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January 17, 2022
File: PE5547-LET.01

Thomas Cavanagh Construction Limited
9094 Cavanagh Road
Ashton, Ontario
K0A 1B0

Attention: Mr. Kyle Montgomery

Subject: Soil Quality Assessment
5000 Robert Grant Avenue
Ottawa, Ontario

Dear Sir,

Further to your request and authorization, Paterson Group (Paterson) conducted an excess soil quality assessment at the abovenoted address (the project area). It is our understanding that as part of the proposed residential development of the project area, excess soil will be generated, the majority of which will require off-site disposal at a local reuse site. At this time, potential reuse sites have not been provided.

Previous Engineering Reports

The following engineering reports were reviewed prior to conducting this assessment:

- "Phase I Environmental Site Assessment, 360 Bobolink Ridge (Block 203 – Fernbank Village), Ottawa, Ontario", prepared by Paterson Group and dated June 2, 2017.

The property was an undeveloped grass covered lot with a gravel entrance and gravel road connecting Robert Grant Avenue and Livery Street. The neighbouring properties to the north, west and south were vacant. Properties to the east were developed with residential dwellings. No PCAs or APECs were identified within or surrounding the property.

Based on the findings of the Phase I ESA, no further work was required for the Phase I property.

- ❑ “Phase I Environmental Site Assessment Update, 1000 Robert Grant Avenue (Block 203 – Fernbank Village), Ottawa, Ontario”, prepared by Paterson Group and dated August 24, 2021.

A review of recent records and a site inspection, confirms the information and findings contained in the original 2017 Phase I ESA completed by Paterson.

Based on the findings of the Phase I ESA update, no further work was required for the Phase I property.

Observations

A test pit program was carried out for the subject property on December 10, 2021. At that time, representative grab samples were recovered from 24 test pit locations (TP1-21 to TP24-21). The test pits were advanced using an excavator and terminated at depths ranging from approximately 1.4 m to 4.0 m below ground surface. A total of 65 soil samples were recovered from the test pit locations, 24 of which were submitted for laboratory analysis.

The surficial soils encountered across the site generally consisted of fill material generally consisting of brown silty sand with clay, gravel, and/or organics. The fill material was encountered at ground level and extended to depths ranging from approximately 0 m to 1.7 m below ground surface. A layer of native brown silty clay was identified beneath the fill material across the site, followed by glacial till consisting of a silty sand to silty clay matrix in some areas.

No apparent deleterious materials or any visual or olfactory signs of potential contamination were observed in the test pits at the time of the field program.

Analytical Test Results

Twenty-four representative soil samples were submitted to Paracel Laboratories (Paracel) in Ottawa for bulk analysis of benzene, ethylbenzene, toluene and xylenes (BTEX), petroleum hydrocarbons (PHCs, Fractions F1 to F4), metals and inorganics.

The test results obtained during the current investigation are presented in the tables appended to this letter, along with the laboratory Certificates of Analysis.

The test results have been compared to the following MECP Excess Soil Quality Standards (ESQS) standards to assist in determining an appropriate reuse site:

- ❒ Table 2.1 Residential/Parkland/Institutional (RPI) - Potable;
- ❒ Table 2.1 Industrial/Commercial/Community (ICC) - Potable;

- ❒ Table 3.1 RPI – Non-Potable;
- ❒ Table 3.1 ICC – Non-Potable;
- ❒ Table 4.1 ICC – Stratified (below 1.5m), Potable

The abovenoted tables were selected as they are considered to represent common reuse scenarios. Other reuse standards should be assessed if the excess soil is intended to be used at an agricultural property, a property within 30 m of a water body, or a property in an environmentally sensitive area (such as a significant wetland).

Analytical results were also compared to MECP Table 3 Residential/Parkland/Institutional for coarse grained soils, which are considered to represent the site-specific standards, in the event that soils will remain on-site.

pH

All samples submitted for pH analysis were found to be between 5 and 9, and fall within the acceptable pH range for both surface soils and subsurface soils.

Metals

All metals analysis were found to be in compliance with site standards, as well as with all ESQS.

BTEX

All BTEX analysis were found to be in compliance with site standards, as well as with all ESQS.

PHCs (F1-F4)

All PHC analysis were found to be in compliance with site standards, as well as with all ESQS.

Conclusion

A total of 65 soil samples were collected from various locations from within the subject site. Of the 65 samples, 24 representative samples of the various layers were submitted to Paracel Laboratories for analyses of BTEX, PHCs (Fractions F1 to F4), metals and inorganics.

The soil profile generally consisted of fill material over top of brown silty clay and glacial till. The fill material generally consisted of brown silty sand with clay, gravel, and/or organics.

All soil samples were found to comply with MECP site standards for on-site reuse purposes, as well as MECP Table 2.1 and 3.1 standards for residential/parkland/institutional uses and industrial/commercial/community uses. Soil also meets MECP Table 4.1 subsurface standards for an industrial/commercial site.

Recommendations

The following options are available for the management of soil:

- ❑ Reuse of excess soil must have a beneficial purpose.
- ❑ All soil can be beneficially reused at a residential, parkland or institutional property, where the reuse site and surrounding properties utilise groundwater as a potable water source. (MECP Table 2.1 RPI)
- ❑ All soil can be beneficially reused at a residential, parkland or institutional property, where the reuse site and surrounding properties utilise municipally treated water as a potable water source. (MECP Table 3.1 RPI)
- ❑ All soil can be beneficially reused at an industrial, commercial, or community use property, where the reuse site and surrounding properties utilise groundwater as a potable water source. (MECP Table 2.1 ICC)
- ❑ All soil can be beneficially reused at an industrial, commercial, or community use property, where the reuse site and surrounding properties utilise municipally treated water as a potable water source. (MECP Table 3.1 ICC)
- ❑ All soil can be beneficially reused at an industrial, commercial, of community use property, (such as a pit or a quarry) where the soil will be finally placed at a depth greater than 1.5 m (MECP Table 4.1 ICC subsurface).
- ❑ All soil can be reused on-site (MECP Table 3 RPI)

It is Paterson's understanding that the project leader (Lepine Homes) entered into a contract with Cavanagh, with respect to the management of excess soil from the project before January 1, 2022, and therefore, a notice to the registry, documentation and tracking is not required for this project.

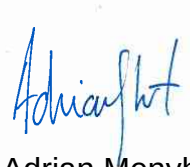
Statement of Limitations

A soils investigation of this nature is a limited sampling program. Should any conditions at the site be encountered which differ from those at the test locations, we request that we be notified immediately in order to permit reassessment of our recommendations/conclusions.

The present report applies only to the project described in this document. Use of this report for purposes other than those described herein or by person(s) other than Thomas Cavanagh Construction Limited, or their agents, without review by this firm for the applicability of our recommendations to the altered use of the report, is prohibited.

Regards,

Paterson Group Inc.



Adrian Menyhart, P.Eng

Attachments

- ❑ Tables – Analytical Test Results
- ❑ Test Hole Location Plan
- ❑ Laboratory Certificates of Analysis

Table 1: MECP Table 3 RPI
Soil Analytical Test Results
5000 Robert Grant Avenue, Ottawa, Ontario

Parameter	Units	MDL	Regulation	Sample																							
				TP1-21-G3	TP2-21-G2	TP3-21-G3	TP4-21-G1	TP5-21-G3	TP6-21-G1	TP7-21-G2	TP8-21-G3	TP9-21-G1	TP10-21-G3	TP11-21-G2	TP12-21-G2	TP13-21-G2	TP14-21-G1	TP15-21-G3	TP16-21-G3	TP17-21-G1	TP18-21-G2	TP19-21-G1	TP20-21-G2	TP21-21-G1	TP22-21-G2	TP23-21-G1	TP24-21-G1
Sample Depth (m)			Reg 153/04 (2011) - Table 3 Residential, coarse	3.0-3.2	1.0-1.2	3.4-3.6	0-0.55	3.5-3.8	0-0.52	1.0-1.2	3.0-3.2	0-0.50	3.0-3.2	1.0-1.2	1.0-1.2	0.7-1.2	0-0.50	3.0-3.2	3.6-3.8	0-0.50	1.2-1.4	0-0.40	1.8-2.0	0-0.50	2.0-2.2	0.3-0.7	0-0.50
Sample Date (m/d/y)				10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21
General Inorganics																											
pH	pH Units	0.05		7.93	NA	NA	NA	NA	NA	NA	7.51	NA	NA	NA	7.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.52
Metals																											
Antimony	ug/g dry	1	7.5 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Arsenic	ug/g dry	1	18 ug/g dry	2.2	3.1	2.2	2.3	2.2	2.6	3.0	2.6	2.1	3.3	2.2	1.9	2.8	2.5	2.9	2.0	3.2	2.6	3.5	2.5	2.4	2.1	2.6	2.2
Barium	ug/g dry	1	390 ug/g dry	202	237	119	128	173	180	234	182	126	287	177	50.9	132	153	302	92.5	145	111	199	81.3	167	75.4	140	65.4
Beryllium	ug/g dry	0.5	4 ug/g dry	0.7	0.7	ND (0.5)	ND (0.5)	0.5	0.6	0.7	0.6	ND (0.5)	0.9	ND (0.5)	ND (0.5)	0.6	ND (0.5)	0.8	ND (0.5)	0.5	ND (0.5)	0.7	ND (0.5)	0.5	ND (0.5)	ND (0.5)	ND (0.5)
Boron	ug/g dry	5	120 ug/g dry	8.9	6.7	ND (5.0)	ND (5.0)	6.0	5.8	7.1	5.1	ND (5.0)	6.7	5.0	ND (5.0)	5.4	5.1	6.9	ND (5.0)	6.8	6.6	7.7	ND (5.0)	5.0	ND (5.0)	ND (5.0)	ND (5.0)
Cadmium	ug/g dry	0.5	1.2 ug/g dry	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Chromium	ug/g dry	5	160 ug/g dry	42.6	55.8	32.7	30.3	35.7	44.9	58.8	45.0	30.2	66.1	39.7	18.8	32.7	38.3	54.3	24.1	31.3	28.5	43.1	22.0	40.5	22.6	32.3	23.8
Cobalt	ug/g dry	1	22 ug/g dry	11.6	14.1	7.8	8.0	9.9	11.6	15.0	11.6	8.1	17.2	10.6	5.1	7.8	10.3	15.0	7.5	8.4	7.6	11.0	6.5	10.6	6.2	9.3	6.6
Copper	ug/g dry	5	140 ug/g dry	23.0	27.6	20.8	18.4	21.5	23.5	30.3	25.8	18.0	35.0	21.2	15.2	16.9	21.0	30.5	18.1	19.9	15.5	21.1	14.7	21.2	16.3	19.5	16.4
Lead	ug/g dry	1	120 ug/g dry	5.1	5.7	3.2	4.3	4.1	4.7	5.7	4.5	3.3	7.1	3.8	2.9	6.6	6.1	5.7	3.3	5.8	5.8	5.8	3.3	3.9	3.1	3.9	3.3
Molybdenum	ug/g dry	1	6.9 ug/g dry	ND (1.0)	ND (1.0)	1.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Nickel	ug/g dry	5	100 ug/g dry	23.6	30.6	18.9	16.4	20.6	23.8	31.3	23.7	16.4	35.6	21.9	9.8	17.6	21.2	31.2	14.0	17.4	20.1	23.8	11.9	22.1	11.7	18.4	13.1
Selenium	ug/g dry	1	2.4 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Silver	ug/g dry	0.3	20 ug/g dry	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)
Thallium	ug/g dry	1	1 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Uranium	ug/g dry	1	23 ug/g dry	2.2	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	1.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vanadium	ug/g dry	10	86 ug/g dry	61.1	70.6	46.1	45.0	52.5	61.3	76.2	61.1	46.6	77.3	55.4	35.7	43.8	53.5	73.1	43.3	46.0	34.7	58.6	39.3	56.7	40.3	48.2	41.8
Zinc	ug/g dry	20	340 ug/g dry	67.4	86.7	40.0	48.6	57.2	65.7	90.0	65.5	44.4	98.2	60.6	28.6	56.2	57.4	91.1	35.7	51.7	31.5	64.9	32.1	60.1	33.1	49.2	34.3
Volatiles																											
Benzene	ug/g dry	0.02	0.21 ug/g dry	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)
Ethylbenzene	ug/g dry	0.05	2 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Toluene	ug/g dry	0.05	2.3 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
m/p-Xylene	ug/g dry	0.05		ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
o-Xylene	ug/g dry	0.05		ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Xylenes, total	ug/g dry	0.05	3.1 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Hydrocarbons																											
F1 PHCs (C6-C10)	ug/g dry	7	55 ug/g dry	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)
F2 PHCs (C10-C16)	ug/g dry	4	98 ug/g dry	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)
F3 PHCs (C16-C34)	ug/g dry	8	300 ug/g dry	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)
F4 PHCs (C34-C50)	ug/g dry	6	2800 ug/g dry	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)

Notes

	Result exceeds applicable site condition standard
MDL	Method Detection Limit
NA	Not Reported
ND	Not Detected

Table 2: MECP Table 2.1 RPI
Soil Analytical Test Results
5000 Robert Grant Avenue, Ottawa, Ontario

Parameter	Units	MDL	Regulation	Sample																								
				TP1-21-G3	TP2-21-G2	TP3-21-G3	TP4-21-G1	TP5-21-G3	TP6-21-G1	TP7-21-G2	TP8-21-G3	TP9-21-G1	TP10-21-G3	TP11-21-G2	TP12-21-G2	TP13-21-G2	TP14-21-G1	TP15-21-G3	TP16-21-G3	TP17-21-G1	TP18-21-G2	TP19-21-G1	TP20-21-G2	TP21-21-G1	TP22-21-G2	TP23-21-G1	TP24-21-G1
Sample Depth (m)			Reg 406/19 - Table 2.1 Residential/Parkland/Institutional	3.0-3.2	1.0-1.2	3.4-3.6	0-0.55	3.5-3.8	0-0.52	1.0-1.2	3.0-3.2	0-0.50	3.0-3.2	1.0-1.2	1.0-1.2	0.7-1.2	0-0.50	3.0-3.2	3.6-3.8	0-0.50	1.2-1.4	0-0.40	1.8-2.0	0-0.50	2.0-2.2	0.3-0.7	0-0.50
Sample Date (m/d/y)				10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21
General Inorganics																												
pH	pH Units	0.05	5 pH units (5 pH Units)	7.93	NA	NA	NA	NA	NA	NA	7.51	NA	NA	NA	7.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.52
Metals																												
Antimony	ug/g dry	1	7.5 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Arsenic	ug/g dry	1	18 ug/g dry	2.2	3.1	2.2	2.3	2.2	2.6	3.0	2.6	2.1	3.3	2.2	1.9	2.8	2.5	2.9	2.0	3.2	2.6	3.5	2.5	2.4	2.1	2.6	2.2
Barium	ug/g dry	1	390 ug/g dry	202	237	119	128	173	180	234	182	126	287	177	50.9	132	153	302	92.5	145	111	199	81.3	167	75.4	140	65.4
Beryllium	ug/g dry	0.5	4 ug/g dry	0.7	0.7	ND (0.5)	ND (0.5)	0.5	0.6	0.7	0.6	ND (0.5)	0.9	ND (0.5)	ND (0.5)	0.6	ND (0.5)	0.8	ND (0.5)	0.5	ND (0.5)	0.7	ND (0.5)	0.5	ND (0.5)	ND (0.5)	ND (0.5)
Boron	ug/g dry	5	120 ug/g dry	8.9	6.7	ND (5.0)	ND (5.0)	6.0	5.8	7.1	5.1	ND (5.0)	6.7	5.0	ND (5.0)	5.4	5.1	6.9	ND (5.0)	6.8	6.6	7.7	ND (5.0)	5.0	ND (5.0)	ND (5.0)	ND (5.0)
Cadmium	ug/g dry	0.5	1.2 ug/g dry	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Chromium	ug/g dry	5	160 ug/g dry	42.6	55.8	32.7	30.3	35.7	44.9	58.8	45.0	30.2	66.1	39.7	18.8	32.7	38.3	54.3	24.1	31.3	28.5	43.1	22.0	40.5	22.6	32.3	23.8
Cobalt	ug/g dry	1	22 ug/g dry	11.6	14.1	7.8	8.0	9.9	11.6	15.0	11.6	8.1	17.2	10.6	5.1	7.8	10.3	15.0	7.5	8.4	7.6	11.0	6.5	10.6	6.2	9.3	6.6
Copper	ug/g dry	5	140 ug/g dry	23.0	27.6	20.8	18.4	21.5	23.5	30.3	25.8	18.0	35.0	21.2	15.2	16.9	21.0	30.5	18.1	19.9	15.5	21.1	14.7	21.2	16.3	19.5	16.4
Lead	ug/g dry	1	120 ug/g dry	5.1	5.7	3.2	4.3	4.1	4.7	5.7	4.5	3.3	7.1	3.8	2.9	6.6	6.1	5.7	3.3	5.8	5.8	5.8	3.3	3.9	3.1	3.9	3.3
Molybdenum	ug/g dry	1	6.9 ug/g dry	ND (1.0)	ND (1.0)	1.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Nickel	ug/g dry	5	100 ug/g dry	23.6	30.6	18.9	16.4	20.6	23.8	31.3	23.7	16.4	35.6	21.9	9.8	17.6	21.2	31.2	14.0	17.4	20.1	23.8	11.9	22.1	11.7	18.4	13.1
Selenium	ug/g dry	1	2.4 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Silver	ug/g dry	0.3	20 ug/g dry	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)
Thallium	ug/g dry	1	1 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Uranium	ug/g dry	1	23 ug/g dry	2.2	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	1.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vanadium	ug/g dry	10	86 ug/g dry	61.1	70.6	46.1	45.0	52.5	61.3	76.2	61.1	46.6	77.3	55.4	35.7	43.8	53.5	73.1	43.3	46.0	34.7	58.6	39.3	56.7	40.3	48.2	41.8
Zinc	ug/g dry	20	340 ug/g dry	67.4	86.7	40.0	48.6	57.2	65.7	90.0	65.5	44.4	98.2	60.6	28.6	56.2	57.4	91.1	35.7	51.7	31.5	64.9	32.1	60.1	33.1	49.2	34.3
Volatiles																												
Benzene	ug/g dry	0.02	0.02 ug/g dry	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)
Ethylbenzene	ug/g dry	0.05	0.05 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Toluene	ug/g dry	0.05	0.2 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
m/p-Xylene	ug/g dry	0.05		ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
o-Xylene	ug/g dry	0.05		ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Xylenes, total	ug/g dry	0.05	0.091 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Hydrocarbons																												
F1 PHCs (C6-C10)	ug/g dry	7	25 ug/g dry	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)
F2 PHCs (C10-C16)	ug/g dry	4	10 ug/g dry	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)
F3 PHCs (C16-C34)	ug/g dry	8	240 ug/g dry	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)
F4 PHCs (C34-C50)	ug/g dry	6	2800 ug/g dry	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)

Notes

	Result exceeds applicable site condition standard
MDL	Method Detection Limit
NA	Not Reported
ND	Not Detected

Table 3: Table 2.1 ICC

Soil Analytical Test Results

5000 Robert Grant Avenue, Ottawa, Ontario

Parameter	Units	MDL	Regulation	Sample																								
				TP1-21-G3	TP2-21-G2	TP3-21-G3	TP4-21-G1	TP5-21-G3	TP6-21-G1	TP7-21-G2	TP8-21-G3	TP9-21-G1	TP10-21-G3	TP11-21-G2	TP12-21-G2	TP13-21-G2	TP14-21-G1	TP15-21-G3	TP16-21-G3	TP17-21-G1	TP18-21-G2	TP19-21-G1	TP20-21-G2	TP21-21-G1	TP22-21-G2	TP23-21-G1	TP24-21-G1
Sample Depth (m)			**Reg 406/19 - Table 2.1 Industrial/Commercial**	**3.0-3.2**	**1.0-1.2**	**3.4-3.6**	**0-0.55**	**3.5-3.8**	**0-0.52**	**1.0-1.2**	**3.0-3.2**	**0-0.50**	**3.0-3.2**	**1.0-1.2**	**1.0-1.2**	**0.7-1.2**	**0-0.50**	**3.0-3.2**	**3.6-3.8**	**0-0.50**	**1.2-1.4**	**0-0.40**	**1.8-2.0**	**0-0.50**	**2.0-2.2**	**0.3-0.7**	**0-0.50**
Sample Date (m/d/y)				10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21
General Inorganics																												
pH	pH Units	0.05	5 pH units (5 pH Units)	7.93	NA	NA	NA	NA	NA	NA	7.51	NA	NA	NA	7.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.52
Metals																												
Antimony	ug/g dry	1	40 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Arsenic	ug/g dry	1	18 ug/g dry	2.2	3.1	2.2	2.3	2.2	2.6	3.0	2.6	2.1	3.3	2.2	1.9	2.8	2.5	2.9	2.0	3.2	2.6	3.5	2.5	2.4	2.1	2.6	2.2
Barium	ug/g dry	1	670 ug/g dry	202	237	119	128	173	180	234	182	126	287	177	50.9	132	153	302	92.5	145	111	199	81.3	167	75.4	140	65.4
Beryllium	ug/g dry	0.5	8 ug/g dry	0.7	0.7	ND (0.5)	ND (0.5)	0.5	0.6	0.7	0.6	ND (0.5)	0.9	ND (0.5)	ND (0.5)	0.6	ND (0.5)	0.8	ND (0.5)	0.5	ND (0.5)	0.7	ND (0.5)	0.5	ND (0.5)	ND (0.5)	ND (0.5)
Boron	ug/g dry	5	120 ug/g dry	8.9	6.7	ND (5.0)	ND (5.0)	6.0	5.8	7.1	5.1	ND (5.0)	6.7	5.0	ND (5.0)	5.4	5.1	6.9	ND (5.0)	6.8	6.6	7.7	ND (5.0)	5.0	ND (5.0)	ND (5.0)	ND (5.0)
Cadmium	ug/g dry	0.5	1.9 ug/g dry	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Chromium	ug/g dry	5	160 ug/g dry	42.6	55.8	32.7	30.3	35.7	44.9	58.8	45.0	30.2	66.1	39.7	18.8	32.7	38.3	54.3	24.1	31.3	28.5	43.1	22.0	40.5	22.6	32.3	23.8
Cobalt	ug/g dry	1	80 ug/g dry	11.6	14.1	7.8	8.0	9.9	11.6	15.0	11.6	8.1	17.2	10.6	5.1	7.8	10.3	15.0	7.5	8.4	7.6	11.0	6.5	10.6	6.2	9.3	6.6
Copper	ug/g dry	5	230 ug/g dry	23.0	27.6	20.8	18.4	21.5	23.5	30.3	25.8	18.0	35.0	21.2	15.2	16.9	21.0	30.5	18.1	19.9	15.5	21.1	14.7	21.2	16.3	19.5	16.4
Lead	ug/g dry	1	120 ug/g dry	5.1	5.7	3.2	4.3	4.1	4.7	5.7	4.5	3.3	7.1	3.8	2.9	6.6	6.1	5.7	3.3	5.8	5.8	5.8	3.3	3.9	3.1	3.9	3.3
Molybdenum	ug/g dry	1	40 ug/g dry	ND (1.0)	ND (1.0)	1.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Nickel	ug/g dry	5	270 ug/g dry	23.6	30.6	18.9	16.4	20.6	23.8	31.3	23.7	16.4	35.6	21.9	9.8	17.6	21.2	31.2	14.0	17.4	20.1	23.8	11.9	22.1	11.7	18.4	13.1
Selenium	ug/g dry	1	5.5 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Silver	ug/g dry	0.3	40 ug/g dry	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)
Thallium	ug/g dry	1	3.3 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Uranium	ug/g dry	1	33 ug/g dry	2.2	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	1.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vanadium	ug/g dry	10	86 ug/g dry	61.1	70.6	46.1	45.0	52.5	61.3	76.2	61.1	46.6	77.3	55.4	35.7	43.8	53.5	73.1	43.3	46.0	34.7	58.6	39.3	56.7	40.3	48.2	41.8
Zinc	ug/g dry	20	340 ug/g dry	67.4	86.7	40.0	48.6	57.2	65.7	90.0	65.5	44.4	98.2	60.6	28.6	56.2	57.4	91.1	35.7	51.7	31.5	64.9	32.1	60.1	33.1	49.2	34.3
Volatiles																												
Benzene	ug/g dry	0.02	0.02 ug/g dry	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)
Ethylbenzene	ug/g dry	0.05	0.05 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Toluene	ug/g dry	0.05	0.2 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
m/p-Xylene	ug/g dry	0.05		ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
o-Xylene	ug/g dry	0.05		ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Xylenes, total	ug/g dry	0.05	0.091 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Hydrocarbons																												
F1 PHCs (C6-C10)	ug/g dry	7	25 ug/g dry	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)
F2 PHCs (C10-C16)	ug/g dry	4	26 ug/g dry	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)
F3 PHCs (C16-C34)	ug/g dry	8	240 ug/g dry	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)
F4 PHCs (C34-C50)	ug/g dry	6	3300 ug/g dry	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)

Notes

	Result exceeds applicable site condition standard
MDL	Method Detection Limit
NA	Not Reported
ND	Not Detected

Table 4: Table 3.1 RPI

Soil Analytical Test Results

5000 Robert Grant Avenue, Ottawa, Ontario

Parameter	Units	MDL	Regulation	Sample																								
				TP1-21-G3	TP2-21-G2	TP3-21-G3	TP4-21-G1	TP5-21-G3	TP6-21-G1	TP7-21-G2	TP8-21-G3	TP9-21-G1	TP10-21-G3	TP11-21-G2	TP12-21-G2	TP13-21-G2	TP14-21-G1	TP15-21-G3	TP16-21-G3	TP17-21-G1	TP18-21-G2	TP19-21-G1	TP20-21-G2	TP21-21-G1	TP22-21-G2	TP23-21-G1	TP24-21-G1
Sample Depth (m)			Reg 406/19 - Table 3.1 Residential/Parkland/Institutional	3.0-3.2	1.0-1.2	3.4-3.6	0-0.55	3.5-3.8	0-0.52	1.0-1.2	3.0-3.2	0-0.50	3.0-3.2	1.0-1.2	1.0-1.2	0.7-1.2	0-0.50	3.0-3.2	3.6-3.8	0-0.50	1.2-1.4	0-0.40	1.8-2.0	0-0.50	2.0-2.2	0.3-0.7	0-0.50
Sample Date (m/d/y)				10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21
General Inorganics																												
pH	pH Units	0.05	5 pH units (5 pH Units)	7.93	NA	NA	NA	NA	NA	NA	7.51	NA	NA	NA	7.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.52
Metals																												
Antimony	ug/g dry	1	7.5 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Arsenic	ug/g dry	1	18 ug/g dry	2.2	3.1	2.2	2.3	2.2	2.6	3.0	2.6	2.1	3.3	2.2	1.9	2.8	2.5	2.9	2.0	3.2	2.6	3.5	2.5	2.4	2.1	2.6	2.2
Barium	ug/g dry	1	390 ug/g dry	202	237	119	128	173	180	234	182	126	287	177	50.9	132	153	302	92.5	145	111	199	81.3	167	75.4	140	65.4
Beryllium	ug/g dry	0.5	4 ug/g dry	0.7	0.7	ND (0.5)	ND (0.5)	0.5	0.6	0.7	0.6	ND (0.5)	0.9	ND (0.5)	ND (0.5)	0.6	ND (0.5)	0.8	ND (0.5)	0.5	ND (0.5)	0.7	ND (0.5)	0.5	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Boron	ug/g dry	5	120 ug/g dry	8.9	6.7	ND (5.0)	ND (5.0)	6.0	5.8	7.1	5.1	ND (5.0)	6.7	5.0	ND (5.0)	5.4	5.1	6.9	ND (5.0)	6.8	6.6	7.7	ND (5.0)	5.0	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Cadmium	ug/g dry	0.5	1.2 ug/g dry	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Chromium	ug/g dry	5	160 ug/g dry	42.6	55.8	32.7	30.3	35.7	44.9	58.8	45.0	30.2	66.1	39.7	18.8	32.7	38.3	54.3	24.1	31.3	28.5	43.1	22.0	40.5	22.6	32.3	23.8
Cobalt	ug/g dry	1	22 ug/g dry	11.6	14.1	7.8	8.0	9.9	11.6	15.0	11.6	8.1	17.2	10.6	5.1	7.8	10.3	15.0	7.5	8.4	7.6	11.0	6.5	10.6	6.2	9.3	6.6
Copper	ug/g dry	5	140 ug/g dry	23.0	27.6	20.8	18.4	21.5	23.5	30.3	25.8	18.0	35.0	21.2	15.2	16.9	21.0	30.5	18.1	19.9	15.5	21.1	14.7	21.2	16.3	19.5	16.4
Lead	ug/g dry	1	120 ug/g dry	5.1	5.7	3.2	4.3	4.1	4.7	5.7	4.5	3.3	7.1	3.8	2.9	6.6	6.1	5.7	3.3	5.8	5.8	5.8	3.3	3.9	3.1	3.9	3.3
Molybdenum	ug/g dry	1	6.9 ug/g dry	ND (1.0)	ND (1.0)	1.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Nickel	ug/g dry	5	100 ug/g dry	23.6	30.6	18.9	16.4	20.6	23.8	31.3	23.7	16.4	35.6	21.9	9.8	17.6	21.2	31.2	14.0	17.4	20.1	23.8	11.9	22.1	11.7	18.4	13.1
Selenium	ug/g dry	1	2.4 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Silver	ug/g dry	0.3	20 ug/g dry	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)
Thallium	ug/g dry	1	1 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Uranium	ug/g dry	1	23 ug/g dry	2.2	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	1.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vanadium	ug/g dry	10	86 ug/g dry	61.1	70.6	46.1	45.0	52.5	61.3	76.2	61.1	46.6	77.3	55.4	35.7	43.8	53.5	73.1	43.3	46.0	34.7	58.6	39.3	56.7	40.3	48.2	41.8
Zinc	ug/g dry	20	340 ug/g dry	67.4	86.7	40.0	48.6	57.2	65.7	90.0	65.5	44.4	98.2	60.6	28.6	56.2	57.4	91.1	35.7	51.7	31.5	64.9	32.1	60.1	33.1	49.2	34.3
Volatiles																												
Benzene	ug/g dry	0.02	0.02 ug/g dry	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)
Ethylbenzene	ug/g dry	0.05	1.9 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Toluene	ug/g dry	0.05	0.99 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
m/p-Xylene	ug/g dry	0.05		ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
o-Xylene	ug/g dry	0.05		ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Xylenes, total	ug/g dry	0.05	0.9 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Hydrocarbons																												
F1 PHCs (C6-C10)	ug/g dry	7	25 ug/g dry	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)
F2 PHCs (C10-C16)	ug/g dry	4	10 ug/g dry	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)
F3 PHCs (C16-C34)	ug/g dry	8	300 ug/g dry	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)
F4 PHCs (C34-C50)	ug/g dry	6	2800 ug/g dry	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)

Notes

	Result exceeds applicable site condition standard
MDL	Method Detection Limit
NA	Not Reported
ND	Not Detected

Table 5: MECP Table 3.1 ICC
Soil Analytical Test Results
5000 Robert Grant Avenue, Ottawa, Ontario

Parameter	Units	MDL	Regulation	Sample																								
				TP1-21-G3	TP2-21-G2	TP3-21-G3	TP4-21-G1	TP5-21-G3	TP6-21-G1	TP7-21-G2	TP8-21-G3	TP9-21-G1	TP10-21-G3	TP11-21-G2	TP12-21-G2	TP13-21-G2	TP14-21-G1	TP15-21-G3	TP16-21-G3	TP17-21-G1	TP18-21-G2	TP19-21-G1	TP20-21-G2	TP21-21-G1	TP22-21-G2	TP23-21-G1	TP24-21-G1
Sample Depth (m)			**Reg 406/19 - Table 3.1 Industrial/Commercial**	**3.0-3.2**	**1.0-1.2**	**3.4-3.6**	**0-0.55**	**3.5-3.8**	**0-0.52**	**1.0-1.2**	**3.0-3.2**	**0-0.50**	**3.0-3.2**	**1.0-1.2**	**1.0-1.2**	**0.7-1.2**	**0-0.50**	**3.0-3.2**	**3.6-3.8**	**0-0.50**	**1.2-1.4**	**0-0.40**	**1.8-2.0**	**0-0.50**	**2.0-2.2**	**0.3-0.7**	**0-0.50**
Sample Date (m/d/y)				10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21
General Inorganics																												
pH	pH Units	0.05	5 pH units (5 pH Units)	7.93	NA	NA	NA	NA	NA	NA	7.51	NA	NA	NA	7.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.52
Metals																												
Antimony	ug/g dry	1	40 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Arsenic	ug/g dry	1	18 ug/g dry	2.2	3.1	2.2	2.3	2.2	2.6	3.0	2.6	2.1	3.3	2.2	1.9	2.8	2.5	2.9	2.0	3.2	2.6	3.5	2.5	2.4	2.1	2.6	2.2
Barium	ug/g dry	1	670 ug/g dry	202	237	119	128	173	180	234	182	126	287	177	50.9	132	153	302	92.5	145	111	199	81.3	167	75.4	140	65.4
Beryllium	ug/g dry	0.5	8 ug/g dry	0.7	0.7	ND (0.5)	ND (0.5)	0.5	0.6	0.7	0.6	ND (0.5)	0.9	ND (0.5)	ND (0.5)	0.6	ND (0.5)	0.8	ND (0.5)	0.5	ND (0.5)	0.7	ND (0.5)	0.5	ND (0.5)	ND (0.5)	ND (0.5)
Boron	ug/g dry	5	120 ug/g dry	8.9	6.7	ND (5.0)	ND (5.0)	6.0	5.8	7.1	5.1	ND (5.0)	6.7	5.0	ND (5.0)	5.4	5.1	6.9	ND (5.0)	6.8	6.6	7.7	ND (5.0)	5.0	ND (5.0)	ND (5.0)	ND (5.0)
Cadmium	ug/g dry	0.5	1.9 ug/g dry	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Chromium	ug/g dry	5	160 ug/g dry	42.6	55.8	32.7	30.3	35.7	44.9	58.8	45.0	30.2	66.1	39.7	18.8	32.7	38.3	54.3	24.1	31.3	28.5	43.1	22.0	40.5	22.6	32.3	23.8
Cobalt	ug/g dry	1	80 ug/g dry	11.6	14.1	7.8	8.0	9.9	11.6	15.0	11.6	8.1	17.2	10.6	5.1	7.8	10.3	15.0	7.5	8.4	7.6	11.0	6.5	10.6	6.2	9.3	6.6
Copper	ug/g dry	5	230 ug/g dry	23.0	27.6	20.8	18.4	21.5	23.5	30.3	25.8	18.0	35.0	21.2	15.2	16.9	21.0	30.5	18.1	19.9	15.5	21.1	14.7	21.2	16.3	19.5	16.4
Lead	ug/g dry	1	120 ug/g dry	5.1	5.7	3.2	4.3	4.1	4.7	5.7	4.5	3.3	7.1	3.8	2.9	6.6	6.1	5.7	3.3	5.8	5.8	5.8	3.3	3.9	3.1	3.9	3.3
Molybdenum	ug/g dry	1	40 ug/g dry	ND (1.0)	ND (1.0)	1.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Nickel	ug/g dry	5	270 ug/g dry	23.6	30.6	18.9	16.4	20.6	23.8	31.3	23.7	16.4	35.6	21.9	9.8	17.6	21.2	31.2	14.0	17.4	20.1	23.8	11.9	22.1	11.7	18.4	13.1
Selenium	ug/g dry	1	5.5 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Silver	ug/g dry	0.3	40 ug/g dry	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)
Thallium	ug/g dry	1	3.3 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Uranium	ug/g dry	1	33 ug/g dry	2.2	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	1.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vanadium	ug/g dry	10	86 ug/g dry	61.1	70.6	46.1	45.0	52.5	61.3	76.2	61.1	46.6	77.3	55.4	35.7	43.8	53.5	73.1	43.3	46.0	34.7	58.6	39.3	56.7	40.3	48.2	41.8
Zinc	ug/g dry	20	340 ug/g dry	67.4	86.7	40.0	48.6	57.2	65.7	90.0	65.5	44.4	98.2	60.6	28.6	56.2	57.4	91.1	35.7	51.7	31.5	64.9	32.1	60.1	33.1	49.2	34.3
Volatiles																												
Benzene	ug/g dry	0.02	0.034 ug/g dry	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)
Ethylbenzene	ug/g dry	0.05	1.9 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Toluene	ug/g dry	0.05	7.8 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
m/p-Xylene	ug/g dry	0.05		ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
o-Xylene	ug/g dry	0.05		ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Xylenes, total	ug/g dry	0.05	3 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Hydrocarbons																												
F1 PHCs (C6-C10)	ug/g dry	7	25 ug/g dry	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)
F2 PHCs (C10-C16)	ug/g dry	4	26 ug/g dry	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)
F3 PHCs (C16-C34)	ug/g dry	8	1700 ug/g dry	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)
F4 PHCs (C34-C50)	ug/g dry	6	3300 ug/g dry	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)

Notes

	Result exceeds applicable site condition standard
MDL	Method Detection Limit
NA	Not Reported
ND	Not Detected

Table 6: MECP Table 4.1 ICC Subsurface

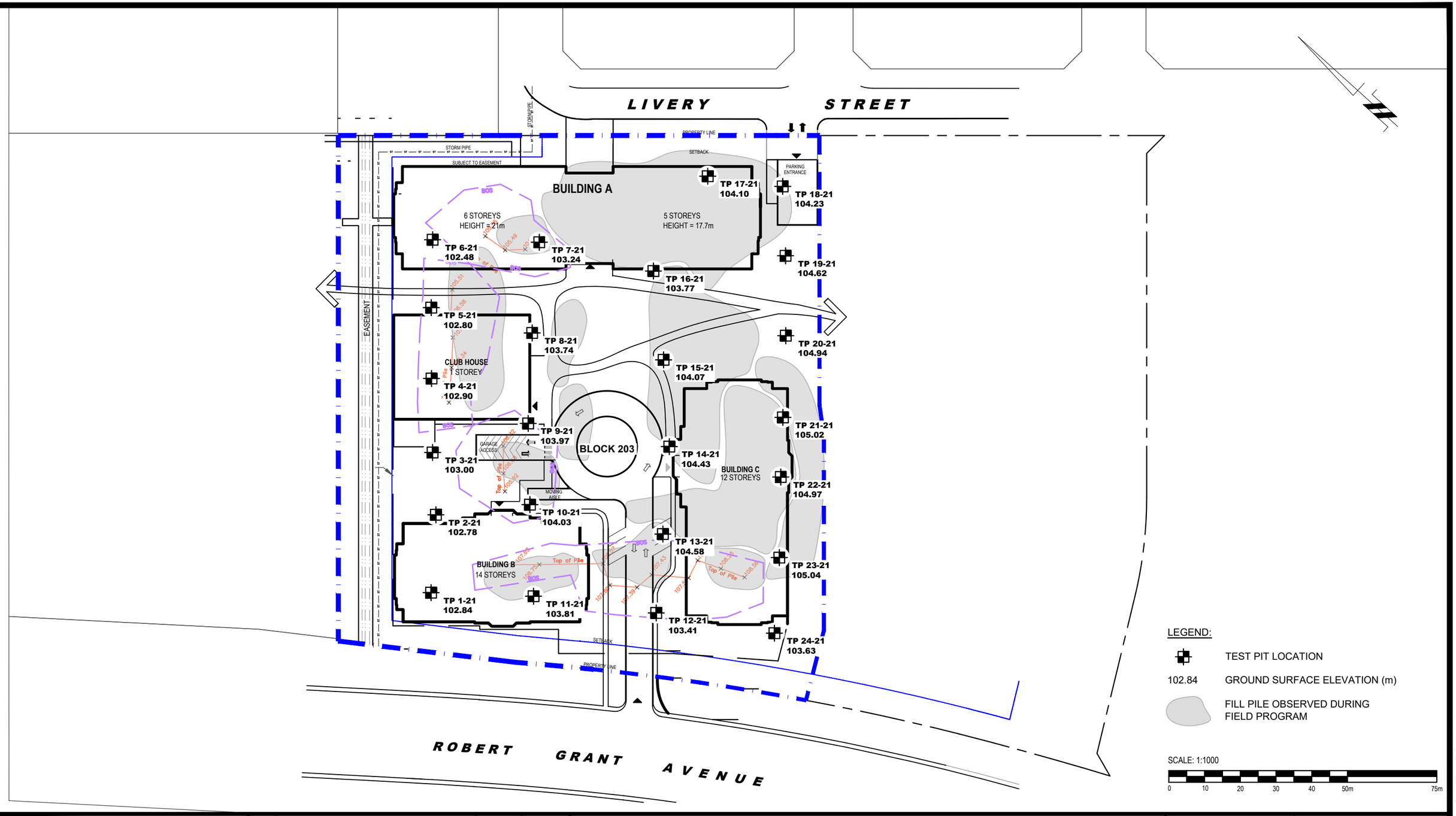
Soil Analytical Test Results

5000 Robert Grant Avenue, Ottawa, Ontario

Parameter	Units	MDL	Regulation	Sample																								
				TP1-21-G3	TP2-21-G2	TP3-21-G3	TP4-21-G1	TP5-21-G3	TP6-21-G1	TP7-21-G2	TP8-21-G3	TP9-21-G1	TP10-21-G3	TP11-21-G2	TP12-21-G2	TP13-21-G2	TP14-21-G1	TP15-21-G3	TP16-21-G3	TP17-21-G1	TP18-21-G2	TP19-21-G1	TP20-21-G2	TP21-21-G1	TP22-21-G2	TP23-21-G1	TP24-21-G1
Sample Depth (m)			Reg 406/19 - Table 4.1 Industrial/Commercial SubSurface	3.0-3.2	1.0-1.2	3.4-3.6	0-0.55	3.5-3.8	0-0.52	1.0-1.2	3.0-3.2	0-0.50	3.0-3.2	1.0-1.2	1.0-1.2	0.7-1.2	0-0.50	3.0-3.2	3.6-3.8	0-0.50	1.2-1.4	0-0.40	1.8-2.0	0-0.50	2.0-2.2	0.3-0.7	0-0.50
Sample Date (m/d/y)				10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21	10-Dec-21
General Inorganics																												
pH	pH Units	0.05	5 pH units (5 pH Units)	7.93	NA	NA	NA	NA	NA	NA	7.51	NA	NA	NA	7.66	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.52
Metals																												
Antimony	ug/g dry	1	63 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Arsenic	ug/g dry	1	39 ug/g dry	2.2	3.1	2.2	2.3	2.2	2.6	3.0	2.6	2.1	3.3	2.2	1.9	2.8	2.5	2.9	2.0	3.2	2.6	3.5	2.5	2.4	2.1	2.6	2.2
Barium	ug/g dry	1	7700 ug/g dry	202	237	119	128	173	180	234	182	126	287	177	50.9	132	153	302	92.5	145	111	199	81.3	167	75.4	140	65.4
Beryllium	ug/g dry	0.5	60 ug/g dry	0.7	0.7	ND (0.5)	ND (0.5)	0.5	0.6	0.7	0.6	ND (0.5)	0.9	ND (0.5)	ND (0.5)	0.6	ND (0.5)	0.8	ND (0.5)	0.5	ND (0.5)	0.7	ND (0.5)	0.5	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Boron	ug/g dry	5	5000 ug/g dry	8.9	6.7	ND (5.0)	ND (5.0)	6.0	5.8	7.1	5.1	ND (5.0)	6.7	5.0	ND (5.0)	5.4	5.1	6.9	ND (5.0)	6.8	6.6	7.7	ND (5.0)	5.0	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)
Cadmium	ug/g dry	0.5	7.9 ug/g dry	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Chromium	ug/g dry	5	11000 ug/g dry	42.6	55.8	32.7	30.3	35.7	44.9	58.8	45.0	30.2	66.1	39.7	18.8	32.7	38.3	54.3	24.1	31.3	28.5	43.1	22.0	40.5	22.6	32.3	23.8
Cobalt	ug/g dry	1	2500 ug/g dry	11.6	14.1	7.8	8.0	9.9	11.6	15.0	11.6	8.1	17.2	10.6	5.1	7.8	10.3	15.0	7.5	8.4	7.6	11.0	6.5	10.6	6.2	9.3	6.6
Copper	ug/g dry	5	1900 ug/g dry	23.0	27.6	20.8	18.4	21.5	23.5	30.3	25.8	18.0	35.0	21.2	15.2	16.9	21.0	30.5	18.1	19.9	15.5	21.1	14.7	21.2	16.3	19.5	16.4
Lead	ug/g dry	1	1000 ug/g dry	5.1	5.7	3.2	4.3	4.1	4.7	5.7	4.5	3.3	7.1	3.8	2.9	6.6	6.1	5.7	3.3	5.8	5.8	5.8	3.3	3.9	3.1	3.9	3.3
Molybdenum	ug/g dry	1	1200 ug/g dry	ND (1.0)	ND (1.0)	1.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Nickel	ug/g dry	5	510 ug/g dry	23.6	30.6	18.9	16.4	20.6	23.8	31.3	23.7	16.4	35.6	21.9	9.8	17.6	21.2	31.2	14.0	17.4	20.1	23.8	11.9	22.1	11.7	18.4	13.1
Selenium	ug/g dry	1	1200 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Silver	ug/g dry	0.3	490 ug/g dry	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.3)
Thallium	ug/g dry	1	33 ug/g dry	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Uranium	ug/g dry	1	300 ug/g dry	2.2	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	1.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Vanadium	ug/g dry	10	160 ug/g dry	61.1	70.6	46.1	45.0	52.5	61.3	76.2	61.1	46.6	77.3	55.4	35.7	43.8	53.5	73.1	43.3	46.0	34.7	58.6	39.3	56.7	40.3	48.2	41.8
Zinc	ug/g dry	20	15000 ug/g dry	67.4	86.7	40.0	48.6	57.2	65.7	90.0	65.5	44.4	98.2	60.6	28.6	56.2	57.4	91.1	35.7	51.7	31.5	64.9	32.1	60.1	33.1	49.2	34.3
Volatiles																												
Benzene	ug/g dry	0.02	0.02 ug/g dry	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)	ND (0.02)
Ethylbenzene	ug/g dry	0.05	0.05 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Toluene	ug/g dry	0.05	0.2 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
m/p-Xylene	ug/g dry	0.05		ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
o-Xylene	ug/g dry	0.05		ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Xylenes, total	ug/g dry	0.05	0.091 ug/g dry	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
Hydrocarbons																												
F1 PHCs (C6-C10)	ug/g dry	7	25 ug/g dry	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)
F2 PHCs (C10-C16)	ug/g dry	4	26 ug/g dry	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)	ND (4)
F3 PHCs (C16-C34)	ug/g dry	8	240 ug/g dry	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)
F4 PHCs (C34-C50)	ug/g dry	6	6900 ug/g dry	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)	ND (6)

Notes

	Result exceeds applicable site condition standard
MDL	Method Detection Limit
NA	Not Reported
ND	Not Detected



patersongroup
consulting engineers

154 Colonnade Road South
Ottawa, Ontario K2E 7J5
Tel: (613) 226-7381 Fax: (613) 226-6344

NO.	REVISIONS	DATE	INITIAL

THOMAS CAVANAGH CONSTRUCTION LIMITED

EXCESS SOIL QUALITY ASSESSMENT
5000 ROBERT GRANT AVENUE
OTTAWA, ONTARIO

Title:

SITE PLAN

Scale: 1:1000	Date: 01/2022
Drawn by: YA	Report No.: PE5547-1
Checked by: AM	Dwg. No.: PE5547-1
Approved by: AM	Revision No.:

p:\autocad drawings\environmental\pe55xx\pe5547\pe5547-1-site plan.dwg

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Certificate of Analysis

Paterson Group Consulting Engineers

154 Colonnade Road South
Nepean, ON K2E 7J5
Attn: Adrian Menyhart

Client PO: 33477
Project: PE5547
Custody:

Report Date: 20-Dec-2021
Order Date: 13-Dec-2021

Order #: 2151170

This Certificate of Analysis contains analytical data applicable to the following samples as submitted:

Paracel ID	Client ID
2151170-01	TP1-21-G3
2151170-02	TP2-21-G2
2151170-03	TP3-21-G3
2151170-04	TP4-21-G1
2151170-05	TP5-21-G3
2151170-06	TP6-21-G1
2151170-07	TP7-21-G2
2151170-08	TP8-21-G3
2151170-09	TP9-21-G1
2151170-10	TP10-21-G3
2151170-11	TP11-21-G2
2151170-12	TP12-21-G2
2151170-13	TP13-21-G2
2151170-14	TP14-21-G1
2151170-15	TP15-21-G3
2151170-16	TP16-21-G3
2151170-17	TP17-21-G1
2151170-18	TP18-21-G2
2151170-19	TP19-21-G1
2151170-20	TP20-21-G2
2151170-21	TP21-21-G1
2151170-22	TP22-21-G2
2151170-23	TP23-21-G1
2151170-24	TP24-21-G1

Approved By:

Dale Robertson, BSc
Laboratory Director

Certificate of Analysis

Report Date: 20-Dec-2021

Client: Paterson Group Consulting Engineers

Order Date: 13-Dec-2021

Client PO: 33477

Project Description: PE5547

Analysis Summary Table

Analysis	Method Reference/Description	Extraction Date	Analysis Date
BTEX by P&T GC-MS	EPA 8260 - P&T GC-MS	15-Dec-21	15-Dec-21
pH, soil	EPA 150.1 - pH probe @ 25 °C, CaCl buffered ext.	15-Dec-21	15-Dec-21
PHC F1	CWS Tier 1 - P&T GC-FID	15-Dec-21	16-Dec-21
PHCs F2 to F4	CWS Tier 1 - GC-FID, extraction	15-Dec-21	17-Dec-21
REG 153: Metals by ICP/MS, soil	EPA 6020 - Digestion - ICP-MS	20-Dec-21	20-Dec-21
Solids, %	Gravimetric, calculation	15-Dec-21	15-Dec-21

Certificate of Analysis

Report Date: 20-Dec-2021

Client: **Paterson Group Consulting Engineers**

Order Date: 13-Dec-2021

Client PO: **33477**

Project Description: PE5547

	Client ID:	TP1-21-G3	TP2-21-G2	TP3-21-G3	TP4-21-G1
	Sample Date:	10-Dec-21 09:00	10-Dec-21 09:00	10-Dec-21 09:00	10-Dec-21 09:00
	Sample ID:	2151170-01	2151170-02	2151170-03	2151170-04
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	69.0	71.9	78.9	83.8
General Inorganics					
pH	0.05 pH Units	7.93	-	-	-
Metals					
Antimony	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Arsenic	1.0 ug/g dry	2.2	3.1	2.2	2.3
Barium	1.0 ug/g dry	202	237	119	128
Beryllium	0.5 ug/g dry	0.7	0.7	<0.5	<0.5
Boron	5.0 ug/g dry	8.9	6.7	<5.0	<5.0
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5.0 ug/g dry	42.6	55.8	32.7	30.3
Cobalt	1.0 ug/g dry	11.6	14.1	7.8	8.0
Copper	5.0 ug/g dry	23.0	27.6	20.8	18.4
Lead	1.0 ug/g dry	5.1	5.7	3.2	4.3
Molybdenum	1.0 ug/g dry	<1.0	<1.0	1.4	<1.0
Nickel	5.0 ug/g dry	23.6	30.6	18.9	16.4
Selenium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Uranium	1.0 ug/g dry	2.2	<1.0	<1.0	<1.0
Vanadium	10.0 ug/g dry	61.1	70.6	46.1	45.0
Zinc	20.0 ug/g dry	67.4	86.7	40.0	48.6
Volatiles					
Benzene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Toluene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
m,p-Xylenes	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
o-Xylene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Xylenes, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Toluene-d8	Surrogate	115%	113%	111%	107%
Hydrocarbons					
F1 PHCs (C6-C10)	7 ug/g dry	<7	<7	<7	<7
F2 PHCs (C10-C16)	4 ug/g dry	<4	<4	<4	<4
F3 PHCs (C16-C34)	8 ug/g dry	<8	<8	<8	<8
F4 PHCs (C34-C50)	6 ug/g dry	<6	<6	<6	<6

Certificate of Analysis

Report Date: 20-Dec-2021

Client: Paterson Group Consulting Engineers

Order Date: 13-Dec-2021

Client PO: 33477

Project Description: PE5547

	Client ID:	TP5-21-G3	TP6-21-G1	TP7-21-G2	TP8-21-G3
	Sample Date:	10-Dec-21 09:00	10-Dec-21 09:00	10-Dec-21 09:00	10-Dec-21 09:00
	Sample ID:	2151170-05	2151170-06	2151170-07	2151170-08
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	77.3	81.3	77.0	71.2
General Inorganics					
pH	0.05 pH Units	-	-	-	7.51
Metals					
Antimony	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Arsenic	1.0 ug/g dry	2.2	2.6	3.0	2.6
Barium	1.0 ug/g dry	173	180	234	182
Beryllium	0.5 ug/g dry	0.5	0.6	0.7	0.6
Boron	5.0 ug/g dry	6.0	5.8	7.1	5.1
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5.0 ug/g dry	35.7	44.9	58.8	45.0
Cobalt	1.0 ug/g dry	9.9	11.6	15.0	11.6
Copper	5.0 ug/g dry	21.5	23.5	30.3	25.8
Lead	1.0 ug/g dry	4.1	4.7	5.7	4.5
Molybdenum	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Nickel	5.0 ug/g dry	20.6	23.8	31.3	23.7
Selenium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Uranium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Vanadium	10.0 ug/g dry	52.5	61.3	76.2	61.1
Zinc	20.0 ug/g dry	57.2	65.7	90.0	65.5
Volatiles					
Benzene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Toluene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
m,p-Xylenes	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
o-Xylene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Xylenes, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Toluene-d8	Surrogate	109%	110%	109%	113%
Hydrocarbons					
F1 PHCs (C6-C10)	7 ug/g dry	<7	<7	<7	<7
F2 PHCs (C10-C16)	4 ug/g dry	<4	<4	<4	<4
F3 PHCs (C16-C34)	8 ug/g dry	<8	<8	<8	<8
F4 PHCs (C34-C50)	6 ug/g dry	<6	<6	<6	<6

Certificate of Analysis

Report Date: 20-Dec-2021

Client: Paterson Group Consulting Engineers

Order Date: 13-Dec-2021

Client PO: 33477

Project Description: PE5547

	Client ID:	TP9-21-G1	TP10-21-G3	TP11-21-G2	TP12-21-G2
	Sample Date:	10-Dec-21 09:00	10-Dec-21 09:00	10-Dec-21 09:00	10-Dec-21 09:00
	Sample ID:	2151170-09	2151170-10	2151170-11	2151170-12
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	85.1	74.0	79.7	80.2
General Inorganics					
pH	0.05 pH Units	-	-	-	7.66
Metals					
Antimony	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Arsenic	1.0 ug/g dry	2.1	3.3	2.2	1.9
Barium	1.0 ug/g dry	126	287	177	50.9
Beryllium	0.5 ug/g dry	<0.5	0.9	<0.5	<0.5
Boron	5.0 ug/g dry	<5.0	6.7	5.0	<5.0
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5.0 ug/g dry	30.2	66.1	39.7	18.8
Cobalt	1.0 ug/g dry	8.1	17.2	10.6	5.1
Copper	5.0 ug/g dry	18.0	35.0	21.2	15.2
Lead	1.0 ug/g dry	3.3	7.1	3.8	2.9
Molybdenum	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Nickel	5.0 ug/g dry	16.4	35.6	21.9	9.8
Selenium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Uranium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Vanadium	10.0 ug/g dry	46.6	77.3	55.4	35.7
Zinc	20.0 ug/g dry	44.4	98.2	60.6	28.6
Volatiles					
Benzene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Toluene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
m,p-Xylenes	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
o-Xylene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Xylenes, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Toluene-d8	Surrogate	110%	114%	111%	111%
Hydrocarbons					
F1 PHCs (C6-C10)	7 ug/g dry	<7	<7	<7	<7
F2 PHCs (C10-C16)	4 ug/g dry	<4	<4	<4	<4
F3 PHCs (C16-C34)	8 ug/g dry	<8	<8	<8	<8
F4 PHCs (C34-C50)	6 ug/g dry	<6	<6	<6	<6

Certificate of Analysis

Report Date: 20-Dec-2021

Client: Paterson Group Consulting Engineers

Order Date: 13-Dec-2021

Client PO: 33477

Project Description: PE5547

	Client ID:	TP13-21-G2	TP14-21-G1	TP15-21-G3	TP16-21-G3
	Sample Date:	10-Dec-21 09:00	10-Dec-21 09:00	10-Dec-21 09:00	10-Dec-21 09:00
	Sample ID:	2151170-13	2151170-14	2151170-15	2151170-16
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	81.6	84.1	74.5	80.9
Metals					
Antimony	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Arsenic	1.0 ug/g dry	2.8	2.5	2.9	2.0
Barium	1.0 ug/g dry	132	153	302	92.5
Beryllium	0.5 ug/g dry	0.6	<0.5	0.8	<0.5
Boron	5.0 ug/g dry	5.4	5.1	6.9	<5.0
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5.0 ug/g dry	32.7	38.3	54.3	24.1
Cobalt	1.0 ug/g dry	7.8	10.3	15.0	7.5
Copper	5.0 ug/g dry	16.9	21.0	30.5	18.1
Lead	1.0 ug/g dry	6.6	6.1	5.7	3.3
Molybdenum	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Nickel	5.0 ug/g dry	17.6	21.2	31.2	14.0
Selenium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Uranium	1.0 ug/g dry	<1.0	<1.0	<1.0	1.4
Vanadium	10.0 ug/g dry	43.8	53.5	73.1	43.3
Zinc	20.0 ug/g dry	56.2	57.4	91.1	35.7
Volatiles					
Benzene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Toluene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
m,p-Xylenes	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
o-Xylene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Xylenes, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Toluene-d8	Surrogate	106%	107%	111%	112%
Hydrocarbons					
F1 PHCs (C6-C10)	7 ug/g dry	<7	<7	<7	<7
F2 PHCs (C10-C16)	4 ug/g dry	<4	<4	<4	<4
F3 PHCs (C16-C34)	8 ug/g dry	<8	<8	<8	<8
F4 PHCs (C34-C50)	6 ug/g dry	<6	<6	<6	<6

Certificate of Analysis

Report Date: 20-Dec-2021

Client: Paterson Group Consulting Engineers

Order Date: 13-Dec-2021

Client PO: 33477

Project Description: PE5547

	Client ID:	TP17-21-G1	TP18-21-G2	TP19-21-G1	TP20-21-G2
	Sample Date:	10-Dec-21 09:00	10-Dec-21 09:00	10-Dec-21 09:00	10-Dec-21 09:00
	Sample ID:	2151170-17	2151170-18	2151170-19	2151170-20
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	83.2	82.0	79.5	80.6
Metals					
Antimony	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Arsenic	1.0 ug/g dry	3.2	2.6	3.5	2.5
Barium	1.0 ug/g dry	145	111	199	81.3
Beryllium	0.5 ug/g dry	0.5	<0.5	0.7	<0.5
Boron	5.0 ug/g dry	6.8	6.6	7.7	<5.0
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5.0 ug/g dry	31.3	28.5	43.1	22.0
Cobalt	1.0 ug/g dry	8.4	7.6	11.0	6.5
Copper	5.0 ug/g dry	19.9	15.5	21.1	14.7
Lead	1.0 ug/g dry	5.8	5.8	5.8	3.3
Molybdenum	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Nickel	5.0 ug/g dry	17.4	20.1	23.8	11.9
Selenium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Uranium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Vanadium	10.0 ug/g dry	46.0	34.7	58.6	39.3
Zinc	20.0 ug/g dry	51.7	31.5	64.9	32.1
Volatiles					
Benzene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Toluene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
m,p-Xylenes	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
o-Xylene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Xylenes, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Toluene-d8	Surrogate	109%	109%	109%	108%
Hydrocarbons					
F1 PHCs (C6-C10)	7 ug/g dry	<7	<7	<7	<7
F2 PHCs (C10-C16)	4 ug/g dry	<4	<4	<4	<4
F3 PHCs (C16-C34)	8 ug/g dry	<8	<8	<8	<8
F4 PHCs (C34-C50)	6 ug/g dry	<6	<6	<6	<6

Certificate of Analysis

Report Date: 20-Dec-2021

Client: Paterson Group Consulting Engineers

Order Date: 13-Dec-2021

Client PO: 33477

Project Description: PE5547

	Client ID:	TP21-21-G1	TP22-21-G2	TP23-21-G1	TP24-21-G1
	Sample Date:	10-Dec-21 09:00	10-Dec-21 09:00	10-Dec-21 09:00	10-Dec-21 09:00
	Sample ID:	2151170-21	2151170-22	2151170-23	2151170-24
	MDL/Units	Soil	Soil	Soil	Soil
Physical Characteristics					
% Solids	0.1 % by Wt.	82.2	79.5	83.5	81.1
General Inorganics					
pH	0.05 pH Units	-	-	-	7.52
Metals					
Antimony	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Arsenic	1.0 ug/g dry	2.4	2.1	2.6	2.2
Barium	1.0 ug/g dry	167	75.4	140	65.4
Beryllium	0.5 ug/g dry	0.5	<0.5	<0.5	<0.5
Boron	5.0 ug/g dry	5.0	<5.0	<5.0	<5.0
Cadmium	0.5 ug/g dry	<0.5	<0.5	<0.5	<0.5
Chromium	5.0 ug/g dry	40.5	22.6	32.3	23.8
Cobalt	1.0 ug/g dry	10.6	6.2	9.3	6.6
Copper	5.0 ug/g dry	21.2	16.3	19.5	16.4
Lead	1.0 ug/g dry	3.9	3.1	3.9	3.3
Molybdenum	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Nickel	5.0 ug/g dry	22.1	11.7	18.4	13.1
Selenium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Silver	0.3 ug/g dry	<0.3	<0.3	<0.3	<0.3
Thallium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Uranium	1.0 ug/g dry	<1.0	<1.0	<1.0	<1.0
Vanadium	10.0 ug/g dry	56.7	40.3	48.2	41.8
Zinc	20.0 ug/g dry	60.1	33.1	49.2	34.3
Volatiles					
Benzene	0.02 ug/g dry	<0.02	<0.02	<0.02	<0.02
Ethylbenzene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Toluene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
m,p-Xylenes	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
o-Xylene	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Xylenes, total	0.05 ug/g dry	<0.05	<0.05	<0.05	<0.05
Toluene-d8	Surrogate	108%	109%	108%	107%
Hydrocarbons					
F1 PHCs (C6-C10)	7 ug/g dry	<7	<7	<7	<7
F2 PHCs (C10-C16)	4 ug/g dry	<4	<4	<4	<4
F3 PHCs (C16-C34)	8 ug/g dry	<8	<8	<8	<8
F4 PHCs (C34-C50)	6 ug/g dry	<6	<6	<6	<6

Method Quality Control: Blank

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	ND	7	ug/g						
F2 PHCs (C10-C16)	ND	4	ug/g						
F3 PHCs (C16-C34)	ND	8	ug/g						
F4 PHCs (C34-C50)	ND	6	ug/g						
Metals									
Antimony	ND	1.0	ug/g						
Arsenic	ND	1.0	ug/g						
Barium	ND	1.0	ug/g						
Beryllium	ND	0.5	ug/g						
Boron	ND	5.0	ug/g						
Cadmium	ND	0.5	ug/g						
Chromium	ND	5.0	ug/g						
Cobalt	ND	1.0	ug/g						
Copper	ND	5.0	ug/g						
Lead	ND	1.0	ug/g						
Molybdenum	ND	1.0	ug/g						
Nickel	ND	5.0	ug/g						
Selenium	ND	1.0	ug/g						
Silver	ND	0.3	ug/g						
Thallium	ND	1.0	ug/g						
Uranium	ND	1.0	ug/g						
Vanadium	ND	10.0	ug/g						
Zinc	ND	20.0	ug/g						
Volatiles									
Benzene	ND	0.02	ug/g						
Ethylbenzene	ND	0.05	ug/g						
Toluene	ND	0.05	ug/g						
m,p-Xylenes	ND	0.05	ug/g						
o-Xylene	ND	0.05	ug/g						
Xylenes, total	ND	0.05	ug/g						
Surrogate: Toluene-d8	*7.88*		*ug/g*		*98.5*	*50-140*			

Method Quality Control: Duplicate

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
General Inorganics									
pH	7.60	0.05	pH Units	7.57			0.4	2.3	
Hydrocarbons									
F1 PHCs (C6-C10)	ND	7	ug/g dry	ND			NC	40	
F2 PHCs (C10-C16)	ND	4	ug/g dry	ND			NC	30	
F3 PHCs (C16-C34)	ND	8	ug/g dry	ND			NC	30	
F4 PHCs (C34-C50)	ND	6	ug/g dry	ND			NC	30	
Metals									
Antimony	1.1	1.0	ug/g dry	1.0			3.4	30	
Arsenic	3.1	1.0	ug/g dry	3.1			1.0	30	
Barium	98.0	1.0	ug/g dry	108			9.4	30	
Beryllium	0.6	0.5	ug/g dry	0.7			2.4	30	
Boron	10.8	5.0	ug/g dry	9.7			10.4	30	
Cadmium	ND	0.5	ug/g dry	ND			NC	30	
Chromium	28.3	5.0	ug/g dry	29.0			2.4	30	
Cobalt	7.7	1.0	ug/g dry	8.0			4.5	30	
Copper	18.9	5.0	ug/g dry	20.0			6.0	30	
Lead	5.8	1.0	ug/g dry	6.3			7.8	30	
Molybdenum	ND	1.0	ug/g dry	ND			NC	30	
Nickel	16.1	5.0	ug/g dry	17.4			7.6	30	
Selenium	ND	1.0	ug/g dry	ND			NC	30	
Silver	ND	0.3	ug/g dry	ND			NC	30	
Thallium	ND	1.0	ug/g dry	ND			NC	30	
Uranium	ND	1.0	ug/g dry	ND			NC	30	
Vanadium	41.8	10.0	ug/g dry	43.9			4.8	30	
Zinc	37.8	20.0	ug/g dry	41.4			9.0	30	
Physical Characteristics									
% Solids	86.2	0.1	% by Wt.	86.2			0.1	25	
Volatiles									
Benzene	ND	0.02	ug/g dry	ND			NC	50	
Ethylbenzene	ND	0.05	ug/g dry	ND			NC	50	
Toluene	ND	0.05	ug/g dry	ND			NC	50	
m,p-Xylenes	ND	0.05	ug/g dry	ND			NC	50	
o-Xylene	ND	0.05	ug/g dry	ND			NC	50	
Surrogate: Toluene-d8	*10.9*		*ug/g dry*		*108*	*50-140*			

Method Quality Control: Spike

Analyte	Result	Reporting Limit	Units	Source Result	%REC	%REC Limit	RPD	RPD Limit	Notes
Hydrocarbons									
F1 PHCs (C6-C10)	208	7	ug/g	ND	104	80-120			
F2 PHCs (C10-C16)	106	4	ug/g	ND	91.1	60-140			
F3 PHCs (C16-C34)	297	8	ug/g	ND	105	60-140			
F4 PHCs (C34-C50)	219	6	ug/g	ND	122	60-140			
Metals									
Antimony	42.0	1.0	ug/g	ND	83.3	70-130			
Arsenic	46.6	1.0	ug/g	1.2	90.7	70-130			
Barium	81.0	1.0	ug/g	43.1	75.8	70-130			
Beryllium	43.8	0.5	ug/g	ND	87.2	70-130			
Boron	45.2	5.0	ug/g	ND	82.7	70-130			
Cadmium	43.1	0.5	ug/g	ND	86.2	70-130			
Chromium	56.5	5.0	ug/g	11.6	89.8	70-130			
Cobalt	47.4	1.0	ug/g	3.2	88.4	70-130			
Copper	50.1	5.0	ug/g	8.0	84.2	70-130			
Lead	43.0	1.0	ug/g	2.5	81.0	70-130			
Molybdenum	43.7	1.0	ug/g	ND	86.9	70-130			
Nickel	50.3	5.0	ug/g	7.0	86.6	70-130			
Selenium	44.9	1.0	ug/g	ND	89.4	70-130			
Silver	39.8	0.3	ug/g	ND	79.5	70-130			
Thallium	42.0	1.0	ug/g	ND	83.8	70-130			
Uranium	42.9	1.0	ug/g	ND	85.4	70-130			
Vanadium	61.6	10.0	ug/g	17.5	88.2	70-130			
Zinc	58.0	20.0	ug/g	ND	82.9	70-130			
Volatiles									
Benzene	3.66	0.02	ug/g	ND	91.6	60-130			
Ethylbenzene	3.52	0.05	ug/g	ND	88.0	60-130			
Toluene	3.41	0.05	ug/g	ND	85.3	60-130			
m,p-Xylenes	7.06	0.05	ug/g	ND	88.2	60-130			
o-Xylene	3.72	0.05	ug/g	ND	93.0	60-130			
Surrogate: Toluene-d8	*7.63*		*ug/g*		*95.3*	*50-140*			

Qualifier Notes:

None

Sample Data Revisions

None

Work Order Revisions / Comments:

None

Other Report Notes:

n/a: not applicable
ND: Not Detected
MDL: Method Detection Limit
Source Result: Data used as source for matrix and duplicate samples
%REC: Percent recovery.
RPD: Relative percent difference.
NC: Not Calculated

Soil results are reported on a dry weight basis when the units are denoted with 'dry'.
Where %Solids is reported, moisture loss includes the loss of volatile hydrocarbons.

CCME PHC additional information:

- The method for the analysis of PHCs complies with the Reference Method for the CWS PHC and is validated for use in the laboratory. All prescribed quality criteria identified in the method has been met.
- F1 range corrected for BTEX.
- F2 to F3 ranges corrected for appropriate PAHs where available.
- The gravimetric heavy hydrocarbons (F4G) are not to be added to C6 to C50 hydrocarbons.
- In the case where F4 and F4G are both reported, the greater of the two results is to be used for comparison to CWS PHC criteria.
- When reported, data for F4G has been processed using a silica gel cleanup.

Paracel ID: 2151170

PARACE LABORATORIES L

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Paracel Order Number (Lab Use Only)	Chain Of Custody (Lab Use Only)
2151770	

Client Name: Paterson Group
Project Ref: PE5547
Page 1 of 3
Contact Name: Adrian Meighan
Quote #:
Address: 154 Colonnade Road
PO #: 33477
Telephone: 613-226-7381
E-mail: ameighan@patersongroup.ca

Turnaround Time
☐ 1 day ☐ 3 day
☐ 2 day ☒ Regular
Date Required:

Regulation 153/04
☐ Table 1 ☐ Res/Park ☐ Med/Fine
☐ Table 2 ☐ Ind/Comm ☐ Coarse
☒ Table 3 ☐ Agri/Other
☐ Table
For RSC: ☐ Yes ☐ No

Other Regulation
☐ REG 558 ☐ PWQO
☐ CCME ☐ MISA
☐ SU - Sani ☐ SU - Storm
Mun:
☐ Other:

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

Required Analysis

	Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken: Date	Sample Taken: Time	PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	pH
1	TP1-21-G3	S		3	Dec 10/21		✓			✓				✓
2	TP2-21-G2													
3	TP3-21-G3													
4	TP4-21-G1													
5	TP5-21-G3													
6	TP6-21-G1													
7	TP7-21-G2			2										
8	TP8-21-G3													✓
9	TP9-21-G1													
10	TP10-21-G3													

Comments:

Method of Delivery: Foobox

Relinquished By (Sign):	Received By Driver/Depot:	Received at Lab:	Verified By:
Relinquished By (Print): Joshua Dempsey	Date/Time:	Date/Time: Dec 13 2021 7:00	Date/Time: Dec 14 2021 13:34
Date/Time: Dec 13/2021	Temperature: °C	Temperature: 20.8 °C	pH Verified: ☐ By:

Paracel ID: 2151170

PARAC LABORATORIES

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Ottawa, Ontario K1G 4J8
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e: paracel@paracellabs.com
www.paracellabs.com

Paracel Order Number (Lab Use Only)	Chain Of Custody (Lab Use Only)

Client Name: Paterson Group
Contact Name: Adrian Merryhart
Address: 154 Colonnade Road
Telephone: 613-226-7381

Project Ref: P5547
Quote #:
PO #: 33477
E-mail: amerryhart@patersongroup.ca

Page 2 of 3

Turnaround Time
☐ 1 day ☐ 3 day
☐ 2 day ☒ Regular
Date Required:

Regulation 153/04
☐ Table 1 ☐ Res/Park ☐ Med/Fine
☐ Table 2 ☐ Ind/Comm ☐ Coarse
☒ Table 3 ☐ Agri/Other
☐ Table
For RSC: ☐ Yes ☐ No

Other Regulation
☐ REG 558 ☐ PWQO
☐ CCME ☐ MISA
☐ SU - Sani ☐ SU - Storm
Mun:
☐ Other:

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

	Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken Date	Sample Taken Time	PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	pH						
1	TP11-21-G2	S		2	Dec 10/21		✓			✓										
2	TP12-21-G2													✓						
3	TP13-21-G2																			
4	TP14-21-G1			3																
5	TP15-21-G3																			
6	TP16-21-G3																			
7	TP17-21-G1																			
8	TP18-21-G2																			
9	TP19-21-G1																			
10	TP20-21-G2																			

Comments:

Method of Delivery: drop box

Relinquished By (Sign):	Received By Driver/Depot:	Received at Lab:	Verified By:
Relinquished By (Print): Jessica Dempsey	Date/Time:	Date/Time: Dec 13 2021 7:00	Date/Time: Dec 14 2021 13:14
Date/Time: Dec 13/2021	Temperature: °C	Temperature: 10.8 °C	pH Verified: ☐ By:

PARACEL LABORATORIES

Paracel ID: 2151170

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800-749-1947
paracel@paracellabs.com
www.paracellabs.com

Paracel Order Number (Lab Use Only)	Chain Of Custody (Lab Use Only)

Client Name: Paterson Group
Contact Name: Adrian Meyhart
Address: 154 Colonnade Road
Telephone: 613-226-7381

Project Ref: PE5547
Quote #:
PO #: 33477
E-mail: ameyhart@patersongroup.ca

Page 3 of 3

Turnaround Time
☐ 1 day ☐ 3 day
☐ 2 day ☒ Regular
Date Required:

Regulation 153/04
☐ Table 1 ☐ Res/Park ☐ Med/Fine
☐ Table 2 ☐ Ind/Comm ☐ Coarse
☒ Table 3 ☐ Agri/Other
☐ Table
For RSC: ☐ Yes ☐ No

Other Regulation
☐ REG 558 ☐ PWQO
☐ CCME ☐ MISA
☐ SU - Sani ☐ SU - Storm
Mun:
☐ Other:

Matrix Type: S (Soil/Sed.) GW (Ground Water) SW (Surface Water) SS (Storm/Sanitary Sewer) P (Paint) A (Air) O (Other)

Required Analysis

	Sample ID/Location Name	Matrix	Air Volume	# of Containers	Sample Taken: Date	Sample Taken: Time	PHCs F1-F4+BTEX	VOCs	PAHs	Metals by ICP	Hg	CrVI	B (HWS)	pH
1	TP21-21-G1	S		3	Dec 10/21		✓			✓				
2	TP22-21-G2	↓		2	↓		↓			↓				
3	TP23-21-G1	↓		3	↓		↓			↓				
4	TP24-21-G1	↓		2	↓		↓			↓				✓
5														
6														
7														
8														
9														
10														

Comments:

Method of Delivery: drop box

Relinquished By (Sign):	Received By Driver/Depot:	Received at Lab:	Verified By:
Relinquished By (Print): Jeshan Dampsey	Date/Time:	Date/Time: Dec 13 2021 7:00	Date/Time: Dec 13 2021 13:24
Date/Time: Dec 13/2021	Temperature: °C	Temperature: 20.0 °C	pH Verified: ☐ By: