20	3.5	3.2	2.8
Acetone	2700	ug/L	10	<10	15	13	13
Bromodichloromethane	2	ug/L	0.50	<0.50	<0.50	<0.50	<0.50
Bromoform	5	ug/L	1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	0.89	ug/L	0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	0.2	ug/L	0.19 - 0.20	<0.19	<0.20	<0.20	<0.20
Chlorobenzene	0.5	ug/L	0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	2	ug/L	0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane	2	ug/L	0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	0.5	ug/L	0.40 - 0.50	<0.40	<0.50	<0.50	<0.50
1,3-Dichlorobenzene	0.5	ug/L	0.40 - 0.50	<0.40	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	0.5	ug/L	0.40 - 0.50	<0.40	<0.50	<0.50	<0.50
Dichlorodifluoromethane	590	ug/L	1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	0.5	ug/L	0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	0.5	ug/L	0.49 - 0.50	<0.49	<0.50	<0.50	<0.50
1,1-Dichloroethylene	0.5	ug/L	0.20	<0.20	<0.20	<0.20	<0.20
cis-1,2-Dichloroethylene	1.6	ug/L	0.50	<0.50	<0.50	<0.50	<0.50
trans-1,2-Dichloroethylene	1.6	ug/L	0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloropropane	0.5	ug/L	0.20	<0.20	<0.20	<0.20	<0.20
cis-1,3-Dichloropropene	0.5	ug/L	0.30	<0.30	<0.30	<0.30	<0.30
trans-1,3-Dichloropropene	0.5	ug/L	0.40	<0.40	<0.40	<0.40	<0.40
1,3-Dichloropropene (cis+trans)	0.5	ug/L	0.50	<0.50	<0.50	<0.50	-
Ethylene Dibromide	0.2	ug/L	0.19 - 0.20	<0.19	<0.20	<0.20	<0.20
Hexane	5	ug/L	1.0	<1.0	<1.0	<1.0	<1.0
Methyl Ethyl Ketone (MEK)	400	ug/L	10	<10	<10	<10	<10
Methyl Isobutyl Ketone (MIBK)	640	ug/L	5.0	<5.0	<5.0	<5.0	<5.0
Methyl tert-butyl ether (MTBE)	15	ug/L	0.50	<0.50	<0.50	<0.50	<0.50
Methylene Chloride (Dichloromethane)	5	ug/L	2.0	<2.0	<2.0	<2.0	<2.0
Styrene	0.5	ug/L	0.40 - 0.50	<0.40	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	1.1	ug/L	0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	0.5	ug/L	0.40 - 0.50	<0.40	<0.50	<0.50	<0.50
Tetrachloroethylene	0.5	ug/L	0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	0.5	ug/L	0.20	<0.20	<0.20	<0.20	<0.20
1,1,2-Trichloroethane	0.5	ug/L	0.40 - 0.50	<0.40	<0.50	<0.50	<0.50
Trichloroethylene	0.5	ug/L	0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	150	ug/L	0.50	<0.50	<0.50	<0.50	<0.50
Vinyl Chloride	0.5	ug/L	0.20	<0.20	<0.20	<0.20	<0.20
1,4-Dioxane							
1,4-Dioxane		ug/L		-	-	-	-

Legend	
To Be Announced	TBA
Exceeds one Criteria	**Result**
DL > Criteria	Result
Criteria 1	Reg153/04 T1-GW

Table C5 - Petroleum Hydrocarbons (PHCs) and Volatile Organic Compounds (VOCs) in Water

Parameter	*MECP Table 1 RPIICC Criteria* [1]	*Units*	*RDL*	*Sample ID*	
				BV Labs Job ID / Sample ID	
				Sample Collection Date	
				Sample Collection Time	
				MW-103 C1F6446 / PTX973 Jun 08, 2021 09:35 AM	MW-106 C1F6446 / PTX974 Jun 08, 2021 10:05 AM
Petroleum Hydrocarbons (PHCs)					
F1 (C6-C10)	420	ug/L	25	<25	<25
F1 (C6-C10) - BTEX	420	ug/L	25	<25	<25
F2 (C10-C16)	150	ug/L	100	<100	<100
F3 (C16-C34)	500	ug/L	200	<200	<200
F4 (C34-C50)	500	ug/L	200	<200	<200
Reached Baseline at C50		ug/L		YES	YES
F4G (Gravimetric)		ug/L		-	-
Volatile Organic Compounds (VOCs)					
Benzene	0.5	ug/L	0.20	<0.20	<0.20
Toluene	0.8	ug/L	0.20	<0.20	<0.20
Ethylbenzene	0.5	ug/L	0.20	<0.20	<0.20
m+p-Xylene		ug/L	0.20 - 0.40	<0.40	<0.40
o-Xylene		ug/L	0.20	<0.20	<0.20
Xylenes, Total	72	ug/L	0.20 - 0.40	<0.40	<0.40
Acetone	2700	ug/L	10	-	-
Bromodichloromethane	2	ug/L	0.50	-	-
Bromoform	5	ug/L	1.0	-	-
Bromomethane	0.89	ug/L	0.50	-	-
Carbon Tetrachloride	0.2	ug/L	0.19 - 0.20	-	-
Chlorobenzene	0.5	ug/L	0.20	-	-
Chloroform	2	ug/L	0.20	-	-
Dibromochloromethane	2	ug/L	0.50	-	-
1,2-Dichlorobenzene	0.5	ug/L	0.40 - 0.50	-	-
1,3-Dichlorobenzene	0.5	ug/L	0.40 - 0.50	-	-
1,4-Dichlorobenzene	0.5	ug/L	0.40 - 0.50	-	-
Dichlorodifluoromethane	590	ug/L	1.0	-	-
1,1-Dichloroethane	0.5	ug/L	0.20	-	-
1,2-Dichloroethane	0.5	ug/L	0.49 - 0.50	-	-
1,1-Dichloroethylene	0.5	ug/L	0.20	-	-
cis-1,2-Dichloroethylene	1.6	ug/L	0.50	-	-
trans-1,2-Dichloroethylene	1.6	ug/L	0.50	-	-
1,2-Dichloropropane	0.5	ug/L	0.20	-	-
cis-1,3-Dichloropropene	0.5	ug/L	0.30	-	-
trans-1,3-Dichloropropene	0.5	ug/L	0.40	-	-
1,3-Dichloropropene (cis+trans)	0.5	ug/L	0.50	-	-
Ethylene Dibromide	0.2	ug/L	0.19 - 0.20	-	-
Hexane	5	ug/L	1.0	-	-
Methyl Ethyl Ketone (MEK)	400	ug/L	10	-	-
Methyl Isobutyl Ketone (MIBK)	640	ug/L	5.0	-	-
Methyl tert-butyl ether (MTBE)	15	ug/L	0.50	-	-
Methylene Chloride (Dichloromethane)	5	ug/L	2.0	-	-
Styrene	0.5	ug/L	0.40 - 0.50	-	-
1,1,1,2-Tetrachloroethane	1.1	ug/L	0.50	-	-
1,1,2,2-Tetrachloroethane	0.5	ug/L	0.40 - 0.50	-	-
Tetrachloroethylene	0.5	ug/L	0.20	-	-
1,1,1-Trichloroethane	0.5	ug/L	0.20	-	-
1,1,2-Trichloroethane	0.5	ug/L	0.40 - 0.50	-	-
Trichloroethylene	0.5	ug/L	0.20	-	-
Trichlorofluoromethane	150	ug/L	0.50	-	-
Vinyl Chloride	0.5	ug/L	0.20	-	-
1,4-Dioxane					
1,4-Dioxane		ug/L		-	-

Legend	
To Be Announced	TBA
Exceeds one Criteria	**Result**
DL > Criteria	Result
Criteria 1	Reg153/04 T1-GW

Appendix D – Certificates of Analysis

Your P.O. #: MRK-GEO
Your Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY

Attention: Aleksandar Saric

exp Services Inc
Markham Branch
220 Commerce Valley Dr W
Suite 500
Markham, ON
CANADA L3T 0A8

Your C.O.C. #: 792128-83-01, 792128-121-01, 792128-163-01

Report Date: 2021/06/11
Report #: R6672190
Version: 2 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1F3550
Received: 2021/06/04, 15:30

Sample Matrix: Soil
Samples Received: 28

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Hot Water Extractable Boron	8	2021/06/08	2021/06/08	CAM SOP-00408	R153 Ana. Prot. 2011
1,3-Dichloropropene Sum	4	N/A	2021/06/11		EPA 8260C m
Free (WAD) Cyanide	8	2021/06/08	2021/06/08	CAM SOP-00457	OMOE E3015 m
Conductivity	8	2021/06/09	2021/06/09	CAM SOP-00414	OMOE E3530 v1 m
Hexavalent Chromium in Soil by IC (1)	8	2021/06/08	2021/06/09	CAM SOP-00436	EPA 3060/7199 m
Petroleum Hydro. CCME F1 & BTEX in Soil (2)	7	N/A	2021/06/08	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Soil (3)	11	2021/06/07	2021/06/08	CAM SOP-00316	CCME CWS m
Acid Extractable Metals by ICPMS	1	2021/06/08	2021/06/08	CAM SOP-00447	EPA 6020B m
Acid Extractable Metals by ICPMS	7	2021/06/08	2021/06/09	CAM SOP-00447	EPA 6020B m
Moisture	28	N/A	2021/06/07	CAM SOP-00445	Carter 2nd ed 51.2 m
OC Pesticides (Selected) & PCB (4)	6	2021/06/08	2021/06/09	CAM SOP-00307	SW846 8081, 8082
OC Pesticides Summed Parameters	6	N/A	2021/06/08	CAM SOP-00307	EPA 8081/8082 m
Polychlorinated Biphenyl in Soil	3	2021/06/07	2021/06/08	CAM SOP-00309	EPA 8082A m
pH CaCl2 EXTRACT	8	2021/06/09	2021/06/09	CAM SOP-00413	EPA 9045 D m
Sodium Adsorption Ratio (SAR)	8	N/A	2021/06/10	CAM SOP-00102	EPA 6010C
Volatile Organic Compounds and F1 PHCs	4	N/A	2021/06/11	CAM SOP-00230	EPA 8260C m

Remarks:

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

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

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report.

Your P.O. #: MRK-GEO
Your Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY

Attention: Aleksandar Saric

exp Services Inc
Markham Branch
220 Commerce Valley Dr W
Suite 500
Markham, ON
CANADA L3T 0A8

Your C.O.C. #: 792128-83-01, 792128-121-01, 792128-163-01

Report Date: 2021/06/11
Report #: R6672190
Version: 2 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1F3550
Received: 2021/06/04, 15:30

Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Soils are reported on a dry weight basis unless otherwise specified.
(2) No lab extraction date is given for F1BTEX & VOC samples that are field preserved with methanol. Extraction date is the date sampled unless otherwise stated.
(3) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.
(4) Chlordane (Total) = Alpha Chlordane + Gamma Chlordane

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Patricia Legette, Project Manager
Email: Patricia.Legette@bureauveritas.com
Phone# (905)817-5799
==========
BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

BV Labs Job #: C1F3550
Report Date: 2021/06/11

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

O.REG 153 METALS & INORGANICS PKG (SOIL)

BV Labs ID		PTI234	PTI237		PTI238		
Sampling Date		2021/05/27	2021/05/28		2021/05/28		
COC Number		792128-83-01	792128-83-01		792128-83-01		
	UNITS	**BH-3 SS3 (1.5-2.1M)**	**BH-4 SS3 (1.5-2.1M)**	**QC Batch**	**BH-4 SS3D (1.5-2.1M)**	**RDL**	**QC Batch**
Calculated Parameters							
Sodium Adsorption Ratio	N/A	0.31 (1)	0.29	7391452	0.29		7391452
Inorganics							
Conductivity	mS/cm	0.12	0.28	7397185	0.29	0.002	7397185
Moisture	%	12	14	7393235	14	1.0	7393235
Available (CaCl2) pH	pH	7.79	7.27	7397483	7.31		7397483
WAD Cyanide (Free)	ug/g	<0.01	<0.01	7394587	<0.01	0.01	7394587
Chromium (VI)	ug/g	<0.18	<0.18	7395470	<0.18	0.18	7394948
Metals							
Hot Water Ext. Boron (B)	ug/g	<0.050	0.51	7395236	0.52	0.050	7395236
Acid Extractable Antimony (Sb)	ug/g	<0.20	<0.20	7395393	<0.20	0.20	7395627
Acid Extractable Arsenic (As)	ug/g	<1.0	1.6	7395393	1.9	1.0	7395627
Acid Extractable Barium (Ba)	ug/g	15	46	7395393	50	0.50	7395627
Acid Extractable Beryllium (Be)	ug/g	<0.20	0.36	7395393	0.40	0.20	7395627
Acid Extractable Boron (B)	ug/g	<5.0	<5.0	7395393	<5.0	5.0	7395627
Acid Extractable Cadmium (Cd)	ug/g	<0.10	<0.10	7395393	0.14	0.10	7395627
Acid Extractable Chromium (Cr)	ug/g	7.5	16	7395393	19	1.0	7395627
Acid Extractable Cobalt (Co)	ug/g	2.4	4.1	7395393	4.8	0.10	7395627
Acid Extractable Copper (Cu)	ug/g	3.5	7.7	7395393	9.1	0.50	7395627
Acid Extractable Lead (Pb)	ug/g	2.2	7.7	7395393	8.0	1.0	7395627
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	<0.50	7395393	<0.50	0.50	7395627
Acid Extractable Nickel (Ni)	ug/g	4.7	7.9	7395393	9.6	0.50	7395627
Acid Extractable Selenium (Se)	ug/g	<0.50	<0.50	7395393	<0.50	0.50	7395627
Acid Extractable Silver (Ag)	ug/g	<0.20	<0.20	7395393	<0.20	0.20	7395627
Acid Extractable Thallium (Tl)	ug/g	<0.050	0.075	7395393	0.086	0.050	7395627
Acid Extractable Uranium (U)	ug/g	0.42	0.46	7395393	0.52	0.050	7395627
Acid Extractable Vanadium (V)	ug/g	17	24	7395393	26	5.0	7395627
Acid Extractable Zinc (Zn)	ug/g	9.9	30	7395393	35	5.0	7395627

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Sodium was not detected. To report SAR the sodium detection limit was used in the calculation. This value represents a maximum ratio.

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

BV Labs Job #: C1F3550
Report Date: 2021/06/11

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

O.REG 153 METALS & INORGANICS PKG (SOIL)

BV Labs ID		PTI234	PTI237		PTI238		
Sampling Date		2021/05/27	2021/05/28		2021/05/28		
COC Number		792128-83-01	792128-83-01		792128-83-01		
	UNITS	**BH-3 SS3 (1.5-2.1M)**	**BH-4 SS3 (1.5-2.1M)**	**QC Batch**	**BH-4 SS3D (1.5-2.1M)**	**RDL**	**QC Batch**
Acid Extractable Mercury (Hg)	ug/g	<0.050	<0.050	7395393	0.051	0.050	7395627
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

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

BV Labs Job #: C1F3550
Report Date: 2021/06/11

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

O.REG 153 METALS & INORGANICS PKG (SOIL)

BV Labs ID		PTI238			PTI240		
Sampling Date		2021/05/28			2021/05/28		
COC Number		792128-83-01			792128-83-01		
	UNITS	**BH-4 SS3D (1.5-2.1M) Lab-Dup**	**RDL**	**QC Batch**	**BH-7 SS5 (3.1-3.7)**	**RDL**	**QC Batch**
Calculated Parameters							
Sodium Adsorption Ratio	N/A				0.50		7391452
Inorganics							
Conductivity	mS/cm				0.27	0.002	7397185
Moisture	%				17	1.0	7393235
Available (CaCl2) pH	pH				7.20		7397483
WAD Cyanide (Free)	ug/g				<0.01	0.01	7394587
Chromium (VI)	ug/g				<0.18	0.18	7395470
Metals							
Hot Water Ext. Boron (B)	ug/g				0.82	0.050	7395236
Acid Extractable Antimony (Sb)	ug/g	<0.20	0.20	7395627	<0.20	0.20	7395393
Acid Extractable Arsenic (As)	ug/g	1.8	1.0	7395627	3.0	1.0	7395393
Acid Extractable Barium (Ba)	ug/g	50	0.50	7395627	90	0.50	7395393
Acid Extractable Beryllium (Be)	ug/g	0.38	0.20	7395627	0.64	0.20	7395393
Acid Extractable Boron (B)	ug/g	<5.0	5.0	7395627	8.3	5.0	7395393
Acid Extractable Cadmium (Cd)	ug/g	0.14	0.10	7395627	0.28	0.10	7395393
Acid Extractable Chromium (Cr)	ug/g	18	1.0	7395627	21	1.0	7395393
Acid Extractable Cobalt (Co)	ug/g	4.9	0.10	7395627	7.2	0.10	7395393
Acid Extractable Copper (Cu)	ug/g	8.8	0.50	7395627	16	0.50	7395393
Acid Extractable Lead (Pb)	ug/g	7.8	1.0	7395627	54	1.0	7395393
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	0.50	7395627	<0.50	0.50	7395393
Acid Extractable Nickel (Ni)	ug/g	9.7	0.50	7395627	15	0.50	7395393
Acid Extractable Selenium (Se)	ug/g	<0.50	0.50	7395627	<0.50	0.50	7395393
Acid Extractable Silver (Ag)	ug/g	<0.20	0.20	7395627	<0.20	0.20	7395393
Acid Extractable Thallium (Tl)	ug/g	0.085	0.050	7395627	0.13	0.050	7395393
Acid Extractable Uranium (U)	ug/g	0.50	0.050	7395627	0.50	0.050	7395393
Acid Extractable Vanadium (V)	ug/g	27	5.0	7395627	32	5.0	7395393
Acid Extractable Zinc (Zn)	ug/g	35	5.0	7395627	68	5.0	7395393
Acid Extractable Mercury (Hg)	ug/g	<0.050	0.050	7395627	0.13	0.050	7395393

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

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

BV Labs Job #: C1F3550
Report Date: 2021/06/11

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

O.REG 153 METALS & INORGANICS PKG (SOIL)

BV Labs ID		PTI242	PTI251		PTI254		
Sampling Date		2021/05/27	2021/05/26		2021/06/01 12:15		
COC Number		792128-83-01	792128-121-01		792128-121-01		
	UNITS	**BH-12 SS3 (1.5-2.1M)**	**BH-14 SS3 (1.5-2.1M)**	**QC Batch**	**BH-101 SS1 (0.0-0.6M)**	**RDL**	**QC Batch**
Calculated Parameters							
Sodium Adsorption Ratio	N/A	0.30 (1)	0.21 (1)	7391452	0.21 (1)		7391452
Inorganics							
Conductivity	mS/cm	0.12	0.26	7397185	0.25	0.002	7397185
Moisture	%	13	18	7393235	13	1.0	7393235
Available (CaCl2) pH	pH	7.67	7.21	7397483	7.64		7397483
WAD Cyanide (Free)	ug/g	<0.01	<0.01	7394587	<0.01	0.01	7394587
Chromium (VI)	ug/g	<0.18	<0.18	7394948	<0.18	0.18	7395470
Metals							
Hot Water Ext. Boron (B)	ug/g	0.056	0.44	7395236	0.92	0.050	7395236
Acid Extractable Antimony (Sb)	ug/g	<0.20	<0.20	7395393	<0.20	0.20	7395393
Acid Extractable Arsenic (As)	ug/g	1.0	1.3	7395393	1.4	1.0	7395393
Acid Extractable Barium (Ba)	ug/g	30	29	7395393	42	0.50	7395393
Acid Extractable Beryllium (Be)	ug/g	0.26	0.25	7395393	0.25	0.20	7395393
Acid Extractable Boron (B)	ug/g	<5.0	<5.0	7395393	5.6	5.0	7395393
Acid Extractable Cadmium (Cd)	ug/g	<0.10	0.17	7395393	0.16	0.10	7395393
Acid Extractable Chromium (Cr)	ug/g	9.8	10	7395393	10	1.0	7395393
Acid Extractable Cobalt (Co)	ug/g	3.1	2.9	7395393	3.2	0.10	7395393
Acid Extractable Copper (Cu)	ug/g	5.7	4.3	7395393	9.0	0.50	7395393
Acid Extractable Lead (Pb)	ug/g	4.8	6.2	7395393	21	1.0	7395393
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	<0.50	7395393	<0.50	0.50	7395393
Acid Extractable Nickel (Ni)	ug/g	6.0	5.5	7395393	6.3	0.50	7395393
Acid Extractable Selenium (Se)	ug/g	<0.50	<0.50	7395393	<0.50	0.50	7395393
Acid Extractable Silver (Ag)	ug/g	<0.20	<0.20	7395393	<0.20	0.20	7395393
Acid Extractable Thallium (Tl)	ug/g	0.055	0.055	7395393	0.062	0.050	7395393
Acid Extractable Uranium (U)	ug/g	0.42	0.41	7395393	0.37	0.050	7395393
Acid Extractable Vanadium (V)	ug/g	20	21	7395393	19	5.0	7395393
Acid Extractable Zinc (Zn)	ug/g	15	24	7395393	40	5.0	7395393

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Sodium was not detected. To report SAR the sodium detection limit was used in the calculation. This value represents a maximum ratio.

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

BV Labs Job #: C1F3550
Report Date: 2021/06/11

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

O.REG 153 METALS & INORGANICS PKG (SOIL)

BV Labs ID		PTI242	PTI251		PTI254		
Sampling Date		2021/05/27	2021/05/26		2021/06/01 12:15		
COC Number		792128-83-01	792128-121-01		792128-121-01		
	UNITS	**BH-12 SS3 (1.5-2.1M)**	**BH-14 SS3 (1.5-2.1M)**	**QC Batch**	**BH-101 SS1 (0.0-0.6M)**	**RDL**	**QC Batch**
Acid Extractable Mercury (Hg)	ug/g	<0.050	<0.050	7395393	0.061	0.050	7395393

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

O.REG 153 METALS & INORGANICS PKG (SOIL)

BV Labs ID		PTI263			PTI263		
Sampling Date		2021/06/02 08:40			2021/06/02 08:40		
COC Number		792128-163-01			792128-163-01		
	UNITS	**BH-105 SS2 (0.8-1.4M)**	**RDL**	**QC Batch**	**BH-105 SS2 (0.8-1.4M) Lab-Dup**	**RDL**	**QC Batch**
Calculated Parameters							
Sodium Adsorption Ratio	N/A	0.26		7391452			
Inorganics							
Conductivity	mS/cm	0.24	0.002	7397185			
Moisture	%	17	1.0	7393235			
Available (CaCl2) pH	pH	7.08		7397483			
WAD Cyanide (Free)	ug/g	<0.01	0.01	7394587			
Chromium (VI)	ug/g	<0.18	0.18	7395470	<0.18	0.18	7395470
Metals							
Hot Water Ext. Boron (B)	ug/g	0.51	0.050	7395236			
Acid Extractable Antimony (Sb)	ug/g	<0.20	0.20	7395393			
Acid Extractable Arsenic (As)	ug/g	1.7	1.0	7395393			
Acid Extractable Barium (Ba)	ug/g	48	0.50	7395393			
Acid Extractable Beryllium (Be)	ug/g	0.37	0.20	7395393			
Acid Extractable Boron (B)	ug/g	5.2	5.0	7395393			
Acid Extractable Cadmium (Cd)	ug/g	0.14	0.10	7395393			
Acid Extractable Chromium (Cr)	ug/g	17	1.0	7395393			
Acid Extractable Cobalt (Co)	ug/g	4.6	0.10	7395393			
Acid Extractable Copper (Cu)	ug/g	9.0	0.50	7395393			
Acid Extractable Lead (Pb)	ug/g	7.8	1.0	7395393			
Acid Extractable Molybdenum (Mo)	ug/g	<0.50	0.50	7395393			
Acid Extractable Nickel (Ni)	ug/g	9.2	0.50	7395393			
Acid Extractable Selenium (Se)	ug/g	<0.50	0.50	7395393			
Acid Extractable Silver (Ag)	ug/g	<0.20	0.20	7395393			
Acid Extractable Thallium (Tl)	ug/g	0.089	0.050	7395393			
Acid Extractable Uranium (U)	ug/g	0.49	0.050	7395393			
Acid Extractable Vanadium (V)	ug/g	25	5.0	7395393			
Acid Extractable Zinc (Zn)	ug/g	31	5.0	7395393			
Acid Extractable Mercury (Hg)	ug/g	<0.050	0.050	7395393			

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

BV Labs Job #: C1F3550
Report Date: 2021/06/11

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

O.REG 153 OC PESTICIDES (SOIL)

BV Labs ID		PTI235	PTI236	PTI239	PTI241		
Sampling Date		2021/05/28	2021/05/28	2021/05/28	2021/05/27		
COC Number		792128-83-01	792128-83-01	792128-83-01	792128-83-01		
	UNITS	**BH-4 SS1 (0.0-0.6M)**	**BH-4 SS1D (0.0-0.6M)**	**BH-7 SS1 (0.0-0.6M)**	**BH-12 SS2 (0.8-1.4M)**	**RDL**	**QC Batch**
Inorganics							
Moisture	%	21	21	16	9.5	1.0	7393020
Calculated Parameters							
Chlordane (Total)	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7391451
o,p-DDD + p,p-DDD	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7391451
o,p-DDE + p,p-DDE	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7391451
o,p-DDT + p,p-DDT	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7391451
Total Endosulfan	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7391451
Total PCB	ug/g	<0.015	<0.015	<0.015	<0.015	0.015	7391451
Pesticides & Herbicides							
Aldrin	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
a-Chlordane	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
g-Chlordane	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
o,p-DDD	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
p,p-DDD	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
o,p-DDE	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
p,p-DDE	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
o,p-DDT	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
p,p-DDT	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
Dieldrin	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
Lindane	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
Endosulfan I (alpha)	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
Endosulfan II (beta)	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
Endrin	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
Heptachlor	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
Heptachlor epoxide	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
Hexachlorobenzene	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
Hexachlorobutadiene	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
Hexachloroethane	ug/g	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	7395123
Methoxychlor	ug/g	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	7395123

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

BV Labs Job #: C1F3550
Report Date: 2021/06/11

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

O.REG 153 OC PESTICIDES (SOIL)

BV Labs ID		PTI235	PTI236	PTI239	PTI241		
Sampling Date		2021/05/28	2021/05/28	2021/05/28	2021/05/27		
COC Number		792128-83-01	792128-83-01	792128-83-01	792128-83-01		
	UNITS	**BH-4 SS1 (0.0-0.6M)**	**BH-4 SS1D (0.0-0.6M)**	**BH-7 SS1 (0.0-0.6M)**	**BH-12 SS2 (0.8-1.4M)**	**RDL**	**QC Batch**
Aroclor 1242	ug/g	<0.015	<0.015	<0.015	<0.015	0.015	7395123
Aroclor 1248	ug/g	<0.015	<0.015	<0.015	<0.015	0.015	7395123
Aroclor 1254	ug/g	<0.015	<0.015	<0.015	<0.015	0.015	7395123
Aroclor 1260	ug/g	<0.015	<0.015	<0.015	<0.015	0.015	7395123
Surrogate Recovery (%)							
2,4,5,6-Tetrachloro-m-xylene	%	82	98	93	84		7395123
Decachlorobiphenyl	%	86	120	93	82		7395123

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

O.REG 153 OC PESTICIDES (SOIL)

BV Labs ID		PTI243	PTI262		
Sampling Date		2021/05/26	2021/06/02 08:30		
COC Number		792128-83-01	792128-163-01		
	UNITS	**BH-14 SS2 (0.8-1.4M)**	**BH-105 SS1 (0.0-0.6M)**	**RDL**	**QC Batch**
Inorganics					
Moisture	%	16	12	1.0	7393020
Calculated Parameters					
Chlordane (Total)	ug/g	<0.0020	<0.0020	0.0020	7391451
o,p-DDD + p,p-DDD	ug/g	<0.0020	<0.0020	0.0020	7391451
o,p-DDE + p,p-DDE	ug/g	<0.0020	<0.0020	0.0020	7391451
o,p-DDT + p,p-DDT	ug/g	<0.0020	<0.0020	0.0020	7391451
Total Endosulfan	ug/g	<0.0020	<0.0020	0.0020	7391451
Total PCB	ug/g	<0.015	<0.015	0.015	7391451
Pesticides & Herbicides					
Aldrin	ug/g	<0.0020	<0.0020	0.0020	7395123
a-Chlordane	ug/g	<0.0020	<0.0020	0.0020	7395123
g-Chlordane	ug/g	<0.0020	<0.0020	0.0020	7395123
o,p-DDD	ug/g	<0.0020	<0.0020	0.0020	7395123
p,p-DDD	ug/g	<0.0020	<0.0020	0.0020	7395123
o,p-DDE	ug/g	<0.0020	<0.0020	0.0020	7395123
p,p-DDE	ug/g	<0.0020	<0.0020	0.0020	7395123
o,p-DDT	ug/g	<0.0020	<0.0020	0.0020	7395123
p,p-DDT	ug/g	<0.0020	<0.0020	0.0020	7395123
Dieldrin	ug/g	<0.0020	<0.0020	0.0020	7395123
Lindane	ug/g	<0.0020	<0.0020	0.0020	7395123
Endosulfan I (alpha)	ug/g	<0.0020	<0.0020	0.0020	7395123
Endosulfan II (beta)	ug/g	<0.0020	<0.0020	0.0020	7395123
Endrin	ug/g	<0.0020	<0.0020	0.0020	7395123
Heptachlor	ug/g	<0.0020	<0.0020	0.0020	7395123
Heptachlor epoxide	ug/g	<0.0020	<0.0020	0.0020	7395123
Hexachlorobenzene	ug/g	<0.0020	<0.0020	0.0020	7395123
Hexachlorobutadiene	ug/g	<0.0020	<0.0020	0.0020	7395123
Hexachloroethane	ug/g	<0.0020	<0.0020	0.0020	7395123
Methoxychlor	ug/g	<0.0050	<0.0050	0.0050	7395123

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

O.REG 153 OC PESTICIDES (SOIL)

BV Labs ID		PTI243	PTI262		
Sampling Date		2021/05/26	2021/06/02 08:30		
COC Number		792128-83-01	792128-163-01		
	UNITS	**BH-14 SS2 (0.8-1.4M)**	**BH-105 SS1 (0.0-0.6M)**	**RDL**	**QC Batch**
Aroclor 1242	ug/g	<0.015	<0.015	0.015	7395123
Aroclor 1248	ug/g	<0.015	<0.015	0.015	7395123
Aroclor 1254	ug/g	<0.015	<0.015	0.015	7395123
Aroclor 1260	ug/g	<0.015	<0.015	0.015	7395123
Surrogate Recovery (%)					
2,4,5,6-Tetrachloro-m-xylene	%	76	77		7395123
Decachlorobiphenyl	%	87	93		7395123

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

BV Labs Job #: C1F3550
Report Date: 2021/06/11

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

O.REG 153 PCBS (SOIL)

BV Labs ID		PTI252	PTI265	PTI266		
Sampling Date		2021/05/31	2021/06/02 14:45	2021/06/02 14:45		
COC Number		792128-121-01	792128-163-01	792128-163-01		
	UNITS	**BH-16 SS2 (0.8-1.4M)**	**BH-107 SS2 (0.8-1.4M)**	**BH-107 SS2D (0.8-1.4M)**	**RDL**	**QC Batch**
Inorganics						
Moisture	%	16	16	17	1.0	7393020
PCBs						
Aroclor 1242	ug/g	<0.010	<0.010	<0.010	0.010	7394457
Aroclor 1248	ug/g	<0.010	<0.010	<0.010	0.010	7394457
Aroclor 1254	ug/g	<0.010	<0.010	<0.010	0.010	7394457
Aroclor 1260	ug/g	<0.010	<0.010	<0.010	0.010	7394457
Total PCB	ug/g	<0.010	<0.010	<0.010	0.010	7394457
Surrogate Recovery (%)						
Decachlorobiphenyl	%	93	92	92		7394457

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

BV Labs Job #: C1F3550
Report Date: 2021/06/11

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

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

BV Labs ID		PTI253	PTI255	PTI260	PTI261		
Sampling Date		2021/05/31	2021/06/01 12:40	2021/06/01 14:00	2021/06/02 14:20		
COC Number		792128-121-01	792128-121-01	792128-121-01	792128-163-01		
	UNITS	**BH-16 SS3 (1.5-2.1M)**	**BH-101 SS4 (2.3-2.7M)**	**BH-103 SS6 (3.8-4.4M)**	**BH-104 SS4 (2.3-2.7M)**	**RDL**	**QC Batch**
Inorganics							
Moisture	%	19	17	16	15	1.0	7393235
BTEX & F1 Hydrocarbons							
Benzene	ug/g	<0.020	<0.020	<0.020	<0.020	0.020	7393649
Toluene	ug/g	<0.020	<0.020	<0.020	<0.020	0.020	7393649
Ethylbenzene	ug/g	<0.020	<0.020	<0.020	<0.020	0.020	7393649
o-Xylene	ug/g	<0.020	<0.020	<0.020	<0.020	0.020	7393649
p+m-Xylene	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	7393649
Total Xylenes	ug/g	<0.040	<0.040	<0.040	<0.040	0.040	7393649
F1 (C6-C10)	ug/g	<10	<10	<10	<10	10	7393649
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	<10	10	7393649
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/g	<10	<10	<10	<10	10	7393224
F3 (C16-C34 Hydrocarbons)	ug/g	54	<50	<50	<50	50	7393224
F4 (C34-C50 Hydrocarbons)	ug/g	<50	<50	<50	<50	50	7393224
Reached Baseline at C50	ug/g	Yes	Yes	Yes	Yes		7393224
Surrogate Recovery (%)							
1,4-Difluorobenzene	%	97	95	96	97		7393649
4-Bromofluorobenzene	%	99	98	95	96		7393649
D10-o-Xylene	%	107	110	103	111		7393649
D4-1,2-Dichloroethane	%	116	117	114	114		7393649
o-Terphenyl	%	88	91	85	87		7393224

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

BV Labs Job #: C1F3550
Report Date: 2021/06/11

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

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

BV Labs ID		PTI261			PTI264	PTI267		
Sampling Date		2021/06/02 14:20			2021/06/02 11:20	2021/06/02 14:55		
COC Number		792128-163-01			792128-163-01	792128-163-01		
	UNITS	**BH-104 SS4 (2.3-2.7M) Lab-Dup**	**RDL**	**QC Batch**	**BH-106 SS4 (0.8-1.4M)**	**BH-107 SS3 (1.5-2.1M)**	**RDL**	**QC Batch**
Inorganics								
Moisture	%	15	1.0	7393235	16	16	1.0	7393235
BTEX & F1 Hydrocarbons								
Benzene	ug/g				<0.020	<0.020	0.020	7393649
Toluene	ug/g				<0.020	<0.020	0.020	7393649
Ethylbenzene	ug/g				<0.020	<0.020	0.020	7393649
o-Xylene	ug/g				<0.020	<0.020	0.020	7393649
p+m-Xylene	ug/g				<0.040	<0.040	0.040	7393649
Total Xylenes	ug/g				<0.040	<0.040	0.040	7393649
F1 (C6-C10)	ug/g				<10	<10	10	7393649
F1 (C6-C10) - BTEX	ug/g				<10	<10	10	7393649
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/g				<10	<10	10	7393224
F3 (C16-C34 Hydrocarbons)	ug/g				<50	<50	50	7393224
F4 (C34-C50 Hydrocarbons)	ug/g				<50	<50	50	7393224
Reached Baseline at C50	ug/g				Yes	Yes		7393224
Surrogate Recovery (%)								
1,4-Difluorobenzene	%				96	96		7393649
4-Bromofluorobenzene	%				96	99		7393649
D10-o-Xylene	%				95	104		7393649
D4-1,2-Dichloroethane	%				116	115		7393649
o-Terphenyl	%				87	89		7393224

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

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

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

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

BV Labs ID		PTI268		
Sampling Date		2021/06/02 15:15		
COC Number		792128-163-01		
	UNITS	**BH-108 SS2 (0.8-1.4M)**	**RDL**	**QC Batch**
Inorganics				
Moisture	%	16	1.0	7393235
BTEX & F1 Hydrocarbons				
Benzene	ug/g	<0.020	0.020	7393649
Toluene	ug/g	<0.020	0.020	7393649
Ethylbenzene	ug/g	<0.020	0.020	7393649
o-Xylene	ug/g	<0.020	0.020	7393649
p+m-Xylene	ug/g	<0.040	0.040	7393649
Total Xylenes	ug/g	<0.040	0.040	7393649
F1 (C6-C10)	ug/g	<10	10	7393649
F1 (C6-C10) - BTEX	ug/g	<10	10	7393649
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/g	<10	10	7393224
F3 (C16-C34 Hydrocarbons)	ug/g	<50	50	7393224
F4 (C34-C50 Hydrocarbons)	ug/g	<50	50	7393224
Reached Baseline at C50	ug/g	Yes		7393224
Surrogate Recovery (%)				
1,4-Difluorobenzene	%	98		7393649
4-Bromofluorobenzene	%	94		7393649
D10-o-Xylene	%	103		7393649
D4-1,2-Dichloroethane	%	114		7393649
o-Terphenyl	%	93		7393224

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

BV Labs ID		PTI256	PTI257	PTI258		
Sampling Date		2021/06/01 09:00	2021/06/01 09:00	2021/06/01 08:15		
COC Number		792128-121-01	792128-121-01	792128-121-01		
	UNITS	**BH-102 SS5 (3.1-3.7M)**	**BH-102 SS5D (3.1-3.7M)**	**BH-102 SS6 (3.8-4.4M)**	**RDL**	**QC Batch**
Inorganics						
Moisture	%	15	15	15	1.0	7393235
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	<0.050	<0.050	0.050	7391450
Volatile Organics						
Acetone (2-Propanone)	ug/g	<0.50	<0.50	<0.50	0.50	7392157
Benzene	ug/g	<0.020	<0.020	<0.020	0.020	7392157
Bromodichloromethane	ug/g	<0.050	<0.050	<0.050	0.050	7392157
Bromoform	ug/g	<0.050	<0.050	<0.050	0.050	7392157
Bromomethane	ug/g	<0.050	<0.050	<0.050	0.050	7392157
Carbon Tetrachloride	ug/g	<0.050	<0.050	<0.050	0.050	7392157
Chlorobenzene	ug/g	<0.050	<0.050	<0.050	0.050	7392157
Chloroform	ug/g	<0.050	<0.050	<0.050	0.050	7392157
Dibromochloromethane	ug/g	<0.050	<0.050	<0.050	0.050	7392157
1,2-Dichlorobenzene	ug/g	<0.050	<0.050	<0.050	0.050	7392157
1,3-Dichlorobenzene	ug/g	<0.050	<0.050	<0.050	0.050	7392157
1,4-Dichlorobenzene	ug/g	<0.050	<0.050	<0.050	0.050	7392157
Dichlorodifluoromethane (FREON 12)	ug/g	<0.050	<0.050	<0.050	0.050	7392157
1,1-Dichloroethane	ug/g	<0.050	<0.050	<0.050	0.050	7392157
1,2-Dichloroethane	ug/g	<0.050	<0.050	<0.050	0.050	7392157
1,1-Dichloroethylene	ug/g	<0.050	<0.050	<0.050	0.050	7392157
cis-1,2-Dichloroethylene	ug/g	<0.050	<0.050	<0.050	0.050	7392157
trans-1,2-Dichloroethylene	ug/g	<0.050	<0.050	<0.050	0.050	7392157
1,2-Dichloropropane	ug/g	<0.050	<0.050	<0.050	0.050	7392157
cis-1,3-Dichloropropene	ug/g	<0.030	<0.030	<0.030	0.030	7392157
trans-1,3-Dichloropropene	ug/g	<0.040	<0.040	<0.040	0.040	7392157
Ethylbenzene	ug/g	<0.020	<0.020	<0.020	0.020	7392157
Ethylene Dibromide	ug/g	<0.050	<0.050	<0.050	0.050	7392157
Hexane	ug/g	<0.050	<0.050	<0.050	0.050	7392157
Methylene Chloride(Dichloromethane)	ug/g	<0.050	<0.050	<0.050	0.050	7392157

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

BV Labs ID		PTI256	PTI257	PTI258		
Sampling Date		2021/06/01 09:00	2021/06/01 09:00	2021/06/01 08:15		
COC Number		792128-121-01	792128-121-01	792128-121-01		
	UNITS	**BH-102 SS5 (3.1-3.7M)**	**BH-102 SS5D (3.1-3.7M)**	**BH-102 SS6 (3.8-4.4M)**	**RDL**	**QC Batch**
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.50	<0.50	<0.50	0.50	7392157
Methyl Isobutyl Ketone	ug/g	<0.50	<0.50	<0.50	0.50	7392157
Methyl t-butyl ether (MTBE)	ug/g	<0.050	<0.050	<0.050	0.050	7392157
Styrene	ug/g	<0.050	<0.050	<0.050	0.050	7392157
1,1,1,2-Tetrachloroethane	ug/g	<0.050	<0.050	<0.050	0.050	7392157
1,1,2,2-Tetrachloroethane	ug/g	<0.050	<0.050	<0.050	0.050	7392157
Tetrachloroethylene	ug/g	<0.050	<0.050	<0.050	0.050	7392157
Toluene	ug/g	<0.020	<0.020	<0.020	0.020	7392157
1,1,1-Trichloroethane	ug/g	<0.050	<0.050	<0.050	0.050	7392157
1,1,2-Trichloroethane	ug/g	<0.050	<0.050	<0.050	0.050	7392157
Trichloroethylene	ug/g	<0.050	<0.050	<0.050	0.050	7392157
Trichlorofluoromethane (FREON 11)	ug/g	<0.050	<0.050	<0.050	0.050	7392157
Vinyl Chloride	ug/g	<0.020	<0.020	<0.020	0.020	7392157
p+m-Xylene	ug/g	<0.020	<0.020	<0.020	0.020	7392157
o-Xylene	ug/g	<0.020	<0.020	<0.020	0.020	7392157
Total Xylenes	ug/g	<0.020	<0.020	<0.020	0.020	7392157
F1 (C6-C10)	ug/g	<10	<10	<10	10	7392157
F1 (C6-C10) - BTEX	ug/g	<10	<10	<10	10	7392157
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/g	<10	<10	<10	10	7393224
F3 (C16-C34 Hydrocarbons)	ug/g	51	<50	68	50	7393224
F4 (C34-C50 Hydrocarbons)	ug/g	<50	<50	<50	50	7393224
Reached Baseline at C50	ug/g	Yes	Yes	Yes		7393224
Surrogate Recovery (%)						
o-Terphenyl	%	84	94	91		7393224
4-Bromofluorobenzene	%	93	92	94		7392157
D10-o-Xylene	%	82	81	80		7392157
D4-1,2-Dichloroethane	%	96	95	96		7392157
D8-Toluene	%	102	103	101		7392157

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

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

BV Labs ID		PTI259		
Sampling Date		2021/06/01 08:30		
COC Number		792128-121-01		
	UNITS	**BH-102 SS7 (4.6-5.2M)**	**RDL**	**QC Batch**
Inorganics				
Moisture	%	16	1.0	7393235
Calculated Parameters				
1,3-Dichloropropene (cis+trans)	ug/g	<0.050	0.050	7391450
Volatile Organics				
Acetone (2-Propanone)	ug/g	<0.50	0.50	7392157
Benzene	ug/g	<0.020	0.020	7392157
Bromodichloromethane	ug/g	<0.050	0.050	7392157
Bromoform	ug/g	<0.050	0.050	7392157
Bromomethane	ug/g	<0.050	0.050	7392157
Carbon Tetrachloride	ug/g	<0.050	0.050	7392157
Chlorobenzene	ug/g	<0.050	0.050	7392157
Chloroform	ug/g	<0.050	0.050	7392157
Dibromochloromethane	ug/g	<0.050	0.050	7392157
1,2-Dichlorobenzene	ug/g	<0.050	0.050	7392157
1,3-Dichlorobenzene	ug/g	<0.050	0.050	7392157
1,4-Dichlorobenzene	ug/g	<0.050	0.050	7392157
Dichlorodifluoromethane (FREON 12)	ug/g	<0.050	0.050	7392157
1,1-Dichloroethane	ug/g	<0.050	0.050	7392157
1,2-Dichloroethane	ug/g	<0.050	0.050	7392157
1,1-Dichloroethylene	ug/g	<0.050	0.050	7392157
cis-1,2-Dichloroethylene	ug/g	<0.050	0.050	7392157
trans-1,2-Dichloroethylene	ug/g	<0.050	0.050	7392157
1,2-Dichloropropane	ug/g	<0.050	0.050	7392157
cis-1,3-Dichloropropene	ug/g	<0.030	0.030	7392157
trans-1,3-Dichloropropene	ug/g	<0.040	0.040	7392157
Ethylbenzene	ug/g	<0.020	0.020	7392157
Ethylene Dibromide	ug/g	<0.050	0.050	7392157
Hexane	ug/g	<0.050	0.050	7392157
Methylene Chloride(Dichloromethane)	ug/g	<0.050	0.050	7392157

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

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

BV Labs ID		PTI259		
Sampling Date		2021/06/01 08:30		
COC Number		792128-121-01		
	UNITS	**BH-102 SS7 (4.6-5.2M)**	**RDL**	**QC Batch**
Methyl Ethyl Ketone (2-Butanone)	ug/g	<0.50	0.50	7392157
Methyl Isobutyl Ketone	ug/g	<0.50	0.50	7392157
Methyl t-butyl ether (MTBE)	ug/g	<0.050	0.050	7392157
Styrene	ug/g	<0.050	0.050	7392157
1,1,1,2-Tetrachloroethane	ug/g	<0.050	0.050	7392157
1,1,2,2-Tetrachloroethane	ug/g	<0.050	0.050	7392157
Tetrachloroethylene	ug/g	<0.050	0.050	7392157
Toluene	ug/g	<0.020	0.020	7392157
1,1,1-Trichloroethane	ug/g	<0.050	0.050	7392157
1,1,2-Trichloroethane	ug/g	<0.050	0.050	7392157
Trichloroethylene	ug/g	<0.050	0.050	7392157
Trichlorofluoromethane (FREON 11)	ug/g	<0.050	0.050	7392157
Vinyl Chloride	ug/g	<0.020	0.020	7392157
p+m-Xylene	ug/g	<0.020	0.020	7392157
o-Xylene	ug/g	<0.020	0.020	7392157
Total Xylenes	ug/g	<0.020	0.020	7392157
F1 (C6-C10)	ug/g	<10	10	7392157
F1 (C6-C10) - BTEX	ug/g	<10	10	7392157
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/g	<10	10	7393224
F3 (C16-C34 Hydrocarbons)	ug/g	80	50	7393224
F4 (C34-C50 Hydrocarbons)	ug/g	<50	50	7393224
Reached Baseline at C50	ug/g	Yes		7393224
Surrogate Recovery (%)				
o-Terphenyl	%	88		7393224
4-Bromofluorobenzene	%	93		7392157
D10-o-Xylene	%	82		7392157
D4-1,2-Dichloroethane	%	95		7392157
D8-Toluene	%	101		7392157

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

TEST SUMMARY

BV Labs ID: PTI234
Sample ID: BH-3 SS3 (1.5-2.1M)
Matrix: Soil

Collected: 2021/05/27
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7395236	2021/06/08	2021/06/08	Medhat Nasr
Free (WAD) Cyanide	TECH	7394587	2021/06/08	2021/06/08	Aditiben Patel
Conductivity	AT	7397185	2021/06/09	2021/06/09	Khushbu Vijay kumar Patel
Hexavalent Chromium in Soil by IC	IC/SPEC	7395470	2021/06/08	2021/06/09	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	7395393	2021/06/08	2021/06/09	Daniel Teclu
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)
pH CaCl2 EXTRACT	AT	7397483	2021/06/09	2021/06/09	Neil Dassanayake
Sodium Adsorption Ratio (SAR)	CALC/MET	7391452	N/A	2021/06/10	Automated Statchk

BV Labs ID: PTI235
Sample ID: BH-4 SS1 (0.0-0.6M)
Matrix: Soil

Collected: 2021/05/28
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	7393020	N/A	2021/06/07	Gurpreet Kaur (ONT)
OC Pesticides (Selected) & PCB	GC/ECD	7395123	2021/06/08	2021/06/09	Li Peng
OC Pesticides Summed Parameters	CALC	7391451	N/A	2021/06/08	Automated Statchk

BV Labs ID: PTI236
Sample ID: BH-4 SS1D (0.0-0.6M)
Matrix: Soil

Collected: 2021/05/28
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	7393020	N/A	2021/06/07	Gurpreet Kaur (ONT)
OC Pesticides (Selected) & PCB	GC/ECD	7395123	2021/06/08	2021/06/09	Li Peng
OC Pesticides Summed Parameters	CALC	7391451	N/A	2021/06/08	Automated Statchk

BV Labs ID: PTI237
Sample ID: BH-4 SS3 (1.5-2.1M)
Matrix: Soil

Collected: 2021/05/28
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7395236	2021/06/08	2021/06/08	Medhat Nasr
Free (WAD) Cyanide	TECH	7394587	2021/06/08	2021/06/08	Aditiben Patel
Conductivity	AT	7397185	2021/06/09	2021/06/09	Khushbu Vijay kumar Patel
Hexavalent Chromium in Soil by IC	IC/SPEC	7395470	2021/06/08	2021/06/09	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	7395393	2021/06/08	2021/06/09	Daniel Teclu
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)
pH CaCl2 EXTRACT	AT	7397483	2021/06/09	2021/06/09	Neil Dassanayake
Sodium Adsorption Ratio (SAR)	CALC/MET	7391452	N/A	2021/06/10	Automated Statchk

TEST SUMMARY

BV Labs ID: PTI238
Sample ID: BH-4 SS3D (1.5-2.1M)
Matrix: Soil

Collected: 2021/05/28
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7395236	2021/06/08	2021/06/08	Medhat Nasr
Free (WAD) Cyanide	TECH	7394587	2021/06/08	2021/06/08	Aditiben Patel
Conductivity	AT	7397185	2021/06/09	2021/06/09	Khushbu Vijay kumar Patel
Hexavalent Chromium in Soil by IC	IC/SPEC	7394948	2021/06/08	2021/06/09	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	7395627	2021/06/08	2021/06/08	Prempal Bhatti
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)
pH CaCl2 EXTRACT	AT	7397483	2021/06/09	2021/06/09	Neil Dassanayake
Sodium Adsorption Ratio (SAR)	CALC/MET	7391452	N/A	2021/06/10	Automated Statchk

BV Labs ID: PTI238 Dup
Sample ID: BH-4 SS3D (1.5-2.1M)
Matrix: Soil

Collected: 2021/05/28
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acid Extractable Metals by ICPMS	ICP/MS	7395627	2021/06/08	2021/06/08	Prempal Bhatti

BV Labs ID: PTI239
Sample ID: BH-7 SS1 (0.0-0.6M)
Matrix: Soil

Collected: 2021/05/28
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	7393020	N/A	2021/06/07	Gurpreet Kaur (ONT)
OC Pesticides (Selected) & PCB	GC/ECD	7395123	2021/06/08	2021/06/09	Li Peng
OC Pesticides Summed Parameters	CALC	7391451	N/A	2021/06/08	Automated Statchk

BV Labs ID: PTI240
Sample ID: BH-7 SS5 (3.1-3.7)
Matrix: Soil

Collected: 2021/05/28
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7395236	2021/06/08	2021/06/08	Medhat Nasr
Free (WAD) Cyanide	TECH	7394587	2021/06/08	2021/06/08	Aditiben Patel
Conductivity	AT	7397185	2021/06/09	2021/06/09	Khushbu Vijay kumar Patel
Hexavalent Chromium in Soil by IC	IC/SPEC	7395470	2021/06/08	2021/06/09	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	7395393	2021/06/08	2021/06/09	Daniel Teclu
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)
pH CaCl2 EXTRACT	AT	7397483	2021/06/09	2021/06/09	Neil Dassanayake
Sodium Adsorption Ratio (SAR)	CALC/MET	7391452	N/A	2021/06/10	Automated Statchk

BV Labs Job #: C1F3550
Report Date: 2021/06/11

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

TEST SUMMARY

BV Labs ID: PTI241
Sample ID: BH-12 SS2 (0.8-1.4M)
Matrix: Soil

Collected: 2021/05/27
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	7393020	N/A	2021/06/07	Gurpreet Kaur (ONT)
OC Pesticides (Selected) & PCB	GC/ECD	7395123	2021/06/08	2021/06/09	Li Peng
OC Pesticides Summed Parameters	CALC	7391451	N/A	2021/06/08	Automated Statchk

BV Labs ID: PTI242
Sample ID: BH-12 SS3 (1.5-2.1M)
Matrix: Soil

Collected: 2021/05/27
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7395236	2021/06/08	2021/06/08	Medhat Nasr
Free (WAD) Cyanide	TECH	7394587	2021/06/08	2021/06/08	Aditiben Patel
Conductivity	AT	7397185	2021/06/09	2021/06/09	Khushbu Vijay kumar Patel
Hexavalent Chromium in Soil by IC	IC/SPEC	7394948	2021/06/08	2021/06/09	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	7395393	2021/06/08	2021/06/09	Daniel Teclu
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)
pH CaCl2 EXTRACT	AT	7397483	2021/06/09	2021/06/09	Neil Dassanayake
Sodium Adsorption Ratio (SAR)	CALC/MET	7391452	N/A	2021/06/10	Automated Statchk

BV Labs ID: PTI243
Sample ID: BH-14 SS2 (0.8-1.4M)
Matrix: Soil

Collected: 2021/05/26
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	7393020	N/A	2021/06/07	Gurpreet Kaur (ONT)
OC Pesticides (Selected) & PCB	GC/ECD	7395123	2021/06/08	2021/06/09	Li Peng
OC Pesticides Summed Parameters	CALC	7391451	N/A	2021/06/08	Automated Statchk

BV Labs ID: PTI251
Sample ID: BH-14 SS3 (1.5-2.1M)
Matrix: Soil

Collected: 2021/05/26
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7395236	2021/06/08	2021/06/08	Medhat Nasr
Free (WAD) Cyanide	TECH	7394587	2021/06/08	2021/06/08	Aditiben Patel
Conductivity	AT	7397185	2021/06/09	2021/06/09	Khushbu Vijay kumar Patel
Hexavalent Chromium in Soil by IC	IC/SPEC	7394948	2021/06/08	2021/06/09	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	7395393	2021/06/08	2021/06/09	Daniel Teclu
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)
pH CaCl2 EXTRACT	AT	7397483	2021/06/09	2021/06/09	Neil Dassanayake
Sodium Adsorption Ratio (SAR)	CALC/MET	7391452	N/A	2021/06/10	Automated Statchk

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

TEST SUMMARY

BV Labs ID: PTI252 **Collected:** 2021/05/31
Sample ID: BH-16 SS2 (0.8-1.4M) **Shipped:**
Matrix: Soil **Received:** 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	7393020	N/A	2021/06/07	Gurpreet Kaur (ONT)
Polychlorinated Biphenyl in Soil	GC/ECD	7394457	2021/06/07	2021/06/08	Svitlana Shaula

BV Labs ID: PTI253 **Collected:** 2021/05/31
Sample ID: BH-16 SS3 (1.5-2.1M) **Shipped:**
Matrix: Soil **Received:** 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7393649	N/A	2021/06/08	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7393224	2021/06/07	2021/06/08	Jeevaraj Jeevaratrnam
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)

BV Labs ID: PTI254 **Collected:** 2021/06/01
Sample ID: BH-101 SS1 (0.0-0.6M) **Shipped:**
Matrix: Soil **Received:** 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7395236	2021/06/08	2021/06/08	Medhat Nasr
Free (WAD) Cyanide	TECH	7394587	2021/06/08	2021/06/08	Aditiben Patel
Conductivity	AT	7397185	2021/06/09	2021/06/09	Khushbu Vijay kumar Patel
Hexavalent Chromium in Soil by IC	IC/SPEC	7395470	2021/06/08	2021/06/09	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	7395393	2021/06/08	2021/06/09	Daniel Teclu
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)
pH CaCl2 EXTRACT	AT	7397483	2021/06/09	2021/06/09	Neil Dassanayake
Sodium Adsorption Ratio (SAR)	CALC/MET	7391452	N/A	2021/06/10	Automated Statchk

BV Labs ID: PTI255 **Collected:** 2021/06/01
Sample ID: BH-101 SS4 (2.3-2.7M) **Shipped:**
Matrix: Soil **Received:** 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7393649	N/A	2021/06/08	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7393224	2021/06/07	2021/06/08	Jeevaraj Jeevaratrnam
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)

BV Labs ID: PTI256 **Collected:** 2021/06/01
Sample ID: BH-102 SS5 (3.1-3.7M) **Shipped:**
Matrix: Soil **Received:** 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7391450	N/A	2021/06/11	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7393224	2021/06/07	2021/06/08	Jeevaraj Jeevaratrnam
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7392157	N/A	2021/06/11	Manpreet Sarao

TEST SUMMARY

BV Labs ID: PTI257
Sample ID: BH-102 SS5D (3.1-3.7M)
Matrix: Soil

Collected: 2021/06/01
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7391450	N/A	2021/06/11	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7393224	2021/06/07	2021/06/08	Jeevaraj Jeevaratrnam
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7392157	N/A	2021/06/11	Manpreet Sarao

BV Labs ID: PTI258
Sample ID: BH-102 SS6 (3.8-4.4M)
Matrix: Soil

Collected: 2021/06/01
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7391450	N/A	2021/06/11	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7393224	2021/06/07	2021/06/08	Jeevaraj Jeevaratrnam
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7392157	N/A	2021/06/11	Manpreet Sarao

BV Labs ID: PTI259
Sample ID: BH-102 SS7 (4.6-5.2M)
Matrix: Soil

Collected: 2021/06/01
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7391450	N/A	2021/06/11	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7393224	2021/06/07	2021/06/08	Jeevaraj Jeevaratrnam
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7392157	N/A	2021/06/11	Manpreet Sarao

BV Labs ID: PTI260
Sample ID: BH-103 SS6 (3.8-4.4M)
Matrix: Soil

Collected: 2021/06/01
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7393649	N/A	2021/06/08	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7393224	2021/06/07	2021/06/08	Jeevaraj Jeevaratrnam
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)

BV Labs ID: PTI261
Sample ID: BH-104 SS4 (2.3-2.7M)
Matrix: Soil

Collected: 2021/06/02
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7393649	N/A	2021/06/08	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7393224	2021/06/07	2021/06/08	Jeevaraj Jeevaratrnam
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)

TEST SUMMARY

BV Labs ID: PTI261 Dup
Sample ID: BH-104 SS4 (2.3-2.7M)
Matrix: Soil
Collected: 2021/06/02
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)

BV Labs ID: PTI262
Sample ID: BH-105 SS1 (0.0-0.6M)
Matrix: Soil
Collected: 2021/06/02
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	7393020	N/A	2021/06/07	Gurpreet Kaur (ONT)
OC Pesticides (Selected) & PCB	GC/ECD	7395123	2021/06/08	2021/06/09	Li Peng
OC Pesticides Summed Parameters	CALC	7391451	N/A	2021/06/08	Automated Statchk

BV Labs ID: PTI263
Sample ID: BH-105 SS2 (0.8-1.4M)
Matrix: Soil
Collected: 2021/06/02
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hot Water Extractable Boron	ICP	7395236	2021/06/08	2021/06/08	Medhat Nasr
Free (WAD) Cyanide	TECH	7394587	2021/06/08	2021/06/08	Aditiben Patel
Conductivity	AT	7397185	2021/06/09	2021/06/09	Khushbu Vijay kumar Patel
Hexavalent Chromium in Soil by IC	IC/SPEC	7395470	2021/06/08	2021/06/09	Violeta Porcila
Acid Extractable Metals by ICPMS	ICP/MS	7395393	2021/06/08	2021/06/09	Daniel Teclu
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)
pH CaCl2 EXTRACT	AT	7397483	2021/06/09	2021/06/09	Neil Dassanayake
Sodium Adsorption Ratio (SAR)	CALC/MET	7391452	N/A	2021/06/10	Automated Statchk

BV Labs ID: PTI263 Dup
Sample ID: BH-105 SS2 (0.8-1.4M)
Matrix: Soil
Collected: 2021/06/02
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Hexavalent Chromium in Soil by IC	IC/SPEC	7395470	2021/06/08	2021/06/09	Violeta Porcila

BV Labs ID: PTI264
Sample ID: BH-106 SS4 (0.8-1.4M)
Matrix: Soil
Collected: 2021/06/02
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7393649	N/A	2021/06/08	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7393224	2021/06/07	2021/06/08	Jeevaraj Jeevaratrnam
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)

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

BV Labs Job #: C1F3550
Report Date: 2021/06/11

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

TEST SUMMARY

BV Labs ID: PTI265
Sample ID: BH-107 SS2 (0.8-1.4M)
Matrix: Soil

Collected: 2021/06/02
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	7393020	N/A	2021/06/07	Gurpreet Kaur (ONT)
Polychlorinated Biphenyl in Soil	GC/ECD	7394457	2021/06/07	2021/06/08	Svitlana Shaula

BV Labs ID: PTI266
Sample ID: BH-107 SS2D (0.8-1.4M)
Matrix: Soil

Collected: 2021/06/02
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Moisture	BAL	7393020	N/A	2021/06/07	Gurpreet Kaur (ONT)
Polychlorinated Biphenyl in Soil	GC/ECD	7394457	2021/06/07	2021/06/08	Svitlana Shaula

BV Labs ID: PTI267
Sample ID: BH-107 SS3 (1.5-2.1M)
Matrix: Soil

Collected: 2021/06/02
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7393649	N/A	2021/06/08	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7393224	2021/06/07	2021/06/08	Jeevaraj Jeevaratrnam
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)

BV Labs ID: PTI268
Sample ID: BH-108 SS2 (0.8-1.4M)
Matrix: Soil

Collected: 2021/06/02
Shipped:
Received: 2021/06/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Soil	HSGC/MSFD	7393649	N/A	2021/06/08	Domnica Andronescu
Petroleum Hydrocarbons F2-F4 in Soil	GC/FID	7393224	2021/06/07	2021/06/08	Jeevaraj Jeevaratrnam
Moisture	BAL	7393235	N/A	2021/06/07	Gurpreet Kaur (ONT)

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

BV Labs Job #: C1F3550
Report Date: 2021/06/11

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

GENERAL COMMENTS

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

Package 1	1.3°C

Results relate only to the items tested.

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

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7392157	4-Bromofluorobenzene	2021/06/10	97	60 - 140	98	60 - 140	94	%		
7392157	D10-o-Xylene	2021/06/10	82	60 - 130	95	60 - 130	81	%		
7392157	D4-1,2-Dichloroethane	2021/06/10	96	60 - 140	98	60 - 140	96	%		
7392157	D8-Toluene	2021/06/10	103	60 - 140	105	60 - 140	102	%		
7393224	o-Terphenyl	2021/06/08	84	60 - 130	81	60 - 130	89	%		
7393649	1,4-Difluorobenzene	2021/06/07	93	60 - 140	92	60 - 140	96	%		
7393649	4-Bromofluorobenzene	2021/06/07	102	60 - 140	103	60 - 140	99	%		
7393649	D10-o-Xylene	2021/06/07	104	60 - 140	102	60 - 140	96	%		
7393649	D4-1,2-Dichloroethane	2021/06/07	110	60 - 140	110	60 - 140	117	%		
7394457	Decachlorobiphenyl	2021/06/08	106	60 - 130	101	60 - 130	94	%		
7395123	2,4,5,6-Tetrachloro-m-xylene	2021/06/08	91	50 - 130	86	50 - 130	90	%		
7395123	Decachlorobiphenyl	2021/06/08	113	50 - 130	114	50 - 130	108	%		
7392157	1,1,1,2-Tetrachloroethane	2021/06/10	94	60 - 140	102	60 - 130	<0.050	ug/g	NC	50
7392157	1,1,1-Trichloroethane	2021/06/10	92	60 - 140	94	60 - 130	<0.050	ug/g	NC	50
7392157	1,1,2,2-Tetrachloroethane	2021/06/10	93	60 - 140	104	60 - 130	<0.050	ug/g	NC	50
7392157	1,1,2-Trichloroethane	2021/06/10	93	60 - 140	103	60 - 130	<0.050	ug/g	NC	50
7392157	1,1-Dichloroethane	2021/06/10	94	60 - 140	97	60 - 130	<0.050	ug/g	NC	50
7392157	1,1-Dichloroethylene	2021/06/10	91	60 - 140	92	60 - 130	<0.050	ug/g	NC	50
7392157	1,2-Dichlorobenzene	2021/06/10	94	60 - 140	103	60 - 130	<0.050	ug/g	NC	50
7392157	1,2-Dichloroethane	2021/06/10	86	60 - 140	92	60 - 130	<0.050	ug/g	NC	50
7392157	1,2-Dichloropropane	2021/06/10	97	60 - 140	103	60 - 130	<0.050	ug/g	NC	50
7392157	1,3-Dichlorobenzene	2021/06/10	97	60 - 140	105	60 - 130	<0.050	ug/g	NC	50
7392157	1,4-Dichlorobenzene	2021/06/10	116	60 - 140	125	60 - 130	<0.050	ug/g	NC	50
7392157	Acetone (2-Propanone)	2021/06/10	86	60 - 140	96	60 - 140	<0.50	ug/g	NC	50
7392157	Benzene	2021/06/10	93	60 - 140	96	60 - 130	<0.020	ug/g	NC	50
7392157	Bromodichloromethane	2021/06/10	92	60 - 140	99	60 - 130	<0.050	ug/g	NC	50
7392157	Bromoform	2021/06/10	91	60 - 140	102	60 - 130	<0.050	ug/g	NC	50
7392157	Bromomethane	2021/06/10	92	60 - 140	95	60 - 140	<0.050	ug/g	NC	50
7392157	Carbon Tetrachloride	2021/06/10	87	60 - 140	89	60 - 130	<0.050	ug/g	NC	50
7392157	Chlorobenzene	2021/06/10	93	60 - 140	100	60 - 130	<0.050	ug/g	NC	50

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7392157	Chloroform	2021/06/10	91	60 - 140	95	60 - 130	<0.050	ug/g	NC	50
7392157	cis-1,2-Dichloroethylene	2021/06/10	95	60 - 140	99	60 - 130	<0.050	ug/g	NC	50
7392157	cis-1,3-Dichloropropene	2021/06/10	88	60 - 140	95	60 - 130	<0.030	ug/g	NC	50
7392157	Dibromochloromethane	2021/06/10	90	60 - 140	100	60 - 130	<0.050	ug/g	NC	50
7392157	Dichlorodifluoromethane (FREON 12)	2021/06/10	90	60 - 140	91	60 - 140	<0.050	ug/g	NC	50
7392157	Ethylbenzene	2021/06/10	88	60 - 140	93	60 - 130	<0.020	ug/g	NC	50
7392157	Ethylene Dibromide	2021/06/10	92	60 - 140	102	60 - 130	<0.050	ug/g	NC	50
7392157	F1 (C6-C10) - BTEX	2021/06/10					<10	ug/g	NC	30
7392157	F1 (C6-C10)	2021/06/10	102	60 - 140	94	80 - 120	<10	ug/g	NC	30
7392157	Hexane	2021/06/10	98	60 - 140	98	60 - 130	<0.050	ug/g	NC	50
7392157	Methyl Ethyl Ketone (2-Butanone)	2021/06/10	96	60 - 140	108	60 - 140	<0.50	ug/g	NC	50
7392157	Methyl Isobutyl Ketone	2021/06/10	88	60 - 140	100	60 - 130	<0.50	ug/g	NC	50
7392157	Methyl t-butyl ether (MTBE)	2021/06/10	86	60 - 140	91	60 - 130	<0.050	ug/g	NC	50
7392157	Methylene Chloride(Dichloromethane)	2021/06/10	96	60 - 140	100	60 - 130	<0.050	ug/g	NC	50
7392157	o-Xylene	2021/06/10	88	60 - 140	94	60 - 130	<0.020	ug/g	NC	50
7392157	p+m-Xylene	2021/06/10	90	60 - 140	96	60 - 130	<0.020	ug/g	NC	50
7392157	Styrene	2021/06/10	98	60 - 140	107	60 - 130	<0.050	ug/g	NC	50
7392157	Tetrachloroethylene	2021/06/10	90	60 - 140	94	60 - 130	<0.050	ug/g	NC	50
7392157	Toluene	2021/06/10	89	60 - 140	93	60 - 130	<0.020	ug/g	NC	50
7392157	Total Xylenes	2021/06/10					<0.020	ug/g	NC	50
7392157	trans-1,2-Dichloroethylene	2021/06/10	96	60 - 140	99	60 - 130	<0.050	ug/g	NC	50
7392157	trans-1,3-Dichloropropene	2021/06/10	95	60 - 140	105	60 - 130	<0.040	ug/g	NC	50
7392157	Trichloroethylene	2021/06/10	99	60 - 140	103	60 - 130	<0.050	ug/g	NC	50
7392157	Trichlorofluoromethane (FREON 11)	2021/06/10	87	60 - 140	88	60 - 130	<0.050	ug/g	NC	50
7392157	Vinyl Chloride	2021/06/10	102	60 - 140	103	60 - 130	<0.020	ug/g	NC	50
7393020	Moisture	2021/06/07							3.2	20
7393224	F2 (C10-C16 Hydrocarbons)	2021/06/08	99	50 - 130	95	80 - 120	<10	ug/g	NC	30
7393224	F3 (C16-C34 Hydrocarbons)	2021/06/08	98	50 - 130	98	80 - 120	<50	ug/g	0.15	30
7393224	F4 (C34-C50 Hydrocarbons)	2021/06/08	101	50 - 130	98	80 - 120	<50	ug/g	NC	30
7393235	Moisture	2021/06/07							0	20

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

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7393649	Benzene	2021/06/07	114	50 - 140	105	50 - 140	<0.020	ug/g	NC	50
7393649	Ethylbenzene	2021/06/07	121	50 - 140	112	50 - 140	<0.020	ug/g	NC	50
7393649	F1 (C6-C10) - BTEX	2021/06/07					<10	ug/g	NC	30
7393649	F1 (C6-C10)	2021/06/07	100	60 - 140	93	80 - 120	<10	ug/g	NC	30
7393649	o-Xylene	2021/06/07	119	50 - 140	110	50 - 140	<0.020	ug/g	NC	50
7393649	p+m-Xylene	2021/06/07	117	50 - 140	108	50 - 140	<0.040	ug/g	NC	50
7393649	Toluene	2021/06/07	111	50 - 140	103	50 - 140	<0.020	ug/g	NC	50
7393649	Total Xylenes	2021/06/07					<0.040	ug/g	NC	50
7394457	Aroclor 1242	2021/06/08					<0.010	ug/g	NC	50
7394457	Aroclor 1248	2021/06/08					<0.010	ug/g	NC	50
7394457	Aroclor 1254	2021/06/08					<0.010	ug/g	NC	50
7394457	Aroclor 1260	2021/06/08	124	30 - 130	116	30 - 130	<0.010	ug/g	NC	50
7394457	Total PCB	2021/06/08	124	30 - 130	116	30 - 130	<0.010	ug/g	NC	50
7394587	WAD Cyanide (Free)	2021/06/08	68 (1)	75 - 125	94	80 - 120	<0.01	ug/g	NC	35
7394948	Chromium (VI)	2021/06/09	77	70 - 130	97	80 - 120	<0.18	ug/g	NC	35
7395123	a-Chlordane	2021/06/09	91	50 - 130	87	50 - 130	<0.0020	ug/g	NC	40
7395123	Aldrin	2021/06/09	83	50 - 130	80	50 - 130	<0.0020	ug/g	NC	40
7395123	Aroclor 1242	2021/06/09					<0.015	ug/g	NC	40
7395123	Aroclor 1248	2021/06/09					<0.015	ug/g	NC	40
7395123	Aroclor 1254	2021/06/09					<0.015	ug/g	NC	40
7395123	Aroclor 1260	2021/06/09					<0.015	ug/g	NC	40
7395123	Dieldrin	2021/06/09	97	50 - 130	110	50 - 130	<0.0020	ug/g	NC	40
7395123	Endosulfan I (alpha)	2021/06/09	124	50 - 130	87	50 - 130	<0.0020	ug/g	NC	40
7395123	Endosulfan II (beta)	2021/06/09	116	50 - 130	102	50 - 130	<0.0020	ug/g	NC	40
7395123	Endrin	2021/06/09	109	50 - 130	102	50 - 130	<0.0020	ug/g	NC	40
7395123	g-Chlordane	2021/06/09	95	50 - 130	88	50 - 130	<0.0020	ug/g	NC	40
7395123	Heptachlor epoxide	2021/06/09	115	50 - 130	112	50 - 130	<0.0020	ug/g	NC	40
7395123	Heptachlor	2021/06/09	81	50 - 130	80	50 - 130	<0.0020	ug/g	NC	40
7395123	Hexachlorobenzene	2021/06/09	90	50 - 130	96	50 - 130	<0.0020	ug/g	NC	40
7395123	Hexachlorobutadiene	2021/06/09	100	50 - 130	93	50 - 130	<0.0020	ug/g	NC	40

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

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7395123	Hexachloroethane	2021/06/09	82	50 - 130	84	50 - 130	<0.0020	ug/g	NC	40
7395123	Lindane	2021/06/09	81	50 - 130	78	50 - 130	<0.0020	ug/g	NC	40
7395123	Methoxychlor	2021/06/09	119	50 - 130	127	50 - 130	<0.0050	ug/g	NC	40
7395123	o,p-DDD	2021/06/09	104	50 - 130	98	50 - 130	<0.0020	ug/g	NC	40
7395123	o,p-DDE	2021/06/09	82	50 - 130	85	50 - 130	<0.0020	ug/g	NC	40
7395123	o,p-DDT	2021/06/09	96	50 - 130	105	50 - 130	<0.0020	ug/g	NC	40
7395123	p,p-DDD	2021/06/09	97	50 - 130	97	50 - 130	<0.0020	ug/g	NC	40
7395123	p,p-DDE	2021/06/09	88	50 - 130	84	50 - 130	<0.0020	ug/g	NC	40
7395123	p,p-DDT	2021/06/09	110	50 - 130	104	50 - 130	<0.0020	ug/g	NC	40
7395236	Hot Water Ext. Boron (B)	2021/06/08	102	75 - 125	99	75 - 125	<0.050	ug/g	8.2	40
7395393	Acid Extractable Antimony (Sb)	2021/06/09	94	75 - 125	104	80 - 120	<0.20	ug/g	NC	30
7395393	Acid Extractable Arsenic (As)	2021/06/09	97	75 - 125	101	80 - 120	<1.0	ug/g	7.6	30
7395393	Acid Extractable Barium (Ba)	2021/06/09	NC	75 - 125	105	80 - 120	<0.50	ug/g	2.6	30
7395393	Acid Extractable Beryllium (Be)	2021/06/09	98	75 - 125	95	80 - 120	<0.20	ug/g	4.3	30
7395393	Acid Extractable Boron (B)	2021/06/09	95	75 - 125	96	80 - 120	<5.0	ug/g	3.5	30
7395393	Acid Extractable Cadmium (Cd)	2021/06/09	96	75 - 125	98	80 - 120	<0.10	ug/g	NC	30
7395393	Acid Extractable Chromium (Cr)	2021/06/09	95	75 - 125	102	80 - 120	<1.0	ug/g	0.57	30
7395393	Acid Extractable Cobalt (Co)	2021/06/09	93	75 - 125	99	80 - 120	<0.10	ug/g	2.1	30
7395393	Acid Extractable Copper (Cu)	2021/06/09	93	75 - 125	98	80 - 120	<0.50	ug/g	5.3	30
7395393	Acid Extractable Lead (Pb)	2021/06/09	93	75 - 125	100	80 - 120	<1.0	ug/g	1.8	30
7395393	Acid Extractable Mercury (Hg)	2021/06/09	82	75 - 125	84	80 - 120	<0.050	ug/g	NC	30
7395393	Acid Extractable Molybdenum (Mo)	2021/06/09	98	75 - 125	101	80 - 120	<0.50	ug/g	9.3	30
7395393	Acid Extractable Nickel (Ni)	2021/06/09	93	75 - 125	102	80 - 120	<0.50	ug/g	6.6	30
7395393	Acid Extractable Selenium (Se)	2021/06/09	97	75 - 125	99	80 - 120	<0.50	ug/g	NC	30
7395393	Acid Extractable Silver (Ag)	2021/06/09	94	75 - 125	100	80 - 120	<0.20	ug/g	NC	30
7395393	Acid Extractable Thallium (Tl)	2021/06/09	95	75 - 125	102	80 - 120	<0.050	ug/g	NC	30
7395393	Acid Extractable Uranium (U)	2021/06/09	97	75 - 125	103	80 - 120	<0.050	ug/g	6.9	30
7395393	Acid Extractable Vanadium (V)	2021/06/09	101	75 - 125	102	80 - 120	<5.0	ug/g	4.9	30
7395393	Acid Extractable Zinc (Zn)	2021/06/09	104	75 - 125	93	80 - 120	<5.0	ug/g	0.85	30
7395470	Chromium (VI)	2021/06/09	37 (2)	70 - 130	98	80 - 120	<0.18	ug/g	NC	35

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

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7395627	Acid Extractable Antimony (Sb)	2021/06/08	102	75 - 125	102	80 - 120	<0.20	ug/g	NC	30
7395627	Acid Extractable Arsenic (As)	2021/06/08	104	75 - 125	102	80 - 120	<1.0	ug/g	2.4	30
7395627	Acid Extractable Barium (Ba)	2021/06/08	103	75 - 125	101	80 - 120	<0.50	ug/g	0.96	30
7395627	Acid Extractable Beryllium (Be)	2021/06/08	102	75 - 125	99	80 - 120	<0.20	ug/g	6.2	30
7395627	Acid Extractable Boron (B)	2021/06/08	97	75 - 125	94	80 - 120	<5.0	ug/g	NC	30
7395627	Acid Extractable Cadmium (Cd)	2021/06/08	104	75 - 125	100	80 - 120	<0.10	ug/g	0.17	30
7395627	Acid Extractable Chromium (Cr)	2021/06/08	98	75 - 125	99	80 - 120	<1.0	ug/g	1.5	30
7395627	Acid Extractable Cobalt (Co)	2021/06/08	103	75 - 125	100	80 - 120	<0.10	ug/g	0.59	30
7395627	Acid Extractable Copper (Cu)	2021/06/08	102	75 - 125	100	80 - 120	<0.50	ug/g	3.2	30
7395627	Acid Extractable Lead (Pb)	2021/06/08	99	75 - 125	100	80 - 120	<1.0	ug/g	2.6	30
7395627	Acid Extractable Mercury (Hg)	2021/06/08	94	75 - 125	94	80 - 120	<0.050	ug/g	1.2	30
7395627	Acid Extractable Molybdenum (Mo)	2021/06/08	104	75 - 125	99	80 - 120	<0.50	ug/g	NC	30
7395627	Acid Extractable Nickel (Ni)	2021/06/08	103	75 - 125	103	80 - 120	<0.50	ug/g	0.76	30
7395627	Acid Extractable Selenium (Se)	2021/06/08	104	75 - 125	103	80 - 120	<0.50	ug/g	NC	30
7395627	Acid Extractable Silver (Ag)	2021/06/08	108	75 - 125	104	80 - 120	<0.20	ug/g	NC	30
7395627	Acid Extractable Thallium (Tl)	2021/06/08	102	75 - 125	102	80 - 120	<0.050	ug/g	1.6	30
7395627	Acid Extractable Uranium (U)	2021/06/08	104	75 - 125	102	80 - 120	<0.050	ug/g	4.6	30
7395627	Acid Extractable Vanadium (V)	2021/06/08	105	75 - 125	101	80 - 120	<5.0	ug/g	0.96	30
7395627	Acid Extractable Zinc (Zn)	2021/06/08	103	75 - 125	99	80 - 120	<5.0	ug/g	0.60	30
7397185	Conductivity	2021/06/09			100	90 - 110	<0.002	mS/cm	1.5	10

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

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7397483	Available (CaCl2) pH	2021/06/09			100	97 - 103			0.044	N/A

N/A = Not Applicable

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

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

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

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

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

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

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

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

(2) The matrix spike recovery was below the lower control limit. This may be due in part to the reducing environment of the sample. The matrix spike was reanalyzed to confirm result.

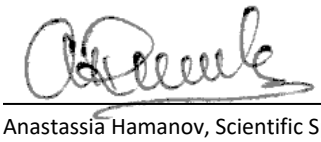
Bureau Veritas Laboratories 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

BV Labs Job #: C1F3550
Report Date: 2021/06/11

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GROOMLEY
Your P.O. #: MRK-GEO
Sampler Initials: AS

VALIDATION SIGNATURE PAGE

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



Anastassia Hamanov, Scientific Specialist

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

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

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

CHAIN OF CUSTODY RECORD

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#17485 exp Services Inc	Company Name:	EXP Services Inc.	Quotation #:	B91718	BV Labs Job #:	Bottle Order #:
Attention:	Simon Lan	Attention:	~~Victor Tam~~ So Ming Chiang; Simon Lan; Aleksandar Sarić	P.O. #:	MRK-GEO 15450 Woodbine Avenue, Gormley, Ontario ~~BRM-00609060-A0 (C200)~~ BRM-20010564-A0		792128
Address:	220 Commerce Valley Dr W Suite 500 Markham ON L3T 0A8	Address:		Project:			
Tel:	(905) 695-3217 Fax:	Tel:	Fax:	Project Name:	15450 Woodbine Avenue, Gormley, Ontario	COC #:	Project Manager:
Email:	simon.lan@exp.com	Email:	~~victor.tam@exp.com~~, simon.lan@exp.com; soming.chiang@exp.com; aleksandar.saric@exp.com	Site #:		C#792128-83-01	Christine Gripton
				Sampled By:	AS; AG		

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

Regulation 153 (2011)	Other Regulations	Special Instructions
☐ Table 1 ☑ Res/Park ☐ Medium/Fine	☐ CCME ☐ Sanitary Sewer Bylaw	
☑ Table 2 ☐ Ind/Comm ☐ Coarse	☐ Reg 558. ☐ Storm Sewer Bylaw	
☐ Table 3 ☐ Agri/Other ☑ For RSC	☐ MISA Municipality	
☐ Table	☐ PWQO ☐ Reg 406 Table	
	☐ Other	

Include Criteria on Certificate of Analysis (Y/N)? ____

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

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

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

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr VI	ANALYSIS REQUESTED (PLEASE BE SPECIFIC): Metals + Inorganics	PCBs	OC Pesticides	BTEX + PHC (F1-F4)	VOCs	# of Bottles	Comments
1		BH-3 SS3 (1.5-2.1m)	2021/05/27		Soil		✓					1	
2		BH-4 SS1 (0.0-0.6m)	2021/05/28						✓			1	
3		BH-4 SS1D (0.0-0.6m)							✓			1	
4		BH-4 SS3 (1.5-2.1m)					✓					1	04-Jun-21 15:30 Christine Gripton C1F3550
5		BH-4 SS3D (1.5-2.1m)					✓					1	
6		BH-7 SS1 (0.0-0.6m)							✓			1	HDE ENV 802
7		BH-7 SS5 (3.1-3.7m)	↓				✓					1	
8		BH-12 SS2 (0.8-1.4m)	2021/05/27						✓			1	
9		BH-12 SS3 (1.5-2.1m)	2021/05/27				✓					1	
10		BH-14 SS2 (0.8-1.4m)	2021/05/26		↓				✓			1	

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Recei	Custody Seal	Yes	No
Aleksandar Saric Aleksandar Saric	2021/06/04	11:30am	[illegible]	2021/06/04	15:30			4/0/0	Present		
									Intact	✓	

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

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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

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

White: BV Labs Yellow: Client

Bureau Veritas Canada (2019) Inc.

BV drive

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

CHAIN OF CUSTODY RECORD

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#17485 exp Services Inc	Company Name:	EXP Services Inc.	Quotation #:	B91718	BV Labs Job #:	Bottle Order #: 792128
Attention:	Simon Lan	Attention:	~~Victor Tam~~ So Ming Chiang; Simon Lan	P.O. #:	MRK-GEO		
Address:	220 Commerce Valley Dr W Suite 500	Address:	Aleksandar Sarić	Project:	~~BRM-00609060-A0 (C200)~~ BRM-210108GH-BO		
	Markham ON L3T 0A8		aleksandar.saric@exp.com	Project Name:	15450 Woodbine Avenue, Formley, Ontario	COC #: C#792128-121-01	Project Manager: Christine Gripton
Tel:	(905) 695-3217 Fax:	Tel:	soming.chiang@exp.com Fax:	Site #:			
Email:	simon.lan@exp.com	Email:	~~victortam@exp.com~~, simon.lan@exp.com	Sampled By:	AS; AG		

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

Regulation 153 (2011)	Other Regulations	Special Instructions
☐ Table 1 ☑ Res/Park ☐ Medium/Fine	☐ CCME ☐ Sanitary Sewer Bylaw	
☑ Table 2 ☐ Ind/Comm ☐ Coarse	☐ Reg 558 ☐ Storm Sewer Bylaw	
☐ Table 3 ☐ Agri/Other ☑ For RSC	☐ MISA Municipality	
☐ Table	☐ PWQO ☐ Reg 406 Table	
	☐ Other	

Include Criteria on Certificate of Analysis (Y/N)? _____

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

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

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

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr VI	ANALYSIS REQUESTED (PLEASE BE SPECIFIC): Metals + Inorganics	PCBs	OC Pesticides	BTEX + PHCs (F_1 - F_4)	VOCs						# of Bottles	Comments
1		BH-14 SS3 (1.5-2.1m)	2021/05/26		Soil		✓										1	
2		BH-16 SS2 (0.8-1.4m)	2021/05/31					✓									1	
3		BH-16 SS3 (1.5-2.1m)	↓							✓							2	
4		BH-101 SS1 (0.0-0.6m)	2021/06/01	12:15pm			✓										1	
5		BH-101 SS4 (2.3-2.7m)		12:40pm						✓							2	
6		BH-102 SS5 (3.1-3.7m)		9:00am						✓	✓						3	
7		BH-102 SS5A (3.1-3.7m)		9:00am						✓	✓						3	
8		BH-102 SS6 (3.8-4.4m)		9:15am						✓	✓						3	HOLD VOCs + PHCs
9		BH-102 SS7 (4.6-5.2m)		9:30am						✓	✓						3	HOLD VOCs + PHCs
10		BH-103 SS6 (3.8-4.4m)	↓	2:00pm	↓					✓							1	

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Recei	Custody Seal	Yes	No
Aleksandar Sarić Aleksandar Sarić	2021/06/04	11:30am	See page 1						Present		
									Intact		

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

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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

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

White: BV Labs Yellow: Client

Bureau Veritas Canada (2019) Inc.

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

CHAIN OF CUSTODY RECORD

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#17485 exp Services Inc	Company Name:	EXP Services Inc.	Quotation #:	B91718	BV Labs Job #:	Bottle Order #:
Attention:	Simon Lan	Attention:	~~Victor Tam~~ Sz Ming Chang; Simon Lan;	P.O. #:	MRK-GEO		792128
Address:	220 Commerce Valley Dr W Suite 500	Address:	Aleksandar Saric	Project:	~~BRM-00609060-A0 (C200)~~ BRM-21010834-B0		
	Markham ON L3T 0A8		aleksandar.saric@exp.com	Project Name:	15450 Woodbine Avenue, Gormley, Ontario	COC #:	Project Manager:
Tel:	(905) 695-3217 Fax:	Tel:	szming.chang@exp.com Fax:	Site #:		C#792128-163-01	Christine Gripton
Email:	simon.lan@exp.com	Email:	~~victor.tam@exp.com~~, simon.lan@exp.com	Sampled By:	AS; AG		

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

Regulation 153 (2011)
- ☐ Table 1 ☑ Res/Park ☐ Medium/Fine
- ☑ Table 2 ☐ Ind/Comm ☐ Coarse
- ☐ Table 3 ☐ Agri/Other ☑ For RSC
- ☐ Table ___

Other Regulations
- ☐ CCME ☐ Sanitary Sewer Bylaw
- ☐ Reg 558. ☐ Storm Sewer Bylaw
- ☐ MISA Municipality ___
- ☐ PWQO ☐ Reg 406 Table ___
- ☐ Other ___

Special Instructions

Include Criteria on Certificate of Analysis (Y/N)? ___

Field Filtered (please circle): Metals / Hg / Cr VI

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

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

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

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

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Metals + Inorganics	PCBs	OC Pesticides	BTEX + PHC (F1 - F4)	VOCs	# of Bottles	Comments
1		BH-104 SS4 (2.3-2.7m)	2021/06/02	2:20pm	Soil				✓		2	
2		BH-105 SS1 (0.0-0.6m)		8:30am				✓			1	
3		BH-105 SS2 (0.8-1.4m)		8:40am		✓					1	
4		BH-106 SS4 (2.3-2.7m)		11:20am					✓		2	
5		BH-107 SS2 (0.8-1.4m)		2:45pm			✓				1	
6		BH-107 SS2A (0.8-1.4m)		2:45pm			✓				1	
7		BH-107 SS3 (1.5-2.1m)	↓	2:55pm					✓		2	
8		BH-108 SS2 (0.8-1.4m)	2021/06/01	3:15pm	↓				✓		2	
9												
10												

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only				
Aleksandar Saric Aleksandar Saric	2021/06/04	11:30am	See pg 1				Time Sensitive	Temperature (°C) on Recei	Custody Seal	Yes	No
									Present		
									Intact		

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

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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

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

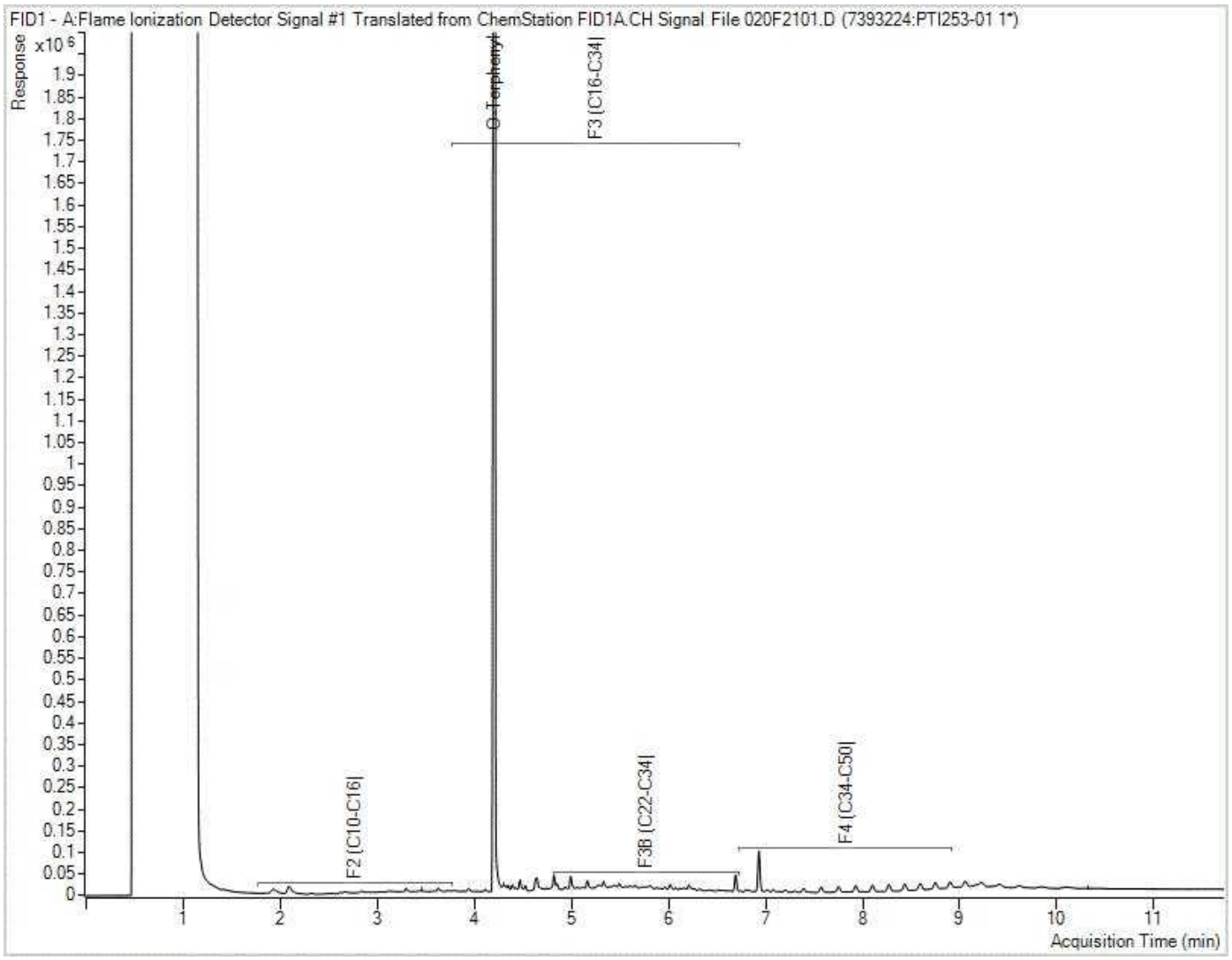
White: BV Labs Yellow: Client

Bureau Veritas Canada (2019) Inc.

BV Labs Job #: C1F3550
Report Date: 2021/06/11
BV Labs Sample: PTI253

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GROOMLEY
Client ID: BH-16 SS3 (1.5-2.1M)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

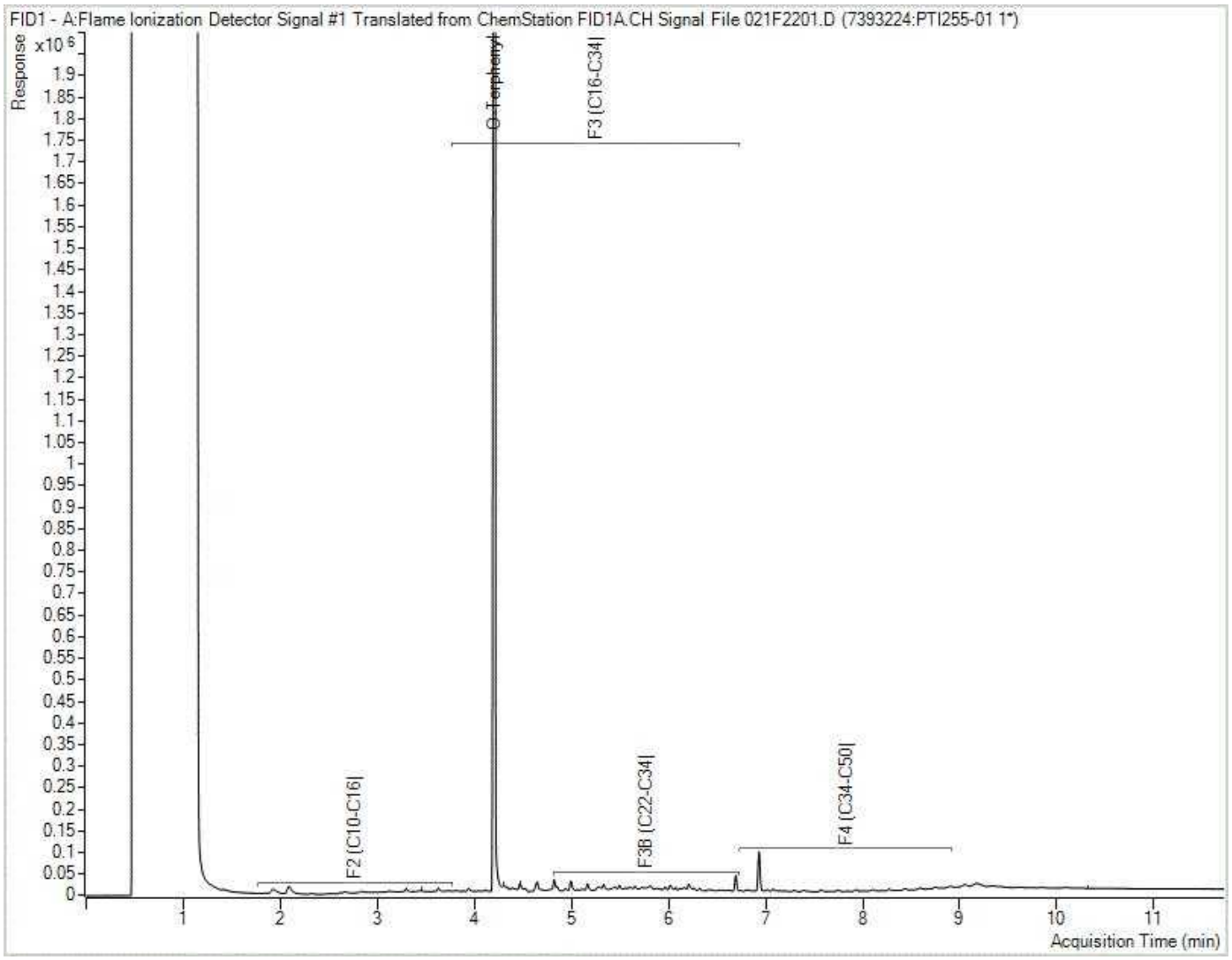


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1F3550
Report Date: 2021/06/11
BV Labs Sample: PTI255

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GROOMLEY
Client ID: BH-101 SS4 (2.3-2.7M)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

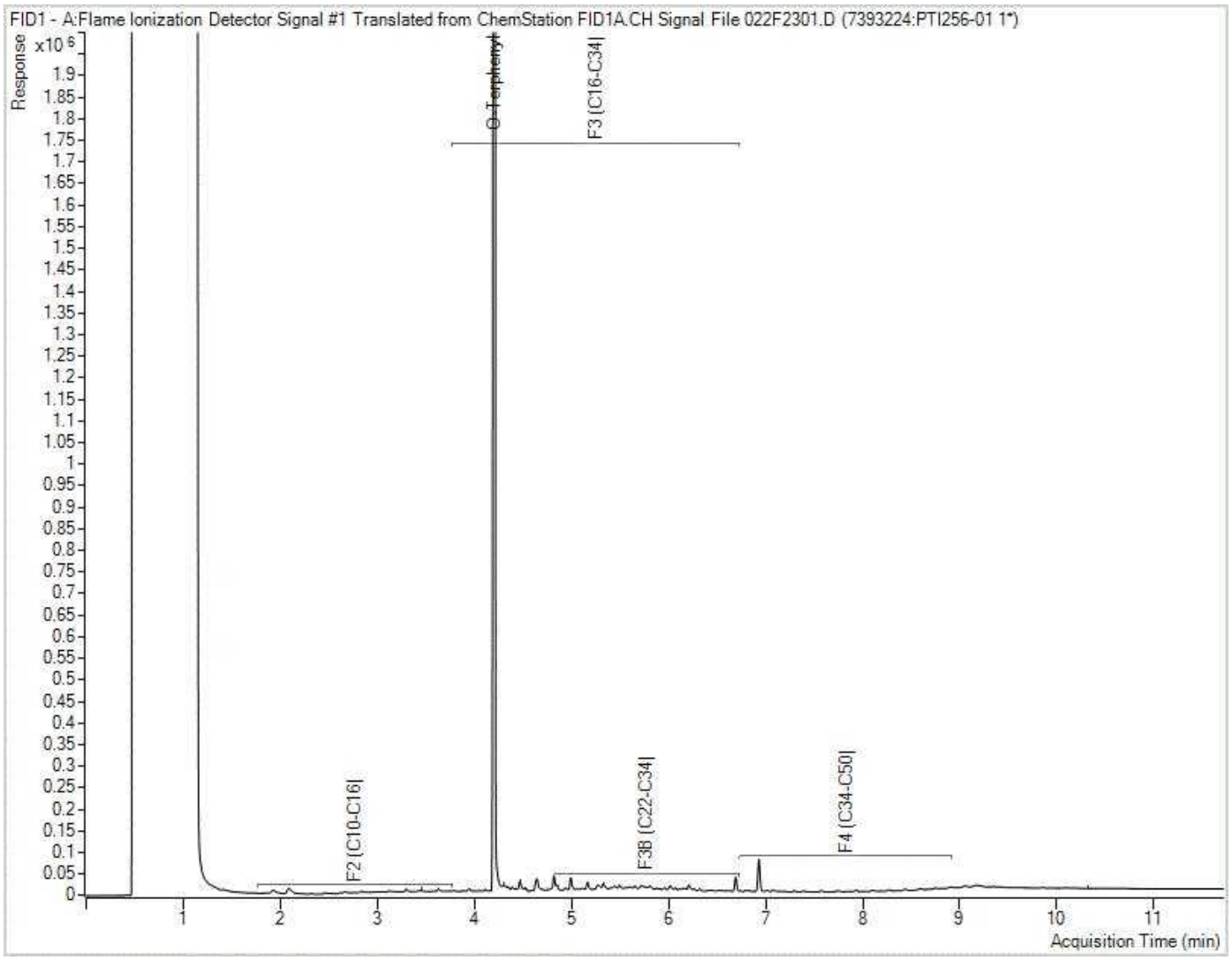


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1F3550
Report Date: 2021/06/11
BV Labs Sample: PTI256

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GROOMLEY
Client ID: BH-102 SS5 (3.1-3.7M)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

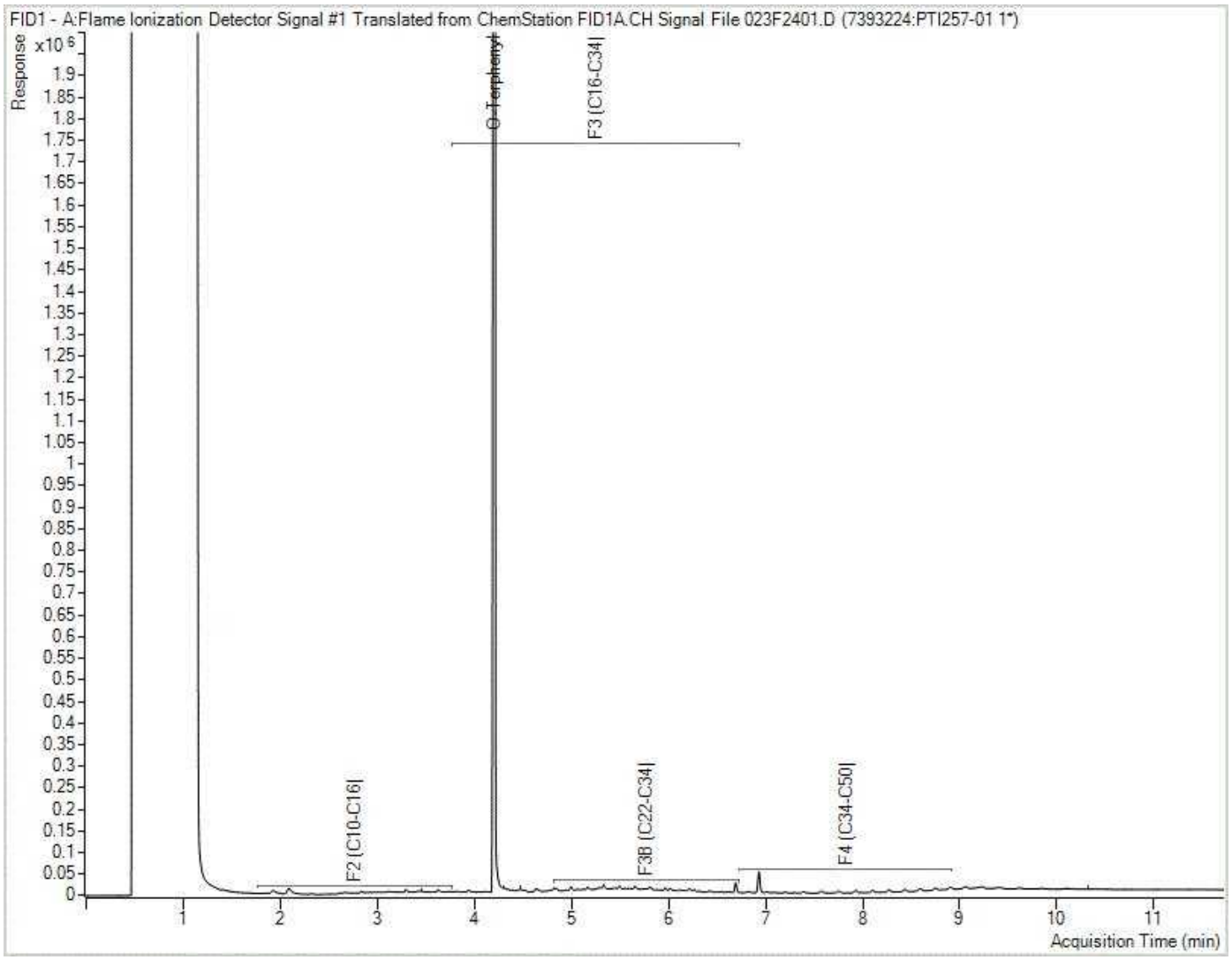


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1F3550
Report Date: 2021/06/11
BV Labs Sample: PTI257

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GROOMLEY
Client ID: BH-102 SS5D (3.1-3.7M)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

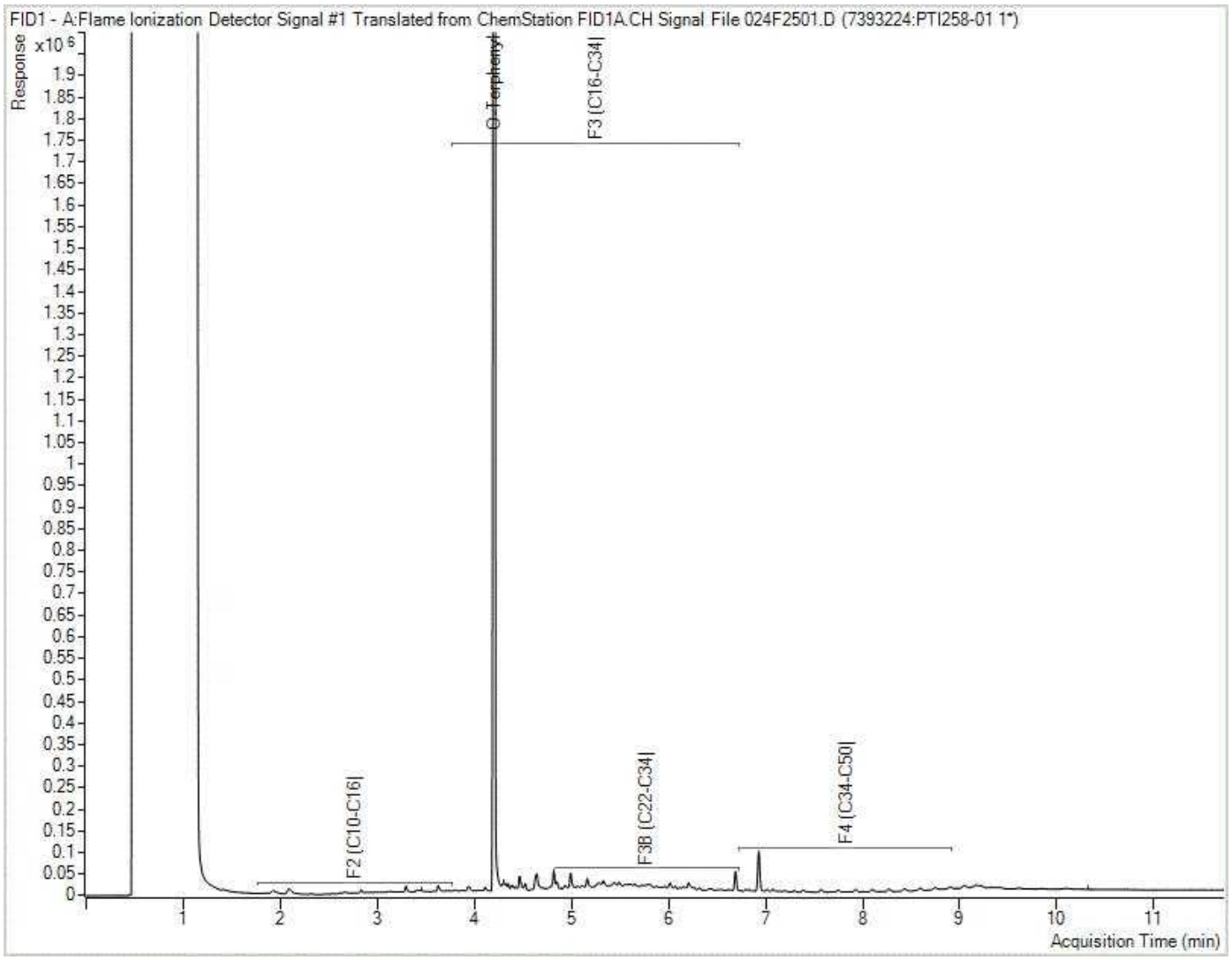


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1F3550
Report Date: 2021/06/11
BV Labs Sample: PTI258

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GROOMLEY
Client ID: BH-102 SS6 (3.8-4.4M)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

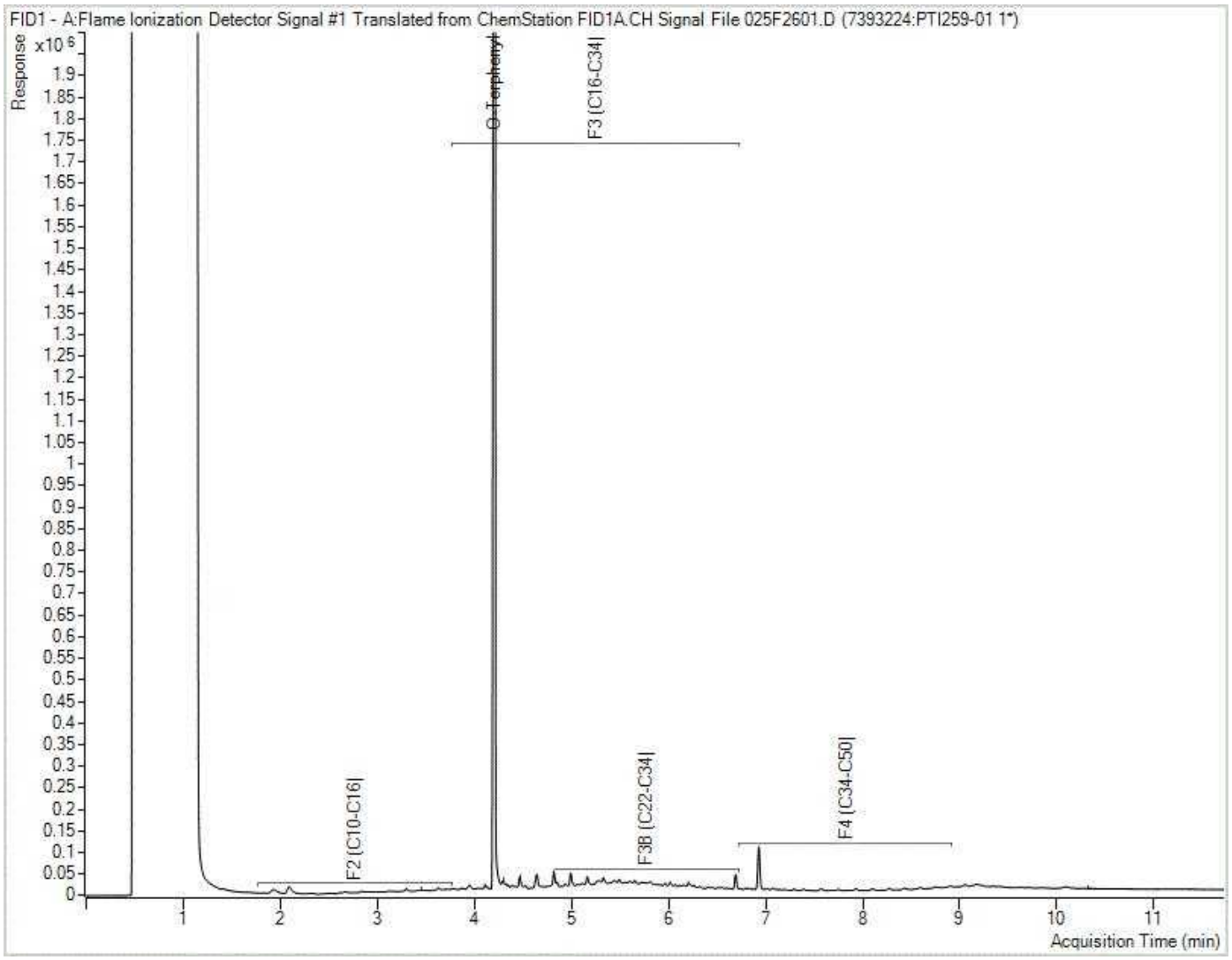


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1F3550
Report Date: 2021/06/11
BV Labs Sample: PTI259

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GROOMLEY
Client ID: BH-102 SS7 (4.6-5.2M)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

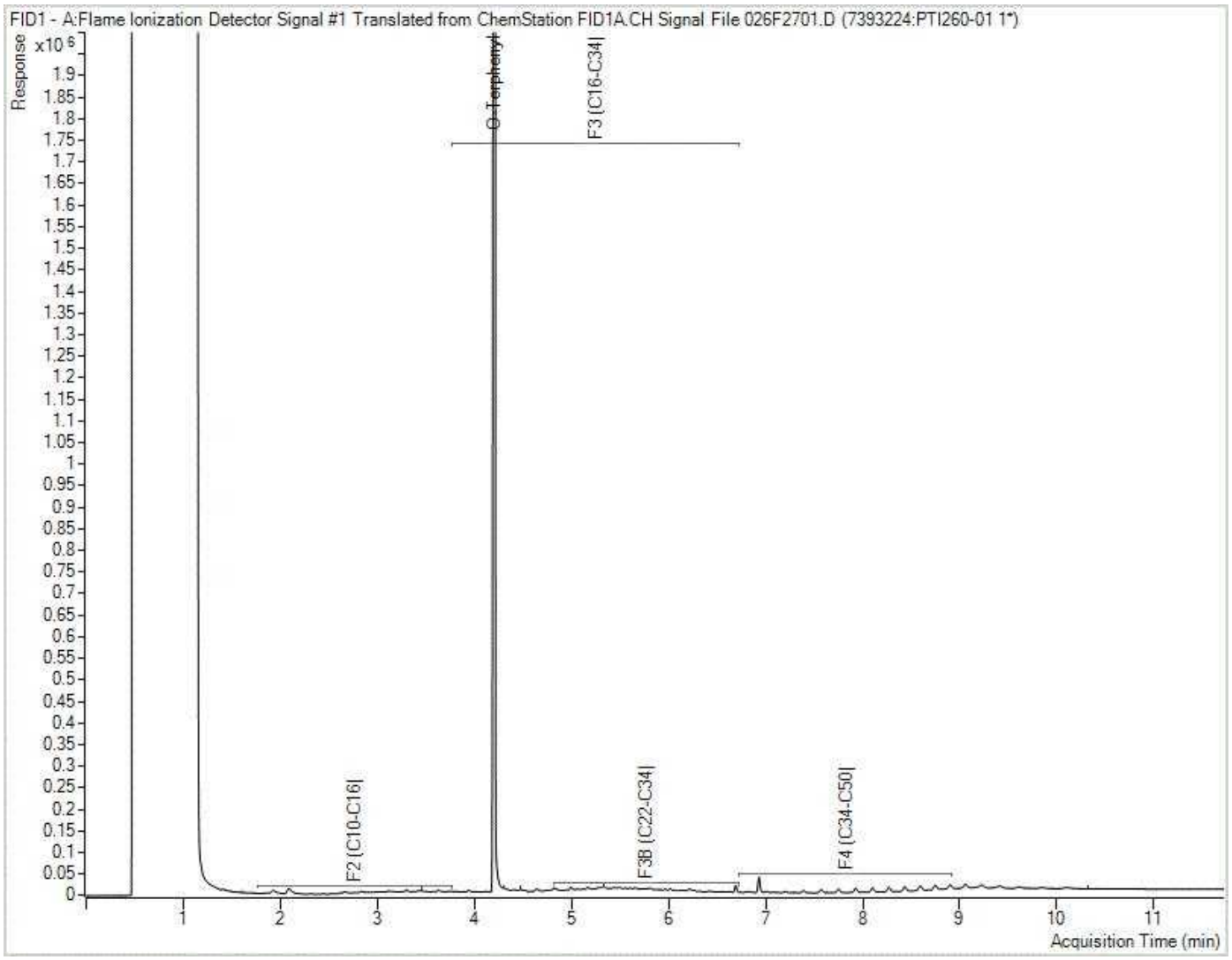


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1F3550
Report Date: 2021/06/11
BV Labs Sample: PTI260

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GROOMLEY
Client ID: BH-103 SS6 (3.8-4.4M)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

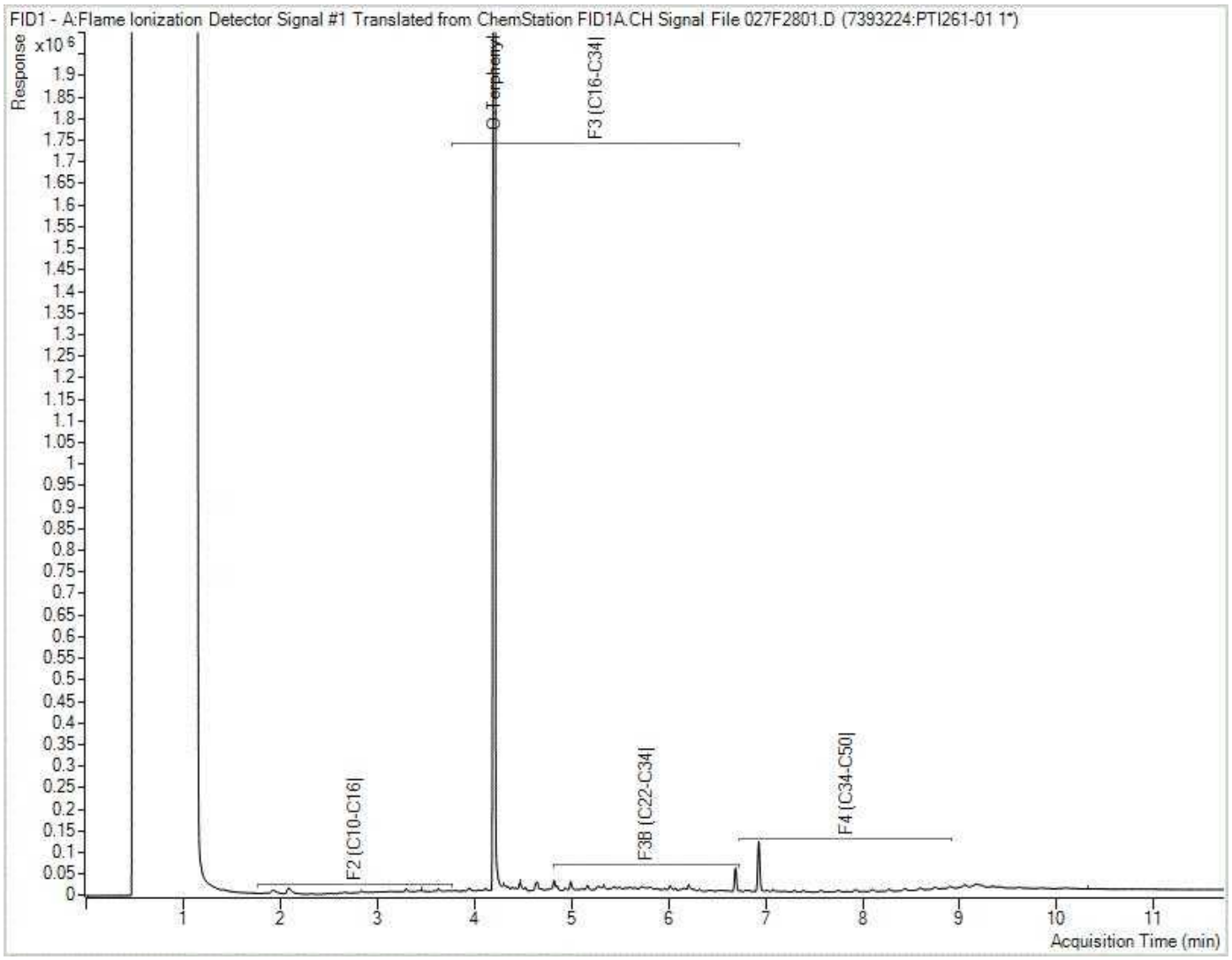


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1F3550
Report Date: 2021/06/11
BV Labs Sample: PTI261

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GROOMLEY
Client ID: BH-104 SS4 (2.3-2.7M)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

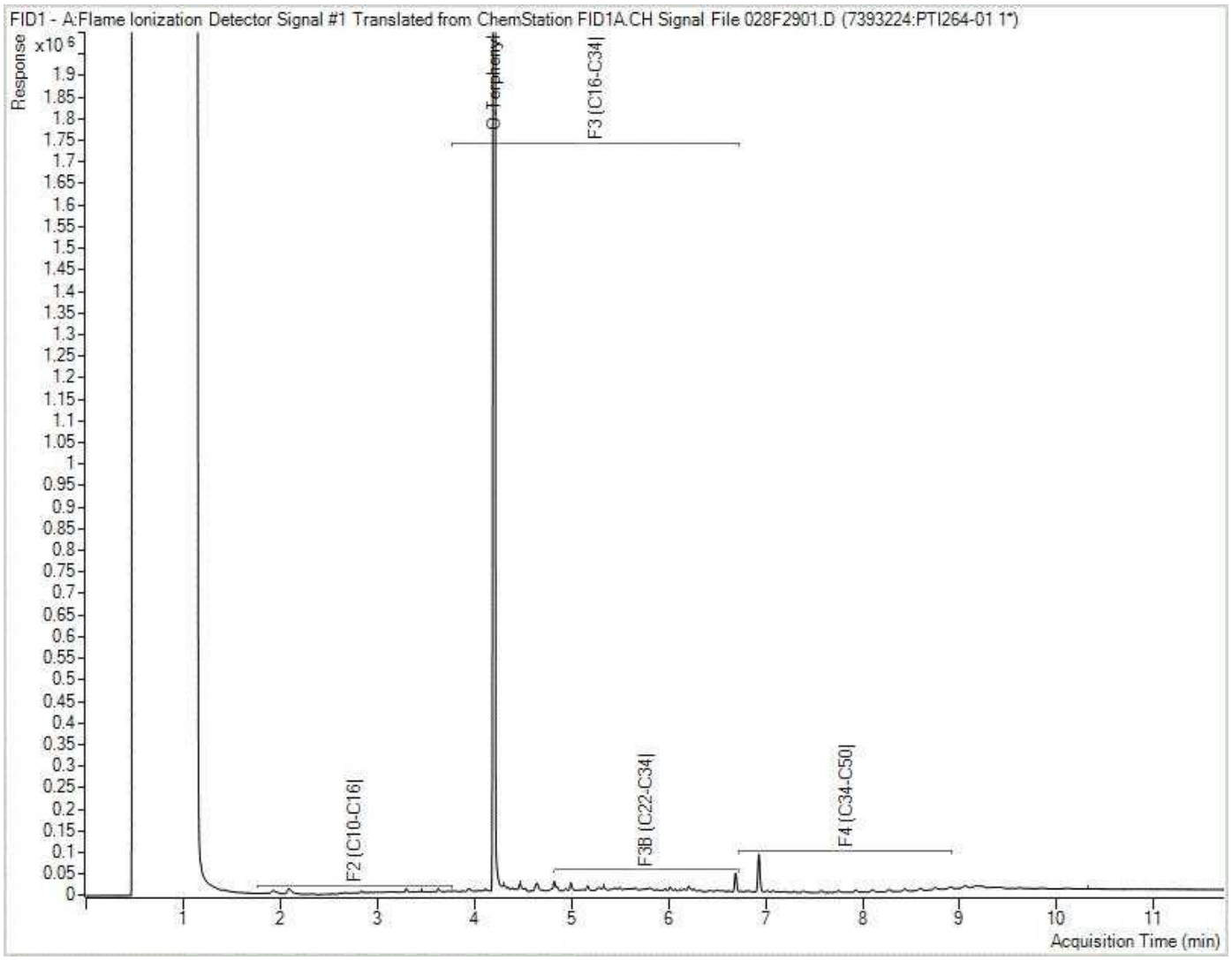


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1F3550
Report Date: 2021/06/11
BV Labs Sample: PTI264

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GROOMLEY
Client ID: BH-106 SS4 (0.8-1.4M)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

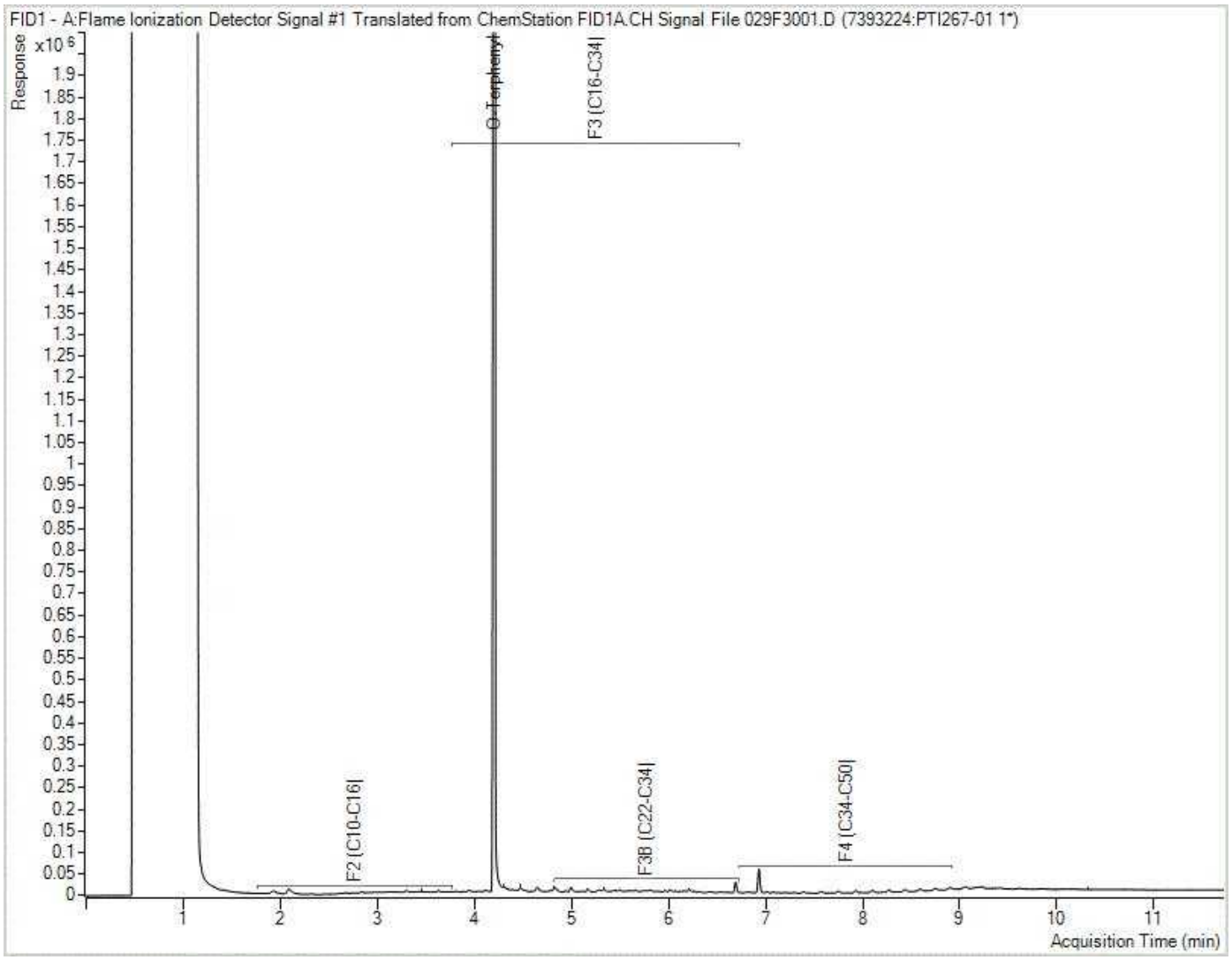


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1F3550
Report Date: 2021/06/11
BV Labs Sample: PTI267

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GROOMLEY
Client ID: BH-107 SS3 (1.5-2.1M)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram

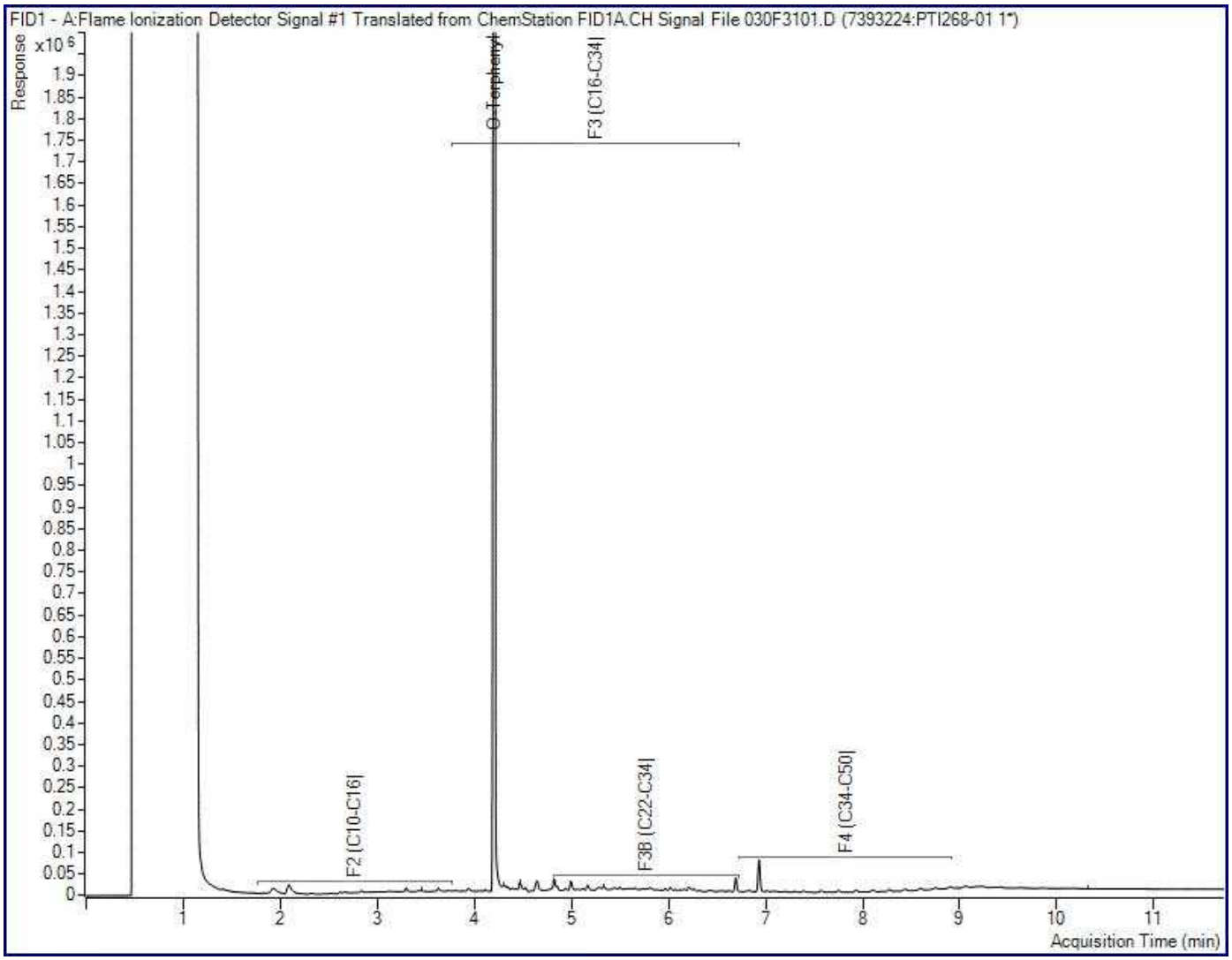


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1F3550
Report Date: 2021/06/11
BV Labs Sample: PTI268

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GROOMLEY
Client ID: BH-108 SS2 (0.8-1.4M)

Petroleum Hydrocarbons F2-F4 in Soil Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Your P.O. #: MRK- GEO
Your Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GORMLEY
Your C.O.C. #: na

Attention: Aleksandar Saric

exp Services Inc
Markham Branch
220 Commerce Valley Dr W
Suite 500
Markham, ON
CANADA L3T 0A8

Report Date: 2021/06/15
Report #: R6677579
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1F6446
Received: 2021/06/08, 15:25

Sample Matrix: Water
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
1,3-Dichloropropene Sum	1	N/A	2021/06/14		EPA 8260C m
1,3-Dichloropropene Sum	2	N/A	2021/06/15		EPA 8260C m
Petroleum Hydro. CCME F1 & BTEX in Water	2	N/A	2021/06/11	CAM SOP-00315	CCME PHC-CWS m
Petroleum Hydrocarbons F2-F4 in Water (1)	4	2021/06/11	2021/06/11	CAM SOP-00316	CCME PHC-CWS m
Volatile Organic Compounds and F1 PHCs	1	N/A	2021/06/14	CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds and F1 PHCs	1	N/A	2021/06/15	CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds in Water	1	N/A	2021/06/13	CAM SOP-00228	EPA 8260C m

Remarks:

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

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

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

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) All CCME PHC results met required criteria unless otherwise stated in the report. The CWS PHC methods employed by Bureau Veritas Laboratories conform to all prescribed elements of the reference method and performance based elements have been validated. All modifications have been validated and proven equivalent following "Alberta

Your P.O. #: MRK- GEO
Your Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GORMLEY
Your C.O.C. #: na

Attention: Aleksandar Saric

exp Services Inc
Markham Branch
220 Commerce Valley Dr W
Suite 500
Markham, ON
CANADA L3T 0A8

Report Date: 2021/06/15
Report #: R6677579
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1F6446
Received: 2021/06/08, 15:25

Environment's Interpretation of the Reference Method for the Canada-Wide Standard for Petroleum Hydrocarbons in Soil Validation of Performance-Based Alternative Methods September 2003". Documentation is available upon request. Modifications from Reference Method for the Canada-wide Standard for Petroleum Hydrocarbons in Soil-Tier 1 Method: F2/F3/F4 data reported using validated cold solvent extraction instead of Soxhlet extraction.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Patricia Legette, Project Manager
Email: Patricia.Legette@bureauveritas.com
Phone# (905)817-5799

==========

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

BV Labs Job #: C1F6446
Report Date: 2021/06/15

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GORMLEY
Your P.O. #: MRK- GEO
Sampler Initials: AS

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

BV Labs ID		PTX973	PTX974		
Sampling Date		2021/06/08 09:35	2021/06/08 10:05		
COC Number		na	na		
	UNITS	**MW-103**	**MW-106**	**RDL**	**QC Batch**
BTEX & F1 Hydrocarbons					
Benzene	ug/L	<0.20	<0.20	0.20	7402385
Toluene	ug/L	<0.20	<0.20	0.20	7402385
Ethylbenzene	ug/L	<0.20	<0.20	0.20	7402385
o-Xylene	ug/L	<0.20	<0.20	0.20	7402385
p+m-Xylene	ug/L	<0.40	<0.40	0.40	7402385
Total Xylenes	ug/L	<0.40	<0.40	0.40	7402385
F1 (C6-C10)	ug/L	<25	<25	25	7402385
F1 (C6-C10) - BTEX	ug/L	<25	<25	25	7402385
F2-F4 Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	100	7402234
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	200	7402234
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	200	7402234
Reached Baseline at C50	ug/L	Yes	Yes		7402234
Surrogate Recovery (%)					
1,4-Difluorobenzene	%	94	92		7402385
4-Bromofluorobenzene	%	109	104		7402385
D10-o-Xylene	%	102	100		7402385
D4-1,2-Dichloroethane	%	103	104		7402385
o-Terphenyl	%	94	94		7402234

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

BV Labs Job #: C1F6446
Report Date: 2021/06/15

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GORMLEY
Your P.O. #: MRK- GEO
Sampler Initials: AS

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

BV Labs ID		PTX971	PTX972			PTX972		
Sampling Date		2021/06/08 09:23	2021/06/08 09:23			2021/06/08 09:23		
COC Number		na	na			na		
	UNITS	**MW-102**	**MW-102D**	**RDL**	**QC Batch**	**MW-102D Lab-Dup**	**RDL**	**QC Batch**
Calculated Parameters								
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	0.50	7395293			
Volatile Organics								
Acetone (2-Propanone)	ug/L	15	13	10	7402448	13	10	7402448
Benzene	ug/L	<0.20	<0.20	0.20	7402448	<0.20	0.20	7402448
Bromodichloromethane	ug/L	<0.50	<0.50	0.50	7402448	<0.50	0.50	7402448
Bromoform	ug/L	<1.0	<1.0	1.0	7402448	<1.0	1.0	7402448
Bromomethane	ug/L	<0.50	<0.50	0.50	7402448	<0.50	0.50	7402448
Carbon Tetrachloride	ug/L	<0.20	<0.20	0.20	7402448	<0.20	0.20	7402448
Chlorobenzene	ug/L	<0.20	<0.20	0.20	7402448	<0.20	0.20	7402448
Chloroform	ug/L	<0.20	<0.20	0.20	7402448	<0.20	0.20	7402448
Dibromochloromethane	ug/L	<0.50	<0.50	0.50	7402448	<0.50	0.50	7402448
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	7402448	<0.50	0.50	7402448
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	7402448	<0.50	0.50	7402448
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	7402448	<0.50	0.50	7402448
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	1.0	7402448	<1.0	1.0	7402448
1,1-Dichloroethane	ug/L	<0.20	<0.20	0.20	7402448	<0.20	0.20	7402448
1,2-Dichloroethane	ug/L	<0.50	<0.50	0.50	7402448	<0.50	0.50	7402448
1,1-Dichloroethylene	ug/L	<0.20	<0.20	0.20	7402448	<0.20	0.20	7402448
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	7402448	<0.50	0.50	7402448
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	7402448	<0.50	0.50	7402448
1,2-Dichloropropane	ug/L	<0.20	<0.20	0.20	7402448	<0.20	0.20	7402448
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	0.30	7402448	<0.30	0.30	7402448
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	0.40	7402448	<0.40	0.40	7402448
Ethylbenzene	ug/L	0.39	0.39	0.20	7402448	0.34	0.20	7402448
Ethylene Dibromide	ug/L	<0.20	<0.20	0.20	7402448	<0.20	0.20	7402448
Hexane	ug/L	<1.0	<1.0	1.0	7402448	<1.0	1.0	7402448
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	2.0	7402448	<2.0	2.0	7402448
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	10	7402448	<10	10	7402448
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	5.0	7402448	<5.0	5.0	7402448

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

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

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

BV Labs ID		PTX971	PTX972			PTX972		
Sampling Date		2021/06/08 09:23	2021/06/08 09:23			2021/06/08 09:23		
COC Number		na	na			na		
	UNITS	**MW-102**	**MW-102D**	**RDL**	**QC Batch**	**MW-102D Lab-Dup**	**RDL**	**QC Batch**
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	0.50	7402448	<0.50	0.50	7402448
Styrene	ug/L	<0.50	<0.50	0.50	7402448	<0.50	0.50	7402448
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	7402448	<0.50	0.50	7402448
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	7402448	<0.50	0.50	7402448
Tetrachloroethylene	ug/L	<0.20	<0.20	0.20	7402448	<0.20	0.20	7402448
Toluene	ug/L	0.42	0.40	0.20	7402448	0.33	0.20	7402448
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	0.20	7402448	<0.20	0.20	7402448
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	0.50	7402448	<0.50	0.50	7402448
Trichloroethylene	ug/L	<0.20	<0.20	0.20	7402448	<0.20	0.20	7402448
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	0.50	7402448	<0.50	0.50	7402448
Vinyl Chloride	ug/L	<0.20	<0.20	0.20	7402448	<0.20	0.20	7402448
p+m-Xylene	ug/L	0.56	0.53	0.20	7402448	0.47	0.20	7402448
o-Xylene	ug/L	2.9	2.6	0.20	7402448	2.3	0.20	7402448
Total Xylenes	ug/L	3.5	3.2	0.20	7402448	2.8	0.20	7402448
F1 (C6-C10)	ug/L	53	46	25	7402448	38	25	7402448
F1 (C6-C10) - BTEX	ug/L	49	43	25	7402448	35	25	7402448
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	100	7402234	<100	100	7402234
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	200	7402234	<200	200	7402234
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	200	7402234	<200	200	7402234
Reached Baseline at C50	ug/L	Yes	Yes		7402234	Yes		7402234
Surrogate Recovery (%)								
o-Terphenyl	%	94	95		7402234	94		7402234
4-Bromofluorobenzene	%	83	87		7402448	85		7402448
D4-1,2-Dichloroethane	%	116	117		7402448	117		7402448
D8-Toluene	%	89	92		7402448	81		7402448

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

BV Labs Job #: C1F6446
Report Date: 2021/06/15

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GORMLEY
Your P.O. #: MRK- GEO
Sampler Initials: AS

O.REG 153 VOCS BY HS (WATER)

BV Labs ID		PTX975		
Sampling Date		2021/06/08		
COC Number		na		
	UNITS	**TRIP BLANK LOT#3699**	**RDL**	**QC Batch**
Calculated Parameters				
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	7395293
Volatile Organics				
Acetone (2-Propanone)	ug/L	<10	10	7402436
Benzene	ug/L	<0.20	0.20	7402436
Bromodichloromethane	ug/L	<0.50	0.50	7402436
Bromoform	ug/L	<1.0	1.0	7402436
Bromomethane	ug/L	<0.50	0.50	7402436
Carbon Tetrachloride	ug/L	<0.19	0.19	7402436
Chlorobenzene	ug/L	<0.20	0.20	7402436
Chloroform	ug/L	<0.20	0.20	7402436
Dibromochloromethane	ug/L	<0.50	0.50	7402436
1,2-Dichlorobenzene	ug/L	<0.40	0.40	7402436
1,3-Dichlorobenzene	ug/L	<0.40	0.40	7402436
1,4-Dichlorobenzene	ug/L	<0.40	0.40	7402436
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	7402436
1,1-Dichloroethane	ug/L	<0.20	0.20	7402436
1,2-Dichloroethane	ug/L	<0.49	0.49	7402436
1,1-Dichloroethylene	ug/L	<0.20	0.20	7402436
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	7402436
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	7402436
1,2-Dichloropropane	ug/L	<0.20	0.20	7402436
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	7402436
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	7402436
Ethylbenzene	ug/L	<0.20	0.20	7402436
Ethylene Dibromide	ug/L	<0.19	0.19	7402436
Hexane	ug/L	<1.0	1.0	7402436
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	7402436
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	10	7402436
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	7402436
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	7402436

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

BV Labs Job #: C1F6446
Report Date: 2021/06/15

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GORMLEY
Your P.O. #: MRK- GEO
Sampler Initials: AS

O.REG 153 VOCS BY HS (WATER)

BV Labs ID		PTX975		
Sampling Date		2021/06/08		
COC Number		na		
	UNITS	**TRIP BLANK LOT#3699**	**RDL**	**QC Batch**
Styrene	ug/L	<0.40	0.40	7402436
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	7402436
1,1,2,2-Tetrachloroethane	ug/L	<0.40	0.40	7402436
Tetrachloroethylene	ug/L	<0.20	0.20	7402436
Toluene	ug/L	<0.20	0.20	7402436
1,1,1-Trichloroethane	ug/L	<0.20	0.20	7402436
1,1,2-Trichloroethane	ug/L	<0.40	0.40	7402436
Trichloroethylene	ug/L	<0.20	0.20	7402436
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	7402436
Vinyl Chloride	ug/L	<0.20	0.20	7402436
p+m-Xylene	ug/L	<0.20	0.20	7402436
o-Xylene	ug/L	<0.20	0.20	7402436
Total Xylenes	ug/L	<0.20	0.20	7402436
Surrogate Recovery (%)				
4-Bromofluorobenzene	%	97		7402436
D4-1,2-Dichloroethane	%	107		7402436
D8-Toluene	%	93		7402436

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

BV Labs Job #: C1F6446
Report Date: 2021/06/15

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GORMLEY
Your P.O. #: MRK- GEO
Sampler Initials: AS

TEST SUMMARY

BV Labs ID: PTX971
Sample ID: MW-102
Matrix: Water
Collected: 2021/06/08
Shipped:
Received: 2021/06/08

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7395293	N/A	2021/06/15	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	7402234	2021/06/11	2021/06/11	Jeevaraj Jeevaratrnam
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7402448	N/A	2021/06/14	Yang (Philip) Yu

BV Labs ID: PTX972
Sample ID: MW-102D
Matrix: Water
Collected: 2021/06/08
Shipped:
Received: 2021/06/08

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7395293	N/A	2021/06/15	Automated Statchk
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	7402234	2021/06/11	2021/06/11	Jeevaraj Jeevaratrnam
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7402448	N/A	2021/06/15	Yang (Philip) Yu

BV Labs ID: PTX972 Dup
Sample ID: MW-102D
Matrix: Water
Collected: 2021/06/08
Shipped:
Received: 2021/06/08

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	7402234	2021/06/11	2021/06/11	Jeevaraj Jeevaratrnam
Volatile Organic Compounds and F1 PHCs	GC/MSFD	7402448	N/A	2021/06/15	Yang (Philip) Yu

BV Labs ID: PTX973
Sample ID: MW-103
Matrix: Water
Collected: 2021/06/08
Shipped:
Received: 2021/06/08

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	7402385	N/A	2021/06/11	Joe Paino
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	7402234	2021/06/11	2021/06/11	Jeevaraj Jeevaratrnam

BV Labs ID: PTX974
Sample ID: MW-106
Matrix: Water
Collected: 2021/06/08
Shipped:
Received: 2021/06/08

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydro. CCME F1 & BTEX in Water	HSGC/MSFD	7402385	N/A	2021/06/11	Joe Paino
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	7402234	2021/06/11	2021/06/11	Jeevaraj Jeevaratrnam

BV Labs ID: PTX975
Sample ID: TRIP BLANK LOT#3699
Matrix: Water
Collected: 2021/06/08
Shipped:
Received: 2021/06/08

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
1,3-Dichloropropene Sum	CALC	7395293	N/A	2021/06/14	Automated Statchk
Volatile Organic Compounds in Water	GC/MS	7402436	N/A	2021/06/13	Juan Pangilinan

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

BV Labs Job #: C1F6446
Report Date: 2021/06/15

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GORMLEY
Your P.O. #: MRK- GEO
Sampler Initials: AS

GENERAL COMMENTS

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

Package 1	5.0°C

Results relate only to the items tested.

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

BV Labs Job #: C1F6446
Report Date: 2021/06/15

QUALITY ASSURANCE REPORT

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GORMLEY
Your P.O. #: MRK- GEO
Sampler Initials: AS

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7402234	o-Terphenyl	2021/06/11	95	60 - 130	93	60 - 130	95	%		
7402385	1,4-Difluorobenzene	2021/06/11	89	70 - 130	89	70 - 130	92	%		
7402385	4-Bromofluorobenzene	2021/06/11	113	70 - 130	110	70 - 130	102	%		
7402385	D10-o-Xylene	2021/06/11	87	70 - 130	82	70 - 130	99	%		
7402385	D4-1,2-Dichloroethane	2021/06/11	101	70 - 130	99	70 - 130	101	%		
7402436	4-Bromofluorobenzene	2021/06/13	105	70 - 130	107	70 - 130	100	%		
7402436	D4-1,2-Dichloroethane	2021/06/13	101	70 - 130	100	70 - 130	103	%		
7402436	D8-Toluene	2021/06/13	101	70 - 130	102	70 - 130	95	%		
7402448	4-Bromofluorobenzene	2021/06/14	93	70 - 130	103	70 - 130	80	%		
7402448	D4-1,2-Dichloroethane	2021/06/14	110	70 - 130	98	70 - 130	110	%		
7402448	D8-Toluene	2021/06/14	104	70 - 130	109	70 - 130	92	%		
7402234	F2 (C10-C16 Hydrocarbons)	2021/06/11	95	60 - 130	97	60 - 130	<100	ug/L	NC	30
7402234	F3 (C16-C34 Hydrocarbons)	2021/06/11	95	60 - 130	98	60 - 130	<200	ug/L	NC	30
7402234	F4 (C34-C50 Hydrocarbons)	2021/06/11	100	60 - 130	102	60 - 130	<200	ug/L	NC	30
7402385	Benzene	2021/06/11	88	50 - 140	86	50 - 140	<0.20	ug/L	NC	30
7402385	Ethylbenzene	2021/06/11	94	50 - 140	94	50 - 140	<0.20	ug/L	NC	30
7402385	F1 (C6-C10) - BTEX	2021/06/11					<25	ug/L	NC	30
7402385	F1 (C6-C10)	2021/06/11	90	60 - 140	90	60 - 140	<25	ug/L	NC	30
7402385	o-Xylene	2021/06/11	92	50 - 140	91	50 - 140	<0.20	ug/L	NC	30
7402385	p+m-Xylene	2021/06/11	91	50 - 140	91	50 - 140	<0.40	ug/L	NC	30
7402385	Toluene	2021/06/11	86	50 - 140	85	50 - 140	<0.20	ug/L	NC	30
7402385	Total Xylenes	2021/06/11					<0.40	ug/L	NC	30
7402436	1,1,1,2-Tetrachloroethane	2021/06/13	97	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
7402436	1,1,1-Trichloroethane	2021/06/13	101	70 - 130	101	70 - 130	<0.20	ug/L	NC	30
7402436	1,1,2,2-Tetrachloroethane	2021/06/13	100	70 - 130	100	70 - 130	<0.40	ug/L	NC	30
7402436	1,1,2-Trichloroethane	2021/06/13	101	70 - 130	102	70 - 130	<0.40	ug/L	NC	30
7402436	1,1-Dichloroethane	2021/06/13	91	70 - 130	91	70 - 130	<0.20	ug/L	NC	30
7402436	1,1-Dichloroethylene	2021/06/13	95	70 - 130	97	70 - 130	<0.20	ug/L	NC	30
7402436	1,2-Dichlorobenzene	2021/06/13	100	70 - 130	97	70 - 130	<0.40	ug/L	NC	30
7402436	1,2-Dichloroethane	2021/06/13	97	70 - 130	97	70 - 130	<0.49	ug/L	NC	30

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

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7402436	1,2-Dichloropropane	2021/06/13	95	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
7402436	1,3-Dichlorobenzene	2021/06/13	98	70 - 130	95	70 - 130	<0.40	ug/L	NC	30
7402436	1,4-Dichlorobenzene	2021/06/13	115	70 - 130	112	70 - 130	<0.40	ug/L	NC	30
7402436	Acetone (2-Propanone)	2021/06/13	105	60 - 140	104	60 - 140	<10	ug/L	NC	30
7402436	Benzene	2021/06/13	92	70 - 130	92	70 - 130	<0.20	ug/L	NC	30
7402436	Bromodichloromethane	2021/06/13	102	70 - 130	102	70 - 130	<0.50	ug/L	NC	30
7402436	Bromoform	2021/06/13	102	70 - 130	102	70 - 130	<1.0	ug/L	NC	30
7402436	Bromomethane	2021/06/13	94	60 - 140	92	60 - 140	<0.50	ug/L	NC	30
7402436	Carbon Tetrachloride	2021/06/13	97	70 - 130	97	70 - 130	<0.19	ug/L	NC	30
7402436	Chlorobenzene	2021/06/13	99	70 - 130	99	70 - 130	<0.20	ug/L	NC	30
7402436	Chloroform	2021/06/13	96	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
7402436	cis-1,2-Dichloroethylene	2021/06/13	100	70 - 130	100	70 - 130	<0.50	ug/L	NC	30
7402436	cis-1,3-Dichloropropene	2021/06/13	101	70 - 130	99	70 - 130	<0.30	ug/L	NC	30
7402436	Dibromochloromethane	2021/06/13	96	70 - 130	96	70 - 130	<0.50	ug/L	NC	30
7402436	Dichlorodifluoromethane (FREON 12)	2021/06/13	89	60 - 140	88	60 - 140	<1.0	ug/L	NC	30
7402436	Ethylbenzene	2021/06/13	94	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
7402436	Ethylene Dibromide	2021/06/13	97	70 - 130	97	70 - 130	<0.19	ug/L	NC	30
7402436	Hexane	2021/06/13	95	70 - 130	96	70 - 130	<1.0	ug/L	NC	30
7402436	Methyl Ethyl Ketone (2-Butanone)	2021/06/13	107	60 - 140	108	60 - 140	<10	ug/L	NC	30
7402436	Methyl Isobutyl Ketone	2021/06/13	107	70 - 130	108	70 - 130	<5.0	ug/L	NC	30
7402436	Methyl t-butyl ether (MTBE)	2021/06/13	95	70 - 130	96	70 - 130	<0.50	ug/L	NC	30
7402436	Methylene Chloride(Dichloromethane)	2021/06/13	110	70 - 130	108	70 - 130	<2.0	ug/L	NC	30
7402436	o-Xylene	2021/06/13	93	70 - 130	95	70 - 130	<0.20	ug/L	NC	30
7402436	p+m-Xylene	2021/06/13	103	70 - 130	105	70 - 130	<0.20	ug/L	NC	30
7402436	Styrene	2021/06/13	108	70 - 130	111	70 - 130	<0.40	ug/L	NC	30
7402436	Tetrachloroethylene	2021/06/13	92	70 - 130	91	70 - 130	<0.20	ug/L	NC	30
7402436	Toluene	2021/06/13	95	70 - 130	94	70 - 130	<0.20	ug/L	NC	30
7402436	Total Xylenes	2021/06/13					<0.20	ug/L	NC	30
7402436	trans-1,2-Dichloroethylene	2021/06/13	99	70 - 130	98	70 - 130	<0.50	ug/L	NC	30
7402436	trans-1,3-Dichloropropene	2021/06/13	105	70 - 130	101	70 - 130	<0.40	ug/L	NC	30

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

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7402436	Trichloroethylene	2021/06/13	102	70 - 130	102	70 - 130	<0.20	ug/L	NC	30
7402436	Trichlorofluoromethane (FREON 11)	2021/06/13	95	70 - 130	95	70 - 130	<0.50	ug/L	NC	30
7402436	Vinyl Chloride	2021/06/13	93	70 - 130	91	70 - 130	<0.20	ug/L	NC	30
7402448	1,1,1,2-Tetrachloroethane	2021/06/15	78	70 - 130	101	70 - 130	<0.50	ug/L	NC	30
7402448	1,1,1-Trichloroethane	2021/06/15	82	70 - 130	104	70 - 130	<0.20	ug/L	NC	30
7402448	1,1,2,2-Tetrachloroethane	2021/06/15	83	70 - 130	99	70 - 130	<0.50	ug/L	NC	30
7402448	1,1,2-Trichloroethane	2021/06/15	86	70 - 130	101	70 - 130	<0.50	ug/L	NC	30
7402448	1,1-Dichloroethane	2021/06/15	77	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
7402448	1,1-Dichloroethylene	2021/06/15	76	70 - 130	97	70 - 130	<0.20	ug/L	NC	30
7402448	1,2-Dichlorobenzene	2021/06/15	76	70 - 130	95	70 - 130	<0.50	ug/L	NC	30
7402448	1,2-Dichloroethane	2021/06/15	83	70 - 130	94	70 - 130	<0.50	ug/L	NC	30
7402448	1,2-Dichloropropane	2021/06/15	83	70 - 130	101	70 - 130	<0.20	ug/L	NC	30
7402448	1,3-Dichlorobenzene	2021/06/15	76	70 - 130	96	70 - 130	<0.50	ug/L	NC	30
7402448	1,4-Dichlorobenzene	2021/06/15	90	70 - 130	116	70 - 130	<0.50	ug/L	NC	30
7402448	Acetone (2-Propanone)	2021/06/15	76	60 - 140	94	60 - 140	<10	ug/L	4.8	30
7402448	Benzene	2021/06/15	75	70 - 130	92	70 - 130	<0.20	ug/L	NC	30
7402448	Bromodichloromethane	2021/06/15	86	70 - 130	104	70 - 130	<0.50	ug/L	NC	30
7402448	Bromoform	2021/06/15	70 (1)	70 - 130	95	70 - 130	<1.0	ug/L	NC	30
7402448	Bromomethane	2021/06/15	66	60 - 140	84	60 - 140	<0.50	ug/L	NC	30
7402448	Carbon Tetrachloride	2021/06/15	78	70 - 130	99	70 - 130	<0.20	ug/L	NC	30
7402448	Chlorobenzene	2021/06/15	77	70 - 130	98	70 - 130	<0.20	ug/L	NC	30
7402448	Chloroform	2021/06/15	82	70 - 130	97	70 - 130	<0.20	ug/L	NC	30
7402448	cis-1,2-Dichloroethylene	2021/06/15	80	70 - 130	82	70 - 130	<0.50	ug/L	NC	30
7402448	cis-1,3-Dichloropropene	2021/06/15	78	70 - 130	95	70 - 130	<0.30	ug/L	NC	30
7402448	Dibromochloromethane	2021/06/15	88	70 - 130	89	70 - 130	<0.50	ug/L	NC	30
7402448	Dichlorodifluoromethane (FREON 12)	2021/06/15	50 (1)	60 - 140	60 (1)	60 - 140	<1.0	ug/L	NC	30
7402448	Ethylbenzene	2021/06/15	75	70 - 130	97	70 - 130	<0.20	ug/L	14	30
7402448	Ethylene Dibromide	2021/06/15	76	70 - 130	96	70 - 130	<0.20	ug/L	NC	30
7402448	F1 (C6-C10) - BTEX	2021/06/15					<25	ug/L	20	30
7402448	F1 (C6-C10)	2021/06/15	91	60 - 140	94	60 - 140	<25	ug/L	19	30

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7402448	Hexane	2021/06/15	79	70 - 130	108	70 - 130	<1.0	ug/L	NC	30
7402448	Methyl Ethyl Ketone (2-Butanone)	2021/06/15	86	60 - 140	92	60 - 140	<10	ug/L	NC	30
7402448	Methyl Isobutyl Ketone	2021/06/15	89	70 - 130	105	70 - 130	<5.0	ug/L	NC	30
7402448	Methyl t-butyl ether (MTBE)	2021/06/15	71	70 - 130	91	70 - 130	<0.50	ug/L	NC	30
7402448	Methylene Chloride(Dichloromethane)	2021/06/15	90	70 - 130	113	70 - 130	<2.0	ug/L	NC	30
7402448	o-Xylene	2021/06/15	76	70 - 130	101	70 - 130	<0.20	ug/L	14	30
7402448	p+m-Xylene	2021/06/15	76	70 - 130	102	70 - 130	<0.20	ug/L	11	30
7402448	Styrene	2021/06/15	82	70 - 130	112	70 - 130	<0.50	ug/L	NC	30
7402448	Tetrachloroethylene	2021/06/15	65 (1)	70 - 130	91	70 - 130	<0.20	ug/L	NC	30
7402448	Toluene	2021/06/15	76	70 - 130	101	70 - 130	<0.20	ug/L	20	30
7402448	Total Xylenes	2021/06/15					<0.20	ug/L	14	30
7402448	trans-1,2-Dichloroethylene	2021/06/15	73	70 - 130	97	70 - 130	<0.50	ug/L	NC	30
7402448	trans-1,3-Dichloropropene	2021/06/15	80	70 - 130	99	70 - 130	<0.40	ug/L	NC	30
7402448	Trichloroethylene	2021/06/15	75	70 - 130	99	70 - 130	<0.20	ug/L	NC	30
7402448	Trichlorofluoromethane (FREON 11)	2021/06/15	73	70 - 130	93	70 - 130	<0.50	ug/L	NC	30
7402448	Vinyl Chloride	2021/06/15	70	70 - 130	87	70 - 130	<0.20	ug/L	NC	30

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

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

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

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

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

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

(1) The recovery was below the lower control limit. This may represent a low bias in some results for this specific analyte.

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

BV Labs Job #: C1F6446
Report Date: 2021/06/15

exp Services Inc
Client Project #: BRM-21010864-B0
Site Location: 15450 WOODBINE AVENUE,GORMLEY
Your P.O. #: MRK- GEO
Sampler Initials: AS

VALIDATION SIGNATURE PAGE

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

Anastassia Hamanov, Scientific Specialist

Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

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

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

08-Jun-21 15:25
Patricia Legette
C1F6446

AF2 ENV-1164

Presence of Visible Particulate/Sediment

Maxxam Analytics
CAM FCD-01013/5

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

		Bottle Types																														
			Inorganics						Organics											Hydrocarbons							Volatiles				Other
	Sample ID	All	CrVI	CN	General	Hg	Metals (Diss.)	Organic 1 of 2	Organic 2 of 2	PCB 1 of 2	PCB 2 of 2	Pest/ Herb 1 of 2	Pest/ Herb 2 of 2	SVOC/ ABN 1 of 2	SVOC/ ABN 2 of 2	PAH 1 of 2	PAH 2 of 2	Dioxin /Furan	F1 Vial 1	F1 Vial 2	F1 Vial 3	F1 Vial 4	F2-F4 1 of 2	F2-F4 2 of 2	F4G	VOC Vial 1	VOC Vial 2	VOC Vial 3	VOC Vial 4	
1	MW-102	TS																												
2	MW-102D	TS																												
3	MW-103	TS																												
4	MW-106	TS																												
5																														
6																														
7																														
8																														
9																														
10																														

Comments:

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

Recorded By: (signature/print) FOR / ALEXANDRA FODOR

Maxxam
A Bureau Veritas Group Company

6740 Campobello Road, Mississauga, Ontario L5N 2L8
Phone: 905-817-5700 Fax: 905-817-5779 Toll Free: 800-563-6266
CAM FCD-01191/3

CHAIN OF CUSTODY RECORD 123108 Page 1 of 1

Invoice Information	Report Information (if differs from invoice)	Project Information (where applicable)	Turnaround Time (TAT) Required
Company Name: #17485 EXP Services Inc.	Company Name: EXP Services Inc.	Quotation #: B91718 Stream 3	☑ Regular TAT (5-7 days) Most analyses
Contact Name: Central Services	Contact Name: So Mung Chiang; Simon Lan;	P.O. #/ AFE#: MRB-GEO	PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS
Address: 220 Commerce Valley Dr. W, Suite 500 Markham, ON L3T 0A8	Address: Aleksandar Saric	Project #: BRM-31010864-B0	Rush TAT (Surcharges will be applied) ☐ 1 Day ☐ 2 Days ☐ 3-4 Days
Phone: (905) 695-3217 Fax:	Phone: simon.lan@exp.com Fax: soming.chiang@exp.com	Site Location: 15450 Woodbine Avenue, Gormley, Ontario	
Email: AP@exp.com; karen.burke@exp.com	Email: aleksandar.saric@exp.com	Site #:	Date Required:
		Sampled By: AS	Rush Confirmation #:

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

Regulation 153

☐ Table 1 ☑ Res/Park ☐ Med/ Fine
☑ Table 2 ☐ Ind/Comm ☐ Coarse
☐ Table 3 ☐ Agri/ Other
☐ Table ____
FOR RSC (PLEASE CIRCLE) (Y) / N

Other Regulations

☐ CCME ☐ Sanitary Sewer Bylaw
☐ MISA ☐ Storm Sewer Bylaw
☐ PWQO Region ____
☐ Other (Specify) ____
☐ REG 558 (MIN. 3 DAY TAT REQUIRED)

Include Criteria on Certificate of Analysis: Y / N

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

	SAMPLE IDENTIFICATION	DATE SAMPLED (YYYY/MM/DD)	TIME SAMPLED (HH:MM)	MATRIX	# OF CONTAINERS SUBMITTED	FIELD FILTERED (CIRCLE) Metals / Hg / CrVI	BTEX/ PHC F1	PHCs F2 - F4	VOCs	REG 153 METALS & INORGANICS	REG 153 ICPMS METALS	REG 153 METALS (Hg, Cr VI, ICPMS Metals, HWS - B)	HOLD- DO NOT ANALYZE
1	MW-102	2021/06/08	9:23am	GW	4		✓	✓	✓				
2	MW-102D		9:23am		4		✓	✓	✓				
3	MW-103		10:35am		4		✓	✓					
4	MW-106		10:05am		4		✓	✓					
5	Trip Blank Lot # 3699				2				✓				
6													
7													
8													
9													
10													

LABORATORY USE ONLY

CUSTODY SEAL Y / N		COOLER TEMPERATURES
Present	Intact	
4	4	5/5/5

COOLING MEDIA PRESENT: (Y) / N

COMMENTS

RELINQUISHED BY: (Signature/Print)	DATE: (YYYY/MM/DD)	TIME: (HH:MM)	RECEIVED BY: (Signature/Print)	DATE: (YYYY/MM/DD)	TIME: (HH:MM)
Aleksandar Saric Aleksandar Saric	2021/06/08	11:30a	Joseph Joseph Mreud	2021/06/08	15:25

08-Jun-21 15:25
Patricia Legette
C1F6446
AF2 ENV-1164

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Maxxam's standard Terms and Conditions. Signing of this Chain of Custody document is acknowled available for viewing at www.maxxam.ca/terms. Sample container, preservation, hold time and packages information can be viewed at http://maxxam.ca/wp-content/uploads/Ontario-COC.pdf.

COC-1004 (03/17)

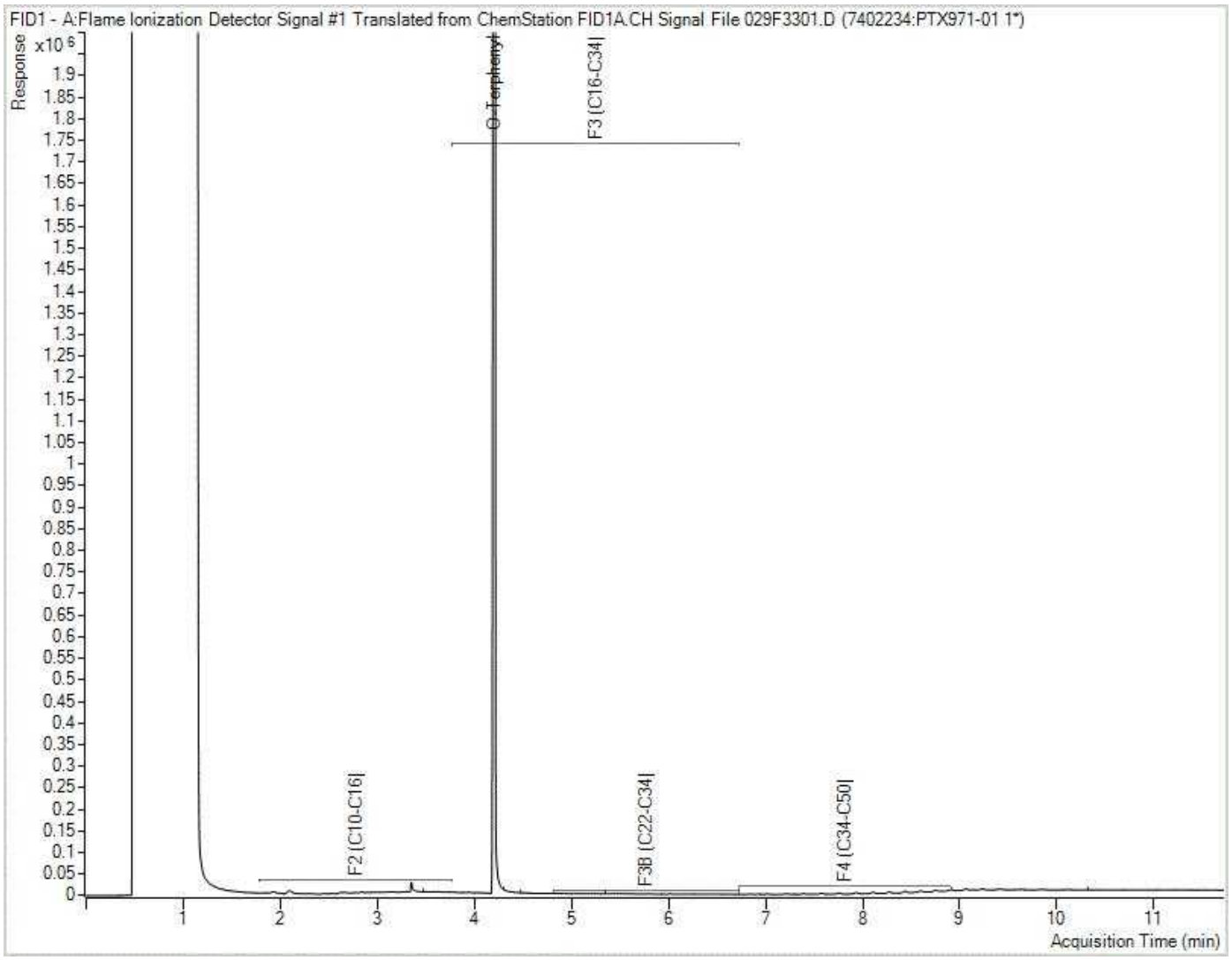
BVH396W0

White: Maxxam ~ Yellow: Client

BV Labs Job #: C1F6446
Report Date: 2021/06/15
BV Labs Sample: PTX971

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GORMLEY
Client ID: MW-102

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

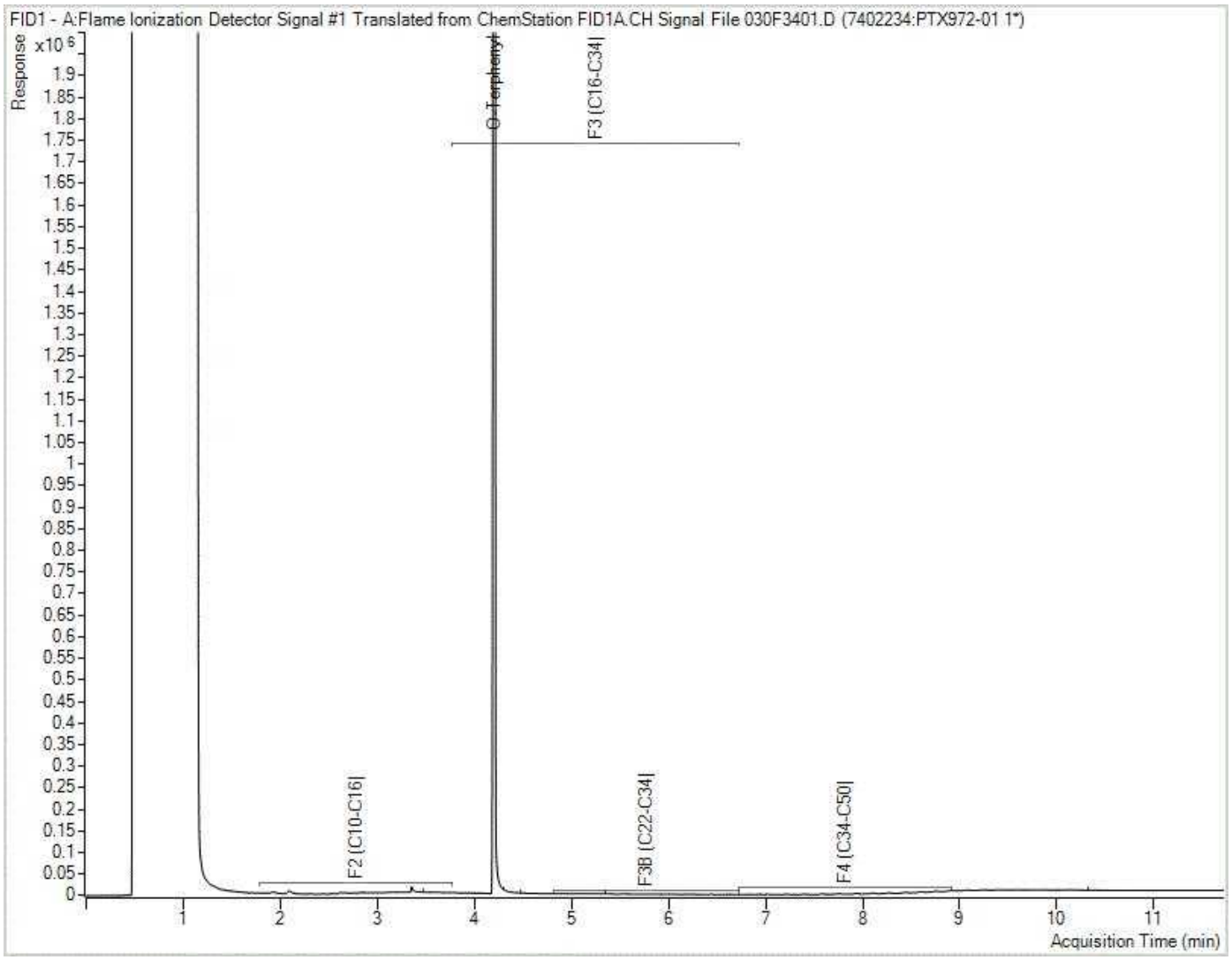


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1F6446
Report Date: 2021/06/15
BV Labs Sample: PTX972

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GORMLEY
Client ID: MW-102D

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

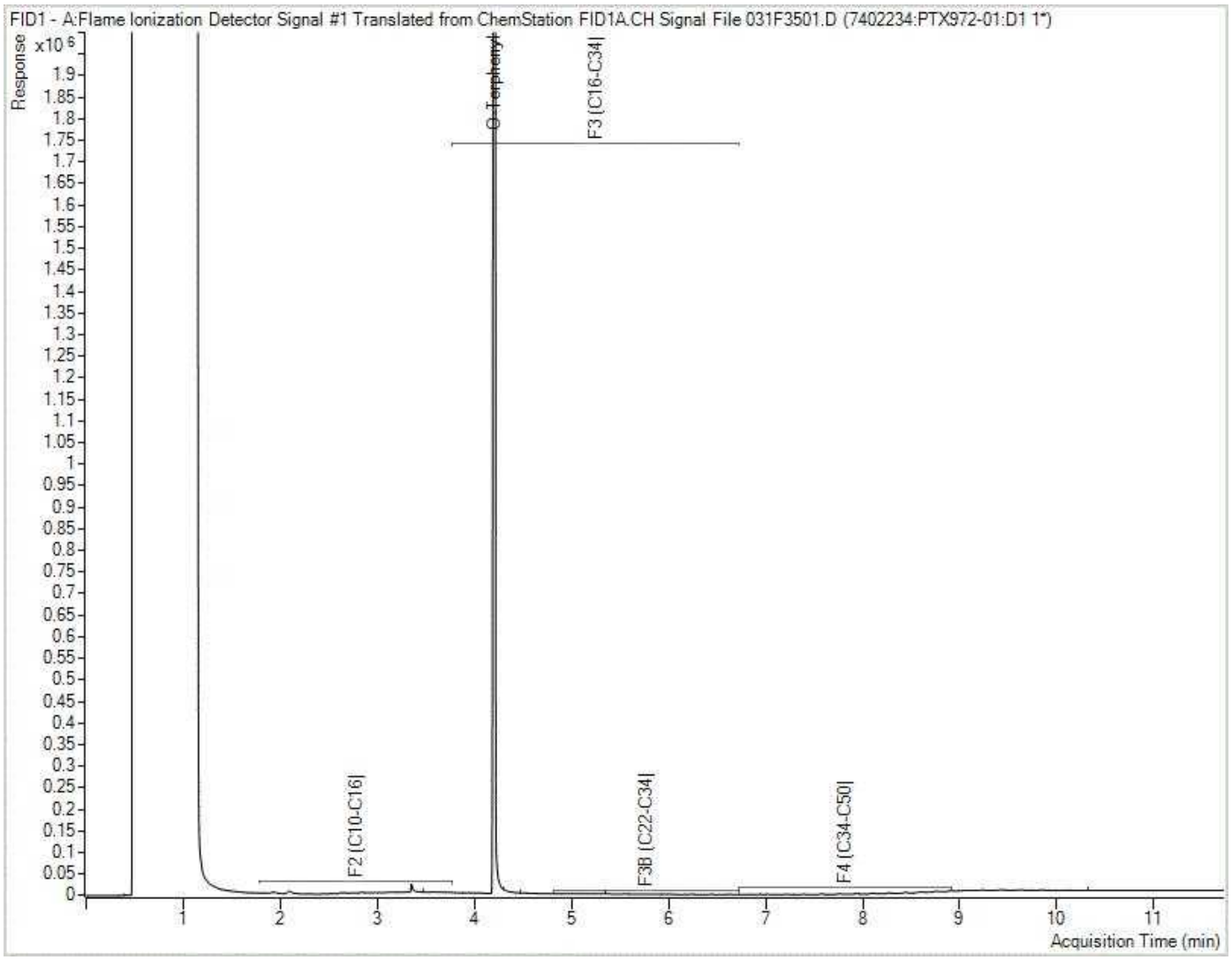


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1F6446
Report Date: 2021/06/15
BV Labs Sample: PTX972 Lab-Dup

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GORMLEY
Client ID: MW-102D

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

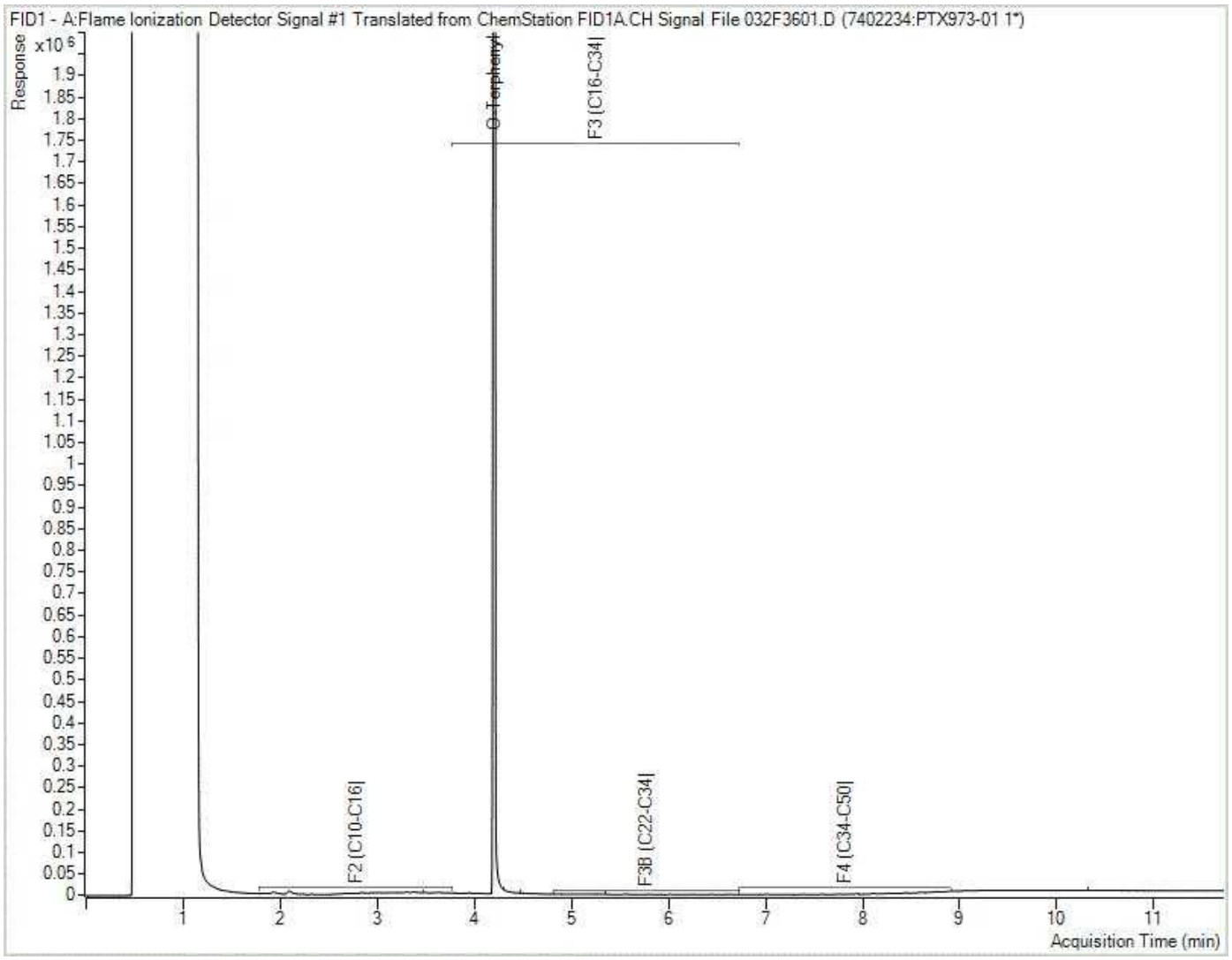


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1F6446
Report Date: 2021/06/15
BV Labs Sample: PTX973

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GORMLEY
Client ID: MW-103

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

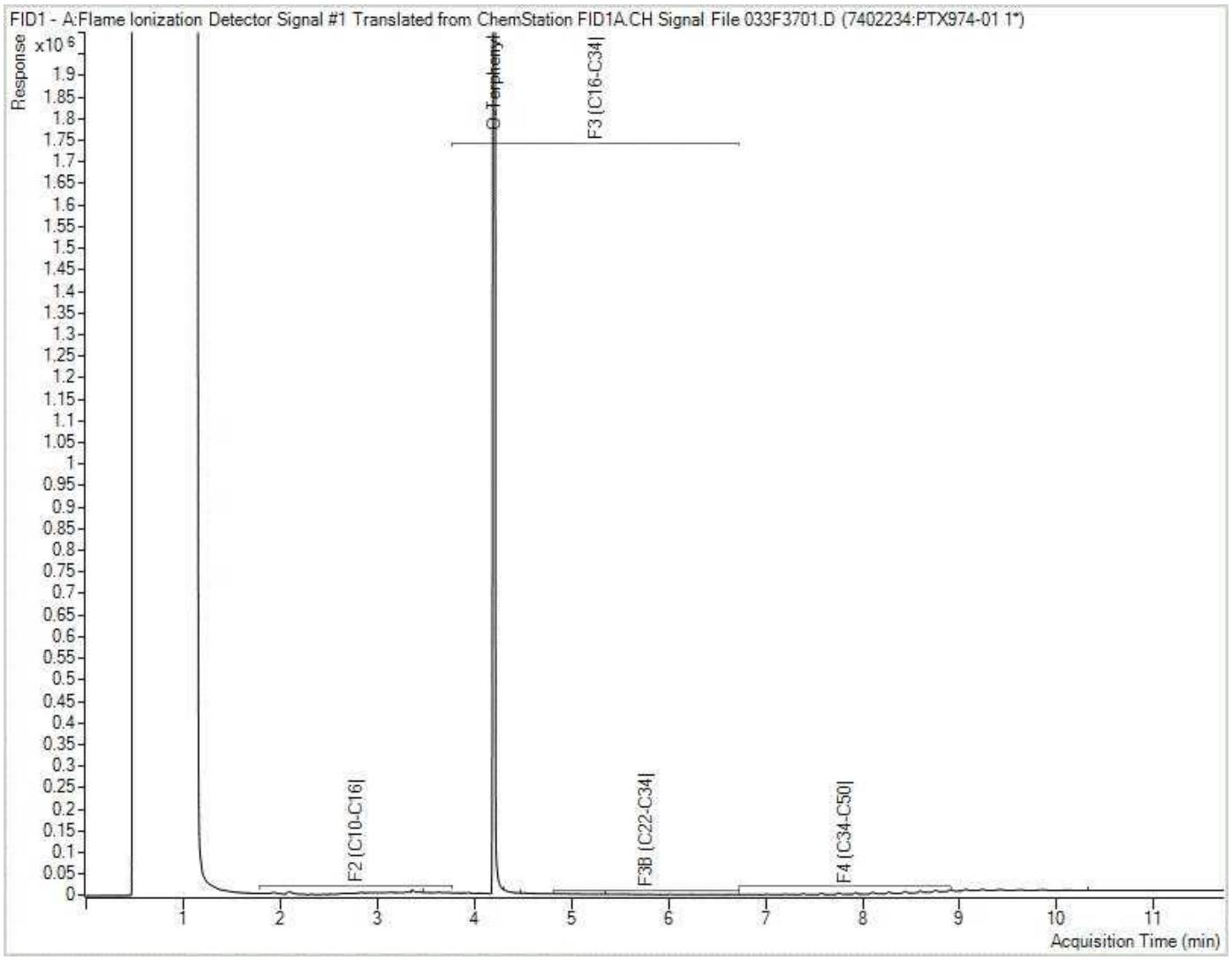


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

BV Labs Job #: C1F6446
Report Date: 2021/06/15
BV Labs Sample: PTX974

exp Services Inc
Client Project #: BRM-21010864-B0
Project name: 15450 WOODBINE AVENUE,GORMLEY
Client ID: MW-106

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Appendix E – Grain Size Analysis Results

exp Services Inc.
1595 Clark Boulevard, Brampton
Ontario, Canada, L6T 4V1
Telephone: (905) 793-9800
Fax: (905) 793-0641

Grain Size Analysis & Hydrometer Test Report

ST08

Sample Test No.: 370684-1 **Report No.:** 1 **Date Reported:** 15-Jun-21

Project No.: brm-21010864-a0 c100
Project Name: Preliminary Geo. Invesigation & Phase I ESA

Grain Size Proportion (%)

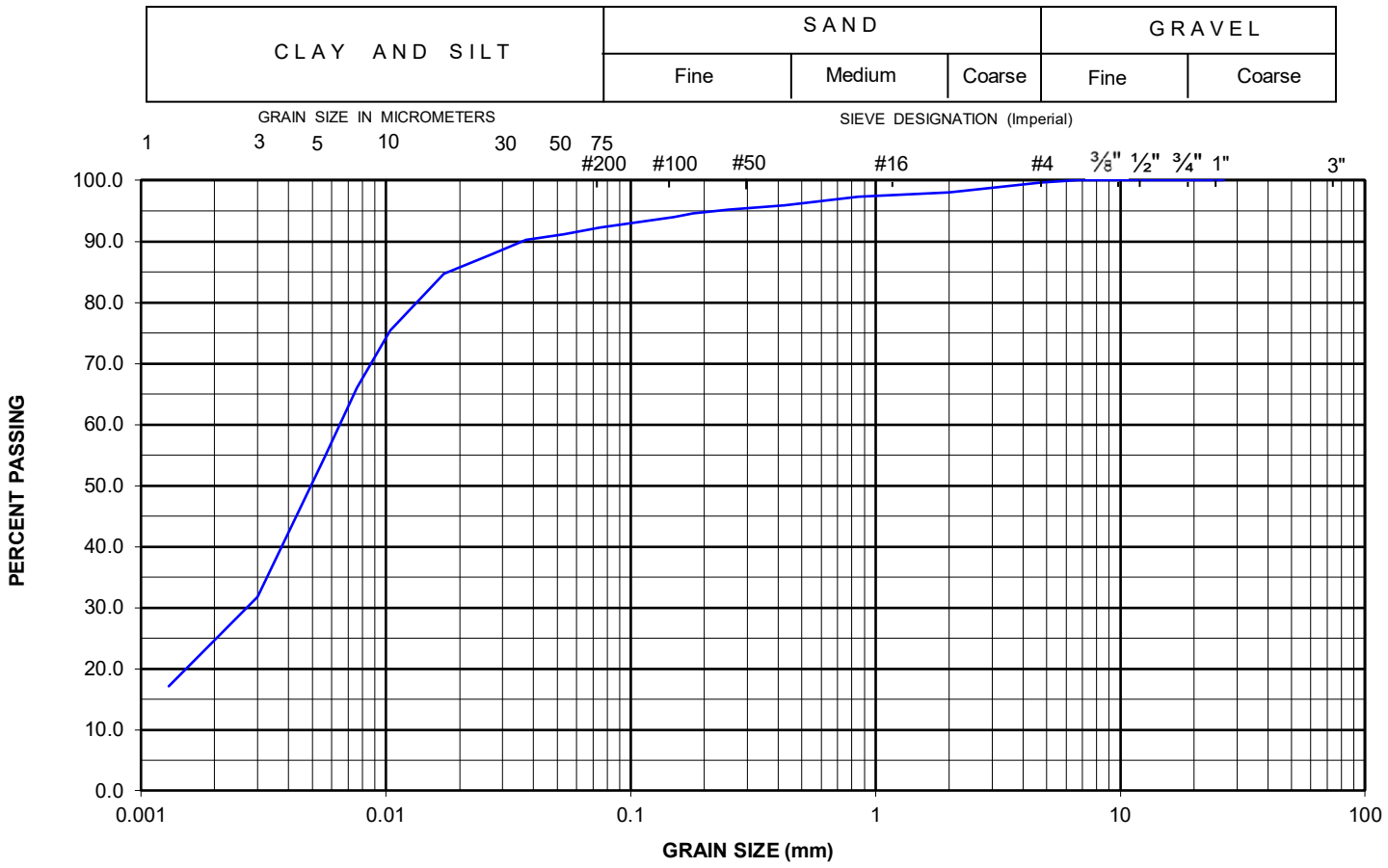
Gravel (> 4.75mm):	**0.3**
Sand (> 75µm, < 4.75mm):	**7.3**
Silt (> 2µm), < 75µm):	**69.2**
Clay (< 2µm):	**23.2**
Total:	**100.0**

Sample Information

Location:	BH 6
Sample Method:	SS
Sample No.:	
Depth:	1.5 - 2.0 m
Sample Description:	Clayey Silt, trace Sand and Gravel; Brown
Sampled By:	exp Markham
Sampling Date:	5/27/2021
Date Received:	6/9/2021
Client Sample ID:	
Comments:	

Grain Size (mm)	% Passing	Grain Size (mm)	% Passing
26.5	100.0	**0.0374**	90.3
22.4	100.0	**0.0268**	87.9
19	100.0	**0.0172**	84.7
16	100.0	**0.0104**	75.4
13.2	100.0	**0.0076**	66.0
12.5	100.0	**0.0056**	54.5
9.5	100.0	**0.0030**	31.8
6.7	100.0	**0.0013**	17.1
4.75	99.7		
2	98.1		
0.85	97.3		
0.425	96.0		
0.25	95.2		
0.18	94.6		
0.15	94.1		
0.075	92.3		
0.053	91.2		

UNIFIED SOIL CLASSIFICATION SYSTEM



Project Manager: Clement Chow **Approved By:** *Original Signed By* **Date Approved:** 15-Jun-21

Willie Rodych, Lab Supervisor

exp Services Inc.
1595 Clark Boulevard, Brampton
Ontario, Canada, L6T 4V1
Telephone: (905) 793-9800
Fax: (905) 793-0641

Grain Size Analysis & Hydrometer Test Report

ST08

Sample Test No.: 370685-1 **Report No.:** 2 **Date Reported:** 15-Jun-21

Project No.: brm-21010864-a0 c100
Project Name: Preliminary Geo. Invesigation & Phase I ESA

Grain Size Proportion (%)

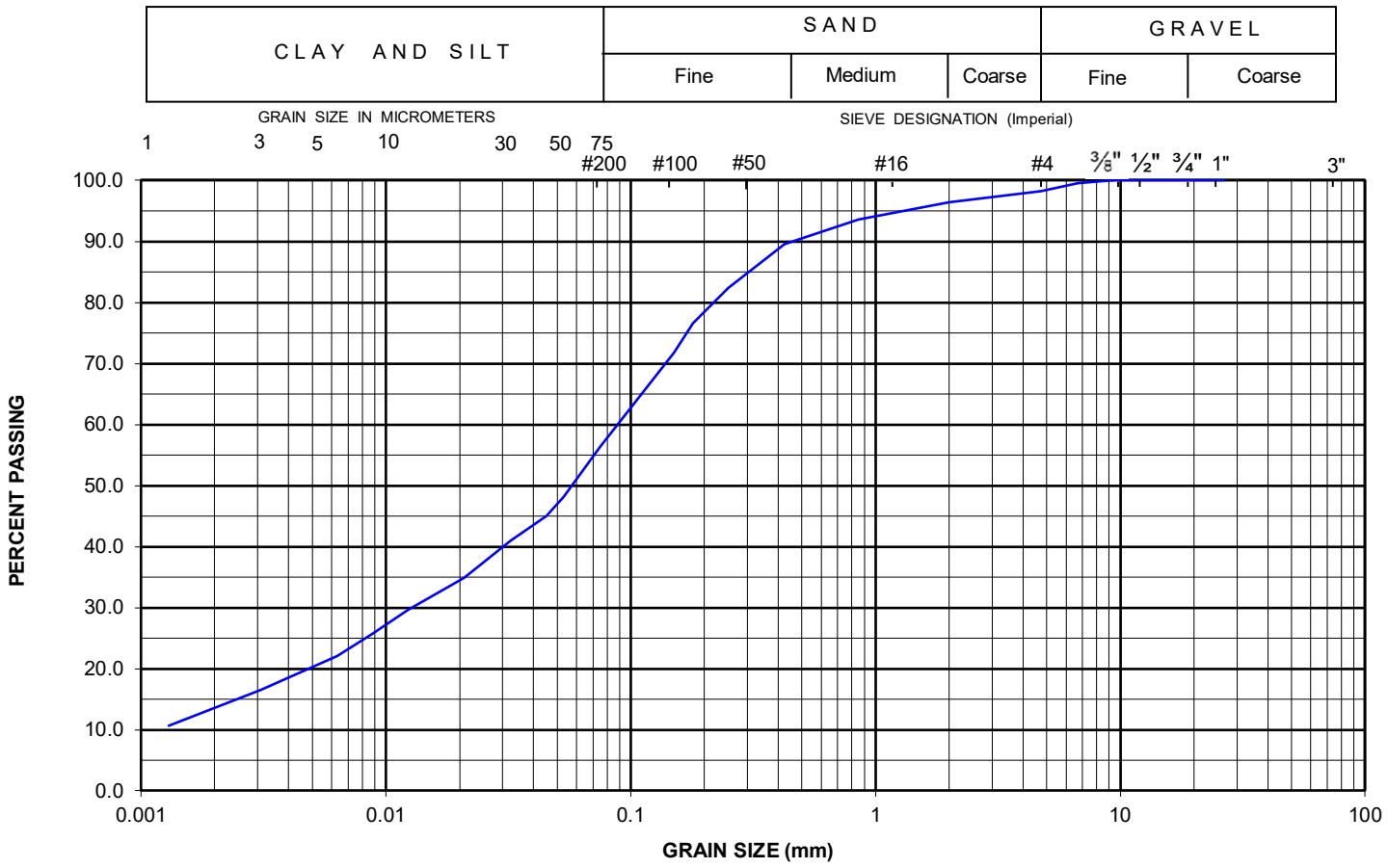
Gravel (> 4.75mm):	**1.8**
Sand (> 75µm, < 4.75mm):	**41.9**
Silt (> 2µm), < 75µm):	**43.3**
Clay (< 2µm):	**13.0**
Total:	**100.0**

Sample Information

Location: BH 11
Sample Method: SS
Sample No.:
Depth: 1.5 - 2.0 m
Sample Description: Silt and Sand, some Clay; trace Gravel; Brown
Sampled By: exp Markham
Sampling Date: 5/27/2021
Date Received: 6/9/2021
Client Sample ID:
Comments:

Grain Size (mm)	% Passing	Grain Size (mm)	% Passing
26.5	100.0	**0.0451**	45.0
22.4	100.0	**0.0323**	41.0
19	100.0	**0.0209**	34.9
16	100.0	**0.0123**	29.7
13.2	100.0	**0.0088**	25.7
12.5	100.0	**0.0063**	22.1
9.5	100.0	**0.0031**	16.5
6.7	99.5	**0.0013**	10.7
4.75	98.2		
2	96.4		
0.85	93.6		
0.425	89.6		
0.25	82.4		
0.18	76.7		
0.15	71.9		
0.075	56.3		
0.053	48.2		

UNIFIED SOIL CLASSIFICATION SYSTEM



Project Manager: Clement Chow **Approved By:** *Original Signed By* **Date Approved:** 15-Jun-21
Willie Rodych, Lab Supervisor

exp Services Inc.
1595 Clark Boulevard, Brampton
Ontario, Canada, L6T 4V1
Telephone: (905) 793-9800
Fax: (905) 793-0641

Grain Size Analysis Test Report

ST06-Soil

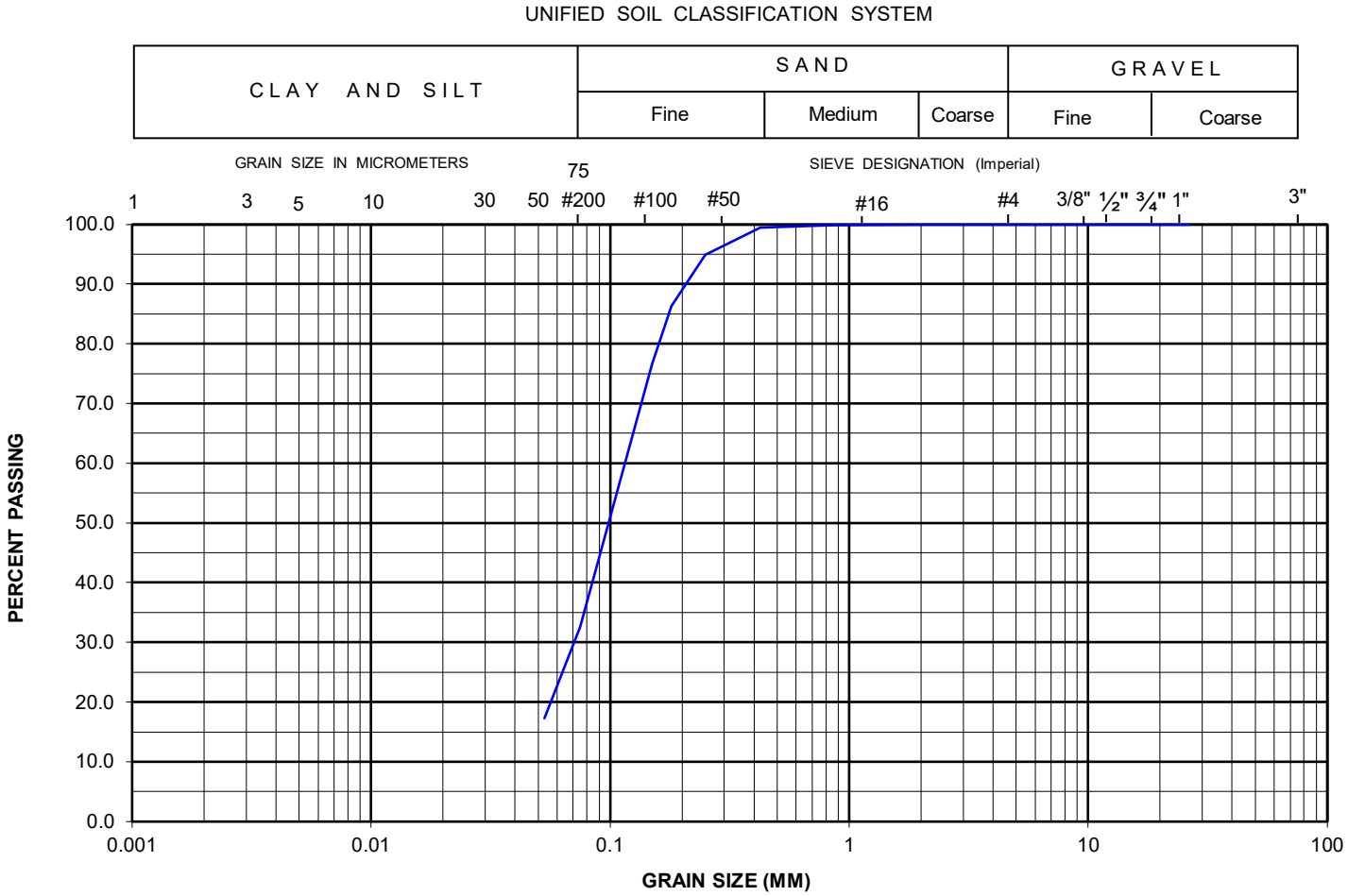
Sample Test No.: 370686-1 **Report No.:** 1 **Date Reported:** 14-Jun-2021

Project No.: brm-21010864-a0 c100
Project Name: Preliminary Geo. Invesigation & Phase I ESA

Sample Information
Borehole No.: BH 12
Sample Method: SS
Sample No.:
Depth: 0.75 - 1.2 m
Sample Description:
Sampled By: exp Markham
Sampling Date: 27-May-2021
Date Received: 9-Jun-2021
Client Sample ID:
Comments:

Sieve Size (mm)	% Passing Sample
26.5	100.0
22.4	100.0
19.0	100.0
16.0	100.0
13.2	100.0
12.7	100.0
9.5	100.0
6.7	100.0
4.75	100.0
2.00	100.0
0.850	99.8
0.425	99.5
0.250	94.9
0.180	86.3
0.150	76.6
0.075	32.5
0.053	17.4

Notes: *Out of Specificatior



Project Manager: Clement Chow **Approved By:** *Original Signed By* Willie Rodych **Date Approved:** 14-Jun-2021