

June 17, 2022

Joey Theberge McCormick Park Developments Incorporated 1600 Laperriere Avenue, Suite 205 Ottawa, Ontario K1Z 1B7 Via Email: JoeyTheberge@thebergehomes.com

Re: OTT-22009213-B0 Post Remediation Groundwater Sampling

177 Armstrong Street and 268 Carruthers Avenue, Ottawa, Ontario

1. Introduction

EXP Services Inc. (EXP) was retained by McCormick Park Developments Incorporated to conduct a Post Remediation Groundwater Sampling for the property at 177 Armstrong Street and 268 Carruthers Avenue in Ottawa, Ontario, herein referred to as "the Phase Two property".

It is understood that the work is required in support of a Record of Site Condition (RSC) under Ontario Regulation (O. Reg.) 153/04.

2. Background

The Phase Two property is located near the northwest corner of Armstrong Street and Carruthers Avenue in Ottawa. The property at 177 Armstrong Street was previously improved with a residential building and a commercial building. The property at 268 Carruthers Avenue also had a residential building. The property has footprint area of 0.12 hectares. As of April 12, 2022, the three buildings had been removed and the soil was mostly excavated to bedrock surface at a depth of 1.5 m below surface grade (bsg). The previously installed monitoring wells were also removed during this excavation work. The site location is shown on Figure 1 in Appendix A.

Since there will be a change in land use from residential & commercial to residential, a Ministry of the Environment, Conservation and Parks (MECP) Record of Site Condition will be required. The findings of a Phase One Environmental Site Assessment (ESA) were presented in a report entitled *Phase One Environmental Site* Assessment, 177 Armstrong Street and 268 Carruthers Avenue, Ottawa, *Ontario* dated September 3, 2019. The Phase One ESA identified the following Areas of Potential Environmental Concern (APECs):

Table 2.1: Areas of Potential Environmental Concern

Area of Potential Environmental Concern (APEC)	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On- Site or Off- Site)	Contaminants of Potential Concern	Media Potentially Impacted (Groundwater, Soil and/or Sediment)
#1. AST Fuel storage tanks in basement 177 Armstrong Street	Southwest part of the RSC property	#28 – Gasoline and Associated Products Storage in Fixed Tanks	On-site	Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), Petroleum Hydrocarbons (PHC)	Soil and groundwater

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#2. AST Fuel storage tanks in basement 179 Armstrong Street	Southeast part of the RSC property	#28 – Gasoline and Associated Products Storage in Fixed Tanks	On-site	BTEX, PHC	Soil and groundwater
#3. Former UST shown north of the commercial building in the 1956 FIP	Southeast part of the RSC property	#28 – Gasoline and Associated Products Storage in Fixed Tanks	On-site	BTEX, PHC	Soil and groundwater
#4. AST Fuel storage tanks in basement 268 Carruthers Avenue	Northeast part of the RSC property	#28 – Gasoline and Associated Products Storage in Fixed Tanks	On-site	BTEX, PHC	Soil and groundwater
#5. Fill material on the RSC property	Entire RSC property	#34 – Importation of Fill Material of Unknown Quality	On-Site	PHC, Volatile Organic Compounds (VOC), Polycyclic Aromatic Hydrocarbons (PAH), Metals	Soil
#6. Former automotive repair garage at 180 Armstrong Street	South part of the RSC property	#10 – Commercial Autobody Shop	Off-site	PHC, VOC, Metals	Soil and groundwater
#7. Active automotive repair garage at 1 Grant Street	South part of the RSC property	#10 – Commercial Autobody Shop	Off-site	PHC, VOC, Metals	Soil and groundwater

Based on the Phase One ESA findings, EXP recommended conducting a Phase Two ESA. The Phase Two ESA was conducted in September 2019 and consisted of advancing boreholes and completing them as groundwater monitoring wells. Soil and groundwater samples were collected and submitted for laboratory analysis of one or more of the following parameters: BTEX and PHC, VOC, PAH, and metals

During the Phase Two ESA, a sand and gravel fill material was observed under the asphalt parking surface and granular fill to a maximum depth of 1.2 m bsg. A layer of medium sand was observed below the sand and gravel fill in BH-4 at a depth of 0.8 m to 1.2 m bsg. Limestone bedrock was encountered from 0.4 m to 1.2 m bsg. Groundwater was encountered at a depth of 4.18 m bsg in BH-1 to 5.66 m bsg in MW-7. Based on the results of the investigation, there were mulitple soil samples collected from the fill material above the limestone bedrock that had one or more MECP Table 7 site condition standards (SCS) exceedances of PHC F3, PHC F4, PAHs, antimony, cadmium, and lead. The estimated volume of impacted soil was estimated at 1,350 m³. All of the groundwater samples collected had concentrations of VOC and PHC that were less than the 2011 MECP Table 7 SCS.



On April 12 and 13, 2022, 195.4 tonnes of impacted soil was removed from the Phase Two property and disposed of at the GLF licensed landfill in Moose Creek, Ontario. The site plan is presented as Figure 2 in Appendix A. The landfill waybills are presented in Appendix E.

Since all of the soil has been removed to the bedrock surface at the site, confirmatory soil samples cannot be collected from the excavation walls and floor. Therefore, monitoring wells must be installed to verify that the groundwater has not been impacted due to the former presence of this impacted soil. It is assumed that the contaminants of concern in groundwater are: BTEX, PHC, metals, and PAHs. The following report presents the results of the groundwater sampling program.

3. Objective

The objective of the Post Remediation Groundwater Sampling program was to show that the groundwater beneath the site has not been impacted due the presence of impacted soil that has been removed.

4. Scope of Investigation

The Post Remediation Groundwater Sampling scope of work consisted of the following activities:

- Refresh underground service clearances;
- Advance four (4) boreholes at the site to approximately 6 m bsg or 1.5 m below the groundwater table, whichever came first;
- No soil samples were collected as part of this investigation;
- The instrumentation of monitoring wells in each of the boreholes;
- Collect groundwater samples from the new monitoring wells for chemical analysis of BTEX, PHC, metals, and PAH;
- Complete an elevation survey of the new monitoring wells;
- Review the analytical data and comparing to provincial site condition standards; and,
- Prepare a report summarizing the findings.

5. Applicable Site Conditions Standards

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 *Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act*, MOECC, July 2011. These criteria 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 153/09 (O. Reg. 153/09).

For assessment purposes, EXP selected the MECP (2011) Table 7: Full Depth Generic Site Condition Standards (SCS) in a non-potable groundwater condition for a residential/parkland/institutional property use and coarse textured soil. The selection of this category was based on the following factors:



- The predominant soil type on the Phase Two property was considered to be coarse textured (refer to the results of the Grain Size Analysis as provided in the Certificates of Analysis presented in Appendix E);
- There was no intention to carry out a stratified restoration at the Phase Two property;
- More than two-thirds of the Phase Two property had an overburden thickness less than 2 m;
- The Phase Two property is not located within 30 m of a surface water body or an area of natural significance;
- The soil at the Phase Two property has a pH value between 5 and 9 for surficial soils;
- The property is not within an area of natural significance; does not include, nor is it adjacent to an area of natural significance, nor is it part of such an area; and, it does not include land that is within 30 m of an area of natural significance, nor is it part of such an area;
- The Phase Two property is serviced by the City of Ottawa's water distribution system and the surrounding properties are municipally serviced; and,
- The Phase Two property is planned for residential use.

6. Methodology

Services Clearances

Prior to the commencement of drilling, the locations of underground public utilities including telephone, fibre optic, natural gas, and electrical lines were marked at the site by locating companies. A private utility locating contractor was also retained to clear the individual borehole locations.

The site investigative activities consisted of drilling boreholes to install monitoring wells for hydrogeological property characterization and the collection of groundwater samples for chemical analysis.

Monitoring Well Installation

On May 11, 2022, four (4) boreholes (MW22-01 to MW22-04) were advanced at the site by Strata Soil Drilling, a licensed well contractor, under the full-time supervision of EXP staff. A track mount Geomachine drill rig was used to air hammer the bedrock to the required depth. No petroleum-based greases or solvents were used during drilling activities.

Monitoring wells were installed in all of the boreholes to facilitate groundwater sampling. The monitoring wells consisted of a 51-millimetre diameter Schedule 40 PVC screen that was 3.0 m long and a Schedule 40 PVC riser pipe. The annular space around the monitoring wells was backfilled with sand to a height of approximately 0.3 m above the top of the screen. A bentonite seal was added from the top of the sand pack to approximately 0.3 m below bedrock surface (wells were installed within the excavation which was on the limestone bedrock). Details of the installations are shown on the borehole logs provided in Appendix B.

The locations of the monitoring wells are shown on Figure 2 in Appendix A.

Groundwater Monitoring and Sampling

Groundwater sampling activities were conducted on May 30, 2022. The monitoring activities consisted of measuring the depth to groundwater in each of the monitoring wells. The water level meter probe was decontaminated



between monitoring well locations with a spray bottle of water and alconox solution, dried with a paper towel, and then rinsed with potable water.

Groundwater samples were collected from three (3) of the monitoring wells. On May 30, 2022, groundwater samples were collected from MW22-3 and MW22-4 (as well as a blind duplicate MW22-5). On June 8, 2022 groundwater samples were collected from MW22-2; MW22-1 had insufficient groundwater to allow for a viable sample to be collected.

All groundwater samples from the monitoring wells were obtained using a low-flow sampling technique with a YSI multiparameter water quality meter. This technique involves pumping groundwater at low rates, typically less than 500 mL per minute, to minimize drawdown. Prior to collecting the groundwater samples, the monitoring wells were purged with the low-flow sampling equipment and field parameters (turbidity, dissolved oxygen, conductivity, temperature, pH, and oxidation reduction potential) were monitored until stable readings were achieved. These parameters are considered to be stable when three consecutive readings meet the following conditions:

- Turbidity: within 10% for values greater than 5 nephelometric turbidity units (NTU), or three values less than 5 NTU;
- Dissolved oxygen: within 10% for values greater than 0.5 mg/L, or three values less than 0.5 mg/L;
- Conductivity: within 3%;
- Temperature: ± 1°C;
- pH: ± 0.1 unit; and,
- Oxidation reduction potential: ±10 millivolts.

When stabilization occurs, equilibrium between groundwater within a monitor and the surrounding formation water is attained. As such, samples were collected when stabilization was observed. The groundwater samples were transported to Caduceon Laboratories of Ottawa under Chain of Custody protocol on the same day they were sampled.

Field Observations

Groundwater elevations and water levels were measured at the site on May 30, 2022 and June 6, 2022. The groundwater elevations are shown on Figure 2A and 2B in Appendix A. A summary of the elevation survey and groundwater levels for each well are shown on Table 6.1.

Based on the water levels measured on May 30 and June 6, 2022, the depth to groundwater ranged from 1.79 m below surface grade in MW22-2 to 7.39 m below surface grade in MW22-3. The groundwater flow direction was to the north.

Table 6.1 Groundwater Elevations

Manitorina	TOC Elevation	May 30), 2022	June 6, 2022					
Monitoring Well ID	(metres)	Water Level (mbtoc)	Water Level (MASL)	Water Level (mbtoc)	Water Level (MASL)				
MW22-1	65.00	7.63	57.37	7.57	57.43				
MW22-2	61.99	NA	NA	2.62	59.37				
MW22-3	63.46	8.17	55.29	8.46	55.00				
MW22-4	63.91	4.31	59.60	4.50	59.41				



Note: Elevations were referenced using a benchmark (storm catch basin on Armstrong Street across from Site) with a geodetic elevation of 64.14 m relative to mean sea level.

mbtoc – metres below top of well casing

MASL – metres above sea level

NM – not measured

7. Analytical Results

The groundwater analytical results for the new monitoring wells as well as the previous monitoring wells are presented in Tables 1 to 4 in Appendix B. The groundwater analytical results are also shown in plan view on Figures 3 to 5 and on cross-sections on Figures 6 to 9 in Appendix A.

There were no exceedances of the MECP Table 7 SCS for any of the parameters analysed in the groundwater samples.

8. Conclusions

Based on the Post Remediation Groundwater Sampling results, the following conclusions are provided:

- Groundwater was encountered at a depth of 1.79 m in MW22-2 below surface grade to 7.39 m below surface grade on June 6, 2022. Groundwater flow direction calculations show overburden groundwater to be flowing towards the north;
- Based on the results obtained, the VOC, BTEX, metals and PHC concentrations in the three (3) groundwater samples were found to meet the MECP Table 7 site condition standards; and,
- No groundwater impact was observed at the Phase Two property.

9. Recommendations

Since all of the soil has been removed from the site, post remediation groundwater was completed at the Phase Two property. The pre-remediation groundwater concentrations of the analyzed parameters in the groundwater samples met the MECP Table 7 SCS, and the post remediation groundwater sampling showed that the groundwater concentrations met the MECP Table 7 SCS, therefore no further environmental work is required at the Phase Two property.





10. Limitation of Liability, Scope of Report, and Third Party Reliance

This report ("Report") is based on site conditions known or inferred by the investigation undertaken as of the date of the Report. Should changes occur which potentially impact the condition of the site the recommendations of EXP may require re-evaluation. Where special concerns exist, or McCormick Park Developments Incorporated ("the Client") has special considerations or requirements, these should be disclosed to EXP to allow for additional or special investigations to be undertaken not otherwise within the scope of investigation conducted for the purpose of the Report.

Where applicable, recommended field services are the minimum necessary to ascertain that construction is being carried out in general conformity with building code guidelines, generally accepted practices and EXP's recommendations. Any reduction in the level of services recommended will result in EXP providing qualified opinions regarding the adequacy of the work. EXP can assist design professionals or contractors retained by the Client to review applicable plans, drawings, and specifications as they relate to the Report or to conduct field reviews during construction.

The evaluation and conclusions contained in the Report are based on conditions in evidence at the time of site inspections and information provided to EXP by the Client and others. The Report has been prepared for the specific site, development, building, design or building assessment objectives and purpose as communicated by the Client. EXP has relied in good faith upon such representations, information and instructions and accepts no responsibility for any deficiency, misstatement or inaccuracy contained in the Report as a result of any misstatements, omissions, misrepresentation or fraudulent acts of persons providing information. Unless specifically stated otherwise, the applicability and reliability of the findings, recommendations, suggestions or opinions expressed in the Report are only valid to the extent that there has been no material alteration to or variation from any of the information provided to EXP. If new information about the environmental conditions at the Site is found, the information should be provided to EXP so that it can be reviewed and revisions to the conclusions and/or recommendations can be made, if warranted.

The Report has been prepared in a manner consistent with the degree of care and skill exercised by engineering consultants currently practicing under similar circumstances and locale. No other warranty, expressed or implied, is made. Unless specifically stated otherwise, the Report does not contain environmental consulting advice.

All documents, records, data and files, whether electronic or otherwise, generated as part of this assignment form part of the Report. This material includes, but is not limited to, the terms of reference given to EXP by the Client, communications between EXP and the Client, other reports, proposals or documents prepared by EXP for the Client in connection with the site described in the Report. In order to properly understand the suggestions, recommendations and opinions expressed in the Report, reference must be made to the Report in its entirety. EXP is not responsible for use by any party of portions of the Report.

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Yours truly,

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EXP Services Inc.

Carl Hentschel, P.Eng. PMP Environmental Engineer Earth & Environment

EXP Services Inc.

MM/CH:kmr

Attachments: Appendix A – Figures

Appendix B – Borehole Logs

Appendix C – Analytical Summary Tables

Appendix D – Laboratory Certificates of Analysis

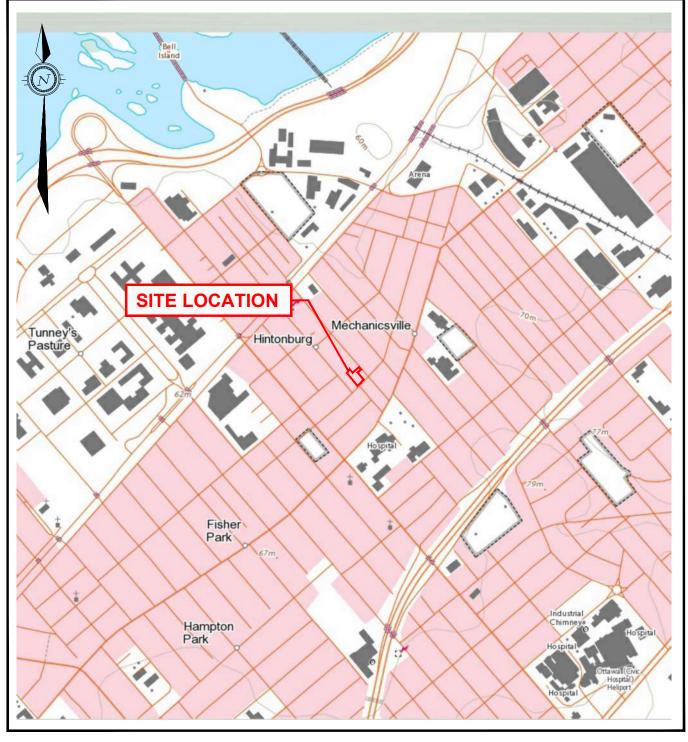
Appendix E - Landfill Waybills

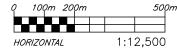




Appendix A – Figures

A.S.







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JULY 2022

MC CORMICK PARK DEVELOPMENTS INC.

M.M. C.H.

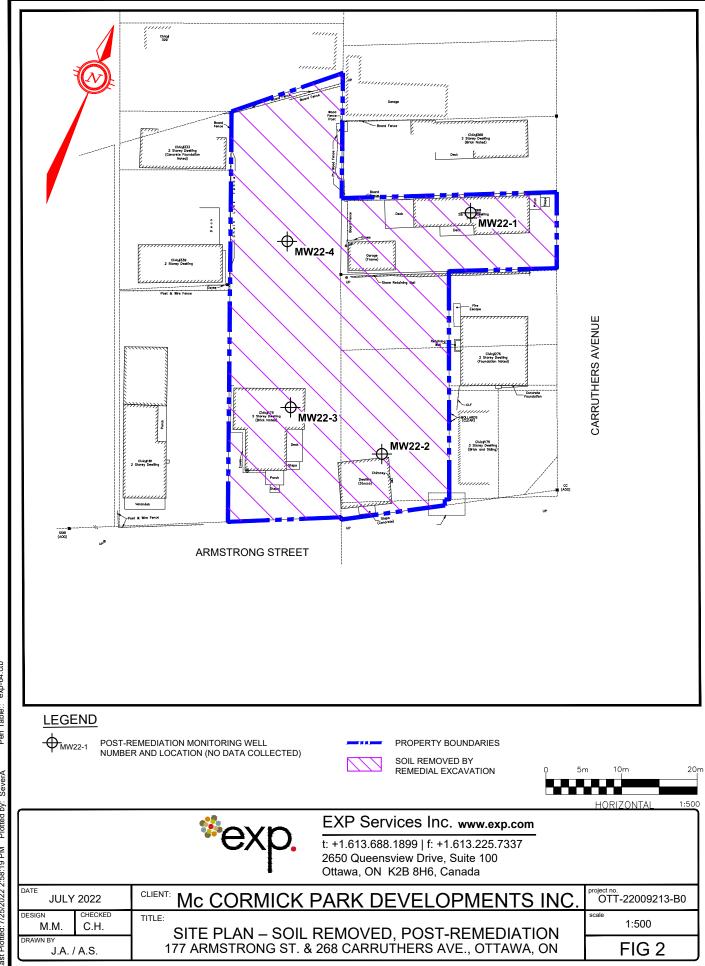
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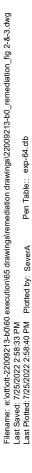
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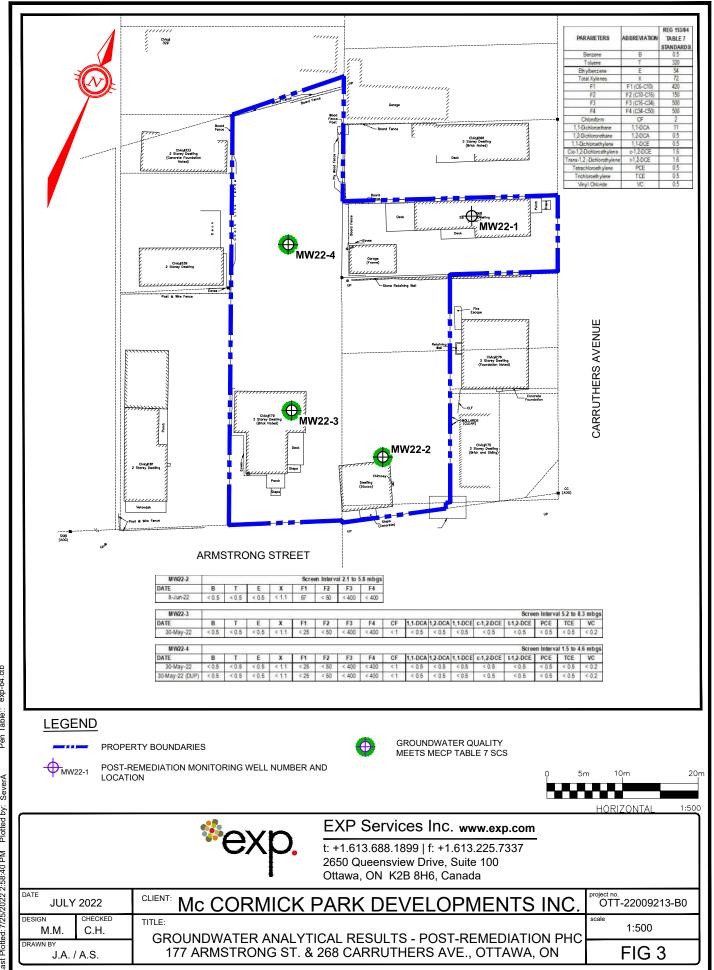
oroject no. OTT-22009213-B0

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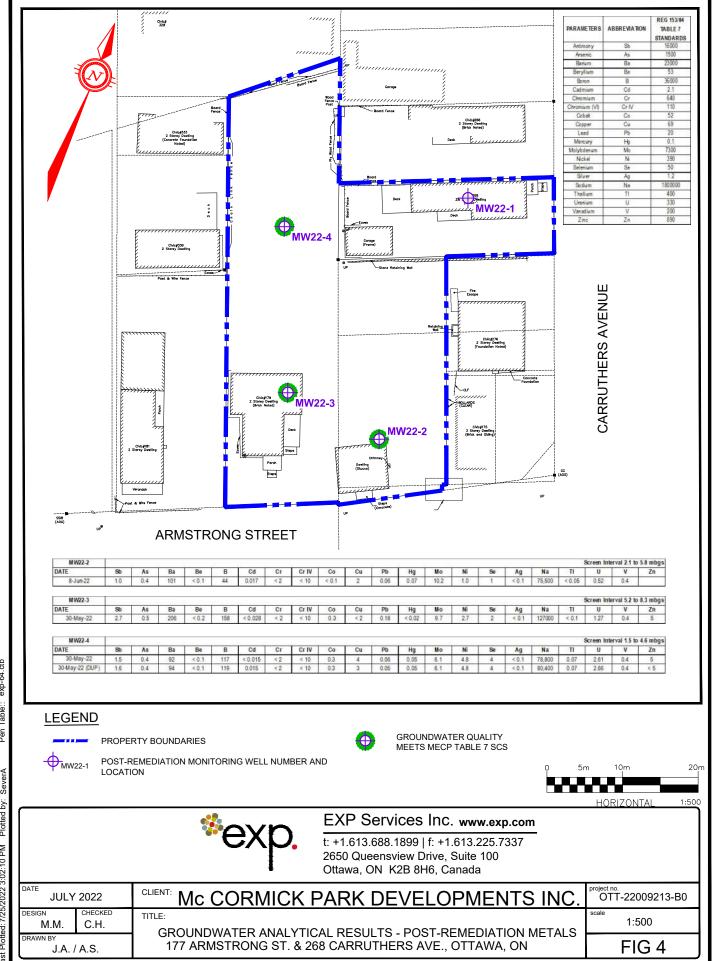




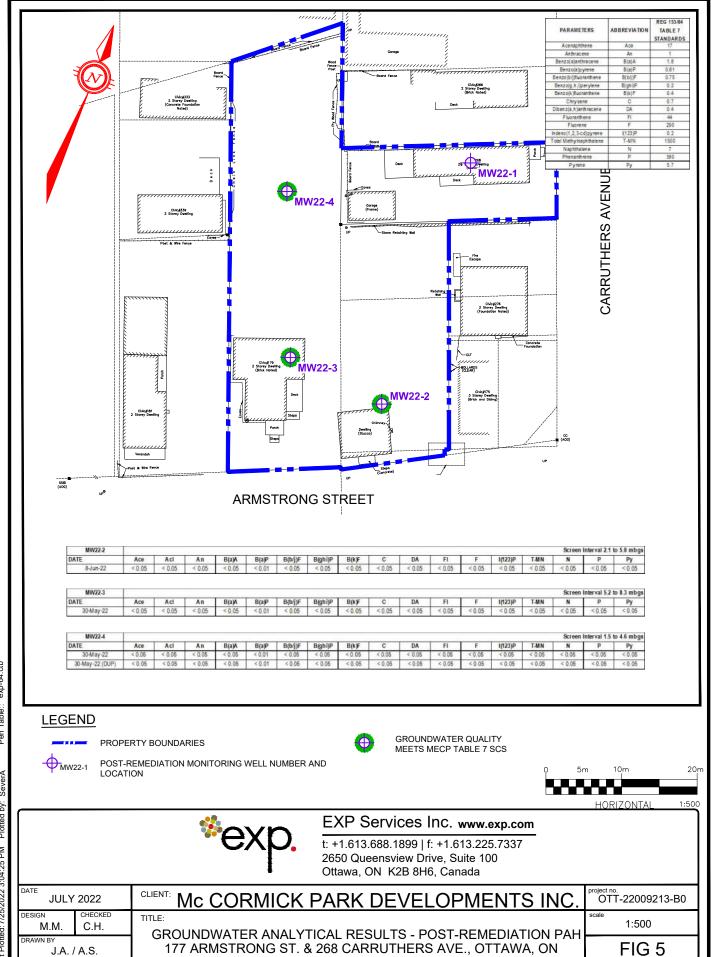




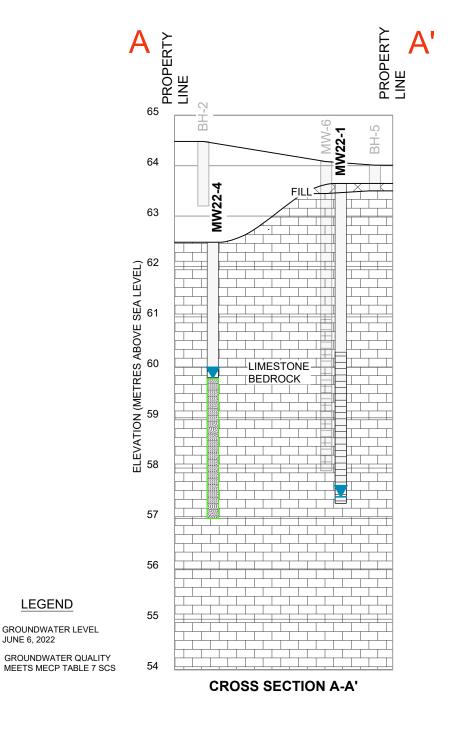


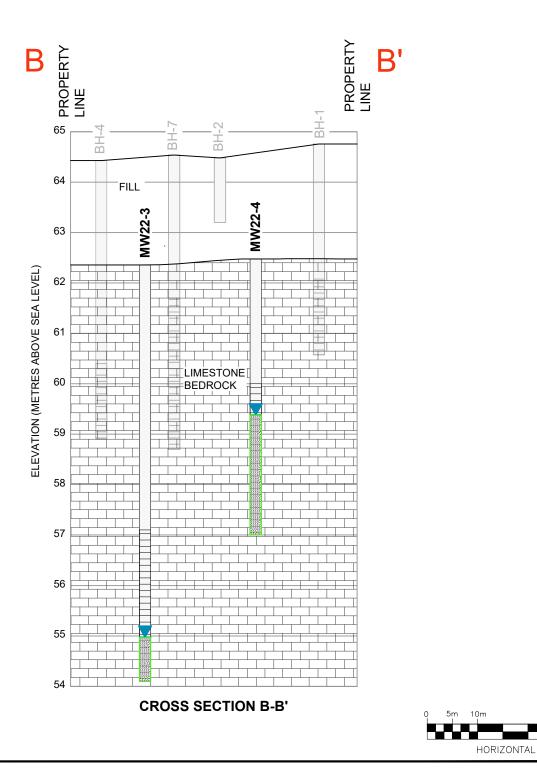












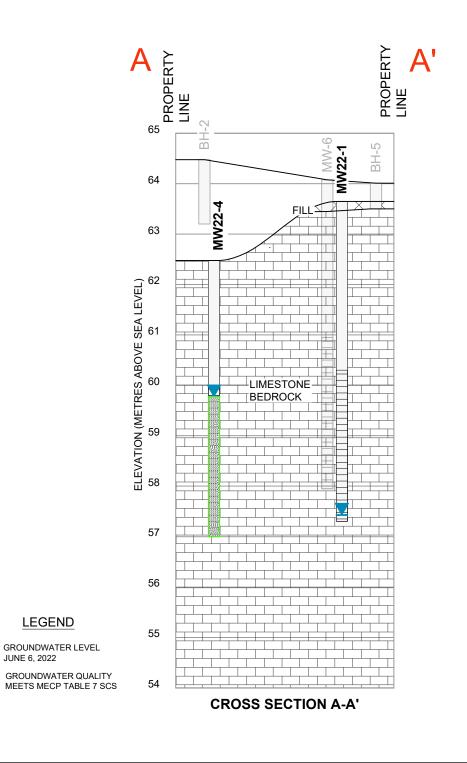
PARAMETERS	ABBREVIATION	STANDARDS
Benzene	В	0.5
Toluene	T	320
Ethylbenzene	E	54
Total Xylenes	X	72
F1	F1 (C6-C10)	420
F2	F2 (C10-C16)	150
F3	F3 (C16-C34)	500
F4	F4 (C34-C50)	500
Chloroform	CF	2
1,1-Dichloroethane	1,1-DCA	11
1,2-Dichlororethane	1,2-DCA	0.5
1,1-Dichloroethylene	1,1-DCE	0.5
Cis-1,2-Dichloroethylene	c-1,2-DCE	1,6
Trans-1, 2, -Dichlorothylene	1-1,2-DCE	1.6
Tetrachioroethylene	PCE	0.5
Trichloroethylene	TCE	0.5

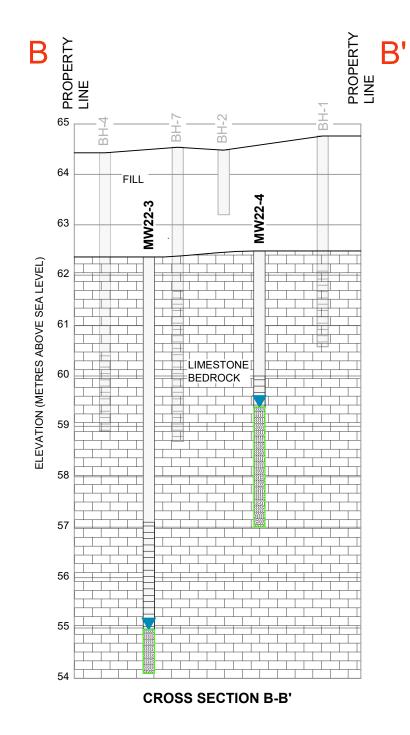
MW22-2				10-	Scre	en Interv	al 2.1 to !	5.8 mbgs								
DATE	В	T	E	X	F1	F2	F3	F4	1							
8-Jun-22	< 0.5	< 0.5	< 0.5	< 1.1	67	< 50	< 400	< 400								
MW22-3	1	y		57 - 74				100 0		5-55	v:		Scree	en Interv	al 5.2 to 8	3.3 mb
DATE		_	-			F2	F3	F4		I no.		 c-1,2-DCE	nor	200	TCE	VC

SU-May-22	< 0.5	< 0.5	< 0.5	51.1	< 25	< 50	< 400	< 400	51	< 0.5	< 0.5	< 0.5	40.5	50.5	< 0.5	< 0.5	< 0.2
MW22-4	5 .	77 76		77 - 30			00	200		976	VI			Scree	en Interv	al 1.5 to	4.6 mbg
DATE	В	T	E	X	F1	F2	F3	F4	CF	1,1-DCA	1,2-DCA	1,1-DCE	c-1,2-DCE	t-1,2-DCE	PCE	TCE	VC
30-May-22	< 0.5	< 0.5	< 0.5	< 1.1	< 25	< 50	< 400	< 400	<1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.2
20 May 22 (THD)	20E	<0.5	C0.5	211	7.0E	2 En	< 400	< 800 T	11	10E	×05	20E	20E	20E	ZOE	C 0.5	<0.0











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CLIENT: Mc CORMICK PARK DEVELOPMENTS INC. JULY 2022 177 ARMSTRONG ST. & 268 CARRUTHERS AVE., OTTAWA, ON C.H.

OTT-22009213-B0 HORZ. 1:750 / VERT. 1:75

HORIZONTAL

GROUNDWATER ANALYTICAL RESULTS - POST-REMEDIATION METALS

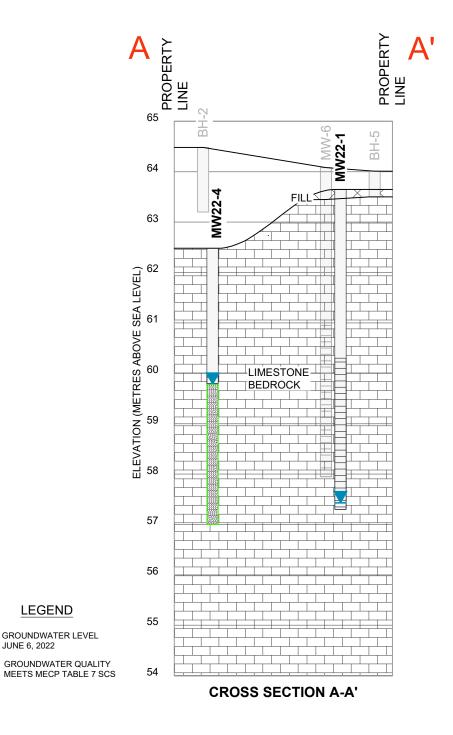
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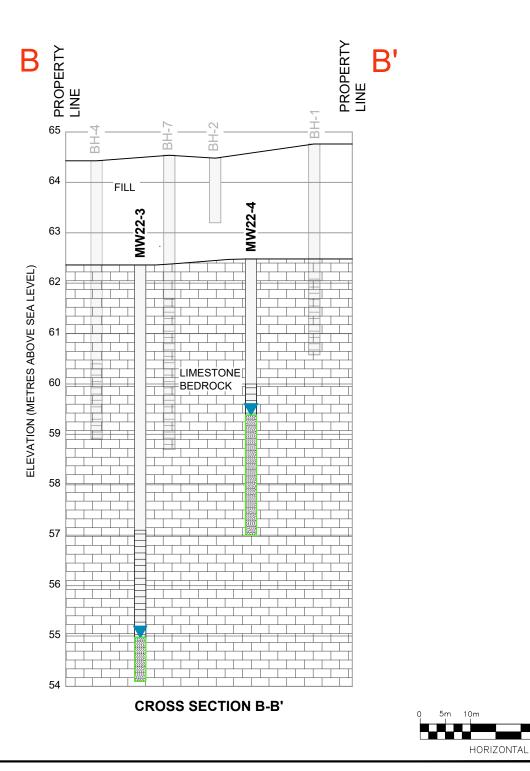
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CROSS-SECTIONS A-A' & B-B':

FIG 7







PARAMETERS	ABBREVIATION	REG 153/04 TABLE 7 STANDARDS
Acenaphthene	Ace	17
Anthracene	An	1
Benzo(a)anthracene	B(a)A	1.8
Benzo(a)pyrene	B(a)P	0.81
Benzo(b/j)fluoranthene	B(b/j)F	0.75
Benzo(g,h,i)perylene	B(ghi)P	0.2
Berizo(k)fluoranthene	B(k)F	0.4
Chrysene	C	0.7
Dibenz(a, h) arthracene	DA	0.4
Fluoranthene	FI	44
Fluorene	F	290
Indeno(1,2,3-cd)pyrene	(123)P	0.2
Total Methylnaphthalene	T-MN	1500
Naphthalene	N	7
Phenanthrene	p	380

MW22-2															Screen	Interval 2.1	to 5.8 mbg
DATE	Ace	Act	An	B(a)A	B(a)P	B(b/j)F	B(ghi)P	B(k)F	С	DA	FI	F	I(123)P	T-MN	N	р	Py
8-Jun-22	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
MW22-3			4.2	4.2			00 20								Screen	Interval 5.2	to 8.3 mbg
DATE	Ace	AcI	An	B(a)A	B(a)P	B(b/j)F	B(ghi)P	B(k)F	С	DA	FI	F	I(123)P	T-MN	N	р	Py
30-May-22	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
MW22-4		45	20	20 17	65	200 00	200	00 00	00 89	00 00					Screen	Interval 1.5	to 4.6 mbg
DATE	Ace	Act	An	B(a)A	B(a)P	B(b/j)F	B(ghi)P	B(k)F	C	DA	FI	F	I(123)P	T-MN	N	р	Py
30-May-22	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
30-May-22 (DUP)	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05



EXP Services Inc.

McCormick Park Developments Incorporated Post Remediation Groundwater Sampling 177 Armstrong Street and 268 Carruthers Avenue, Ottawa, Ontario OTT-22009213-B0 June 17, 2022

Appendix B – Borehole Logs



Explanation of Terms Used on Borehole Records

SOIL DESCRIPTION

Terminology describing common soil genesis:

Topsoil: mixture of soil and humus capable of supporting good vegetative growth.

Peat: fibrous fragments of visible and invisible decayed organic matter.

Fill: where fill is designated on the borehole log it is defined as indicated by the sample recovered during the boring process. The reader is cautioned that fills are heterogeneous in nature and variable in density or degree of compaction. The borehole description may therefore not be applicable as a general description of site fill materials. All fills should be expected to contain obstruction such as wood, large concrete pieces or subsurface basements, floors, tanks, etc.; none of these may have been encountered in the boreholes. Since boreholes cannot accurately define the contents of the fill, test pits are recommended to provide supplementary information. Despite the use of test pits, the heterogeneous nature of fill will leave some ambiguity as to the exact composition of the fill. Most fills contain pockets, seams, or layers of organically contaminated soil. This organic material can result in the generation of methane gas and/or significant ongoing and future settlements. Fill at this site may have been monitored for the presence of methane gas and, if so, the results are given on the borehole logs. The monitoring process does not indicate the volume of gas that can be potentially generated nor does it pinpoint the source of the gas. These readings are to advise of the presence of gas only, and a detailed study is recommended for sites where any explosive gas/methane is detected. Some fill material may be contaminated by toxic/hazardous waste that renders it unacceptable for deposition in any but designated land fill sites; unless specifically stated the fill on this site has not been tested for contaminants that may be considered toxic or hazardous. This testing and a potential hazard study can be undertaken if requested. In most residential/commercial areas undergoing reconstruction, buried oil tanks are common and are generally not detected in a conventional geotechnical site investigation.

Till: the term till on the borehole logs indicates that the material originates from a geological process associated with glaciation. Because of this geological process the till must be considered heterogeneous in composition and as such may contain pockets and/or seams of material such as sand, gravel, silt or clay. Till often contains cobbles (60 to 200 mm) or boulders (over 200 mm). Contractors may therefore encounter cobbles and boulders during excavation, even if they are not indicated by the borings. It should be appreciated that normal sampling equipment cannot differentiate the size or type of any obstruction. Because of the horizontal and vertical variability of till, the sample description may be applicable to a very limited zone; caution is therefore essential when dealing with sensitive excavations or dewatering programs in till materials.

Terminology describing soil structure:

Desiccated: having visible signs of weathering by oxidization of clay minerals, shrinkage cracks, etc.

Stratified: alternating layers of varying material or color with the layers greater than 6 mm thick.

Laminated: alternating layers of varying material or color with the layers less than 6 mm thick.

Fissured: material breaks along plane of fracture.

Varved: composed of regular alternating layers of silt and clay.

Slickensided: fracture planes appear polished or glossy, sometimes striated.

Blocky: cohesive soil that can be broken down into small angular lumps which resist further

breakdown.



Lensed: inclusion of small pockets of different soil, such as small lenses of sand scattered

through a mass of clay; not thickness.

Seam: a thin, confined layer of soil having different particle size, texture, or color from

materials above and below.

Homogeneous: same color and appearance throughout.

Well Graded: having wide range in grain sized and substantial amounts of all predominantly on grain

size.

Uniformly Graded: predominantly on grain size.

All soil sample descriptions included in this report follow the ASTM D2487-11 Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System). The system divides soils into three major categories: (1) coarse grained, (2) fine-grained, and (3) highly organic. The soil is then subdivided based on either gradation or plasticity characteristics. The system provides a group symbol (e.g. SM) and group name (e.g. silty sand) for identification. The classification excludes particles larger than 76 mm. Please note that, with the exception of those samples where a grain size analysis has been made, all samples are classified visually in accordance with ASTM D2488-09a Standard Practice for Description and Identification of Soils (Visual-Manual Procedure). Visual classification is not sufficiently accurate to provide exact grain sizing or precise differentiation between size classification systems. Others may use different classification systems; one such system is the ISSMFE Soil Classification.

ISSMFE SOIL CLASSIFICATION

	SILT			SAND	_		GRAVEL	_	COBBLES	BOULDERS
FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE		
0.00	6 0.02	0.06	0.2	0.6	2.0	6.0	20	60	200	
0.00	0.02	0.00	0.2	0.0	I 2.0	I 0.0	1	I	1	
			FINE MEDIUM COARSE	FINE MEDIUM COARSE FINE	FINE MEDIUM COARSE FINE MEDIUM	FINE MEDIUM COARSE FINE MEDIUM COARSE	FINE MEDIUM COARSE FINE MEDIUM COARSE FINE	FINE MEDIUM COARSE FINE MEDIUM COARSE FINE MEDIUM	FINE MEDIUM COARSE FINE MEDIUM COARSE FINE MEDIUM COARSE	FINE MEDIUM COARSE FINE MEDIUM COARSE FINE MEDIUM COARSE

EQUIVALENT GRAIN DIAMETER IN MILLIMETRES

CLAY (PLASTIC) TO	FINE	MEDIUM	CRS.	FINE	COARSE
SILT (NONPLASTIC)		SAND		GF	RAVEL

UNIFIED SOIL CLASSIFICATION

Terminology describing materials outside the USCS, (e.g. particles larger than 76 mm, visible organic matter, construction debris) is based upon the proportion of these materials present and as described below in accordance with Note 16 in ASTM D2488-09a:

Table a: Percent or Proportion of Soil, Pp

	Criteria
Trace	Particles are present but estimated to be less than 5%
Few	5≤Pp≤10%
Little	15≤Pp≤25%
Some	30≤Pp≤45%
Mostly	50≤Pp≤100%

The standard terminology to describe cohesionless soils includes the compactness as determined by the Standard Penetration Test 'N' value:

Table b: Apparent Density of Cohesionless Soil

raisie sir ipparent Benenty er	331133131333333
	'N' Value (blows/0.3 m)
Very Loose	N<5
Loose	5≤N<10
Compact	10≤N<30
Dense	30≤N<50
Very Dense	50≤N



The standard terminology to describe cohesive soils includes consistency, which is based on undrained shear strength as measured by insitu vane tests, penetrometer tests, unconfined compression tests or similar field and laboratory analysis, Standard Penetration Test 'N' values can also be used to provide an approximate indication of the consistency and shear strength of fine grained, cohesive soils:

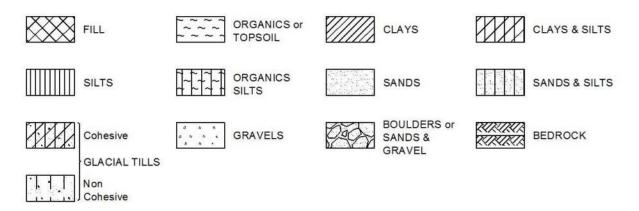
Table c: Consistency of Cohesive Soil

Consistency	Vane Shear Measurement (kPa)	'N' Value
Very Soft	<12.5	<2
Soft	12.5-25	2-4
Firm	25-50	4-8
Stiff	50-100	8-15
Very Stiff	100-200	15-30
Hard	>200	>30

Note: 'N' Value - The Standard Penetration Test records the number of blows of a 140 pound (64kg) hammer falling 30 inches (760mm), required to drive a 2 inch (50.8mm) O.D. split spoon sampler 1 foot (305mm). For split spoon samples where full penetration is not achieved, the number of blows is reported over the sampler penetration in meters (e.g. 50/0.15).

STRATA PLOT

Strata plots symbolize the soil or bedrock description. They are combinations of the following basic symbols:



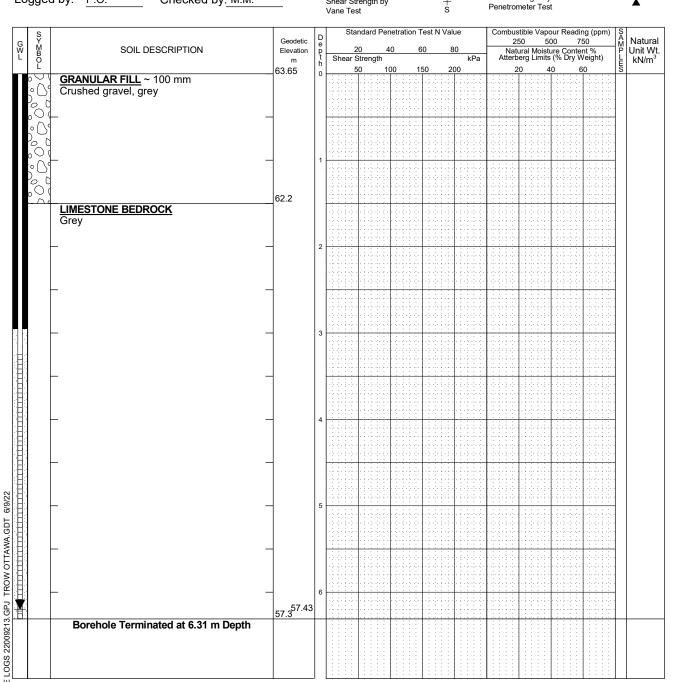
WATER LEVEL MEASUREMENT

 $ar{\Delta}$

Open Borehole or Test Pit Monitoring Well, Piezometer or Standpipe



)!!!!!! <u>!!!!!</u>		-x
Project No:	OTT-22009213-B0			
Project:	Post Remediation Groundwater Sampling Program	n	Figure No1_ 	
Location:	177 Armstrong Street and 268 Carruthers Avenue	, Ottawa, Ontario		_
Date Drilled:	'May 11, 2022	Split Spoon Sample	Combustible Vapour Reading	
Orill Type:	Geomachine Drill Rig	Auger Sample SPT (N) Value O	Natural Moisture Content Atterberg Limits	X ⊢—⊖
Datum:	Geodetic Elevation	Dynamic Cone Test Shelby Tube	Undrained Triaxial at % Strain at Failure	\oplus
odded pv.	P.O. Checked by: M.M.	Shoar Strongth by	Shear Strength by	



NOTES:

- Borehole data requires interpretation by EXP before use by others
- 2.A 37 mm diameter monitoring well was installed as shown.
- 3. Field work supervised by an EXP representative.
- 4. See Notes on Sample Descriptions
- 5. Log to be read with EXP Report OTT-22009213-B0

WATER LEVEL RECORDS					
Date	Water Level (m)	Hole Open To (m)			
25 days	6.2				

CORE DRILLING RECORD						
Run No.	Depth (m)	% Rec.	RQD %			
1	1.3 - 2.6	94	19			
2	2.6 - 4.1	100	58			

Project N	g of Bor								Figure No2_				_	<u>'</u> ^\	
Project:	Post Remediation Groundwat									_		1 of			•
Location	Date Drilled: 'May 11, 2022 Split Spoon Sample														
Date Drill						our Readi	ng		×						
Drill Type	e: Geomachine Drill Rig		-	Auger: SPT (N				□		Natural M Atterberg		Content	F		~
Datum:	Geodetic Elevation		-	Dynam Shelby		ne Te	st	_	I	Undraine % Strain					\oplus
Logged b	by: P.O. Checked by:	: M.M.		Shear Vane T	Streng	jth by		+		Shear St Penetror					•
G M B O L	SOIL DESCRIPTION	Geodetic Elevation m	D e p t h		20 r Strer	ngth		60	80 kPa	25 Natu Atterb	50 5 ural Moist erg Limit	ture Conte s (% Dry V	50 nt % Veight)	SAMPLES	Natural Unit Wt. kN/m³
<u> </u>	LIMESTONE BEDROCK	61.16	0		50		00 1	50 2	200		0 4	40 6	50		
	Grey														
		_													
							4-1-1-5	-3 -1 -1 -1							
			1												
¥		59.37	7												
			2												
							64.56	-3-4-2-3					-54-14		
			3												
		_													
		-	4												
		56.0	5												
	Borehole Terminated at 5.18 m D	Depth													
NOTES:			_ _		: 1 :	- : :	Lilii			1 : : : :			<u> </u>		
	data requires interpretation by EXP before	WATE	R L	EVEL Water			S Hole Op	en	Run	COI		LLING R % Re			QD %
use by Oll	1013	Date				1			1			,,,,,			//

- 2.A 37 mm diameter monitoring well was installed as shown.
- 3. Field work supervised by an EXP representative.
- 4. See Notes on Sample Descriptions

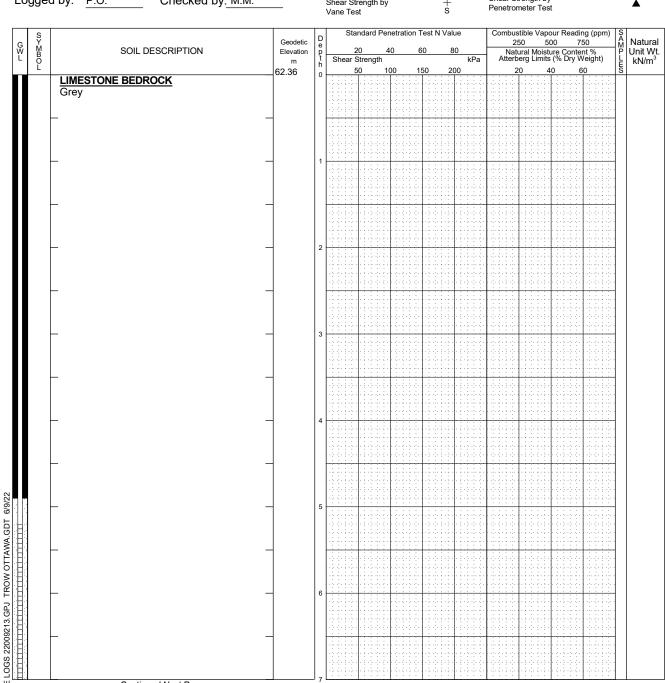
LOG OF BOREHOLE BOREHOLE LOGS 22009213.GPJ TROW OTTAWA.GDT 6/9/22

 $5. Log\ to\ be\ read\ with\ EXP\ Report\ OTT-22009213-B0$

WATER LEVEL RECORDS					
Date	Water Level (m)	Hole Open To (m)			
25 days	1.8				

CORE DRILLING RECORD					
Run No.	Depth (m)	% Rec.	RQD %		

Project No:	OTT-22009213-B0	<u> </u>		_	CV
Project:	Post Remediation Groundwater Sampling Program	n		Figure No3_	
Location:	177 Armstrong Street and 268 Carruthers Avenue	e, Ottawa, Ontario		Page. <u>1</u> of <u>2</u>	_
Date Drilled:	May 11, 2022	Split Spoon Sample	\boxtimes	Combustible Vapour Reading	
Drill Type:	Geomachine Drill Rig	Auger Sample [SPT (N) Value	I) 0	Natural Moisture Content Atterberg Limits	× ⊖
Datum:	Geodetic Elevation	Dynamic Cone Test Shelby Tube	_	Undrained Triaxial at % Strain at Failure	\oplus
Logged by:	P.O. Checked by: M.M.	Shear Strength by	- + s	Shear Strength by Penetrometer Test	•



Continued Next Page

Borehole data requires interpretation by EXP before use by others

2.A 37 mm diameter monitoring well was installed as shown.

3. Field work supervised by an EXP representative.

4. See Notes on Sample Descriptions

 $5. Log\ to\ be\ read\ with\ EXP\ Report\ OTT-22009213-B0$

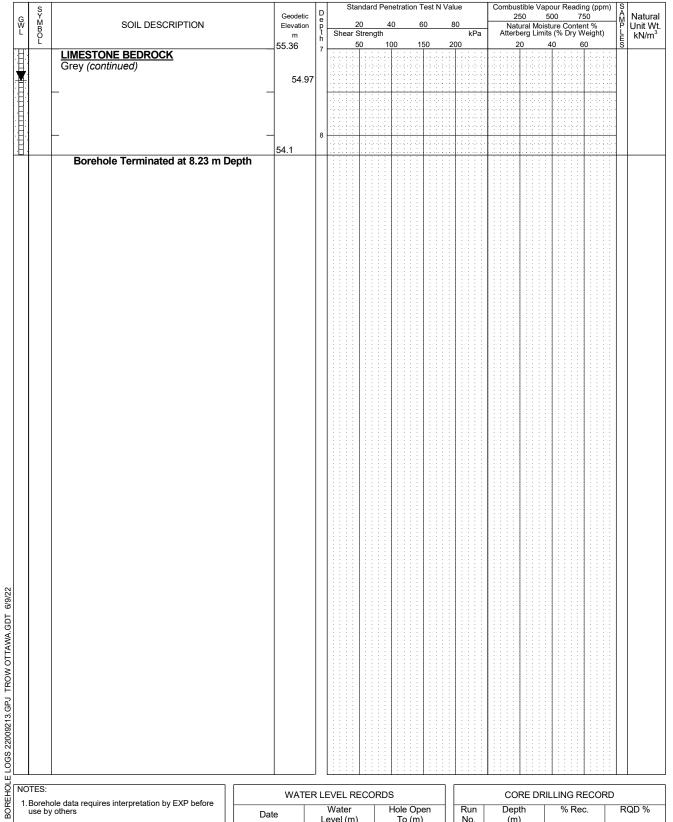
WATER LEVEL RECORDS					
Date	Water Level (m)	Hole Open To (m)			
25 days	7.4				

CORE DRILLING RECORD						
Run No.	Depth (m)	% Rec.	RQD %			
1	0.6 - 1.3	93	83			
2	1.3 - 2.5	100	65			

Project No: OTT-22009213-B0

Figure No.

Project: Post Remediation Groundwater Sampling Program of 2 Page.

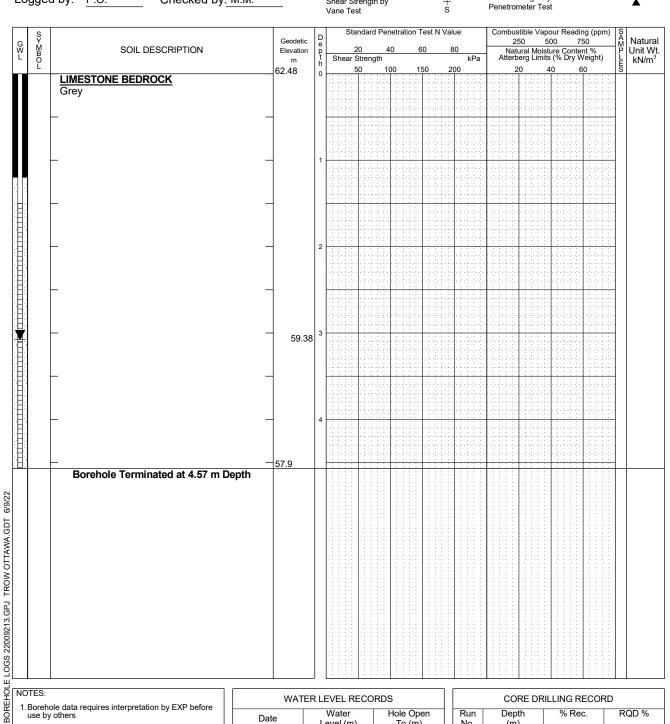


- Borehole data requires interpretation by EXP before use by others
- 2. A 37 mm diameter monitoring well was installed as shown.
- 3. Field work supervised by an EXP representative.
- 4. See Notes on Sample Descriptions
- 5. Log to be read with EXP Report OTT-22009213-B0

WATER LEVEL RECORDS						
Date	Water Level (m)	Hole Open To (m)				
25 days	7.4					

CORE DRILLING RECORD						
Run No.	Depth (m)	% Rec.	RQD %			
110.	00 40	00	00			
1	0.6 - 1.3	93	83			
2	1.3 - 2.5	100	65			

	Log of Bor				-	^X
Project No:	OTT-22009213-B0				\cup	·/\
Project:	Post Remediation Groundwater Sampling Progra	m		Figure No. 4		
Location:	177 Armstrong Street and 268 Carruthers Avenue	e, Ottawa, Ontario		Page. <u>1</u> of <u>1</u>	_	
Date Drilled:	'May 11, 2022	Split Spoon Sample		Combustible Vapour Reading		
Drill Type:	Geomachine Drill Rig	Auger Sample		Natural Moisture Content		×
Dilli Type.	Geomachine Dhii Rig	SPT (N) Value	0	Atterberg Limits	-	\rightarrow
Datum:	Geodetic Elevation	Dynamic Cone Test -		Undrained Triaxial at		\oplus
		Shelby Tube		% Strain at Failure		•
Logged by:	P.O. Checked by: M.M.	Shear Strength by	+	Shear Strength by Penetrometer Test		\blacktriangle



- Borehole data requires interpretation by EXP before use by others
- 2. A 37 mm diameter monitoring well was installed as shown.
- 3. Field work supervised by an EXP representative.
- 4. See Notes on Sample Descriptions
- 5. Log to be read with EXP Report OTT-22009213-B0

WATER LEVEL RECORDS								
Date	Water Level (m)	Hole Open To (m)						
25 days	3.1							

CORE DRILLING RECORD								
Run No.	Depth (m)	% Rec.	RQD %					
1	1.6 - 2.3	85	0					
2	2.3 - 4	97	65					
3	4 - 5.5	100	71					



Appendix C – Analytical Summary Tables

EXP Services Inc. OTT-22009213-B0

TABLE 1 GROUNDWATER ANALYTICAL RESULTS (μg/L)
PETROLEUM HYDROCARBONS and BTEX
177 Armstrong Street and 268 Carruthers Avenue, Ottawa

Parameter	MECP Table 7 ¹	BH-4	MW-10	MW-6	MW-7	MW-8	MW22-2	MW22-3	MW22-4	MW22-5
Sample Date (d/m/y)		19-Sep-19	Duplicate of	19-Sep-19	19-Sep-19	19-Sep-19	8-Jun-22	30-May-22	30-May-22	Duplicate
Screened Interval (mbsg)		4.0 - 5.5	BH-4	3.1 - 6.1	2.8 - 5.8	2.8 - 5.8	2.2 - 5.2	5.2 - 8.2	1.5	- 3.5
BV Labs ID		KVG986	KVG985	KVG982	KVG983	KVG984	B22-17640-1	B22-16103-2	B22-16103-1	B22-16103-3
Date of Analysis		24-Sep-2019	24-Apr-2019	24-Apr-2019	24-Apr-2019	24-Apr-2019	10-Jun-2022	1-Jun-2022	1-Jun	-2022
Maxxam Certificate of Analysis		B9Q3808	B9Q3808	B9Q3808	B9Q3808	B9Q3808	B22-17640	B22-16103	B22-16103	B22-16103
Benzene	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.5	<0.5	<0.5	<0.5
Toluene	320	<0.20	<0.20	<0.20	<0.20	<0.20	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	54	<0.20	<0.20	<0.20	<0.20	<0.20	<0.5	<0.5	<0.5	<0.5
Total Xylenes	72	<0.20	<0.20	<0.20	<0.20	<0.20	<1.1	<1.1	<1.1	<1.1
PHC F1	420	<25	<25	<25	<25	<25	67	<25	<25	<25
PHC F2	150	<100	<100	<100	<100	<100	<50	<50	<50	<50
PHC F3	500	<200	<200	<200	<200	<200	<400	<400	<400	<400
PHC F4	500	<200	<200	<200	<200	<200	<400	<400	<400	<400

NOTES:

MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA, April 2011, Table 7

Non-Potable Residential SCS, coarse grained soil.

Shaded Concentration exceeds MECP Table 7 Residential SCS.

NA Not Analyzed NV No Value

EXP Services Inc. OTT-22009213-B0

TABLE 2 GROUNDWATER ANALYTICAL RESULTS ($\mu g/L$) VOLATILE ORGANIC COMPOUNDS

177 Armstrong Street and 268 Carruthers Avenue, Ottawa

177 Amistrong Sire	MECP									
Parameter	Table 7 ¹	BH-4	MW-10	MW-6	MW-7	MW-8	TRIP BLANK	MW22-3	MW22-4	MW22-5
Sample Date (d/m/y)		19-Sep-19	Duplicate of	19-Sep-19	19-Sep-19	19-Sep-19	19-Sep-19	30-May-22	30-May-22	Duplicate
Screened Interval		4.0 - 5.5	BH-4	3.1 - 6.1	2.8 - 5.8	2.8 - 5.8	NA	5.2 - 8.2	1.5	- 3.5
BV Labs ID		KVG986	KVG985	KVG982	KVG983	KVG984	KVG987	B22-16103-2	B22-16103-1	B22-16103-3
Date of Analysis		25-Sep-2019	25-Apr-2019	25-Apr-2019	25-Apr-2019	25-Apr-2019	25-Apr-2019	2-Jun-2022		-2022
Maxxam Certificate of Analysis		B9Q3808	B9Q3808	B9Q3808	B9Q3808	B9Q3808	B9Q3808	B22-16103	B22-16103	B22-16103
Acetone	100000	<10	<10	<10	11	<10	<10	< 30	< 30	< 30
Benzene	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	< 0.5	< 0.5	< 0.5
Bromodichloromethane	67000	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2	< 2	< 2
Bromoform	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 5	< 5	< 5
Bromomethane	0.89	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	< 0.2	< 0.2	< 0.2
Chlorobenzene	140	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	< 0.5	< 0.5	< 0.5
Chloroform	2	<0.20	<0.20	<0.20	<0.20	0.27	<0.20	< 1	< 1	< 1
Dibromochloromethane	65000	<0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2	< 2	< 2
1,2-Dichlorobenzene	150	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5	< 0.5	< 0.5
1,3-Dichlorobenzene	7600	<0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5	< 0.5	< 0.5
1,4-Dichlorobenzene	0.5	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	3500	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 2	< 2	< 2
1,1-Dichloroethane	11	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	< 0.5	< 0.5	< 0.5
1,2-Dichloroethane	0.5	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5	< 0.5	< 0.5
1,1-Dichloroethylene	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	< 0.5	< 0.5	< 0.5
Cis-1,2-Dichloroethylene	1.6	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5	< 0.5	< 0.5
Trans-1,2-Dichloroethylene	1.6	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5	< 0.5	< 0.5
1,2-Dichloropropane	0.58	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	< 0.5	< 0.5	< 0.5
Cis-1,3-Dichloropropylene	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	< 0.5	< 0.5	< 0.5
Trans-1,3-Dichloropropylene	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	< 0.5	< 0.5	< 0.5
Ethylbenzene	54	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	< 0.5	< 0.5	< 0.5
Ethylene Dibromide	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	< 0.2	< 0.2	< 0.2
Hexane	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	< 5	< 5	< 5
Methylene Chloride	26	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	< 5	< 5	< 5
Methyl Ethyl Ketone	21000	<10	<10	<10	<10	<10	<10	< 20	< 20	< 20
Methyl Isobutyl Ketone	5200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	< 20	< 20	< 20
Methyl-t-Butyl Ether	15	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	<0.50	< 2	< 2	< 2
Styrene	43	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5	< 0.5	< 0.5
1,1,1,2-Tetrachloroethane	1.1	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.5	< 0.5	< 0.5
1,1,2,2-Tetrachloroethane	0.5	< 0.50	<0.50	< 0.50	< 0.50	< 0.50	<0.50	< 0.5	< 0.5	< 0.5
Tetrachloroethylene	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	< 0.5	< 0.5	< 0.5
Toluene	320	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	< 0.5	< 0.5	< 0.5
1,1,1-Trichloroethane	23	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	< 0.5	< 0.5	< 0.5
Trichloroethylene	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	2000	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	< 5	< 5	< 5
Vinyl Chloride	0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	< 0.2	< 0.2	< 0.2
Total Xylenes	72	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	< 1.1	< 1.1	< 1.1

NOTES:

MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA, April 2011, Table 7 Non-Potable Residential

SCS, coarse grained soil.

Shaded Concentration exceeds MECP Table 7 Residential SCS.

TABLE 3 GROUNDWATER ANALYTICAL RESULTS (μg/L)
METALS
177 Armstrong Street and 268 Carruthers Avenue, Ottawa

Parameter	MECP	MW22-2	MW22-3	MW22-4	MW22-5
Sample Date (d/m/y)	Table 7 ¹	8-Jun-22	30-May-22	30-May-22	Duplicate
Screened Interval		2.2 - 5.2	5.2 - 8.2	1.5	- 3.5
Laboratory ID		B22-17640-1	B22-16103-2	B22-16103-1	B22-16103-3
Date of Analysis		14-Jun-2022	2-Jun-2022	2-Jun	-2022
Certificate of Analysis		B22-17640	B22-16103	B22-16103	B22-16103
Antimony	16000	1	2.7	1.5	1.6
Arsenic	1500	0.4	0.5	0.4	0.4
Barium	23000	101	206	92	94
Beryllium	53	< 0.1	< 0.2	< 0.1	< 0.1
Boron	36000	44	158	117	119
Cadmium	2.1	0.017	< 0.028	< 0.015	0.015
Chromium	640	< 2	< 2	< 2	< 2
Chromium VI	110	< 10	< 10	< 10	< 10
Cobalt	52	< 0.1	0.3	0.3	0.3
Copper	69	2	< 2	4	3
Lead	20	0.06	0.18	0.06	0.05
Mercury	0.1	0.07	< 0.02	0.05	0.05
Molybdenum	7300	10.2	9.7	6.1	6.1
Nickel	390	1	2.7	4.8	4.8
Selenium	50	1	2	4	4
Silver	1.2	< 0.1	< 0.1	< 0.1	< 0.1
Sodium	1800000	75500	127000	78800	80400
Thallium	400	< 0.05	< 0.1	0.07	0.07
Uranium	330	0.52	1.27	2.61	2.66
Vanadium	200	0.4	0.4	0.4	0.4
Zinc	890	< 5	5	5	< 5

NOTES:

1

MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA, April 2011, Table 7 Non-Potable Residential SCS, coarse grained soil.

Shaded Concentration exceeds MECP Table 7 Residential SCS.

TABLE 4 GROUNDWATER ANALYTICAL RESULTS (μg/L)
POLYCYCLIC AROMATIC HYDROCARBONS
177 Armstrong Street and 268 Carruthers Avenue, Ottawa

Parameter	MECP Table 7 ¹	MW22-2	MW22-3	MW22-4	MW22-5
Sample Date (d/m/y)	Table 7	8-Jun-22	30-May-22	30-May-22	Duplicate
Screened Interval		2.2 - 5.2	5.2 - 8.2	1.5	- 3.5
Laboratory ID		B22-17640-1	B22-16103-2	B22-16103-1	B22-16103-3
Date of Analysis		13-Jun-2022	2-Jun-2022	2-Jun	-2022
Maxxam Certificate of Analysis		B22-17640	B22-16103	B22-16103	B22-16103
Acenaphthene	17	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	1	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	1	< 0.05	< 0.05	< 0.05	< 0.05
Benzo[a]anthracene	1.8	< 0.05	< 0.05	< 0.05	< 0.05
Benzo[a]pyrene	0.81	< 0.01	< 0.01	< 0.01	< 0.01
Benzo[b]fluoranthene	0.75	< 0.05	< 0.05	< 0.05	< 0.05
Benzo[g,h,i]perylene	0.2	< 0.05	< 0.05	< 0.05	< 0.05
Benzo[k]fluoranthene	0.4	< 0.05	< 0.05	< 0.05	< 0.05
Chrysene	0.7	< 0.05	< 0.05	< 0.05	< 0.05
Dibenzo[a,h]anthracene	0.4	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	44	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	290	< 0.05	< 0.05	< 0.05	< 0.05
Indeno[1,2,3-cd]pyrene	0.2	< 0.05	< 0.05	< 0.05	< 0.05
Methylnaphthalene (1&2)	1500	<1	< 0.05	< 0.05	< 0.05
Naphthalene	7	< 0.06	< 0.05	< 0.05	< 0.05
Phenanthrene	380	< 0.05	< 0.05	< 0.05	< 0.05
Pyrene	5.7	< 0.05	< 0.05	< 0.05	< 0.05

NOTES:

1

MECP Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the EPA, April 2011, Table 7 Non-Potable Residential SCS, coarse grained soil.

Shaded Concentration exceeds MECP Table 7 Residential SCS.

EXP Services Inc.

McCormick Park Developments Incorporated Post Remediation Groundwater Sampling 177 Armstrong Street and 268 Carruthers Avenue, Ottawa, Ontario OTT-22009213-B0 June 17, 2022

Appendix D – Laboratory Certificates of Analysis





Final Report

C.O.C.: G110777 REPORT No. B22-16103

Report To:

EXP Services Inc

2650 Queensview Drive, Suite 100 Ottawa ON K2B 8H6 Canada **Attention:** Mark McCalla

DATE RECEIVED: 30-May-22

DATE REPORTED: 03-Jun-22

SAMPLE MATRIX: Groundwater

Caduceon Environmental Laboratories

2378 Holly Lane

Ottawa Ontario K1V 7P1 Tel: 613-526-0123 Fax: 613-526-1244

JOB/PROJECT NO.:

P.O. NUMBER:

OTT-220091213-B

WATERWORKS NO.

Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
SVOC	3	Kingston	esi	02-Jun-22	C-NAB-S-001 (k)	EPA 8270
SVOC	3	Kingston	esi	02-Jun-22	C-NAB-W-001 (k)	EPA 8270
PHC(F2-F4)	3	Kingston	KPR	01-Jun-22	C-PHC-W-001 (k)	MOE E3421
VOC's	3	Richmond Hill	JE	01-Jun-22	C-VOC-02 (rh)	EPA 8260
PHC(F1)	3	Richmond Hill	JE	01-Jun-22	C-VPHW-01 (rh)	MOE E3421
Chromium (VI)	3	Holly Lane	ST	03-Jun-22	D-CRVI-01 (o)	MOE E3056
Mercury	3	Holly Lane	PBK	02-Jun-22	D-HG-02 (o)	SM 3112 B
Metals - ICP-OES	3	Holly Lane	AHM	02-Jun-22	D-ICP-01 (o)	SM 3120
Metals - ICP-MS	3	Holly Lane	TPR	03-Jun-22	D-ICPMS-01 (o)	EPA 200.8

μg/g = micrograms per gram (parts per million) and is equal to mg/Kg

F1 C6-C10 hydrocarbons in μg/g, (F1-btex if requested)

F2 C10-C16 hydrocarbons in µg/g, (F2-napth if requested)

F3 C16-C34 hydrocarbons in µg/g, (F3-pah if requested)

F4 C34-C50 hydrocarbons in µg/g

This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.

Any deviations from the method are noted and reported for any particular sample.

nC6 and nC10 response factor is within 30% of response factor for toluene:

nC10,nC16 and nC34 response factors within 10% of each other:

C50 response factors within 70% of nC10+nC16+nC34 average:

Linearity is within 15%:

All results expressed on a dry weight basis.

Unless otherwise noted all chromatograms returned to baseline by the retention

time of nC50.

Unless otherwise noted all extraction, analysis, QC requirements and limits for holding time were met. If analyzed for F4 and F4G they are not to be summed but the greater of the two numbers are to be used in application to the CWS PHC

QC will be made available upon request.

O. Reg. 153 - Soil, Ground Water and Sediment Standards Tbl. 1 - GW (μ g/L) - Table 1 - Ground Water

R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an * Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Greg Clarkin , BSc., C. Chem Lab Manager - Ottawa District

The analytical results reported herein refer to the samples as received. Reproduction of this analytical report in full or in part is prohibited without prior consent from Caduceon Environmental Laboratories.



Final Report

C.O.C.: G110777 REPORT No. B22-16103

Report To:

EXP Services Inc

2650 Queensview Drive, Suite 100 Ottawa ON K2B 8H6 Canada **Attention:** Mark McCalla

DATE RECEIVED: 30-May-22

DATE REPORTED: 03-Jun-22

SAMPLE MATRIX: Groundwater

Caduceon Environmental Laboratories

2378 Holly Lane

Ottawa Ontario K1V 7P1 Tel: 613-526-0123 Fax: 613-526-1244

JOB/PROJECT NO.:

P.O. NUMBER: OT

OTT-220091213-B

WATERWORKS NO.

	Client I.D. Sample I.D. Date Collected		MW22-4 B22-16103-1 30-May-22	MW22-3 B22-16103-2 30-May-22	MW22-5 B22-16103-3 30-May-22	Ο. Reg. 153 Tbl. 1 - GW (μg/L)
Parameter	Units	R.L.				
Antimony	μg/L	0.1	1.5	2.7	1.6	1.5
Arsenic	μg/L	0.1	0.4	0.5	0.4	13
Barium	μg/L	1	92	206	94	610
Beryllium	μg/L	0.1	< 0.1	< 0.2	< 0.1	0.5
Boron	μg/L	5	117	158	119	1700
Cadmium	μg/L	0.015	< 0.015	< 0.028	0.015	0.5
Chromium	μg/L	2	< 2	< 2	< 2	11
Chromium (VI)	μg/L	10	< 10	< 10 1	< 10 1	25
Cobalt	μg/L	0.1	0.3	0.3	0.3	3.8
Copper	μg/L	2	4	< 2	3	5
Lead	μg/L	0.02	0.06	0.18	0.05	1.9
Mercury	μg/L	0.02	0.05	< 0.02	0.05	0.1
Molybdenum	μg/L	0.1	6.1	9.7	6.1	23
Nickel	μg/L	0.2	4.8	2.7	4.8	14
Selenium	μg/L	1	4	2	4	5
Silver	μg/L	0.1	< 0.1	< 0.1	< 0.1	0.3
Sodium	μg/L	200	78800	127000	80400	490000
Thallium	μg/L	0.05	0.07	< 0.1	0.07	0.5
Uranium	μg/L	0.05	2.61	1.27	2.66	8.9
Vanadium	μg/L	0.1	0.4	0.4	0.4	3.9
Zinc	μg/L	5	5	5	< 5	160
Acetone	μg/L	30	< 30	< 30	< 30	2700
Benzene	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Bromodichloromethane	μg/L	2	< 2	< 2	< 2	2
Bromoform	μg/L	5	< 5	< 5	< 5	5
Bromomethane	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.89
Carbon Tetrachloride	μg/L	0.2	< 0.2	< 0.2	< 0.2	0.2

O. Reg. 153 - Soil, Ground Water and Sediment Standards

Tbl. 1 - GW (µg/L) - Table 1 - Ground Water

R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an * Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Greg Clarkin, BSc., C. Chem Lab Manager - Ottawa District



Final Report

C.O.C.: G110777 REPORT No. B22-16103

Report To:

EXP Services Inc

2650 Queensview Drive, Suite 100 Ottawa ON K2B 8H6 Canada **Attention:** Mark McCalla

DATE RECEIVED: 30-May-22

DATE REPORTED: 03-Jun-22

SAMPLE MATRIX: Groundwater

Caduceon Environmental Laboratories

2378 Holly Lane

Ottawa Ontario K1V 7P1 Tel: 613-526-0123 Fax: 613-526-1244

JOB/PROJECT NO.:

P.O. NUMBER:

OTT-220091213-B

WATERWORKS NO.

	Client I.D. Sample I.D. Date Collected		MW22-4 B22-16103-1 30-May-22	MW22-3 B22-16103-2 30-May-22	MW22-5 B22-16103-3 30-May-22	Ο. Reg. 153 Tbl. 1 - GW (μg/L)
Parameter	Units	R.L.				
Monochlorobenzene (Chlorobenzene)	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Chloroform	μg/L	1	< 1	< 1	< 1	2
Dibromochloromethane	μg/L	2	< 2	< 2	< 2	2
Dichlorobenzene,1,2-	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Dichlorobenzene,1,3-	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Dichlorobenzene,1,4-	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Dichlorodifluoromethane	μg/L	2	< 2	< 2	< 2	590
Dichloroethane,1,1-	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Dichloroethane,1,2-	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Dichloroethylene,1,1-	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Dichloroethene, cis-1,2-	μg/L	0.5	< 0.5	< 0.5	< 0.5	1.6
Dichloroethene, trans-1,2-	μg/L	0.5	< 0.5	< 0.5	< 0.5	1.6
Dichloropropane,1,2-	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Dichloropropene, cis-1,3-	μg/L	0.5	< 0.5	< 0.5	< 0.5	
Dichloropropene, trans- 1,3-	μg/L	0.5	< 0.5	< 0.5	< 0.5	
Dichloropropene 1,3- cis+trans	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Ethylbenzene	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Dibromoethane,1,2- (Ethylene Dibromide)	μg/L	0.2	< 0.2	< 0.2	< 0.2	0.2
Hexane	μg/L	5	< 5	< 5	< 5	5
Methyl Ethyl Ketone	μg/L	20	< 20	< 20	< 20	400
Methyl Isobutyl Ketone	μg/L	20	< 20	< 20	< 20	640
Methyl-t-butyl Ether	μg/L	2	< 2	< 2	< 2	15

O. Reg. 153 - Soil, Ground Water and Sediment Standards

Tbl. 1 - GW (µg/L) - Table 1 - Ground Water

R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an * Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Greg Clarkin , BSc., C. Chem Lab Manager - Ottawa District



Final Report

C.O.C.: G110777 REPORT No. B22-16103

Report To:

EXP Services Inc

2650 Queensview Drive, Suite 100 Ottawa ON K2B 8H6 Canada **Attention:** Mark McCalla

DATE RECEIVED: 30-May-22

DATE REPORTED: 03-Jun-22

SAMPLE MATRIX: Groundwater

Caduceon Environmental Laboratories

2378 Holly Lane

Ottawa Ontario K1V 7P1 Tel: 613-526-0123 Fax: 613-526-1244

JOB/PROJECT NO.:

P.O. NUMBER: OTT-

OTT-220091213-B

WATERWORKS NO.

	Client I.D. Sample I.D. Date Collected		MW22-4	MW22-3	MW22-5	O. Reg. 153
			B22-16103-1	B22-16103-2	B22-16103-3	Tbl. 1 - GW
			30-May-22	30-May-22	30-May-22	(μg/L)
Parameter	Units	R.L.				
Dichloromethane (Methylene Chloride)	μg/L	5	< 5	< 5	< 5	5
Styrene	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Tetrachloroethane,1,1,1,2-	μg/L	0.5	< 0.5	< 0.5	< 0.5	1.1
Tetrachloroethane,1,1,2,2-	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Tetrachloroethylene	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Toluene	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.8
Trichloroethane,1,1,1-	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Trichloroethane,1,1,2-	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Trichloroethylene	μg/L	0.5	< 0.5	< 0.5	< 0.5	0.5
Trichlorofluoromethane	μg/L	5	< 5	< 5	< 5	150
Vinyl Chloride	μg/L	0.2	< 0.2	< 0.2	< 0.2	0.5
Xylene, m,p-	μg/L	1.0	< 1.0	< 1.0	< 1.0	
Xylene, o-	μg/L	0.5	< 0.5	< 0.5	< 0.5	
Xylene, m,p,o-	μg/L	1.1	< 1.1	< 1.1	< 1.1	72
PHC F1 (C6-C10)	μg/L	25	< 25	< 25	< 25	420
PHC F2 (>C10-C16)	μg/L	50	< 50	< 50	< 50	150
PHC F3 (>C16-C34)	μg/L	400	< 400	< 400	< 400	500
PHC F4 (>C34-C50)	μg/L	400	< 400	< 400	< 400	500
Acenaphthene	μg/L	0.05	< 0.05	< 0.05	< 0.05	4.1
Acenaphthylene	μg/L	0.05	< 0.05	< 0.05	< 0.05	1
Anthracene	μg/L	0.05	< 0.05	< 0.05	< 0.05	0.1
Benzo(a)anthracene	μg/L	0.05	< 0.05	< 0.05	< 0.05	0.2
Benzo(a)pyrene	μg/L	0.01	< 0.01	< 0.01	< 0.01	0.01
Benzo(b)fluoranthene	μg/L	0.05	< 0.05	< 0.05	< 0.05	0.1
Benzo(b+k)fluoranthene	μg/L	0.1	< 0.1	< 0.1	< 0.1	
Benzo(g,h,i)perylene	μg/L	0.05	< 0.05	< 0.05	< 0.05	0.2

O. Reg. 153 - Soil, Ground Water and Sediment Standards

Tbl. 1 - GW (µg/L) - Table 1 - Ground Water

R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an * Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Greg Clarkin, BSc., C. Chem Lab Manager - Ottawa District



Final Report

C.O.C.: G110777 REPORT No. B22-16103

Report To:

EXP Services Inc

2650 Queensview Drive, Suite 100 Ottawa ON K2B 8H6 Canada **Attention:** Mark McCalla

DATE RECEIVED: 30-May-22

DATE REPORTED: 03-Jun-22

SAMPLE MATRIX: Groundwater

Caduceon Environmental Laboratories

2378 Holly Lane

Ottawa Ontario K1V 7P1 Tel: 613-526-0123 Fax: 613-526-1244

JOB/PROJECT NO.:

P.O. NUMBER: OTT-220091213-B

WATERWORKS NO.

	Client I.D. Sample I.D. Date Collected		MW22-4 B22-16103-1 30-May-22	MW22-3 B22-16103-2 30-May-22	MW22-5 B22-16103-3 30-May-22	Ο. Reg. 153 Tbl. 1 - GW (μg/L)
Parameter	Units	R.L.				
Benzo(k)fluoranthene	μg/L	0.05	< 0.05	< 0.05	< 0.05	0.1
Chrysene	μg/L	0.05	< 0.05	< 0.05	< 0.05	0.1
Dibenzo(a,h)anthracene	μg/L	0.05	< 0.05	< 0.05	< 0.05	0.2
Fluoranthene	μg/L	0.05	< 0.05	< 0.05	< 0.05	0.4
Fluorene	μg/L	0.05	< 0.05	< 0.05	< 0.05	120
Indeno(1,2,3,-cd)pyrene	μg/L	0.05	< 0.05	< 0.05	< 0.05	0.2
Methylnaphthalene,1-	μg/L	0.05	< 0.05	< 0.05	< 0.05	2
Methylnaphthalene,2-	μg/L	0.05	< 0.05	< 0.05	< 0.05	2
Naphthalene	μg/L	0.05	< 0.05	< 0.05	< 0.05	7
Phenanthrene	μg/L	0.05	< 0.05	< 0.05	< 0.05	0.1
Pyrene	μg/L	0.05	< 0.05	< 0.05	< 0.05	0.2
Terphenyl-d14 (SS)	% rec.	10	109	111	115	

¹ Chromium (VI) result is based on total Chromium

O. Reg. 153 - Soil, Ground Water and Sediment Standards Tbl. 1 - GW (μ g/L) - Table 1 - Ground Water

R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an * Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Greg Clarkin, BSc., C. Chem Lab Manager - Ottawa District



Final Report

C.O.C.: G110777 REPORT No. B22-16103

Report To:

EXP Services Inc

2650 Queensview Drive, Suite 100 Ottawa ON K2B 8H6 Canada **Attention:** Mark McCalla

DATE RECEIVED: 30-May-22

DATE REPORTED: 03-Jun-22

SAMPLE MATRIX: Groundwater

Caduceon Environmental Laboratories

2378 Holly Lane

Ottawa Ontario K1V 7P1 Tel: 613-526-0123 Fax: 613-526-1244

JOB/PROJECT NO.:

P.O. NUMBER: OTT-220091213-B

WATERWORKS NO.

Summary of Exceedances

Table 1 - Ground Water							
MW22-3	Found Value	Limit					
Antimony (µg/L)	2.7	1.5					
MW22-5	Found Value	Limit					
Antimony (µg/L)	1.6	1.5					

O. Reg. 153 - Soil, Ground Water and Sediment Standards Tbl. 1 - GW (μ g/L) - Table 1 - Ground Water

R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an * Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Greg Clarkin, BSc., C. Chem Lab Manager - Ottawa District



Final Report

C.O.C.: G096879 REPORT No. B22-17640

Report To:

EXP Services Inc

2650 Queensview Drive, Suite 100 Ottawa ON K2B 8H6 Canada **Attention:** Mark McCalla

DATE RECEIVED: 08-Jun-22

DATE REPORTED: 16-Jun-22

SAMPLE MATRIX: Groundwater

Caduceon Environmental Laboratories

2378 Holly Lane

Ottawa Ontario K1V 7P1 Tel: 613-526-0123 Fax: 613-526-1244

JOB/PROJECT NO.: OTT-22009213-BO

P.O. NUMBER:

WATERWORKS NO.

Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
SVOC	1	Kingston	esi	13-Jun-22	C-NAB-S-001 (k)	EPA 8270
SVOC	1	Kingston	esi	13-Jun-22	C-NAB-W-001 (k)	EPA 8270
PHC(F2-F4)	1	Kingston	KPR	10-Jun-22	C-PHC-W-001 (k)	MOE E3421
VOC's	1	Richmond Hill	FAL	10-Jun-22	C-VOC-02 (rh)	EPA 8260
PHC(F1)	1	Richmond Hill	FAL	10-Jun-22	C-VPHW-01 (rh)	MOE E3421
Chromium (VI)	1	Holly Lane	ST	15-Jun-22	D-CRVI-01 (o)	MOE E3056
Mercury	1	Holly Lane	PBK	14-Jun-22	D-HG-02 (o)	SM 3112 B
Metals - ICP-OES	1	Holly Lane	AHM	14-Jun-22	D-ICP-01 (o)	SM 3120
Metals - ICP-MS	1	Holly Lane	TPR	16-Jun-22	D-ICPMS-01 (o)	EPA 200.8

μg/g = micrograms per gram (parts per million) and is equal to mg/Kg

F1 C6-C10 hydrocarbons in μg/g, (F1-btex if requested)

F2 C10-C16 hydrocarbons in µg/g, (F2-napth if requested)

F3 C16-C34 hydrocarbons in µg/g, (F3-pah if requested)

F4 C34-C50 hydrocarbons in µg/g

This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.

Any deviations from the method are noted and reported for any particular sample.

nC6 and nC10 response factor is within 30% of response factor for toluene:

nC10,nC16 and nC34 response factors within 10% of each other:

C50 response factors within 70% of nC10+nC16+nC34 average:

Linearity is within 15%:

All results expressed on a dry weight basis.

Unless otherwise noted all chromatograms returned to baseline by the retention

time of nC50.

Unless otherwise noted all extraction, analysis, QC requirements and limits for holding time were met. If analyzed for F4 and F4G they are not to be summed but the greater of the two numbers are to be used in application to the CWS PHC

QC will be made available upon request.

O. Reg. 153 - Soil, Ground Water and Sediment Standards Tbl. 1 - GW ($\mu g/L$) - Table 1 - Ground Water

R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an * Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Greg Clarkin , BSc., C. Chem Lab Manager - Ottawa District

The analytical results reported herein refer to the samples as received. Reproduction of this analytical report in full or in part is prohibited without prior consent from Caduceon Environmental Laboratories.



Final Report

C.O.C.: G096879 REPORT No. B22-17640

Report To:

EXP Services Inc

2650 Queensview Drive, Suite 100 Ottawa ON K2B 8H6 Canada **Attention:** Mark McCalla

DATE RECEIVED: 08-Jun-22

DATE REPORTED: 16-Jun-22
SAMPLE MATRIX: Groundwater

Caduceon Environmental Laboratories

2378 Holly Lane

Ottawa Ontario K1V 7P1 Tel: 613-526-0123 Fax: 613-526-1244

JOB/PROJECT NO.: OTT-22009213-BO

P.O. NUMBER: WATERWORKS NO.

	Sample I.I	Client I.D. Sample I.D. Date Collected		Ο. Reg. 153 Tbl. 1 - GW (μg/L)
Parameter	Units	R.L.		
Antimony	μg/L	0.1	1.0	1.5
Arsenic	μg/L	0.1	0.4	13
Barium	μg/L	1	101	610
Beryllium	μg/L	0.1	< 0.1	0.5
Boron	μg/L	5	44	1700
Cadmium	μg/L	0.015	0.017	0.5
Chromium	μg/L	2	< 2	11
Chromium (VI)	μg/L	10	< 10 1	25
Cobalt	μg/L	0.1	< 0.1	3.8
Copper	μg/L	2	2	5
Lead	μg/L	0.02	0.06	1.9
Mercury	μg/L	0.02	0.07	0.1
Molybdenum	μg/L	0.1	10.2	23
Nickel	μg/L	0.2	1.0	14
Selenium	μg/L	1	1	5
Silver	μg/L	0.1	< 0.1	0.3
Sodium	μg/L	200	75500	490000
Thallium	μg/L	0.05	< 0.05	0.5
Uranium	μg/L	0.05	0.52	8.9
Vanadium	μg/L	0.1	0.4	3.9
Zinc	μg/L	5	< 5	160
Benzene	μg/L	0.5	< 0.5	0.5
Toluene	μg/L	0.5	< 0.5	0.8
Ethylbenzene	μg/L	0.5	< 0.5	0.5
Xylene, m,p-	μg/L	1.0	< 1.0	
Xylene, o-	μg/L	0.5	< 0.5	
Xylene, m,p,o-	μg/L	1.1	< 1.1	72

O. Reg. 153 - Soil, Ground Water and Sediment Standards

Tbl. 1 - GW (µg/L) - Table 1 - Ground Water

R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an * Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Greg Clarkin , BSc., C. Chem Lab Manager - Ottawa District



Final Report

C.O.C.: G096879 REPORT No. B22-17640

Report To:

EXP Services Inc

2650 Queensview Drive, Suite 100 Ottawa ON K2B 8H6 Canada **Attention:** Mark McCalla

DATE RECEIVED: 08-Jun-22

DATE REPORTED: 16-Jun-22
SAMPLE MATRIX: Groundwater

Caduceon Environmental Laboratories

2378 Holly Lane

Ottawa Ontario K1V 7P1 Tel: 613-526-0123 Fax: 613-526-1244

JOB/PROJECT NO.: OTT-22009213-BO

P.O. NUMBER: WATERWORKS NO.

	Client I.D. Sample I.D. Date Collected		MW22-2 B22-17640-1 08-Jun-22	O. Reg. 153 Tbl. 1 - GW (μg/L)
Parameter	Units	R.L.		
Toluene-d8 (SS)	% rec.		98.1	
PHC F1 (C6-C10)	μg/L	25	67	420
PHC F2 (>C10-C16)	μg/L	50	< 50	150
PHC F3 (>C16-C34)	μg/L	400	< 400	500
PHC F4 (>C34-C50)	μg/L	400	< 400	500
Acenaphthene	μg/L	0.05	< 0.05	4.1
Acenaphthylene	μg/L	0.05	< 0.05	1
Anthracene	μg/L	0.05	< 0.05	0.1
Benzo(a)anthracene	μg/L	0.05	< 0.06 2	0.2
Benzo(a)pyrene	μg/L	0.01	< 0.01	0.01
Benzo(b)fluoranthene	μg/L	0.05	< 0.05	0.1
Benzo(b+k)fluoranthene	μg/L	0.1	< 0.1	
Benzo(g,h,i)perylene	μg/L	0.05	< 0.05	0.2
Benzo(k)fluoranthene	μg/L	0.05	< 0.05	0.1
Chrysene	μg/L	0.05	< 0.05	0.1
Dibenzo(a,h)anthracene	μg/L	0.05	< 0.05	0.2
Fluoranthene	μg/L	0.05	< 0.05	0.4
Fluorene	μg/L	0.05	< 0.05	120
Indeno(1,2,3,-cd)pyrene	μg/L	0.05	< 0.05	0.2
Methylnaphthalene,1-	μg/L	0.05	< 0.05	2
Methylnaphthalene,2-	μg/L	0.05	< 0.05	2
Methylnaphthalene 2-(1-)	μg/L	1	< 1	2
Naphthalene	μg/L	0.05	< 0.06	7
Phenanthrene	μg/L	0.05	< 0.05	0.1
Pyrene	μg/L	0.05	< 0.05	0.2
Terphenyl-d14 (SS)	% rec.	10	112	

O. Reg. 153 - Soil, Ground Water and Sediment Standards

Tbl. 1 - GW (μg/L) - Table 1 - Ground Water

R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an $^{\star}\,$

Greg Clarkin , BSc., C. Chem Lab Manager - Ottawa District

Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie



Final Report

C.O.C.: G096879 REPORT No. B22-17640

Report To:

EXP Services Inc

2650 Queensview Drive, Suite 100 Ottawa ON K2B 8H6 Canada **Attention:** Mark McCalla

DATE RECEIVED: 08-Jun-22

DATE REPORTED: 16-Jun-22
SAMPLE MATRIX: Groundwater

Caduceon Environmental Laboratories

2378 Holly Lane

Ottawa Ontario K1V 7P1 Tel: 613-526-0123 Fax: 613-526-1244

JOB/PROJECT NO.: OTT-22009213-BO

P.O. NUMBER:

WATERWORKS NO.

	Client I.D. Sample I.D. Date Collected		MW22-2 B22-17640-1 08-Jun-22		O. Reg. 153 Tbl. 1 - GW (μg/L)
Parameter	Units	R.L.			

¹ Chromium (VI) result is based on total chromium

O. Reg. 153 - Soil, Ground Water and Sediment Standards Tbl. 1 - GW (μ g/L) - Table 1 - Ground Water

R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an * Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Greg Clarkin , BSc., C. Chem Lab Manager - Ottawa District

² NOTE: Elevated RL due to sample matrix interferences.



Final Report

C.O.C.: G096879 REPORT No. B22-17640

Report To:

EXP Services Inc

2650 Queensview Drive, Suite 100 Ottawa ON K2B 8H6 Canada **Attention:** Mark McCalla

DATE RECEIVED: 08-Jun-22

DATE REPORTED: 16-Jun-22 SAMPLE MATRIX: Groundwater **Caduceon Environmental Laboratories**

2378 Holly Lane

Ottawa Ontario K1V 7P1 Tel: 613-526-0123 Fax: 613-526-1244

JOB/PROJECT NO.: OTT-22009213-BO

P.O. NUMBER: WATERWORKS NO.

Summary of Exceedances

O. Reg. 153 - Soil, Ground Water and Sediment Standards Tbl. 1 - GW (μ g/L) - Table 1 - Ground Water

R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an * Site Analyzed=K-Kingston,W-Windsor,O-Ottawa,R-Richmond Hill,B-Barrie

Greg Clarkin , BSc., C. Chem Lab Manager - Ottawa District



exp Services Inc. 2650 Queensview Drive, Suite 100 Ottawa, Ontario K2B 8H6

Telephone: **613-688-1899** Facsimile: **613-225-7337**

Appendix E – Landfill Waybills



GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK ON K0C 1W0

(613) 538-2776 HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 12/04/2022 12:05 pm EXIT: 12/04/2022 12:25 pm

GROSS 37130 ka Scale In TARE 14240 kg Scale Out

NET 22890 kg

Qty Unit Description Rate **Taxes** Subtotal 22.89 **CONTAMINATED SOIL** \$52.00 \$1,190.28 \$154.74 ΜT

Have A Nice Day! **ALL SALES ARE FINAL**

SIGNATURE:

GREEN FOR LIFE

TICKET#: 527283

GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK, ON KOC 1WO

(613) 538-2776

HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 12/04/2022 12:05 pm EXIT: 12/04/2022 12:25 pm

GROSS 37130 kg k Scale In 14240 Scale Out **TARE** kg

22890 **NET** kq

OTY Unit Description

22.89 MT CONTAMINATED SOIL \$52.00 \$1,190.28 \$154.74 \$1,345.02

Have A Nice Day!

ALL SALES ARE FINAL

SIGNATURE:

TYPE CASH

001726 - Theberge Developments Ltd.

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

VEHICLE #: BB 60710

CONTAINER:

BB 60710 LICENSE:

REFERENCE:

Total

\$1,345.02

Total: \$1,345.02 \$1,345.02 Received:

Change: \$0.00 **********2825 Cheque .:

VISA

TYPE CASH

001726 - Theberge Developments Ltd.

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

BB 60710 VEHICLE:

CONTAINER:

BB 60710 LICENSE:

REFERENCE:

Taxes Total Rate Sub Total

\$1,345.02 Total: \$1,345.02 Received:

\$0.00 Change: *********2825 Cheque.:



GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK ON K0C 1W0

(613) 538-2776 HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 12/04/2022 12:47 pm EXIT: 12/04/2022 1:02 pm

GROSS 32610 kg Scale In TARE 15110 kg Scale Out

NET 17500 kg

Qty Unit Description

17.50 **CONTAMINATED SOIL** ΜT

> Have A Nice Day! **ALL SALES ARE FINAL**

SIGNATURE:

TICKET#: 527289

GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK, ON KOC 1WO

(613) 538-2776

HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 12/04/2022 12:47 pm EXIT: 12/04/2022 1:02 pm

GROSS 32610 kg k Scale In 15110 Scale Out **TARE** kg

17500 **NET** kq

OTY Unit Description

17.50 MT CONTAMINATED SOIL

Have A Nice Day!

ALL SALES ARE FINAL

SIGNATURE:

TYPE CASH

001726 - Theberge Developments Ltd.

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

VEHICLE #: AN 51804

CONTAINER:

AN 51804 LICENSE:

REFERENCE:

Total Rate Subtotal **Taxes**

\$52.00 \$910.00 \$118.30 \$1,028.30

> Total: \$1,028.30 \$1,028.30 Received: Change:

\$0.00 **********2825 Cheque .:

VISA

GREEN FOR LIFE

TYPE CASH

001726 - Theberge Developments Ltd.

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

VEHICLE: AN 51804

CONTAINER:

AN 51804 LICENSE:

REFERENCE:

Taxes Total Rate Sub Total \$52.00 \$910.00 \$118.30 \$1,028.30

\$1,028.30 Total: \$1,028.30 Received: \$0.00

Change: **********2825 Cheque.:



GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK ON K0C 1W0

(613) 538-2776

HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 12/04/2022 2:21 pm EXIT: 12/04/2022 2:44 pm

GROSS 30610 kg Scale In TARE 14210 kg Scale Out

NET 16400 kg

Qty

16.40 **CONTAMINATED SOIL** ΜT

VEHICLE #: BB 60710 CONTAINER:

1600 Laperriere Ave.

BB 60710 LICENSE:

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

TYPE CASH

001726 - Theberge Developments Ltd.

REFERENCE:

Unit Description **Taxes** Total Rate Subtotal \$52.00 \$852.80 \$110.86 \$963.66

Have A Nice Day! **ALL SALES ARE FINAL**

SIGNATURE:

\$963.66 Received: Change: \$0.00 **********2825 Cheque .: **VISA**

GREEN FOR LIFE

TICKET#: 527323

GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK, ON KOC 1WO

(613) 538-2776

HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 12/04/2022 2:21 pm EXIT: 12/04/2022 2:44 pm

kg k Scale In **GROSS** 30610 14210 Scale Out

16400 **NET** kq

TARE kg

OTY Unit Description 16.40 MT CONTAMINATED SOIL

Have A Nice Day! **ALL SALES ARE FINAL** **TYPE CASH**

001726 - Theberge Developments Ltd. 1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

BB 60710 VEHICLE:

CONTAINER:

BB 60710 LICENSE:

REFERENCE:

Taxes Total Rate Sub Total \$52.00 \$852.80 \$110.86 \$963.66

\$963.66 Total:

Total:

\$963.66

\$963.66 Received: \$0.00 Change: **********2825 Cheque .:

VISA

SIGNATURE:



GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK ON K0C 1W0

(613) 538-2776 HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 13/04/2022 7:04 am EXIT: 13/04/2022 7:21 am

38570 **GROSS** ka Scale In TARE 15130 kg Scale Out

NET 23440 kg

Qty Unit Description **Taxes** Rate Subtotal Total 23.44 **CONTAMINATED SOIL** \$52.00 ΜT

Have A Nice Day! **ALL SALES ARE FINAL**

SIGNATURE:

GREEN FOR LIFE

TICKET#: 527367

GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK, ON KOC 1WO

(613) 538-2776

HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 13/04/2022 7:04 am EXIT: 13/04/2022 7:21 am

GROSS 38570 kg k Scale In 15130 Scale Out **TARE** kg

23440 **NET** kq

OTY Unit Description

Total Rate 23.44 MT CONTAMINATED SOIL \$52.00 \$1.218.88 \$158.45 \$1,377.33

Have A Nice Day!

ALL SALES ARE FINAL

SIGNATURE:

TYPE CASH

001726 - Theberge Developments Ltd.

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

VEHICLE #: AN 51804

CONTAINER:

AN 51804 LICENSE:

REFERENCE:

\$1,218.88 \$158.45 \$1,377.33

> Total: \$1,377.33 \$1,377.33 Received:

Change: \$0.00 Cheque .:

**********2825

VISA

TYPE CASH

001726 - Theberge Developments Ltd.

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

VEHICLE: AN 51804

CONTAINER:

AN 51804 LICENSE:

REFERENCE:

Taxes Sub Total

\$1,377.33 Total: \$1,377.33 Received: \$0.00

Change: *********2825 Cheque.:



GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK ON K0C 1W0

(613) 538-2776

HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 13/04/2022 7:15 am EXIT: 13/04/2022 7:29 am

35640 **GROSS** ka Scale In TARE 14340 kg Scale Out

NET 21300 kg

Qty Unit Description

21.30 **CONTAMINATED SOIL** ΜT

001726 - Theberge Developments Ltd.

TYPE CASH

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

VEHICLE #: BB 60710

CONTAINER:

BB 60710 LICENSE:

REFERENCE:

Taxes Rate Subtotal Total \$52.00 \$1,107.60 \$143.99 \$1,251.59

Have A Nice Day! **ALL SALES ARE FINAL**

Total: \$1,251.59 \$1,251.59 Received: Change: \$0.00 **********2825 Cheque .:

VISA

SIGNATURE:

GREEN FOR LIFE

TICKET#: 527369

GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK, ON KOC 1WO

(613) 538-2776

HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 13/04/2022 7:15 am EXIT: 13/04/2022 7:29 am

GROSS 35640 kg k Scale In 14340 Scale Out **TARE** kg

21300 **NET** kq EarthMovers - 177 Armstrong St.

Ottawa, Ontario, ON K2B 8H6

TYPE CASH

001726 - Theberge Developments Ltd.

BB 60710 VEHICLE:

CONTAINER:

1600 Laperriere Ave.

BB 60710 LICENSE:

REFERENCE:

OTY Unit Description

Taxes Total Rate Sub Total 21.30 MT CONTAMINATED SOIL \$52.00 \$1,107.60 \$143.99 \$1,251.59

Have A Nice Day!

ALL SALES ARE FINAL

\$1,251.59 Total: \$1,251.59 Received:

\$0.00 Change: ******2825 Cheque .:

SIGNATURE: VISA



GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK ON KOC 1WO

(613) 538-2776 HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 13/04/2022 7:18 am EXIT: 13/04/2022 7:31 am

GROSS 36010 kg Scale In TARE 14410 kg Scale Out

NET 21600 kg

Qty Unit Description
21.60 MT CONTAMINATED SOIL

Have A Nice Day!

ALL SALES ARE FINAL

SIGNATURE:

TICKET#: 527370

GFL Environmental Inc. 17125 Lafleche Road MOOSE CREEK, ON K0C 1W0

(613) 538-2776

HST - **84188 4893 RT0001**

ATTENDENT: sabjoa

ENTER: 13/04/2022 7:18 am EXIT: 13/04/2022 7:31 am

GROSS 36010 kg k Scale In TARE 14410 kg Scale Out

NET 21600 kg

QTY Unit Description

21.60 MT CONTAMINATED SOIL

Have A Nice Day!

ALL SALES ARE FINAL

SIGNATURE:

TYPE CASH

001726 - Theberge Developments Ltd.

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

VEHICLE #: BB 60709

CONTAINER:

LICENSE: BB 60709

REFERENCE:

Rate Subtotal Taxes Total

\$52.00 \$1,123.20 \$146.02 \$1,269.22

Total: \$1,269.22 Received: \$1,269.22

Change: \$0.00 Cheque.: *******2825

VISA

GREEN FOR LIFE
TYPE CASH

001726 - Theberge Developments Ltd.

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

VEHICLE: BB 60709

CONTAINER:

LICENSE: BB 60709

REFERENCE:

Rate Sub Total Taxes Total \$52.00 \$1,123.20 \$146.02 \$1,269.22

00 ψ1,120.20 ψ140.02 ψ1,203.22

Total: \$1,269.22 Received: \$1,269.22

Change: \$0.00 Cheque.: ********2825



GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK ON K0C 1W0

(613) 538-2776 HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 13/04/2022 9:28 am EXIT: 13/04/2022 9:45 am

GROSS 26930 kg Scale In TARE 14380 kg Scale Out

NET 12550 kg

Qty Unit Description
12.55 MT CONTAMINATED SOIL

Have A Nice Day!
ALL SALES ARE FINAL

SIGNATURE:

environmental TYPE CASH

001726 - Theberge Developments Ltd.

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

VEHICLE #: BB 60709

CONTAINER:

LICENSE: BB 60709

REFERENCE:

Rate Subtotal Taxes Total \$52.00 \$652.60 \$84.84 \$737.44

Total: \$737.44 Received: \$737.44 Change: \$0.00

Cheque.: *********2825

VISA



TICKET#: 527409

GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK, ON K0C 1W0

(613) 538-2776

HST - **84188 4893 RT0001**

ATTENDENT: sabjoa

ENTER: 13/04/2022 9:28 am EXIT: 13/04/2022 9:45 am

GROSS 26930 kg k Scale In TARE 14380 kg Scale Out

NET 12550 kg

QTY Unit Description

12.55 MT CONTAMINATED SOIL \$52.00 \$652.60

Have A Nice Day!

ALL SALES ARE FINAL

SIGNATURE:

001726 - Theberge Developments Ltd.

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

TYPE CASH

EarthMovers - 177 Armstrong St.

VEHICLE: BB 60709

CONTAINER:

LICENSE: BB 60709

REFERENCE:

Rate

Sub Total Taxes \$652.60 \$84.84

\$84.84 \$737.44

Total: \$737.44 Received: \$737.44 Change: \$0.00

Change: \$0.00 Cheque.: *********2825

Total



GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK ON K0C 1W0

(613) 538-2776 HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 13/04/2022 9:40 am EXIT: 13/04/2022 10:07 am

GROSS 29570 kg Scale In TARE 14290 kg Scale Out

NET 15280 kg

Qty Unit Description

15.28 **CONTAMINATED SOIL** ΜT

> Have A Nice Day! **ALL SALES ARE FINAL**

SIGNATURE:

TYPE CASH

001726 - Theberge Developments Ltd.

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

VEHICLE #: BB 60710

CONTAINER:

BB 60710 LICENSE:

REFERENCE:

Taxes Total Rate Subtotal \$52.00 \$794.56 \$103.29 \$897.85

> Total: \$897.85 \$897.85 Received: Change:

\$0.00 **********2825 Cheque .:

VISA



TICKET#: 527414

GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK, ON KOC 1WO

(613) 538-2776

HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 13/04/2022 9:40 am EXIT: 13/04/2022 10:07 am

GROSS 29570 kg k Scale In 14290 Scale Out **TARE** kg

15280 **NET** kq

OTY Unit Description

15.28 MT CONTAMINATED SOIL

Have A Nice Day!

ALL SALES ARE FINAL

SIGNATURE:

TYPE CASH

001726 - Theberge Developments Ltd.

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

BB 60710 VEHICLE:

CONTAINER:

BB 60710 LICENSE:

REFERENCE:

Taxes Total Rate Sub Total \$52.00 \$794.56 \$103.29 \$897.85

\$897.85 Total: \$897.85 Received:

\$0.00 Change: **********2825 Cheque .:



GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK ON K0C 1W0

(613) 538-2776

HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 13/04/2022 9:41 am EXIT: 13/04/2022 10:15 am

40120 **GROSS** ka Scale In TARE 15110 kg Scale Out

NET 25010 kg

Qty Unit Description

25.01 **CONTAMINATED SOIL** ΜT

Have A Nice Day! **ALL SALES ARE FINAL**

SIGNATURE:

TICKET#: 527415

GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK, ON KOC 1WO

(613) 538-2776

HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 13/04/2022 9:41 am EXIT: 13/04/2022 10:15 am

GROSS 40120 kg k Scale In 15110 Scale Out **TARE** kg

25010 **NET** kq

OTY Unit Description

25.01 MT CONTAMINATED SOIL

Have A Nice Day!

ALL SALES ARE FINAL

SIGNATURE:

TYPE CASH

001726 - Theberge Developments Ltd.

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

VEHICLE #: AN 51804

CONTAINER:

AN 51804 LICENSE:

REFERENCE:

Total Rate Subtotal **Taxes**

\$52.00 \$1,300.52 \$169.07 \$1,469.59

> Total: \$1,469.59 \$1,469.59 Received:

Change: \$0.00 **********2825 Cheque .:

VISA

GREEN FOR LIFE **TYPE CASH**

001726 - Theberge Developments Ltd.

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

VEHICLE: AN 51804

CONTAINER:

AN 51804 LICENSE:

REFERENCE:

Taxes Total Rate Sub Total \$52.00

\$1,300.52 \$169.07 \$1,469.59

> \$1,469.59 Total: \$1,469.59 Received:

\$0.00 Change: **********2825 Cheque.:



GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK ON K0C 1W0

(613) 538-2776 HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 12/04/2022 2:20 pm EXIT: 12/04/2022 2:40 pm

GROSS 33730 kg Scale In TARE 14300 kg Scale Out

NET 19430 kg

Qty Unit Description **Taxes** Rate Subtotal Total 19.43 **CONTAMINATED SOIL** \$52.00 ΜT

Have A Nice Day! **ALL SALES ARE FINAL**

SIGNATURE:

GREEN FOR LIFE

TICKET#: 527320

GFL Environmental Inc. 17125 Lafleche Road

MOOSE CREEK, ON KOC 1WO

(613) 538-2776 HST - 84188 4893 RT0001

ATTENDENT: sabjoa

ENTER: 12/04/2022 2:20 pm EXIT: 12/04/2022 2:40 pm

GROSS 33730 kg k Scale In 14300 Scale Out **TARE** kg

19430 **NET** kq

OTY Unit Description

19.43 MT CONTAMINATED SOIL \$52.00 \$1,010.36 \$131.35 \$1,141.71

Have A Nice Day!

ALL SALES ARE FINAL

SIGNATURE:

TYPE CASH

001726 - Theberge Developments Ltd.

1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

VEHICLE #: BB 60709

CONTAINER:

BB 60709 LICENSE:

REFERENCE:

\$1,010.36 \$131.35 \$1,141.71

> Total: \$1,141.71 \$1,141.71 Received:

Change: \$0.00 **********2825 Cheque .:

VISA

TYPE CASH

001726 - Theberge Developments Ltd. 1600 Laperriere Ave.

Ottawa, Ontario, ON K2B 8H6

EarthMovers - 177 Armstrong St.

BB 60709 VEHICLE:

CONTAINER:

BB 60709 LICENSE:

REFERENCE:

Taxes Total Rate Sub Total

\$1,141.71 Total: \$1,141.71 Received:

\$0.00 Change:

*********2825 Cheque.: