PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

217 and 227 Cross Avenue and 571, 581 and 587 – 595 Argus Road, Oakville, Ontario

Client

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Project Number

BIGC-ENV-349G

Prepared By:

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Date Submitted

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Executive Summary

B.I.G. Consulting Inc (BIG) was retained by Mr. Clarence Zichen Qian on behalf of Oakville Argus Cross LP (the Client) to conduct a Phase Two Environmental Site Assessment (ESA) on the properties located at 217 and 227 Cross Avenue and 571, 581 and 587-595 Argus Road, in Oakville, Ontario (the Site).

This Phase Two ESA was conducted in accordance with the Phase Two ESA standard defined by Ontario Regulation 153/04 (O.Reg.153/04), as amended.

The objective of the Phase Two ESA was to assess the areas of potential environmental concern (APECs) identified in the Phase One ESA completed by BIG in September 2022 and, to obtain soil and groundwater data to further characterize the Site to support the preparation of the filing of an RSC on the Ontario Ministry of the Environment, Conservation and Parks (MECP) Brownfields Environmental Site Registry (BESR).

The findings of the Phase Two ESA conducted at the Site are summarized as follows:

1. The general stratigraphy at the Site, as observed in the boreholes, consisted of asphalt or topsoil at the ground surface, underlain by fill material comprised of clayey silt, silty clay and sandy silt underlain by native material characterized by clayey silt till/silty clay till followed by shale bedrock.
2. Coarse textured standards were applied as part of this Phase Two ESA.
3. Groundwater depths within the groundwater table across the Site ranged between approximately 2.04 m and 16.27 m bgs on February 13, 2023.
4. The soil analytical results indicated that select parameters were detected at concentrations above the applicable MECP (2011a) Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional Property Use and coarse textured soil including:

Parameter	MECP (2011a) Table 2 SCS (µg/g)	Number of Soil Samples Submitted (1)	Number of Soil Samples Exceeding the applicable SCS (1)	Maximum concentration detected (µg/g)
PAHs				
Benzo(a)anthracene	0.50	44	1	0.51
Benzo(a)pyrene	0.30	44	1	0.40
Fluoranthene	0.69	44	2	1.12
Metals				
Copper	140	40	2	493

(1) Excluding duplicate samples

5. The groundwater analytical results indicated all groundwater samples submitted for PHCs, BTEX, VOCs, PAHs, metals and inorganics analyses were either non-detect or detected below the applicable MECP (2011a) Table 2 SCS; and all laboratory RDLs were below the applicable SCS.

The soil COCs present at the Site comprised of benz(a)anthracene, benzo(a)pyrene, fluoranthene and copper. No groundwater COCs are present at the Site. Based on the former activities on-Site, the impacts are likely associated with the importation of fill material of unknown quality.

In order to proceed with the Record of Site Condition (RSC), the following is recommended:

1. Excavate the impacted soil and dispose of off-site at a registered landfill facility.
2. Conduct confirmatory soil sampling.
3. Prepare a report documenting remedial activities.
4. Update Phase Two ESA.
5. File RSC.

Closing Remarks

BIG has conducted soil remediation programs to remove the PAH and copper impacted soil from the Site. The Soil Remediation Reports are included in Appendix G, and are summarized below:

a) Between March 22 and 25, 2022, approximately 260 m^3 of impacted soil material was removed from the Site. The impacted soil material was transported and disposed of at the York1 facility located at 195 Bethridge Road in Toronto, Ontario.
b) The excavation advanced to remediate the PAH impacted soil was approximately 6 m in length, 4 m in width and extended to 1 m below ground surface (bgs). Approximately 24 m^3 of PAH impacted soil was excavated and disposed of off-Site.
c) The excavation advanced to remediate the copper impacted soil was approximately 15 m in length, 7.5 m in width and extended to the depth of bedrock which was approximately 2 m bgs.
d) Approximately 260 m^3 of impacted soil in total was excavated and disposed of off-Site.
e) All confirmatory soil sample results analyzed met the applicable MECP Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional Property Use and coarse textured soil.

As a result of the remedial excavation activities conducted, the PAH and copper impacts identified in soil have been successfully remediated. The soil meets the applicable MECP (2011) Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional Property Use and coarse textured soil. As such, an RSC can now be filed for the Site.

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1 Introduction

B.I.G. Consulting Inc (BIG) was retained by Mr. Clarence Zichen Qian on behalf of Oakville Argus Cross LP (the Client) to conduct a Phase Two Environmental Site Assessment (ESA) on the properties located at 217 and 227 Cross Avenue and 571, 581 and 587-595 Argus Road, in Oakville, Ontario (the Site).

The objective of the investigation was to support the filing of a Record of Site Condition (RSC) in accordance with Ontario Regulation 153/04 (O.Reg.153/04), as amended. It is BIG's understanding that the Client is planning on redeveloping the Site for residential use in the future, which would require a land use change and a Record of Site Condition (RSC). Contact information for the Client is provided in Section 1.2.

The objective of the Phase Two ESA was to assess the areas of potential environmental concern (APECs) identified in the Phase One ESA completed by BIG in September 2022 and, to obtain soil and groundwater data to further characterize the Site to support the preparation of the filing of an RSC on the Ontario Ministry of the Environment, Conservation and Parks (MECP) Brownfields Environmental Site Registry (BESR).

1.1 Site Description

The Site is located north of Cross Avenue and east of Argus Road, in Oakville, Ontario, as shown on Figure 1. For ease of review, Argus Road is considered to be towards the north and west of the Site and Cross Avenue is considered to be towards the south of the Site. The Site is irregular in shape and measures approximately 12,600 m² in size. The Site is currently occupied by four (4) commercial buildings (Site buildings). The Site at 217 Cross Avenue is developed with one (1) single-story commercial building that is occupied by Swiss Chalet and Harvey's. The Site at 227 Cross Avenue is currently developed with one (1) single-story commercial building that is occupied by McDonald's. The Site at 571 Argus Road is currently vacant and undeveloped. The Site at 581 Argus Road is currently occupied by one (1) three-story commercial building that is occupied by various medical practices. The Site at 587 to 595 Argus Road is currently occupied by one (1) single story commercial building that is occupied by various medical practices. The Site buildings have a combined footprint of approximately 1,900 m², occupying approximately 15 % of the Site. The areas surrounding the Site building are covered with asphalt with some landscaping.

The Site is bound to the north by Argus Road followed by commercial properties, to the east by commercial properties, to the south by Cross Avenue followed by community properties and to the west by Argus Road followed by commercial properties. The surrounding properties are shown on Figure 3.

1.2 Legal Description and Property Ownership

Refer to the table below for the Site identification information.

Site Details	
Municipal Addresses	217 and 227 Cross Avenue and 571 – 595 Argus Road
Current Owners	2739828 Ontario Inc., 2810685 Ontario Inc., Oakville Argus Cross III Inc.
Beneficial Owners	Oakville Argus Cross LP, Oakville Argus Cross GP Inc., Oakville Argus Cross II LP, Oakville Argus Cross II GP Inc., Oakville Argus Cross III LP, Oakville Argus Cross III GP Inc., Distrikt Capital Holdings I Corp, Sud Oakville One LP
Owner Address	1-90 Wingold Avenue, Toronto, Ontario, M6B 1P5
Owner Contact Person	Name: Mr. Emil Toma Position: President Email: emil@distrikt.com
Legal Descriptions	**217 Cross Avenue:** Part of Lot 13, 14 Concession 3 Trafalgar, South of Dundas Street, as in 765240; Oakville/Trafalgar. Subject to Easement H816821 over Part 1, 20R13210.

Site Details	
	227 Cross Avenue: Part of Lot 13, Concession 3 Trafalgar, South of Dundas Street, Part 4, 5, 20R3864, subject to 487336, "subject to 487707"; "Amended July 28 '99 J. Menard". Subject to Easement H816820 over Parts 2 and 3, 20R13210; Town of Oakville. **571 Argus Road:** Part Lots 13 and 14, Concession 3 Trafalgar, South of Dundas Street, as in H857135; Oakville. **581 Argus Road:** Lot 6, Plan 1333; Subject to Easement as in 304377; Town of Oakville. **587 - 595 Argus Road:** Part Lot 5, Plan 1333, as in 380801; Oakville.
Property Identification Numbers (PINs)	**217 Cross Avenue:** 24816-0044 (LT) **227 Cross Avenue:** 24816-0043 (LT) **571 Argus Road:** 24816-0114 (LT) **581 Argus Road:** 24816-0035 (LT) **587-595 Argus Road:** 24816-0034 (LT)
Property Size	12,600 m² (1.26 hectares)
Approximate Universal Transverse Mercator (UTM) coordinates	Zone: 17 Easting: 606458.69 Northing: 4812432.12 (1m, NAD83, QGIS)

1.3 Current and Proposed Future Uses

The Site is currently used for commercial purposes and is developed with four (4) commercial buildings occupying approximately 15 % of the Site. The areas surrounding the Site buildings are covered with asphalt paved parking with landscaping present along the southern, western and northwestern property boundaries.

The Site will be redeveloped for residential use with three (3) condominium tower buildings which is anticipated to have six (6) or seven (7) levels of underground parking. Section 168.3.1 of the *Environmental Protection Act* does not prohibit the proposed future use of the Property. Current surrounding land uses is included in Figure 3.

1.4 Applicable Site Condition Standards

Analytical results obtained for Site soil and groundwater samples were assessed against Site Condition Standards (SCS) as established under subsection 169.4(1) of the Environmental Protection Act, and presented in the document MECP "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the *Environmental Protection Act',* ("SGWS" Standards), (MECP). Tabulated background SCS (Table 1) applicable to environmentally sensitive sites and effects based generic SCS (Tables 2 to 9) applicable to non-environmentally sensitive sites are provided in MECP. The effects based SCS (Tables 2 to 9) are protective of human health and the environment for different groundwater conditions (potable and non-potable), land use scenarios (residential, parkland, institutional, commercial, industrial, community and agricultural/other), soil texture (coarse or medium/fine) and restoration depth (full or stratified).

Tables 1 to 9 of MECP are summarized as follows:

a) Table 1 - applicable to sites where background concentrations must be met (full depth), such as sensitive sites where site-specific criteria have not been derived;
b) Table 2 - applicable to sites with potable groundwater and full depth restoration;
c) Table 3 - applicable to sites with non-potable groundwater and full depth restoration;
d) Table 4 - applicable to sites with potable groundwater and stratified restoration;

e) Table 5 - applicable to sites with non-potable groundwater and stratified restoration;
f) Table 6 - applicable to sites with potable groundwater and shallow soils;
g) Table 7 - applicable to sites with non-potable groundwater and shallow soils;
h) Table 8 - applicable to sites with potable groundwater and that are within 30 m of a water body; and,
i) Table 9 - applicable to sites with non-potable groundwater and that are within 30 m of a water body.

Application of the generic or background SCS to a specific site is based on a consideration of site conditions related to soil pH (i.e., surface and subsurface soil), thickness and extent of overburden material, (i.e., shallow soil conditions), and proximity to an area of environmental sensitivity or of natural significance. For some chemical constituents, consideration is also given to soil textural classification with SCS having been derived for both coarse and medium/fine textured soil conditions.

For assessment purposes, BIG selected the MECP Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional Property Use and coarse textured soil. The selection of this category was based on the following factors:

a) More than two-thirds of the Site has an overburden thickness greater than 2 m.
b) The Site is not located within 30 m of a surface water body or an area of natural significance.
c) The soil at the Site has a pH value between 5 and 9 for surficial soils; and, between 5 and 11 for subsurface soils.
d) 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.
e) The Site is considered as potable for the following reasons: The Site is located within an area designated in a municipal official plan as a well-head protection area or other designation identified by the municipality for the protection of groundwater.
f) The future land use of the Site is residential.
g) Coarse textured standards were applied as part of this Phase Two ESA.
h) There was no intention to carry out a stratified restoration at the Site.

2 Background Information

2.1 Physical Setting

The following physiographic, geological and soil maps were reviewed as part of this Phase Two ESA:

a) Atlas of Canada – Toporama Topographic Map, 2012 (Toporama).
b) Ontario Base Map (OBM).
c) Ontario Ministry of Northern Development and Mines website, Bedrock Geology of Ontario, 2011 – MRD 126; and Paleozoic Geology of Southern Ontario, 2007 – MRD 219 (KML format).
d) Ontario Ministry of Northern Development and Mines website, Surficial Geology of Southern Ontario, 2010. (KML format).
e) Ontario Ministry of Northern Development and Mines website, Physiography of Southern Ontario 2007.

The following information was obtained from these maps:

a) The Site is at an elevation of approximately 102 metres above sea level (m asl), generally at the same elevation as properties to the north, east, south and west of the Site.
b) No water bodies are located on the Site. A tributary to the Morrison Creek is situated approximately 300 m east of the Site and Lake Ontario is situated approximately 2.0 km southeast of the Site.
c) The physiography of the Site is within Iroquois Plain and is characterized as shale plains.
d) The surficial geology of the Site is described as Paleozoic bedrock.
e) The bedrock in the general area consists of shale, limestone, dolostone and siltstone and is part of Georgian Bay Formation, Blue Mountain Formation, Billings Formation, Collingwood Member and Eastview Member. The approximate depth to bedrock was obtained from the well records map of Ontario (MECP, 2021) and is approximately 3 m below ground surface.

2.2 Past Environmental Investigations

Previous environmental investigations have been conducted at the Site, including Phase I and II ESAs, Phase One and Two environmental site assessments, a preliminary geotechnical investigation and a preliminary hydrogeological investigation conducted by Terrapex, Fisher and BIG.

The following is a list of the environmental investigations reviewed in support of this Phase Two ESA report:

1. Terrapex (2019a) Phase I and Phase II Environmental Site Assessment, 217 Cross Avenue and 571 Argus Road, Oakville, Ontario. Terrapex Environmental Ltd. October 11, 2019.
2. Terrapex (2019b) Phase I Environmental Site Assessment Update, 217 Cross Avenue and 571 Argus Road, Oakville, Ontario. Terrapex Environmental Ltd. November 4, 2019.
3. BIG (2019) Preliminary Geotechnical Investigation, 217 Cross Avenue and 571 Argus Road, Oakville Ontario. B.I.G Consulting Inc. December 3, 2019.
4. BIG (2020) Phase I Environmental Site Assessment, 227 Cross Avenue Road, Oakville Ontario. B.I.G Consulting Inc. December 22, 2020.
5. BIG (2021a) Geotechnical Investigation, 217 & 227 Cross Avenue and 571 Argus Road, Oakville, ON. B.I.G. Consulting Inc. February 16, 2021.
6. BIG (2021b) Phase One Environmental Site Assessment, 217 & 227 Cross Avenue, and 571 Argus Road, Oakville, Ontario. B.I.G. Consulting Inc. February 17, 2021.
7. BIG (2021c) Phase Two Environmental Site Assessment, 217 & 227 Cross Avenue, and 571 Argus Road, Oakville, Ontario. B.I.G. Consulting Inc. February 17, 2021.
8. BIG (2021d) Hydrogeological Investigation, 217 & 227 Cross Avenue and 571 Argus Road, Oakville, Ontario. B.I.G. Consulting Inc. March 9, 2021.

9. Fisher (2021a) Phase I Environmental Site Assessment, 581 Argus Road, Oakville, Ontario. Fisher Environmental Ltd. June 1, 2021.
10. Fisher (2021b) Phase I Environmental Site Assessment, 587 to 595 Argus Road, Oakville, Ontario. Fisher Environmental Ltd. June 1, 2021.
11. BIG (2022a) Preliminary Geotechnical Investigation, 581 – 587 Argus Road, Oakville, Ontario. B.I.G. Consulting Inc. March 13, 2022.
12. BIG (2022b) Phase II Environmental Site Assessment, 581 – 587 Argus Road, Oakville, Ontario. B.I.G. Consulting Inc. March 17, 2022.
13. BIG (2022c) Phase One Environmental Site Assessment, 217 & 227 Cross Avenue and 571 – 595 Argus Road, Oakville, Ontario. B.I.G. Consulting Inc. September 19, 2022.

The applicable environmental information related to the Site is summarized below.

Terrapex (2019a) Phase I and II ESA	
Objective	Identify former and existing potential environmental concerns at the Site and on neighbouring properties; and investigate the potential for soil and groundwater quality at the Site. Note, this report was prepared for 217 Cross Ave and 571 Argus Road, not the entire Site.
Potential Environmental Concerns Identified	• Importation of fill material of unknown quality at the Site • Transformer located on Site
Program	• Advancement of six (6) boreholes (MW101, MW102, BH103, MW104, MW105, and BH106) up to a maximum depth of 3.05 m below ground surface (bgs). • Installation of four (4) monitoring wells (MW101, MW102, MW104, and MW105). • Soil samples submitted for the analyses of petroleum hydrocarbons (PHCs), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), metals and inorganics. • Groundwater samples submitted for the analyses of PHCs, VOCs, SVOCs, metals and inorganics.
Site Condition Standards	MECP (2011) Table 2 Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition for industrial/commercial/community (ICC) property with coarse textured soil.
Soil	• The stratigraphy consists of asphalt underlain by sand and gravel followed by fill consisting of sandy silt and native silty clay soil. • Shale bedrock was encountered between 2.29 and 2.90 m bgs.
Groundwater	• Water levels ranged from 2.29 to 2.45 m bgs (September 19, 2018).
Soil Conditions	• Sodium adsorption ratio (SAR) was detected at MW105-1a from 0-0.61 m bgs (13.5 µg/g) above the applicable MECP Table 2 SCS of 12 µg/g.
Groundwater Conditions	• Chloride was detected at MW105 (1,640,000 µg/L) above the applicable MECP Table 2 SCS of 790,000 µg/L. • Sodium was detected at MW104 (1,470,000 µg/L) and MW105 (500,000 µg/L) above the applicable MECP Table 2 SCS of 490,000 µg/L.

Terrapex (2019b) Phase I Environmental Site Assessment Update	
Objective	To verify that no significant changes occurred within the Site or surrounding areas since the Phase I and II were conducted. Note, this report was prepared for 217 Cross Ave and 571 Argus Road, not the entire Site

Terrapex (2019b) Phase I Environmental Site Assessment Update	
Potential environmental impacts identified	The Phase I ESA update work program did not identify any evidence to suggest that, since the report date of the previous Phase I and II ESAs, there is any new or materially changed potential environmental concerns at the Site.

BIG (2019) Geotechnical Investigation	
Objective	To establish the local geological settings at the Site. Note, this report was prepared for 217 to 227 Cross Ave and 571 Argus Road, not the entire Site.
Program	• Advancement of six (6) boreholes (BH1 to BH6) the depths ranged between 2.3 m to 17.7 m bgs. • Piezometers were installed within three (3) boreholes BH3, BH4 and BH6 for long-term groundwater level observations.
Soil	• The stratigraphy at the site consisted of topsoil or asphalt, underlain by fill, followed by native silt to clayey silt till deposits. • Shale bedrock was encountered from 1.8 to 3.1 m bgs.

BIG (2020) Phase I Environmental Site Assessment	
Objective	Identify existing or former potential sources of environmental concern at the Site at 227 Cross Avenue, not the entire Site.
Potential environmental impacts identified	• Use of de-icing salts across the entire Site. • Fill material may have been imported to the Site.

BIG (2021a) Geotechnical Investigation	
Objective	Investigate subsurface conditions for the Site and give geotechnical recommendations and identify potential geotechnical hazards. Note, this report was prepared for 217 to 227 Cross Ave and 571 Argus Road, not the entire Site.
Field Program	• Advancement of fifteen (15) boreholes (BH101 to BH115) the depths ranged between 5.5 m to 7.6 m bgs. • BH106, BH114 and BH115 were cored through the bedrock to depths of 23.4 m, 23.3 m and 23.3 m bgs respectively.
Site Stratigraphy	• The general stratigraphy at the site consists of topsoil, pavement or asphalt, overlying existing fills, underlain by clayey silt till followed by shale bedrock. • Shale was encountered at depths ranging between 1.7 to 3.1 m bgs.
Groundwater Observations	• Water level = 1.72 m to 21.09 m bgs (February 8, 2021).

BIG (2021b) Phase One Environmental Site Assessment	
Objective	Identify former and existing potential environmental concerns at the Site for Oakville Argus Cross LP. Note, this report was prepared for 217 to 227 Cross Avenue and 571 Argus Road, not the entire Site.
Potential Environmental Concerns Identified	• Use of de-icing salts at the Site. • Importation of fill material of unknown quality at the Site. • Autobody shop at 570 Argus Road, approximately 20 m west. • Former sheet metal shop at 568, 570 and 572 Argus Road, approximately 20 m west.

BIG (2021c) Phase Two Environmental Site Assessment	
Objective	Investigate soil and groundwater quality at the Site. Note, this report was prepared for 217 to 227 Cross Avenue and 571 Argus Road, not the entire Site.
Program	• Advancement of fifteen (15) boreholes (BH101 and BH115) to a maximum depth of 23.4 m bgs, respectively, and installation of fifteen (15) monitoring wells (MW101 and MW115). • Soil samples submitted for the analysis of petroleum hydrocarbons (PHCs), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), metals and inorganics. • Groundwater samples submitted for the analysis of PHCs, BTEX, VOCs, PAHs, metals and inorganics.
Site Condition Standards	• MECP (2011a) Table 2 Full depth SCS for residential/parkland/ institutional land use with potable groundwater coarse textured soil.
Soil	• The stratigraphy at the Site comprised of asphalt pavement or topsoil underlain by fill materials comprised of clayey silt and sandy silt, followed by native materials comprised of clayey silt till and highly weathered shale bedrock.
Groundwater	• Groundwater levels ranged from 1.72 m to 4.77 m bgs in shallow wells and 17.91 to 21.09 m bgs in deep wells (February 8, 2021). • Hydraulic conductivity ranged from 5.34×10^{-5} to 1.58×10^{-8} m/s with a geometric mean of 3.95×10^{-7}. • Groundwater flow direction was determined to be towards the south.
Soil Conditions	• Copper was detected at BH101-SS1 from 0-0.61 m bgs (493 µg/g) and BH106-SS2 from 0.76-1.37 m bgs (188 µg/g) above the applicable MECP Table 2 SCS of 140 µg/g.
Groundwater Conditions	• All groundwater samples submitted were detected below applicable SCS.

BIG (2021d) Hydrogeological Investigation	
Objective	Establish local hydrogeological settings at the Site. Note, this report is focused on 217 to 227 Cross Avenue and 571 Argus Road, not the entire Site.
Program	• Advancement of fifteen (15) monitoring wells (MW101 to MW115) up to a maximum depth of 23.4 m bgs. • Conduct single well response tests at selected wells.
Soil	• The stratigraphy at the Site is comprised of asphalt followed by granular, underlain by clayey silt and sandy silt fill, clayey silt till and shale bedrock.
Groundwater	• Groundwater levels ranged from 1.72 to 21.09 on February 8, 2021. • Hydraulic conductivity ranged from 5.34×10^{-5} to 1.58×10^{-8} m/s with a geometric mean of 3.95×10^{-7}.

Fisher (2021a) Phase I Environmental Site Assessment	
Objective	Identify existing or former potential sources of environmental concern.
Potential environmental impacts identified	No evidence of actual surface or sub-surface contamination associated with the Site and other properties within the Phase I Study Area.

Fisher (2021b) Phase I Environmental Site Assessment	
Objective	Identify existing or former potential sources of environmental concern.
Potential environmental impacts identified	No evidence of actual surface or sub-surface contamination associated with the Site and other properties within the Phase I Study Area.

BIG (2022a) Preliminary Geotechnical Investigation	
Objective	To establish the local geological settings at the Site. Note, this report was prepared for 581 - 595 Argus Road, not the entire Site.
Program	• Advancement of five (5) boreholes (BH1 to BH5) the depths ranged between 2.3 m to 17.7 m bgs. • Monitoring wells were installed within all five (5) boreholes (MW1 to MW5) for long-term groundwater level observations.
Soil	• The stratigraphy at the site consisted of asphalt, underlain by fill, followed by native clayey silt till followed by shale bedrock. • Shale bedrock was encountered from 2.3 to 2.6 m bgs.

BIG (2022b) Phase II Environmental Site Assessment	
Objective	Investigate soil and groundwater quality at the Site. Note, this report was prepared for 581 - 595 Argus Road, not the entire Site.
Program	• Advancement of five (5) boreholes (BH1 to BH5) to a maximum depth of 27.6 m bgs, respectively, and installation of five (5) monitoring wells (MW1 to MW5). • Soil samples submitted for the analysis of polycyclic aromatic hydrocarbons (PAHs), metals and inorganics. • Groundwater samples submitted for the analysis of PAHs.
Site Condition Standards	• MECP (2011a) Table 2 Full depth SCS for residential/parkland/ institutional land use with potable groundwater coarse textured soil.
Soil	• The stratigraphy at the Site comprised of asphalt underlain by fill materials comprised of clayey silt/silty clay, followed by native materials comprised of clayey silt till/silty clay till and highly weathered shale bedrock.
Groundwater	• Groundwater levels ranged from 4.24 m to 4.71 m bgs in shallow wells and 9.05 to 19.04 m bgs in deep wells (October 18, 2021).
Soil Conditions	• Fluoranthene was detected at BH4-SS1 from 0.0 - 0.61 m bgs (0.93 µg/g) above the applicable MECP Table 2 SCS of 0.69 µg/g.
Groundwater Conditions	• The groundwater sample submitted for PAHs was detected below applicable SCS.

BIG (2022b) Phase One Environmental Site Assessment	
Objective	Identify existing or former potential sources of environmental concern at the Site at 217 & 227 Cross Avenue and 571 – 595 Argus Road.
Potential environmental impacts identified	• Use of de-icing salts across the exterior of the Site. • Fill material has been imported to the Site. • Copper impacts were previously identified on-Site in soil at 217 and 227 Cross Avenue. • Transformer located on-Site at 217 Cross Avenue. • PAH soil impacts were previously identified on-Site in soil at 581 Argus Road. • Transformer located on-Site at 581 Argus Road.

BIG (2022b) Phase One Environmental Site Assessment	
	• Autobody shop and former fuel tank were located at 570 Trafalgar Road located approximately 15 m east of the Site.

3 Scope of Investigation

3.1 Overview of Site Investigation

The objective of the Phase Two ESA was to assess the APECs identified in BIG's Phase One ESA; and, to obtain soil and groundwater data to further characterize the Site to support the filing of an RSC on the MECP's BESR.

3.1.1 Scope of Work

The scope of work for the Phase Two ESA was as follows:

a) Request public and private utility locating companies (e.g., cable, telephone, gas, hydro, water, sewer and storm water) to mark any underground utilities present at the Site;
b) Advance a total of thirty-two (32) boreholes (BH/MW1A to BH/MW5A, BH/MW101 to BH116, BH105, BH104NA, BH104EA, BH104SA, BH104WA, BH104WB, BH201 to BH204 and BH301), up to a maximum depth of 27.6 m below ground surface (bgs);
c) Instrument twenty-one (21) boreholes as monitoring wells (BH/MW1A to BH/MW5A, BH/MW101 to BH/MW115 and MW301) with depths ranging from 2.44 to 22.9 m bgs;
d) Collect representative soil samples for laboratory chemical analysis of petroleum hydrocarbons (PHCs), benzene, toluene, ethylbenzene and xylenes (BTEX), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), metals and inorganics;
e) Develop both the previously and newly installed groundwater monitoring wells;
f) Collect groundwater levels from both the previously and newly installed monitoring wells;
g) Collect groundwater samples from the newly and previously installed monitoring wells for laboratory chemical analysis of PHCs, BTEX, VOCs, PAHs, metals and inorganics.
h) Complete an elevation survey of all newly installed monitoring wells to determine the groundwater flow direction in the bedrock groundwater aquifer beneath the Site;
i) Analyze the data and prepare a report of the findings.

3.2 Media Investigated

The focus of the Phase Two ESA was on the environmental conditions of the surficial topsoil, overburden materials and groundwater beneath the Site. As there was no surface water body on the Site, no sediment sampling was required.

A copy of the Site Sampling and Analysis Plan (SSAP) prepared for the Site is provided in Appendix A.

3.3 Phase One Conceptual Site Model

This section presents the Phase One Conceptual Site Model (P1CSM) providing a narrative, graphical and tabulated description integrating information related to the Site geologic and hydrogeologic conditions, areas of potential environmental concern/potential contaminating activities, and the presence and distribution of potential contaminants of concern. These components are discussed in the following sections.

The Site is located north of Cross Avenue and east of Argus Road, in Oakville, Ontario, as shown on Figure 1. For ease of review, Argus Road is considered to be towards the north and west of the Site and Cross Avenue is considered to be towards the south of the Site. The Site is irregular in shape and measures approximately 12,600 m² in size. The Site is currently occupied by four (4) commercial buildings (Site buildings). The Site at 217 Cross Avenue is developed with one (1) single-story commercial building that is occupied by Swiss Chalet and Harvey's. The Site at 227 Cross Avenue is currently developed with one (1) single-story commercial building that is occupied by McDonald's. The Site at 571 Argus Road is currently vacant and undeveloped.

The Site at 581 Argus Road is currently occupied by one (1) three-story commercial building that is occupied by various medical practices. The Site at 587 to 595 Argus Road is currently occupied by one (1) single story commercial building that is occupied by various medical practices. The Site buildings have a combined footprint of approximately 1,900 m², occupying approximately 15 % of the Site. The areas surrounding the Site building are covered with asphalt with some landscaping.

The legal descriptions of the Site as obtained from the PIN abstracts are summarized below:

217 Cross Avenue: Part of Lot 13, 14 Concession 3 Trafalgar, South of Dundas Street, as in 765240; Oakville/Trafalgar. Subject to Easement H816821 over Part 1, 20R13210.

227 Cross Avenue: Part of Lot 13, Concession 3 Trafalgar, South of Dundas Street, Part 4, 5, 20R3864, subject to 487336, "subject to 487707"; "Amended July 28 '99 J. Menard". Subject to Easement H816820 over Parts 2 and 3, 20R13210; Town of Oakville.

571 Argus Road: Part of Lot 13 and 14, Concession 3 Trafalgar, South of Dundas Street, as in H857135; Oakville.

581 Argus Road: Lot 6, Plan 1333; Subject to Easement as in 304377; Town of Oakville.

587 - 595 Argus Road: Part Lot 5, Plan 1333, as in 380801; Oakville.

The Property Identification Numbers (PINs) are 24816-0043 (LT), 24816-0044 (LT), 24816-0114 (LT), 24816-0035 (LT), 24816-0034 (LT). A legal survey plan is provided in Appendix E.

The approximate Universal Transverse Mercator (UTM) coordinates for the Site centroid was NAD83 17-4812432.12 m N, 606458.69 m E. The UTM coordinates are based on measurements obtained from QGIS. The accuracy of the centroid is estimated to 1 m.

Potentially Contaminating Activities

The Phase One ESA conducted by BIG in 2022 identified the following PCAs:

PCA Identifier	Address	PCA	PCA Location	Contributing to APEC at the Site?	Rationale
1.	217 & 227 Cross Avenue and 571, 581, 587 – 595 Argus Road	Usage of De-icing Salts (PCA#Other – Usage of De-icing Salts)	On-Site	Yes	On-Site
2.		Importation of Fill Material (PCA#30 – Importation of Fill Material of Unknown Quality)	On-Site		
3.	217 & 227 Cross Avenue	Copper impacts in soil (PCA#Other – Previously identified copper impacts in soil)	On-Site	Yes	On-Site
4.	217 Cross Avenue	Transformer (PCA#55 – Transformer Manufacturing, Processing and Use)	On-Site	Yes	On-Site
5.	581 Argus Road	PAH impacts in soil (PCA#Other – Previously identified PAH impacts in soil)	On-Site	Yes	On-Site
6.		Transformer			

PCA Identifier	Address	PCA	PCA Location	Contributing to APEC at the Site?	Rationale
		(PCA#55 – Transformer Manufacturing, Processing and Use)			
7.	570 Trafalgar Road	Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site (15 m east)	Yes	Upgradient
8.		Former Fuel Tank (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)			
9.	570 Argus Road	Current Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site (20 m west)	No	Inferred trans-gradient
10.		Transformer (PCA#55 – Transformer Manufacturing, Processing and Use)			PCBs are immobile
11.	572 Argus Road	Former Sheet Metal Workshop (PCA#33 – Metal Treatment, Coating, Plating and Finishing)	Off-Site (20 m west)	No	Inferred trans-gradient
12.		Former Sheet Metal Workshop (PCA#34 – Metal Fabrication)			
13.	214 Cross Avenue	CN Railway (PCA#46 – Rail Yards, Tracks and Spurs)	Off-Site (20 m south)	No	Located downgradient
14.	218 Cross Avenue	Former UST (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (20 m south)	No	Located downgradient
15.	580 Argus Road	Former Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site (20 m west)	No	Inferred trans-gradient
16.	234 South Service Road East	Transformer (PCA#55 – Transformer Manufacturing, Processing and Use)	Off-Site (50 m north)	No	PCBs are immobile
17.	187 Cross Avenue	Former Dry Cleaner (PCA#37 – Operation of Dry Cleaning Equipment (where chemicals are used))	Off-Site (55 m southwest)	No	Located downgradient
18.	185 Cross Avenue	Former Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site (65 m southwest)	No	Located downgradient

PCA Identifier	Address	PCA	PCA Location	Contributing to APEC at the Site?	Rationale
19.		Former Tannery (PCA#53 – Tannery)			
20.	562 Trafalgar Road	Auto Service Station (PCA#10 – Commercial Autobody Shops)	Off-Site (90 m northeast)	No	Inferred trans-gradient
21.		Current USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)			
22.		Former gasoline spill (PCA#Other – Gasoline spill to ground surface)			
23.	494 Trafalgar Road	Former USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (105 m east)	No	Inferred trans-gradient
24.	No municipal address	Railway Tracks (PCA#46 – Rail Yards, Tracks and Spurs)	Off-Site (140 m southeast)	No	Located downgradient
25.	489 Trafalgar Road	Former USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (155 southwest)	No	Located downgradient
26.	547 Trafalgar Road	Former Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site (160 northeast)	No	Inferred trans-gradient
27.		Former UST (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)			
28.		Former Paint Shop (PCA#39 – Paints Manufacturing, Processing and Bulk Storage)			
29.	142 – 148 Cross Avenue	Former Foundry (PCA#32 – Iron and Steel Manufacturing and Processing)	Off-Site (175 m Southwest)	No	Located downgradient
30.	480 Trafalgar Road	Former fuel oil tanks (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (180 m Southwest)	No	Located downgradient
31.	485 Trafalgar Road	Former USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (190 m southeast)	No	Located downgradient
32.	2 Dundas	Former USTs	Off-Site	No	Located

PCA Identifier	Address	PCA	PCA Location	Contributing to APEC at the Site?	Rationale
	Street North	(PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	(215 m south)		downgradient
33.	125 Cross Avenue	Former Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site (220 southwest)	No	Located downgradient
34.		Former ASTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)		No	Located downgradient
35.		Former Dry Cleaner (PCA#37 – Operation of Dry Cleaning Equipment (where chemicals are used))		No	Located downgradient
36.		Former Tannery (PCA#53 – Tannery)		No	Located downgradient
37.	312 Davis Road	Former Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site (220 northeast)	No	Inferred trans-gradient
38.	468 Trafalgar Road	Former USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (220 southeast)	No	Inferred trans-gradient
39.		Former Autobody Shop (PCA#10 – Commercial Autobody Shop)			
40.	147 to 151 Dundas Street North	Former UST (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (230 m south)	No	Located downgradient
41.	541 Dundas Street North	Former Autobody Shop (PCA#10 – Commercial Autobody Shops)	Off-Site (250 m south)	No	Located downgradient

1) *Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a phase one study area*

The identification of the PCAs both on-Site and off-Site within the Phase One study area are shown on Figure 3.

As a result of the PCAs, the report identified the following eight (8) APECs:

APEC	Location of APEC on Phase One Property	PCA	PCA Details	Location of PCA (On-Site or Off-Site)	Contaminants of Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 1: Usage of de-icing salts on paved surfaces	Paved surfaces of the Site	"Other" – Usage of De-icing Salts	De-icing salt were used during the winter months on the exterior portion of the Site for vehicular and pedestrian safety during the winter months.	On-Site	Electrical Conductivity, SAR, Na and Cl-	Soil and Groundwater
APEC 2: Importation of Fill Material	Entire Site	#30 – Importation of Fill Material of Unknown Quality	Fill material of unknown quality was identified on-Site. As the quality of the fill was unknown, it could be contaminated.	On-Site	PAHs, metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	Soil
APEC 3: Copper impacts in soil	Eastern Portion	#Other – Previously identified copper impacts in soil	Copper impacts were previously identified in soil within the northwestern portion of 217 and 227 Cross Avenue	On-Site	Metals	Soil and Groundwater
APEC 4: Transformer	Southern portion	#55 – Transformer Manufacturing, Processing and Use	A transformer is located in the southern portion of 217 Cross Avenue to the south of the existing building. The existing transformer could have leaked.	On-Site	PCBs	Soil
APEC 5: PAH impacts in soil	Central portion	#Other – Previously identified PAH impacts in soil	Select PAH impacts were previously identified in soil within the southern portion of 581 Argus Road.	On-Site	PAHs	Soil and Groundwater
APEC 6: Transformer	Eastern portion	#55 – Transformer Manufacturing, Processing and Use	A transformer is located to the east of the existing building at 581 Argus Road. The existing transformer could have leaked.	On-Site	PCBs	Soil
APEC 7: Autobody Shop	Eastern portion	#10 – Commercial Autobody Shops	An autobody shop is located off-Site, east adjacent to the Site. COCs could have leaked from the oil-water separators.	Off-Site	VOCs, Metals, As, Sb, Se, Cr (VI), Hg, CN-	Groundwater

APEC	Location of APEC on Phase One Property	PCA	PCA Details	Location of PCA (On-Site or Off-Site)	Contaminants of Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 8: Former Fuel Tank	Eastern portion	#28 – Gasoline and Associated Products Storage in Fixed Tanks	Former fuel tank located off-Site could have leaked.	Off-Site	PHCs and BTEX	Groundwater

1) *Area of Potential Environmental Concern means the area on, in or under a phase one study area where one or more contaminants are potentially present, as determined through the Phase One ESA including through:*
   a. *Identification of post or present uses on, in or under the phase one property, and*
   b. *Identification of potentially contaminating activities.*
2) *Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a phase one study area.*

PHCs = petroleum hydrocarbons; BTEX = benzene, toluene, ethylbenzene and toluene; VOCs = volatile organic compounds; PAHs = polycyclic aromatic hydrocarbons; PCBs = polychlorinated biphenyls; As = arsenic, Sb = antimony, Se = selenium; Cr (VI) = chromium hexavalent; Hg = mercury; B-HWS = boron hot water soluble; CN- = cyanide; Na = sodium; Cl- = chloride; SAR = sodium adsorption ratio.

The surficial geology of the Site is described Paleozoic bedrock. The physiography of the Site is the Iroquois Plains and is characterized as Shale Plains. The bedrock in the general area consists of shale, limestone, dolostone and siltstone and is part of the Georgian Bay Formation, Blue Mountain formation, Billings Formation, Collingwood Member and Eastview Member.

Based on the review of the OBM and Toporama map, the Site is at an elevation of approximately 102 metres above sea level (m asl), generally at the same elevation as properties to the north, east, south and west of the Site.

No water bodies are located on the Site. A tributary to Morrison Creek is situated approximately 300 m east of the Site. Lake Ontario is situated approximately 2.0 km southeast of the Site.

No potable wells were observed at the Site or within the Phase One Study Area. The Site and the Phase One Study Area are supplied by the Town of Oakville municipal water system, as defined in the *Safe Drinking Water Act, 2002*.

Based on the review of available resources from the Ministry of Natural Resources and Forestry (MNRF) and Natural Heritage Information Centre (NHIC, 2017), no areas of natural significance were identified at the Site or within the Phase One Study Area.

The Site utilities and services were identified at the Site based on relevant utility infrastructure observed during the Site reconnaissance. The Site utilities are summarized in the table below. It is noted that the precise underground location of utilities cannot by determined without profession locate services.

Utility	Source	Location	Site Entry
Storm Sewer	Municipality – Town of Oakville	On-Site and southeast	Catch basins are located at 227 Cross Avenue, 581 Argus Road, 587 Argus Road and along Cross Avenue.
Sanitary Sewer	Municipality – Town of Oakville	South	Given the Site is located in a mixed residential and commercial area, sanitary sewer lines are anticipated to run along Cross Avenue.
Water	Municipality – Town of Oakville	South	Given the Site is located in a mixed residential and commercial area, water lines are anticipated to run along Cross Avenue.
Natural Gas	Enbridge Gas	West, northwest and south	A natural gas meter was observed on the northwest corner of Argus Road. Given the Site is located in a mixed residential and commercial area, natural gas lines are anticipated to run along Cross Avenue and Argus Road.
Electricity	Oakville Hydro	West, northwest and south	Overhead hydro lines were observed along Cross Avenue and Argus Road, and enter the Site buildings underground on the southeastern, western and northwestern sides.

3.4 Deviations from Sampling and Analysis Plan

The field investigative and sampling program was carried out following the requirements of the SSAP, shown in Appendix A. No deviations from the SSAP were reported, which affected the sampling and data quality objectives for the Site.

3.5 Impediments

The entire Site was accessible at the time of the investigation, and no physical impediments were encountered during the field investigation.

4 Investigation Method

4.1 General

The Site investigative activities consisted of the drilling of thirty-two (32) boreholes to facilitate the collection of soil samples for geologic characterization and chemical analysis; and the installation of monitoring wells for hydrogeologic property characterization and the collection of groundwater samples for chemical analysis.

Boreholes were advanced in the surficial fill and overburden soils by a licensed drilling company under the full-time supervision of BIG staff. The drilling equipment used to advance the boreholes is described below. No petroleum-based greases or solvents were used during drilling activities. Monitoring wells were installed in the boreholes by a MECP licensed well contractor in accordance with Ontario Regulation 903/90, as amended (O.Reg.903) using manufactured well components (i.e., riser pipes and screens) and materials (i.e., sand pack and grout) from documented sources.

4.2 Borehole Drilling

Prior to the commencement of drilling activities, the locations of underground utilities including cable, telephone, natural gas, electrical lines, as well as water, sewer, storm water and sanitary lateral conduits were marked out by public locating companies. In addition, a private utility locating service was also retained to clear the individual borehole locations.

The fieldwork for the soil investigative portion of the Phase Two ESA was carried out between January 13 and 27, August 20, October 6 to 8, 2021, March 9, 2022, and February 10, 2023.

The boreholes were advanced by Canadian Soil Drilling and Davis Drilling Limited under full-time supervision of BIG staff using a truck-mounted, power operated solid and hollow stem continuous flight augers to a maximum depth of 27.6 m bgs at various on-Site locations to sufficiently assess the APECs identified in the Phase One ESA. The approximate locations of the boreholes and monitoring wells are shown on Figure 4.

BIG continuously monitored the drilling activities to record the physical characteristics of the soil, depth of soil sample collection and total depth of boreholes. Field observations are summarized on the borehole logs provided in Appendix C. Representative soil samples were recovered at regular intervals using a stainless-steel split spoon sampler in all boreholes.

4.3 Soil Sampling

Soil samples for geologic characterization and chemical analysis were collected on a discrete basis in the overburden materials using 5 cm diameter, 60 cm long, split spoon samples advanced in to the subsurface using a track mounted, power operated solid and hollow stem continuous flight augers. The soil cores were extruded from the samplers upon retrieval by drilling personnel. Geologic details of the recovered cores were logged by BIG field staff and samples were collected from selected cores for chemical analysis. Field observations are summarized on the borehole logs prepared from the field logs and provided in Appendix C.

Measures were taken in the field and during transport to preserve sample integrity prior to chemical analysis. Recommended volumes of soil samples selected for chemical analysis were collected from the recovered cores into pre-cleaned, laboratory-supplied glass sample jars/vials identified for the specified analytical test group. All soil samples were placed in clean coolers containing ice prior to and during transportation to the subcontract laboratory, AGAT Laboratories (AGAT) of Mississauga, Ontario. The samples were transported/submitted within the acceptable holding time to AGAT following Chain of Custody protocols for chemical analysis.

Decontamination and other protocols were followed during sample collection and handling to minimize the potential for sample cross-contamination. New disposable nitrile gloves were used for the handling and sampling of each retrieved soil core. Drill cuttings were placed in labelled, sealed drums upon completion of sampling. Twenty-one (21) of the boreholes that were advanced were installed with monitoring wells (BH/MW1A to BH/MW5A, MW101 to MW115, and MW301).

Soil samples submitted for specific chemical analysis were selected on the basis of visual inspection of the recovered cores, sample location and depth interval.

Geologic details of the soil cores recovered from the boreholes advanced at the Site are provided in boreholes logs presented in Appendix C.

Five (5) duplicate soil samples were collected for QA/QC purposes as summarized below:

Borehole	Duplicate Sample Identification	Analytical Test Group
BH104NA-SS2	DUPWA020	PAHs
BH104NA-SS3	DUPW4A030	PAHs
BH105-SS1	DUP010501	PCBs
BH110-SS2	DUP011002	VOCs and BTEX
		PHCs
BH114-SS2	DUP011402	PAHs
		Metals and inorganics

4.4 Field Screening Measurements

A portion of each soil sample was placed in a sealed Ziploc® plastic bag and allowed to reach ambient temperature. Field screening measurements were completed using a Photo Ionization Detection (PID) instrument, calibrated with isobutulene gas.

Each sample was examined for visual, textural and olfactory classification at the time of sampling.

4.5 Groundwater: Monitoring Well Installation

Twenty-one (21) boreholes were instrumented with groundwater monitoring wells at the Site (BH/MW1A to BH/MW5A, BH/MW101 to BH/MW115 and MW301). The monitoring wells were installed in general accordance with the Ontario Water Resources Act - R.R.O. 1990, Regulation 903/90 - amended to O.Reg.128/03 and were installed by a licensed well contractor.

All monitoring wells consisted of a 3 m length, 50 mm diameter PVC screen, and an appropriate length of PVC riser pipe, with the exception BH/MW3A which consisted of a 1.5 m length. All pipe connections were factory machined threaded flush couplings. The annular space around the wells was backfilled with sand to an average height of 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 ground surface.

When the monitoring wells are no longer required, they must be decommissioned in accordance with the procedure outlined in the Ontario Water Resources Act - R.R.O. 1990, Regulation 903 - amended to O. Reg. 128/03. Monitoring well completion details are summarized in Table 3.

Measures taken to minimize the potential for cross contamination or the introduction of contaminants during well construction included:

a) The use of well pipe components (e.g., riser pipe and well screens) with factory machine threaded flush coupling joints;
b) Construction of wells without the use of glues or adhesives;

c) Removing the protective plastic wraps from well components at the time of borehole insertion to prevent contact with the ground and other surfaces;
d) Cleaning of augers between sampling locations; and,
e) The use of hollow stem augers to prevent loose and potentially contaminated material in overlying layers from sloughing into the boreholes and coming into contact with groundwater.

4.6 Monitoring Well Development

Upon completion of monitoring well installation, the new monitoring wells were developed to remove fine sediment particles from the sand pack and enhance hydraulic communication with the surrounding formation waters. The previously and newly installed monitoring wells were developed on February 3, 2021, July 27, 2021, March 10, 2021, June 3, 2022, and February 13, 2023, using dedicated bailers to disturb the water column and recover groundwater containing dislodged sediment particles.

4.7 Groundwater Monitoring

Groundwater monitoring activities, which consisted of measuring the depths to groundwater in each monitoring well, were conducted on the newly installed monitoring wells so that groundwater flow and direction below the Site could be assessed and groundwater samples can be collected. These groundwater monitoring activities were conducted on February 3, 2021, July 27, 2021, March 10, 2021, June 3, 2022, and February 13, 2023. Water levels were measured with respect to the top of casing by means of an electronic water level meter. The water level measurements were recorded on water level log sheets or in a bound field notebook. The water level meter probe was decontaminated between monitoring well locations.

4.8 Monitoring Well Purging

Monitoring wells were purged prior to groundwater sample collection. Approximately three (3) wetted well volumes of water were purged from each well to remove standing water and draw in fresh formation water. Water levels and wetted well volumes were determined by means of an electronic water level meter.

Well purging was monitored by taking field measurements of turbidity, redox, pH, specific conductance and temperature and water level for every standing well (i.e., wetted casing) volume removed. Well purging continued until the purged water had chemically stabilized as indicated by field parameter measurements, and the water was of sufficient clarity as indicated by turbidity measurements. The groundwater was considered to be chemically stable when the pH measurements of three (3) successive purge well volumes agreed to within ± 1 pH units, the specific conductance within ± 10%, and turbidity ± 10% of the average value of the three readings with the temperature within ± 3%. Field parameters including pH, conductivity and temperature were monitored during monitoring well purging using a Hanna HI 9829 multiparameter water quality meter. All development water was collected and stored on-Site in labeled, sealed containers.

Equipment used during groundwater monitoring were thoroughly cleaned and decontaminated between wells. Well purging details were documented on a log sheet or in a bound hard cover notebook.

4.9 Field Measurements of Water Quality Parameters

Field parameters including pH, conductivity and temperature were monitored during well development using a Hanna HI 9829 multiparameter water quality meter.

4.10 Groundwater Sampling

Upon completion of purging, newly installed monitoring wells BH/MW101, BH/MW103, BH/MW104, BH/MW107, BH/MW108, BH/MW111, BH/MW112, BH/MW113 and BH/MW115 were sampled on February 3, 2021. BH/MW115 was sampled on June 3, 2022, BH/MW106 was sampled on July 27, 2021 and BH/MW4A was sampled on March 10, 2022. MW301 was sampled on February 13, 2023. Recommended groundwater sample volumes were collected into laboratory-supplied vials or bottles provided with analytical test group specific preservatives, as required. The samples were placed in an insulated cooler pre-chilled with ice immediately upon collection. The groundwater samples were transported to BV or AGAT under Chain of Custody protocols, within 24 hours of sample collection or approved holding times.

Groundwater samples were collected from twelve (12) monitoring wells, BH/MW4A, BH/MW101, BH/MW103, BH/MW104, BH/MW106, BH/MW107, BH/MW108, BH/MW111, BH/MW112, BH/MW113, BH/MW115, and MW301.

4.11 Sediment Sampling

As no water body was present at the Site, sediment sampling was not part of the Phase Two ESA.

4.12 Analytical Testing

All analytical testing was performed by Bureau Veritas (BV; formerly Maxxam Analytics Inc.) of Mississauga, Ontario and AGAT, which are both accredited laboratories under the Standards Council of Canada/Canadian Association of Environmental Analytical Laboratories (Accredited Laboratory No. 15025 and No. A3200, respectively) in accordance with ISO/IEC 17025:2017 - "General Requirements for the Competence of Testing and Calibration Laboratories".

4.12.1 Soil Sampling

Representative soil samples from each borehole were selected for laboratory analysis based on field screening results, sample location and depth interval. The requested laboratory analysis was based on the identified contaminants of concern. The representative soil samples selected for laboratory analysis, the rationale for each sample and the requested analyses are summarized below.

Table 1: Summary of Soil Samples Submitted for Chemical Analyses

Soil Sample ID	Rationale	Requested Analyses	Consultant
MW101-1a	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	Terrapex
MW101-2a	Site characterization	PHCs, BTEX and VOCs	Terrapex
MW102-1b	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	Terrapex
MW102-2a	Site characterization	PHCs, BTEX and VOCs	Terrapex
BH103-1a	APECs 1, 2 and Site characterization	PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	Terrapex
MW104-1a	APECs 1 & 2 characterization	Metals and Inorganics	Terrapex
MW104-1b	APEC 2 characterization	PAHs	Terrapex
MW104-2a	Site characterization	PHCs, BTEX and VOCs	Terrapex
MW105-1a	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	Terrapex
MW105-2a	Site characterization	PHCs, BTEX and VOCs	Terrapex
BH106-1	APEC 4 characterization	PCBs	Terrapex

Soil Sample ID	Rationale	Requested Analyses	Consultant
BH/MW1A-SS2	APEC 2 characterization	PAHs and Metals	BIG
BH/MW2A-SS1	APEC 2 characterization	PAHs and Metals	BIG
BH/MW3A-SS1	APEC 2 characterization	PAHs and Metals	BIG
BH/MW4A-SS1	APECs 2 and 5 characterization	PAHs and Metals	BIG
BH/MW5A-SS1	APEC 2 characterization	PAHs and Metals	BIG
BH/MW101-SS1	APECs 1 – 3 characterization	PAHs, Metals and Inorganics	BIG
BH/MW101-SS2	Site characterization	PHCs, BTEX and VOCs	BIG
BH/MW102-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW102-SS2	Site characterization	PHCs, BTEX and VOCs	BIG
BH/MW103-SS1	APECs 1 & 2 characterization	PAHs, Metals and inorganics	BIG
BH/MW104-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH104NA-SS1	Horizontal delineation	PAHs	BIG
BH104NA-SS2	Vertical delineation	PAHs	BIG
BH104NA-SS3	Vertical delineation	PAHs	BIG
BH104WA-SS1	Horizontal delineation	PAHs	BIG
BH104WA-SS2	Vertical delineation	PAHs	BIG
BH104WB-SS1	Horizontal delineation	PAHs	BIG
BH104EA-SS1	Horizontal delineation	PAHs	BIG
BH104EA-SS2	Vertical delineation	PAHs	BIG
BH104SA-SS1	Horizontal delineation	PAHs	BIG
BH104SA-SS2	Vertical delineation	PAHs	BIG
BH105-SS1	APEC 6 characterization	PCBs	BIG
BH/MW105-SS1	APECs 1 & 2 characterization	PAHs, Metals and inorganics	BIG
BH/MW105-SS3	Site characterization	PHCs, BTEX and VOCs	BIG
BH/MW106-SS1	Site characterization	PHCs, BTEX and VOCs	BIG
BH/MW106-SS2	APECs 1 – 3 characterization	PAHs, Metals and Inorganics	BIG
BH/MW107-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW108-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW109-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW110-SS1	APEC 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW110-SS2	Site characterization	PHCs, BTEX and VOCs	BIG
BH/MW111-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW112-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW112-SS2	Site characterization	PHCs, BTEX and VOCs	BIG
BH/MW113-SS1	APECs 1 & 2 characterization	PAHs, Metals and	BIG

Soil Sample ID	Rationale	Requested Analyses	Consultant
		Inorganics	
BH/MW113-SS2	Site characterization	PHCs, BTEX and VOCs	BIG
BH/MW114-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW114-SS2	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW115-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW115-SS2	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH116-AS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH201-SS1	Horizontal delineation	Metals	BIG
BH201-SS2	Horizontal delineation	Metals	BIG
BH202-SS2	Horizontal delineation	Metals	BIG
BH203-SS2	Horizontal delineation	Metals	BIG
BH204-SS1	Horizontal delineation	Metals	BIG
BH204-SS2	Vertical delineation	Metals	BIG

4.12.2 Groundwater Sampling

Representative groundwater samples were submitted for specific chemical analysis based on the identified contaminants of concern. The representative groundwater samples selected for lab analysis, the rationale for each sample, and the required analyses are summarized below.

Table 2: Summary of Groundwater Samples Submitted for Chemical Analyses

Monitoring Well ID	Rationale	Requested Analyses	Consultant
BH/MW101	APECs 1, 3, 7 and 8 characterization	PHCs, BTEX, VOCs, Metals and Inorganics	BIG
BH/MW103	APEC 1 characterization	Na and Cl-	BIG
BH/MW104	Site characterization	PHCs, BTEX, VOCs, and PAHs	BIG
BH/MW106	APEC 3 characterization	Metals	BIG
BH/MW107	APEC 1 characterization	Na and Cl-	BIG
BH/MW108	APEC 1 characterization	Metals and inorganics	BIG
BH/MW111	Site characterization	PAHs	BIG
BH/MW112	APEC 1 and Site characterization	PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	BIG
BH/MW113	Site characterization	PAHs	BIG
BH/MW115	APEC 1 characterization	Metals and Inorganics	BIG
MW301	APECs 7 and 8 characterization	PHCs, BTEX, VOCs, Metals and Inorganics	BIG
MW104	APEC 1 and Site characterization	PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	Terrapex
MW105	APEC 1 and Site characterization	PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	Terrapex
BH/MW4A	APEC 5 characterization	PAHs	BIG

4.13 Elevation Survey

An elevation survey was conducted to obtain vertical control of the newly installed borehole and monitoring well locations. The ground surface elevations of each newly installed monitoring well location was surveyed relative to the geodetic benchmark. The geodetic benchmark (GBM) is located on the asphalt paved parking lot located at 571 Argus Road. The GBM is positioned 0.01 m north of the southwest corner of the building and 0.23 m above the ground level. A summary of groundwater levels and elevations is provided below.

Table 3: Summary of Groundwater Levels and Elevations

Borehole/Monitoring Well ID	Ground Surface Elevation	Groundwater Level (m bgs)	Groundwater Elevation (AMSL)	Groundwater Sampling Date
BH/MW1A	104.53	4.38	100.15	October 18, 2021
		4.40	100.13	June 3, 2022
		4.37	100.16	February 13, 2023
BH/MW2A	104.24	9.05	95.19	October 18, 2021
		8.68	95.56	June 3, 2022
		8.32	95.92	February 13, 2023
BH/MW3A	104.37	4.24	100.13	October 18, 2021
		4.29	100.08	June 3, 2022
		4.14	100.23	February 13, 2023
BH/MW4A	103.61	4.71	98.90	October 18, 2021
		4.67	98.94	March 10, 2022
		Monitoring well destroyed		June 3, 2022
BH/MW5A	103.75	19.04	84.71	October 18, 2021
		16.66	87.09	June 3, 2022
		16.27	87.48	February 13, 2023
BH/MW101	103.04	3.38	99.66	February 8, 2021
		Monitoring well destroyed		June 3, 2022
BH/MW102	102.55	3.67	98.88	February 8, 2021
		3.33	99.22	June 3, 2022
		3.16	99.39	February 13, 2023
BH/MW103	101.78	2.79	98.99	February 8, 2021
		2.51	99.27	June 3, 2022
		2.29	99.49	February 13, 2023
BH/MW104	100.96	2.45	98.51	February 8, 2021
		2.18	98.78	June 3, 2022
		2.04	98.92	February 13, 2023
BH105	104.37	-	-	-
BH/MW105	102.38	21.09	81.29	February 8, 2021
		20.47	81.91	June 3, 2022
		20.47	81.91	February 13, 2023
BH/MW106	102.83	3.32	99.51	February 8, 2021
		Monitoring well destroyed		June 3, 2022
BH/MW107	102.40	3.61	98.79	February 8, 2021
		3.31	99.09	June 3, 2022
BH/MW108	102.55	3.90	98.65	February 8, 2021

Borehole/Monitoring Well ID	Ground Surface Elevation	Groundwater Level (m bgs)	Groundwater Elevation (AMSL)	Groundwater Sampling Date
		3.58	98.97	June 3, 2022
		3.47	99.08	February 13, 2023
BH/MW109	102.89	4.20	98.69	February 8, 2021
		3.83	99.06	June 3, 2022
		2.75	100.14	February 13, 2023
BH/MW110	101.82	3.08	98.74	February 8, 2021
		2.74	99.08	June 3, 2022
		2.61	99.21	February 13, 2023
BH/MW111	101.94	3.37	98.57	February 8, 2021
		3.07	98.87	June 3, 2022
		3.00	98.94	February 13, 2023
BH/MW112	102.78	4.23	98.55	February 8, 2021
		4.69	98.09	June 3, 2022
		4.55	98.23	February 13, 2023
BH/MW113	103.45	4.77	98.68	February 8, 2021
		5.27	98.18	June 3, 2022
		4.33	99.12	February 13, 2023
BH/MW114	103.31	18.88	84.43	February 8, 2021
		16.01	87.30	June 3, 2022
		15.91	87.39	February 13, 2023
BH/MW115	101.72	17.91	83.81	February 8, 2021
		16.58	85.14	June 3, 2022
		15.66	86.06	February 13, 2023
BH116	97.59	-	-	-
BH201	102.83	-	-	-
BH202	102.83	-	-	-
BH203	102.83	-	-	-
BH204	102.83	-	-	-
MW301	102.76	2.62	100.14	February 13, 2023
BH1	101.55	-	-	-
BH2	101.93	-	-	-
BH/MW3	102.87	1.72	101.15	February 8, 2021
		Monitoring well destroyed		June 3, 2022
BH/MW4	102.32	3.80	98.52	February 8, 2021
		Monitoring well destroyed		June 3, 2022
BH5	103.39	-	-	-
BH/MW6	102.74	DRY	DRY	February 8, 2021
		DRY	DRY	June 3, 2022
		DRY	DRY	February 13, 2023
MW101	99.37	DRY	DRY	September 19, 2018
		DRY	DRY	June 3, 2022
		DRY	DRY	February 13, 2023
MW102	98.98	DRY	DRY	September 19, 2018
		DRY	DRY	June 3, 2022

Borehole/Monitoring Well ID	Ground Surface Elevation	Groundwater Level (m bgs)	Groundwater Elevation (AMSL)	Groundwater Sampling Date
		DRY	DRY	February 13, 2023
BH103	-	-	-	-
MW104	97.76	2.29	95.47	September 19, 2018
		Monitoring well destroyed		June 3, 2022
BH104EA	103.61	-	-	-
BH104NA	103.61	-	-	-
BH104SA	103.61	-	-	-
BH104WA	103.61	-	-	-
BH104WB	103.61	-	-	-
MW105	97.68	2.45	95.23	September 19, 2018
		Monitoring well destroyed		June 3, 2022
BH105	104.37	-	-	-
BH106	-	-	-	-

The elevation survey was completed using BIG's own Sokkia B40. The survey equipment was calibrated by BIG personnel prior to use.

4.14 Quality Assurance and Quality Control Measures

Quality Assurance/Quality Control (QA/QC) measures, as set out in the Sampling and Analysis Plan, were implemented during sample collection, storage and transport to provide accurate data representative of conditions in the surficial fill and upper overburden soils and the water table aquifer. The QA/QC measures included decontamination procedures to minimize the potential for sample cross contamination, the execution of standard operating procedures to collect representative and unbiased samples, the collection of quality control samples to evaluate sample precision and accuracy, and the implementation of measures to preserve sample integrity.

Decontamination protocols were followed during sample collection and handling to minimize the potential for cross-contamination. During the collection of soil samples, split-spoon samplers were scraped and decontaminated between sampling intervals by washing with a potable water/phosphate-free detergent solution followed by a rinse with potable water. New disposable nitrile gloves were used for the handling and collection of samples from each soil core and for sample collection from each borehole.

Soil samples selected for chemical analyses were collected from the retrieved soil cores and placed directly into pre-cleaned, laboratory-supplied glass jars or vials. Sample volumes were consistent with analytical test group requirements as specified by the receiving laboratory.

Groundwater samples were collected into pre-clean laboratory-supplied vials or bottles provided with analytical test group specific preservatives, as required. Recommended analytical test group specific sample volumes were collected as specified by the contractual laboratory. Sample vials for analysis of BTEX and VOCs were inspected for the presence of gas bubbles and the presence of head space, where volatiles may partition into.

Measures were followed to preserve sample integrity between collection and receipt by the contractual laboratory. All samples, both soil and groundwater, immediately upon collection were placed in insulated coolers pre-chilled with ice for storage and transport to the contractual laboratory. Samples were received by the contractual laboratory within specific analytical test group holding time requirements.

Documentation procedures were followed to confirm sample identification and tracked sample movement. Each sample was assigned a unique identification ID number, which was recorded along with the date, time of sampling and requested analyses on labels affixed to the sampling containers, and in a bound field notebook. Chain of Custody protocols were followed to track sample handling and movement until receipt by the contractual laboratory.

Field QA/QC samples were collected during the soil and groundwater sampling. Duplicate samples were collected to evaluate sampling precision and trip blanks were included to evaluate the potential for sample cross-contamination during handling and transport.

Five (5) duplicate soil samples were collected for QA/QC purposes as summarized below:

Borehole	Duplicate Sample Identification	Analytical Test Group
BH104NA-SS2	DUPWA020	PAHs
BH104NA-SS3	DUPW4A030	PAHs
BH105-SS1	DUP010501	PCBs
BH110-SS2	DUP011002	BTEX and VOCs
		PHCs
BH114-SS2	DUP011402	PAHs
		Metals and inorganics

Four (4) duplicate groundwater samples were collected for QA/QC purposes as summarized below:

Monitoring Well	Duplicate Sample Identification	Analytical Test Group
BH/MW4A	DUP40	PAHs
BH/MW112	DUP11201	PHCs
		BTEX and VOCs
		PAHs
		Metals and inorganics
BH/MW115	DUP1150	Metals and inorganics
MW301	DUP3010	PHCs, BTEX, VOCs, Metals and inorganics

There were no significant deviations from the SSAP.

5 Review and Evaluation

5.1 Geology

The soil investigation conducted at the Site consisted of the advancement of thirty-two (32) boreholes into the surficial topsoil and the underlying native materials to a maximum depth of 27.6 m bgs. Borehole logs describing geologic details of the soil cores recovered during the Site drilling activities are presented in Appendix C. Boundaries of soil indicated on the log sheets are intended to reflect transition zones for the purpose of environmental assessment and should not be interpreted as exact planes of geological change.

The general stratigraphy at the Site, as observed in the boreholes, consisted of asphalt or topsoil at the ground surface, underlain by fill material comprised of clayey silt, silty clay and sandy silt underlain by native material characterized by clayey silt till/silty clay till followed by shale bedrock.

A brief description of the soil stratigraphy at the Site, in order of depth, is summarized in the following sections. The interpreted Site geology is shown on the enclosed cross sections (Figures 7A, 8A and 9A).

5.1.1 Surface Material

A layer of asphalt was encountered at all boreholes advanced at the Site with the exception of BH/MW6 and BH/MW112 to BH/MW114. The asphalt pavement consisted of approximately 50 to 150 mm thick asphaltic concrete over a 100 to 300 mm thick granular base.

A layer of topsoil was encountered at BH/MW6, BH/MW112 and BH/MW114. The topsoil layer ranged in thickness from 90 mm to 150 mm.

A layer of gravel was encountered at the ground surface of BH/MW113, the gravel layer had a thickness of 50 mm.

5.1.2 Fill Material

Fill material comprised of clayey silt, silty clay and sandy silt was encountered in all boreholes advanced at the Site and extended to depths ranging between 0.50 m to 1.70 m bgs. The fill material contained trace sand, trace gravel, trace rootlets and trace organics.

5.1.3 Native Material

Clayey Silt Till / Silty Clay Till

Below the fill material, clayey silt till and silty clay till was observed in all boreholes advanced at the Site and extended to depths ranging from 1.7 m to 2.8 m bgs.

5.1.4 Bedrock

Below the clayey silt till/silty clay till, a highly weathered shale bedrock was encountered in all boreholes and extended to the borehole termination depths. The shale bedrock unit was encountered at depths ranging from 1.7 m to 3.1 m bgs, with more than two-thirds (2/3) of the Site consisting of soil equal to or greater than 2 m in depth before the bedrock was encountered.

5.2 Groundwater Elevations and Flow Direction

The on-Site monitoring well network consists of a total of twenty-three (23) monitoring wells advanced by BIG screened within the bedrock and four (4) monitoring wells installed by previous consultants.

Based on the static water levels observed, the interpreted groundwater flow was towards the west/southwest.

5.2.1 Groundwater: Hydraulic Gradients

The horizontal hydraulic gradient, between each monitoring well pair, is calculated using the following equation:

$$i = Ah/As$$

Where,

i = horizontal hydraulic gradient;

Ah (m) = groundwater elevation difference; and,

As (m) = separation distance.

The horizontal hydraulic gradient in groundwater, based on groundwater measurements collected on February 13, 2023 was 0.012 m/m between BH/MW110 and BH/MW111 and 0.034 m/m between BH/MW109 and BH/MW113 with a geomean of 0.012 m/m.

It is noted that vertical hydraulic gradients were not evaluated for this Site as a second water bearing unit was not identified at the depths investigated at the Site.

5.2.2 Groundwater: Hydraulic Conductivity

Single Well Response Test (SWRT) analyses were conducted by BIG at monitoring wells BH/MW1A – BH/MW5A, BH/MW104, BH/MW106, BH/MW110, BH/MW113, BH/MW114 and BH/MW115 across the Site. Estimates of the saturated hydraulic conductivity in the aquifer ranged from 6.12×10^{-9} m/s and 5.34×10^{-5} m/s, with a geometric mean of 3.96×10^{-7} m/s.

5.3 Soil Texture

The native materials encountered, are comprised of clayey silt till with fragments of weathered shale. However, as grain size analysis was not conducted, coarse textured soil standards were applied.

5.4 Soil Field Screening

All soil samples were submitted for chemical analyses based on field observations, location, and depth.

5.5 Soil Quality

In accordance with the scope of work, chemical analyses were performed on selected soil samples recovered from the boreholes. The selection of representative “worst case” soil samples was based on field screening, visual and/or olfactory evidence of impacts, and the presence of potential water bearing zones. Copies of the laboratory Certificates of Analysis for the analyzed soil samples are provided in Appendix F.

5.5.1 PHCs

Soil samples submitted for PHCs analysis indicated that all parameters were either non-detect or detected below the applicable MECP Table 2 SCS; and, all laboratory RDLs were below the applicable SCS.

Refer to Table B.1 for a summary of the soil results analyzed for PHCs.

5.5.2 BTEX

Soil samples submitted for BTEX analysis indicated that all parameters were either non-detect or detected below the applicable MECP Table 2 SCS; and, all laboratory RDLs were below the applicable SCS.

Refer to Table B.2 for a summary of the soil results analyzed for BTEX.

5.5.3 VOCs

Soil samples submitted for VOCs analysis indicated that all parameters were either non-detect or detected below the applicable MECP Table 2 SCS; and, all laboratory RDLs were below the applicable SCS.

Refer to Table B.2 for a summary of the soil results analyzed for VOCs.

5.5.4 PAHs

The soil samples submitted for PAHs analysis indicated that select parameters were detected at concentrations above the MECP Table 2 SCS:

Parameter	MECP (2011a) Table 2 SCS (µg/g)	Number of Soil Samples Submitted (1)	Number of Soil Samples Exceeding the applicable SCS (1)	Maximum concentration detected (µg/g)
PAHs				
Benzo(a)anthracene	0.50	44	1	0.51
Benzo(a)pyrene	0.30	44	1	0.40
Fluoranthene	0.69	44	2	1.12

(1) Excluding duplicate samples

The remaining parameters were all detected below the applicable MECP Table 2 SCS and all laboratory RDLs were below the applicable SCS.

Refer to Table B.3 for a summary of the soil results analyzed for PAHs.

5.5.5 PCBs

Soil samples submitted for PCBs analysis indicated that all parameters were either non-detect or detected below the applicable MECP Table 2 SCS; and, all laboratory RDLs were below the applicable SCS.

Refer to Table B.4 for a summary of the soil results analyzed for PCBs.

5.5.6 Metals

The soil samples submitted for metals analysis indicated that select parameters were detected at concentrations above the MECP Table 2 SCS:

Parameter	MECP (2011a) Table 2 SCS (µg/g)	Number of Soil Samples Submitted (1)	Number of Soil Samples Exceeding the applicable SCS (1)	Maximum concentration detected (µg/g)
Metals				
Copper	140	40	2	493

(1) Excluding duplicate samples

The remaining parameters were all detected below the applicable MECP Table 2 SCS and all laboratory RDLs were below the applicable SCS.

Refer to Table B.5 for a summary of the soil results analyzed for metals.

5.5.7 Inorganics

Electrical conductivity (EC) and/or sodium adsorption ratio (SAR) were detected in soil in exceedance of the applicable MECP Table 2 SCS in seven (7) samples. However, under the newly amended O.Reg.153/04 (O.Reg.407/19) Section 49.1 (1), if a substance has been applied to surfaces for the safety of vehicular or pedestrian traffic under the conditions of snow or ice or both (i.e., application of de-icing salts), its related

parameters are not deemed to be in exceedance of the MECP Table 2 SCS. As de-icing salts are used at the Site for vehicular and pedestrian safety, EC and SAR in soil are not considered as contaminants of concern.

The remaining parameters were all detected below the applicable MECP Table 2 SCS and all laboratory RDLs were below the applicable SCS.

Refer to Table B.5 for a summary of the soil results analyzed for inorganics.

5.5.8 Chemical Transformation and Soil Contaminant Sources

PAHs and metals were identified in soil at concentrations in exceedance of the applicable MECP Table 2 SCS. However, given the nature of the compounds it is not expected that any chemical transformation (i.e., presence of parent compounds and daughter products) has occurred on the property. Further assessment would need to be conducted to assess whether any natural attenuation processes have occurred. Based on the former activities on-Site, the impacts are likely associated with the importation of fill material of unknown quality.

5.5.9 Evidence of Non-Aqueous Phase Liquid

Inspection of the soil cores retrieved from the boreholes did not indicate the presence of non-aqueous phase liquid (NAPL), staining or sheen.

5.6 Groundwater Quality

Representative groundwater samples were collected from the previously and newly installed monitoring wells to assess groundwater quality at the Site. Evidence of free product (i.e., visible film or sheen), and odour was not observed during well purging (noted in Section 5.6.6).

Analytical results summary tables are provided in Appendix B and copies of the laboratory Certificates of Analysis for the analyzed groundwater samples are provided in Appendix F.

5.6.1 PHCs

Groundwater samples submitted for PHCs analysis indicated that all parameters were either non-detect or detected below the applicable MECP Table 2 SCS; and, all laboratory RDLs were below the applicable SCS.

Refer to Table B.6 for a summary of the groundwater results analyzed for PHCs.

5.6.2 BTEX

Groundwater samples submitted for BTEX analysis indicated that all parameters were either non-detect or detected below the applicable MECP Table 2 SCS; and, all laboratory RDLs were below the applicable SCS.

Refer to Table B.7 for a summary of the groundwater results analyzed for BTEX.

5.6.3 VOCs

Groundwater samples submitted for VOCs analysis indicated that all parameters were either non-detect or detected below the applicable MECP Table 2 SCS; and, all laboratory RDLs were below the applicable SCS.

Refer to Table B.7 for a summary of the groundwater results analyzed for VOCs.

5.6.4 PAHs

Groundwater samples submitted for PAHs analysis indicated that all parameters were either non-detect or detected below the applicable MECP Table 2 SCS; and, all laboratory RDLs were below the applicable SCS.

Refer to Table B.8 for a summary of the groundwater results analyzed for PAHs.

5.6.5 Metals

Groundwater samples submitted for metals analysis indicated that all parameters were either non-detect or detected below the applicable MECP Table 2 SCS; and, all laboratory RDLs were below the applicable SCS.

Refer to Table B.9 for a summary of the groundwater results analyzed for metals.

5.6.6 Sodium and Chloride

Groundwater samples submitted for inorganics analysis indicated that sodium and chloride were detected in groundwater at eight (8) monitoring wells in exceedance of the applicable MECP Table 2 SCS, respectively. However, under the newly amended O.Reg.153/04 (O.Reg.407/19) Section 49.1 (1), if a substance has been applied to surfaces for the safety of vehicular or pedestrian traffic under the conditions of snow or ice or both (i.e., application of de-icing salts), its related parameters are not deemed to be in exceedance of the MECP Table 2 SCS. As de-icing salts are used at the Site for vehicular and pedestrian safety, sodium in groundwater is not considered as a contaminant of concern.

Refer to Table B.9 for a summary of the groundwater results analyzed for sodium and chloride.

5.6.7 Chemical Transformation and Contaminant Sources

No parameters were detected in groundwater above the applicable MECP Table 2 SCS. Therefore, chemical transformations and contaminant sources are not considered.

5.6.8 Evidence of Non-Aqueous Phase Liquid

Inspection of the purged groundwater retrieved from the monitoring wells did not indicate the presence of NAPL, staining, sheen, or odour in groundwater.

5.7 Sediment Quality

As no surface water body was located on-Site, the Phase Two ESA did not include sediment sampling.

5.8 Quality Assurance and Quality Control Measures

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

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

Review of field activity documentation indicated that recommended sample volumes were collected from soil and groundwater for each analytical test group into appropriate containers and preserved with proper chemical reagents in accordance with the protocols set out in the "Protocol for Analytical Methods used in the Assessment of Properties under Part XV.1 of the *Environmental Protection Act',* dated March 9,

2004, amended as of July 1,2011. Samples were preserved at the required temperatures in pre-chilled insulated coolers and met applicable holding time requirements, when relinquished to the receiving laboratory.

Field QA/QC samples were collected during the soil and groundwater sampling. Duplicate samples were collected to evaluate sampling precision.

Five (5) duplicate soil samples were collected for QA/QC purposes as summarized below:

Borehole	Duplicate Sample Identification	Analytical Test Group
BH104NA-SS2	DUPWA020	PAHs
BH104NA-SS3	DUPW4A030	PAHs
BH105-SS1	DUP010501	PCBs
BH110-SS2	DUP011002	BTEX and VOCs
		PHCs
BH114-SS2	DUP011402	PAHs
		Metals and inorganics

Four (4) duplicate groundwater samples were collected for QA/QC purposes as summarized below:

Monitoring Well	Duplicate Sample Identification	Analytical Test Group
BH/MW4A	DUP40	PAHs
BH/MW112	DUP11201	PHCs
		BTEX and VOCs
		PAHs
		Metals and inorganics
BH/MW115	DUP1150	Metals and inorganics
MW301	DUP3010	PHCs, BTEX, VOCs, Metals and inorganics

The field duplicate sample results were quantitatively evaluated by calculating the relative percent difference (RPD). Assessment of the duplicate soil and groundwater samples, where quantifiable, showed that the results met analytical test group specific acceptance criteria. The overall assessment indicates that the soil and groundwater samples were collected within an acceptable level of precision, and the data is acceptable quality for meeting the objectives of the Phase Two ESA.

The subcontract laboratories used during this investigation, BV and AGAT, are accredited by the Standards Council of Canada/Canadian Association for Laboratory Accreditation (Accredited Laboratory No. 15025 and No. A3200, respectively), in accordance with ISO/IEC 17025:2017 - "General Requirements for the Competence of Testing and Calibration Laboratories" for the analysis of all parameters for all samples in the scope of work for which SCS have been established under O.Reg.153/04.

Certificates of Analysis were received from BV and AGAT reporting the results of all the chemical analyses performed on the submitted soil and groundwater samples. Copies of the BV and AGAT Certificates of Analysis are provided in Appendix F. Review of the Certificates of Analysis prepared by BV and AGAT indicates that they were in compliance with the requirements set out under subsection 47(3) of O.Reg.153/04.

The analytical program conducted by BV and AGAT included analytical test group specific QA/QC measures to evaluate the accuracy and precision of the analytical results and the efficiency of analyte recovery during solute extraction procedures. The laboratory QA/QC program consisted of the preparation and analysis of laboratory duplicate samples to assess precision and sample homogeneity, method blanks to assess analytical bias, spiked blanks and QC standards to evaluate analyte recovery, matrix spikes to

evaluate matrix interferences and surrogate compound recoveries (VOCs only) to evaluate extraction efficiency. The laboratory QA/QC results are presented in the Quality Assurance Report provided in the Certificate of Analysis prepared by BV and AGAT. The QA/QC results are reported as percent recoveries for matrix spikes, spike blanks and QC standards, RPDs for laboratory duplicates and analyte concentrations for method blanks.

The BV and AGAT QA/QC results were assessed against test group control limits in the case of spiked blanks, matrix spikes and surrogate recoveries and alert criteria in the case of method blanks and laboratory duplicates. Review of the laboratory QA/QC results reported by BV and AGAT indicated that they were within acceptable control limits or below applicable alert criteria for the sampled media and analytical test groups. Based on the assessment of the QA/QC, the analytical results reported by BV and AGAT are of acceptable quality and data qualifications are not required.

5.9 Phase Two Conceptual Site Model

This section presents a Conceptual Site Model (CSM) providing a narrative, graphical and tabulated description integrating information related to the Site geologic and hydrogeologic conditions, areas of potential environmental concern/potential contaminating activities, the presence and distribution of potential contaminants of concern, contaminant fate and transport, and potential exposure pathways.

5.9.1 Introduction

The Site is located north of Cross Avenue and east of Argus Road, in Oakville, Ontario, as shown on Figure 1. For ease of review, Argus Road is considered to be towards the north and west of the Site and Cross Avenue is considered to be towards the south of the Site. The Site is irregular in shape and measures approximately 12,600 m² in size. The Site is currently occupied by four (4) commercial buildings (Site buildings). The Site at 217 Cross Avenue is developed with one (1) single-story commercial building that is occupied by Swiss Chalet and Harvey's. The Site at 227 Cross Avenue is currently developed with one (1) single-story commercial building that is occupied by McDonald's. The Site at 571 Argus Road is currently vacant and undeveloped. The Site at 581 Argus Road is currently occupied by one (1) three-story commercial building that is occupied by various medical practices. The Site at 587 to 595 Argus Road is currently occupied by one (1) single story commercial building that is occupied by various medical practices. The Site buildings have a combined footprint of approximately 1,900 m², occupying approximately 15 % of the Site. The areas surrounding the Site building are covered with asphalt with some landscaping.

The Site is located within a mixed commercial and residential area of Oakville. The nearest surface water body is a tributary of Morrison Creek, located approximately 300 m east, and Lake Ontario is located approximately 2.0 km southeast of the Site. A Site Location Map and Site layout Plan are shown in Figures 1 and 2, respectively.

Refer to the following table for the Site identification information.

Site Details	
Municipal Addresses	217 and 227 Cross Avenue and 571 – 595 Argus Road
Current Owners	2739828 Ontario Inc., 2810685 Ontario Inc., Oakville Argus Cross III Inc.
Beneficial Owners	Oakville Argus Cross LP, Oakville Argus Cross GP Inc., Oakville Argus Cross II LP, Oakville Argus Cross II GP Inc., Oakville Argus Cross III LP, Oakville Argus Cross III GP Inc., Distrikt Capital Holdings I Corp, Sud Oakville One LP
Owner Address	1-90 Wingold Avenue, Toronto, Ontario, M6B 1P5
Owner Contact Information	Name: Mr. Emil Toma

Site Details	
	Position: President Email: emil@distrikt.com
Legal Description	**217 Cross Avenue:** Part of Lot 13, 14 Concession 3 Trafalgar, South of Dundas Street, as in 765240; Oakville/Trafalgar. Subject to Easement H816821 over Part 1, 20R13210. **227 Cross Avenue:** Part of Lot 13, Concession 3 Trafalgar, South of Dundas Street, Part 4, 5, 20R3864, subject to 487336, "subject to 487707"; "Amended July 28 '99 J. Menard". Subject to Easement H816820 over Parts 2 and 3, 20R13210; Town of Oakville. **571 Argus Road:** Part Lots 13 and 14, Concession 3 Trafalgar, South of Dundas Street, as in H857135; Oakville. **581 Argus Road:** Lot 6, Plan 1333; Subject to Easement as in 304377; Town of Oakville. **587 - 595 Argus Road:** Part Lot 5, Plan 1333, as in 380801; Oakville.
Property Identification Numbers (PINs)	**217 Cross Avenue:** 24816-0044 (LT) **227 Cross Avenue:** 24816-0043 (LT) **571 Argus Road:** 24816-0114 (LT) **581 Argus Road:** 24816-0035 (LT) **587-595 Argus Road:** 24816-0034 (LT)
Property Size	12,600 m² (1.26 hectares)
Approximate Universal Transverse Mercator (UTM) coordinates	Zone: 17 Easting: 606458.69 Northing: 4812432.12 (1m, NAD83, QGIS)

5.9.2 Potentially Contaminating Activities and Areas of Potential Environmental Concern

A Phase One ESA, in accordance with O.Reg.153/04, as amended, has been conducted by BIG for the Site. The surrounding land use plan and PCAs identified On-Site and in the Phase One ESA Study Area are shown on Figure 2. A list of all PCA's identified at the Site and within the Phase One ESA Study Area are presented below:

Table 4: Potentially Contaminating Activities in the Phase One Study Area

PCA Identifier	Address	PCA	PCA Location	Contributing to APEC at the Site?	Rationale
1.	217 & 227 Cross Avenue and 571, 581, 587 – 595 Argus Road	Usage of De-icing Salts (PCA#Other – Usage of De-icing Salts)	On-Site	Yes	On-Site
2.		Importation of Fill Material (PCA#30 – Importation of Fill Material of Unknown Quality)	On-Site		
3.	217 & 227 Cross Avenue	Copper impacts in soil (PCA#Other – Previously identified copper impacts in	On-Site	Yes	On-Site

PCA Identifier	Address	PCA	PCA Location	Contributing to APEC at the Site?	Rationale
		soil)			
4.	217 Cross Avenue	Transformer (PCA#55 – Transformer Manufacturing, Processing and Use)	On-Site	Yes	On-Site
5.	581 Argus Road	PAH impacts in soil (PCA#Other – Previously identified PAH impacts in soil)	On-Site	Yes	On-Site
6.		Transformer (PCA#55 – Transformer Manufacturing, Processing and Use)			
7.	570 Trafalgar Road	Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site (15 m east)	Yes	Upgradient
8.		Former Fuel Tank (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)			
9.	570 Argus Road	Current Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site (20 m west)	No	Inferred trans-gradient
10.		Transformer (PCA#55 – Transformer Manufacturing, Processing and Use)			PCBs are immobile
11.	572 Argus Road	Former Sheet Metal Workshop (PCA#33 – Metal Treatment, Coating, Plating and Finishing)	Off-Site (20 m west)	No	Inferred trans-gradient
12.		Former Sheet Metal Workshop (PCA#34 – Metal Fabrication)			
13.	214 Cross Avenue	CN Railway (PCA#46 – Rail Yards, Tracks and Spurs)	Off-Site (20 m south)	No	Located downgradient
14.	218 Cross Avenue	Former UST (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (20 m south)	No	Located downgradient
15.	580 Argus Road	Former Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site (20 m west)	No	Inferred trans-gradient

PCA Identifier	Address	PCA	PCA Location	Contributing to APEC at the Site?	Rationale
16.	234 South Service Road East	Transformer (PCA#55 – Transformer Manufacturing, Processing and Use)	Off-Site (50 m north)	No	PCBs are immobile
17.	187 Cross Avenue	Former Dry Cleaner (PCA#37 – Operation of Dry Cleaning Equipment (where chemicals are used))	Off-Site (55 m southwest)	No	Located downgradient
18.	185 Cross Avenue	Former Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site (65 m southwest)	No	Located downgradient
19.		Former Tannery (PCA#53 – Tannery)			
20.	562 Trafalgar Road	Auto Service Station (PCA#10 – Commercial Autobody Shops)	Off-Site (90 m northeast)	No	Inferred trans-gradient
21.		Current USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)			
22.		Former gasoline spill (PCA#Other – Gasoline spill to ground surface)			
23.	494 Trafalgar Road	Former USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (105 m east)	No	Inferred trans-gradient
24.	No municipal address	Railway Tracks (PCA#46 – Rail Yards, Tracks and Spurs)	Off-Site (140 m southeast)	No	Located downgradient
25.	489 Trafalgar Road	Former USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (155 southwest)	No	Located downgradient
26.	547 Trafalgar Road	Former Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site (160 northeast)	No	Inferred trans-gradient
27.		Former UST (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)			
28.		Former Paint Shop (PCA#39 – Paints Manufacturing, Processing and Bulk Storage)			
29.	142 – 148	Former Foundry	Off-Site	No	Located

PCA Identifier	Address	PCA	PCA Location	Contributing to APEC at the Site?	Rationale
	Cross Avenue	(PCA#32 – Iron and Steel Manufacturing and Processing)	(175 m Southwest)		downgradient
30.	480 Trafalgar Road	Former fuel oil tanks (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (180 m Southwest)	No	Located downgradient
31.	485 Trafalgar Road	Former USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (190 m southeast)	No	Located downgradient
32.	2 Dundas Street North	Former USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (215 m south)	No	Located downgradient
33.	125 Cross Avenue	Former Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site (220 southwest)	No	Located downgradient
34.		Former ASTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)		No	Located downgradient
35.		Former Dry Cleaner (PCA#37 – Operation of Dry Cleaning Equipment (where chemicals are used))		No	Located downgradient
36.		Former Tannery (PCA#53 – Tannery)		No	Located downgradient
37.	312 Davis Road	Former Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site (220 northeast)	No	Inferred trans-gradient
38.	468 Trafalgar Road	Former USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (220 southeast)	No	Inferred trans-gradient
39.		Former Autobody Shop (PCA#10 – Commercial Autobody Shop)			
40.	147 to 151 Dundas Street North	Former UST (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (230 m south)	No	Located downgradient
41.	541 Dundas Street North	Former Autobody Shop (PCA#10 – Commercial Autobody Shops)	Off-Site (250 m south)	No	Located downgradient

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

The identification of the PCAs both on-Site and off-Site within the Phase One study area are shown on Figure 3.

5.9.3 Areas of Potential Environmental Concern

Based on the evaluation of the PCAs located on- and off-Site, eight (8) APECs are identified, as presented below:

Table 5: Areas of Potential Environmental Concern (APECs)

APEC	Location of APEC on Phase One Property	PCA	PCA Details	Location of PCA (On-Site or Off-Site)	Potential Contaminants of Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 1: Usage of de-icing salts on paved surfaces	Paved surfaces of the Site	"Other" – Usage of De-icing Salts	De-icing salt were used during the winter months on the exterior portion of the Site for vehicular and pedestrian safety during the winter months.	On-Site	Electrical Conductivity, SAR, Na and Cl-	Soil and Groundwater
APEC 2: Importation of Fill Material	Entire Site	#30 – Importation of Fill Material of Unknown Quality	Fill material of unknown quality was identified on-Site. As the quality of the fill was unknown, it could be contaminated.	On-Site	PAHs, metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	Soil
APEC 3: Copper impacts in soil	Eastern Portion	#Other – Previously identified copper impacts in soil	Copper impacts were previously identified in soil within the northwestern portion of 217 and 227 Cross Avenue	On-Site	Metals	Soil and Groundwater
APEC 4: Transformer	Southern portion	#55 – Transformer Manufacturing, Processing and Use	A transformer is located in the southern portion of 217 Cross Avenue to the south of the existing building. The existing transformer could have leaked.	On-Site	PCBs	Soil
APEC 5: PAH impacts in soil	Central portion	#Other – Previously identified PAH impacts in soil	Select PAH impacts were previously identified in soil within the southern portion of 581 Argus Road.	On-Site	PAHs	Soil and Groundwater

APEC	Location of APEC on Phase One Property	PCA	PCA Details	Location of PCA (On-Site or Off-Site)	Potential Contaminants of Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 6: Transformer	Eastern portion	#55 – Transformer Manufacturing, Processing and Use	A transformer is located to the east of the existing building at 581 Argus Road. The existing transformer could have leaked.	On-Site	PCBs	Soil
APEC 7: Autobody Shop	Eastern portion	#10 – Commercial Autobody Shops	An autobody shop is located off-Site, east adjacent to the Site. COCs could have leaked from the oil-water separators.	Off-Site	VOCs, Metals, As, Sb, Se, Cr (VI), Hg, CN-	Groundwater
APEC 8: Former Fuel Tank	Eastern portion	#28 – Gasoline and Associated Products Storage in Fixed Tanks	Former fuel tank located off-Site could have leaked.	Off-Site	PHCs and BTEX	Groundwater

1) Area of Potential Environmental Concern means the area on, in or under a phase one study area where one or more contaminants are potentially present, as determined through the Phase One ESA including through:

a. Identification of post or present uses on, in or under the phase one property, and

b. Identification of potentially contaminating activities.

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

PHCs = petroleum hydrocarbons; BTEX = benzene, toluene, ethylbenzene and toluene; VOCs = volatile organic compounds; PAHs = polycyclic aromatic hydrocarbons; PCBs = polychlorinated biphenyls; As = arsenic, Sb = antimony, Se = selenium; Cr (VI) = chromium hexavalent; Hg = mercury; B-HWS = boron hot water soluble; CN- = cyanide; Na = sodium; Cl- = chloride; SAR = sodium adsorption ratio.

Refer to Figures 4 and 5 for the Site plan illustrating the borehole/monitoring well locations and APECs and to Table 6 below for details on APEC characterization.

Table 6: APEC Characterization Details

APEC	APEC Details	Media Potentially Impacted	Boreholes/ Monitoring Wells Advanced within APEC	Depth(s) of Soil Samples Submitted for Analysis (m bgs)	Well Screen Depth (m bgs)	Parameters Tested	Figure #
APEC 1	De-icing salt were used during the winter months on the exterior portion of the Site for vehicular and pedestrian safety during the winter months	Soil + Groundwater	BH/MW101	0.0 – 0.61	3.05 – 6.10	EC, SAR, Na and Cl-	15 + 20
			BH/MW102	0.0 – 0.61	-	EC and SAR	
			BH/MW103	0.0 – 0.61	3.05 – 6.10	EC, SAR, Na and Cl-	
			BH/MW104	0.0 – 0.61	-	EC and SAR	
			BH/MW105	0.0 – 0.61	-	EC and SAR	
			BH/MW106	0.76 – 1.37	-	EC and SAR	
			BH/MW107	0.0 – 0.61	3.05 – 6.10	EC, SAR, Na and Cl-	
			BH/MW108	-	3.05 – 6.10	Na and Cl-	
			BH/MW109	0.0 – 0.61	-	EC and SAR	
			BH/MW110	0.0 – 0.61	-	EC and SAR	
			BH/MW111	0.0 – 0.61	-	EC and SAR	
			BH/MW112	0.0 – 0.61	3.05 – 6.10	EC, SAR, Na and Cl-	
			BH/MW113	0.0 – 0.61	-	EC and SAR	
			BH/MW114	0.0 – 0.61	-	EC and SAR	
				0.76 – 1.37	-	EC and SAR	
			BH/MW115	0.0 – 0.61	18.6 – 21.6	EC, SAR, Na and Cl-	
			MW101	0.0 – 0.76	-	EC and SAR	
			MW102	0.76 – 1.52	-	EC and SAR	
			BH103	0.0 – 0.61	-	EC and SAR	
			MW104	0.0 – 0.76	0.91 – 3.05	EC, SAR, Na and Cl-	
			MW105	0.0 – 0.76	0.91 – 3.05	EC, SAR, Na and Cl-	
APEC 2	Fill material of unknown quality was identified on-Site. As the quality of the fill was unknown, it could be contaminated	Soil	BH/MW1A	0.76 – 1.37	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	12A + 14A
			BH/MW2A	0.0 – 0.61	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
			BH/MW3A	0.76 – 1.37	-	PAHs, Metals,	

APEC	APEC Details	Media Potentially Impacted	Boreholes/ Monitoring Wells Advanced within APEC	Depth(s) of Soil Samples Submitted for Analysis (m bgs)	Well Screen Depth (m bgs)	Parameters Tested	Figure #
						As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
			BH/MW4A	0.0 – 0.61	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
			BH/MW5A	0.0 – 0.61	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
			BH104NA	0.0 – 0.61	-	PAHs	
				0.76 – 1.37	-	PAHs	
				1.52 – 2.13	-	PAHs	
			BH104EA	0.0 – 0.61	-	PAHs	
				0.76 – 1.37	-	PAHs	
			BH104SA	0.0 – 0.61	-	PAHs	
				0.76 – 1.37	-	PAHs	
			BH104WA	0.0 – 0.61	-	PAHs	
				0.76 – 1.37	-	PAHs	
			BH104WB	0.0 – 0.61	-	PAHs	
			BH/MW101	0.0 – 0.61	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
				1.52 – 2.13	-	Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
				-	3.05 – 6.10	Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
			BH/MW102	0.0 – 0.61	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
			BH/MW103	0.0 – 0.61	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
			BH/MW104	0.0 – 0.61	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
				-	3.05 – 6.10	PAHs	
			BH/MW105	0.0 – 0.61	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
			BH/MW106	0.76 – 1.37	-	PAHs, Metals, As, Sb, Se, Cr	

APEC	APEC Details	Media Potentially Impacted	Boreholes/ Monitoring Wells Advanced within APEC	Depth(s) of Soil Samples Submitted for Analysis (m bgs)	Well Screen Depth (m bgs)	Parameters Tested	Figure #
						(VI), Hg, B-HWS, CN-	
				1.52 – 2.13		Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
			BH/MW108	0.0 – 0.61	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
				-	3.05 – 6.10	Metals, As, Sb, Se, Cr (VI), Hg, CN-	
			BH/MW109	0.0 – 0.61	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
			BH/MW110	0.0 – 0.61	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
			BH/MW111	0.0 – 0.61	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
				-	3.05 – 6.10	PAHs	
			BH/MW112	0.0 – 0.61	3.05 – 6.10	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
			BH/MW113	0.0 – 0.61	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
				-	3.05 – 6.10	PAHs	
			BH/MW114	0.0 – 0.61	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
				0.76 – 1.37	-		
			BH/MW115	0.0 – 0.61	-		
				0.76 – 1.37	-		
			BH116	0.0 – 0.61	-		
			MW101	0.0 – 0.76	-		
			MW102	0.76 – 1.52	-		
			BH103	0.0 – 0.76	-		
			MW104	0.76 – 1.52	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	
				-	0.91 – 3.05	PAHs	
			MW105	0.0 – 0.76	-	Metals, As, Sb, Se, Cr (VI), Hg,	

APEC	APEC Details	Media Potentially Impacted	Boreholes/ Monitoring Wells Advanced within APEC	Depth(s) of Soil Samples Submitted for Analysis (m bgs)	Well Screen Depth (m bgs)	Parameters Tested	Figure #
						B-HWS, CN-	
				-	0.91 – 3.05	PAHs	
APEC 3	Copper impacts were previously identified in soil within the northwestern portion of 217 and 227 Cross Avenue	Soil	BH/MW101	0.0 – 0.61	3.05 – 6.10	Metals	14A + 19
			MW102	0.76 – 1.52	-		
			BH/MW106	0.76 – 1.37	3.05 – 6.10		
			BH201	0.0 – 0.61 0.76 – 1.37	-		
			BH202	0.76 – 1.37	-		
			BH203	0.76 – 1.37	-		
			BH204	0.0 – 0.61 0.76 – 1.37	-		
APEC 4	A transformer is located in the southern portion of 217 Cross Avenue to the south of the existing building	Soil	BH106	0.0 – 0.10	NA	PCBs	13
APEC 5	Select PAH impacts were previously identified in soil within the southern portion of 581 Argus Road	Soil	BH/MW4A	0.0 – 0.61	4.3 – 7.3	PAHs	12A + 18
			BH104NA	0.0 – 0.61 0.76 – 1.37 1.52 – 2.13	-		
			BH104EA	0.0 – 0.61 0.76 – 1.37	-		
			BH104SA	0.0 – 0.61 0.76 – 1.37	-		
			BH104WA	0.0 – 0.61 0.76 – 1.37	-		
			BH104WB	0.0 – 0.61	-		
APEC 6	A transformer is located to the east of the existing building at 581 Argus Road	Soil	BH105	0.0 – 0.61	NA	PCBs	13
APEC 7	An autobody shop is located off-Site, east adjacent to the Site. COCs could have migrated on-Site in groundwater	Groundwater	BH/MW101	NA	3.05 – 6.10	VOCs, Metals, As, Sb, Se, Cr (VI), Hg, CN-	17 + 19
			MW301	NA	3.05 – 6.10	VOCs, Metals, As, Sb, Se, Cr (VI), Hg, CN-	17 + 19
APEC 8	A former fuel tank was located off-Site	Groundwater	BH/MW101	NA	3.05 – 6.10	PHCs and BTEX	16
			MW301	NA	3.05 – 6.10	PHCs and BTEX	16

5.9.4 Underground Utilities

A fibre optic cable is located on the northern portion of the Site and enters the Site on the western property boundary and then extends across the Site where it exits on the eastern property boundary.

Two (2) gas lines are located on-site. The two (2) gas lines enter the property on the northwestern property boundary, one gas extends east and then towards the north where it enters the building located at 587 – 595 Argus Road. The second gas line extends east and then to the south where it enters the building located at 581 Argus Road.

Two (2) telephone conduit lines are located on-Site. The two (2) lines enter the property on the northwestern property boundary, one telephone conduit extends east and then curves towards the north where it enters the building located at 587 – 595 Argus Road. The telephone conduit extends east and then to the south where it enters the building located at 581 Argus Road.

One (1) tv conduit is located on the northwestern property boundary, the conduit extends east and then towards the south where it enters the building located at 581 Argus Road.

Three (3) water mains are located on-Site. One (1) water main enters the Site from the northern property boundary, the main extends to the south where it enters the building located at 587 – 595 Argus Road. The second main enters the Site on the western property boundary where it extends to the east and then enters the building located at 587 – 595 Argus Road. The third water main enters the Site on the southern property boundary where it extends to the north and enters the building at 217 Cross Avenue.

Four (4) hydro lines are located on-Site. One (1) hydro line enters the Site from the northwestern property boundary where it extends to the east and then curves towards the south where it connects with the transformer located to the east of the building located at located at 581 Argus Road. Two (2) hydro lines are connected to the building located at 217 Cross Avenue, the hydro lines then extend to the north and to the northeast, away from the building and into the parking lot. The fourth hydro line enter the Site from the southeastern property boundary, the line then curves toward the north and then towards the east where it enters the building at 227 Cross Avenue.

Five (5) catch basins were present on-Site, in the central and southern portion of the Site. Three (3) of the catch basins were connected by a storm sewer. A second storm sewer line is present in the southern portion of 581 Argus Road. The line enters the Site on the western property boundary where it then extends towards the east and exits the Site on the eastern property boundary.

5.9.5 Physical Site Description

The Phase Two CSM provides a narrative and graphical interpretation of the Site surface features, near surface geologic and hydrogeologic conditions, potential contaminants of concern, contaminant fate and transport mechanisms and relevant receptors and exposure pathways. These components are discussed in the following sections.

Surface Features

The Site is currently developed with four (4) commercial buildings occupying approximately 15 % of the Site. The areas surrounding the Site buildings are covered with asphalt paved parking with landscaping present along the southern, western and northwestern property boundaries.

Geologic Setting

Information on the overburden and bedrock geology of the general Site area was obtained from relevant geological maps. The Site is located in the physiographic region within the Iroquois Plains characterized as shale plains. The surficial geology of the Site is described as Paleozoic bedrock. The bedrock in the general area of the Site consists of shale, limestone, dolostone and siltstone and is part of the Georgian Bay Formation, Blue Mountain Formation, Billings Formation, Collingwood Member and Eastview Member.

This section presents a description of the Site geology as interpreted from borehole logs prepared from subsurface investigations of the Site.

The general stratigraphy at the Site, as observed in the boreholes, consisted of asphalt or topsoil at the ground surface, underlain by fill material comprised of clayey silt, silty clay and sandy silt underlain by native material characterized by clayey silt till/silty clay till followed by shale bedrock.

Surface Material

A layer of asphalt was encountered at all boreholes advanced at the Site with the exception of BH/MW6 and BH/MW112 to BH/MW114. The asphalt pavement consisted of approximately 50 to 150 mm thick asphaltic concrete over a 100 to 300 mm thick granular base.

A layer of topsoil was encountered at BH/MW6, BH/MW112 and BH/MW114. The topsoil layer ranged in thickness from 90 mm to 150 mm.

A layer of gravel was encountered at the ground surface of BH/MW113, the gravel layer had a thickness of 50 mm.

Fill Material

Fill material comprised of clayey silt, silty clay and sandy silt was encountered in all boreholes advanced at the Site and extended to depths ranging between 0.50 m to 1.70 m bgs. The fill material contained trace sand, trace gravel, trace rootlets and trace organics.

Native Material

Clayey Silt Till/Silty Clay Till

Below the fill material, clayey silt till and silty clay till was observed in all boreholes advanced at the Site and extended to depths ranging from 1.7 m to 2.8 m bgs.

Bedrock

Below the clayey silt till/silty clay till, a highly weathered shale bedrock was encountered in all boreholes and extended to the borehole termination depths. The shale bedrock unit was encountered at depths ranging from 1.7 m to 3.1 m bgs, with more than two-thirds (2/3) of the Site consisting of soil equal to or greater than 2 m in depth before the bedrock was encountered.

Refer to the geological cross sections in Figures 7A, 8A and 9A for an overview of the Site stratigraphy.

Hydrogeologic Setting

One (1) hydrostratigraphic unit was encountered at the Site.

The on-Site monitoring well network consists of a total of twenty-three (23) monitoring wells advanced by BIG screened within the bedrock and four (4) monitoring wells installed by previous consultants.

Bedrock was encountered at the Site which acts as an aquifer. Within the bedrock an upper groundwater table was identified within the highly fractured and weathered bedrock. The water table within this unit ranged from 2.04 m – 4.55 m bgs on February 13, 2023. Another groundwater table was encountered at depth and within the highly competent and less fractured bedrock formation. The water table within this unit ranged from 8.32 m – 16.27 m bgs on February 13, 2023.

Based on the static water levels observed, the interpreted groundwater flow was towards the west/southwest. The interpreted groundwater flow direction is presented on Figure 6.

Single Well Response Test (SWRT) analyses were conducted by BIG at monitoring wells BH/MW1A – BH/MW5A, BH/MW104, BH/MW106, BH/MW110, BH/MW113, BH/MW114 and BH/MW115 across the Site.

Estimates of the saturated hydraulic conductivity in the aquifer ranged from 6.12×10^{-9} m/s and 5.34×10^{-5} m/s, with a geometric mean of 3.96×10^{-7} m/s.

The horizontal hydraulic gradient in groundwater, based on groundwater measurements collected on February 13, 2023 was 0.012 m/m between BH/MW110 and BH/MW111 and 0.034 m/m between BH/MW109 and BH/MW113 with a geomean of 0.012 m/m.

It is noted that vertical hydraulic gradients were not evaluated for this Site as a second water bearing unit was not identified at the depths investigated at the Site.

5.9.6 Site Sensitivity

The Site Sensitivity classification with respect to Sections 41 and 43.1 of O.Reg.153/04, as amended, were evaluated to determine if the Site is sensitive. Rationale is provided below:

Table 7: Site Sensitivity

Sensitivity	Classification	Does Sensitivity Apply to Site?
Section 41 applies if	Property is within an area of natural significance (ANSI)	No
	Property includes or is adjacent to an ANSI or part of such an area	No
	Property includes land that is within 30 m of an ANSI or part of such an area	No
	Soil at property has pH less than 5 or greater than 9 for surface soil	No
	Soil at property has pH less than 5 or greater than 11 for sub-surface soil	No
	A QP is of the opinion, that given the characteristics of the property and the certifications the QP would be required to make in an RSC that in relation to the property as specified in Schedule A, it is appropriate to apply this section to the property	No
Section 43.1 applies if	Property is a shallow soil property	No
	Property includes all or part of a water body or is adjacent to a water body or includes land that is within 30 m of a water body	No

5.9.7 Previous Reports

Terrapex previously conducted Phase I and Phase II ESA investigations at 217 Cross Avenue and 571 Argus Road in 2019 and BIG had previously conducted Phase One and Phase Two Environmental Site Assessments, Hydrogeological and Geotechnical Investigations for 217 and 227 Cross Avenue and 571 Argus Road in 2021. No other previous reports were provided to BIG for review. The previous reports prepared by Terrapex and BIG were relied upon in the Phase Two ESA and Phase Two CSM.

5.9.8 Remediation

During the Phase Two ESA investigation conducted by BIG, impacts were identified in soil in exceedance of the applicable MECP (2011) Table 2 SCS. The contaminants of concern identified in soil included benzo(a)anthracene, benzo(a)pyrene, fluoranthene and copper.

A fluoranthene PAH impact was identified in BH/MW4A in soil in the central portion of the Site from 0.0 – 0.61 m bgs. Boreholes BH104NA, BH104EA, BH104SA and BH104WA were advanced to delineate the impact with samples collected from 0.0 – 0.61 m bgs and submitted for PAHs analysis. The samples submitted were all detected below the applicable MECP (2011) Table 2 SCS at all of the boreholes with the exception of BH104WA where exceedances of benzo(a)anthracene, benzo(a)pyrene, and fluoranthene were identified.

As such, an additional borehole BH104WB was advanced 1 m to the west of BH104WA. A sample was collected from 0.0 – 0.61 m bgs and was submitted for analysis of PAHs. The sample results from BH104WB were below the applicable MECP Table 2 SCS. As such, the soil impacts had been horizontally delineated. Vertical delineation of the PAH impacts was achieved at 0.76 – 1.37 m bgs at BH104NA, BH104EA, BH104SA and BH104WA. BH/MW4A was sampled for PAHs in groundwater, the sample collected was below the applicable MECP Table 2 SCS for PAHs. Please refer to Figure 12A for the PAH soil delineation.

The excavation that was advanced in the central portion of the Site to remove the identified PAH impacts was advanced from the ground surface to 1 m below ground surface (bgs) and was 6 m in length and 4 m in width (6 m x 4 m x 1 m). Confirmatory soil samples were collected from the excavation floor and the north, east, south and west walls and submitted for PAHs analysis. The analysis indicated that all parameters were either non-detect or detected below the applicable MECP (2011) Table 2 SCS. As such, the PAH contamination had been successfully removed from the Site. Please refer to Figures 12B to 12D for details on the soil remediation.

Copper impacts were identified at BH/MW101 at 0.0 – 0.61 m bgs and at BH/MW106 from 0.76 – 1.37 m bgs. The copper impacts in soil were horizontally delineated by boreholes BH201 to BH204 and samples were submitted from 0.0 – 0.61 m bgs and/or 0.76 – 1.37 m bgs. Bedrock at the Site is deeper than 2.0 m over two-thirds of the Site, however within the eastern portion of the Site where the copper impacts were identified, bedrock was encountered between approximately 1.7 m to 2.3 m bgs. As the copper impacts extended to 1.37 m bgs, it was assumed that the impacts extended to the depth of bedrock. Please refer to Figure 14A for the metals soil delineation. Monitoring wells BH/MW101 and BH/MW106 were sampled for metals in groundwater, the samples collected were below the applicable MECP Table 2 SCS for metals.

The excavation that was advanced in the eastern portion of the Site to remove the identified copper impacts was advanced from the ground surface to the depth of bedrock which ranged from 1.7 – 2.3 m below ground surface (bgs) and was 15 m in length and 7.5 m in width (15 m x 7.5 m x 2 m). Confirmatory soil samples were collected from the south and west walls and submitted for metals analysis. Confirmatory soil samples were not collected from the north and east excavation walls as the excavation was extended to the property boundaries. Confirmatory samples were also not collected from the excavation floor as the excavation was extended to the shale bedrock. The analysis indicated that all parameters were either non-detect or detected below the applicable MECP (2011) Table 2 SCS. As such, the copper contamination had been successfully removed from the Site. Please refer to Figures 14B to 14D for details on the soil remediation.

Approximately 260 m^3 of impacted soil was excavated between the two (2) excavation areas and was disposed of off-site at a registered MECP landfill facility. The remedial excavations were backfilled with imported sand and granular 'A' material from Brock Aggregates located in Concord, Ontario. The material used as backfill is not treated as soil and as such, is not subject to the requirements for importing excess soil to the Phase Two/RSC Property. The ground surface was then repaved with asphalt.

5.9.9 Areas on, in or under the Phase Two ESA Property where Excess Soil is Finally Placed

No soil importation has occurred on Site.

5.9.10 Land Use

The Site is currently used for commercial purposes and is developed with four (4) commercial buildings occupying approximately 15 % on the Site. The areas surrounding the Site buildings are covered with asphalt paved parking with landscaping present along the southern, western and northwestern property boundaries. The site will be redeveloped for residential use with three (3) condominium tower buildings which is anticipated to have six (6) or seven (7) levels of underground parking.

5.9.11 Contaminants of Concern

The MECP (2011a) Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional Land Use and coarse textured soils were considered applicable for determining contaminants of concern (COCs), based on the reasons presented below:

Table 8: Site Condition Standards

Descriptor	Site-Specific Condition
Section 41 Site Sensitivity	Not applicable o The soil at the Site has pH values between 5 and 9 for surficial soil; and, between 5 and 11 for subsurface soil. o The Site is not located within, or adjacent to, an area of natural significance, or part of such an area; and, the Site does not include land that is within 30 m of an area of natural significance, or part of such an area.
Section 43.1 Site Sensitivity	Not applicable o The Site is not considered a shallow soil property, based on the recovered soil cores, which indicated that more than two-thirds of the Site has an overburden thickness in excess of 2 m; and, o The Site is not located within 30 m of a surface water body; the nearest surface water body, a tributary of Morrison Creek is located approximately 300 m east, and Lake Ontario is located approximately 2.0 km southeast of the Site.
Section 35 Ground Water	Potable o The Site is supplied by the City of Oakville municipal water system however the Site is considered potable.
Land Use	Residential/Parkland/Institutional o The future use of the Site will be residential land use.
Soil Texture	Coarse-textured o The predominant texture of soils at the Site is considered to be coarse textured.

Based on the analytical results, benzo(a)anthracene, benzo(a)pyrene, copper and fluoranthene were identified in soil in exceedance of the applicable MECP Table 2 SCS. No parameters were detected in groundwater at concentrations in exceedance of the applicable SCS.

It is noted that electrical conductivity (EC) and sodium adsorption ratio (SAR) exceedances were identified in surficial soil at the Site and sodium and chloride exceedances were also identified in groundwater. EC, SAR, sodium and chloride are not considered as contaminants of concern (COC) at the Site as under the newly amended O.Reg.153/04 (O.Reg.407/19) Section 49.1 (1), if a substance has been applied to surfaces for the safety of vehicular or pedestrian traffic under the conditions of snow or ice or both (i.e., application of de-icing salts), its related parameters are not deemed to be in exceedance of the MECP Table 2 SCS.

As de-icing salts were used at the Site for vehicular and pedestrian safety, EC, SAR, sodium and chloride are not considered as COCs in soil or groundwater at the Site.

Table 9: Contaminants of Concern in Soil Prior to Remediation

Parameter Analyzed	Maximum concentration (µg/g)	Site Condition Standard (µg/g) [(1)]	Maximum Concentration Above Applicable SCS
Benzo(a)anthracene	0.51	0.50	Yes
Benzo(a)pyrene	0.40	0.30	Yes
Fluoranthene	0.93	0.69	Yes
Copper	493	140	Yes

(1) MECP (2011a) Table 2 Site Condition Standards in Residential/Parkland/Institutional property use and coarse textured soil.

5.9.12 Soil Impacts Prior to Remediation

Information regarding the reasons for discharge, distribution and delineation of the impacts detected in soil is summarized in the below tables.

Table 10: Reasons for Discharge of Soil Impacts

Parameter Group and Media	Contaminants associated with each parameter group	Reason for Discharge
PAH parameters in soil	Benzo(a)anthracene Benzo(a)pyrene Fluoranthene	Likely associated with the importation of fill material of unknown quality at the Site
Metal parameter in soil	Copper	Likely associated with the importation of fill material of unknown quality at the Site

Table 11: Distribution of Soil Impacts

Parameter group and media	Contaminants associated with each group	Distribution
PAH parameters in soil	Benzo(a)anthracene Benzo(a)pyrene Fluoranthene	Central portion of the Site (southern portion of 581 Argus Road)
Metal parameter in soil	Copper	Eastern portion of the Site (northwestern portion of 217 and 227 Cross Avenue)

Table 12: Delineation of Soil Impacts

Parameter group and media	Contaminant associated with each group	Horizontal Delineation	Associated Figures	Vertical Delineation	Associated Figures
PAH parameters in soil	Benzo(a)anthracene Benzo(a)pyrene Fluoranthene	Central portion of the Site	12A	0.76 – 1.37 m bgs at BH104NA, BH104EA and BH104SA	7B, 8B, 12C + 12D
Metal parameter in soil	Copper	Eastern portion of the Site	14A	Impacts extend to depth of bedrock which ranges from 1.7 – 2.3 bgs	9B, 14C + 14D

5.9.13 Contaminant Fate and Transport

Soil Media

The soil COCs that were present at the Site prior to remediation were benzo(a)anthracene, benzo(a)pyrene, fluoranthene and copper.

Based on the former activities on-Site, the impacts are likely associated with the importation of fill material of unknown quality.

A variety of physical, chemical and biochemical mechanisms affect the fate and transport of the potential COCs in soil, the contribution of which is dependent on the soil conditions and the chemical/physical properties of the COCs. Relevant fate and transport mechanisms are natural attenuation mechanisms, including advection mixing, mechanical dispersion/molecular diffusion, phase partitions (i.e., sorption and volatilization), and possibly abiotic or biotic chemical reactions, which effectively reduce COC concentrations.

Following remedial activities at the Site, no COCs remain in the soil. As such, contaminant fate and transport are not considered further.

There are no known preferential pathways for contaminants previously present in soil media.

Groundwater Media

No COCs were present in the groundwater at the Site.

5.9.14 Preferential Pathways

The preferential pathways for contaminants present in soil and groundwater media typically include various underground utilities, building footings and surface features.

Underground utilities include a hydro line, gas service line, and cable conduit as identified in Section 2.2. These underground utilities may have acted as preferential pathways when COCs were at the Site. However, the soil at the Site has been remediated and no groundwater COCs were identified, as such preferential pathways are not considered further.

5.9.15 Climatic Conditions

It is noted that climatic or meteorological conditions may have influenced the distribution and migration of COCs at the Site. Seasonal fluctuations in groundwater due to cyclical increases and decreases in precipitation can affect groundwater recharge. Groundwater levels may be elevated in the spring and fall due to snow melt and/or increases in precipitation; and groundwater levels may be lowered in the winter and summer due to snow storage and/or increased evaporation. Such fluctuations can increase the vertical distribution of COCs in the capillary zone, as well as alter the direction of groundwater flow paths based on changes in infiltration rates. However, based on the conditions observed at the Site, it is not anticipated that the climatic or meteorological changes will have resulted in significant alterations in the distribution of contaminants previously present at the Site. As no COCs remain at the Site following remediation climatic conditions are not considered further.

5.9.16 Soil Vapour Migration

Prior to soil remediation, semi-volatile PAHs benzo(a)anthracene and fluoranthene were present in soil at the Site. Soil vapour intrusion may have occurred at the Site in the past when the contaminants were still present in soil. The buildings present on-Site are slab-on-grade and do not have any crawl space or basement. As no semi-volatile COCs remain at the Site in soil, soil vapour migration is no longer possible at the Site and is not considered further.

5.9.17 Receptors and Exposure Pathways

<u>Human Health Receptors and Exposure Pathways</u>

Prior to soil remediation, the on-Site human receptors could have been exposed to benzo(a)anthracene, benzo(a)pyrene, fluoranthene and copper in soil. The receptors and complete on-site exposure pathways prior to remediation are presented in Table 12 below.

Table 12: Human Health Receptors and Exposure Pathways Prior to Remediation

Scenario	Receptor	Exposure Pathways
Workers – Long Term (indoor)	Adult (including pregnant female)	Soil ingestion, soil skin contact, soil inhalation, vapour inhalation and vapour skin contact
Workers – Short Term (outdoor)	Adult (including pregnant female)	Soil ingestion, soil skin contact, soil inhalation, vapour inhalation and vapour skin contact
Property Visitor - Recreational	Adult (including pregnant female), Teen, Child, Toddler, Infant	Soil ingestion, soil skin contact, soil inhalation, vapour inhalation and vapour skin contact
Property Visitor - Trespassers	Adult (including pregnant female), Teen, Child, Toddler, Infant	Soil ingestion, soil skin contact, soil inhalation, vapour inhalation and vapour skin contact
Workers – Construction	Adult (including pregnant female)	Soil ingestion, soil skin contact, soil inhalation, trench air inhalation and vapour skin contact

The pre-remediation human health conceptual on-Site model is included in D.1 in Appendix D.

As no COCs remain in soil at the Site following successful remediation and no COCs were identified in groundwater, there are no complete exposure pathways for human receptors at the future residential development. Please refer to Table 13 below.

Table 13: Human Health Receptors and Exposure Pathways Post Remediation

Scenario	Receptor	Exposure Pathways
Property Residents	Adult (including pregnant female), Teen, Child, Toddler, Infant	None
Workers – Long Term (indoor)	Adult (including pregnant female)	None
Workers – Short Term (outdoor)	Adult (including pregnant female)	None
Property Visitor - Recreational	Adult (including pregnant female), Teen, Child, Toddler, Infant	None
Property Visitor - Trespassers	Adult (including pregnant female), Teen, Child, Toddler, Infant	None
Workers – Construction	Adult (including pregnant female)	None

The post-remediation human health conceptual on-Site model is included in D.2 in Appendix D.

Ecological Receptors and Exposure Pathways

Prior to soil remediation, the on-Site ecological receptors could have been exposed to benzo(a)anthracene, benzo(a)pyrene, fluoranthene and copper in soil. The receptors and complete on-site exposure pathways prior to remediation are presented in Table 14 below.

Table 14: Ecological Receptors and Exposure Pathways Prior to Remediation

Primary Source	Secondary Source	Receptor	Exposure Pathway
Impacted soil	Impacted soil	Vegetation	Root uptake of soil, stem and foliar uptake
		Soil invertebrates	Soil dermal contact, soil ingestion, soil inhalation and vapour inhalation
		Terrestrial birds and mammals	Soil dermal contact, soil ingestion, soil inhalation and vapour inhalation
	Impacted groundwater	Terrestrial vegetation	None
		Soil invertebrates	None
		Terrestrial birds and mammals	None
	Impacted animal tissue	Terrestrial birds and mammals	None

The pre-remediation ecological health conceptual on-Site model is included in D.3 in Appendix D.

As no COCs remain in soil at the Site following successful remediation and no COCs were identified in groundwater, there are no complete exposure pathways for ecological receptors at the future residential development. Please refer to Table 15 below.

Table 15: Ecological Receptors and Exposure Pathways Post Remediation

Primary Source	Secondary Source	Receptor	Exposure Pathway
Impacted soil	Impacted soil	Vegetation	None
		Soil invertebrates	None
		Terrestrial birds and mammals	None
	Impacted groundwater	Terrestrial vegetation	None
		Soil invertebrates	None
		Terrestrial birds and mammals	None
	Impacted animal tissue	Terrestrial birds and mammals	None

The post-remediation ecological health conceptual on-Site model is included in D.4 in Appendix D.

6 Summary of Findings

The findings of the Phase Two ESA conducted at the Site are summarized as follows:

1. The general stratigraphy at the Site, as observed in the boreholes, consisted of asphalt or topsoil at the ground surface, underlain by fill material comprised of clayey silt, silty clay and sandy silt underlain by native material characterized by clayey silt till/silty clay till followed by shale bedrock.
2. Coarse textured standards were applied as part of this Phase Two ESA.
3. Groundwater depths within the groundwater table across the Site ranged between approximately 2.04 m and 16.27 m bgs on February 13, 2023.
4. The soil analytical results indicated that select parameters were detected at concentrations above the applicable MECP (2011a) Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional Property Use and coarse textured soil including:

Parameter	MECP (2011a) Table 2 SCS (µg/g)	Number of Soil Samples Submitted (1)	Number of Soil Samples Exceeding the applicable SCS (1)	Maximum concentration detected (µg/g)
PAHs				
Benzo(a)anthracene	0.50	44	1	0.51
Benzo(a)pyrene	0.30	44	1	0.40
Fluoranthene	0.69	44	2	1.12
Metals				
Copper	140	40	2	493

(1) Excluding duplicate samples

5. The groundwater analytical results indicated all groundwater samples submitted for PHCs, BTEX, VOCs, PAHs, metals and inorganics analyses were either non-detect or detected below the applicable MECP (2011a) Table 2 SCS; and all laboratory RDLs were below the applicable SCS.

7 Conclusions and Recommendations

The soil COCs present at the Site comprised of benz(a)anthracene, benzo(a)pyrene, fluoranthene and copper. No groundwater COCs are present at the Site. Based on the former activities on-Site, the impacts are likely associated with the importation of fill material of unknown quality.

In order to proceed with the Record of Site Condition (RSC), the following is recommended:

1. Excavate the impacted soil and dispose of off-site at a registered landfill facility.
2. Conduct confirmatory soil sampling.
3. Prepare a report documenting remedial activities.
4. Update Phase Two ESA.
5. File RSC.

Closing Remarks

BIG has conducted soil remediation programs, including the removal of PAH and copper impacted soil from the Site. The Soil Remediation Reports are included in Appendix G, and is summarized below:

a) Between March 22 and 25, 2022, approximately 260 m^3 of impacted soil material was removed from the Site. The impacted soil material was transported and disposed of at the York1 facility located at 195 Bethridge Road in Toronto, Ontario.
b) The excavation advanced to remediate the PAH impacted soil was approximately 6 m in length, 4 m in width and extended to 1 m below ground surface (bgs). Approximately 24 m^3 of PAH impacted soil was excavated and disposed of off-Site.
c) The excavation advanced to remediate the copper impacted soil was approximately 15 m in length, 7.5 m in width and extended to the depth of bedrock which was approximately 2 m bgs.
d) Approximately 260 m^3 of impacted soil in total was excavated and disposed of off-Site.
e) All confirmatory soil sample results analyzed met the applicable MECP Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional Property Use and coarse textured soil.

As a result of the remedial excavation activities conducted, the PAH and copper impacts identified in soil have been successfully remediated. The soil meets the applicable MECP (2011) Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional Property Use and coarse textured soil. As such, an RSC can now be filed for the Site.

8 General Limitations

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

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Yours truly,

B.I.G. Consulting Inc.

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Environmental Scientist

Rebecca Morrison, M.Env.Sc.
Project Manager

Darko Strajin, P.Eng.
Managing Partner

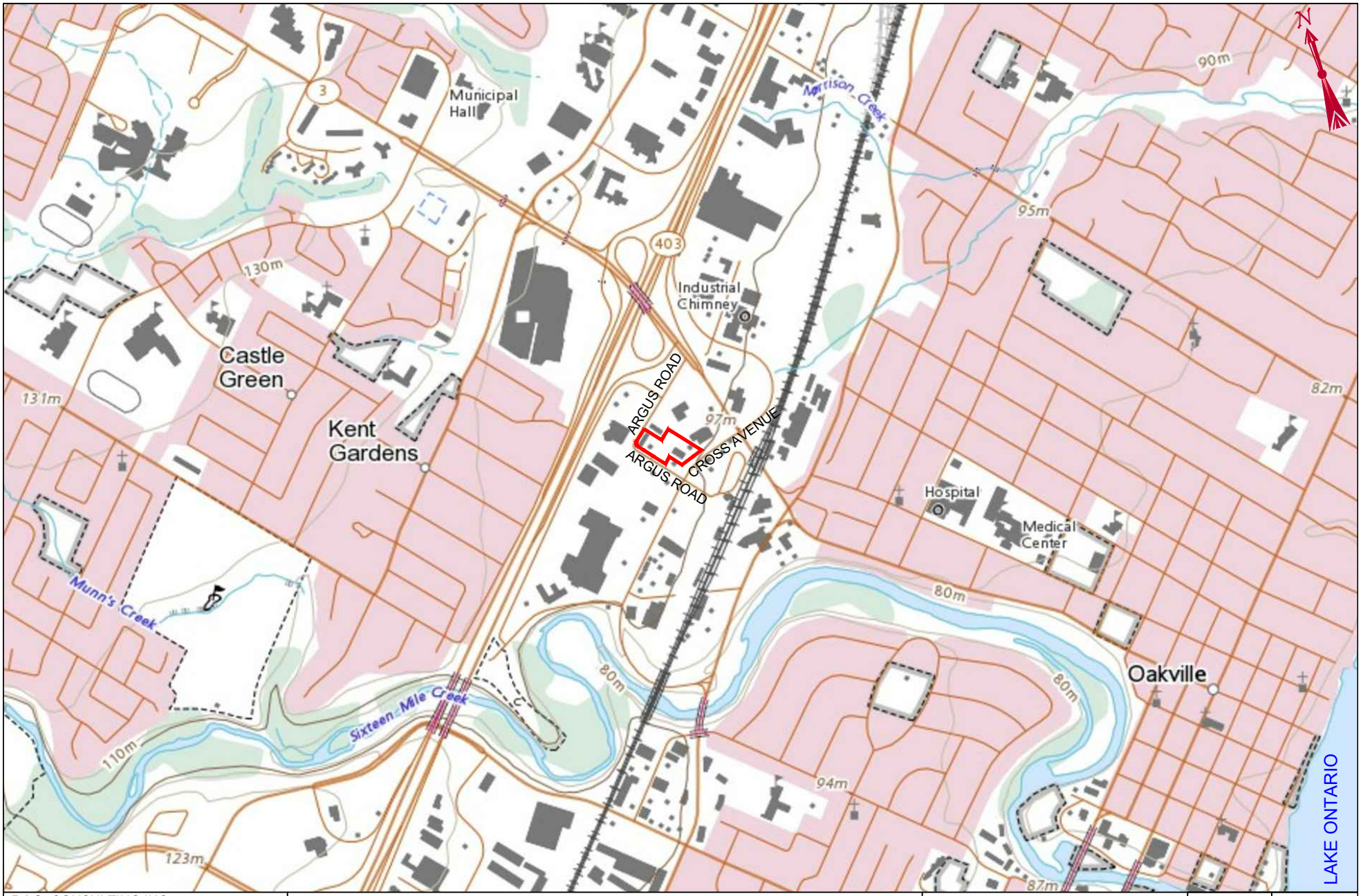
9 References

1. MECP (2011a) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the *Environmental Protection Act*";
2. MECP (2011b) Protocol for Analytical Methods Used in the Assessment of Properties under Prt XV.1 of the *Environmental Protection Act*. PIBS 4696e01
3. MECP (2018); Well Records Map. Retrieved from https://www.ontario.ca/environment-and-energy/map-well-records
4. NHIC (2017); Make a Natural Heritage Map. Retrieved from http://www.gisapplication.lrc.gov.on.ca/mamnh/Index.html?site=MNR_NHLUPS_NaturalHeritage&viewer=NaturalHeritage&locale=en-US
5. Toporama. Retrieved from http://www.atlas.gc.ca/toporama/en/index.html

The following is a list of the environmental investigations reviewed in support of this report:

1. Terrapex (2019a) Phase I and Phase II Environmental Site Assessment, 217 Cross Avenue and 571 Argus Road, Oakville, Ontario. Terrapex Environmental Ltd. October 11, 2019.
2. Terrapex (2019b) Phase I Environmental Site Assessment Update, 217 Cross Avenue and 571 Argus Road, Oakville, Ontario. Terrapex Environmental Ltd. November 4, 2019.
3. BIG (2019) Preliminary Geotechnical Investigation, 217 Cross Avenue and 571 Argus Road, Oakville Ontario. B.I.G Consulting Inc. December 3, 2019.
4. BIG (2020) Phase I Environmental Site Assessment, 227 Cross Avenue Road, Oakville Ontario. B.I.G Consulting Inc. December 22, 2020.
5. BIG (2021a) Geotechnical Investigation, 217 & 227 Cross Avenue and 571 Argus Road, Oakville, ON. B.I.G. Consulting Inc. February 16, 2021.
6. BIG (2021b) Phase One Environmental Site Assessment, 217 & 227 Cross Avenue, and 571 Argus Road, Oakville, Ontario. B.I.G. Consulting Inc. February 17, 2021.
7. BIG (2021c) Phase Two Environmental Site Assessment, 217 & 227 Cross Avenue, and 571 Argus Road, Oakville, Ontario. B.I.G. Consulting Inc. February 17, 2021.
8. BIG (2021d) Hydrogeological Investigation, 217 & 227 Cross Avenue and 571 Argus Road, Oakville, Ontario. B.I.G. Consulting Inc. March 9, 2021.
9. Fisher (2021a) Phase I Environmental Site Assessment, 581 Argus Road, Oakville, Ontario. Fisher Environmental Ltd. June 1, 2021.
10. Fisher (2021b) Phase I Environmental Site Assessment, 587 to 595 Argus Road, Oakville, Ontario. Fisher Environmental Ltd. June 1, 2021.
11. BIG (2022a) Preliminary Geotechnical Investigation, 581 – 587 Argus Road, Oakville, Ontario. B.I.G. Consulting Inc. March 13, 2022.
12. BIG (2022b) Phase II Environmental Site Assessment, 581 – 587 Argus Road, Oakville, Ontario. B.I.G. Consulting Inc. March 17, 2022.
13. BIG (2022c) Phase One Environmental Site Assessment, 217 & 227 Cross Avenue and 571 – 595 Argus Road, Oakville, Ontario. B.I.G. Consulting Inc. September 19, 2022.

Figures



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LEGEND

SITE BOUNDARY

SCALE

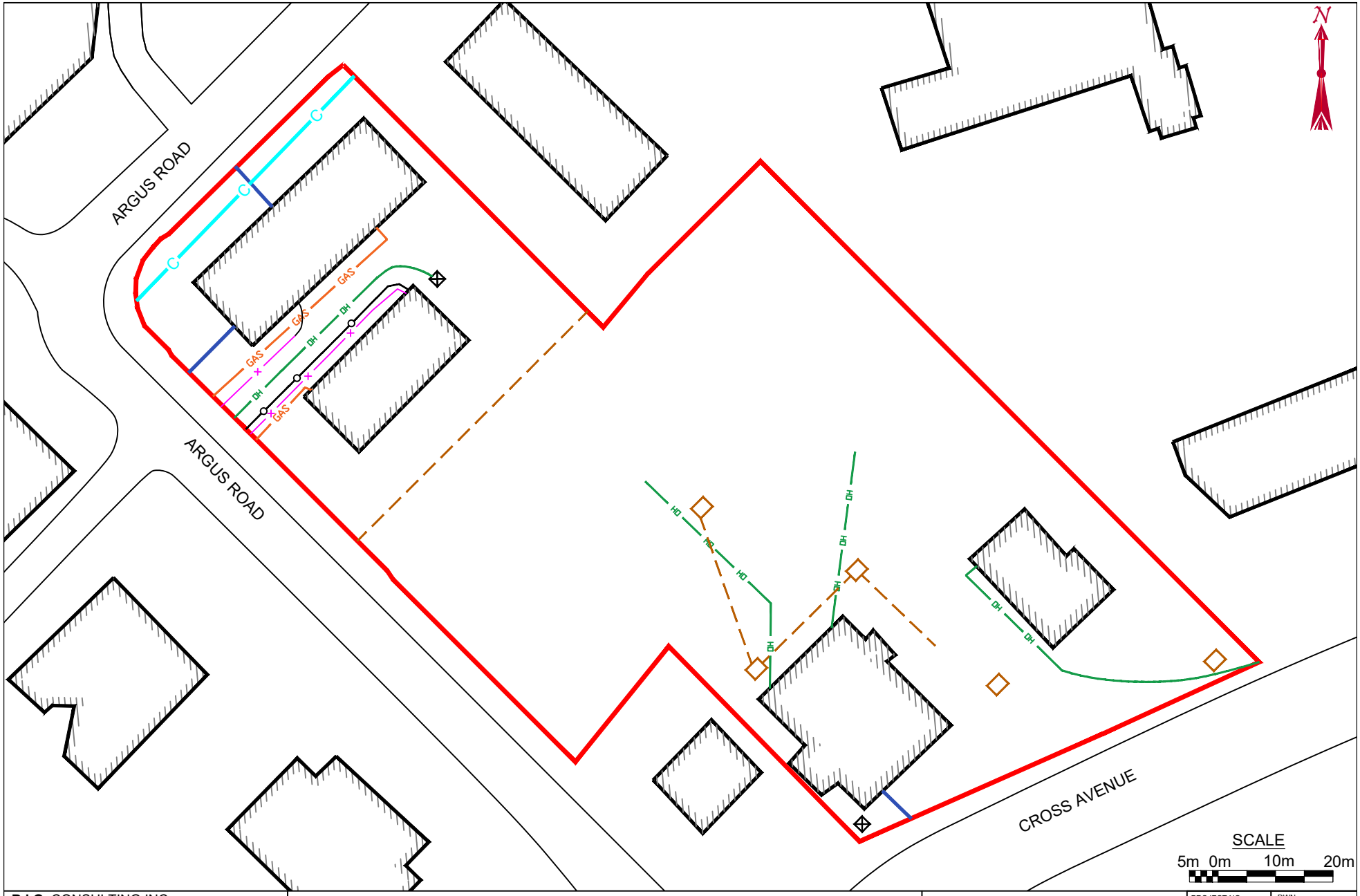
100m 0m 100m 200m 300m 400m 500m

IMAGERY OBTAINED FROM TOPORAMA, NATURAL RESOURCES CANADA, 2021

TITLE AND LOCATION

SITE LOCATION PLAN
PHASE TWO ESA
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	1



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LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT
- WATER
- GAS LINE
- TELEPHONE CONDUIT
- HYDRO
- FIBRE OPTIC CABLE
- TV CONDUIT
- STORM SEWER
- LOCATION OF TRANSFORMER
- LOCATION OF CATCH BASIN

TITLE AND LOCATION

SITE LAYOUT AND UTILITIES PLAN

PHASE TWO ESA

217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	2

PCA	PCA Identifier	PCA	PCA Identifier
1.	#Other	22.	# Other
2.	#30	23.	#28
3.	#Other	24.	#46
4.	#55	25.	#28
5.	# Other	26.	#10
6.	#55	27.	#28
7.	#10	28.	#39
8.	#28	29.	#32
9.	#10	30.	#28
10.	#55	31.	#28
11.	#33	32.	#28
12.	#34	33.	#10
13.	#46	34.	#28
14.	#28	35.	#37
15.	#10	36.	#53
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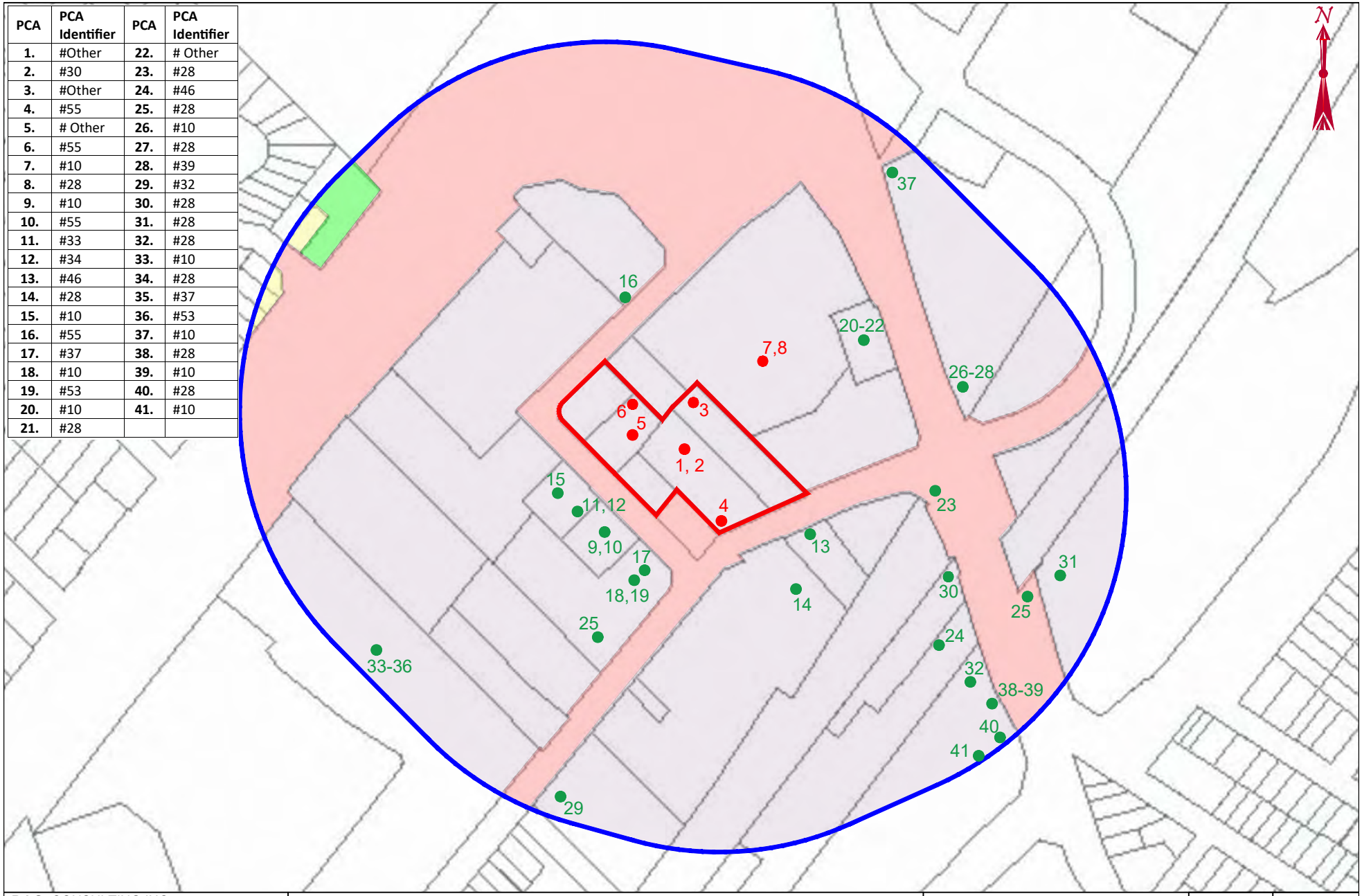

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LEGEND

- SITE BOUNDARY
- PHASE TWO STUDY AREA BOUNDARY
- COMMERCIAL USE
- COMMUNITY USE
- RESIDENTIAL USE
- PARKLAND USE
- 1 PCA IDENTIFIER
- 9 PCA IDENTIFIER NOT CONTRIBUTING TO APEC

SCALE

25m 0m 50m 100m 150m

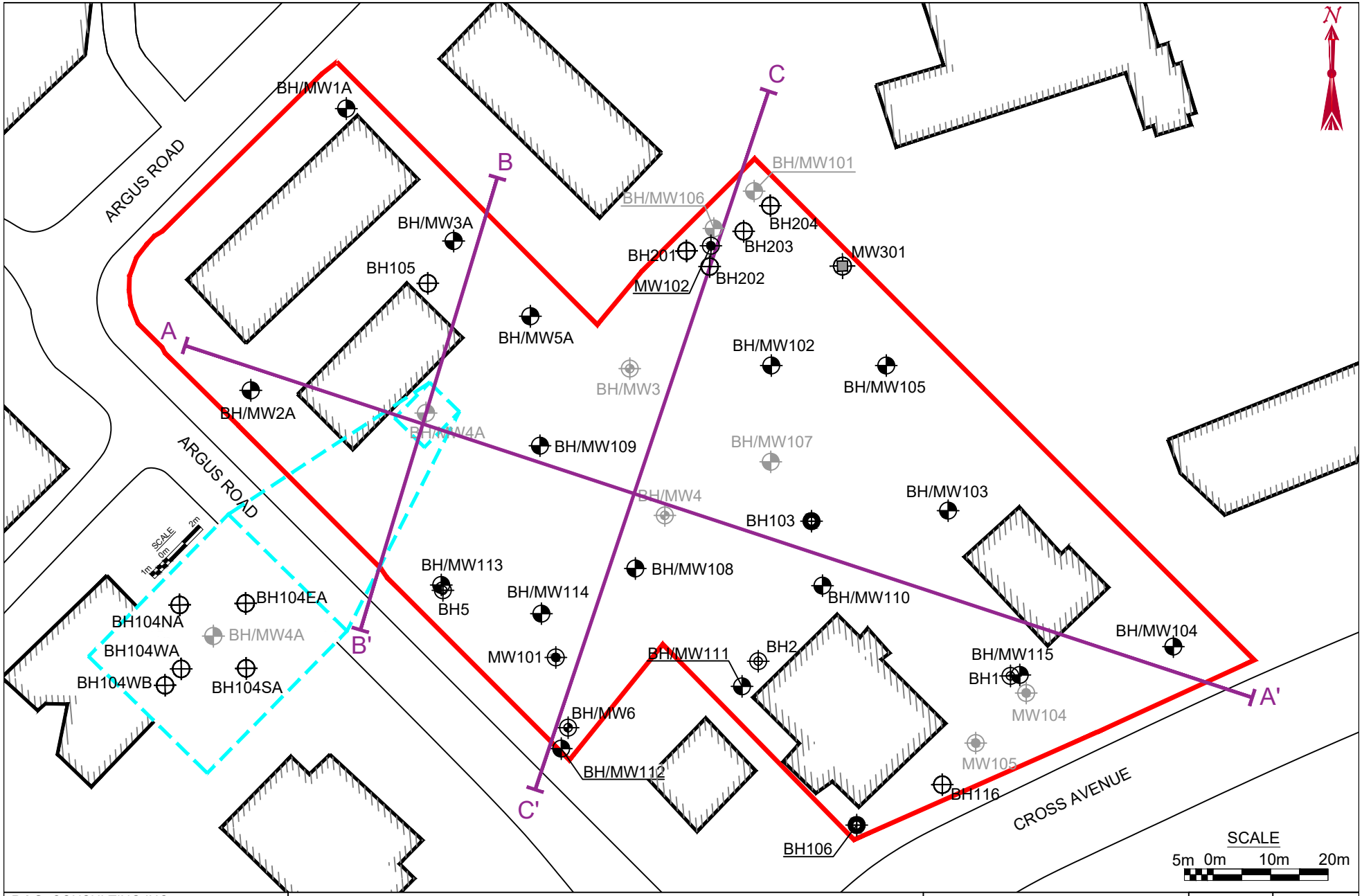
IMAGERY OBTAINED FROM COSINE ONLINE SERVICES, 2017

TITLE AND LOCATION

PHASE TWO STUDY AREA AND POTENTIALLY CONTAMINATING ACTIVITIES (PCAs)

PHASE TWO ESA
217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	3



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LEGEND

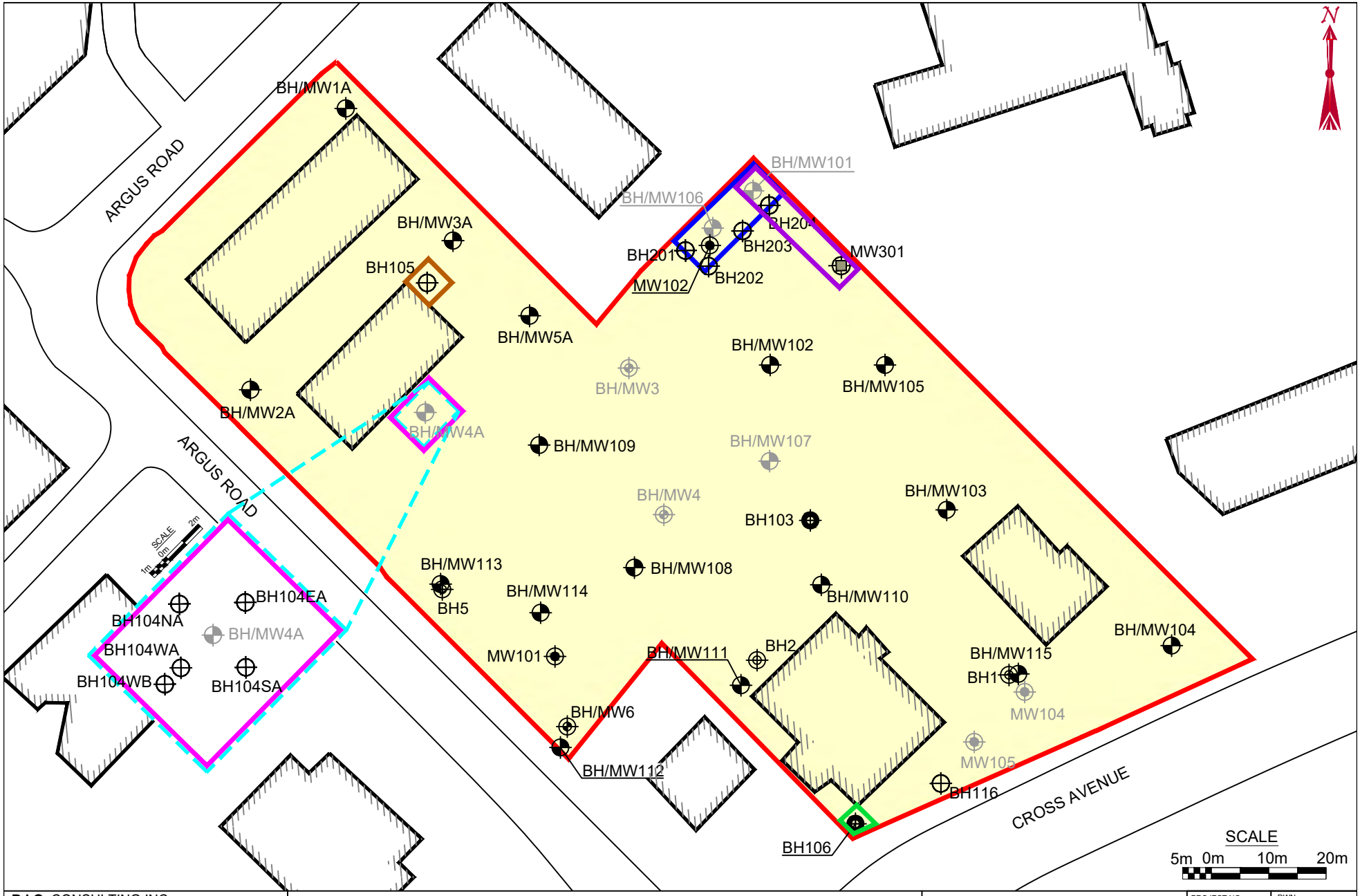
- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- A–A' GEOLOGICAL CROSS SECTION (SEE FIGURE 7)
- B–B' GEOLOGICAL CROSS SECTION (SEE FIGURE 8)
- C–C' GEOLOGICAL CROSS SECTION (SEE FIGURE 9)
- DESTROYED BOREHOLE/MONITORING WELL

TITLE AND LOCATION

BOREHOLE/MONTORING WELL LOCATION PLAN

PHASE TWO ESA
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	4



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LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- APECs 1, 2
- APEC 3
- APEC 4
- APEC 5
- APEC 6
- APECs 7, 8
- DESTROYED BOREHOLE/MONITORING WELL

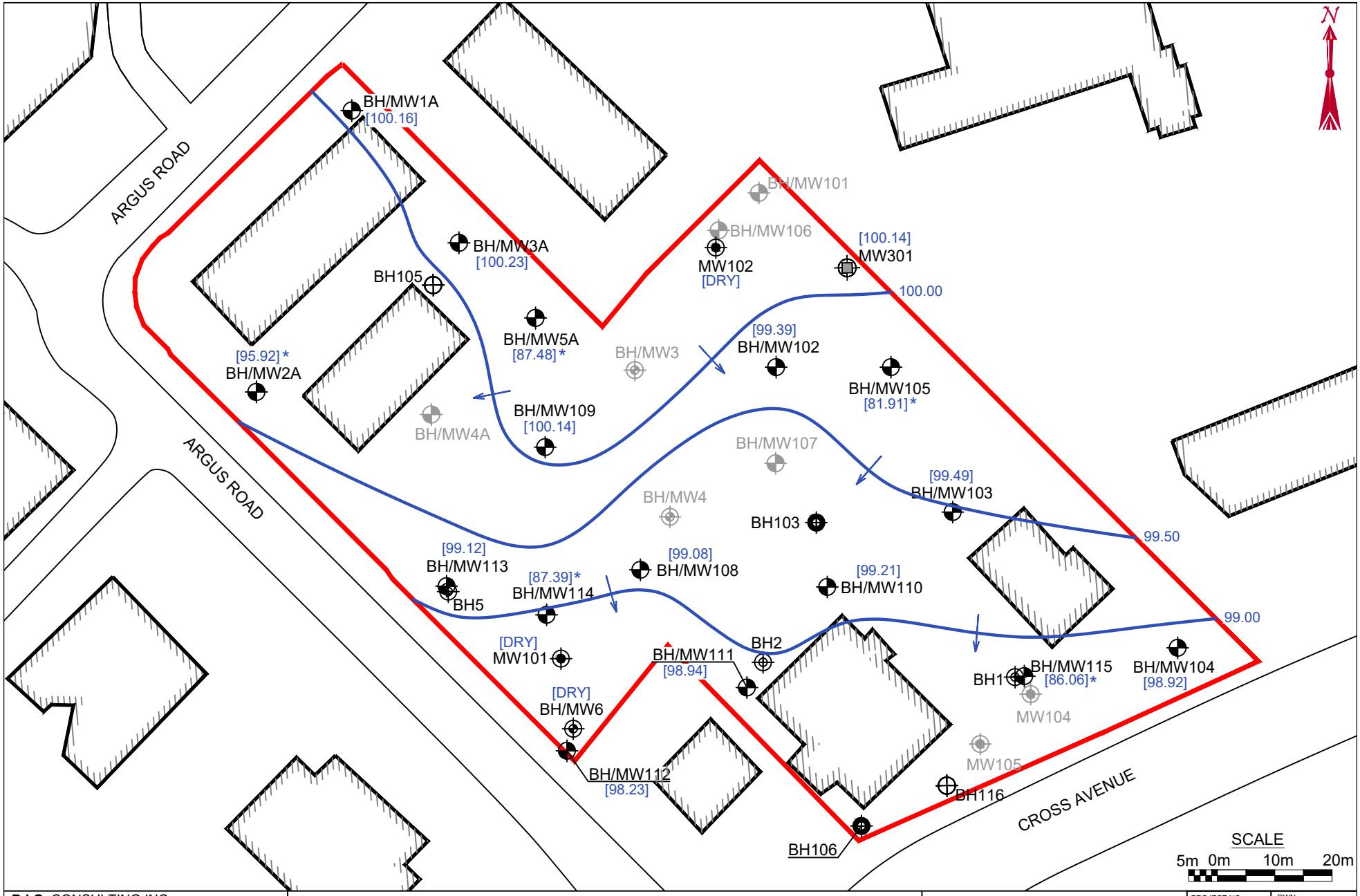
TITLE AND LOCATION

BOREHOLE/MONTORING WELL LOCATION PLAN WITH AREAS OF POTENTIAL ENVIRONMENTAL CONCERN (APECs)

PHASE TWO ESA

217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	5



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LEGEND

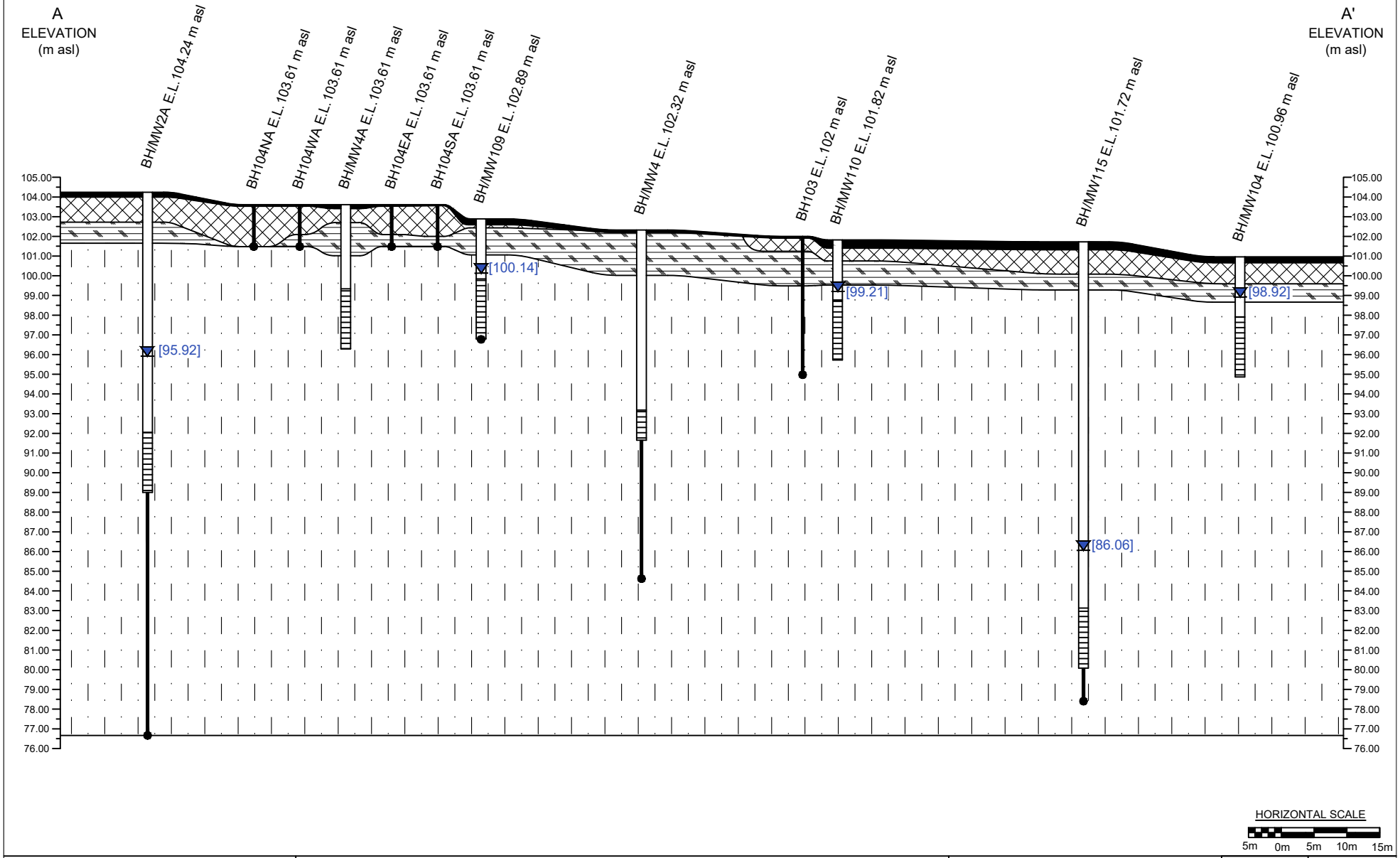
- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- [XX.XX] WATER LEVEL MEASUREMENT (FEBRUARY 13, 2023)
- GROUNDWATER CONTOUR
- INTERPRETED DIRECTION OF GROUNDWATER FLOW
- * GROUNDWATER ELEVATION NOT INCLUDED AS MONITORING WELL IS INSTALLED AT A SIGNIFICANTLY DEEPER DEPTH
- DESTROYED BOREHOLE/MONITORING WELL

TITLE AND LOCATION

INTERPRETED GROUNDWATER CONTOUR PLAN

PHASE TWO ESA
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	6



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LEGEND

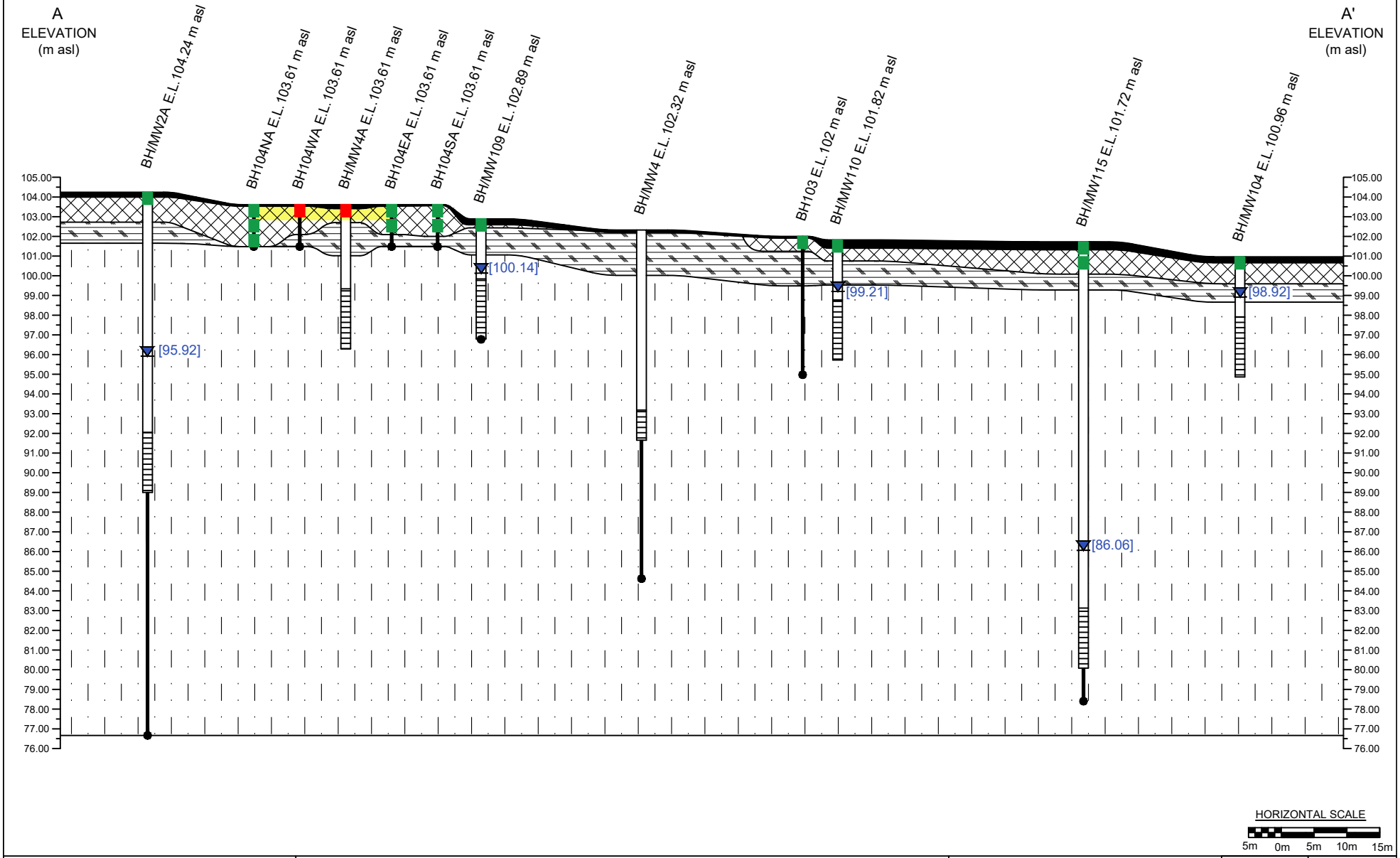
- ASPHALT PAVEMENT
- FILL
- SILTY CLAY / CLAYEY SILT TILL
- SHALE BEDROCK
- WATER LEVEL
- [xx.xx] WATER LEVEL MEASUREMENT (FEBRUARY 13, 2023)

TITLE AND LOCATION

GEOLOGICAL CROSS SECTION A-A'

PHASE TWO ESA
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	7A



HORIZONTAL SCALE

5m 0m 5m 10m 15m

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LEGEND

- ASPHALT PAVEMENT
- FILL
- SILTY CLAY / CLAYEY SILT TILL
- SHALE BEDROCK
- WATER LEVEL
- [xx.xx] WATER LEVEL MEASUREMENT (FEBRUARY 13, 2023)
- SAMPLE EXCEEDS MECP TABLE 2 SCS
- SAMPLE MEETS MECP TABLE 2 SCS
- APPROXIMATE EXTENT OF SOIL IMPACT

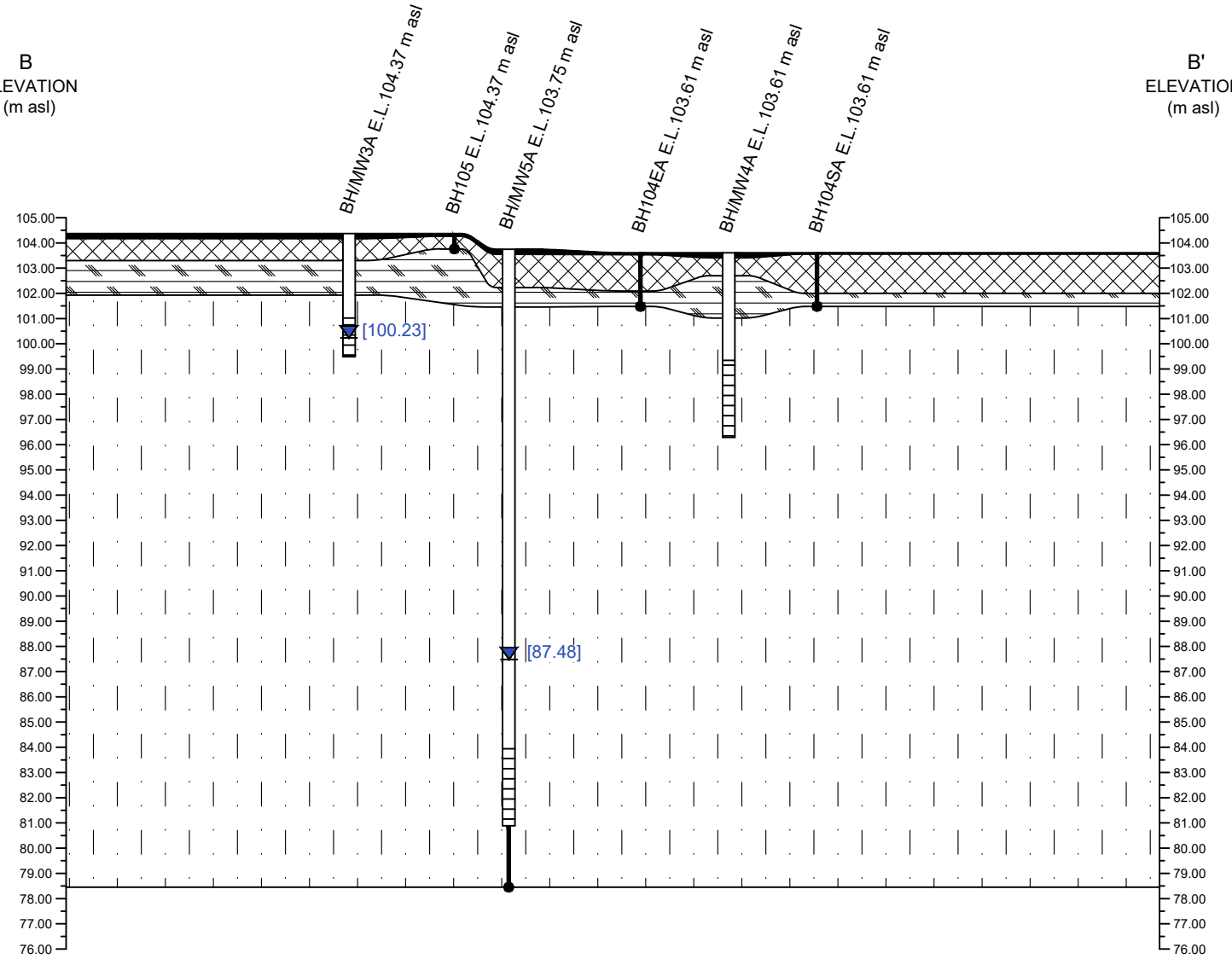
TITLE AND LOCATION

CROSS SECTION A-A' WITH PAH IMPACTS IN SOIL

PHASE TWO ESA

217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	7B



HORIZONTAL SCALE

4m 0m 4m 8m 12m

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LEGEND

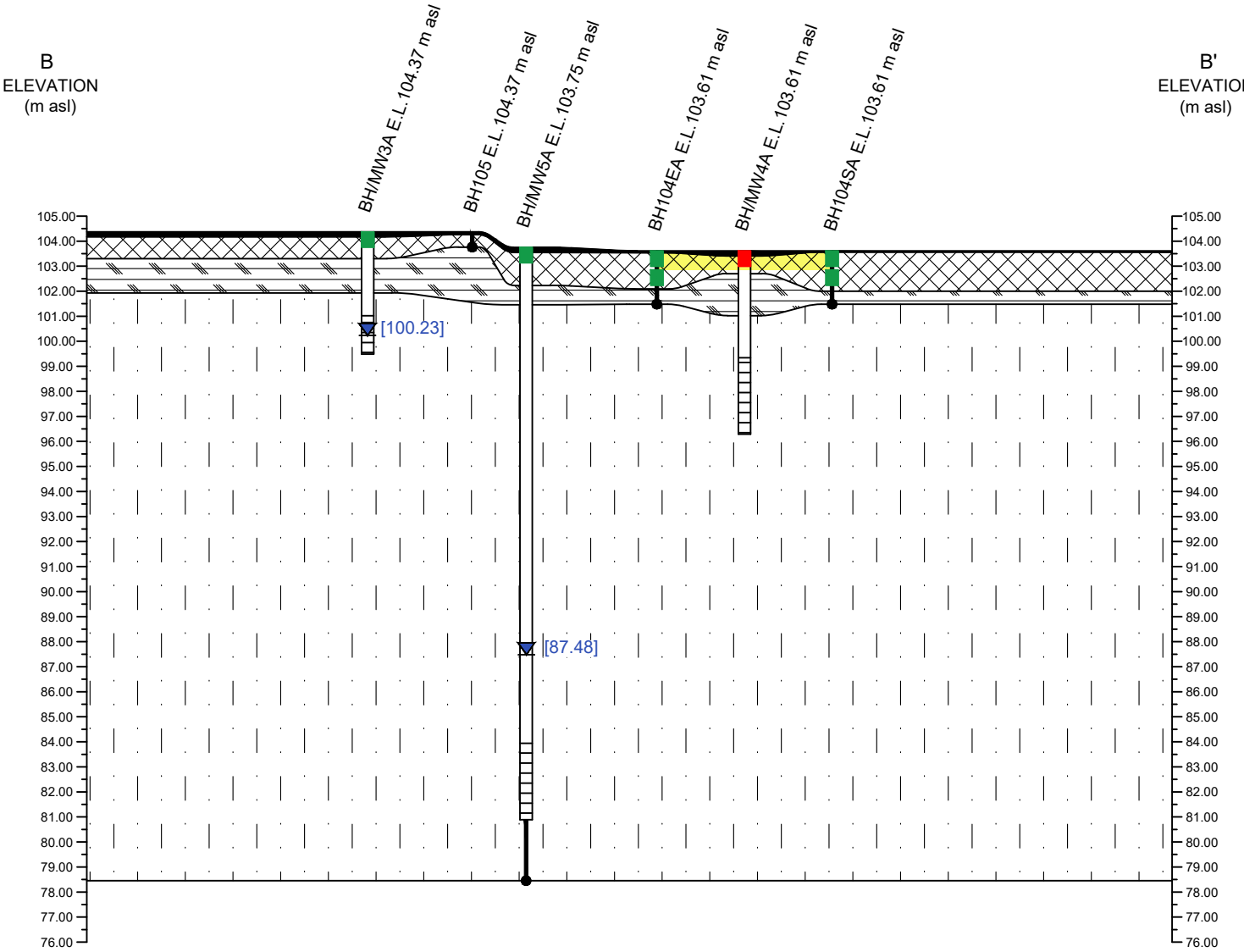
- ASPHALT PAVEMENT
- FILL
- SILTY CLAY / CLAYEY SILT TILL
- SHALE BEDROCK
- WATER LEVEL
- [xx.xx] WATER LEVEL MEASUREMENT (FEBRUARY 13, 2023)

TITLE AND LOCATION

GEOLOGICAL CROSS SECTION B-B'

PHASE TWO ESA
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	8A



HORIZONTAL SCALE

4m 0m 4m 8m 12m

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LEGEND

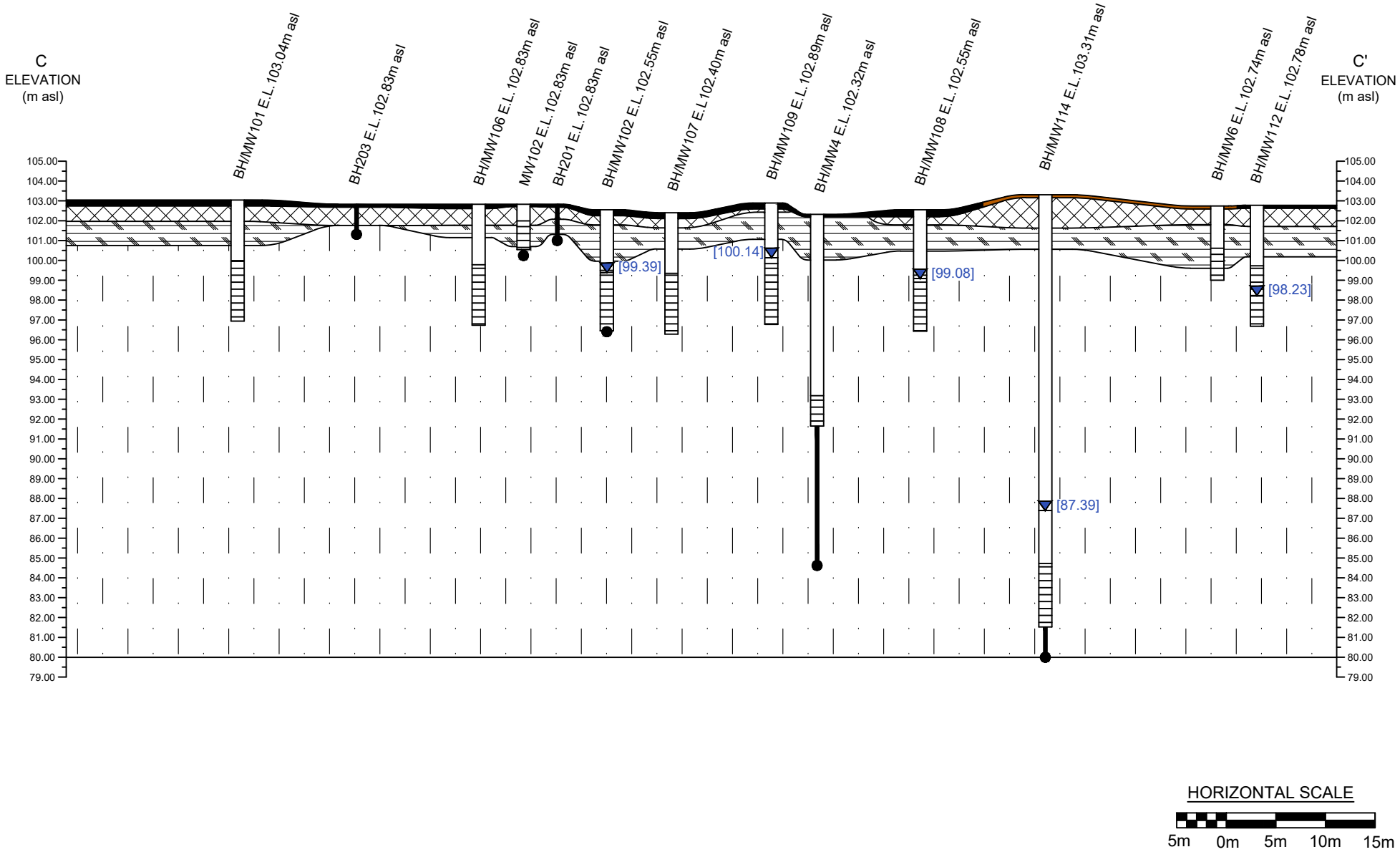
- ASPHALT PAVEMENT
- FILL
- SILTY CLAY / CLAYEY SILT TILL
- SHALE BEDROCK
- WATER LEVEL
- [xx.xx] WATER LEVEL MEASUREMENT (FEBRUARY 13, 2023)
- SAMPLE EXCEEDS MECP TABLE 2 SCS
- SAMPLE MEETS MECP TABLE 2 SCS
- APPROXIMATE EXTENT OF SOIL IMPACT

TITLE AND LOCATION

CROSS SECTION B-B' WITH PAH IMPACTS IN SOIL

PHASE TWO ESA
217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	8B



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LEGEND

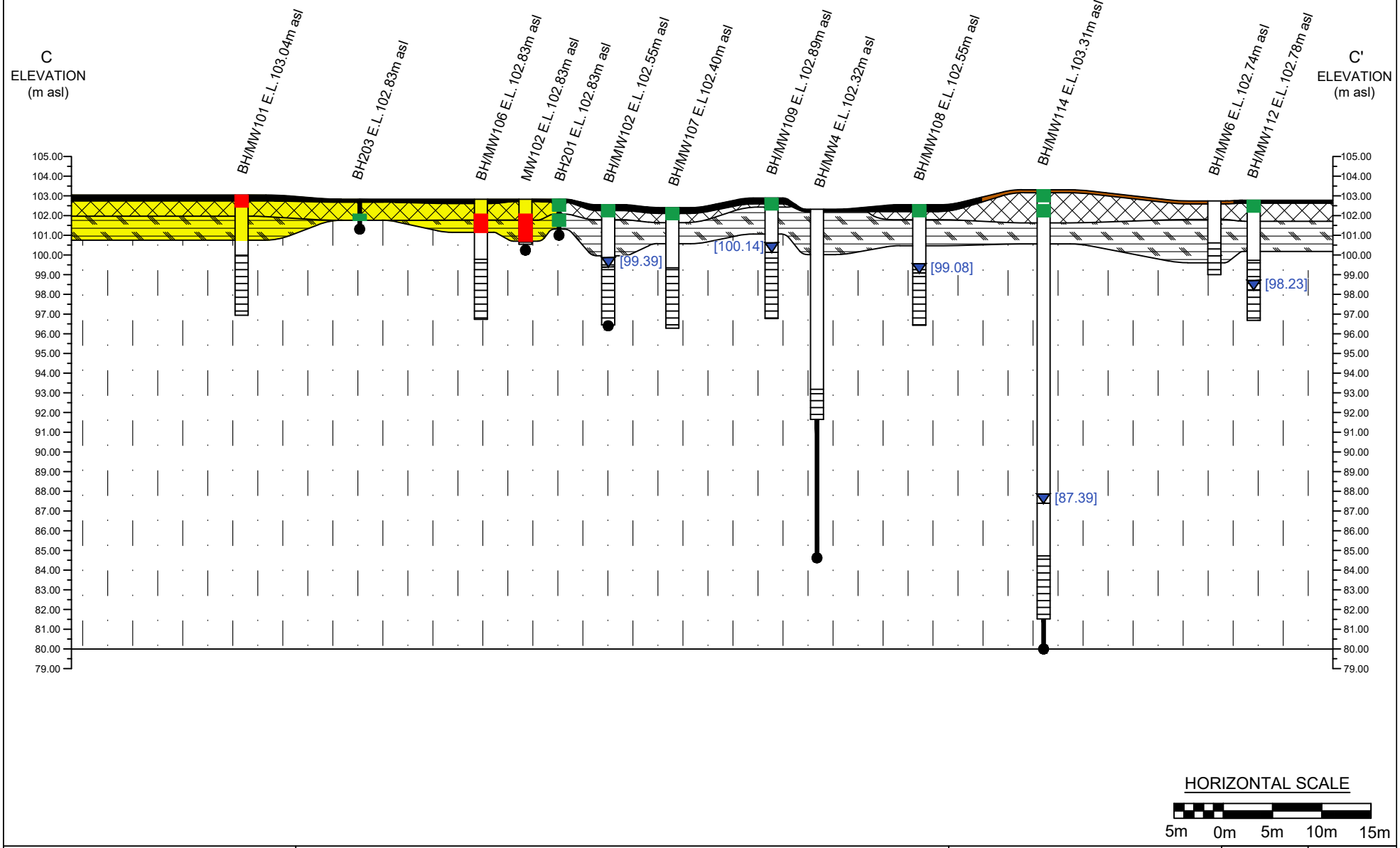
- ASPHALT PAVEMENT
- TOP SOIL
- FILL
- SILTY CLAY / CLAYEY SILT TILL
- SHALE BEDROCK
- WATER LEVEL
- [xx.xx] WATER LEVEL MEASUREMENT (FEBRUARY 13, 2023)

TITLE AND LOCATION

GEOLOGICAL CROSS SECTION C-C'

PHASE TWO ESA
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	9A



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LEGEND

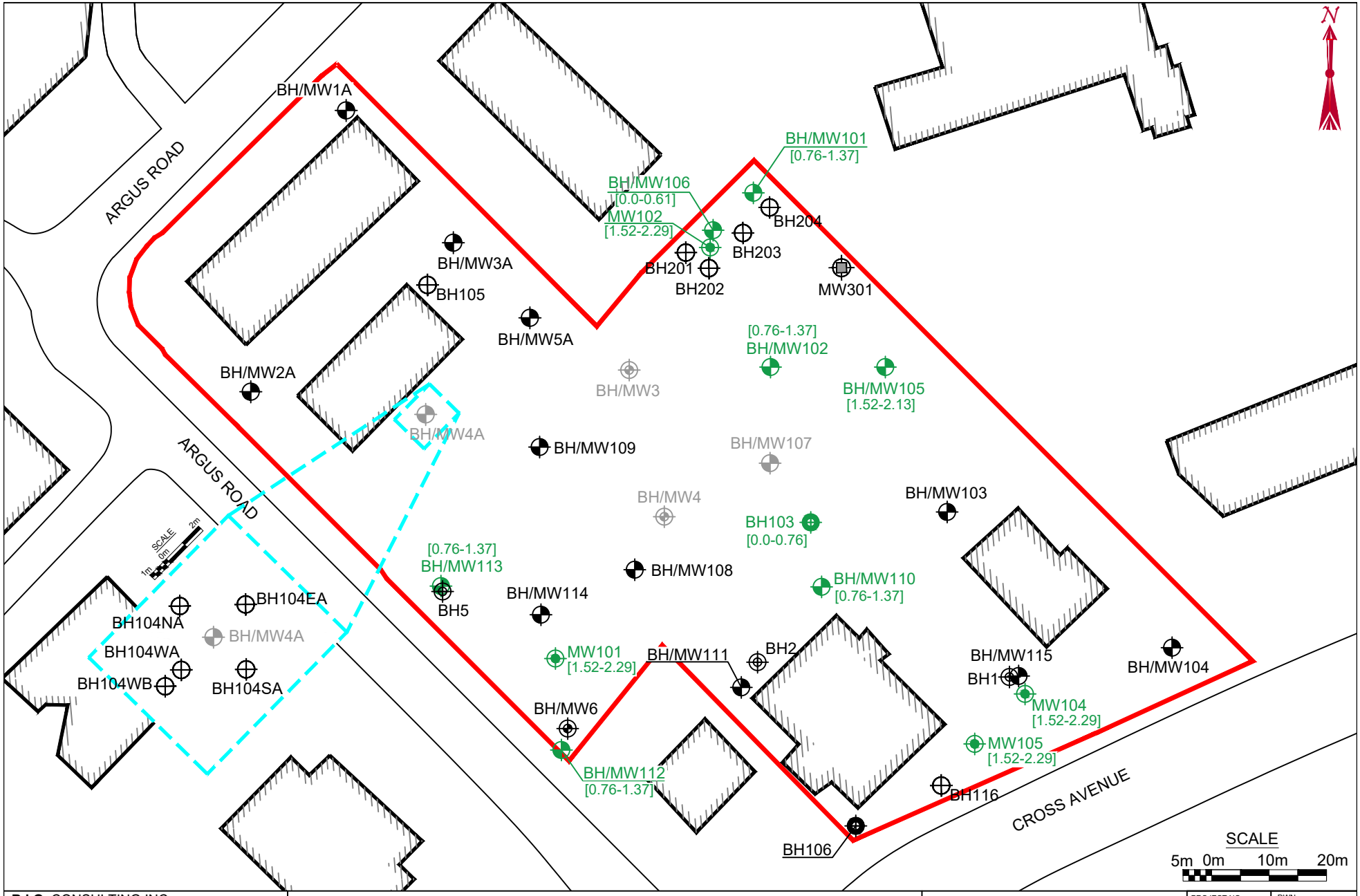
- ASPHALT PAVEMENT
- TOP SOIL
- FILL
- SILTY CLAY / CLAYEY SILT TILL
- SHALE BEDROCK
- WATER LEVEL
- [xx.xx] WATER LEVEL MEASUREMENT (FEBRUARY 13, 2023)
- SAMPLE EXCEEDS MECP TABLE 2 SCS
- SAMPLE MEETS MECP TABLE 2 SCS
- APPROXIMATE EXTENT OF SOIL IMPACT

TITLE AND LOCATION

CROSS SECTION C-C' WITH METALS (As, Sb, Se, Cr(VI), Hg, CN- AND B-HWS) IN SOIL

PHASE TWO ESA
217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	9B



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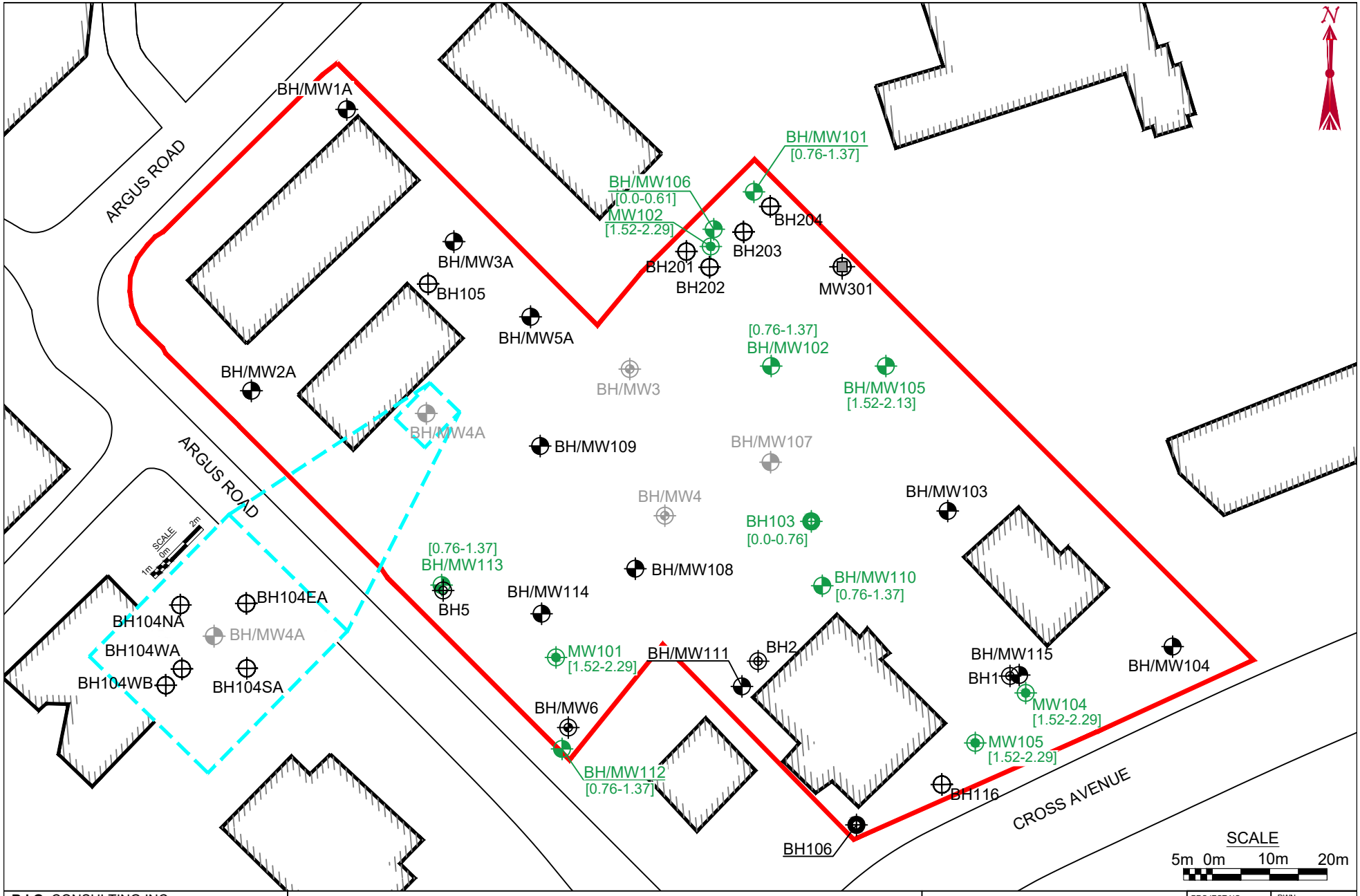
LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- MEETS MECP TABLE 2 SCS
- [xx.xx] SOIL SAMPLE DEPTH (m bgs)
- DESTROYED BOREHOLE/MONITORING WELL

TITLE AND LOCATION

PHC + BTEX IN SOIL
PHASE TWO ESA
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	10



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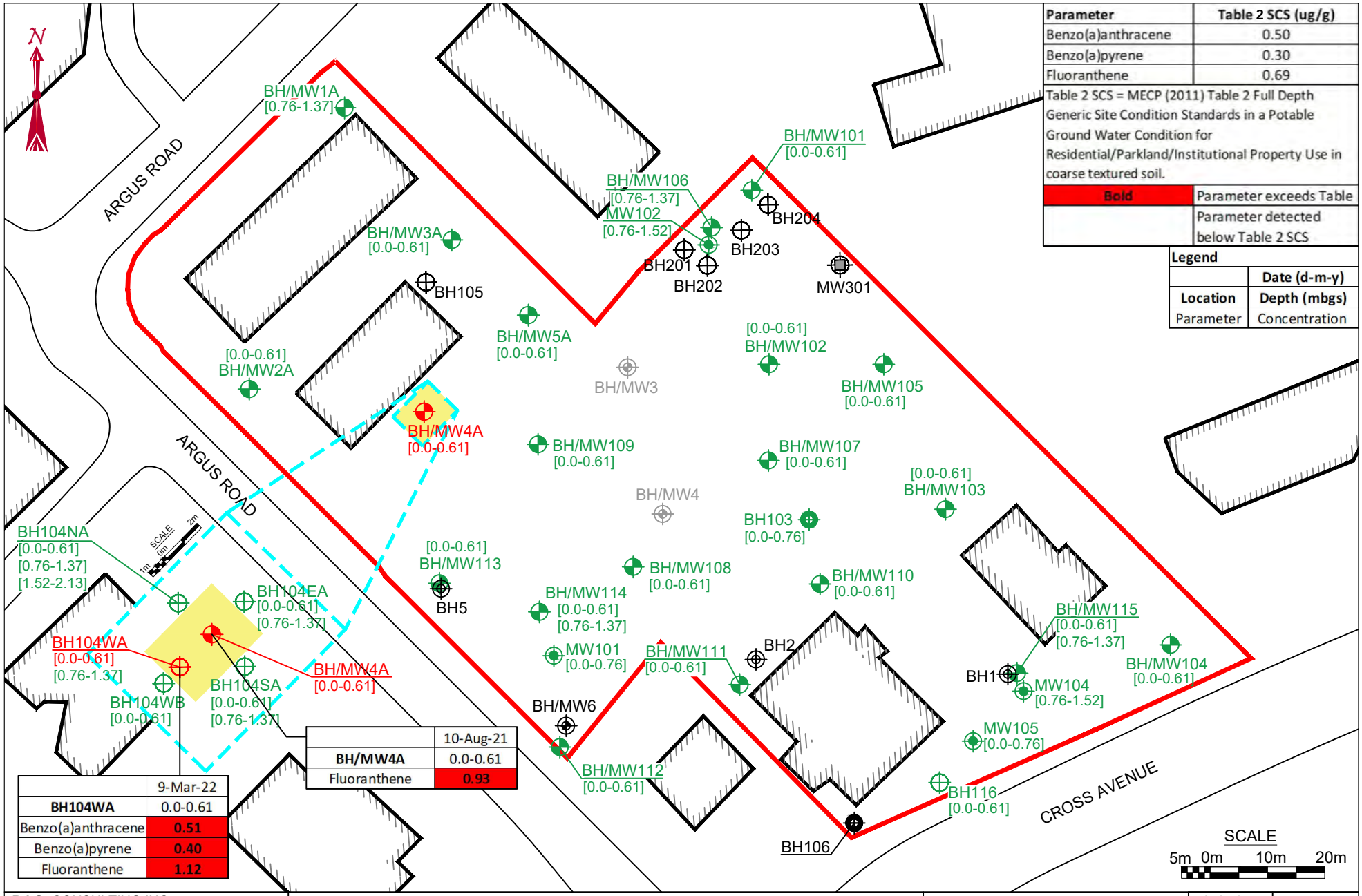
LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- MEETS MECP TABLE 2 SCS
- [xx.xx] SOIL SAMPLE DEPTH (m bgs)
- DESTROYED BOREHOLE/MONITORING WELL

TITLE AND LOCATION

VOCs IN SOIL
PHASE TWO ESA
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	11



Parameter	Table 2 SCS (ug/g)
Benzo(a)anthracene	0.50
Benzo(a)pyrene	0.30
Fluoranthene	0.69

Table 2 SCS = MECP (2011) Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional Property Use in coarse textured soil.

Bold	Parameter exceeds Table
	Parameter detected below Table 2 SCS

Legend	
	Date (d-m-y)
Location	**Depth (mbgs)**
Parameter	Concentration

	9-Mar-22
BH104WA	0.0-0.61
Benzo(a)anthracene	**0.51**
Benzo(a)pyrene	**0.40**
Fluoranthene	**1.12**

	10-Aug-21
BH/MW4A	0.0-0.61
Fluoranthene	**0.93**

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LEGEND

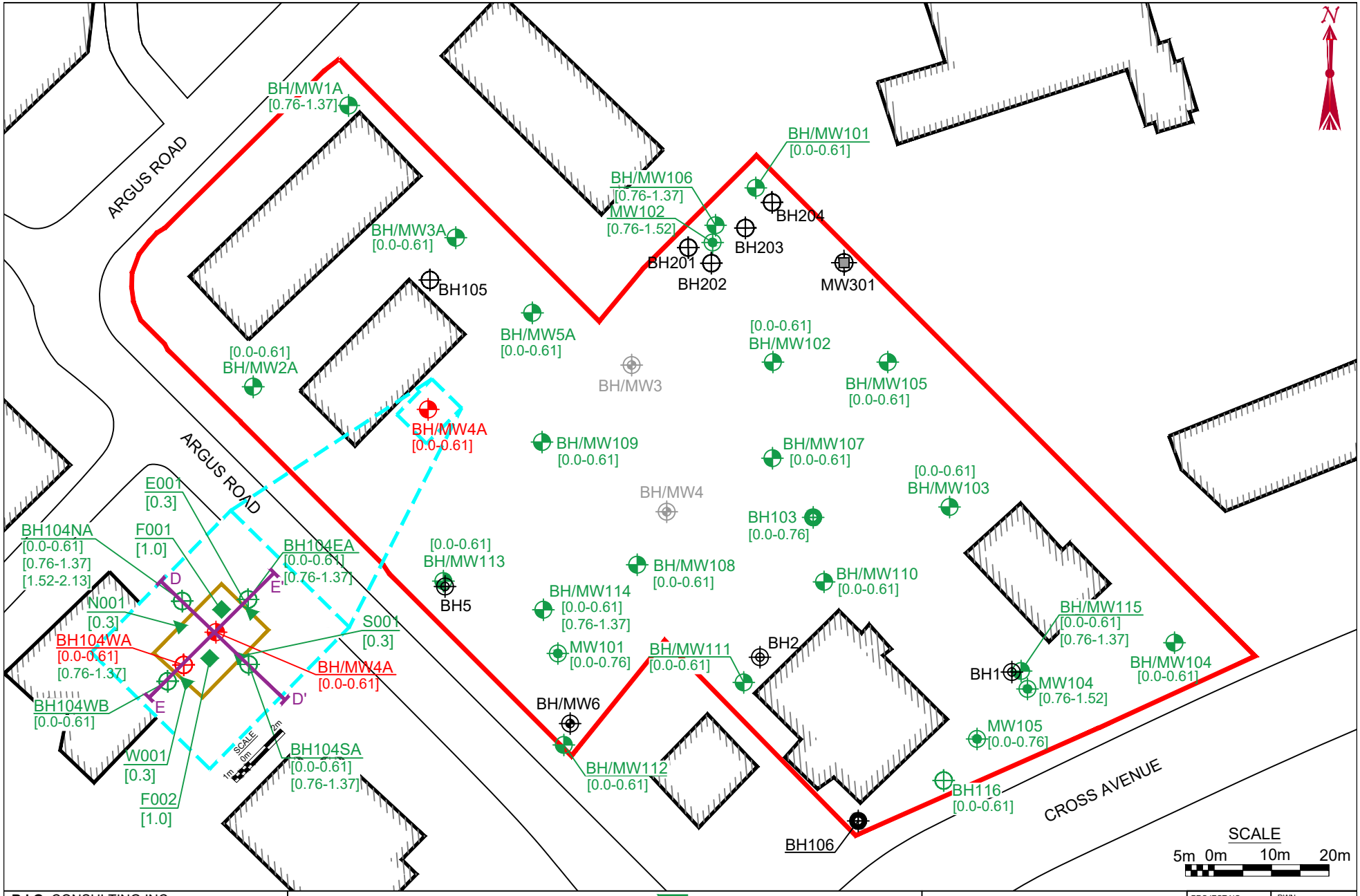
- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- MEETS MECP TABLE 2 SCS
- EXCEEDS MECP TABLE 2 SCS
- APPROXIMATE EXTENT OF SOIL IMPACTS
- [xx.xx] SOIL SAMPLE DEPTH (m bgs)
- DESTROYED BOREHOLE/MONITORING WELL

TITLE AND LOCATION

PAH IMPACTS IN SOIL PRIOR TO REMEDIATION

PHASE TWO ESA
217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	12A



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LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE (TERRAPEX)
- MEETS MECP TABLE 2 SCS
- EXCEEDS MECP TABLE 2 SCS
- [xx.xx] SOIL SAMPLE DEPTH (m bgs)
- REMEDIATION EXCAVATION BOUNDARY
- LOCATION OF EXCAVATION FLOOR SAMPLE
- LOCATION OF EXCAVATION WALL SAMPLE
- DESTROYED BOREHOLE/MONITORING WELL
- D D' GEOLOGICAL CROSS SECTION (SEE FIGURE 12C)
- E E' GEOLOGICAL CROSS SECTION (SEE FIGURE 12D)

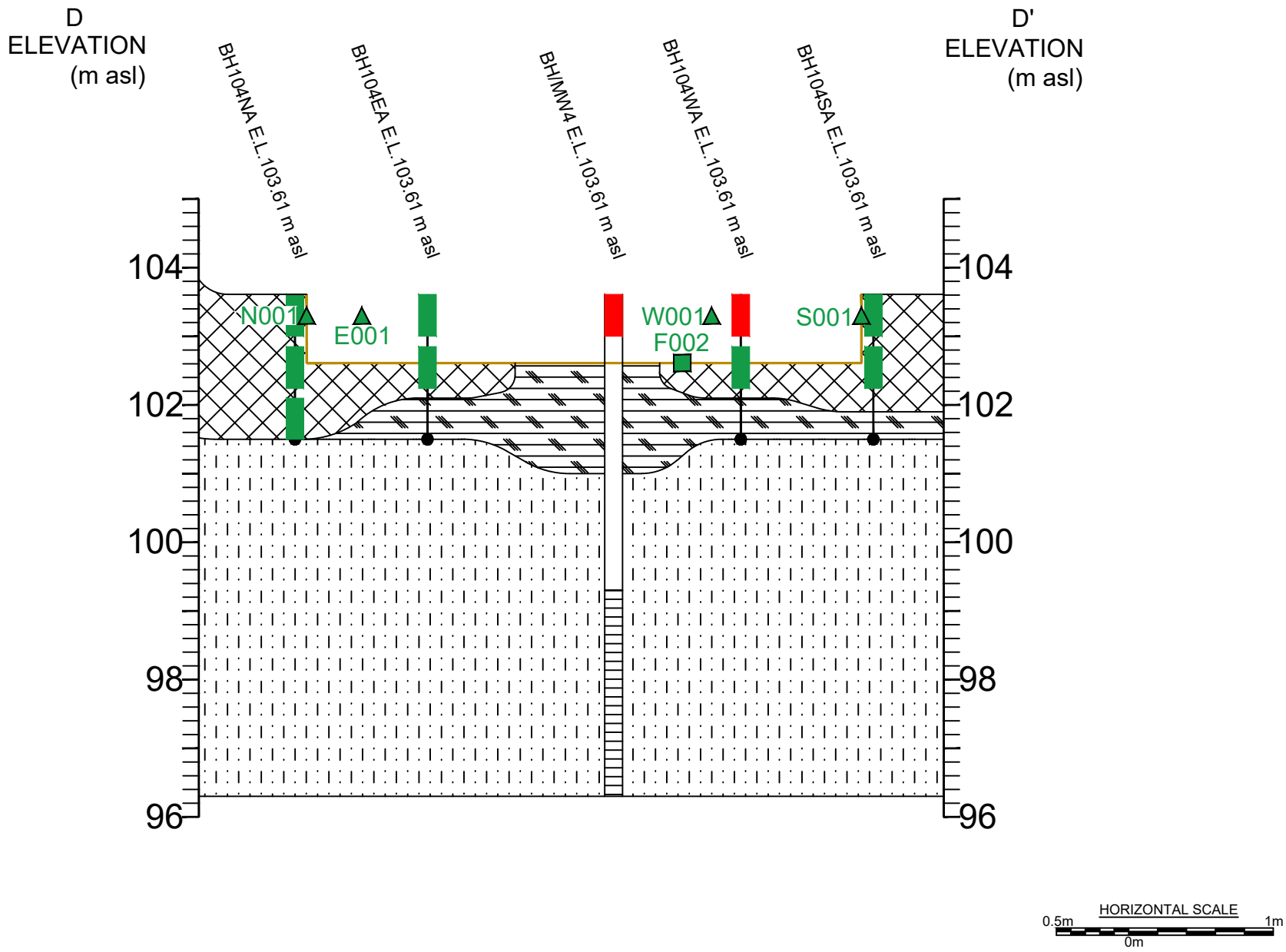
TITLE AND LOCATION

PAH IMPACTS IN SOIL POST REMEDIATION

PHASE TWO ESA

217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	12B



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LEGEND

- FILL
- CLAYEY SILT TILL
- BEDROCK
- LOCATION OF EXCAVATION WALL SAMPLE
- LOCATION OF EXCAVATION FLOOR SAMPLE
- EXCEEDS TABLE 2 SCS
- MEETS TABLE 2 SCS
- REMEDIAL EXCAVATION BOUNDARY

TITLE AND LOCATION

POST REMEDIATION CROSS SECTION D-D' WITH PAHs IN SOIL

PHASE TWO ESA
217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

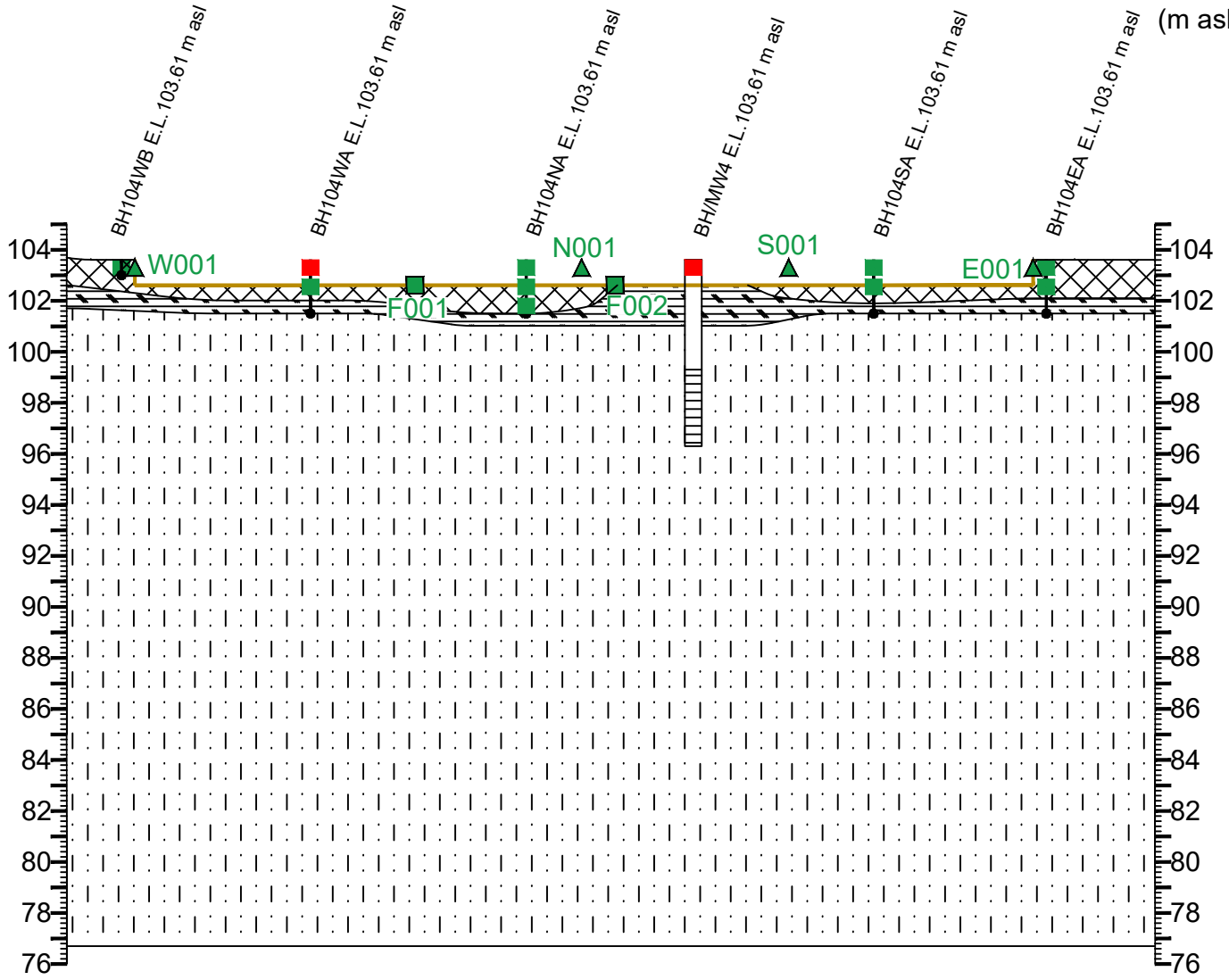
PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	12C

E

ELEVATION
(m asl)

E'

ELEVATION
(m asl)



HORIZONTAL SCALE
0.5m 1m
0m

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LEGEND

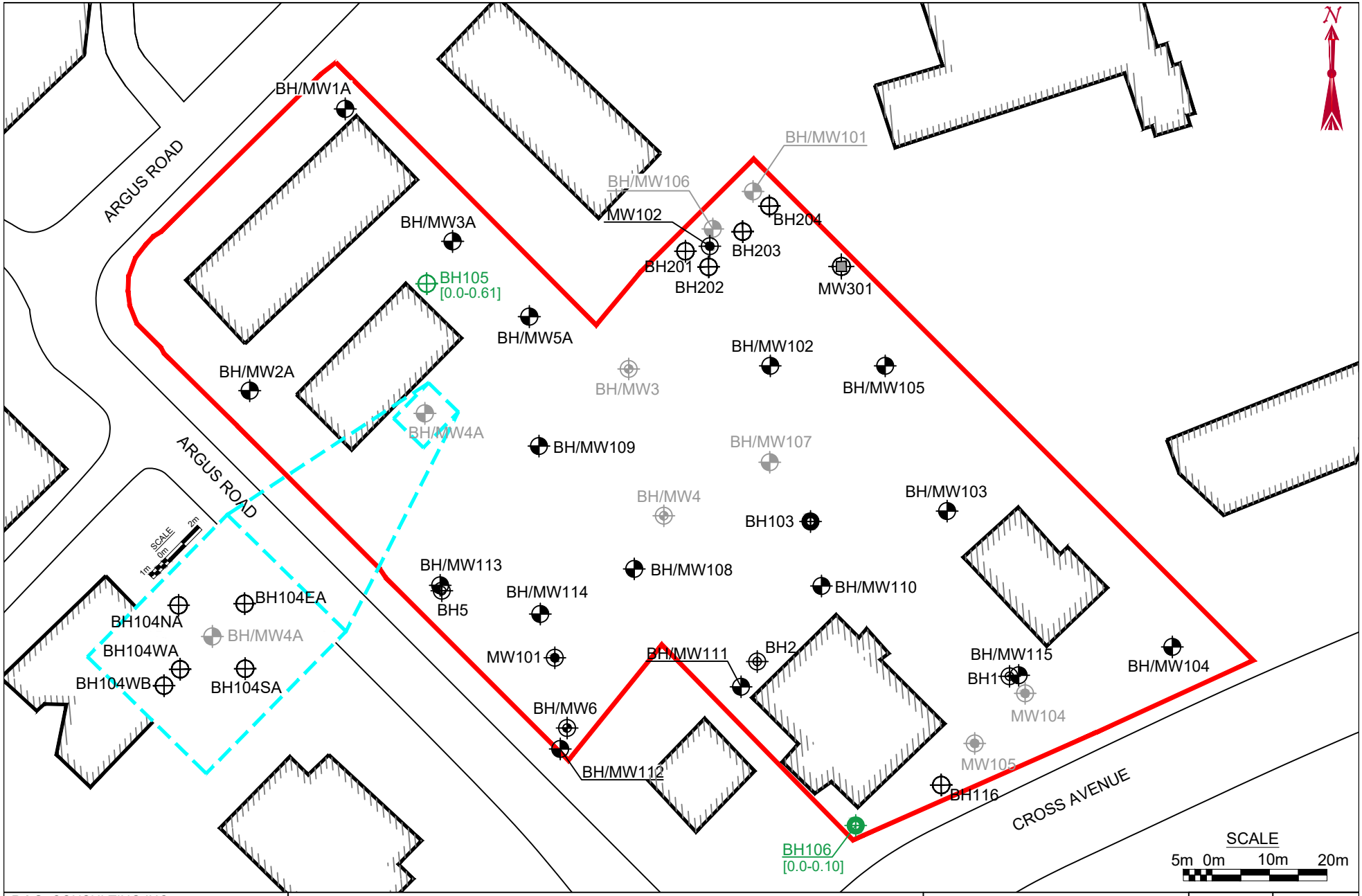
- FILL
- CLAYEY SILT TILL
- BEDROCK
- LOCATION OF EXCAVATION WALL SAMPLE
- LOCATION OF EXCAVATION FLOOR SAMPLE
- EXCEEDS TABLE 2 SCS
- MEETS TABLE 2 SCS
- REMEDIAL EXCAVATION BOUNDARY

TITLE AND LOCATION

POST REMEDIATION CROSS SECTION E-E' WITH PAHs IN SOIL

PHASE TWO ESA
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	12D



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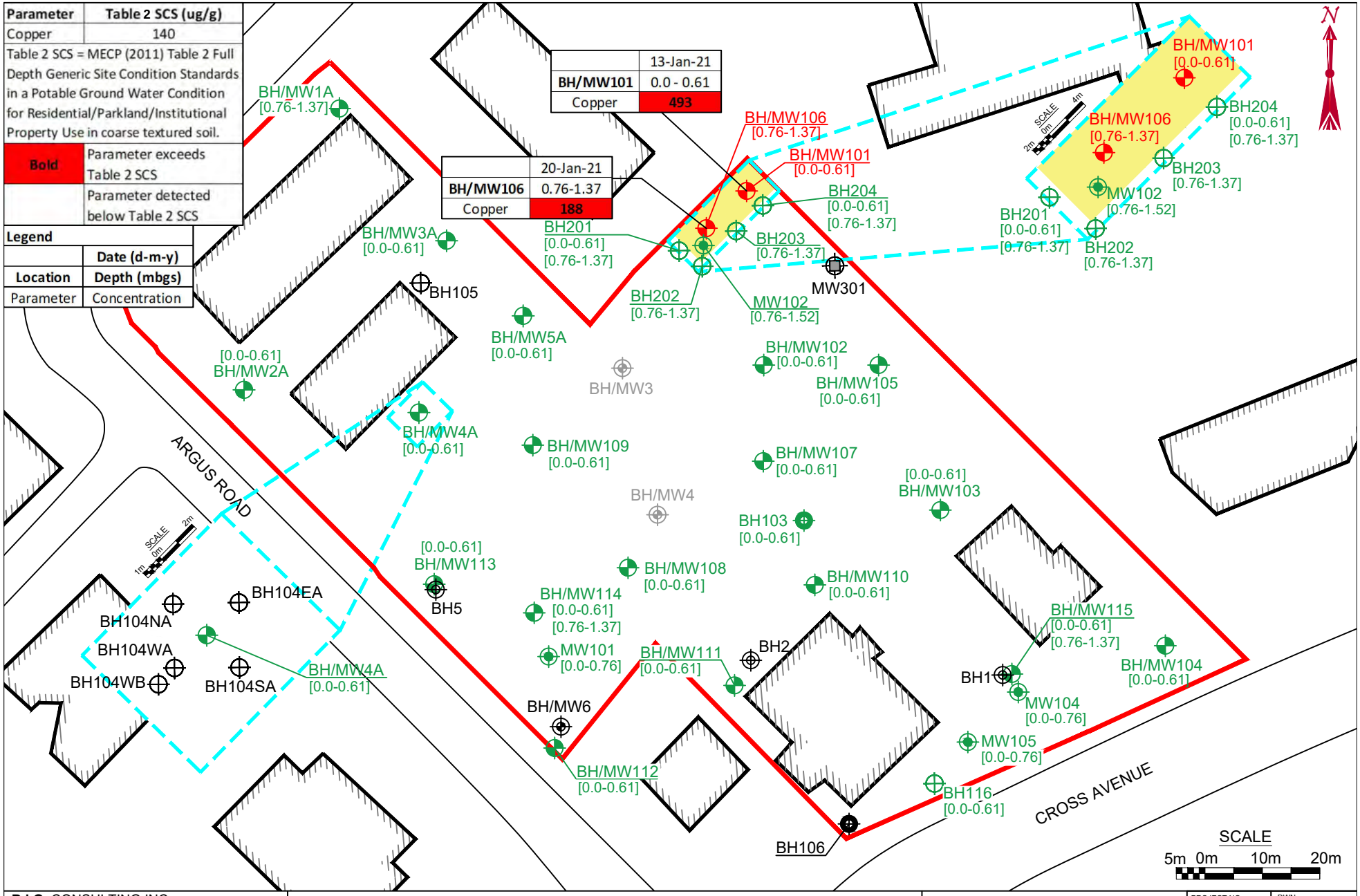
LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- MEETS MECP TABLE 2 SCS
- [xx.xx] SOIL SAMPLE DEPTH (m bgs)
- DESTROYED BOREHOLE/MONITORING WELL

TITLE AND LOCATION

PCBs IN SOIL
PHASE TWO ESA
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	13



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LEGEND

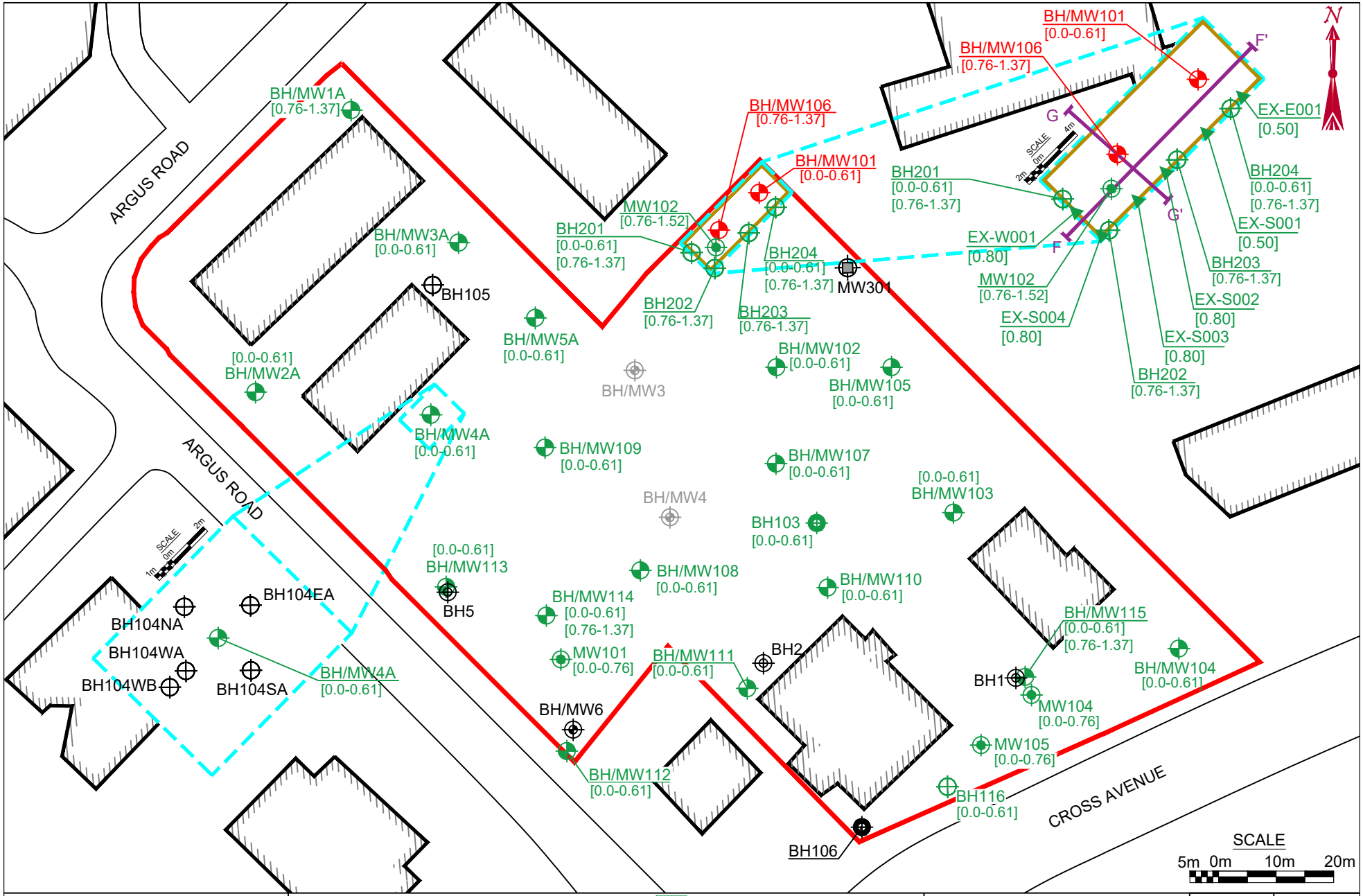
- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- MEETS MECP TABLE 2 SCS
- EXCEEDS MECP TABLE 2 SCS
- APPROXIMATE EXTENT OF SOIL IMPACTS
- [xx.xx] SOIL SAMPLE DEPTH (m bgs)
- DESTROYED BOREHOLE/MONITORING WELL

TITLE AND LOCATION

METALS (As, Sb, Se, Cr(VI), Hg, CN- AND B-HWS) IN SOIL PRIOR TO REMEDIATION PHASE TWO ESA

217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	14A



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LEGEND

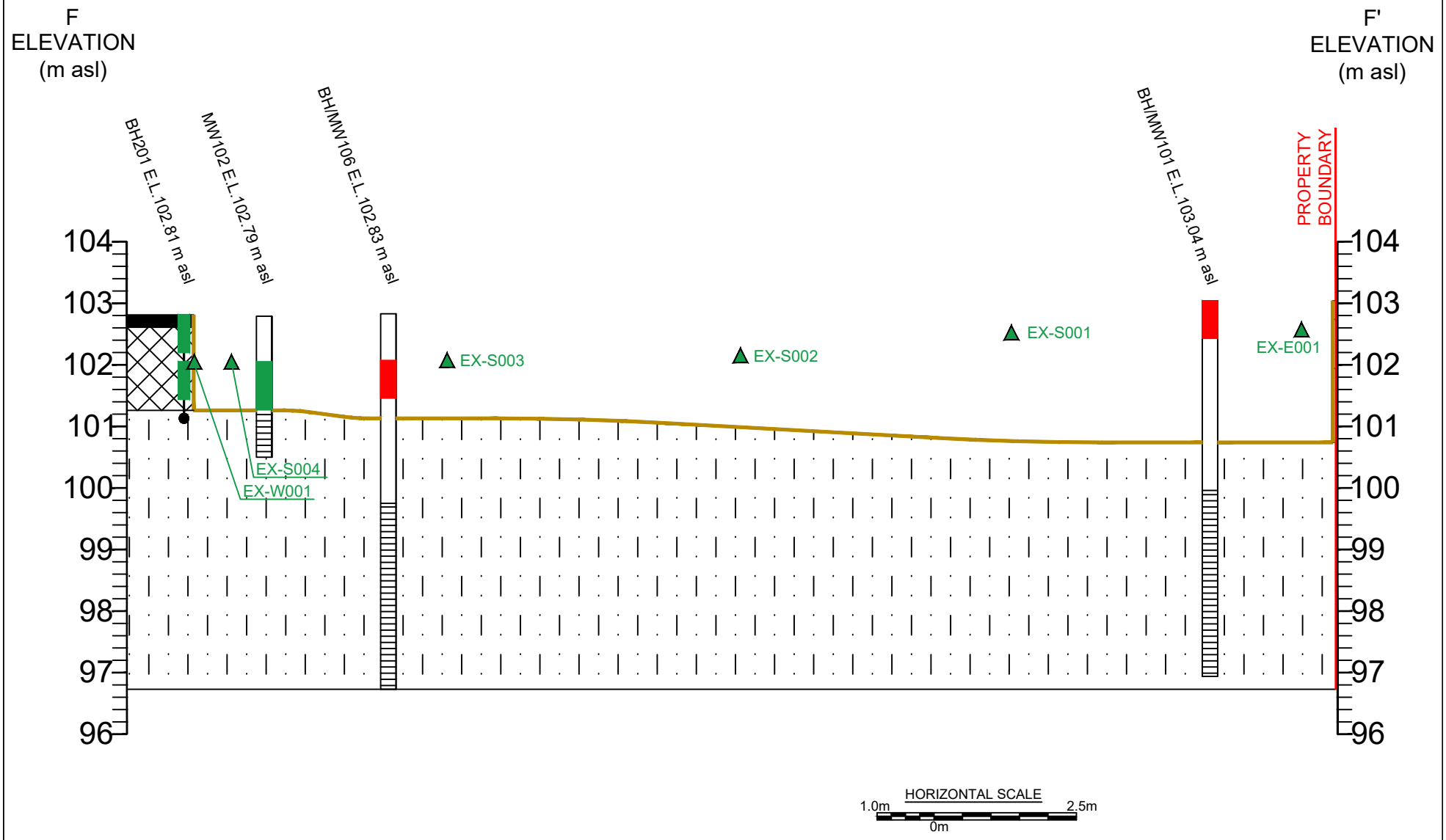
- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE (TERRAPEX)
- MEETS MECP TABLE 2 SCS
- EXCEEDS MECP TABLE 2 SCS
- [xx.xx] SOIL SAMPLE DEPTH (m bgs)
- REMEDIATION EXCAVATION BOUNDARY
- LOCATION OF EXCAVATION FLOOR SAMPLE
- LOCATION OF EXCAVATION WALL SAMPLE
- DESTROYED BOREHOLE/MONITORING WELL
- F—F' GEOLOGICAL CROSS SECTION (SEE FIGURE 14C)
- G—G' GEOLOGICAL CROSS SECTION (SEE FIGURE 14D)

TITLE AND LOCATION

METALS (As, Sb, Se, Cr(VI), Hg, CN- AND B-HWS) IN SOIL PRIOR TO REMEDIATION PHASE TWO ESA

217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	14B



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LEGEND

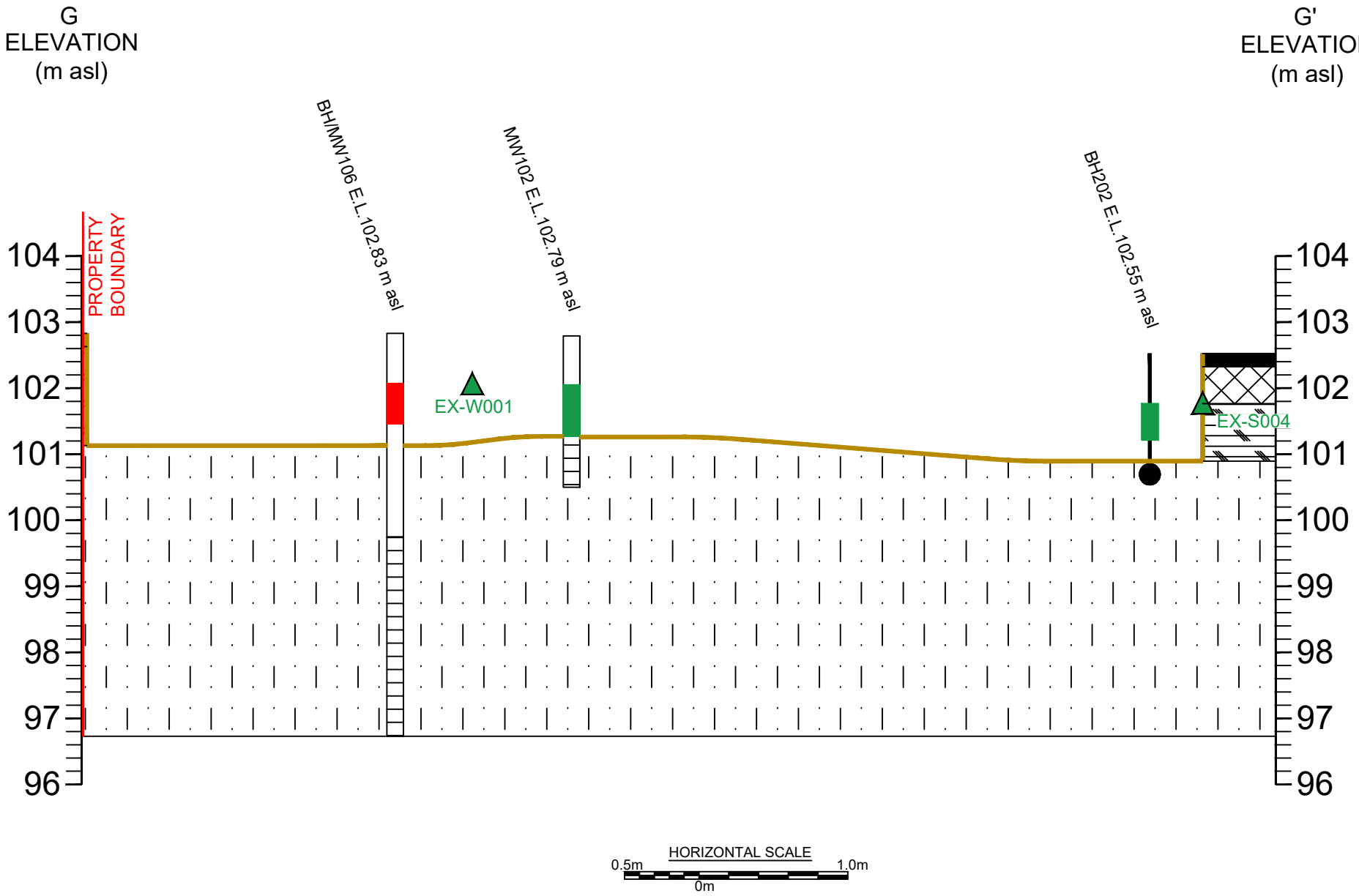
- ASPHALT
- FILL
- SILTY CLAY / CLAYEY SILT TILL
- BEDROCK
- CONFIRMATORY WALL SAMPLE
- EXCEEDS TABLE 2 SCS
- MEETS TABLE 2 SCS
- REMEDIAL EXCAVATION BOUNDARY

TITLE AND LOCATION

POST REMEDIATION CROSS SECTION F-F' WITH METALS (As, Sb, Se, Cr(VI), Hg, CN-) IN SOIL

PHASE TWO ESA
217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	14C



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LEGEND

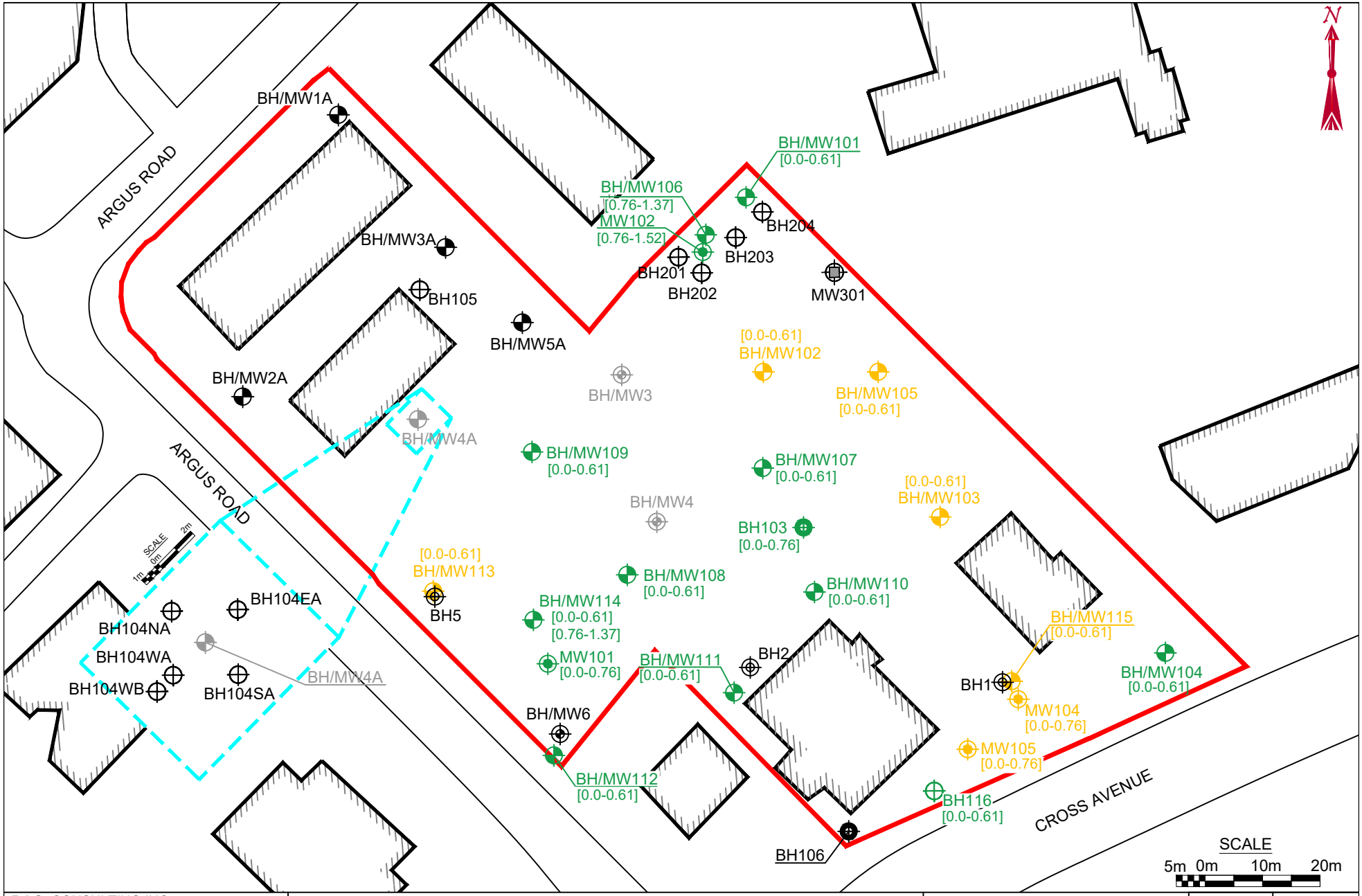
- ASPHALT
- FILL
- SILTY CLAY / CLAYEY SILT TILL
- BEDROCK
- CONFIRMATORY WALL SAMPLE
- EXCEEDS TABLE 2 SCS
- MEETS TABLE 2 SCS
- REMEDIAL EXCAVATION BOUNDARY

TITLE AND LOCATION

POST REMEDIATION CROSS SECTION G-G' WITH METALS (As, Sb, Se, Cr(VI), Hg, CN-) IN SOIL

PHASE TWO ESA
217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	14D



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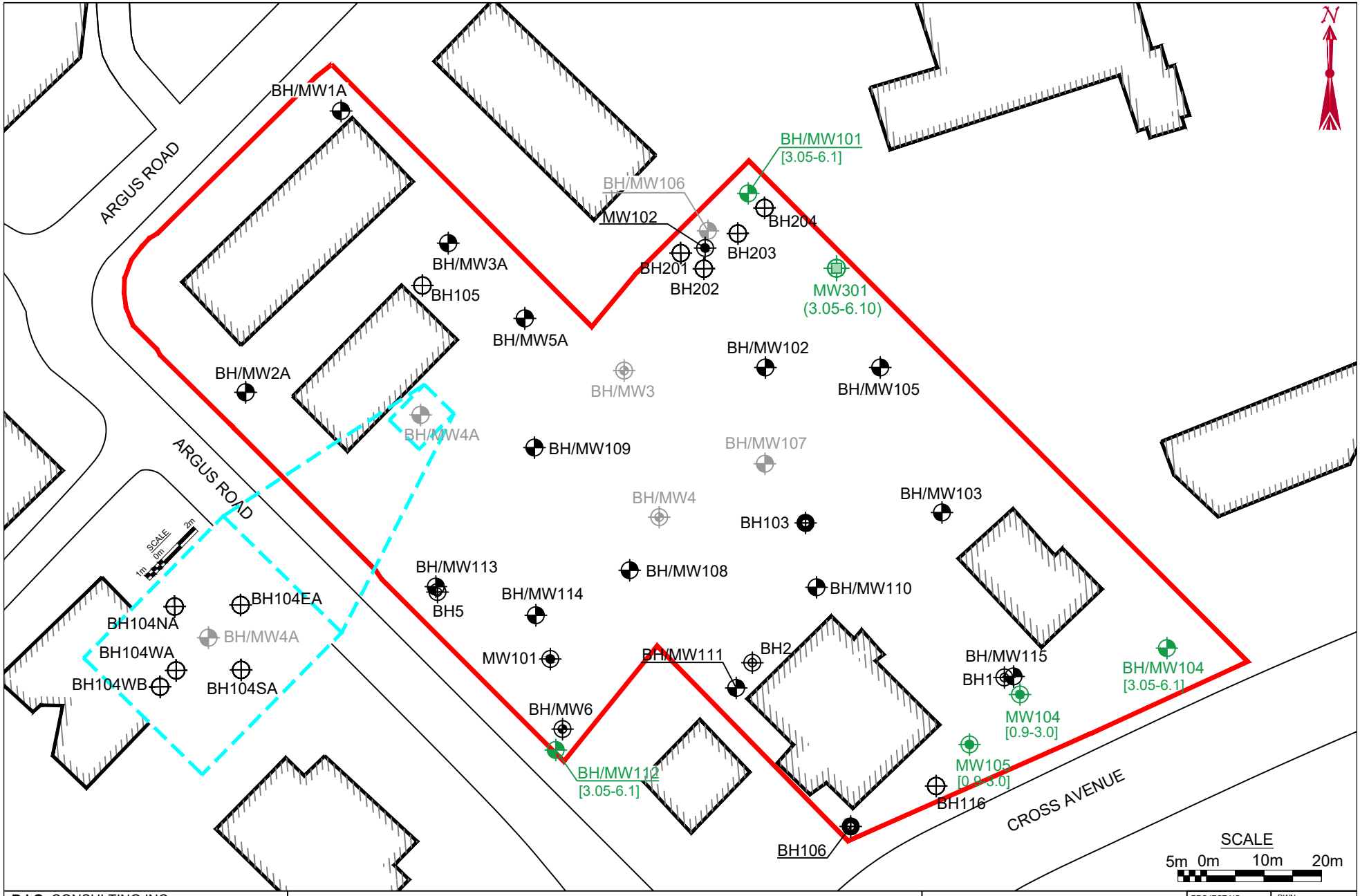
LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- MEETS MECP TABLE 2 SCS
- EXCEEDS MECP TABLE 2 SCS BUT NOT CONSIDERED A COC
- [xx.xx] SOIL SAMPLE DEPTH (m bgs)
- DESTROYED BOREHOLE/MONITORING WELL

TITLE AND LOCATION

EC AND SAR IN SOIL
PHASE TWO ESA
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	15



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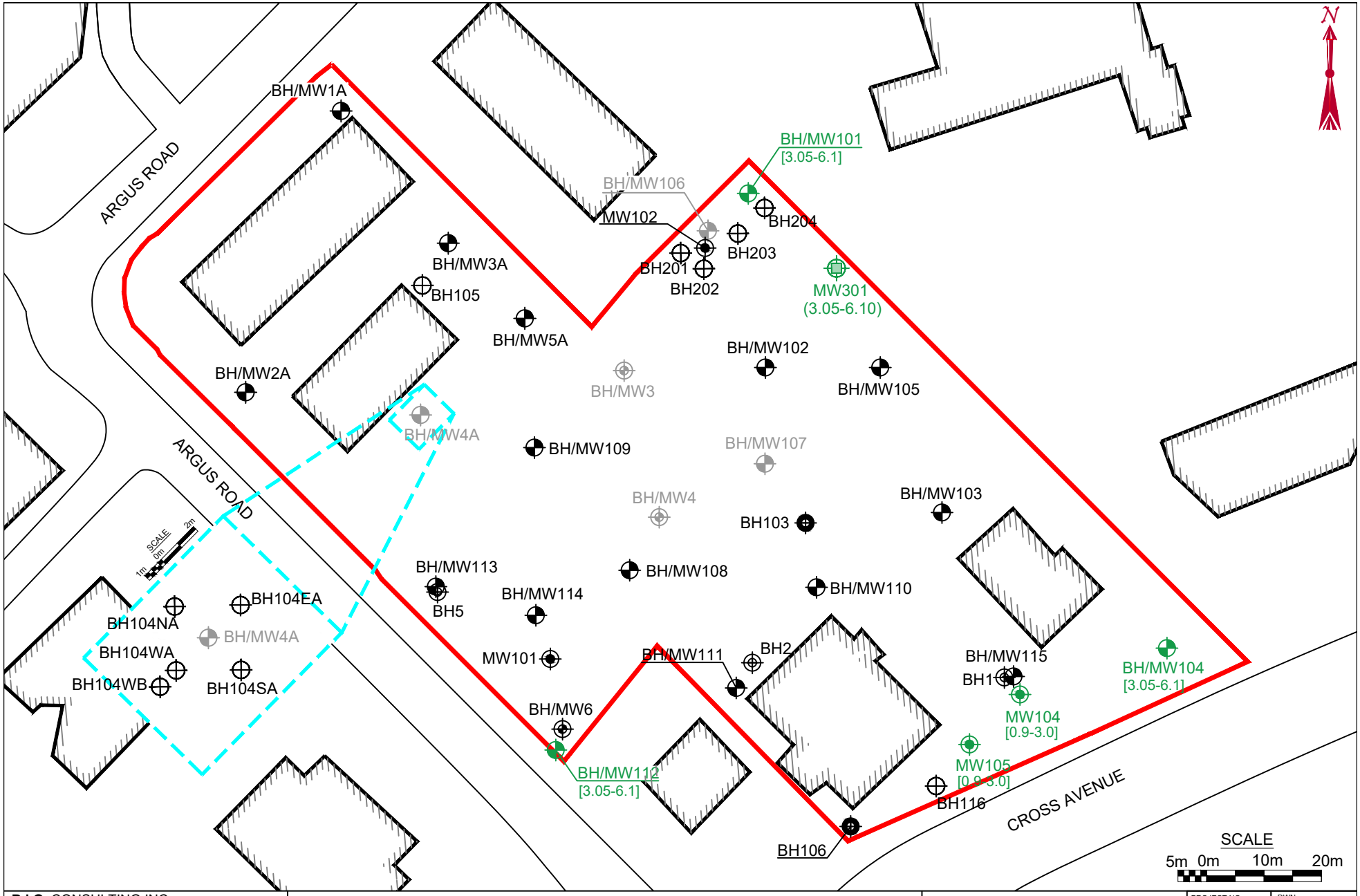
LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- MEETS MECP TABLE 2 SCS
- [xx.xx] WELL SCREEN DEPTH (m bgs)
- DESTROYED BOREHOLE/MONITORING WELL

TITLE AND LOCATION

PHCs + BTEX IN GROUNDWATER
PHASE TWO ESA
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	16



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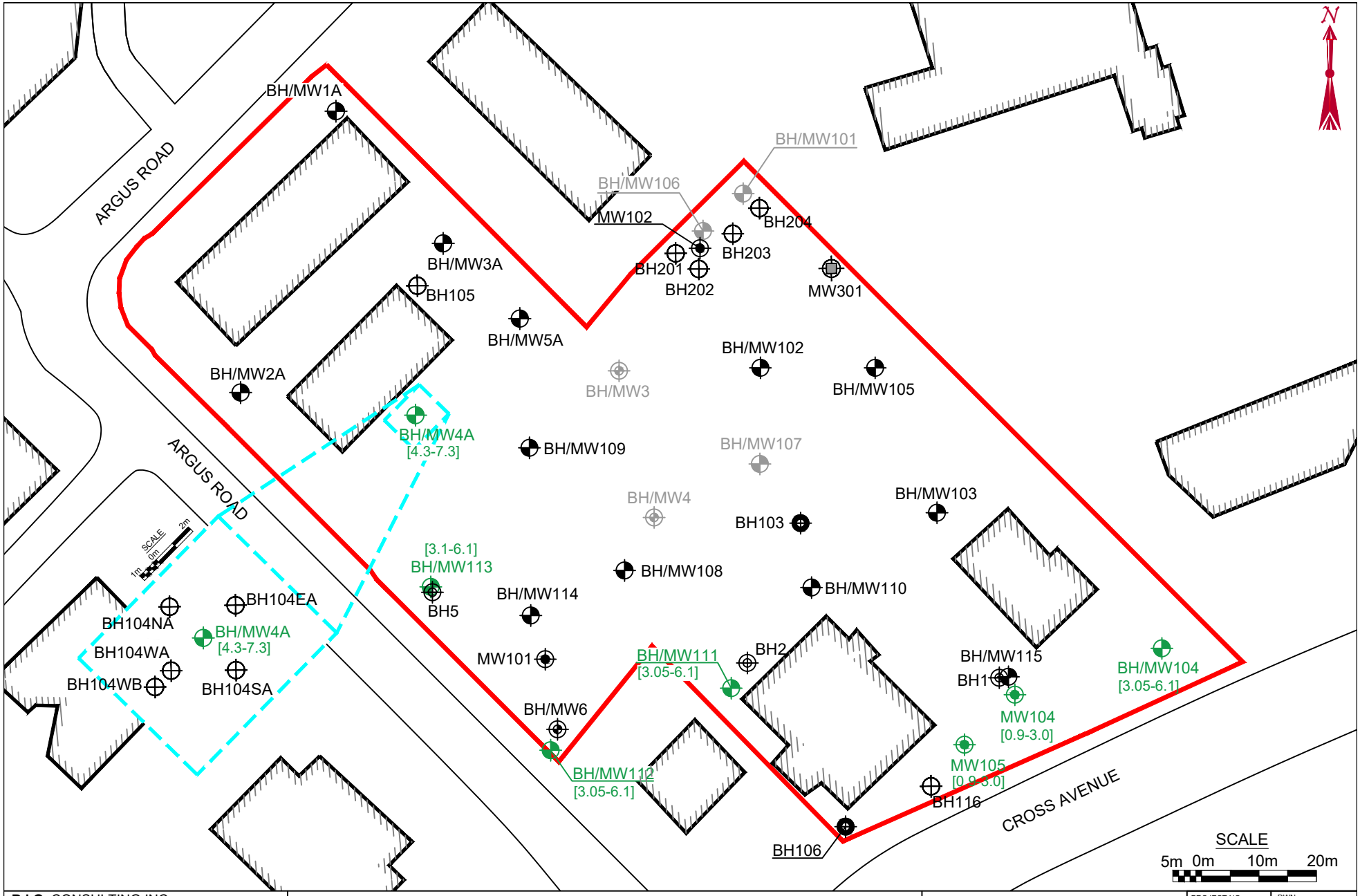
LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- MEETS MECP TABLE 2 SCS
- [xx.xx] WELL SCREEN DEPTH (m bgs)
- DESTROYED BOREHOLE/MONITORING WELL

TITLE AND LOCATION

VOCs IN GROUNDWATER
PHASE TWO ESA
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	17



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LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
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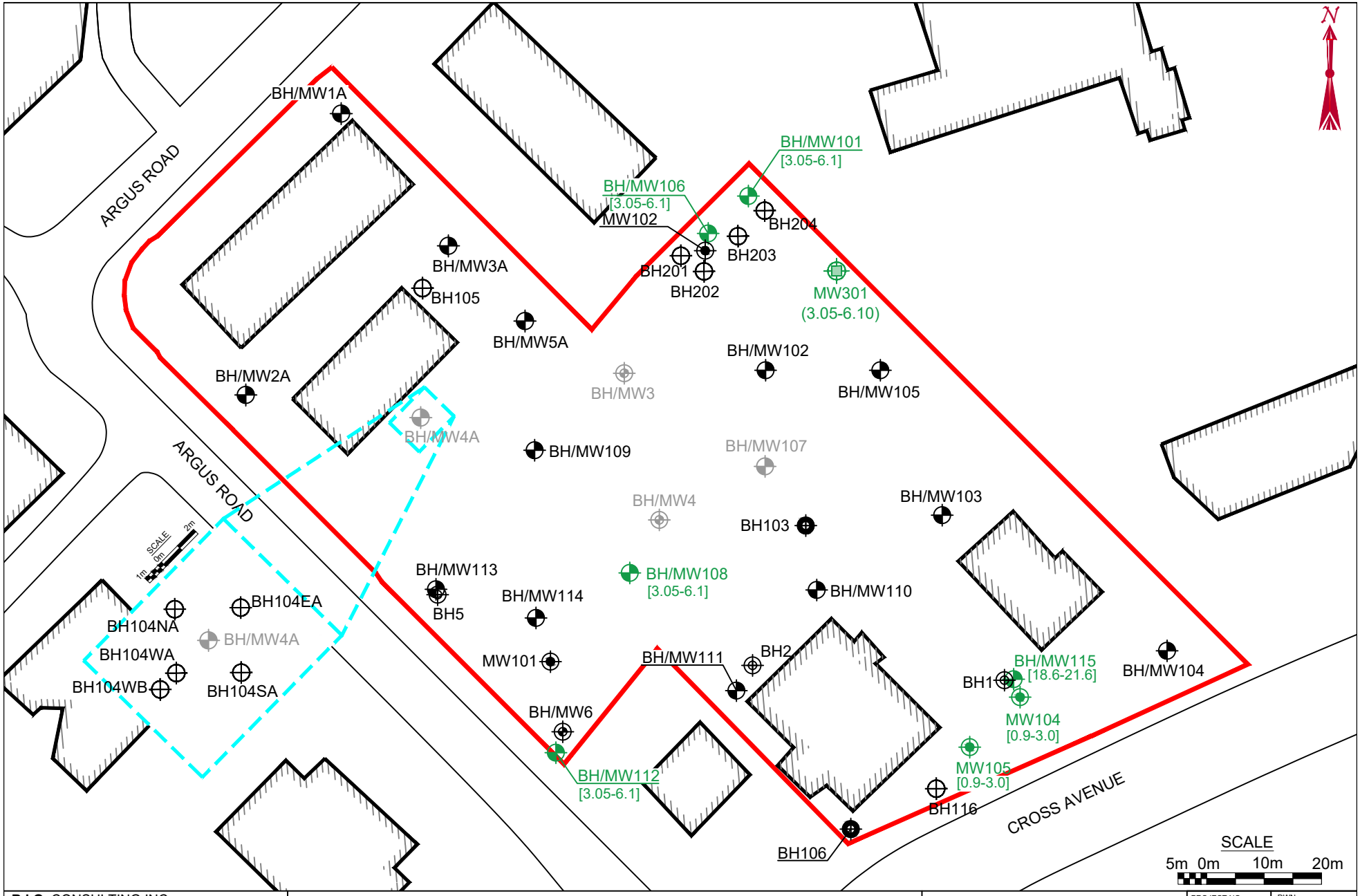
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- MEETS MECP TABLE 2 SCS
- [xx.xx] WELL SCREEN DEPTH (m bgs)
- DESTROYED BOREHOLE/MONITORING WELL

TITLE AND LOCATION

PAHs IN GROUNDWATER
PHASE TWO ESA
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	18



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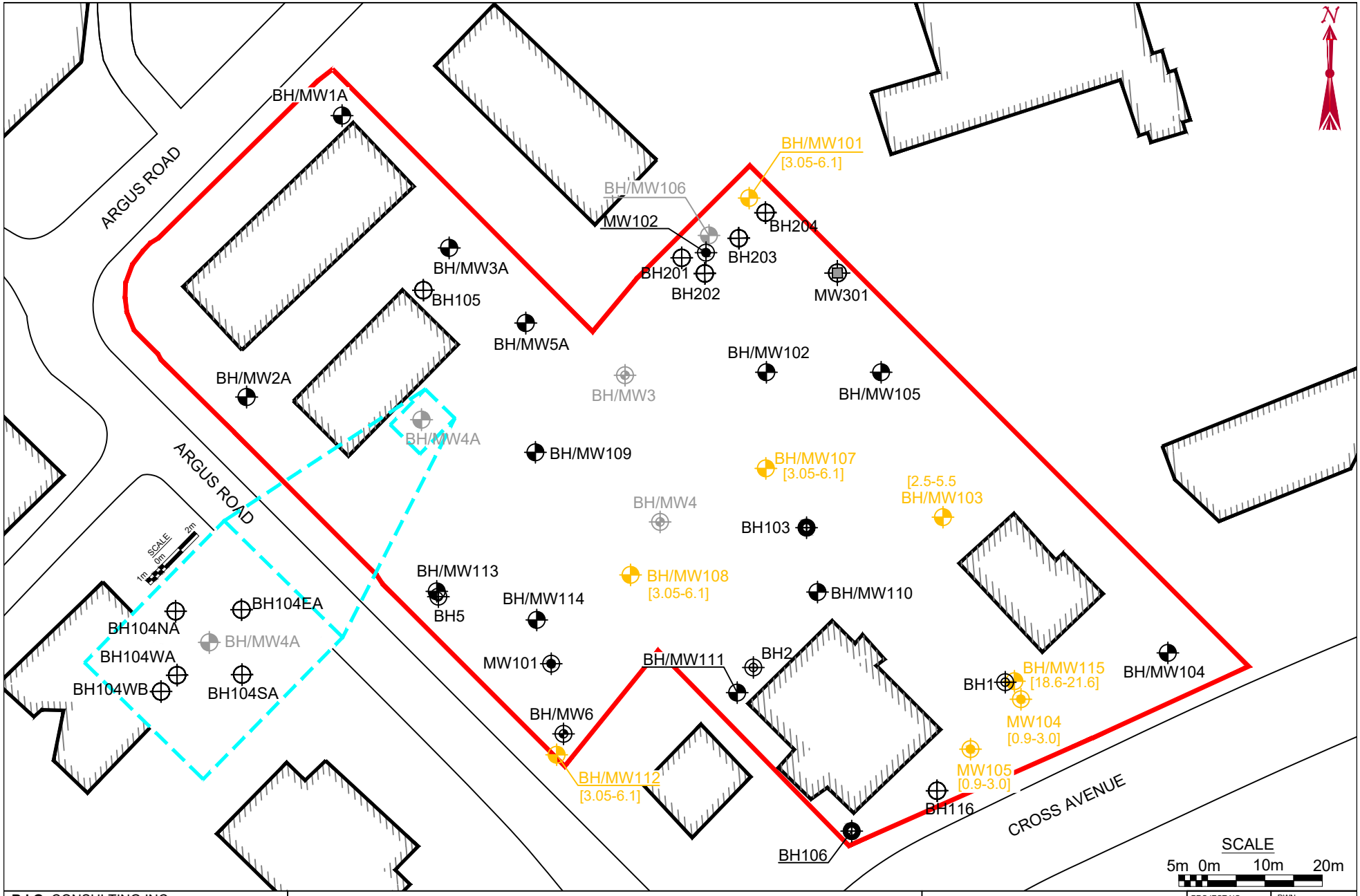
LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- MEETS MECP TABLE 2 SCS
- [xx.xx] WELL SCREEN DEPTH (m bgs)
- DESTROYED BOREHOLE/MONITORING WELL

TITLE AND LOCATION

METALS (As, Sb, Se, Cr(VI), Hg AND CN-) IN GROUNDWATER
PHASE TWO ESA
217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	19



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LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF MONITORING WELL (BIG 2023)
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- MEETS MECP TABLE 2 SCS
- EXCEEDS MECP TABLE 2 SCS BUT NOT CONSIDERED A COC
- [xx.xx] WELL SCREEN DEPTH (m bgs)
- DESTROYED BOREHOLE/MONITORING WELL

TITLE AND LOCATION

SODIUM + CHLORIDE IN GROUNDWATER

PHASE TWO ESA
217 AND 227 CROSS AVENUE AND
571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
MARCH 2023	20

Tables

TABLE 1 – Areas of Potential Environmental Concern (APECs)
BIGC-ENV-349F – Phase Two Environmental Site Assessment
217 & 227 Cross Avenue and 571, 581 and 587-595 Argus Road, Oakville, Ontario

APEC	Location of APEC on Phase One Property	Potentially Contaminating Activity (PCA)	Location of PCA (On-Site or Off-Site)	Contaminants of Concern	Media Potentially Impacted (Groundwater, soil and/or sediment)
APEC 1: Usage of de-icing salts on paved surfaces	Exterior portion of the Site	"Other" – Usage of De-icing Salts	On-Site	Electrical Conductivity, SAR, Na and Cl-	Soil and Groundwater
APEC 2: Importation of Fill Material	Entire Site	#30 – Importation of Fill Material of Unknown Quality	On-Site	PAHs, metals, As, Sb, Se, Cr (VI), Hg, B-HWS, CN-	Soil
APEC 3: Copper impacts in soil	Eastern portion	#Other – Previously identified copper impacts in soil	On-Site	Metals	Soil and Groundwater
APEC 4: Transformer	Southern portion	#55 – Transformer Manufacturing, Processing and Use	On-Site	PCBs	Soil
APEC 5: PAH impacts in soil	Central portion	#Other – Previously identified PAH impacts in soil	On-Site	PAHs	Soil and Groundwater
APEC 6: Transformer	Northeastern portion	#55 – Transformer Manufacturing, Processing and Use	On-Site	PCBs	Soil
APEC 7: Autobody Shop	Eastern portion	#10 – Commercial Autobody Shops	Off-Site	VOCs, Metals, As, Sb, Se, Cr (VI), Hg, CN-	Groundwater
APEC 8: Former Fuel Tank	Eastern portion	#28 – Gasoline and Associated Products Storage in Fixed Tanks	Off-Site	PHCs and BTEX	Groundwater

1) *Area of Potential Environmental Concern means the area on, in or under a phase one study area where one or more contaminants are potentially present, as determined through the Phase One ESA including through:*
    a) *Identification of post or present uses on, in or under the phase one property, and*
    b) *Identification of potentially contaminating activities.*
2) *Potentially contaminating activity means a use or activity set out in Column A of Table 2 of Schedule D that is occurring or has occurred in a phase one study area.*

PHCs = petroleum hydrocarbons; BTEX = benzene, toluene, ethylbenzene and toluene; VOCs = volatile organic compounds; PAHs = polycyclic aromatic hydrocarbons; PCBs = polychlorinated biphenyls; As = arsenic, Sb = antimony, Se = selenium; Cr (VI) = chromium hexavalent; Hg = mercury; B-HWS = boron hot water soluble; CN- = cyanide; Na = sodium; Cl- = chloride; SAR = sodium adsorption ratio.

TABLE 2 – Summary of Soil Samples Submitted for Chemical Analysis

BIGC-ENV-349F – Phase Two Environmental Site Assessment

217 & 227 Cross Avenue and 571, 581 and 587-595 Argus Road, Oakville, Ontario

Soil Sample ID	Rationale	Requested Analyses	Consultant
MW101-1a	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	Terrapex
MW101-2a	Site characterization	PHCs, BTEX and VOCs	Terrapex
MW102-1b	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	Terrapex
MW102-2a	Site characterization	PHCs, BTEX and VOCs	Terrapex
BH103-1a	APECs 1, 2 and Site characterization	PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	Terrapex
MW104-1a	APECs 1 & 2 characterization	Metals and Inorganics	Terrapex
MW104-1b	APEC 2 characterization	PAHs	Terrapex
MW104-2a	Site characterization	PHCs, BTEX and VOCs	Terrapex
MW105-1a	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	Terrapex
MW105-2a	Site characterization	PHCs, BTEX and VOCs	Terrapex
BH106-1	APEC 4 characterization	PCBs	Terrapex
BH/MW1A-SS2	APEC 2 characterization	PAHs and Metals	BIG
BH/MW2A-SS1	APEC 2 characterization	PAHs and Metals	BIG
BH/MW3A-SS1	APEC 2 characterization	PAHs and Metals	BIG
BH/MW4A-SS1	APECs 2 and 5 characterization	PAHs and Metals	BIG
BH/MW5A-SS1	APEC 2 characterization	PAHs and Metals	BIG
BH/MW101-SS1	APECs 1 – 3 characterization	PAHs, Metals and Inorganics	BIG
BH/MW101-SS2	Site characterization	PHCs, BTEX and VOCs	BIG
BH/MW102-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW102-SS2	Site characterization	PHCs, BTEX and VOCs	BIG
BH/MW103-SS1	APECs 1 & 2 characterization	PAHs, Metals and inorganics	BIG
BH/MW104-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH104NA-SS1	Horizontal delineation	PAHs	BIG
BH104NA-SS2	Vertical delineation	PAHs	BIG
BH104NA-SS3	Vertical delineation	PAHs	BIG
BH104WA-SS1	Horizontal delineation	PAHs	BIG
BH104WA-SS2	Vertical delineation	PAHs	BIG
BH104WB-SS1	Horizontal delineation	PAHs	BIG
BH104EA-SS1	Horizontal delineation	PAHs	BIG
BH104EA-SS2	Vertical delineation	PAHs	BIG
BH104SA-SS1	Horizontal delineation	PAHs	BIG
BH104SA-SS2	Vertical delineation	PAHs	BIG
BH105-SS1	APEC 6 characterization	PCBs	BIG
BH/MW105-SS1	APECs 1 & 2 characterization	PAHs, Metals and inorganics	BIG
BH/MW105-SS3	Site characterization	PHCs, BTEX and VOCs	BIG
BH/MW106-SS1	Site characterization	PHCs, BTEX and VOCs	BIG

Soil Sample ID	Rationale	Requested Analyses	Consultant
BH/MW106-SS2	APECs 1 – 3 characterization	PAHs, Metals and Inorganics	BIG
BH/MW107-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW108-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW109-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW110-SS1	APEC 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW110-SS2	Site characterization	PHCs, BTEX and VOCs	BIG
BH/MW111-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW112-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW112-SS2	Site characterization	PHCs, BTEX and VOCs	BIG
BH/MW113-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW113-SS2	Site characterization	PHCs, BTEX and VOCs	BIG
BH/MW114-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW114-SS2	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW115-SS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH/MW115-SS2	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH116-AS1	APECs 1 & 2 characterization	PAHs, Metals and Inorganics	BIG
BH201-SS1	Horizontal delineation	Metals	BIG
BH201-SS2	Horizontal delineation	Metals	BIG
BH202-SS2	Horizontal delineation	Metals	BIG
BH203-SS2	Horizontal delineation	Metals	BIG
BH204-SS1	Horizontal delineation	Metals	BIG
BH204-SS2	Vertical delineation	Metals	BIG

TABLE 3 – Monitoring Well Installation Details

BIGC-ENV-349F – Phase Two Environmental Site Assessment

217 & 227 Cross Avenue and 571, 581 and 587-595 Argus Road, Oakville, Ontario

Well ID	Consultant	Ground Elevation (m asl)	Stick down (m)	Top of screen (m bgs)	Bottom of screen (m bgs)	Screen length (m)	Top of screen (m asl)	Bottom of screen (m asl)	Geologic Units Intercepted by Well Screen	Well Condition
BH/MW1A	BIG	104.53	0.11	4.0	7.0	3.0	100.53	97.53	Shale	Intact
BH/MW2A	BIG	104.24	0.16	12.2	15.2	3.0	92.04	89.04	Shale	Intact
BH/MW3A	BIG	104.37	0.13	3.2	4.7	1.5	101.17	99.67	Shale	Intact
BH/MW4A	BIG	103.61	0.11	4.3	7.3	3.0	99.31	96.31	Shale	Destroyed
BH/MW5A	BIG	103.75	0.08	19.9	22.9	3.0	83.85	80.85	Shale	Intact
BH/MW101	BIG	103.04	0.12	3.1	6.1	3.0	99.94	96.94	Shale	Destroyed
BH/MW102	BIG	102.55	0.12	3.1	6.1	3.0	99.45	96.45	Shale	Intact
BH/MW103	BIG	101.78	0.13	2.5	5.5	3.0	99.28	96.28	Shale	Intact
BH/MW104	BIG	100.96	0.12	3.1	6.1	3.0	97.86	94.86	Shale	Intact
BH/MW105	BIG	102.38	0.11	18.9	21.9	3.0	83.48	80.48	Shale	Intact
BH/MW106	BIG	102.83	0.12	3.1	6.1	3.0	99.73	96.73	Shale	Destroyed
BH/MW107	BIG	102.40	0.1	3.1	6.1	3.0	99.3	96.3	Shale	Intact
BH/MW108	BIG	102.55	0.12	3.1	6.1	3.0	99.45	96.45	Shale	Intact
BH/MW109	BIG	102.89	0.09	3.1	6.1	3.0	99.79	96.79	Shale	Intact
BH/MW110	BIG	101.82	0.09	3.1	6.1	3.0	98.72	95.72	Shale	Intact
BH/MW111	BIG	101.94	0.12	3.1	6.1	3.0	98.84	95.84	Shale	Intact
BH/MW112	BIG	102.78	-0.76	3.1	6.1	3.0	99.68	96.68	Shale	Intact
BH/MW113	BIG	103.45	-0.77	3.1	6.1	3.0	100.35	97.35	Shale	Intact
BH/MW114	BIG	103.31	-0.93	18.6	21.6	3.0	84.71	81.71	Shale	Intact
BH/MW115	BIG	101.72	0.1	18.6	21.6	3.0	83.12	80.12	Shale	Intact
MW301	BIG	102.76	0.11	3.1	6.1	3.0	99.66	96.66	Shale	Intact
BH/MW3	BIG	102.87	0.04	0.8	2.30	1.5	102.07	100.57	Clayey silt/silty clay till, shale	Destroyed
BH/MW4	BIG	102.32	0.12	9.0	10.50	1.5	93.32	91.82	Shale	Destroyed

Well ID	Consultant	Ground Elevation (m asl)	Stick down (m)	Top of screen (m bgs)	Bottom of screen (m bgs)	Screen length (m)	Top of screen (m asl)	Bottom of screen (m asl)	Geologic Units Intercepted by Well Screen	Well Condition
BH/MW6	BIG	102.74	-0.88	2.2	3.70	1.5	100.54	99.04	Clayey silt/silty clay till, shale	Intact
MW101	Terrapex	99.37	-	0.9	3.0	2.1	98.47	96.37	Sandy silt, silty clay, shale	Intact
MW102	Terrapex	98.98	-	0.6	2.1	1.5	98.38	96.88	Fill, silty sand, silty clay	Intact
MW104	Terrapex	97.76	-	0.9	3.0	2.1	96.86	94.76	Sandy silt, silty clay, shale	Destroyed
MW105	Terrapex	97.68	-	0.9	3.0	2.1	96.78	94.68	Sandy silt, silty clay, shale	Destroyed

TABLE 4 – Summary of Groundwater Samples Submitted for Chemical Analysis
BIGC-ENV-349F – Phase Two Environmental Site Assessment
217 & 227 Cross Avenue and 571, 581 and 587-595 Argus Road, Oakville, Ontario

Monitoring Well ID	Rationale	Requested Analyses	Consultant
BH/MW101	APECs 1, 3, 7 and 8 characterization	PHCs, BTEX, VOCs, Metals and Inorganics	BIG
BH/MW103	APEC 1 characterization	Na and Cl-	BIG
BH/MW104	Site characterization	PHCs, BTEX, VOCs, and PAHs	BIG
BH/MW106	APEC 3 characterization	Metals	BIG
BH/MW107	APEC 1 characterization	Na and Cl-	BIG
BH/MW108	APEC 1 characterization	Metals and inorganics	BIG
BH/MW111	Site characterization	PAHs	BIG
BH/MW112	APEC 1 and Site characterization	, PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	BIG
BH/MW113	Site characterization	PAHs	BIG
BH/MW115	APEC 1 characterization	Metals and Inorganics	BIG
MW301	APECs 7 and 8 characterization	PHCs, BTEX, VOCs, Metals and Inorganics	BIG
MW104	APEC 1 and Site characterization	PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	Terrapex
MW105	APEC 1 and Site characterization	PHCs, BTEX, VOCs, PAHs, Metals and Inorganics	Terrapex
BH/MW4A	APEC 5 characterization	PAHs	BIG

TABLE 5 – Water Level Depths and Elevations
BIGC-ENV-349F – Phase Two Environmental Site Assessment
217 & 227 Cross Avenue and 571, 581 and 587-595 Argus Road, Oakville, Ontario

Borehole/Monitoring Well ID	Ground Surface Elevation	Groundwater Level (m bgs)	Groundwater Elevation (AMSL)	Groundwater Sampling Date
BH/MW1A	104.53	4.38	100.15	October 18, 2021
		4.40	100.13	June 3, 2022
		4.37	100.16	February 13, 2023
BH/MW2A	104.24	9.05	95.19	October 18, 2021
		8.68	95.56	June 3, 2022
		8.32	95.92	February 13, 2023
BH/MW3A	104.37	4.24	100.13	October 18, 2021
		4.29	100.08	June 3, 2022
		4.14	100.23	February 13, 2023
BH/MW4A	103.61	4.71	98.90	October 18, 2021
		4.67	98.94	March 10, 2022
		Monitoring well destroyed		June 3, 2022
BH/MW5A	103.75	19.04	84.71	October 18, 2021
		16.66	87.09	June 3, 2022
		16.27	87.48	February 13, 2023
BH/MW101	103.04	3.38	99.66	February 8, 2021
		Monitoring well destroyed		June 3, 2022
BH/MW102	102.55	3.67	98.88	February 8, 2021
		3.33	99.22	June 3, 2022
		3.16	99.39	February 13, 2023
BH/MW103	101.78	2.79	98.99	February 8, 2021
		2.51	99.27	June 3, 2022
		2.29	99.49	February 13, 2023
BH/MW104	100.96	2.45	98.51	February 8, 2021
		2.18	98.78	June 3, 2022
		2.04	98.92	February 13, 2023
BH105	104.37	-	-	-
BH/MW105	102.38	21.09	81.29	February 8, 2021
		20.47	81.91	June 3, 2022
		20.47	81.91	February 13, 2023
BH/MW106	102.83	3.32	99.51	February 8, 2021
		Monitoring well destroyed		June 3, 2022
BH/MW107	102.40	3.61	98.79	February 8, 2021
		3.31	99.09	June 3, 2022
BH/MW108	102.55	3.90	98.65	February 8, 2021

Borehole/Monitoring Well ID	Ground Surface Elevation	Groundwater Level (m bgs)	Groundwater Elevation (AMSL)	Groundwater Sampling Date
		3.58	98.97	June 3, 2022
		3.47	99.08	February 13, 2023
BH/MW109	102.89	4.20	98.69	February 8, 2021
		3.83	99.06	June 3, 2022
		2.75	100.14	February 13, 2023
BH/MW110	101.82	3.08	98.74	February 8, 2021
		2.74	99.08	June 3, 2022
		2.61	99.21	February 13, 2023
BH/MW111	101.94	3.37	98.57	February 8, 2021
		3.07	98.87	June 3, 2022
		3.00	98.94	February 13, 2023
BH/MW112	102.78	4.23	98.55	February 8, 2021
		4.69	98.09	June 3, 2022
		4.55	98.23	February 13, 2023
BH/MW113	103.45	4.77	98.68	February 8, 2021
		5.27	98.18	June 3, 2022
		4.33	99.12	February 13, 2023
BH/MW114	103.31	18.88	84.43	February 8, 2021
		16.01	87.30	June 3, 2022
		15.91	87.39	February 13, 2023
BH/MW115	101.72	17.91	83.81	February 8, 2021
		16.58	85.14	June 3, 2022
		15.66	86.06	February 13, 2023
BH116	97.59	-	-	-
BH201	102.83	-	-	-
BH202	102.83	-	-	-
BH203	102.83	-	-	-
BH204	102.83	-	-	-
MW301	102.76	2.62	100.14	February 13, 2023
BH1	101.55	-	-	-
BH2	101.93	-	-	-
BH/MW3	102.87	1.72	101.15	February 8, 2021
		Monitoring well destroyed		June 3, 2022
BH/MW4	102.32	3.80	98.52	February 8, 2021
		Monitoring well destroyed		June 3, 2022
BH5	103.39	-	-	-
BH/MW6	102.74	DRY	DRY	February 8, 2021
		DRY	DRY	June 3, 2022
		DRY	DRY	February 13, 2023

Borehole/Monitoring Well ID	Ground Surface Elevation	Groundwater Level (m bgs)	Groundwater Elevation (AMSL)	Groundwater Sampling Date
MW101	99.37	DRY	DRY	September 19, 2018
		DRY	DRY	June 3, 2022
		DRY	DRY	February 13, 2023
MW102	98.98	DRY	DRY	September 19, 2018
		DRY	DRY	June 3, 2022
		DRY	DRY	February 13, 2023
BH103	-	-	-	-
MW104	97.76	2.29	95.47	September 19, 2018
		Monitoring well destroyed		June 3, 2022
BH104EA	103.61	-	-	-
BH104NA	103.61	-	-	-
BH104SA	103.61	-	-	-
BH104WA	103.61	-	-	-
BH104WB	103.61	-	-	-
MW105	97.68	2.45	95.23	September 19, 2018
		Monitoring well destroyed		June 3, 2022
BH105	104.37	-	-	-
BH106	-	-	-	-

Appendix A - Sampling and Analysis Plan

1. Introduction

This appendix presents the Sampling and Analysis Plan (SAAP) that was developed in support of the Phase Two Environmental Site Assessment (ESA), which will be conducted to provide further characterization of the Site subsurface conditions. The SAAP presents the procedures and measures that will be undertaken during field investigative activities to characterize the Site conditions and meet the data quality objectives of the Phase Two ESA.

The SAAP presents the sampling program proposed for the Site, the recommended procedures and protocols for sampling and related field activities, the data quality objectives, and the quality assurance/quality control (QA/QC) measures that will be undertaken to provide for the collection of accurate, reproducible and representative data. These components are described in further detail below.

2. Field Sampling Program

The field sampling program was developed to provide for the collection of samples of the surficial and subsurface soil materials for chemical analysis of parameters identified as potential contaminants of concern as identified in the Phase One ESA.

The soil samples will be collected from of the surficial fill and overburden material. The groundwater samples will be collected from each monitoring well.

The monitoring wells will be installed at selected boreholes to intercept the groundwater table aquifer. The monitoring wells will be installed with 3.0 m long screens extending to a maximum depth of approximately 22.9 m below grade.

Elevation of the boreholes and monitoring wells will be obtained through the completion of an elevation survey with reference to a Site temporary benchmark or a local geodetic benchmark. Groundwater flow will be determined through groundwater level measurements and the relative groundwater elevations established in the Site elevation survey.

3. Field Methods

To meet the requirements of the field sampling program, the following field investigative methods will be undertaken:

a) Borehole Drilling;
b) Soil Sampling;
c) Monitoring Well Installation;
d) Monitoring Well Development;
e) Groundwater Level Measurements;
f) Elevation Survey;
g) Groundwater Sampling; and
h) Residue Management Procedures.

The field investigative methods will be performed as described below:

a) Borehole Drilling

Boreholes will be advanced at the Site to facilitate the collection of soil samples for chemical analysis and geologic characterization and for the installation of groundwater monitoring wells. Boreholes will be advanced at the Site to a maximum depth of approximately 27.6 m below grade, within the overburden materials to provide for the collection of soil samples beneath the Site. The borehole locations will be selected to assess soil and groundwater quality at the Site.

Prior to borehole drilling, utility clearances will be obtained from public locators, as required. Boreholes will be advanced into the surficial fill and overburden soils by a drilling company under the full-time supervision of BIG staff. A truck mounted drilling machine equipped with hollow stem or solid stem augers and split spoons will be utilized to advance the boreholes through the overburden materials.

b) Soil Sampling

Soil samples for geologic characterization and chemical analysis will be collected from the overburden boreholes using 5 cm diameter, 60 cm long, stainless steel split-spoon sampling devices advanced ahead of the augers. The split-spoon samplers will be attached to drill rods and advanced into the soil by means of a machine-driven hammer. Spilt-spoon soil samples will be collected where possible, beginning at the ground surface and subsequently at continuous intervals. Geologic and sampling details of the recovered cores will be logged and the samples will be assessed for the potential presence of non-aqueous phase liquids. A portion of each soil sample will be placed in a sealed “zip-lock” plastic bag and allowed to reach ambient temperature prior to field screening with a photoionization detector (PID) that will be calibrated by the supplier with an appropriate reference gas and zeroed in ambient conditions prior to use. The vapour measurements will be made by inserting the instrument’s probe into the plastic bag while manipulating the sample to ensure volatilization of the soil gases. These readings will provide a real-time indication of the relative concentration of volatile organic vapours encountered in the subsurface during drilling. Samples for chemical analysis will be selected on the basis of visual, combustible gas and olfactory evidence of impacts and at specific intervals to define the lateral and vertical extent of suspected impacts.

Recommended volumes of soil samples selected for chemical analysis will be collected into pre-cleaned, laboratory supplied, analytical test group specific containers. The samples will be placed into clean insulated coolers chilled with ice for storage and transport. Samples intended for VOC analysis will be collected using a laboratory-supplied soil core sampler, placed into the vials containing methanol for preservation purposes and sealed using Teflon lined septa lids. The samples will be assigned unique identification numbers, and the date, time, location, and requested analyses for each sample will be documented in a bound field notebook. The samples will be submitted to a CAEL certified laboratory within analytical test group holding times under Chain of Custody (COC) protocols. New disposable chemical resistant gloves will be used during the handling and sample collection for each soil core to prevent sample cross-contamination.

c) Monitoring Well Installation

Monitoring wells will be installed in general accordance with Ontario Regulation 903/90, as amended and will be installed by a licensed well contractor.

The monitoring wells will be constructed using 50 mm diameter, Schedule 40, PVC riser pipe and number 10 slot size (0.25 mm) well screens. The base of the well screens will be sealed with PVC end caps. All well pipe connections will be factory machined threaded flush couplings. The pipe components will be pre-wrapped in plastic, which will be removed prior to insertion in the borehole to minimize the potential for contamination. No lubricants or adhesives will be used in the construction of the monitoring wells. The annular space around the well screens will be backfilled with silica sand to at least 0.3 m above the top of the screen. Granular bentonite will be placed in the borehole annulus from the top of the sand pack to approximately grade. The monitoring wells will be completed with protective casings.

d) Monitoring Well Development

Monitoring wells will be developed to remove fine sediment particles potentially lodged in the sand pack and well screen to enhance contact with the surrounding formation groundwater and will be developed using dedicated bailers. Monitoring well development will be monitored by multiparameter water quality meter, visual observations of turbidity, and by taking field measurements of pH and conductivity for every well volume removed. Standing water volumes will be determined by means of a water level meter. Water quality parameter measurements will be recorded using a multiparameter water quality meter. A minimum of approximately three (3) well volumes will be removed; and, well development will continue until the purged water has chemically stabilized as indicated by field parameters measurements.

Well development details will be documented on a well development log sheet or in a bound hard cover notebook. All water accumulated during well development will be collected and stored in sealed containers.

e) Groundwater Level Measurements

Groundwater level measurements will be recorded from monitoring wells to determine groundwater flow and direction at the Site. Water levels will be measured with respect to the top of the casing by means of a groundwater level meter. The water levels will be recorded on water level log sheets or in a bound field notebook. The water level meter probe will be decontaminated between monitoring well locations.

f) Elevation Survey

An elevation survey will be conducted to obtain vertical control of the newly installed monitoring well locations. The top of casing and ground surface elevation of each monitoring well location will be surveyed against a known geodetic benchmark, or if unavailable, against a suitable arbitrary temporary benchmark. Elevations measured against a geodetic benchmark will be recorded as meters above mean sea level (m AMSL). The arbitrary temporary benchmark will be assigned an elevation of 100.00 m. The elevation survey will be accurate to within ± 1 cm.

g) Groundwater Sampling

Groundwater samples will be collected from monitoring wells for chemical analysis. The monitoring wells will be purged first of three to five wetted well volumes of water, or until dry, to remove standing water and draw in fresh formation water as previously described. Dedicated well materials will be used for well purging and sample collection.

Recommended groundwater sample volumes will be collected into pre-cleaned, laboratory-supplied vials or bottles provided with analytical test group specific preservatives, as required. The samples will be placed in an insulated cooler chilled with ice for storage and transport. Where needed, bottles will be checked for head-space.

All groundwater samples will be assigned unique identification numbers, and the date, time, project number and company name will be specified on each bottle. The samples will be submitted to the contractual laboratory within analytical test group holding times under COC protocols. New disposable chemical resistant gloves will be used for each sampling location to prevent sample cross-contamination.

h) Residue Management Procedures

The residue materials produced during the borehole drilling, soil sampling programs and monitoring well sampling programs comprised of decontamination fluids from equipment cleaning, and waters from well development and purging will be placed in sealed drums for future off-Site disposal.

4. Field Quality Assurance/Quality Control Program

The objective of the field quality assurance/quality control (QA/QC) program is to obtain soil and groundwater samples and other field measurements that provide data of acceptable quality that meets the objectives of the Phase Two ESA. The objectives of the QA/QC program will be achieved through the implementation of procedures for the collection of unbiased (i.e., non-contaminated) samples, sample documentation and the collection of appropriate QC samples to provide a measure of sample reproducibility and accuracy. The field QA/QC measures will comprise:

a) Decontamination Protocols;
b) Equipment Calibration;
c) Sample Preservation;
d) Sample Documentation; and,
e) Field Quality Control Samples.

Details on the field QA/QC measures are provided in the following sections.

a) Decontamination Protocols

Decontamination protocols will be followed during field sampling where non-dedicated sampling equipment is used to prevent sample cross contamination. For the borehole drilling and soil sampling, split soil sampling devices will be cleaned/decontaminated between sampling intervals and auger flights between borehole locations. For the monitoring well installation, well components are not to come into contact with the ground surface prior to insertion into

boreholes. Electronic water level meters will be decontaminated between monitoring well locations during well development, purging activities and rising head tests. All decontamination fluids will be collected and stored in sealed containers.

b) Equipment Calibration

All equipment requiring calibration will be calibrated according to manufacturer's requirements using analytical grade reagents, or by the supplier prior to conducting field activities.

c) Sample Preservation

All samples will be preserved using appropriate analytical test group specific reagents, as required, and upon collection placed in ice-filled insulated coolers for storage and transport.

d) Sample Documentation

All samples will be assigned a unique identification number, which is to be recorded along with the date, time, project number and company name. All samples will be handled and transported following COC protocols.

e) Field Quality Control Samples

Field quality controls samples will be collected to evaluate the accuracy and reproducibility of the field sampling procedures. Where required, for groundwater samples, a trip blank prepared by a laboratory will be submitted for chemical analysis to evaluate the potential for sample cross-contamination or bias. The recommended alert criteria for the trip blank sample are the detections of any test group analyte at a concentration in excess of laboratory detection limits.

Appendix B – Analytical Results

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	MW101-2a	MW9101-2a (Dup of MW101-2a)	MW102-2a	BH103-1a	MW104-2a	MW105-2a	BH101-SS2	BH102-SS2
Lab ID		1837443-03	1837443-04	1837443-06	1837443-08	1837443-11	1837443-13	1966585	1966587
Sampling Date		11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	13/Jan/21	13/Jan/21
Soil Sample Depth (m)		1.52-2.29	1.52-2.29	1.52-2.29	0.0-0.76	1.52-2.29	1.52-2.29	0.76-1.37	0.76-1.37
Consultant		Terrapex	Terrapex	Terrapex	Terrapex	Terrapex	Terrapex	BIG	BIG
Laboratory		Paracel	Paracel	Paracel	Paracel	Paracel	Paracel	AGAT	AGAT
PHC F1 (C6-C10)	55	<7	<7	<7	<7	<7	<7	<5	<5
PHC F1 (C6-C10) - BTEX	55	-	-	-	-	-	-	<5	<5
PHC F2 (C10-C16)	98	<4	<4	<4	<4	<4	<4	<10	<10
PHC F3 (C16-C34)	300	<8	<8	<8	<8	<8	<8	<50	<50
PHC F4 (C34-C50)	2800	<6	<6	<6	185	<6	<6	<50	<50
Reached baseline at C50?	-	-	-	-	No	-	-	-	-
PHC F4 (C34-C50)-gravimetric	2800	-	-	-	473	-	-	-	-

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH105-SS3	BH106-SS1	BH110-SS2	DUP011002 (Dup of BH110-SS2)	BH112-SS2	BH113-SS2
Lab ID		1966591	2011444	2011450	2020966	2011453	2011455
Sampling Date		14/Jan/21	20/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21
Soil Sample Depth (m)		1.52-2.13	0.00-0.61	0.76-1.37	0.76-1.37	0.76-1.37	0.76-1.37
Consultant		BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
PHC F1 (C6-C10)	55	<5	<5	<5	<5	<5	<5
PHC F1 (C6-C10) - BTEX	55	<5	<5	<5	<5	<5	<5
PHC F2 (C10-C16)	98	<10	<10	<10	<10	<10	<10
PHC F3 (C16-C34)	300	<50	<50	<50	<50	<50	<50
PHC F4 (C34-C50)	2800	<50	<50	<50	<50	<50	<50
Reached baseline at C50?	-	-	-	-	-	-	-
PHC F4 (C34-C50)-gravimetric	2800	-	-	-	-	-	-

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) S

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	MW101-2a	MW9101-2a (Dup of MW101-2a)	MW102-2a	BH103-1a	MW104-2a	MW105-2a	BH101-SS2	BH102-SS2	BH105-SS3	BH106-SS1	BH110-SS2	DUP011002 (Dup of BH110-SS2)	BH112-SS2	BH113-SS2
Lab ID		1837443-03	1837443-04	1837443-06	1837443-08	1837443-11	1837443-13	1966585	1966587	1966591	2011444	2011450	2020966	2011453	2011455
Sampling Date		11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	13/Jan/21	13/Jan/21	14/Jan/21	20/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21
Soil Sample Depth (m)		1.52-2.29	1.52-2.29	1.52-2.29	0.0-0.76	1.52-2.29	1.52-2.29	0.76-1.37	0.76-1.37	1.52-2.13	0.00-0.61	0.76-1.37	0.76-1.37	0.76-1.37	0.76-1.37
Consultant		Terrapex	Terrapex	Terrapex	Terrapex	Terrapex	Terrapex	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		Paracel	Paracel	Paracel	Paracel	Paracel	Paracel	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Acetone	16	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Benzene	0.21	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Bromodichloromethane	1.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromoform	0.27	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromomethane	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorobenzene	2.4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chloroform	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Dibromochloromethane	2.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dichlorobenzene	1.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,3-Dichlorobenzene	4.8	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	0.083	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dichlorodifluoromethane	16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	0.47	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloroethane	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1-Dichloroethylene	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
cis-1,2-Dichloroethylene	1.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
trans-1,2-Dichloroethylene	0.084	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,2-Dichloropropane	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
cis- & trans-1,3-Dichloropropene	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Ethylbenzene	1.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ethylene Dibromide (1,2-Dibromoethane)	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Hexane (n)	2.8	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methylene chloride (Dichloromethane)	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Methyl ethyl ketone (2-Butanone)	16	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl Isobutyl Ketone	1.7	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl t-butyl ether (MTBE)	0.75	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Styrene	0.7	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	0.058	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
1,1,2,2-Tetrachloroethane	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Tetrachloroethylene	0.28	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Toluene	2.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1-Trichloroethane	0.38	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,2-Trichloroethane	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Trichloroethylene	0.061	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Trichlorofluoromethane	4	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
m-Xylene + p-Xylene	NV	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
o-Xylene	NV	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Xylenes (total)	3.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	MW101-1a	MW9101-1a (Dup of MW101-1a)	MW102-1b	BH103-1a	MW104-1b	MW9104-1b (Dup of MW104-1b)	MW105-1a	BH101-SS1	BH102-SS1	BH103-SS1
Lab ID		1837443-01	1837443-02	1837443-05	1837443-08	1837443-09	1837443-10	1837443-12	1966584	1966586	1966588
Sampling Date		11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	13/Jan/21	13/Jan/21	13/Jan/21
Soil Sample Depth (m)		0.0-0.76	0.0-0.76	0.76-1.52	0.0-0.76	0.76-1.52	0.76-1.52	0.0-0.76	0.00-0.61	0.00-0.61	0.00-0.61
Consultant		Terrapex	Terrapex	Terrapex	Terrapex	Terrapex	Terrapex	Terrapex	BIG	BIG	BIG
Laboratory		Paracel	Paracel	Paracel	Paracel	Paracel	Paracel	Paracel	AGAT	AGAT	AGAT
Acenaphthene	7.9	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	0.15	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	0.67	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)anthracene	0.5	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	0.3	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	0.78	0.02	0.03	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(ghi)perylene	6.6	0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	0.78	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	7	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	0.1	<0.02	<0.02	<0.02	<0.02	<0.10	<0.10	<0.10	<0.05	<0.05	<0.05
Fluoranthene	0.69	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	62	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	0.38	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1&2-Methylnaphthalene	0.99	<0.04	<0.04	<0.04	<0.04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	0.6	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	6.2	<0.02	0.06	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	78	0.03	0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH104-SS1	BH105-SS1	BH106-SS2	BH107-SS1	BH108-SS1	BH109-SS1	BH110-SS1	BH111-SS1	BH112-SS1	BH113-SS1
Lab ID		1966589	1966590	2011445	2011446	2011447	2011448	2011449	2011451	2011452	2011454
Sampling Date		13/Jan/21	14/Jan/21	20/Jan/21	20/Jan/21	20/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21
Soil Sample Depth (m)		0.00-0.61	0.00-0.61	0.76-1.37	0.00-0.61	0.00-0.61	0.00-0.61	0.00-0.61	0.00-0.61	0.00-0.61	0.00-0.61
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Acenaphthene	7.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	0.67	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)anthracene	0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	0.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	0.78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(ghi)perylene	6.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	0.78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	7	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	0.69	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	62	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	0.38	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1&2-Methylnaphthalene	0.99	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	6.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition	BH114-SS1	BH114-SS2	DUP011402 (Dup of BH114-SS2)	BH115-SS1	BH115-SS2	BH116-AS1	BH/MW1A-SS2	BH/MW2A-SS1	BH/MW3A-SS1	BH/MW4A-SS1
Lab ID	Residential/Parkland/Institutional Land Use (coarse textured soil)	2011456	2011457	2020967	2011458	2011459	2787591	3196779	3196864	3196865	3196866
Sampling Date		21/Jan/21	21/Jan/21	21/Jan/21	22/Jan/21	22/Jan/21	27/Jul/21	8/Oct/21	7/Oct/21	8/Oct/21	8/Oct/21
Soil Sample Depth (m)		0.00-0.61	0.76-1.37	0.76-1.37	0.00-0.61	0.76-1.37	0.0-0.61	0.76-1.37	0.00-0.61	0.00-0.61	0.00-0.61
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Acenaphthene	7.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	0.67	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08
Benzo(a)anthracene	0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.5
Benzo(a)pyrene	0.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.26
Benzo(b)fluoranthene	0.78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.4
Benzo(ghi)perylene	6.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.16
Benzo(k)fluoranthene	0.78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.2
Chrysene	7	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.37
Dibenz(a,h)anthracene	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	0.69	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	0.08	**0.93**
Fluorene	62	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	0.38	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.1
1&2-Methylnaphthalene	0.99	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	6.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.25
Pyrene	78	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	0.08	0.85

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH/MW5A-SS1	BH104NA-SS1	BH104NA-SS2	DUPWA020 (Dup of BH104NA-SS2)	BH104NA-SS3	DUPW4A030 (Dup of BH104NA-SS3)	BH104WA-SS1	BH104WA-SS2	BH104WB-SS1	BH104EA-SS1
Lab ID		3196867	3604499	3607391	3607395	3604501	3604504	3604502	3607394	3603000	3604505
Sampling Date		6/Oct/21	9/Mar/22	9/Mar/22	9/Mar/22	9/Mar/22	9/Mar/22	9/Mar/22	9/Mar/22	9/Mar/22	9/Mar/22
Soil Sample Depth (m)		0.00-0.61	0.0-0.61	0.76-1.37	0.76-1.37	1.52-2.13	1.52-2.13	0.0-0.61	0.76-1.37	0.0-0.61	0.0-0.61
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Acenaphthene	7.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	0.67	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	<0.05
Benzo(a)anthracene	0.5	0.11	0.14	<0.05	<0.05	<0.05	<0.05	**0.51**	<0.05	<0.05	<0.05
Benzo(a)pyrene	0.3	0.07	0.11	<0.05	<0.05	<0.05	<0.05	**0.4**	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	0.78	0.09	0.17	<0.05	<0.05	<0.05	<0.05	0.78	<0.05	<0.05	<0.05
Benzo(ghi)perylene	6.6	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.25	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	0.78	0.08	0.06	<0.05	<0.05	<0.05	<0.05	0.23	<0.05	<0.05	<0.05
Chrysene	7	0.08	0.15	<0.05	<0.05	<0.05	<0.05	0.62	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	0.69	0.3	0.34	0.07	<0.05	0.05	<0.05	**1.12**	<0.05	<0.05	0.07
Fluorene	62	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	0.38	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.21	<0.05	<0.05	<0.05
1&2-Methylnaphthalene	0.99	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05	<0.05
Naphthalene	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	6.2	0.1	0.28	<0.05	<0.05	<0.05	<0.05	0.78	<0.05	<0.05	<0.05
Pyrene	78	0.26	0.27	0.05	<0.05	<0.05	<0.05	0.94	<0.05	<0.05	0.06

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition	BH104EA-SS2	BH104SA-SS1	BH104SA-SS2	N001	W001	E001	S001	F001	F002
Lab ID	Residential/Parkland/Institutional Land	3607393	3604507	3607392	3648391	3647953	3648077	3648783	3648420	3648225
Sampling Date	Use	9/Mar/22	9/Mar/22	9/Mar/22	22/Mar/22	22/Mar/22	22/Mar/22	22/Mar/22	22/Mar/22	22/Mar/22
Soil Sample Depth (m)	(coarse textured soil)	0.76-1.37	0.0-0.61	0.76-1.37	0.3	0.3	0.3	0.3	1.0	1.0
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Acenaphthene	7.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05
Acenaphthylene	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	0.67	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.18	<0.05
Benzo(a)anthracene	0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.19	<0.05
Benzo(a)pyrene	0.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.14	<0.05
Benzo(b)fluoranthene	0.78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.18	<0.05
Benzo(ghi)perylene	6.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
Benzo(k)fluoranthene	0.78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05
Chrysene	7	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.15	<0.05
Dibenz(a,h)anthracene	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	0.69	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	0.47	<0.05
Fluorene	62	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05
Indeno(1,2,3-cd)pyrene	0.38	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05
1&2-Methylnaphthalene	0.99	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	6.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.45	<0.05
Pyrene	78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.35	<0.05

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH106-1	BH9106-1 (BH106-1 DUP)	BH105-SS1	DUP010501 (Dup of BH105-SS1)
Lab ID		1837443-14	1837443-15	3604527	3604528
Sampling Date		11-Sep-18	11-Sep-18	9-Mar-22	9-Mar-22
Soil Sample Depth (m)		0.0-0.1	0.0-0.1	0.0-0.61	0.0-0.61
Consultant		Terrapex	Terrapex	BIG	BIG
Laboratory		Paracel	Paracel	AGAT	AGAT
Aroclor 1242	NV	-	-	-	-
Aroclor 1248	NV	-	-	-	-
Aroclor 1254	NV	-	-	-	-
Aroclor 1260	NV	-	-	-	-
Total Polychlorinated Biphenyls	0.35	<0.05	<0.05	<0.1	<0.1

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	MW101-1a	MW9101-1a (Dup of MW101-1a)	MW102-1b	BH103-1a	MW104-1a	MW105-1a	BH101-SS1	BH102-SS1	BH103-SS1
Lab ID		1837443-01	1837443-02	1837443-05	1837443-08	1837443-08	1837443-12	1966584	1966586	1966588
Sampling Date		11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	13/Jan/21	13/Jan/21	13/Jan/21
Soil Sample Depth (m)		0.0-0.76	0.0-0.76	0.76-1.52	0.0-0.76	0.0-0.76	0.0-0.76	0.00-0.61	0.00-0.61	0.00-0.61
Consultant		Terrapex	Terrapex	Terrapex	Terrapex	Terrapex	Terrapex	BIG	BIG	BIG
Laboratory		Paracel	Paracel	Paracel	Paracel	Paracel	Paracel	AGAT	AGAT	AGAT
Antimony	7.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.8	<0.8	<0.8
Arsenic	18	4.2	4.6	3.8	6.3	5.4	4.1	13	8	9
Barium	390	71.8	87.4	108	44	80	86.2	122	141	40
Beryllium	4	0.6	0.6	0.6	<0.5	<0.5	0.6	0.5	0.6	<0.5
Boron (Total)	120	26.3	22.4	15.9	14.7	13.1	10.7	10	7	12
Boron (Hot water soluble)	1.5	<0.5	0.6	0.6	<0.5	<0.5	<0.5	0.3	0.6	0.2
Cadmium	1.2	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (total)	160	15.4	18.4	15.8	10.8	12.0	14.9	18	17	7
Chromium VI	8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cobalt	22	7.8	9.3	7.3	6.5	6.8	7.0	11.5	10.7	5.9
Copper	140	56.1	65.6	62.6	18.9	59.5	81.1	**493**	80	33
Lead	120	25.5	31.8	18.6	48.2	24.1	22.1	18	21	21
Mercury	0.27	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Molybdenum	6.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	1.3	1.1
Nickel	100	19.3	22.4	18.8	17.1	16.9	19.2	23	22	10
Selenium	2.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.8	0.9	0.5
Silver	20	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2
Thallium	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4
Uranium	23	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	1.3	1.4	0.5
Vanadium	86	23.5	27.7	25.3	15.9	21.1	24.0	26	27	12
Zinc	340	51.4	62	60	254	65.0	49.7	121	101	142
Electrical Conductivity (mS/cm)	0.7	0.328	0.316	0.474	0.346	**1.020**	**1.240**	0.470	0.664	**0.912**
Sodium Adsorption Ratio (unitless)	5	0.59	0.49	3.71	2.34	1.05	**13.5**	4.150	**6.670**	**8.990**
Free Cyanide	0.051	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.040	<0.040	<0.040
pH (pH units)	5-9 (surface soil); 5-11 (subsurface soil)	7.77	7.67	7.46	7.65	7.70	7.78	6.18	7.66	7.83

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
pH level outside of the acceptable MECP range

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH104-SS1	BH105-SS1	BH106-SS2	BH107-SS1	BH108-SS1	BH109-SS1	BH110-SS1	BH111-SS1	BH112-SS1
Lab ID		1966589	1966590	2011445	2011446	2011447	2011448	2011449	2011451	2011452
Sampling Date		13/Jan/21	14/Jan/21	20/Jan/21	20/Jan/21	20/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21
Soil Sample Depth (m)		0.00-0.61	0.00-0.61	0.76-1.37	0.00-0.61	0.00-0.61	0.00-0.61	0.00-0.61	0.00-0.61	0.00-0.61
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Antimony	7.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	18	10	12	7	6	7	7	7	7	6
Barium	390	48	41	72	99	78	92	46	66	90
Beryllium	4	<0.5	<0.5	0.6	0.6	0.6	0.6	<0.4	0.4	0.6
Boron (Total)	120	11	9	10	7	8	9	9	10	9
Boron (Hot water soluble)	1.5	0.2	0.2	0.6	0.4	0.4	0.3	0.3	0.3	0.6
Cadmium	1.2	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (total)	160	6	6	22	23	23	24	10	17	24
Chromium VI	8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cobalt	22	5.4	4.9	13.6	14.2	14.3	14.0	6.0	9.1	14.6
Copper	140	31	44	**188**	47	38	43	25	48	37
Lead	120	23	28	12	13	17	14	19	17	14
Mercury	0.27	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Molybdenum	6.9	1.2	1.1	0.7	<0.5	0.5	<0.5	0.9	1.0	<0.5
Nickel	100	11	10	27	30	29	30	11	21	30
Selenium	2.4	0.5	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Silver	20	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	1	<0.4	<0.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	23	0.6	<0.5	0.8	0.7	0.8	0.7	0.5	0.8	1.1
Vanadium	86	10	11	30	33	29	33	15	25	32
Zinc	340	169	106	66	68	74	75	77	84	74
Electrical Conductivity (mS/cm)	0.7	0.269	0.488	0.402	0.386	0.331	0.362	0.648	0.444	0.267
Sodium Adsorption Ratio (unitless)	5	1.030	**6.010**	4.810	4.250	1.830	2.080	1.330	1.990	0.911
Free Cyanide	0.051	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
pH (pH units)	5-9 (surface soil); 5-11 (subsurface soil)	7.83	7.91	7.93	7.80	7.70	7.76	7.99	7.70	7.67

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
pH level outside of the acceptable MECP range

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH113-SS1	BH114-SS1	BH114-SS2	DUP011402 (DUP of BH114-SS2)	BH115-SS1	BH115-SS2	BH116-AS1	BH201-SS1
Lab ID		2011454	2011456	2011457	2020967	2011458	2011459	2787591	2918865
Sampling Date		21/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21	22/Jan/21	22/Jan/21	27/Jul/21	20/Aug/21
Soil Sample Depth (m)		0.00-0.61	0.00-0.61	0.76-1.37	0.76-1.37	0.00-0.61	0.76-1.37	0.0-0.61	0.0-0.61
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Antimony	7.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	18	10	7	6	5	7	6	6	7
Barium	390	109	85	77	71	68	62	82	122
Beryllium	4	0.4	0.5	0.5	0.5	<0.4	0.6	0.5	1.0
Boron (Total)	120	9	8	7	10	10	8	10	15
Boron (Hot water soluble)	1.5	0.6	0.5	0.5	0.4	0.5	0.3	0.4	0.2
Cadmium	1.2	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
Chromium (total)	160	19	19	21	19	10	23	25	26
Chromium VI	8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cobalt	22	10.5	9.7	12.1	10.2	5.8	15.0	7.8	14.5
Copper	140	62	71	60	43	37	35	56	52
Lead	120	47	29	13	10	34	16	43	12
Mercury	0.27	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.11	<0.10
Molybdenum	6.9	0.9	0.8	0.7	0.6	1.1	<0.5	0.8	0.5
Nickel	100	22	22	26	21	12	30	19	30
Selenium	2.4	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Silver	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	23	0.9	0.9	0.8	0.7	0.8	0.6	1.0	0.6
Vanadium	86	27	26	31	30	17	29	31	35
Zinc	340	96	81	62	53	238	72	112	73
Electrical Conductivity (mS/cm)	0.7	**0.808**	0.319	0.371	0.300	**1.630**	0.248	0.305	-
Sodium Adsorption Ratio (unitless)	5	1.250	0.595	0.864	0.925	0.332	1.240	0.914	-
Free Cyanide	0.051	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	-
pH (pH units)	5-9 (surface soil); 5-11 (subsurface soil)	7.70	7.66	7.60	7.37	7.66	7.71	7.53	-

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
pH level outside of the acceptable MECP range

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH201-SS2	BH202-SS2	BH203-SS2	BH204-SS1	BH204-SS2	BH/MW1A-SS2	BH/MW2A-SS1	BH/MW3A-SS1
Lab ID		2878405	2878406	2878407	2918895	2878408	3196779	3196864	3196865
Sampling Date		20/Aug/21	20/Aug/21	20/Aug/21	20/Aug/21	20/Aug/21	8/Oct/21	7/Oct/21	8/Oct/21
Soil Sample Depth (m)		0.76-1.37	0.76-1.37	0.76-1.37	0.0-0.61	0.76-1.37	0.76-1.37	0.00-0.61	0.00-0.61
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Antimony	7.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	18	7	9	7	8	9	7	8	7
Barium	390	122	80	90	57	59	89	104	147
Beryllium	4	0.7	0.9	0.6	<0.4	0.7	0.7	0.8	0.9
Boron (Total)	120	13	17	15	15	16	15	14	19
Boron (Hot water soluble)	1.5	0.3	0.2	0.4	0.1	0.3	0.2	0.4	0.3
Cadmium	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (total)	160	20	25	21	10	22	19	19	27
Chromium VI	8	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
Cobalt	22	11.3	16.4	10.4	5.9	13.6	9.2	10.4	13.7
Copper	140	39	97	85	34	135	78	89	99
Lead	120	21	8	13	26	10	16	17	14
Mercury	0.27	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-
Molybdenum	6.9	0.7	<0.5	0.9	0.9	0.6	1.4	1.4	1.7
Nickel	100	24	33	23	11	27	20	21	31
Selenium	2.4	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Silver	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	23	0.6	0.8	0.9	<0.50	0.9	1.0	0.9	1.0
Vanadium	86	31	35	34	15	32	30	32	44
Zinc	340	85	69	71	101	60	134	89	94
Electrical Conductivity (mS/cm)	0.7	-	-	-	-	-	-	-	-
Sodium Adsorption Ratio (unitless)	5	-	-	-	-	-	-	-	-
Free Cyanide	0.051	-	-	-	-	-	-	-	-
pH (pH units)	5-9 (surface soil); 5-11 (subsurface soil)	-	-	-	-	-	-	-	-

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
pH level outside of the acceptable MECP range

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH/MW4A-SS1	BH/MW5A-SS1	EX-W001	EX-E001	EX-S001	EX-S002	EX-S003	EX-S004
Lab ID		3196866	3196867	3644519	3644109	3644521	3644513	3644416	3644410
Sampling Date		8/Oct/21	6/Oct/21	21/Mar/22	21/Mar/22	21/Mar/22	21/Mar/22	21/Mar/22	21/Mar/22
Soil Sample Depth (m)		0.00-0.61	0.00-0.61	0.8	0.5	0.5	0.8	0.8	0.8
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Antimony	7.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	18	5	12	8	8	8	7	5	6
Barium	390	64	56	72	113	120	91	134	88
Beryllium	4	0.4	0.6	0.8	0.8	1.0	0.8	0.9	0.8
Boron (Total)	120	12	16	11	14	10	9	7	7
Boron (Hot water soluble)	1.5	0.4	0.6	-	-	-	-	-	-
Cadmium	1.2	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (total)	160	16	15	24	25	25	21	23	22
Chromium VI	8	-	-	-	-	-	-	-	-
Cobalt	22	5.3	8.2	14.1	15.4	14.3	11.8	9.4	13.7
Copper	140	26	71	116	56	89	106	88	35
Lead	120	28	34	13	12	19	12	12	12
Mercury	0.27	-	-	-	-	-	-	-	-
Molybdenum	6.9	1.0	1.2	0.5	<0.5	1.0	0.7	1.0	<0.5
Nickel	100	13	16	30	32	30	26	20	28
Selenium	2.4	<0.8	<0.8	<0.8	<0.8	0.9	<0.8	<0.8	<0.8
Silver	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	23	0.7	0.7	0.8	0.7	1.8	1.0	2.5	0.6
Vanadium	86	29	24	34	36	38	30	35	30
Zinc	340	84	129	73	69	101	62	72	68
Electrical Conductivity (mS/cm)	0.7	-	-	-	-	-	-	-	-
Sodium Adsorption Ratio (unitless)	5	-	-	-	-	-	-	-	-
Free Cyanide	0.051	-	-	-	-	-	-	-	-
pH (pH units)	5-9 (surface soil); 5-11 (subsurface soil)	-	-	-	-	-	-	-	-

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
pH level outside of the acceptable MECP range

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition All Types of Land Use (coarse textured soil)	MW104	MW105	BH/MW101	BH/MW104	BH/MW112	DUP11201 (Dup of BH/MW112)	MW301	DUP3010 (Dup of MW301)	Trip Blank
Lab ID		1838161-01	1838161-02	2045847	2045871	2045899	2045928	VBA390	VBA391	2045935
Sampling Date		17/Sep/18	17/Sep/18	3/Feb/21	3/Feb/21	3/Feb/21		13/Feb/23	13/Feb/23	3/Feb/21
Screen Depth Interval (m)		0.9-3.0	0.9-3.0	3.05 - 6.10	3.05 - 6.10	3.05 - 6.10		3.05-6.10	3.05-6.10	-
Consultant		Terrapex	Terrapex	BIG	BIG	BIG		BIG	BIG	BIG
Laboratory		Paracel	Paracel	AGAT	AGAT	AGAT		BV	BV	AGAT
PHC F1 (C6-C10)	750	<25	<25	<25	<25	<25	<25	<25	<25	<25
PHC F1 (C6-C10) - BTEX	750	-	-	<25	<25	<25	<25	<25	<25	<25
PHC F2 (C10-C16)	150	<100	<100	<100	<100	<100	<100	<100	<100	<100
PHC F3 (C16-C34)	500	<100	<100	<100	<100	<100	<100	<200	<200	<100
PHC F4 (C34-C50)	500	<100	<100	<100	<100	<100	<100	<200	<200	<100
Reached baseline at C50?	-	-	-	-	-	-	-	-	-	-
PHC F4 (C34-C50)-gravimetric	500	-	-	-	-	-	-	-	-	-

All groundwater concentrations reported in µg/L.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition All Types of Land Use (coarse textured soil)	MW104	MW105	MW9105 (Dup of MW105)	BH/MW101	BH/MW104	BH/MW112	DUP11201 (Dup of BH/MW112)	MW301	DUP3010 (Dup of MW301)	Trip Blank	Trip Blank
Lab ID		1838161-01	1838161-02	1838161-03	2045847	2045871	2045899	2045928	VBA390	VBA391	2045935	VBA392
Sampling Date		17/Sep/18	17/Sep/18	17/Sep/18	3/Feb/21	3/Feb/21	3/Feb/21	3/Feb/21	13/Feb/23	13/Feb/23	3/Feb/21	13/Feb/23
Screen Depth Interval (m)		0.9-3.0	0.9-3.0	0.9-3.0	3.05 - 6.10	3.05 - 6.10	3.05 - 6.10	3.05 - 6.10	3.05-6.10	3.05-6.10	-	-
Consultant		Terrapex	Terrapex	Terrapex	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		Paracel	Paracel	Paracel	AGAT	AGAT	AGAT	AGAT	BV	BV	AGAT	BV
Acetone	2700	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<1.0	<10
Benzene	5	<0.5	<0.5	<0.5	0.22	0.22	<0.20	<0.20	<0.17	<0.17	<0.20	<0.20
Bromodichloromethane	16	<0.5	<0.5	<0.5	<0.20	<0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.50
Bromoform	25	<0.5	<0.5	<0.5	<0.10	<0.10	<0.10	<0.10	<1.0	<1.0	<0.10	<1.0
Bromomethane	0.89	<0.5	<0.5	<0.5	<0.20	<0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.50
Carbon Tetrachloride	0.79	<0.5	<0.5	<0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.19
Chlorobenzene	30	<0.5	<0.5	<0.5	<0.10	<0.10	<0.10	<0.10	<0.20	<0.20	<0.10	<0.20
Chloroform	2.4	<0.5	<0.5	<0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane	25	<0.5	<0.5	<0.5	<0.10	<0.10	<0.10	<0.10	<0.50	<0.50	<0.10	<0.50
1,2-Dichlorobenzene	3	<0.5	<0.5	<0.5	<0.10	<0.10	<0.10	<0.10	<0.50	<0.50	<0.10	<0.40
1,3-Dichlorobenzene	59	<0.5	<0.5	<0.5	<0.10	<0.10	<0.10	<0.10	<0.50	<0.50	<0.10	<0.40
1,4-Dichlorobenzene	1	<0.5	<0.5	<0.5	<0.10	<0.10	<0.10	<0.10	<0.50	<0.50	<0.10	<0.40
Dichlorodifluoromethane	590	<1.0	<1.0	<1.0	<0.20	<0.20	<0.20	<0.20	<1.0	<1.0	<0.20	<1.0
1,1-Dichloroethane	5	<0.5	<0.5	<0.5	<0.30	<0.30	<0.30	<0.30	<0.20	<0.20	<0.30	<0.20
1,2-Dichloroethane	1.6	<0.5	<0.5	<0.5	<0.20	<0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.49
1,1-Dichloroethylene	1.6	<0.5	<0.5	<0.5	<0.30	<0.30	<0.30	<0.30	<0.20	<0.20	<0.30	<0.20
cis-1,2-Dichloroethylene	1.6	<0.5	<0.5	<0.5	<0.20	<0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.50
trans-1,2-Dichloroethylene	1.6	<0.5	<0.5	<0.5	<0.20	<0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.50
1,2-Dichloropropane	5	<0.5	<0.5	<0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
cis-1,3-Dichloropropene	0.5	<0.5	<0.5	<0.5	-	-	-	-	<0.30	<0.30	-	<0.30
trans-1,3-Dichloropropene									<0.40	<0.40		<0.40
Ethylbenzene	2.4	<0.5	<0.5	<0.5	<0.10	<0.10	<0.10	<0.10	<0.20	<0.20	<0.10	<0.20
Ethylene Dibromide (1,2-Dibromoethar	0.2	<0.2	<0.2	<0.2	<0.10	<0.10	<0.10	<0.10	<0.20	<0.20	<0.10	<0.19
Hexane (n)	51	<1.0	<1.0	<1.0	<0.20	<0.20	<0.20	<0.20	<1.0	<1.0	<0.20	<1.0
Methylene chloride (Dichloromethane)	50	<5.0	<5.0	<5.0	<0.30	<0.30	<0.30	<0.30	<2.0	<2.0	<0.30	<2.0
Methyl ethyl ketone (2-Butanone)	1800	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<1.0	<10
Methyl Isobutyl Ketone	640	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<1.0	<5.0
Methyl t-butyl ether (MTBE)	15	<2.0	<2.0	<2.0	<0.20	<0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.50
Styrene	5.4	<0.5	<0.5	<0.5	<0.10	<0.10	<0.10	<0.10	<0.50	<0.50	<0.10	<0.40
1,1,1,2-Tetrachloroethane	1.1	<0.5	<0.5	<0.5	<0.10	<0.10	<0.10	<0.10	<0.50	<0.50	<0.10	<0.50
1,1,2,2-Tetrachloroethane	1	<0.5	<0.5	<0.5	<0.10	<0.10	<0.10	<0.10	<0.50	<0.50	<0.10	<0.40
Tetrachloroethylene	1.6	<0.5	<0.5	<0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Toluene	24	<0.5	<0.5	<0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	200	<0.5	<0.5	<0.5	<0.30	<0.30	<0.30	<0.30	<0.20	<0.20	<0.30	<0.20
1,1,2-Trichloroethane	4.7	<0.5	<0.5	<0.5	<0.20	<0.20	<0.20	<0.20	<0.50	<0.50	<0.20	<0.40
Trichloroethylene	1.6	<0.5	<0.5	<0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	150	<1.0	<1.0	<1.0	<0.40	<0.40	<0.40	<0.40	<0.50	<0.50	<0.40	<0.50
Vinyl Chloride	0.5	<0.5	<0.5	<0.5	<0.17	<0.17	<0.17	<0.17	<0.20	<0.20	<0.17	<0.20
m-Xylene + p-Xylene	NV	<0.5	<0.5	<0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	NV	<0.5	<0.5	<0.5	<0.10	<0.10	<0.10	<0.10	<0.20	<0.20	<0.10	<0.20
Xylenes (total)	300	<0.5	<0.5	<0.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

All groundwater concentrations reported in µg/L.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition All Types of Land Use (coarse textured soil)	MW104		MW105	BH/MW104	BH/MW111	BH/MW112	DUP11201 (Dup of BH/MW112)	BH/MW113	BH/MW4A	Dup40 (Dup of BH/MW4A)
Lab ID		1838161-01	1380246	1380247	2045871	2045897	2045899	2045928	2045902	3607380	3607381
Sampling Date		17/Sep/18	20/Sep/18	20/Sep/18	3/Feb/21	3/Feb/21	3/Feb/21		3/Feb/21	10/Mar/22	
Screen Depth Interval (m)		0.9-3.0		0.9-3.0	3.05 - 6.10	3.05 - 6.10	3.05 - 6.10		3.05 - 6.10	4.27 - 7.32	
Consultant		Terrapex		Terrapex	BIG	BIG	BIG		BIG	BIG	
Laboratory		Paracel		Paracel	AGAT	AGAT	AGAT		AGAT	AGAT	
Acenaphthene	4.1	<0.05	<0.05	<0.04	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acenaphthylene	1	<0.05	<0.05	<0.04	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Anthracene	2.4	<0.01	<0.02	<0.02	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(a)anthracene	1	<0.01	<0.02	<0.02	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Benzo(a)pyrene	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(b)fluoranthene	0.1	<0.05	<0.1	<0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(ghi)perylene	0.2	<0.05	<0.05	<0.04	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Benzo(k)fluoranthene	0.1	<0.05	<0.05	<0.04	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chrysene	0.1	<0.05	<0.06	<0.06	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Dibenz(a,h)anthracene	0.2	<0.05	<0.05	<0.04	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Fluoranthene	0.41	<0.01	<0.03	<0.03	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Fluorene	120	<0.05	<0.05	<0.04	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Indeno(1,2,3-cd)pyrene	0.2	<0.05	<0.03	<0.03	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1&2-Methylnaphthalene	3.2	<0.10	<1	<1	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Naphthalene	11	<0.05	<0.06	<0.06	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Phenanthrene	1	<0.05	<0.03	<0.03	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Pyrene	4.1	<0.01	<0.06	<0.06	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

All groundwater concentrations reported in µg/L.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition All Types of Land Use (coarse textured soil)	MW104		MW105	MW9105 (Dup of MW105)	MW105	BH/MW101	BH/MW103	BH/MW106
Lab ID		1838161-01	1838429-01	1838161-02	1838161-03	1838429-03	2045847	2045869	2787630
Sampling Date		17/Sep/18	19/Sep/18	17/Sep/18		19/Sep/18	3/Feb/21	3/Feb/21	27/Jul/21
Screen Depth Interval (m)		0.9-3.0		0.9-3.0		0.9-3.0	3.05 - 6.10	2.44 - 5.49	3.05-6.10
Consultant		Terrapex		Terrapex		Terrapex	BIG	BIG	BIG
Laboratory		Paracel		Paracel		Paracel	AGAT	AGAT	AGAT
Antimony	6	<0.5	-	0.6	0.5	-	<1.0	-	<1.0
Arsenic	25	<1	-	2	2	-	<1.0	-	1.1
Barium	1000	249	-	274	241	-	115	-	71.8
Beryllium	4	<0.5	-	<0.5	<0.5	-	<0.50	-	<0.50
Boron (Total)	5000	642	-	837	771	-	351	-	639
Cadmium	2.7	<0.1	-	<0.1	<0.1	-	<0.20	-	<0.20
Chromium (total)	50	<1	-	<1	<1	-	<2.0	-	<2.0
Chromium VI	25	<10	-	<10	<10	-	<2.000	-	-
Cobalt	3.8	1.1	-	2.3	2	-	0.57	-	<0.50
Copper	87	2.6	-	4.3	4.1	-	10.1	-	2.2
Lead	10	0.4	-	0.3	0.5	-	1.54	-	<0.50
Mercury	0.29	-	<0.1	-	-	<0.1	<0.02	-	-
Molybdenum	70	9.5	-	19.5	16.8	-	1.9	-	1.5
Nickel	100	5	-	5	4	-	<3.0	-	<3.0
Selenium	10	<1	-	1	<1	-	2.1	-	<1.0
Silver	1.5	<0.1	-	<0.1	<0.1	-	<0.20	-	<0.20
Thallium	2	<0.1	-	0.1	0.1	-	<0.30	-	<0.30
Uranium	20	2.3	-	8.4	7.2	-	1.65	-	0.74
Vanadium	6.2	1.5	-	1.5	2.2	-	<0.40	-	<0.40
Zinc	1100	11	-	6	8	-	<5.0	-	<5.0
Sodium	490000	230,000	-	**500,000**	487,000	-	**776,000**	**576,000**	-
Chloride	790000	**1,470,000**	-	**1,640,000**	**1,640,000**	-	**1,270,000**	**1,640,000**	-
Free Cyanide	66	<2	-	<2	<2	-	<2	-	-

All groundwater concentrations reported in µg/L.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
Parameter detected and no SCS provided

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition All Types of Land Use (coarse textured soil)	BH/MW107	BH/MW108	BH/MW112	DUP11201 (Dup of BH/MW112)	BH/MW115	DUP 1150 (Dup of BH/MW115)	MW301	DUP3010 (Dup of MW301)
Lab ID		2045886	2045888	2045899	2045928	SUO235	SUO236	VBA390	VBA391
Sampling Date		3/Feb/21	3/Feb/21	3/Feb/21		3/Jun/22		13/Feb/23	13/Feb/23
Screen Depth Interval (m)		3.05 - 6.10	3.05 - 6.10	3.05 - 6.10		18.59 - 21.64		3.05-6.10	3.05-6.10
Consultant		BIG	BIG	BIG		BIG		BIG	BIG
Laboratory		AGAT	AGAT	AGAT		BV		BV	BV
Antimony	6	-	<1.0	<1.0	<1.0	0.94	1.1	<0.50	<0.50
Arsenic	25	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Barium	1000	-	62.4	70.7	66.1	82	79	95	93
Beryllium	4	-	<0.50	<0.50	<0.50	<0.40	<0.40	<0.40	<0.40
Boron (Total)	5000	-	590	746	773	430	420	240	240
Cadmium	2.7	-	<0.20	<0.20	<0.20	<0.090	<0.090	<0.090	<0.090
Chromium (total)	50	-	<2.0	<2.0	<2.0	<5.0	<5.0	<5.0	<5.0
Chromium VI	25	-	<2.000	<2.000	<2.000	<0.50	<2.5	<0.50	<0.50
Cobalt	3.8	-	1.65	<0.50	<0.50	<0.50	<0.50	<0.50	0.56
Copper	87	-	1.5	1.1	<1.0	1	1.3	7.3	7.4
Lead	10	-	2.4	2.09	2.29	<0.50	<0.50	<0.50	<0.50
Mercury	0.29	-	<0.02	<0.02	<0.02	<0.10	<0.10	<0.10	<0.10
Molybdenum	70	-	0.81	0.76	1.38	8.2	8.1	2.1	2.1
Nickel	100	-	<3.0	<3.0	<3.0	2.9	4.9	2.5	2.4
Selenium	10	-	2.1	2.5	3.4	<2.0	<2.0	<2.0	<2.0
Silver	1.5	-	<0.20	<0.20	<0.20	<0.090	<0.090	<0.090	<0.090
Thallium	2	-	<0.30	<0.30	<0.30	<0.050	<0.050	<0.050	<0.050
Uranium	20	-	<0.50	<0.50	<0.50	1.7	1.8	2.6	2.6
Vanadium	6.2	-	<0.40	<0.40	<0.40	<0.50	<0.50	0.52	<0.50
Zinc	1100	-	<5.0	<5.0	<5.0	16	17	<5.0	<5.0
Sodium	490000	**566,000**	402,000	475,000	456,000	**1,000,000**	**980,000**	**660,000**	**680,000**
Chloride	790000	**1,560,000**	**1,160,000**	**1,340,000**	**1,330,000**	**2,000,000**	**5,200,000**	**1,200,000**	**1,200,000**
Free Cyanide	66	-	<2	<2	<2	<1	<1	<1.0	<1.0

All groundwater concentrations reported in µg/L.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
Parameter detected and no SCS provided

Appendix C – Borehole Logs

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RECORD OF BOREHOLE No. BH1

METRIC 1 OF 1

PROJ. NO. BIGC-GEO-349A | LOCATION 571 Argus Road and 217 Cross Avenue, Oakville | ORIGINATED BY F.V.G

DATUM Geodetic | BOREHOLE TYPE Continous flight, 6 inches, Solid Stem Auger | COMPILED BY S.L

PROJ. NAME Geotechnical Investigation | DATE 2019.11.21 - 2019.11.21 | CHECKED BY

ELEV / DEPTH	DESCRIPTION	STRAT PLOT	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: "N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT / SHEAR STRENGTH kPa (○ UNCONFINED, ● QUICK TRIAXIAL, + FIELD VANE, × LAB VANE)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L / WATER CONTENT (%)	UNIT WEIGHT γ kN/m^3	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
101.55											
0.0 / 101.5	**ASPHALT:** 90 mm										
0.1 / 101.1	**GRANULAR:** 350 mm		1	SS1	25						
0.4 / 100.5	**FILL:** clayey silt to silty clay, some sand, organic staining, dark brown to black, moist		2	SS2	6						
1.1 / 98.9	**CLAYEY SILT TILL/SILTY CLAY TILL:** brown, moist, hard - trace rootlets between 1.1 m and 1.5 m		3	SS3	55						
			4	SS4	80						
2.7 / 98.4	**SHALE:** highly weathered, grey, damp										
3.2	**Borehole terminated at 3.2 m** Notes: 1. Open and dry upon completion of drilling										

DYNAMIC CONE PENETRATION RESISTANCE PLOT: 20 40 60 80 100

SHEAR STRENGTH kPa: ○ UNCONFINED + FIELD VANE ● QUICK TRIAXIAL × LAB VANE; 20 40 60 80 100

PLASTIC LIMIT w_P | NATURAL MOISTURE CONTENT w | LIQUID LIMIT w_L

WATER CONTENT (%): 20 40 60

$+^3$, $\times^3$: Numbers refer to Sensitivity

$\circ^{3\%}$ STRAIN AT FAILURE

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RECORD OF BOREHOLE No. BH2

METRIC 1 OF 1

PROJ. NO. BIGC-GEO-349A | LOCATION 571 Argus Road and 217 Cross Avenue, Oakville | ORIGINATED BY F.V.G

DATUM Geodetic | BOREHOLE TYPE Continous flight, 6 inches, Solid Stem Auger | COMPILED BY S.L

PROJ. NAME Geotechnical Investigation | DATE 2019.11.21 - 2019.11.21 | CHECKED BY

ELEV / DEPTH	DESCRIPTION	STRAT PLOT	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES "N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT / SHEAR STRENGTH kPa (○ UNCONFINED, ● QUICK TRIAXIAL, + FIELD VANE, × LAB VANE)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L / WATER CONTENT (%)	UNIT WEIGHT γ kN/m^3	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
101.93											
101.9 / 0.0	**ASPHALT:** 75 mm										
0.1 / 101.5	**GRANULAR:** 330 mm		1	SS1	14						
0.4 / 101.0	**FILL:** clayey silt to silty clay, topsoil inclusion, some rootlets, dark brown to black, moist		2	SS2	9						
0.9 / 100.4	**SILT TO CLAYEY SILT:** trace rootlets, reddish brown, very moist, loose										
1.5 / 99.6	**CLAYEY SILT TILL/SILTY CLAY TILL:** brown, moist, hard - grey below 1.8 m		3	SS3	31						
2.3 / 98.7	**SHALE:** weathered, grey, damp		4	SS4	100						
			5	SS5	100						
3.2	- limestone at 3.2 m **Borehole terminated at 3.2 m** Notes: 1. Open and dry upon completion of drilling										

$+^3, \times^3$: Numbers refer to Sensitivity ○ 3% STRAIN AT FAILURE

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RECORD OF BOREHOLE No. BH/MW3

METRIC 1 OF 1

PROJ. NO. BIGC-GEO-349A | LOCATION 571 Argus Road and 217 Cross Avenue, Oakville | ORIGINATED BY F.V.G

DATUM Geodetic | BOREHOLE TYPE Continous flight, 8 inches, Hollow Stem Auger | COMPILED BY S.L

PROJ. NAME Geotechnical Investigation | DATE 2019.11.21 - 2019.11.21 | CHECKED BY

ELEV / DEPTH	DESCRIPTION	STRAT PLOT	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: "N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT / SHEAR STRENGTH kPa (○ UNCONFINED, ● QUICK TRIAXIAL, + FIELD VANE, × LAB VANE)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L / WATER CONTENT (%)	UNIT WEIGHT γ kN/m³	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
102.87											
102.8	**ASPHALT:** 65 mm										
0.1	**GRANULAR:** 330 mm		1	SS1	14						
102.5											
0.4	**FILL:** clayey silt, organic staining, dark brown, moist										
102.3											
0.6	**CLAYEY SILT TILL/SILTY CLAY TILL:** mottled brown, moist, very stiff to hard		2	SS2	60						
	- shale-till complex below 1.5 m, brownish grey, moist, hard		3	SS3	100						
101.1											
1.8	**SHALE:** weathered, grey, damp		4	SS4	100						
100.6											
2.3	**Borehole terminated at 2.3 m** Notes: 1. Open and dry upon completion of drilling 2. Water level at 1.70 m bgs (Elev. 101.17 m asl) on November 29, 2019										

$+^3, \times^3$: Numbers refer to Sensitivity $\circ^{3\%}$ STRAIN AT FAILURE

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RECORD OF BOREHOLE No. BH/MW4

METRIC

PROJ. NO. BIGC-GEO-349A | LOCATION 571 Argus Road and 217 Cross Avenue, Oakville | ORIGINATED BY F.V.G

DATUM Geodetic | BOREHOLE TYPE Continous flight, 8 inches, Hollow Stem Auger | COMPILED BY S.L

PROJ. NAME Geotechnical Investigation | DATE 2019.11.21 - 2019.11.25 | CHECKED BY

ELEV / DEPTH	DESCRIPTION	STRAT PLOT	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: "N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT / SHEAR STRENGTH kPa (○ UNCONFINED, ● QUICK TRIAXIAL, + FIELD VANE, × LAB VANE)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L / WATER CONTENT (%)	UNIT WEIGHT γ kN/m³	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
102.32											
102.2 / 0.1	**ASPHALT:** 75 mm										
102.0	**GRANULAR:** 280 mm		1	SS1	15						
0.4	**CLAYEY SILT TILL/SILTY CLAY TILL:** mottled brown, moist, very stiff to hard		2	SS2	34						
	- shale-till complex below 1.5 m, brownish grey, moist, hard		3	SS3	100						
100.0											
2.3	**SHALE:** weathered, grey, damp		4	SS4	100						
99.6											
2.7	- Run # 1: 2.7 m to 4.0 m RQD = 0 % Recovery = 54 % - highly weathered, fine-grained grey shale with limestone interbeds - limestone at 2.8 m and 3.0 m - vertical fracture at 2.9 m - mottling due to water intrusion at 3.0 m - medium to hard rock		1	CORE							
98.3											
4.0	- Run # 2: 4.0 m to 5.5 m RQD = 51 % Recovery = 98 % - highly weathered grey shale between 4.0 m and 4.9 m - limestone between 4.0 m to 4.4 m with 100 mm of interbedded shale at 4.1 m - mottling at 4.0 m - fracture filling material observed at 4.2 m - natural fractures between 4.7 m and 4.9 m		2	CORE							
96.8											
5.5	- unweathered grey shale between 4.9 m and 5.5 m - Run # 3: 5.5 m to 7 m RQD = 65 % Recovery = 100 % - grey shale, fine-grained, medium to hard - slightly weathered to unweathered sections between 5.5 m and 5.6 m, between 5.6 m and 6.2 m, and between 6.4 m and 7.0 m - highly weathered section between 5.6 m and 5.7 m		3	CORE							
95.3											
7.0	- completely weathered with major fractures between 5.7 m and 5.9 m, filled with grey clayey silt till - major fractures filled with grey clayey silt till between 6.3 m and 6.4 m - 50 mm of fracture filling clayey silt till observed at 6.7 m - Run # 4: 7 m and 8.5 m RQD = 72 % Recovery = 98 % - slightly weathered grey shale with 25 mm of limestone interbeds at 7.3 m, very fine-grained, hard - clean vertical fracture at 7.3 m - rough fractures with fracture filling material between 7.4 m and 7.5 m and between 7.8 m and 7.9 m - red staining/banding between 7.5 m and 7.7 m		4	CORE							
93.8											
8.5			5	CORE							

Continued Next Page

$+^3$, $\times^3$: Numbers refer to Sensitivity ○ 3% STRAIN AT FAILURE

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RECORD OF BOREHOLE No. BH/MW4

METRIC 2 OF 2

PROJ. NO. BIGC-GEO-349A | LOCATION 571 Argus Road and 217 Cross Avenue, Oakville | ORIGINATED BY F.V.G

DATUM Geodetic | BOREHOLE TYPE Continous flight, 8 inches, Hollow Stem Auger | COMPILED BY S.L

PROJ. NAME Geotechnical Investigation | DATE 2019.11.21 - 2019.11.25 | CHECKED BY

ELEV / DEPTH	DESCRIPTION	STRAT PLOT	SAMPLES: NUMBER	SAMPLES: TYPE	SAMPLES: "N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100) / SHEAR STRENGTH kPa (○ UNCONFINED, ● QUICK TRIAXIAL, + FIELD VANE, × LAB VANE) (20 40 60 80 100)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L — WATER CONTENT (%) (20 40 60)	UNIT WEIGHT γ kN/m³	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
92.2	- Run # 5: 8.5 m and 10.1 m										
10.1	RQD = 70 % Recovery = 98 % - grey shale with limestone interbeds, very fine-grained, very hard rock - vertical fracture at 9.0 m - wide fracture filled with fracture filling material at 9.1 m - mottling between 9.1 m and 9.5 m - more than twelve (12+) horizontal mechanical fractures *(continued)*		6	CORE							
	- Run # 6: 10.1 m and 11.6 m RQD = 80 % Recovery = 100 %										
90.7											
11.6	- slightly weathered to unweathered grey shale with limestone interbeds, very hard rock - vertical fractures at 10.1 m and 11.5 m - very wide fracture filled with dark grey and very moist shale-till complex at 10.6 m - mottled and blotched discolourations of light to dark grey		7	CORE							
	- Run # 7: 11.6 m and 13.1 m RQD = 88 % Recovery = 100 %										
89.2											
13.1	- unweathered grey shale with minor limestone interbeds, hard rock - 75 mm of vertical fracture at 12.6 m - very narrow, slightly rough horizontal fractures in eroded/laminated shale between 12.7 m and 12.8 m, fractures filled with moist shale-till complex - more than eight (8+) horizontal mechanical fractures		8	CORE							
	- Run # 8: 13.1 m and 14.6 m RQD = 97 % Recovery = 100 %										
87.7											
14.6	- grey shale with limestone interbeds, very hard rock - no wide fractures - vertical fracture at 13.6 m - three (3) very narrow and smooth horizontal mechanical fractures		9	CORE							
	- Run # 9: 14.6 m and 16.2 m RQD = 97 % Recovery = 100 % - unweathered grey shale with limestone interbeds, very fine-grained, very hard rock - blotched, light grey to dark grey throughout										
86.1											
16.2	- red staining/banding between 14.6 m and 14.9 m - vertical fracture at 14.8 m for 150 mm - very narrow and smooth fractures with no fracture filling materials present		10	CORE							
	- Run # 10: 16.2 m and 17.7 m RQD = 95 % Recovery = 85 % - unweathered grey shale with little to no limestone inlusions, very fine-grained, very hard rock										
84.6											
17.7	- one (1) narrow and clean fracture with no fracture filling material - minimal horizontal fracturing, no vertical fractures										
	Borehole terminated at 17.7 m										

Notes:
1. Water at 16.2 m upon completion of drilling
2 Open upon completion of drilling
3. Water level at 3.56 m bgs (Elev. 98.76 m asl) on November 29, 2019

$+^3, \times^3$: Numbers refer to Sensitivity

$\circ^{3\%}$ STRAIN AT FAILURE

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RECORD OF BOREHOLE No. BH5

METRIC 1 OF 1

PROJ. NO. BIGC-GEO-349A | LOCATION 571 Argus Road and 217 Cross Avenue, Oakville | ORIGINATED BY F.V.G

DATUM Geodetic | BOREHOLE TYPE Continous flight, 6 inches, Solid Stem Auger | COMPILED BY S.L

PROJ. NAME Geotechnical Investigation | DATE 2019.11.21 - 2019.11.21 | CHECKED BY

ELEV / DEPTH	DESCRIPTION	STRAT PLOT	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES "N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT (20 40 60 80 100) / SHEAR STRENGTH kPa (○ UNCONFINED ● QUICK TRIAXIAL + FIELD VANE × LAB VANE)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L / WATER CONTENT (%)	UNIT WEIGHT γ kN/m^3	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
103.39											
0.0	**FILL:** clayey silt, some sand, mottled brown, moist		1	SS1	14						
102.9											
0.5	**CLAYEY SILT TILL/SILTY CLAY TILL:** mottled brown, moist, hard		2	SS2	28						
			3	SS3	38						
			4	SS4	51						
	- shale-till complex below 2.7 m, brownish grey, moist, hard										
100.3											
3.1	**SHALE:** weathered, grey, damp		5	SS5	100						
99.4											
4.0	**Borehole terminated at 4.0 m** Notes: 1. Open and dry upon completion of drilling										

$+^3, \times^3$: Numbers refer to Sensitivity $\circ^{3\%}$ STRAIN AT FAILURE

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RECORD OF BOREHOLE No. BH/MW6

METRIC 1 OF 1

PROJ. NO. BIGC-GEO-349A | LOCATION 571 Argus Road and 217 Cross Avenue, Oakville | ORIGINATED BY F.V.G

DATUM Geodetic | BOREHOLE TYPE Continous flight, 8 inches, Hollow Stem Auger | COMPILED BY S.L

PROJ. NAME Geotechnical Investigation | DATE 2019.11.21 - 2019.11.21 | CHECKED BY

ELEV / DEPTH	DESCRIPTION	STRAT PLOT	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES "N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	DYNAMIC CONE PENETRATION RESISTANCE PLOT / SHEAR STRENGTH kPa (○ UNCONFINED, ● QUICK TRIAXIAL, + FIELD VANE, × LAB VANE)	PLASTIC LIMIT w_P / NATURAL MOISTURE CONTENT w / LIQUID LIMIT w_L / WATER CONTENT (%)	UNIT WEIGHT γ kN/m³	REMARKS & GRAIN SIZE DISTRIBUTION (%) GR SA SI CL
102.74								20 40 60 80 100	20 40 60		
0.0 / 102.7	**TOPSOIL:** 90 mm										
0.1	**FILL:** clayey silt, some sand, some rootlets, organic staining, dark brown, moist		1	SS1	8				○		
101.8			2	SS2	21						
0.9	**CLAYEY SILT TILL/SILTY CLAY TILL:** mottled brown, moist, very stiff to hard								○		
			3	SS3	65						
	- shale-till complex below 2.3 m, grey, moist, hard		4	SS4	33				○		
99.6											
3.1	**SHALE:** weathered, grey, damp		5	SS5	100				○		
99.0											
3.7	**Borehole terminated at 3.7 m** Notes: 1. Open and dry upon completion of drilling 2. Dry on November 29, 2019										

$+^3, \times^3$: Numbers refer to Sensitivity ○ 3% STRAIN AT FAILURE

RECORD OF BOREHOLE No. BH/MW101

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augering	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	13 Jan 21	Date Completed: 13 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING Penetration Testing: ○ SPT ● DCPT MTO Vane*: △ Intact ▲ Remould Nilcon Vane*: ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING ★ Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading △ parts per million (ppm) 100 200 300 400 ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 100 mm asphalt concrete over 200 mm granular base										
	FILL: clayey silt, trace sand, trace gravel, mottled, grey, moist, very stiff to hard (0.3)	SS	1	41	22			○ 22	○ 23		
		SS	2	100	60	1		○	○ 22		
	CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, grey, moist, hard (1.1)	SS	3	93	71	2		○	○ 10		
	BEDROCK: Shale, highly weathered, occasional limestone seams, grey, damp, hard (2.3)	SS	4	53	50/15			50 ○ 15	○ 18		
		SS	5	63	50/8	3		50 ○ 8	○ 6		
	-first water strike					4					
		SS	6	100	50/3	5	▽	50 ○ 3	○ 4		
		SS	7	100	50/3	6		50 ○ 3	○ 4		
	End of Borehole (6.1)										

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 5.18 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 5.18 m.

RECORD OF BOREHOLE No. BH/MW102

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augering	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	13 Jan 21	Date Completed: 13 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 100 mm asphalt concrete over 200 mm granular base	SS	1	90	50/15			50/15	19		
	FILL: sandy silt, some clay, mottled, brown/grey, very moist, compact 0.3										
	CLAYEY SILT TILL: trace sand, trace sand, trace gravel, fragments of Shale, grey, moist, very stiff to hard 0.8 - sand seam, 100 mm thick	SS	2	46	24	1			16		
		SS	3	90	50/15			50/15	13		
		SS	4	100	50/13	2		50/13	7		
	BEDROCK: Shale, highly weathered, occasional limestone fragments, grey, damp, hard 2.6	SS	5	100	50/3	3		50/3	6		
	-first water strike	SS	6	63	50/8	4		50/8	6		
						5	▽				
		SS	7	60	50/5	6		50/5	6		
	End of Borehole 6.2										

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 5.18 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 5.18 m.

RECORD OF BOREHOLE No. BH/MW103

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augering	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	13 Jan 21	Date Completed: 13 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 100 mm asphalt concrete over 300 mm granular bases	SS	1	51	13						
	FILL: sand and gravel, brown, moist, compact 0.4 **CLAYEY SILT TILL:** some sand, trace gravel, fragments of Shale, reddish brown, moist, very stiff to hard 0.5	SS	2	84	26	1					
		SS	3	93	70	2					
	BEDROCK: Shale, highly weathered, occasional limestone fragments, grey, damp, hard 2.3	SS	4	87	50/15						
		SS	5	100	50/5	3					
		SS	6	60	50/5	4					
	Borehole terminated at 5.49 m due to auger refussal on inferred Limestone bedrock 5.5 Notes: 1. Borehole open upon completion of drilling. 2. Groundwater level at 4.57 m bgs measured upon completion of drilling.					5					

FIELD TESTING: Penetration Testing — SPT / DCPT; MTO Vane* Intact / Remould; Nilcon Vane* Intact / Remould; * Undrained Shear Strength (kPa) 20 40 60 80

LAB TESTING: Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading parts per million (ppm) 100 200 300 400; Lower Explosive Limit (LEL) W_P W W_L; Plastic Liquid 20 40 60 80

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Groundwater depth on completion of drilling: 4.57 m.

RECORD OF BOREHOLE No. BH/MW104

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augering	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	13 Jan 21	Date Completed: 13 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING Penetration Testing: ○ SPT ● DCPT MTO Vane*: △ Intact ▲ Remould Nilcon Vane*: ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING ★ Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading △ parts per million (ppm) 100 200 300 400 ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 100 mm asphalt concrete over 200 mm granular bases										
	FILL: sand and gravel, brown, moist, compact 0.3	SS	1	62	23			○	○ 4		
	------- sandy silt, some clay, trace gravel	SS	2	62	13	1		○	○ 12		
	CLAYEY SILT TILL: some sand, trace gravel, fragments of Shale, brown, moist, hard 1.4	SS	3	95	42	2		○	○ 13		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, moist, hard 2.3	SS	4	63	50/8			50/8 ○	○ 7		
		SS	5	100	50/3	3		50/3 ○	○ 6		
		SS	6	100	50/5	4		50/5 ○	○ 7		
		SS	7	100	50/3	5 ▽ 6		50/3 ○	○ 8		
	End of Borehole 6.1										

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 4.88 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 4.88 m.

RECORD OF BOREHOLE No. BH/MW105

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Hollow Stem Augering + Rock Coring	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	14 Jan 21	Date Completed: 15 Jan 21	Revision No.: 1, 1/2/21

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	PenetrationTesting: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 100 mm asphalt concrete over 200 mm granular base										
	FILL: clayey silt, trace to some sand and gravel, brown/grey, moist, hard to very stiff (0.3)	SS	1	62	37			○ 50	○ 6		
		SS	2	70	23	1		○	○ 14		
	CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, grey, moist, very stiff to hard (1.1)										
		SS	3	84	55	2		○	○ 9		
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist (2.3)	SS	4	100	50/8			○ 50/8	○ 7		
		SS	5	100	50/5	3		○ 50/5	○ 7		
	-first water strike	SS	6	100	50/5	4		○ 50/5	○ 18		
		SS	7	100	50/5	6		○ 50/5	○ 16		
		SS	8	100	50/5	7		○ 50/5	○ 16		
	ROCK CORE BEGINS - Poor Quality	RC	1	78	27	8		○			
						9					

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▽ No freestanding groundwater measured in open borehole on completion of drilling. ■ Cave in depth recorded on completion of drilling: Not Measured m.

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RECORD OF BOREHOLE No. BH/MW105

Project Number: **BIGC-ENV-349B** Drilling Location: **See BH Location Plan** Logged by: **TVH**

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	- Good Quality **BEDROCK:** Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist	RC	2	100	81						
	- Good Quality	RC	3	99	82	10		○			
	- Excellent Quality	RC	4	99	91	11 12		○			
	- Excellent Quality	RC	5	99	97	13 14		○			
	- Excellent Quality	RC	6	99	96	15		○			
	- Excellent Quality	RC	7	99	95	16 17		○			
	- Excellent Quality	RC	8	97	98	18		○			
						19					

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and requires interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commisioned and the accompanying'Notes to Record of Boreholes'.

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RECORD OF BOREHOLE No. BH/MW105

Project Number: **BIGC-ENV-349B** Drilling Location: **See BH Location Plan** Logged by: **TVH**

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist										
	- Good Quality	RC	9	98	83	20		○			
	- Excellent Quality	RC	10	99	93	21		○			
	- Excellent Quality	RC	11	99	92	22		○			
						23					
	Borehole terminated at 23.42 23.4										
	Notes: 1. Borehole open upon completion of drilling. 2. Groundwater level not measured upon completion of drilling due to introduced drilling water										

Scale: 1 : 47

RECORD OF BOREHOLE No. BH/MW106

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	20 Jan 21	Date Completed: 20 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING: Penetration Testing (○ SPT ● DCPT); MTO Vane* (△ Intact ▲ Remould); Nilcon Vane* (◇ Intact ◆ Remould); * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L; Plastic 20 40 60 80 Liquid	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 75 mm asphalt concrete over 150 mm granular base										
	FILL: clayey silt, trace sand, trace gravel, rootlets, mottled, brown, moist, stiff to hard 0.2	SS	1	92	12			○ 50	○ 14		
		SS	2	95	63/23	1		○ 63/23	○ 14		
	CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, brown, moist, hard 1.1	SS	3	93	50/15			○ 50/15	○ 15		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, damp, hard 1.7	SS	4	100	50/5	2		○ 50/5	○ 6		
		SS	5	100	50/5	3		○ 50/5	○ 6		
	-first water strike					4 ▽					
		SS	6	100	50/3			○ 50/3	○ 3		
						5					
		SS	7	100	50/3	6		○ 50/3	○ 2		
	End of Borehole 6.1										

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 4.88 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 3.96 m.

RECORD OF BOREHOLE No. BH/MW107

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	20 Jan 21	Date Completed: 20 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 120 mm asphalt concrete over 170 mm granular base										
	FILL: clayey silt, trace gravel, rootlets, mottled, brown, moist, stiff 0.3	SS	1	59	12			○	○ 16		
	CLAYEY SILT TILL: trace sand, trace gravel, oxidized fissures, mottled, brownish grey, moist, very stiff to hard 0.8	SS	2	92	28	1		○	○ 12		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, damp to moist, hard 1.8	SS	3	70	51	2		○	○ 11		
		SS	4	100	50/5			○ 50/5	○ 8		
		SS	5	60	50/5	3		○ 50/5	○ 6		
	-first water strike						▽				
		SS	6	100	50/5	4		○ 50/5	○ 23		
						5					
		SS	7	100	50/3	6		○ 50/3	○ 23		
	End of Borehole 6.1										

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 3.66 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 3.66 m.

RECORD OF BOREHOLE No. BH/MW108

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	20 Jan 21	Date Completed: 20 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING Penetration Testing: ○ SPT ● DCPT MTO Vane*: △ Intact ▲ Remould Nilcon Vane*: ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING ★ Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading △ parts per million (ppm) 100 200 300 400 ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 150 mm asphalt concrete over 200 mm granular base	SS	1	75	9			○ 9	○ 15		
	FILL: clayey silt, trace gravel, rootlets, organic staining, mottled, brown, moist, stiff 0.4										
	CLAYEY SILT TILL: trace sand, trace gravel, oxidized fissures, mottled, brown, moist, very stiff to hard 0.8	SS	2	100	25	1		○ 25	○ 12		
		SS	3	100	65	2		○ 65	○ 11		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, moist 2.1	SS	4	100	50/5			○ 50/5	○ 8		
		SS	5	100	50/5	3		○ 50/5	○ 6		
	-first water strike					4 ▽					
		SS	6	100	50/3			○ 50/3	○ 5		
						5					
		SS	7	100	50/3	6		○ 50/3	○ 21		
	End of Borehole 6.1										

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 3.96 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 3.96 m.

RECORD OF BOREHOLE No. BH/MW109

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	20 Jan 21	Date Completed: 20 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
	Geodetic Ground Surface Elevation:							Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L; Plastic 20 40 60 80 Liquid		
	ASPHALT: 140 mm asphalt concrete over 160 mm granular base										
	FILL: clayey silt, trace gravel, rootlets, mottled, brown, moist, stiff 0.3 / 0.5	SS	1	92	13			○	○ 14		
	CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, oxidized fissures, mottled, brownish grey, moist, hard	SS	2	100	33	1		○	○ 11		
		SS	3	83	76/20			○ 76/20	○ 10		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, moist to damp, hard 1.8	SS	4	100	50/5	2		○ 50/5	○ 8		
		SS	5	100	50/3	3		○ 50/3	○ 6		
	-first water strike	SS	6	100	50/5	4		○ 50/5	○ 4		
		SS	7	100	50/3	5	▽	○ 50/3	○ 30		
	End of Borehole 6.1					6					
	Notes: 1. Borehole open upon completion of drilling. 2. Groundwater level at 5.18 m bgs measured upon completion of drilling.										

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▽ Groundwater depth on completion of drilling: 5.18 m.

RECORD OF BOREHOLE No. BH/MW110

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	21 Jan 21	Date Completed: 21 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING Penetration Testing: ○ SPT ● DCPT MTO Vane*: △ Intact ▲ Remould Nilcon Vane*: ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING ★ Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading: △ parts per million (ppm) 100 200 300 400 ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 120 mm asphalt concrete over 300 mm granular base	SS	1	79	21			○ 12			
	FILL: sandy silt, some gravel, occasional glass fragments, rootlets, brown, moist, compact 0.4										
	CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, oxidized fissures, mottled, brownish grey, moist, stiff to hard 1.1	SS	2	95	12	1		○	○ 12		
		SS	3	100	37	2		○	○ 10		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, damp, hard 2.3	SS	4	100	50/5			○ 50/5	○ 7		
		SS	5	100	50/5	3		○ 50/5	○ 3		
	-first water strike	SS	6	60	50/5	4 ▽		○ 50/5	○ 7		
		SS	7	100	50/3	5		○ 50/3	○ 17		
	End of Borehole 6.1					6					

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 3.96 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 3.96 m.

RECORD OF BOREHOLE No. BH/MW111

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	21 Jan 21	Date Completed: 21 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 75 mm asphalt concrete over 250 mm granular base										
	FILL: sandy silt, trace gravel, rootlets, organic staining, brown, moist, compact 0.2	SS	1	95	15			○	13		
	------- clayey silt, firm	SS	2	100	8	1		○	15		
	CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, oxidized fissures, mottled, grey, moist, hard 1.7	SS	3	100	34	2		○	13		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, moist 2.3	SS	4	63	50/8			50 ○ 8	5		
		SS	5	100	50/5	3		50 ○ 5	7		
	-first water strike					4 ▽					
		SS	6	60	50/5			50 ○ 5	8		
						5					
		SS	7	100	50/3	6		50 ○ 3	7		
	End of Borehole 6.1										
	Notes: 1. Borehole open upon completion of drilling. 2. Groundwater level at 3.96 m bgs measured upon completion of drilling.										

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▽ Groundwater depth on completion of drilling: 3.96 m.

RECORD OF BOREHOLE No. BH/MW112

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	21 Jan 21 Date Completed: 21 Jan 21	Revision No.:	1, 1/2/21

LITHOLOGY PROFILE | SOIL SAMPLING | FIELD TESTING | LAB TESTING

Field testing legend: Penetration Testing: ○ SPT ● DCPT; MTO Vane*: △ Intact ▲ Remould; Nilcon Vane*: ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80

Lab testing legend: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL); W_P W W_L Plastic Liquid 20 40 60 80

Geodetic Ground Surface Elevation:

Description	Depth (m)	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	Field Testing (SPT)	Lab Testing (Soil Vapour)	Comments
TOPSOIL: 150 mm								
FILL: clayey silt, trace gravel, rootlets, brown, moist, stiff	0.2	SS	1	59	9		13	
------- grey		SS	2	100	21		15	
CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, oxidized fissures, mottled, grey, moist, very stiffto hard	1.1	SS	3	95	44		13	
		SS	4	100	75/25	75/25	5	
BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, moist, hard	2.6	SS	5	100	50/5	50/5	7	
-first water strike		SS	6	60	50/5	50/5	8	
		SS	7	100	50/3	50/3	7	
End of Borehole	6.1							

Groundwater level symbol at approx. 5.18 m depth.

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 5.18 m bgs measured upon completion of drilling.

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Groundwater depth on completion of drilling: 5.18 m.

Scale: 1 : 47

RECORD OF BOREHOLE No. BH/MW113

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	21 Jan 21	Date Completed: 21 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
	Geodetic Ground Surface Elevation:							Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80		
	GRAVEL: 50 mm (0.1)										
	FILL: clayey silt, trace gravel, rootlets, organic staining, brown, moist, very stiff to stiff	SS	1	100	19			○	○ 14		
		SS	2	100	13	1		○	○ 12		
	CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, oxidized fissures, mottled, grey, moist, stiff to hard (1.1)	SS	3	100	44	2		○	○ 11		
		SS	4	100	90			○	○ 13		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, moist (2.6)	SS	5	100	50/5	3		○ 50/5	○ 5		
	-first water strike	SS	6	100	50/3	4		○ 50/3	○ 7		
		SS	7	100	50/5	5		○ 50/5	○ 21		
	End of Borehole (6.1)					6					

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 5.48 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 5.48 m.

RECORD OF BOREHOLE No. BH/MW114

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Hollow Stem Augering + Rock Coring	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	21 Jan 21	Date Completed: 27 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)
	TOPSOIL: 150 mm						
	FILL: clayey silt, trace gravel, mottled, grey, moist, very stiff to firm 0.2	SS	1	100	20		
		SS	2	100	8	1	
	CLAYEY SILT TILL: trace sand, trace gravel, frgments of Shalr, oxidized fissures, mottled, grey, moist, hard 1.7	SS	3	100	37	2	
		SS	4	100	57		
	BEDROCK: Shale, highly weathered to excellen qaulity, occasional Limestone layers, grey, moist to damp 2.8	SS	5	100	50/5	3	
	- first water strike	SS	6	60	50/5	4	
		SS	7	60	50/5	5	
	ROCK CORE BEGINS - Poor Quality	RC	1	98	35	6	
	- Poor Quality	RC	2	69	28	7	
						8	
						9	

FIELD TESTING

Penetration Testing: ○ SPT ● DCPT

MTO Vane*: △ Intact ▲ Remould

Nilcon Vane*: ◇ Intact ◆ Remould

* Undrained Shear Strength (kPa): 20 40 60 80

LAB TESTING

★ Rinse pH Values: 2 4 6 8 10 12

Soil Vapour Reading: △ parts per million (ppm): 100 200 300 400

▲ Lower Explosive Limit (LEL): W_P W W_L

Plastic Liquid: 20 40 60 80

1	19
2	11
3	11
4	11
5	50/5 9
6	50/5 7
7	50/5 19
8	
9	

INSTRUMENTATION INSTALLATION

COMMENTS

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Cave in depth recorded on completion of drilling: Not Measured m.

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RECORD OF BOREHOLE No. BH/MW114

Project Number: **BIGC-ENV-349B** Drilling Location: **See BH Location Plan** Logged by: **TVH**

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist to damp										
	- Fair Quality	RC	3	98	62	10					
	- Good Quality	RC	4	100	87	11					
	- Good Quality	RC	5	100	76	12					
	- Good Quality	RC	6	100	83	13					
	- Excellent Quality	RC	7	100	98	14					
	- Good Quality	RC	8	97	89	15					
						16					
						17					
						18					
						19					

FIELD TESTING: Penetration Testing — ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80

LAB TESTING: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80

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RECORD OF BOREHOLE No. BH/MW114

Project Number: **BIGC-ENV-349B** Drilling Location: **See BH Location Plan** Logged by: **TVH**

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING: Penetration Testing (○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80)	LAB TESTING: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist to damp - Excellent Quality	RC	9	100	94	20		○			
	- Excellent Quality	RC	10	100	90	21		○			
	- Excellent Quality	RC	11	100	97	22		○			
						23					
	Borehole terminated at 23.32 23.3 Notes: 1. Borehole open upon completion of drilling. 2. Groundwater level not measured upon completion of drilling due to introduced drilling water										

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and requires interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commisioned and the accompanying'Notes to Record of Boreholes'.

Scale: 1 : 47

RECORD OF BOREHOLE No. BH/MW115

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Hollow Stem Augering + Rock Coring	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	22 Jan 21	Date Completed: 26 Jan 21	Revision No.: 1, 1/2/21

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 100 mm asphalt concrete over 300 mm granular bases	SS	1	59	16			○ 16	○ 15		
	FILL: clayey silt, trace gravel, rootlets, organic staining, dark brown, moist, very stiff 0.4										
	CLAYEY SILT TILL: trace sand. trace gravel, oxidized fissures, mottled, grey, moist, stiff to hard 0.8	SS	2	100	12	1		○	○ 13		
		SS	3	84	32	2		○	○ 12		
		SS	4	100	50/13			○ 50/13	○ 10		
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist to damp 2.4	SS	5	100	50/5	3		○ 50/5	○ 6		
	- first water strike					4					
		SS	6	60	50/5			○ 50/5	○ 5		
						5					
		SS	7	60	50/5	6		○ 50/5	○ 5		
	ROCK CORE BEGINS - Poor Quality	RC	1	83	30	7		○			
	- Fair Quality	RC	2	98	74	8		○			
						9					

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▽ No freestanding groundwater measured in open borehole on completion of drilling. ■ Cave in depth recorded on completion of drilling: Not Measured m.

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RECORD OF BOREHOLE No. BH/MW115

Project Number: **BIGC-ENV-349B** Drilling Location: **See BH Location Plan** Logged by: **TVH**

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist to damp										
	- Fair Quality	RC	3	99	61	10					
	- Good Quality	RC	4	99	77	11					
	- Excellent Quality	RC	5	100	98	12					
	- Good Quality	RC	6	98	87	13					
	- Excellent Quality	RC	7	100	95	14					
	- Excellent Quality	RC	8	100	92	15					
						16					
						17					
						18					
						19					

FIELD TESTING: Penetration Testing — ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80

LAB TESTING: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80

Scale: 1 : 47

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RECORD OF BOREHOLE No. BH/MW115

Project Number: **BIGC-ENV-349B** Drilling Location: **See BH Location Plan** Logged by: **TVH**

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist to damp - Excellent Quality	RC	9	100	91	20		○			
	- Good Quality	RC	10	96	89	21		○			
	- Excellent Quality	RC	11	100	92	22		○			
						23					
	Borehole terminated at 23.32 23.3 Notes: 1. Borehole open upon completion of drilling. 2. Groundwater level not measured upon completion of drilling due to introduced drilling water										

Scale: 1 : 47

RECORD OF BOREHOLE No. BH201

Project Number:	BIGC-ENV-349E	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TD
Project Name:	Phase Two ESA Update	Drilling Machine:	Truck Mounted Drill	Reviewed by:	
Project Location:	217 & 227 Cross Ave, and 571 Argus Rd, Oakville Ontario	Date Started:	21 Aug 20	Date Completed: 21 Aug 20	Revision No.: 0, 22-4-5

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 102.83 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L; Plastic 20 40 60 80 Liquid	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT PAVEMENT: 150 mm Asphalt over 150 mm granular	102.68 0.2										
	FILL: Clayey silt, trace sand, trace gravel, brown, moist		SS	1	59	13			○			
			SS	2	17	50/3	1	102				
			SS	3	20	50/5						
		101.31										
	BEDROCK: Shale, highly weathered, grey, moist	101.16 1.7										
	End of Borehole						2	101				
	Notes: 1. Borehole open upon completion of drilling.											

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH202

Project Number:	BIGC-ENV-349E	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TD
Project Name:	Phase Two ESA Update	Drilling Machine:	Truck Mounted Drill	Reviewed by:	
Project Location:	217 & 227 Cross Ave, and 571 Argus Rd, Oakville Ontario	Date Started:	21 Aug 20	Date Completed: 21 Aug 20	Revision No.: 0, 22-4-5

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 102.83 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 150 mm Asphalt over 150 mm Granular	102.68 0.2										
	FILL: Clayey silt, trace sand, trace gravel, brown, moist	102.07	SS	1	75	10			○			
	CLAYEY SILT TILL: trace sand and gravel, mottled grey-brown, moist	0.8 101.31	SS	2	84	30	1	102	○			
	BEDROCK: Shale, highly weathered, grey, moist	1.5 101.00	SS	3	81	50/4						
	End of Borehole	1.8					2	101				
	Notes: 1. Borehole open upon completion of drilling.											

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH203

Project Number:	BIGC-ENV-349E	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TD
Project Name:	Phase Two ESA Update	Drilling Machine:	Truck Mounted Drill	Reviewed by:	
Project Location:	217 & 227 Cross Ave, and 571 Argus Rd, Oakville Ontario	Date Started:	21 Aug 20	Date Completed: 21 Aug 20	Revision No.: 0, 22-4-5

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 102.83 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 150 mm Asphalt over 200 mm granular	102.68 0.2										
	FILL: Sandy silt, trace clay and gravel, rootlets, brown to red, moist to very moist		SS	1	33	7			○			
		101.76	SS	2	16	50/5	1	102				
	BEDROCK: Shale, highly weather, grey, moist	1.1 101.31										
	End of Borehole	1.5					2	101				
	Notes: 1. Borehole open upon completion of drilling.											

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH204

Project Number: **BIGC-ENV-349E** | Drilling Location: **See BH Location Plan** | Logged by: **TVH**

Project Client: **Distrikt Capital** | Drilling Method: **150 mm Solid Stem Augers** | Compiled by: **TD**

Project Name: **Phase Two ESA Update** | Drilling Machine: **Truck Mounted Drill** | Reviewed by:

Project Location: **217 & 227 Cross Ave, and 571 Argus Rd, Oakville Ontario** | Date Started: **21 Aug 20** | Date Completed: **21 Aug 20** | Revision No.: **0, 22-4-5**

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 102.83 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 150 mm Asphalt over 300 mm granular	102.68 0.2										
	FILL: Silty sand, trace gravle, brown, moist	102.07	SS	1	33	14			○			
	CLAYEY SILT TILL: Trace sand, trace gravel, mottled grey, moist	0.8 101.31	SS	2	59	18	1	102	○			
	BEDROCK: Shale, highly weathered, grey, moist	1.5 100.85	SS	3	22	50/4		101				
	End of Borehole	2.0					2					

Notes:
1. Borehole open upon completion of drilling.

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. MW301

Project Number:	BIGC-ENV-349F	Drilling Location:	See BH Location Plan	Logged by:	RM
Project Client:	Oakville Argus Cross LP	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	Phase Two ESA Investigation	Drilling Machine:	Track Mounted Drill	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571-595 Argus Rd., Oakville, ON	Date Started:	Feb 10, 23	Date Completed: Feb 10, 23	Revision No.: 1, 10/27/23

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: SPT, DCPT; MTO Vane* Intact/Remould; Nilcon Vane* Intact/Remould; * Undrained Shear Strength (kPa) 20 40 60 80	Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading parts per million (ppm) 100 200 300 400; Lower Explosive Limit (LEL); W_P W W_L; Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	Geodetic Ground Surface Elevation: 102.76 m DIRECT DRILLED TO 6.1 m bgs					0 1 2 3 4 5 6	102 101 100 99 98 97				
	96.66 6.1										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and requires interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commisioned and the accompanying'Notes to Record of Boreholes'.

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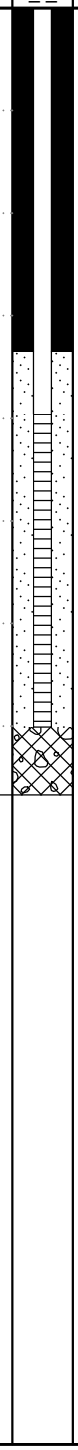
RECORD OF BOREHOLE No. BH/MW1A

Project Number:	BIGC-GEO-490A	Drilling Location:	See Borehole Location Plan	Logged by:	MV
Project Client:	Oakville Argus Cross LP	Drilling Method:	150 mm Mud Rotary/ HQ Core	Compiled by:	MV
Project Name:	Preliminary Geotechnical Investigation	Drilling Machine:	Truck Mounted Drill	Reviewed by:	SS
Project Location:	581-587 Argus Road, Oakville	Date Started:	8 Oct 21	Date Completed: 8 Oct 21	Revision No.: 0, 25/10/21

Geodetic Ground Surface Elevation: 104.53 m

DESCRIPTION	Elev.	Depth	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%
ASPHALT PAVEMENT: 50mm Asphalt over 100mm granular base	104.38	0.2	SS	1	62	5
FILL: silty clay to clayey silt, possibly reworked, mottled brown, moist, firm						
silty sand with clay, trace gravel, compact, possibly reworked below 0.76 m	103.46	1.1	SS	2	59	22
SILTY CLAY TILL: trace sand, trace gravel, occasional Shale fragments, reddish brown, moist, very stiff to hard			SS	3	100	43
pale grey, hard below 1.83 m	101.98	2.6	SS	4	100	50/15
BEDROCK: Shale, highly weathered, occasional limetone layers throughout, grey, moist to damp			SS	5	100	50/8
			SS	6	100	50/5
- first water strike						
	96.86	7.7	SS	7	100	50/5
End of Borehole			SS	8	100	50/5

Notes:
1. Borehole open and dry upon completion of drilling.
2. Groundwater level reading at 4.38 m bgs on October 18, 2021.



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Groundwater depth on completion of drilling: Dry m.

Groundwater depth observed on 18/10/2021 at a depth of: 4.38 m.

Scale: 1 : 74

RECORD OF BOREHOLE No. BM/MW2A

Project Number:	BIGC-GEO-490A	Drilling Location:	See Borehole Location Plan	Logged by:	MV
Project Client:	Oakville Argus Cross LP	Drilling Method:	96 mm Mud Rotary/ HQ Core	Compiled by:	MV
Project Name:	Preliminary Geotechnical Investigation	Drilling Machine:	Truck Mounted Drill	Reviewed by:	SS
Project Location:	581-587 Argus Road, Oakville	Date Started:	7 Oct 21 — Date Completed: 7 Oct 21	Revision No.:	0, 25/10/21

LITHOLOGY PROFILE — SOIL SAMPLING — FIELD TESTING — LAB TESTING — INSTRUMENTATION INSTALLATION — COMMENTS

Field Testing legend: PenetrationTesting: ○ SPT ● DCPT; MTO Vane*: △ Intact ▲ Remould; Nilcon Vane*: ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80

Lab Testing legend: ★ Rinse pH Values 2 4 6 8 10 12; △ Soil Vapour Reading parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL); W_P W W_L Plastic — Liquid 20 40 60 80

Geodetic Ground Surface Elevation: 104.24 m

Description	Elev. / Depth (m)	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%
ASPHALT PAVEMENT: 70mm Asphalt over 200mm granular base	103.97 / 0.3				
FILL: silty clay to clayey silt, trace gravel, dark greenish black, damp, very stiff		SS	1	70	16
---------- mottled greenish brown, stiff below 0.76 m	102.72	SS	2	75	12
CLAYEY SILT TILL: trace sand, trace gravel, grey to reddish brown, damp, hard	1.5	SS	3	79	34
	101.65	SS	4	100	50/23
BEDROCK: Shale, highly weathered to excellent quality, occasional limetone layers throughout, grey, moist to damp	2.6	SS	5	100	50/5
		SS	6	100	50/8
- first water strike		SS	7	100	50/5
ROCK CORE BEGINS at 7.32 m		RC	1	83	0
- Very Poor Quality					
- Fair Quality		RC	2	100	70
- Fair Quality		RC	3	99	72
- Good Quality soft zone from 12.06 to 12.2 m		RC	4	97	78
- Good Quality		RC	5	100	77

DEPTH (m): 1 2 3 4 5 6 7 8 9 10 11 12 13 14 — ELEVATION (m): 104 103 102 101 100 99 98 97 96 95 94 93 92 91

SPT values plotted: 50/23, 50/5, 50/8, 50/5

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▽ Groundwater depth on completion of drilling: Not measured m.

▼ Groundwater depth observed on 18/10/2021 at a depth of: 9.05 m.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and requires interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commisioned and the accompanying'Notes to Record of Boreholes'.

Scale: 1 : 74

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RECORD OF BOREHOLE No. BM/MW2A

Project Number: **BIGC-GEO-490A** Drilling Location: **See Borehole Location Plan** Logged by: **MV**

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent quality, occasional limetone layers throughout, grey, moist to damp	RC	6	100	79	15	90				
	- Good Quality some oxidised laminae at 13.87 m soft zone from 14.38 to 14.54 m						89				
	- Excellent Quality	RC	7	100	90	16	88				
	- Excellent Quality some oxidised laminae at 16.92 m	RC	8	97	95	17 18	87 86				
	- Good Quality	RC	9	97	89	19	85				
	- Excellent Quality	RC	10	100	100	20 21	84 83				
	- Excellent Quality	RC	11	100	99	22	82				
	- Good Quality fracture zone with slickenside from 24.01 to 24.29 m	RC	12	97	79	23 24	81 80				
	- Good Quality	RC	13	97	88	25	79				
	- Good Quality soft zones at 26.25 m and 27.02 to 27.07 m 76.66	RC	14	100	84	26 27	78 77				
	End of Borehole 27.6										

FIELD TESTING: Penetration Testing — ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80

LAB TESTING: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80

Notes:
1. Borehole open completion of drilling.
2. Groundwater level reading not measured upon completion of drilling due to introduced drilling water.
3. Groundwater level reading at 9.05 m bgs on October 18, 2021.

Scale: 1 : 74

RECORD OF BOREHOLE No. BM/MW3A

Project Number:	BIGC-GEO-490A	Drilling Location:	See Borehole Location Plan	Logged by:	MV
Project Client:	Oakville Argus Cross LP	Drilling Method:	150 mm Solid Stem Augering	Compiled by:	MV
Project Name:	Preliminary Geotechnical Investigation	Drilling Machine:	Truck Mounted Drill	Reviewed by:	SS
Project Location:	581-587 Argus Road, Oakville	Date Started:	8 Oct 21	Date Completed: 8 Oct 21	Revision No.: 0, 25/10/21

Geodetic Ground Surface Elevation: 104.37 m

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING: Penetration Testing (○ SPT ● DCPT); MTO Vane* (△ Intact ▲ Remould); Nilcon Vane* (◇ Intact ◆ Remould); * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT PAVEMENT: 50mm Asphalt over 150mm granular base (104.17 / 0.2)										
	FILL: silty clay to clayey silt, possibly reworked, trace sand, trace gravel, mottled brown, moist, stiff to very stiff	SS	1	38	9		104	○			
	---------- (103.30)					1					
	silty sand with clay, trace gravel, mottled pale grey, possibly reworked, compact below 0.76 m (1.1)	SS	2	70	18		103	○			
	CLAYEY SILT TILL: trace sand, trace gravel, occasional Shale fragments, reddish brown to grey, moist, very stiff to hard	SS	3	100	39	2		○			
	(101.93)	SS	4	100	50/8		102	50/8 ○			
	BEDROCK: Shale, highly weathered, occasional limetone layers throughout, grey, moist to damp (2.4)	SS	5	100	50/5	3	101	50/5 ○			
	- first water strike (99.49)	SS	6	100	50/5	4	100	50/5 ○			
	End of Borehole on Auger Refusal (4.9)										

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 4.72 m bgs upon completion of drilling.
3. Groundwater level reading at 4.24 m bgs on October 18, 2021.

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▽ Groundwater depth on completion of drilling: 4.72 m.

▼ Groundwater depth observed on 18/10/2021 at a depth of: 4.24 m.

RECORD OF BOREHOLE No. BM/MW4A

Project Number:	BIGC-GEO-490A	Drilling Location:	See Borehole Location Plan	Logged by:	MV
Project Client:	Oakville Argus Cross LP	Drilling Method:	150 mm Solid Stem Augering	Compiled by:	MV
Project Name:	Preliminary Geotechnical Investigation	Drilling Machine:	Truck Mounted Drill	Reviewed by:	SS
Project Location:	581-587 Argus Road, Oakville	Date Started:	8 Oct 21	Date Completed: 8 Oct 21	Revision No.: 0, 25/10/21

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
	Geodetic Ground Surface Elevation: 103.61 m							Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80		
	ASPHALT PAVEMENT: 50mm Asphalt over 150mm granular base 103.41 / 0.2										
	FILL: silty clay to clayey silt, thale fragments, brown to grey, moist, stiff 102.70	SS	1	75	14		103	○			
	CLAYEY SILT TILL: trace sand, trace gravel, pale slightly mottled brown to grey, moist to damp, stiff to hard 101.02 / 0.9	SS	2	51	31	1					
		SS	3	82	14	2	102	○			
		SS	4	47	75/23		101	75 ○ 23			
	BEDROCK: Shale, highly weathered, occasional limetone layers throughout, grey, moist to damp 2.6	SS	5	100	50/8	3		50 ○ 8			
		SS	6	100	50/8	4	100	50 ○ 8			
	- first water strike					5	99 ▼				
		SS	7	100	50/8	6	98	50 ○ 8			
	96.29					7 ▽	97				
	End of Borehole on Auger Refusal 7.3										

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 7.01 m bgs upon completion of drilling.
3. Groundwater level reading at 4.71 m bgs on October 18, 2021.

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▽ Groundwater depth on completion of drilling: 7.01 m.

▼ Groundwater depth observed on 18/10/2021 at a depth of: 4.71 m.

RECORD OF BOREHOLE No. BM/MW5A

Project Number:	BIGC-GEO-490A	Drilling Location:	See Borehole Location Plan	Logged by:	MV
Project Client:	Oakville Argus Cross LP	Drilling Method:	96 mm Solid Stem Augers	Compiled by:	MV
Project Name:	Preliminary Geotechnical Investigation	Drilling Machine:	Truck Mounted Drill	Reviewed by:	SS
Project Location:	581-587 Argus Road, Oakville	Date Started:	6 Oct 21 Date Completed: 6 Oct 21	Revision No.:	0, 25/10/21

LITHOLOGY PROFILE | SOIL SAMPLING | FIELD TESTING | LAB TESTING

Field Testing: PenetrationTesting: O SPT ● DCPT; MTO Vane*: △ Intact ▲ Remould; Nilcon Vane*: ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80

Lab Testing: ★ Rinse pH Values 2 4 6 8 10 12; △ Soil Vapour Reading parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL); W_P W W_L Plastic Liquid 20 40 60 80

INSTRUMENTATION INSTALLATION | COMMENTS

Geodetic Ground Surface Elevation: 103.75 m

DESCRIPTION	Elev./Depth (m)	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%
ASPHALT PAVEMENT: 70mm Asphalt over 130mm granular base	103.55 / 0.2				
FILL: silty clay to clayey silt, trace sand, trace gravel, mottled pale grey, damp, stiff to hard		SS	1	70	9
---------- occasional cobble, mottled greenish brown, hard below 0.76 m		SS	2	48	50/15
SILTY CLAY TO CLAYEY SILT TILL: trace gravel and pebbles, pale grey, damp, hard	102.23 / 1.5	SS	3	62	32
BEDROCK: Shale, highly weathered to excellent quality, occasional limetone layers throughout, grey, moist to damp	101.46 / 2.3	SS	4	100	50/8
		SS	5	100	50/8
		SS	6	100	50/10
		SS	7	100	50/8
- first water strike					
---------- ROCK CORE BEGINS at 7.32 m - Very Poor Quality		RC	1	87	0
- Fair Quality fracture zone from 8.16 to 8.72 m some conglomeratic layers throughout run		RC	2	100	61
- Fair Quality		RC	3	95	70
- Good Quality		RC	4	100	87
- Fair Quality some oxidised laminae from 12.34 to 15.39 m		RC	5	98	72

DEPTH (m): 1 2 3 4 5 6 7 8 9 10 11 12 13 14

ELEVATION (m): 103 102 101 100 99 98 97 96 95 94 93 92 91 90

SPT plot values: 50/15, 50/8, 50/8, 50/10, 50/8

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▽ Groundwater depth on completion of drilling: Not measured m.

▼ Groundwater depth observed on 18/10/2021 at a depth of: 19.04 m.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and requires interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commisioned and the accompanying'Notes to Record of Boreholes'.

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RECORD OF BOREHOLE No. BM/MW5A

Project Number: **BIGC-GEO-490A** Drilling Location: **See Borehole Location Plan** Logged by: **MV**

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent quality, occasional limetone layers throughout, grey, moist to damp							Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80		
	- Excellent Quality	RC	6	100	93	15	89	○			
	- Fair Quality sub vertical fracture from from 15.84 to 15.92 m	RC	7	100	74	16	88	○			
	- Excellent Quality	RC	8	95	93	17	87	○			
	- Excellent Quality	RC	9	100	92	18 19 ▼	86	○			
	- Excellent Quality	RC	10	98	90	20	85	○			
	- Fair Quality	RC	11	95	70	21	84	○			
	- Excellent Quality fracture zone from 23.81 to 23.91 m	RC	12	100	99	22 23	83	○			
	- Good Quality 78.45	RC	13	100	88	24 25	82 81 80 79	○			
	End of Borehole 25.3										

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level reading not measured upon completion of drilling due to introduced drilling water.
3. Groundwater level reading at 19.04 m bgs on October 18, 2021.

Scale: 1 : 74

RECORD OF BOREHOLE No. BH104EA

Project Number:	BIGC-ENV-490D	Drilling Location:	See BH Location Plan	Logged by:	TD
Project Client:	Oakville Argus Cross LP	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TD
Project Name:	Remediation Report	Drilling Machine:	Truck Mounted Drill	Reviewed by:	
Project Location:	581-587 Argus Road, Oakville, Ontario	Date Started:	22 Mar 9	Date Completed: 22 Mar 9	Revision No.: 0, 22-4-4

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 103.61 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: SPT ○ DCPT ●; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT PAVEMENT: 76 mm Asphalt over 254 mm granular	103.53 0.1										
	FILL: Silty clay, some sand, some gravel, oxidation, brown, moist		SS	1	79	11		103	○			
	------ Cobble pieces	102.09	SS	2	51	38	1		○			
	CLAYE SILT TILL: grey, moist	1.5 101.48	SS	3	100	40		102	○			
	End of Borehole	2.1					2					

Notes:
1. Borehole open upon completion of drilling.

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH104NA

Project Number: **BIGC-ENV-490D** | Drilling Location: **See BH Location Plan** | Logged by: **TD**

Project Client: **Oakville Argus Cross LP** | Drilling Method: **150 mm Solid Stem Augers** | Compiled by: **TD**

Project Name: **Remediation Report** | Drilling Machine: **Truck Mounted Drill** | Reviewed by:

Project Location: **581-587 Argus Road, Oakville, Ontario** | Date Started: **22 Mar 9** | Date Completed: **22 Mar 9** | Revision No.: **0, 22-4-4**

Geodetic Ground Surface Elevation: 103.61 m

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)
	ASPHALT: 76 mm Asphalt over 280 mm Granular (103.53, 0.1)						
	FILL: Sandy silt, reddish brown, moist	SS	1	84	12		
							103
		SS	2	75	4	1	
							102
	(101.48)	SS	3	41	13	2	
	End of Borehole 2.1						

Notes:

1. Borehole open upon completion of drilling.

FIELD TESTING

Penetration Testing: ○ SPT ● DCPT

MTO Vane*: △ Intact ▲ Remould

Nilcon Vane*: ◇ Intact ◆ Remould

* Undrained Shear Strength (kPa) 20 40 60 80

LAB TESTING

★ Rinse pH Values 2 4 6 8 10 12

Soil Vapour Reading △ parts per million (ppm) 100 200 300 400

▲ Lower Explosive Limit (LEL) W_P W W_L

Plastic Liquid 20 40 60 80

INSTRUMENTATION INSTALLATION

COMMENTS

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH104SA

Project Number:	BIGC-ENV-490D	Drilling Location:	See BH Location Plan	Logged by:	TD
Project Client:	Oakville Argus Cross LP	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TD
Project Name:	Remediation Report	Drilling Machine:	Truck Mounted Drill	Reviewed by:	
Project Location:	581-587 Argus Road, Oakville, Ontario	Date Started:	22 Mar 9	Date Completed: 22 Mar 9	Revision No.: 0, 22-4-4

Geodetic Ground Surface Elevation: 103.61 m

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)
	ASPHALT: 50 mm Asphalt over 200 mm granular 103.56						
	FILL: Silty clay, black staining, dark brown, moist	SS	1	70	9		
	------ trace gravel, oxidation, cobble pieces	SS	2	100	38	1	103
	102.00						
	CLAYEY SILT TILL: grey, moist 1.6	SS	3	75	50		102
	101.48					2	
	End of Borehole 2.1						

Notes:
1. Borehole open upon completion of drilling.

FIELD TESTING

Penetration Testing: ○ SPT ● DCPT

MTO Vane*: △ Intact ▲ Remould

Nilcon Vane*: ◇ Intact ◆ Remould

* Undrained Shear Strength (kPa): 20 40 60 80

LAB TESTING

★ Rinse pH Values: 2 4 6 8 10 12

Soil Vapour Reading: △ parts per million (ppm): 100 200 300 400

▲ Lower Explosive Limit (LEL): W_P W W_L

Plastic Liquid: 20 40 60 80

INSTRUMENTATION INSTALLATION

COMMENTS

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH104WA

Project Number:	BIGC-ENV-490D	Drilling Location:	See BH Location Plan	Logged by:	TD
Project Client:	Oakville Argus Cross LP	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TD
Project Name:	Remediation Report	Drilling Machine:	Truck Mounted Drill	Reviewed by:	
Project Location:	581-587 Argus Road, Oakville, Ontario	Date Started:	22 Mar 9	Date Completed: 22 Mar 9	Revision No.: 0, 22-4-4

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 103.61 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 76 mm Asphalt over 254 mm granular	103.53 0.1										
	FILL: Silty clay, grey, moist		SS	1	51	15			○			
	------ Slag inclusions and cobble pieces		SS	2	84	25	1	103	○			
		102.09										
	CLAYEY SILT TILL: mottled grey, moist	1.5	SS	3	100	50		102	○			
		101.48					2					
	End of Borehole	2.1										
	Notes: 1. Borehole open upon completion of drilling.											

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH104WB

Project Number: **BIGC-ENV-490D** | Drilling Location: **See BH Location Plan** | Logged by: **TD**

Project Client: **Oakville Argus Cross LP** | Drilling Method: **150 mm Solid Stem Augers** | Compiled by: **TD**

Project Name: **Remediation Report** | Drilling Machine: **Truck Mounted Drill** | Reviewed by:

Project Location: **581-587 Argus Road, Oakville, Ontario** | Date Started: **22 Mar 9** | Date Completed: **22 Mar 9** | Revision No.: **0, 22-4-4**

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 103.61 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 76 mm Asphalt over 254 mm granular 103.53 0.1 **FILL:** Silty clay, black staining, brown moist 103.00	SS	1	87	10			○			
	End of Borehole 0.6						103				
	Notes: 1. Borehole was open upon completion of drilling.										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 53

RECORD OF BOREHOLE No. BH105

Project Number: **BIGC-ENV-490D** | Drilling Location: **See BH Location Plan** | Logged by: **TD**

Project Client: **Oakville Argus Cross LP** | Drilling Method: **150 mm Solid Stem Augers** | Compiled by: **TD**

Project Name: **Remediation Report** | Drilling Machine: **Truck Mounted Drill** | Reviewed by:

Project Location: **581-587 Argus Road, Oakville, Ontario** | Date Started: **22 Mar 9** | Date Completed: **22 Mar 9** | Revision No.: **0, 22-4-4**

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 104.37 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 114 mm Asphalt over 228 mm granular 104.26 0.1										
	FILL: Silty clay, cobble pieces, brown to reddish brown, moistt 103.76	SS	1	62	15		104	○			
	End of Borehole 0.6										

Notes:
1. Borehole was open upon completion of drilling.

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 53

RECORD OF: MW101

PROJECT NO: **CT2716.00**
CLIENT: **DISTRIKT DEVELOPMENTS**
ADDRESS LINE 1: **571 ARGUS ROAD**
CITY / PROVINCE: **OAKVILLE, ONTARIO**

BORING DATE: **SEPTEMBER 11, 2017**
TYPE OF AUGER: **HOLLOW**
TYPE OF RIG: **GEOPROBE 7822**
CONTRACTOR: **LANDSHARK DRILLING INC.**

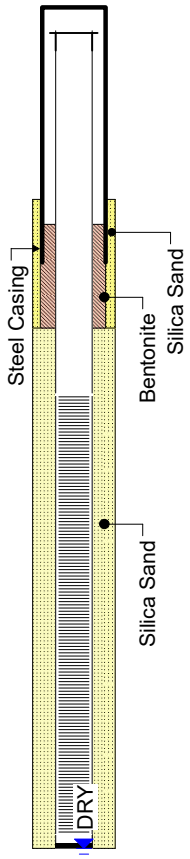
TERRAPEX

VAPOUR MONITOR: **RKI EAGLE II**
PIPE SCHEDULE: **40**
RISER LENGTH: **0.61 m**

BOREHOLE DIAMETER: **200 mm**
SCREEN SLOT #: **10**
SAND TYPE: **SILICA SAND #2**

WELL DIAMETER: **50 mm**
SCREEN LENGTH: **2.13 m**
SEALANT TYPE: **BENTONITE**

SUBSURFACE PROFILE			SAMPLE							
Depth (ft / m)	Strataplot	Description	Elevation	Number	Type	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Laboratory Testing	Piezometer or Monitoring Well Installation
0 / 0		Ground Surface	99.37							
0 – 2 / 0 – 1		***SILT, SAND AND GRAVEL (FILL)*** BROWN, MOIST	98.61	1A	DP	80%	-	<5 ppm	METALS and INORGANICS, PAHs (DUPLICATES)	
2 – 5 / 1		***SANDY SILT, TRACE GRAVEL (NATIVE)*** BROWN, MOIST	97.78	1B	DP	100%	-	<5 ppm		
5 – 9 / 2		***SILTY CLAY, TRACE GRAVEL AND SAND*** GREY, MOIST	96.47	2A	DP	100%	-	<5 ppm	VOCs, PHCs (F1-F4) (DUPLICATES)	
				2B	DP	100%	-	<5 ppm		
9 – 10 / 3		***SHALE BEDROCK*** GREY, MOIST	96.32							
10 / 3		***REFUSAL AT 3.05 m bg***								



LOGGED BY: **MS** INPUT BY: **MS** CHECKED BY: **SJS** INPUT DATE: **SEPTEMBER 17, 2018**

RECORD OF: MW102

PROJECT NO: **CT2716.00**
CLIENT: **DISTRIKT DEVELOPMENTS**
ADDRESS LINE 1: **217 CROSS AVENUE**
CITY / PROVINCE: **OAKVILLE, ONTARIO**

BORING DATE: **SEPTEMBER 11, 2017**
TYPE OF AUGER: **HOLLOW**
TYPE OF RIG: **GEOPROBE 7822**
CONTRACTOR: **LANDSHARK DRILLING INC.**

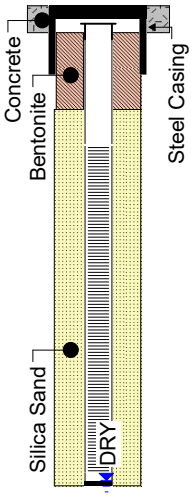
TERRAPEX

VAPOUR MONITOR: **RKI EAGLE II**
PIPE SCHEDULE: **40**
RISER LENGTH: **0.61 m**

BOREHOLE DIAMETER: **200 mm**
SCREEN SLOT #: **10**
SAND TYPE: **SILICA SAND #2**

WELL DIAMETER: **50 mm**
SCREEN LENGTH: **1.52 m**
SEALANT TYPE: **BENTONITE**

SUBSURFACE PROFILE			SAMPLE							
Depth (ft / m)	Strataplot	Description	Elevation	Number	Type	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Laboratory Testing	Piezometer or Monitoring Well Installation
		Ground Surface	**98.98**							
0		***ASPHALT***	98.86							
1		***SAND AND GRAVEL (FILL)*** BROWN, MOIST	98.22	1A	DP	10%	-	-		
2		***SILTY SAND, TRACE COBBLES AND GRAVEL (NATIVE)*** BROWN, MOIST	97.46	1B	DP	100%	-	-	METALS and INORGANICS, PAHs	
5		***SILTY CLAY, TRACE GRAVEL AND SAND*** GREY, MOIST	96.69	2A	DP	100%	-	<5 ppm	VOCs, PHCs (F1-F4)	
8		***SHALE BEDROCK, SOME CLAY*** GREY, MOIST	96.39	2B	DP	20%	-	<5 ppm		
9		***REFUSAL AT 2.59 m bg***								



LOGGED BY: **MS** INPUT BY: **MS** CHECKED BY: **SJS** INPUT DATE: **SEPTEMBER 17, 2018**

RECORD OF: BH103

PROJECT NO: **CT2716.00**
CLIENT: **DISTRIKT DEVELOPMENTS**
ADDRESS LINE 1: **217 CROSS AVENUE**
CITY / PROVINCE: **OAKVILLE, ONTARIO**

BORING DATE: **SEPTEMBER 11, 2017**
TYPE OF AUGER: **HOLLOW**
TYPE OF RIG: **GEOPROBE 7822**
CONTRACTOR: **LANDSHARK DRILLING INC.**

VAPOUR MONITOR: **RKI EAGLE II**
PIPE SCHEDULE: **-**
RISER LENGTH: **-**

BOREHOLE DIAMETER: **200 mm**
SCREEN SLOT #: **-**
SAND TYPE: **-**

WELL DIAMETER: **-**
SCREEN LENGTH: **-**
SEALANT TYPE: **BENTONITE**

SUBSURFACE PROFILE			SAMPLE							
Depth (ft / m)	Strataplot	Description	Elevation	Number	Type	% Recovery	SPT (n)	SV (ppm or %LEL - if applicable)	Laboratory Testing	Piezometer or Monitoring Well Installation
0		Ground Surface	**98.29**							
0		***ASPHALT***	98.20							
1		***SAND AND GRAVEL, TRACE COBBLES (FILL)*** BROWN, MOIST	97.53	1A	DP	30%	-	-	METALS and INORGANICS, PAHs, VOCs, PHCs (F1-F4)	
3 (1)		***SANDY SILT (NATIVE)*** BROWN, WET	96.77	1B	DP	100%	-	-		
5		***SILTY CLAY, TRACE GRAVEL AND SAND*** GREY, MOIST	96.00	2A	DP	100%	-	<5 ppm		
8		***SHALE BEDROCK*** GREY, MOIST	95.24	2B	DP	100%	-	<5 ppm		
10 (3)		***REFUSAL AT 3.05 m bg***								
13 (4)										
15										

LOGGED BY: **MS** INPUT BY: **SF** CHECKED BY: **SJS** INPUT DATE: **SEPTEMBER 25, 2018**

RECORD OF: MW104

PROJECT NO: **CT2716.00**
CLIENT: **DISTRIKT DEVELOPMENTS**
ADDRESS LINE 1: **217 CROSS AVENUE**
CITY / PROVINCE: **OAKVILLE, ONTARIO**

BORING DATE: **SEPTEMBER 11, 2017**
TYPE OF AUGER: **HOLLOW**
TYPE OF RIG: **GEOPROBE 7822**
CONTRACTOR: **LANDSHARK DRILLING INC.**

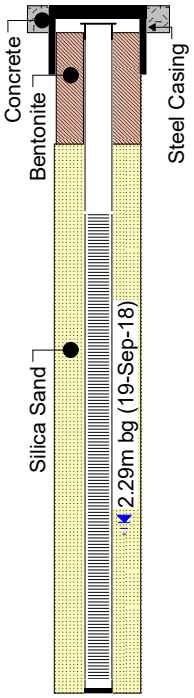
TERRAPEX

VAPOUR MONITOR: **RKI EAGLE II**
PIPE SCHEDULE: **40**
RISER LENGTH: **0.61 m**

BOREHOLE DIAMETER: **200 mm**
SCREEN SLOT #: **10**
SAND TYPE: **SILICA SAND #2**

WELL DIAMETER: **50 mm**
SCREEN LENGTH: **2.13 m**
SEALANT TYPE: **BENTONITE**

SUBSURFACE PROFILE			SAMPLE							
Depth (ft / m)	Strataplot	Description	Elevation	Number	Type	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Laboratory Testing	Piezometer or Monitoring Well Installation
0		Ground Surface	97.76							
0		***ASPHALT***	97.67							
1		***SAND AND GRAVEL (FILL)*** BROWN, MOIST		1A	DP	40%	-	<5 ppm	METALS and INORGANICS	
2			97.00							
3	1	***SANDY SILT (NATIVE)*** RED, WET		1B	DP	100%	-	<5 ppm	SVOCs (DUPLICATE)	
5			96.24							
6	2	***SILTY CLAY*** GREY, MOIST		2A	DP	100%	-	<5 ppm	VOCs, PHCs (F1-F4)	
8				2B	DP	100%	-	<5 ppm		
9			94.86							
10	3	***SHALE BEDROCK*** GREY, MOIST	94.71							
10		***REFUSAL AT 3.05 m bg***								
13	4									
15										



LOGGED BY: **MS** INPUT BY: **SF** CHECKED BY: **SJS** INPUT DATE: **SEPTEMBER 25, 2018**

RECORD OF: MW105

PROJECT NO: **CT2716.00**
CLIENT: **DISTRIKT DEVELOPMENTS**
ADDRESS LINE 1: **217 CROSS AVENUE**
CITY / PROVINCE: **OAKVILLE, ONTARIO**

BORING DATE: **SEPTEMBER 11, 2017**
TYPE OF AUGER: **HOLLOW**
TYPE OF RIG: **GEOPROBE 7822**
CONTRACTOR: **LANDSHARK DRILLING INC.**

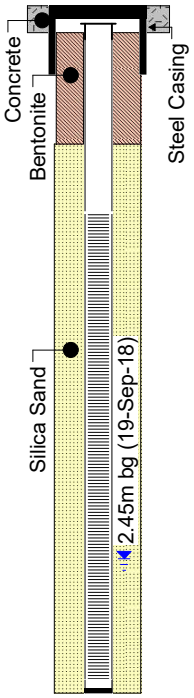
TERRAPEX

VAPOUR MONITOR: **RKI EAGLE II**
PIPE SCHEDULE: **40**
RISER LENGTH: **0.61 m**

BOREHOLE DIAMETER: **200 mm**
SCREEN SLOT #: **10**
SAND TYPE: **SILICA SAND #2**

WELL DIAMETER: **50 mm**
SCREEN LENGTH: **2.13 m**
SEALANT TYPE: **BENTONITE**

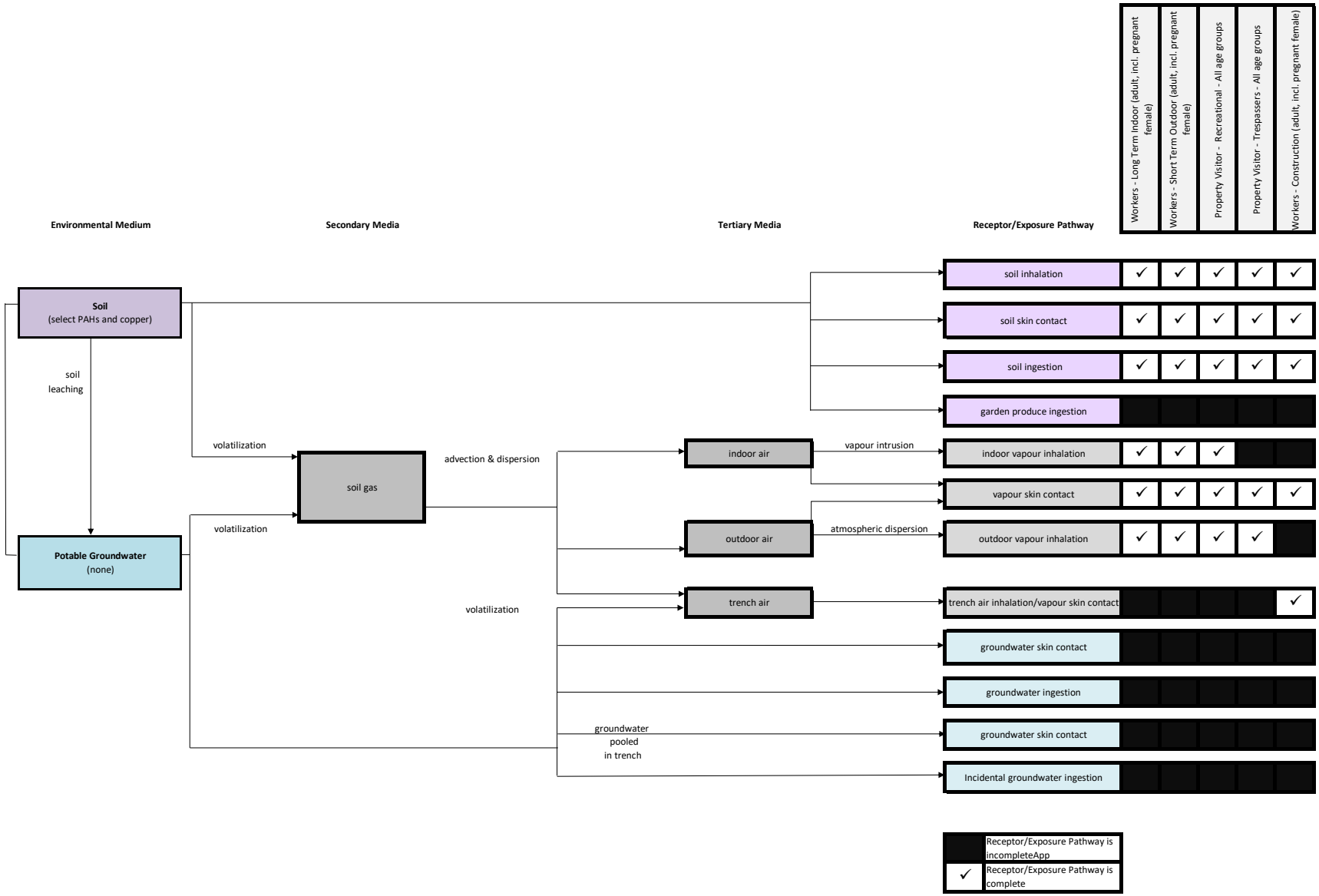
SUBSURFACE PROFILE			SAMPLE							
Depth (ft / m)	Strataplot	Description	Elevation	Number	Type	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Laboratory Testing	Piezometer or Monitoring Well Installation
		Ground Surface	97.68							
		ASPHALT	97.59							
		SAND AND GRAVEL (FILL) GREY, MOIST		1A	DP	30%	-	-	METALS and INORGANICS, SVOCs	
			96.92							
		SANDY SILT (NATIVE) RED, WET		1B	DP	100%	-	<5 ppm		
			96.16							
		SILTY CLAY, TRACE GRAVEL GREY, WET		2A	DP	100%	-	<5 ppm	VOCs, PHCs (F1-F4)	
				2B	DP	100%	-	<5 ppm		
			94.78							
		SHALE BEDROCK GREY, MOIST	94.63							
		REFUSAL AT 3.05 m bg								



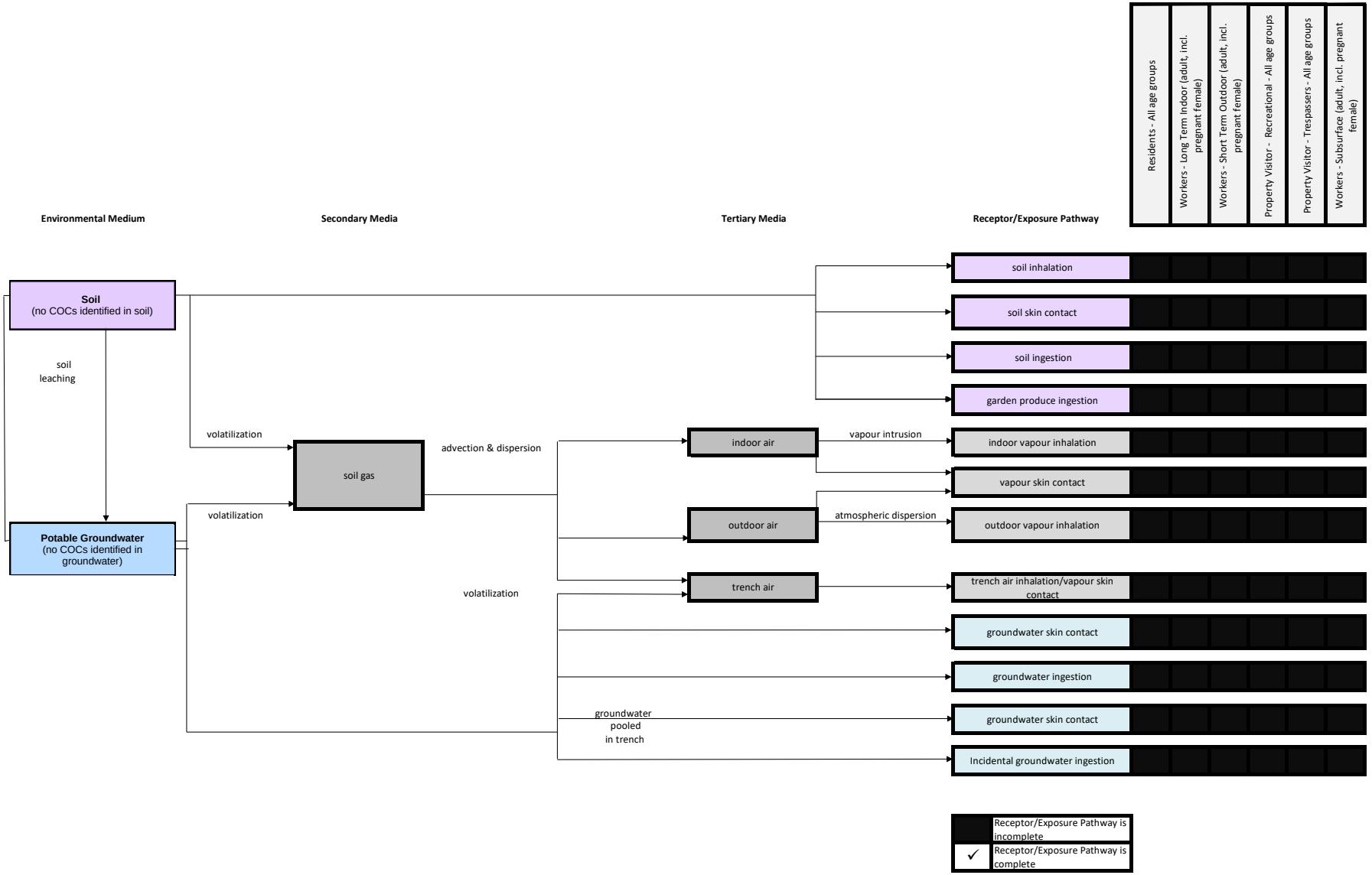
LOGGED BY: **MS** INPUT BY: **SF** CHECKED BY: **SJS** INPUT DATE: **SEPTEMBER 25, 2018**

Appendix D – Conceptual Site Models

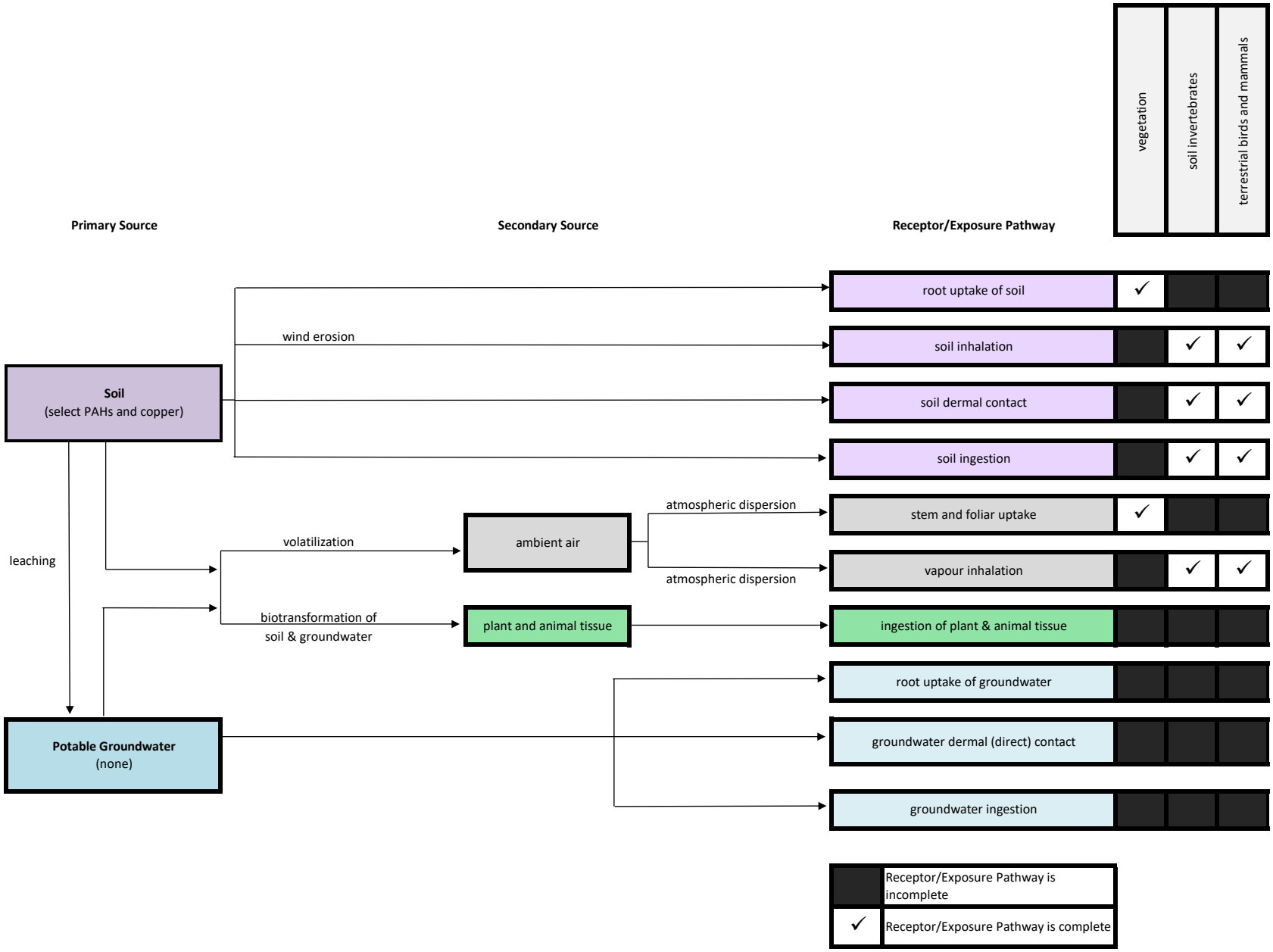
Appendix D.1 - Pre-Remediation Human Health Conceptual On-Site Model



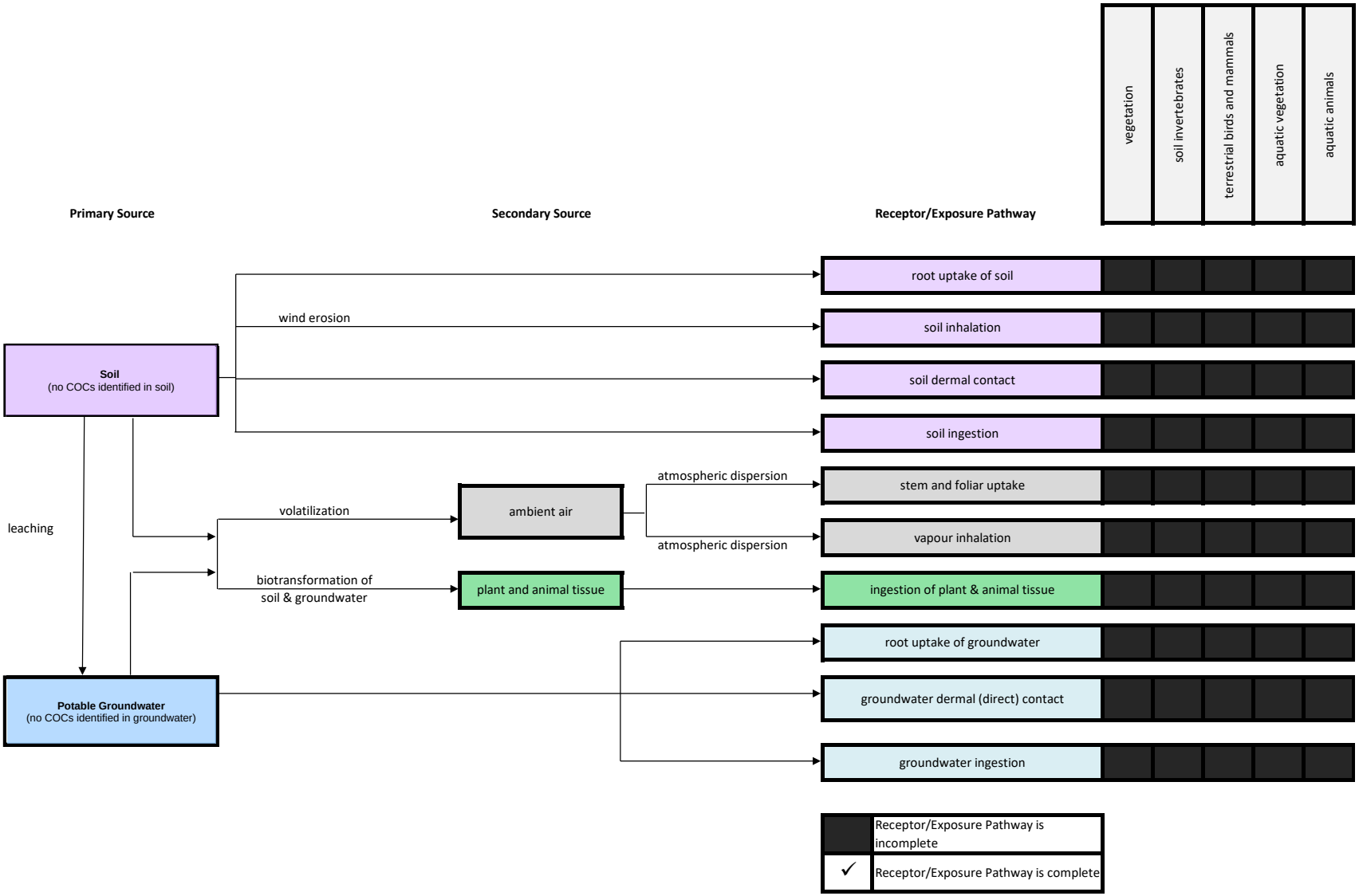
Appendix D.2 - Post Remediation Human Health Conceptual On-Site Model



Appendix D.3 - Pre-Remediation Ecological Conceptual On-Site Model



Appendix D.4 - Post Remediation Ecological Conceptual on-Site Model



Appendix E - Survey Plan

PHASE ONE ESA/PHASE TWO ESA/RSC PROPERTY BOUNDARY

SURVEYOR'S REAL PROPERTY REPORT
PART 1 - PLAN OF SURVEY OF
PART OF LOTS 13 AND 14 CONCESSION 3 SOUTH OF DUNDAS STREET
(GEOGRAPHIC TOWNSHIP OF TRAFALGAR)
TOWN OF OAKVILLE
REGIONAL MUNICIPALITY OF HALTON
SCALE 1 : 250

5 0 5 10 15 metres

J.D. BARNES LIMITED

METRIC DISTANCES AND COORDINATES SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048.

PART 2 - SURVEY REPORT

- **DESCRIPTION**
  PART OF LOTS 13 AND 14, CONCESSION 3, SOUTH OF DUNDAS STREET, AS DESCRIBED BY PINS 24816-0043 (LT), 24816-0044 (LT), 24816-0045 (LT) AND 24816-0144 (LT),
- **REGISTERED EASEMENTS AND/OR RIGHTS-OF-WAY**
  PIN 24816-0043 (LT) - SUBJECT TO AN EASEMENT AS IN INST. No. H816820, OVER PARTS 2 AND 3 ON PLAN 20R-13210.
  PIN 24816-0043 (LT) - SUBJECT TO AN EASEMENT AS IN INST. No. 487336, OVER PART 5 ON PLAN 20R-3864.
  PIN 24816-0043 (LT) - SUBJECT TO A RIGHT-OF-WAY AS IN INST. No. 487707, OVER PART 5 ON PLAN 20R-3864.
  PIN 24816-0044 (LT) - SUBJECT TO AN EASEMENT AS IN INST. No. H816821, OVER PART 1 ON PLAN 20R-13210.
- **ZONING COMPLIANCE**
  COMPLIANCE WITH ONTARIO BUILDING CODE SETBACK REQUIREMENTS ARE NOT VERIFIED BY THIS SURVEY.
- **ADDITIONAL REMARKS**
  PLAN PREPARED FOR OAKVILLE ARGUS CROSS LP.

NOTES

BEARINGS ARE UTM GRID, DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS, UTM ZONE 17, NAD83 (CSRS) (2010.0).

DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99972819.

FOR BEARING COMPARISONS, A ROTATION OF 0°52'50" COUNTER-CLOCKWISE WAS APPLIED TO BEARINGS ON P1, P2, P3, P4 P5, P6, D1, D2 AND D3.

LEGEND

■	DENOTES	SURVEY MONUMENT FOUND
□	DENOTES	SURVEY MONUMENT SET
SIB	DENOTES	STANDARD IRON BAR
SSIB	DENOTES	SHORT STANDARD IRON BAR
RIB	DENOTES	ROUND IRON BAR
IB	DENOTES	IRON BAR
CC	DENOTES	CUT CROSS
CP	DENOTES	CONCRETE PIN AND WASHER
PB	DENOTES	PLASTIC BAR
WIT	DENOTES	WITNESS
P1	DENOTES	REGISTERED PLAN 1333
P2	DENOTES	SURVEYOR'S REAL PROPERTY REPORT BY DAVID HORWOOD LIMITED, DATED DECEMBER 13, 2001. FILE No. 5254.
P3	DENOTES	PLAN 20R-13210
P4	DENOTES	PLAN 20R-3864
P5	DENOTES	PLAN 20R-11413
P6	DENOTES	PLAN OF SURVEY BY C.A. SEXTON LIMITED, DATED JULY 5, 1979
P7	DENOTES	SURVEYOR'S REAL PROPERTY REPORT BY FRED G. CUNNINGHAM, DATED DECEMBER 15, 1995. FILE No. 174-95 (80-87).
D1		INSTRUMENT No. 817079
D2	DENOTES	INSTRUMENT No. H857135
D3	DENOTES	INSTRUMENT No. 765240
MEAS	DENOTES	MEASURED
760	DENOTES	K.H. McCONNELL, O.L.S.
950	DENOTES	F.G. CUNNINGHAM, O.L.S.
1217	DENOTES	HELMUT PILLER, O.L.S.
OAK	DENOTES	TOWN OF OAKVILLE

N=NORTH / S=SOUTH / E=EAST / W=WEST

ALL SET SSIB AND PB MONUMENTS WERE USED DUE TO LACK OF OVERBURDEN AND/OR PROXIMITY OF UNDERGROUND UTILITIES IN ACCORDANCE WITH SECTION 11 (4) OF O.REG. 525/91.

PRIMARY CONTOURS ARE AT 1.00m INTERVALS.
SECONDARY CONTOURS ARE AT 0.25m INTERVALS.

ELEVATION NOTE

ELEVATIONS ARE OF GEODETIC ORIGIN (CGVD-1928:78), AND ARE DERIVED FROM GNSS OBSERVATIONS AND NATURAL RESOURCES CANADA'S GEOID MODEL HT2.0.

LOCAL BENCHMARK No. 1

CUT CROSS IN CONCRETE SIDEWALK, LOCATED AT THE NORTHERN CORNER OF THE INTERSECTION OF CROSS AVENUE AND ARGUS ROAD, AS SHOWN ON THE FACE OF PLAN.
ELEVATION=101.39m

LOCAL BENCHMARK No. 2

CUT CROSS IN CONCRETE SIDEWALK, LOCATED ON THE SOUTHEASTERN SIDE OF CROSS AVENUE ACROSS FROM No. 217, AS SHOWN ON THE FACE OF PLAN.
ELEVATION=100.98m

TOPOGRAPHIC LEGEND

CONC	DENOTES CONCRETE
CB	DENOTES CATCHBASIN
CB	DENOTES SINGLE CATCHBASIN
G METER	DENOTES GAS METER
GV	DENOTES GAS VALVE
HMH	DENOTES HYDRO MANHOLE
MH	DENOTES MANHOLE
SAN MH	DENOTES SANITARY MANHOLE
BH	DENOTES BORE HOLE
MW	DENOTES MONITORING WELL
BOL	DENOTES BOLLARD
HP	DENOTES HYDRO POLE
HT	DENOTES HYDRO TRANSFORMER
LS	DENOTES LIGHT STANDARD
TSC	DENOTES TRAFFIC SIGNAL CONTROL
PED	DENOTES TELEPHONE PEDESTAL
H	DENOTES FIRE HYDRANT
WV	DENOTES WATER VALVE
OC	DENOTES OVERHEAD CABLE
	DENOTES CONIFEROUS TREE DIA=DIAMETER OF TRUNK IN METRES
	DENOTES DECIDUOUS TREE DIA=DIAMETER OF TRUNK IN METRES

	AREA (hectares)	AREA (acres)
PIN 24816-0034 (LT)	0.1870	0.4621
PIN 24816-0035 (LT)	0.1923	0.4752
PIN 24816-0043 (LT)	0.3265	0.8068
PIN 24816-0044 (LT)	0.4384	1.0833
PIN 24816-0114 (LT)	0.1157	0.2859
TOTAL AREA	1.2599	3.1133

ASSOCIATION OF ONTARIO LAND SURVEYORS
PLAN SUBMISSION FORM
2123271

THIS PLAN IS NOT VALID UNLESS IT IS AN EMBOSSED ORIGINAL COPY ISSUED BY THE SURVEYOR In accordance with Regulation 1026, Section 29(3).

SURVEYOR'S CERTIFICATE

I CERTIFY THAT:
1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.
2. THE SURVEY WAS COMPLETED ON THE 16th DAY OF NOVEMBER, 2020.

NOVEMBER 17, 2020 — DATE

R.S. QUERUBIN
ONTARIO LAND SURVEYOR

J.D. BARNES LIMITED
SURVEYING MAPPING GIS
LAND INFORMATION SPECIALISTS
401 WHEELABRATOR WAY, SUITE A, MILTON, ON L9T 3C1
T: (905) 875-9955 F: (905) 875-9956 www.jdbarnes.com

DRAWN BY:	CHECKED BY:	REFERENCE NO.:
AP	RSQ	20-30-586-00-A

FILE: G:\20-30-586\00\Drawing\20-30-586-A.dgn DATED: NOVEMBER 17th, 2020

PLOTTED: 3/3/2023

BEFORE DIGGING, UNDERGROUND SERVICES SHOULD BE LOCATED ON SITE BY THE RESPECTIVE AGENCIES.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT LOCAL BENCHMARKS HAVE NOT BEEN ALTERED OR DISTURBED AND THAT THE RELATIVE ELEVATIONS AGREE WITH THE INFORMATION SHOWN ON THIS PLAN.

Appendix F - Laboratory Certificates of Analysis

AGAT Laboratories

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

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490C

AGAT WORK ORDER: 21T828695

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Nov 18, 2021

PAGES (INCLUDING COVER): 10

VERSION*: 1

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

Notes

AGAT Laboratories

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

Certificate of Analysis

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581-587 Argus Road, Oakville

SAMPLED BY:MV

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)

DATE RECEIVED: 2021-11-10

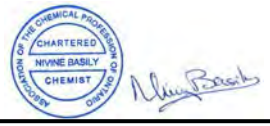
DATE REPORTED: 2021-11-18

SAMPLE DESCRIPTION:				BH/MW1-SS2	BH/MW2-SS1	BH/MW3-SS1	BH/MW4-SS1	BH/MW5-SS1
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-10-08 09:00	2021-10-07 08:20	2021-10-08 11:30	2021-10-08 14:50	2021-10-06 08:30
Parameter	Unit	G / S	RDL	3196779	3196864	3196865	3196866	3196867
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	7	8	7	5	12
Barium	µg/g	390	2.0	89.0	104	147	63.6	56.1
Beryllium	µg/g	4	0.4	0.7	0.8	0.9	0.4	0.6
Boron	µg/g	120	5	15	14	19	12	16
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	<0.5	<0.5	0.6
Chromium	µg/g	160	5	19	19	27	16	15
Cobalt	µg/g	22	0.5	9.2	10.4	13.7	5.3	8.2
Copper	µg/g	140	1.0	78.4	88.8	98.8	26.2	71.3
Lead	µg/g	120	1	16	17	14	28	34
Molybdenum	µg/g	6.9	0.5	1.4	1.4	1.7	1.0	1.2
Nickel	µg/g	100	1	20	21	31	13	16
Selenium	µg/g	2.4	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g	20	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.98	0.89	0.96	0.68	0.71
Vanadium	µg/g	86	0.4	30.3	31.7	43.7	28.8	24.4
Zinc	µg/g	340	5	134	89	94	84	129

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581-587 Argus Road, Oakville

SAMPLED BY:MV

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

DATE RECEIVED: 2021-11-10

DATE REPORTED: 2021-11-18

				SAMPLE DESCRIPTION:	BH/MW1-SS2	BH/MW2-SS1	BH/MW3-SS1	BH/MW4-SS1	BH/MW5-SS1
				SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil
				DATE SAMPLED:	2021-10-08 09:00	2021-10-07 08:20	2021-10-08 11:30	2021-10-08 14:50	2021-10-06 08:30
Parameter	Unit	G / S	RDL		3196779	3196864	3196865	3196866	3196867
Boron (Hot Water Soluble)	µg/g	1.5	0.10		0.19	0.39	0.31	0.43	0.62

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581-587 Argus Road, Oakville

SAMPLED BY:MV

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

DATE RECEIVED: 2021-11-10

DATE REPORTED: 2021-11-18

SAMPLE DESCRIPTION:				BH/MW1-SS2	BH/MW2-SS1	BH/MW3-SS1	BH/MW4-SS1	BH/MW5-SS1
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-10-08 09:00	2021-10-07 08:20	2021-10-08 11:30	2021-10-08 14:50	2021-10-06 08:30
Parameter	Unit	G / S	RDL	3196779	3196864	3196865	3196866	3196867
Naphthalene	µg/g	0.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05	<0.05	<0.05	0.25	0.10
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	0.08	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05	<0.05	0.08	0.93	0.30
Pyrene	µg/g	78	0.05	<0.05	<0.05	0.08	0.85	0.26
Benz(a)anthracene	µg/g	0.5	0.05	<0.05	<0.05	<0.05	0.47	0.11
Chrysene	µg/g	7	0.05	<0.05	<0.05	<0.05	0.37	0.08
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	0.40	0.09
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	0.15	0.08
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	0.26	0.07
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05	<0.05	<0.05	0.11	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05	<0.05	<0.05	0.16	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	17.1	14.2	10.0	15.1	15.2
Surrogate	Unit	Acceptable Limits						
Naphthalene-d8	%	50-140		105	78	124	112	106
Acridine-d9	%	50-140		77	85	91	103	107
Terphenyl-d14	%	50-140		85	99	117	105	63

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

3196779-3196867 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

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Exceedance Summary

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
3196866	BH/MW4-SS1	ON T2 S RPI CT	O. Reg. 153(511) - PAHs (Soil)	Fluoranthene	µg/g	0.69	0.93

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C
ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581-587 Argus Road, Oakville
SAMPLED BY:MV

Soil Analysis

RPT Date: Nov 18, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals (Including Hydrides) (Soil)															
Antimony	3196874		<0.8	<0.8	NA	< 0.8	118%	70%	130%	108%	80%	120%	106%	70%	130%
Arsenic	3196874		5	5	0.0%	< 1	113%	70%	130%	108%	80%	120%	105%	70%	130%
Barium	3196874		119	111	7.0%	< 2.0	108%	70%	130%	105%	80%	120%	100%	70%	130%
Beryllium	3196874		1.2	1.2	NA	< 0.4	108%	70%	130%	110%	80%	120%	114%	70%	130%
Boron	3196874		8	6	NA	< 5	77%	70%	130%	110%	80%	120%	108%	70%	130%
Cadmium	3196874		<0.5	<0.5	NA	< 0.5	95%	70%	130%	103%	80%	120%	105%	70%	130%
Chromium	3196874		35	33	5.9%	< 5	103%	70%	130%	104%	80%	120%	102%	70%	130%
Cobalt	3196874		14.1	14.1	0.0%	< 0.5	97%	70%	130%	105%	80%	120%	101%	70%	130%
Copper	3196874		23.0	23.0	0.0%	< 1.0	92%	70%	130%	107%	80%	120%	99%	70%	130%
Lead	3196874		24	22	8.7%	< 1	104%	70%	130%	107%	80%	120%	100%	70%	130%
Molybdenum	3196874		0.7	0.6	NA	< 0.5	107%	70%	130%	117%	80%	120%	113%	70%	130%
Nickel	3196874		27	27	0.0%	< 1	98%	70%	130%	105%	80%	120%	99%	70%	130%
Selenium	3196874		<0.8	<0.8	NA	< 0.8	104%	70%	130%	106%	80%	120%	105%	70%	130%
Silver	3196874		<0.5	<0.5	NA	< 0.5	104%	70%	130%	104%	80%	120%	101%	70%	130%
Thallium	3196874		<0.5	<0.5	NA	< 0.5	117%	70%	130%	111%	80%	120%	104%	70%	130%
Uranium	3196874		1.35	1.22	NA	< 0.50	117%	70%	130%	111%	80%	120%	107%	70%	130%
Vanadium	3196874		48.2	45.9	4.9%	< 0.4	112%	70%	130%	104%	80%	120%	100%	70%	130%
Zinc	3196874		94	92	2.2%	< 5	100%	70%	130%	107%	80%	120%	97%	70%	130%

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

O. Reg. 153(511) - ORPs (Soil)															
Boron (Hot Water Soluble)	3196874		0.41	0.40	NA	< 0.10	88%	60%	140%	103%	70%	130%	113%	60%	140%

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

Certified By:

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581-587 Argus Road, Oakville

SAMPLED BY:MV

Trace Organics Analysis

RPT Date: Nov 18, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	3188273		< 0.05	< 0.05	NA	< 0.05	105%	50%	140%	70%	50%	140%	114%	50%	140%
Acenaphthylene	3188273		< 0.05	< 0.05	NA	< 0.05	78%	50%	140%	75%	50%	140%	75%	50%	140%
Acenaphthene	3188273		< 0.05	< 0.05	NA	< 0.05	85%	50%	140%	94%	50%	140%	96%	50%	140%
Fluorene	3188273		< 0.05	< 0.05	NA	< 0.05	78%	50%	140%	85%	50%	140%	93%	50%	140%
Phenanthrene	3188273		< 0.05	< 0.05	NA	< 0.05	90%	50%	140%	78%	50%	140%	92%	50%	140%
Anthracene	3188273		< 0.05	< 0.05	NA	< 0.05	85%	50%	140%	74%	50%	140%	104%	50%	140%
Fluoranthene	3188273		< 0.05	< 0.05	NA	< 0.05	96%	50%	140%	109%	50%	140%	78%	50%	140%
Pyrene	3188273		< 0.05	< 0.05	NA	< 0.05	105%	50%	140%	86%	50%	140%	85%	50%	140%
Benz(a)anthracene	3188273		< 0.05	< 0.05	NA	< 0.05	78%	50%	140%	95%	50%	140%	93%	50%	140%
Chrysene	3188273		< 0.05	< 0.05	NA	< 0.05	88%	50%	140%	77%	50%	140%	92%	50%	140%
Benzo(b)fluoranthene	3188273		< 0.05	< 0.05	NA	< 0.05	74%	50%	140%	71%	50%	140%	91%	50%	140%
Benzo(k)fluoranthene	3188273		< 0.05	< 0.05	NA	< 0.05	85%	50%	140%	85%	50%	140%	114%	50%	140%
Benzo(a)pyrene	3188273		< 0.05	< 0.05	NA	< 0.05	93%	50%	140%	93%	50%	140%	78%	50%	140%
Indeno(1,2,3-cd)pyrene	3188273		< 0.05	< 0.05	NA	< 0.05	92%	50%	140%	92%	50%	140%	95%	50%	140%
Dibenz(a,h)anthracene	3188273		< 0.05	< 0.05	NA	< 0.05	91%	50%	140%	104%	50%	140%	93%	50%	140%
Benzo(g,h,i)perylene	3188273		< 0.05	< 0.05	NA	< 0.05	97%	50%	140%	77%	50%	140%	92%	50%	140%

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

Certified By: N Popowkolof

AGAT Laboratories

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581-587 Argus Road, Oakville

SAMPLED BY:MV

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581-587 Argus Road, Oakville

SAMPLED BY:MV

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	CCME Tier 1 Method	BALANCE

AGAT Laboratories

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Chain of Custody Record

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

Report Information:

Company: BIG Consulting Inc
Contact: Rebecca Morrison
Address: 12-5500 Tonken Road, Mississauga, Ontario, L4W2Z4
Phone: 6476748087 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email: mvaughan@brownfieldigi.com

Project Information:

Project: BIGC-ENV-490A
Site Location: 581-587 Argus Road, Oakville
Sampled By: MV
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis

Invoice Information:

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

Regulatory Requirements:

(Please check all applicable boxes)

☑ Regulation 153/04
Table 2 (Indicate One)
☐ Ind/Com
☑ Res/Park
☐ Agriculture
Soil Texture (Check One)
☑ Coarse
☐ Fine

☐ Excess Soils R406
Table (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use
☐ Sanitary ☐ Storm
(Region)
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
(Indicate One)

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 21T828695
Cooler Quantity: 2 coolers
Arrival Temperatures: 4.8 | 5.2 | 5.5 / 3.7 | 4.2 | 4.6
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: online

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	Metals - ☐ CrVI, ☐ Hg, ☑ HWSB	BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	O. Reg 558: Landfill Disposal Characterization TCLP: TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH/MW1-SS2	21-10-8	9:00 AM/PM	2	S				☑		☑							
BH/MW2-SS1	21-10-7	8:20 AM/PM	2	S				☑		☑							
BH/MW3-SS1	21-10-8	11:30 AM/PM	2	S				☑		☑							
BH/MW4-SS1	21-10-8	14:50 AM/PM	2	S				☑		☑							
BH/MW5-SS1	21-10-6	8:30 AM/PM	2	S				☑		☑							
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Matt Vaughan	21-11-10	16:50		21/Nov/10	4:53
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time

Page ____ of ____

N°:

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

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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T872058

TRACE ORGANICS REVIEWED BY: Pinkal Patel, Report Reviewer

DATE REPORTED: Mar 15, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

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

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 22T872058

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

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

DATE RECEIVED: 2022-03-10

DATE REPORTED: 2022-03-15

				SAMPLE DESCRIPTION:	BH/MW4	Dup40
				SAMPLE TYPE:	Water	Water
				DATE SAMPLED:	2022-03-10 09:00	2022-03-10 09:00
Parameter	Unit	G / S	RDL		3607380	3607381
Naphthalene	µg/L	1400	0.20		<0.20	<0.20
Acenaphthylene	µg/L	1.8	0.20		<0.20	<0.20
Acenaphthene	µg/L	600	0.20		<0.20	<0.20
Fluorene	µg/L	400	0.20		<0.20	<0.20
Phenanthrene	µg/L	580	0.10		<0.10	<0.10
Anthracene	µg/L	2.4	0.10		<0.10	<0.10
Fluoranthene	µg/L	130	0.20		<0.20	<0.20
Pyrene	µg/L	68	0.20		<0.20	<0.20
Benzo(a)anthracene	µg/L	4.7	0.20		<0.20	<0.20
Chrysene	µg/L	1	0.10		<0.10	<0.10
Benzo(b)fluoranthene	µg/L	0.75	0.10		<0.10	<0.10
Benzo(k)fluoranthene	µg/L	0.4	0.10		<0.10	<0.10
Benzo(a)pyrene	µg/L	0.81	0.01		<0.01	<0.01
Indeno(1,2,3-cd)pyrene	µg/L	0.2	0.20		<0.20	<0.20
Dibenz(a,h)anthracene	µg/L	0.52	0.20		<0.20	<0.20
Benzo(g,h,i)perylene	µg/L	0.2	0.20		<0.20	<0.20
2-and 1-methyl Naphthalene	µg/L	1800	0.20		<0.20	<0.20
Sediment					NO	NO
Surrogate	Unit	Acceptable Limits				
Naphthalene-d8	%	50-140			66	69
Acridine-d9	%	50-140			90	117
Terphenyl-d14	%	50-140			89	87

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

3607380-3607381 Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&(j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Pinkal Patel

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T872058

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

Trace Organics Analysis

RPT Date: Mar 15, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Water)															
Naphthalene	3607380	3607380	< 0.20	< 0.20	NA	< 0.20	112%	50%	140%	106%	50%	140%	71%	50%	140%
Acenaphthylene	3607380	3607380	<0.20	<0.20	NA	< 0.20	110%	50%	140%	106%	50%	140%	102%	50%	140%
Acenaphthene	3607380	3607380	<0.20	<0.20	NA	< 0.20	113%	50%	140%	105%	50%	140%	114%	50%	140%
Fluorene	3607380	3607380	<0.20	<0.20	NA	< 0.20	110%	50%	140%	108%	50%	140%	112%	50%	140%
Phenanthrene	3607380	3607380	<0.10	<0.10	NA	< 0.10	104%	50%	140%	107%	50%	140%	110%	50%	140%
Anthracene	3607380	3607380	<0.10	<0.10	NA	< 0.10	114%	50%	140%	99%	50%	140%	110%	50%	140%
Fluoranthene	3607380	3607380	<0.20	<0.20	NA	< 0.20	112%	50%	140%	105%	50%	140%	115%	50%	140%
Pyrene	3607380	3607380	<0.20	<0.20	NA	< 0.20	107%	50%	140%	108%	50%	140%	113%	50%	140%
Benzo(a)anthracene	3607380	3607380	<0.20	<0.20	NA	< 0.20	95%	50%	140%	107%	50%	140%	95%	50%	140%
Chrysene	3607380	3607380	<0.10	<0.10	NA	< 0.10	116%	50%	140%	91%	50%	140%	105%	50%	140%
Benzo(b)fluoranthene	3607380	3607380	<0.10	<0.10	NA	< 0.10	62%	50%	140%	96%	50%	140%	90%	50%	140%
Benzo(k)fluoranthene	3607380	3607380	<0.10	<0.10	NA	< 0.10	68%	50%	140%	101%	50%	140%	107%	50%	140%
Benzo(a)pyrene	3607380	3607380	<0.01	<0.01	NA	< 0.01	66%	50%	140%	100%	50%	140%	96%	50%	140%
Indeno(1,2,3-cd)pyrene	3607380	3607380	<0.20	<0.20	NA	< 0.20	66%	50%	140%	94%	50%	140%	85%	50%	140%
Dibenz(a,h)anthracene	3607380	3607380	<0.20	<0.20	NA	< 0.20	64%	50%	140%	92%	50%	140%	83%	50%	140%
Benzo(g,h,i)perylene	3607380	3607380	<0.20	<0.20	NA	< 0.20	66%	50%	140%	94%	50%	140%	86%	50%	140%

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

Certified By: Jinkal Patel

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T872058

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Fluorene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(a)anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Chrysene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
2-and 1-methyl Naphthalene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Sediment			

AGAT Laboratories

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Chain of Custody Record

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

Laboratory Use Only

Work Order #: 22 872058

Cooler Quantity: 1 Small

Arrival Temperatures: 6.1 | 6.4 | 7.3

Custody Seal Intact: ☐ Yes ☐ No ☐ N/A

Notes: Bagged Ice

Report Information:

Company: B.I.G. Consulting
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road
Mississauga, ON L4W 2Z4
Phone: 905-782-0315 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email:

Regulatory Requirements:

(Please check all applicable boxes)

☐ Regulation 558

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

☐ Excess Soils R406
Table (Indicate One)
Sample from APEC?
☐ Yes
☐ No
☐ Stockpile ☐ In-situ

☐ Sewer Use
☐ Sanitary ☐ Storm
Region
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
(Indicate One)

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

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

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Project Information:

Project: BIGC-ENV-490D
Site Location: 581 Argus Road, Oakville, ON
Sampled By: TD
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☑

Company: Brownfield Investment Group Inc.
Contact: Laine Dougherty
Address: Same as report info
Email: LDougherty@brownfieldigi.com; NKepics@brownfieldigi.com

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics, inc. EC/SAR	Metals - ICPMS, ☐ CrVI, ☐ Hg, ☐ HWSB	BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Excess Soils SPLP Rainwater Leach	Excess Soils SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH/MW 4	Mar/10/22	9:00 AM/PM	2	GW						☑								N
Dup 40	↓	AM/PM	2	GW						✓								N
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																

Samples Relinquished By (Print Name and Sign): Timothy Dawson	Date: Mar/10/22	Time: 12:29pm	Samples Received By (Print Name and Sign): Reynaldo Rivas	Date:	Time: '22 MAR 10 12:38PM
Samples Relinquished By (Print Name and Sign):	Date:	Time:	Samples Received By (Print Name and Sign):	Date:	Time: Page 1 of 1
Samples Relinquished By (Print Name and Sign):	Date:	Time:	Samples Received By (Print Name and Sign):	Date:	Time: N°:

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CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880
ATTENTION TO: Fernando Contento
PROJECT: BIGC-ENV-349B
AGAT WORK ORDER: 21T707091
TRACE ORGANICS REVIEWED BY: Pinkal Patel, Report Reviewer
WATER ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer
DATE REPORTED: Feb 17, 2021
PAGES (INCLUDING COVER): 19
VERSION*: 3

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

*Notes

VERSION 3:V3 issued 2021-02-17. Supersedes version 2 reported 2021-02-12.

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:227-212 Cross

SAMPLED BY:TVM/AB

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

DATE RECEIVED: 2021-02-03

DATE REPORTED: 2021-02-17

		SAMPLE DESCRIPTION:		BH/MW104	BH/MW111	BH/MW112	BH/MW113	DUP11201
		SAMPLE TYPE:		Water	Water	Water	Water	Water
		DATE SAMPLED:		2021-02-03	2021-02-03	2021-02-03	2021-02-03	2021-02-03
Parameter	Unit	G / S	RDL	2045871	2045897	2045899	2045902	2045928
Naphthalene	µg/L	11	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acenaphthylene	µg/L	1	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acenaphthene	µg/L	4.1	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Fluorene	µg/L	120	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Phenanthrene	µg/L	1	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Anthracene	µg/L	2.4	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Fluoranthene	µg/L	0.41	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Pyrene	µg/L	4.1	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Benzo(a)anthracene	µg/L	1	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chrysene	µg/L	0.1	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(b)fluoranthene	µg/L	0.1	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(k)fluoranthene	µg/L	0.1	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(a)pyrene	µg/L	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	µg/L	0.2	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibenz(a,h)anthracene	µg/L	0.2	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Benzo(g,h,i)perylene	µg/L	0.2	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
2-and 1-methyl Naphthalene	µg/L	3.2	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Sediment				No	No	No	No	No
Surrogate	Unit	Acceptable Limits						
Naphthalene-d8	%	50-140		63.0	82.0	86.0	87.0	90.0
Acridine-d9	%	50-140		107	96.0	87.0	98.0	79.0
Terphenyl-d14	%	50-140		72.0	110	80.0	94.0	98.0

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2045871-2045928 Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&(j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:227-212 Cross

SAMPLED BY:TVM/AB

O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Water)

DATE RECEIVED: 2021-02-03

DATE REPORTED: 2021-02-17

		SAMPLE DESCRIPTION:		BH/MW101	Trip Blank
		SAMPLE TYPE:		Water	Water
		DATE SAMPLED:		2021-02-03	2021-02-03
Parameter	Unit	G / S	RDL	2045847	2045935
F1 (C6 - C10)	µg/L	750	25	<25	<25
F1 (C6 to C10) minus BTEX	µg/L	750	25	<25	<25
F2 (C10 to C16)	µg/L	150	100	<100	<100
F3 (C16 to C34)	µg/L	500	100	<100	<100
F4 (C34 to C50)	µg/L	500	100	<100	<100
Gravimetric Heavy Hydrocarbons	µg/L		500	NA	NA
Sediment				Trace	No
Surrogate	Unit	Acceptable Limits			
Toluene-d8	% Recovery	50-140		99	91
Terphenyl	% Recovery	60-140		79	79

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:227-212 Cross

SAMPLED BY:TVM/AB

O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Water)

DATE RECEIVED: 2021-02-03

DATE REPORTED: 2021-02-17

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2045847 Sediment present in sample.
The C6-C10 fraction is calculated using Toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and nC34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16 - C50 and are only determined if the chromatogram of the C34 - C50 Hydrocarbons indicated that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6-C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified with the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.
Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.

2045935 The C6-C10 fraction is calculated using Toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and nC34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16 - C50 and are only determined if the chromatogram of the C34 - C50 Hydrocarbons indicated that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6-C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified with the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.
Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Jinkal Patel

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Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:227-212 Cross

SAMPLED BY:TVM/AB

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

DATE RECEIVED: 2021-02-03

DATE REPORTED: 2021-02-17

		SAMPLE DESCRIPTION:		BH/MW104	BH/MW112	DUP11201
		SAMPLE TYPE:		Water	Water	Water
		DATE SAMPLED:		2021-02-03	2021-02-03	2021-02-03
Parameter	Unit	G / S	RDL	2045871	2045899	2045928
F1 (C6-C10)	µg/L	750	25	<25	<25	<25
F1 (C6 to C10) minus BTEX	µg/L	750	25	<25	<25	<25
F2 (C10 to C16)	µg/L	150	100	<100	<100	<100
F2 (C10 to C16) minus Naphthalene	µg/L		100	<100	<100	<100
F3 (C16 to C34)	µg/L	500	100	<100	<100	<100
F3 (C16 to C34) minus PAHs	µg/L		100	<100	<100	<100
F4 (C34 to C50)	µg/L	500	100	<100	<100	<100
Gravimetric Heavy Hydrocarbons	µg/L		500	NA	NA	NA
Sediment				No	No	No
Surrogate	Unit	Acceptable Limits				
Toluene-d8	% Recovery	50-140		93	97	106
Terphenyl	% Recovery	60-140		77	79	113

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2045871-2045928 The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX and PAH contributions.
C>10 – C16 (F2- Naphthalene) is a calculated parameter. The calculated value is F2 - Naphthalene.
C>16 - C34 (F3-PAH) is a calculated parameter. The calculated value is F3-PAH (PAH: sum of Phenanthrene, Benzo(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Benzo(a)pyrene, Fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-c,d)pyrene and Pyrene).
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.

Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: 

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Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:227-212 Cross

SAMPLED BY:TVM/AB

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

DATE RECEIVED: 2021-02-03

DATE REPORTED: 2021-02-17

		SAMPLE DESCRIPTION:		BH/MW101	BH/MW104	BH/MW112	DUP11201	Trip Blank
		SAMPLE TYPE:		Water	Water	Water	Water	Water
		DATE SAMPLED:		2021-02-03	2021-02-03	2021-02-03	2021-02-03	2021-02-03
Parameter	Unit	G / S	RDL	2045847	2045871	2045899	2045928	2045935
Dichlorodifluoromethane	µg/L	590	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	µg/L	0.5	0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Bromomethane	µg/L	0.89	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L	150	0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Acetone	µg/L	2700	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	1.6	0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Methylene Chloride	µg/L	50	0.30	<0.30	<0.30	<0.30	<0.30	<0.30
trans- 1,2-Dichloroethylene	µg/L	1.6	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl tert-butyl ether	µg/L	15	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane	µg/L	5	0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Methyl Ethyl Ketone	µg/L	1800	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis- 1,2-Dichloroethylene	µg/L	1.6	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	µg/L	2.4	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	1.6	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	200	0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Carbon Tetrachloride	µg/L	0.79	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Benzene	µg/L	5.0	0.20	0.22	0.22	<0.20	<0.20	<0.20
1,2-Dichloropropane	µg/L	5	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	µg/L	1.6	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromodichloromethane	µg/L	16	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L	640	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	µg/L	4.7	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Toluene	µg/L	24	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane	µg/L	25	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Ethylene Dibromide	µg/L	0.2	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Tetrachloroethylene	µg/L	1.6	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1,2-Tetrachloroethane	µg/L	1.1	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chlorobenzene	µg/L	30	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Ethylbenzene	µg/L	2.4	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
m & p-Xylene	µg/L		0.20	<0.20	<0.20	<0.20	<0.20	<0.20

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:227-212 Cross

SAMPLED BY:TVM/AB

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

DATE RECEIVED: 2021-02-03

DATE REPORTED: 2021-02-17

		SAMPLE DESCRIPTION:		BH/MW101	BH/MW104	BH/MW112	DUP11201	Trip Blank
		SAMPLE TYPE:		Water	Water	Water	Water	Water
		DATE SAMPLED:		2021-02-03	2021-02-03	2021-02-03	2021-02-03	2021-02-03
Parameter	Unit	G / S	RDL	2045847	2045871	2045899	2045928	2045935
Bromoform	µg/L	25	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Styrene	µg/L	5.4	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane	µg/L	1	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
o-Xylene	µg/L		0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene	µg/L	59	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,4-Dichlorobenzene	µg/L	1	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dichlorobenzene	µg/L	3	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichloropropene	µg/L	0.5	0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Xylenes (Total)	µg/L	300	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
n-Hexane	µg/L	51	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Surrogate	Unit	Acceptable Limits						
Toluene-d8	% Recovery	50-140		101	125	103	102	117
4-Bromofluorobenzene	% Recovery	50-140		87	88	84	88	88

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2045847-2045935 Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Jinkal Patel

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Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:227-212 Cross

SAMPLED BY:TVM/AB

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

DATE RECEIVED: 2021-02-03

DATE REPORTED: 2021-02-17

		SAMPLE DESCRIPTION:		BH/MW101	BH/MW108	BH/MW112	DUP11201
		SAMPLE TYPE:		Water	Water	Water	Water
		DATE SAMPLED:		2021-02-03	2021-02-03	2021-02-03	2021-02-03
Parameter	Unit	G / S	RDL	2045847	2045888	2045899	2045928
Dissolved Antimony	µg/L	6	1.0	<1.0	<1.0	<1.0	<1.0
Dissolved Arsenic	µg/L	25	1.0	<1.0	<1.0	<1.0	<1.0
Dissolved Barium	µg/L	1000	2.0	115	62.4	70.7	66.1
Dissolved Beryllium	µg/L	4	0.50	<0.50	<0.50	<0.50	<0.50
Dissolved Boron	µg/L	5000	10.0	351	590	746	773
Dissolved Cadmium	µg/L	2.7	0.20	<0.20	<0.20	<0.20	<0.20
Dissolved Chromium	µg/L	50	2.0	<2.0	<2.0	<2.0	<2.0
Dissolved Cobalt	µg/L	3.8	0.50	0.57	1.65	<0.50	<0.50
Dissolved Copper	µg/L	87	1.0	10.1	1.5	1.1	<1.0
Dissolved Lead	µg/L	10	0.50	1.54	2.40	2.09	2.29
Dissolved Molybdenum	µg/L	70	0.50	1.90	0.81	0.76	1.38
Dissolved Nickel	µg/L	100	3.0	<3.0	<3.0	<3.0	<3.0
Dissolved Selenium	µg/L	10	1.0	2.1	2.1	2.5	3.4
Dissolved Silver	µg/L	1.5	0.20	<0.20	<0.20	<0.20	<0.20
Dissolved Thallium	µg/L	2	0.30	<0.30	<0.30	<0.30	<0.30
Dissolved Uranium	µg/L	20	0.50	1.65	<0.50	<0.50	<0.50
Dissolved Vanadium	µg/L	6.2	0.40	<0.40	<0.40	<0.40	<0.40
Dissolved Zinc	µg/L	1100	5.0	<5.0	<5.0	<5.0	<5.0
Mercury	µg/L	0.29	0.02	<0.02	<0.02	<0.02	<0.02
Chromium VI	µg/L	25	2.000	<2.000	<2.000	<2.000	<2.000
Cyanide, Free	µg/L	66	2	<2	<2	<2	<2
Dissolved Sodium	µg/L	490000	500	776000	402000	475000	456000
Chloride	µg/L	790000	5000	1270000	1160000	1340000	1330000
Electrical Conductivity	uS/cm	NA	2	4630	4400	4790	4810
pH	pH Units		NA	7.66	7.49	7.52	7.56

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:227-212 Cross

SAMPLED BY:TVM/AB

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

DATE RECEIVED: 2021-02-03

DATE REPORTED: 2021-02-17

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2045847-2045928 Metals analysis completed on a filtered sample.

Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:227-212 Cross

SAMPLED BY:TVM/AB

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

DATE RECEIVED: 2021-02-03

DATE REPORTED: 2021-02-17

		SAMPLE DESCRIPTION:		BH/MW103	BH/MW107
		SAMPLE TYPE:		Water	Water
		DATE SAMPLED:		2021-02-03	2021-02-03
Parameter	Unit	G / S	RDL	2045869	2045886
Dissolved Sodium	µg/L	490000	500	576000	566000
Chloride	µg/L	790000	5000	1640000	1560000

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2045869-2045886 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Exceedance Summary

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
2045847	BH/MW101	ON T2 PGW CT	O. Reg. 153(511) - Metals & Inorganics (Water)	Chloride	µg/L	790000	1270000
2045847	BH/MW101	ON T2 PGW CT	O. Reg. 153(511) - Metals & Inorganics (Water)	Dissolved Sodium	µg/L	490000	776000
2045869	BH/MW103	ON T2 PGW CT	O. Reg. 153(511) - ORPs (Water)	Chloride	µg/L	790000	1640000
2045869	BH/MW103	ON T2 PGW CT	O. Reg. 153(511) - ORPs (Water)	Dissolved Sodium	µg/L	490000	576000
2045886	BH/MW107	ON T2 PGW CT	O. Reg. 153(511) - ORPs (Water)	Chloride	µg/L	790000	1560000
2045886	BH/MW107	ON T2 PGW CT	O. Reg. 153(511) - ORPs (Water)	Dissolved Sodium	µg/L	490000	566000
2045888	BH/MW108	ON T2 PGW CT	O. Reg. 153(511) - Metals & Inorganics (Water)	Chloride	µg/L	790000	1160000
2045899	BH/MW112	ON T2 PGW CT	O. Reg. 153(511) - Metals & Inorganics (Water)	Chloride	µg/L	790000	1340000
2045928	DUP11201	ON T2 PGW CT	O. Reg. 153(511) - Metals & Inorganics (Water)	Chloride	µg/L	790000	1330000

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T707091
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:227-212 Cross
SAMPLED BY:TVM/AB

Trace Organics Analysis

RPT Date: Feb 17, 2021

PARAMETER	Batch	Sample Id	DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
			Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Water)															
F1 (C6 - C10)	2058819		<25	<25	NA	< 25	99%	60%	140%	92%	60%	140%	101%	60%	140%
F2 (C10 to C16)	2045847	2045847	< 100	< 100	NA	< 100	105%	60%	140%	106%	60%	140%	83%	60%	140%
F3 (C16 to C34)	2045847	2045847	< 100	< 100	NA	< 100	95%	60%	140%	105%	60%	140%	93%	60%	140%
F4 (C34 to C50)	2045847	2045847	< 100	< 100	NA	< 100	91%	60%	140%	118%	60%	140%	119%	60%	140%
O. Reg. 153(511) - VOCs (Water)															
Dichlorodifluoromethane	2061685		<0.20	<0.20	NA	< 0.20	79%	50%	140%	76%	50%	140%	104%	50%	140%
Vinyl Chloride	2061685		<0.17	<0.17	NA	< 0.17	109%	50%	140%	82%	50%	140%	75%	50%	140%
Bromomethane	2061685		<0.20	<0.20	NA	< 0.20	115%	50%	140%	95%	50%	140%	123%	50%	140%
Trichlorofluoromethane	2061685		<0.40	<0.40	NA	< 0.40	114%	50%	140%	89%	50%	140%	82%	50%	140%
Acetone	2061685		<1.0	<1.0	NA	< 1.0	88%	50%	140%	90%	50%	140%	96%	50%	140%
1,1-Dichloroethylene	2061685		<0.30	<0.30	NA	< 0.30	84%	50%	140%	72%	60%	130%	77%	50%	140%
Methylene Chloride	2061685		<0.30	<0.30	NA	< 0.30	82%	50%	140%	88%	60%	130%	98%	50%	140%
trans- 1,2-Dichloroethylene	2061685		<0.20	<0.20	NA	< 0.20	92%	50%	140%	108%	60%	130%	103%	50%	140%
Methyl tert-butyl ether	2061685		<0.20	<0.20	NA	< 0.20	88%	50%	140%	101%	60%	130%	98%	50%	140%
1,1-Dichloroethane	2061685		<0.30	<0.30	NA	< 0.30	76%	50%	140%	92%	60%	130%	92%	50%	140%
Methyl Ethyl Ketone	2061685		<1.0	<1.0	NA	< 1.0	98%	50%	140%	80%	50%	140%	91%	50%	140%
cis- 1,2-Dichloroethylene	2061685		<0.20	<0.20	NA	< 0.20	74%	50%	140%	86%	60%	130%	103%	50%	140%
Chloroform	2061685		<0.20	<0.20	NA	< 0.20	76%	50%	140%	88%	60%	130%	107%	50%	140%
1,2-Dichloroethane	2061685		<0.20	<0.20	NA	< 0.20	85%	50%	140%	94%	60%	130%	98%	50%	140%
1,1,1-Trichloroethane	2061685		<0.30	<0.30	NA	< 0.30	96%	50%	140%	85%	60%	130%	86%	50%	140%
Carbon Tetrachloride	2061685		<0.20	<0.20	NA	< 0.20	77%	50%	140%	89%	60%	130%	82%	50%	140%
Benzene	2061685		<0.20	<0.20	NA	< 0.20	77%	50%	140%	76%	60%	130%	87%	50%	140%
1,2-Dichloropropane	2061685		<0.20	<0.20	NA	< 0.20	103%	50%	140%	74%	60%	130%	84%	50%	140%
Trichloroethylene	2061685		<0.20	<0.20	NA	< 0.20	75%	50%	140%	105%	60%	130%	102%	50%	140%
Bromodichloromethane	2061685		<0.20	<0.20	NA	< 0.20	111%	50%	140%	97%	60%	130%	98%	50%	140%
Methyl Isobutyl Ketone	2061685		<1.0	<1.0	NA	< 1.0	81%	50%	140%	80%	50%	140%	82%	50%	140%
1,1,2-Trichloroethane	2061685		<0.20	<0.20	NA	< 0.20	91%	50%	140%	105%	60%	130%	101%	50%	140%
Toluene	2061685		<0.20	<0.20	NA	< 0.20	73%	50%	140%	88%	60%	130%	69%	50%	140%
Dibromochloromethane	2061685		<0.10	<0.10	NA	< 0.10	114%	50%	140%	113%	60%	130%	107%	50%	140%
Ethylene Dibromide	2061685		<0.10	<0.10	NA	< 0.10	95%	50%	140%	108%	60%	130%	100%	50%	140%
Tetrachloroethylene	2061685		<0.20	<0.20	NA	< 0.20	85%	50%	140%	110%	60%	130%	80%	50%	140%
1,1,1,2-Tetrachloroethane	2061685		<0.10	<0.10	NA	< 0.10	91%	50%	140%	111%	60%	130%	90%	50%	140%
Chlorobenzene	2061685		<0.10	<0.10	NA	< 0.10	83%	50%	140%	98%	60%	130%	91%	50%	140%
Ethylbenzene	2061685		<0.10	<0.10	NA	< 0.10	83%	50%	140%	81%	60%	130%	73%	50%	140%
m & p-Xylene	2061685		<0.20	<0.20	NA	< 0.20	71%	50%	140%	90%	60%	130%	73%	50%	140%
Bromoform	2061685		<0.10	<0.10	NA	< 0.10	108%	50%	140%	114%	60%	130%	101%	50%	140%
Styrene	2061685		<0.10	<0.10	NA	< 0.10	83%	50%	140%	81%	60%	130%	83%	50%	140%
1,1,2,2-Tetrachloroethane	2061685		<0.10	<0.10	NA	< 0.10	98%	50%	140%	100%	60%	130%	102%	50%	140%
o-Xylene	2061685		<0.10	<0.10	NA	< 0.10	77%	50%	140%	94%	60%	130%	81%	50%	140%

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T707091
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:227-212 Cross
SAMPLED BY:TVM/AB

Trace Organics Analysis (Continued)

RPT Date: Feb 17, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
1,3-Dichlorobenzene	2061685		<0.10	<0.10	NA	< 0.10	101%	50%	140%	117%	60%	130%	113%	50%	140%
1,4-Dichlorobenzene	2061685		<0.10	<0.10	NA	< 0.10	102%	50%	140%	122%	60%	130%	115%	50%	140%
1,2-Dichlorobenzene	2061685		<0.10	<0.10	NA	< 0.10	106%	50%	140%	119%	60%	130%	119%	50%	140%
n-Hexane	2061685		<0.20	<0.20	NA	< 0.20	105%	50%	140%	86%	60%	130%	89%	50%	140%
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs and VOC) (Water)															
F1 (C6-C10)	2058819		<25	<25	NA	< 25	99%	60%	140%	92%	60%	140%	101%	60%	140%
O. Reg. 153(511) - PAHs (Water)															
Naphthalene	2045871	2045871	< 0.20	< 0.20	NA	< 0.20	102%	50%	140%	115%	50%	140%	88%	50%	140%
Acenaphthylene	2045871	2045871	< 0.20	< 0.20	NA	< 0.20	115%	50%	140%	85%	50%	140%	87%	50%	140%
Acenaphthene	2045871	2045871	< 0.20	< 0.20	NA	< 0.20	85%	50%	140%	74%	50%	140%	74%	50%	140%
Fluorene	2045871	2045871	< 0.20	< 0.20	NA	< 0.20	74%	50%	140%	71%	50%	140%	71%	50%	140%
Phenanthrene	2045871	2045871	< 0.10	< 0.10	NA	< 0.10	77%	50%	140%	75%	50%	140%	75%	50%	140%
Anthracene	2045871	2045871	< 0.10	< 0.10	NA	< 0.10	71%	50%	140%	77%	50%	140%	81%	50%	140%
Fluoranthene	2045871	2045871	< 0.20	< 0.20	NA	< 0.20	70%	50%	140%	74%	50%	140%	82%	50%	140%
Pyrene	2045871	2045871	< 0.20	< 0.20	NA	< 0.20	79%	50%	140%	78%	50%	140%	80%	50%	140%
Benzo(a)anthracene	2045871	2045871	< 0.20	< 0.20	NA	< 0.20	85%	50%	140%	85%	50%	140%	71%	50%	140%
Chrysene	2045871	2045871	< 0.10	< 0.10	NA	< 0.10	81%	50%	140%	71%	50%	140%	74%	50%	140%
Benzo(b)fluoranthene	2045871	2045871	< 0.10	< 0.10	NA	< 0.10	115%	50%	140%	70%	50%	140%	77%	50%	140%
Benzo(k)fluoranthene	2045871	2045871	< 0.10	< 0.10	NA	< 0.10	114%	50%	140%	71%	50%	140%	75%	50%	140%
Benzo(a)pyrene	2045871	2045871	< 0.01	< 0.01	NA	< 0.01	85%	50%	140%	79%	50%	140%	96%	50%	140%
Indeno(1,2,3-cd)pyrene	2045871	2045871	< 0.20	< 0.20	NA	< 0.20	80%	50%	140%	85%	50%	140%	85%	50%	140%
Dibenz(a,h)anthracene	2045871	2045871	< 0.20	< 0.20	NA	< 0.20	71%	50%	140%	86%	50%	140%	80%	50%	140%
Benzo(g,h,i)perylene	2045871	2045871	< 0.20	< 0.20	NA	< 0.20	107%	50%	140%	81%	50%	140%	80%	50%	140%

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

Certified By: Jinkal Patel

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T707091
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:227-212 Cross
SAMPLED BY:TVM/AB

Water Analysis

RPT Date: Feb 17, 2021

PARAMETER	Batch	Sample Id	DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
			Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Water)															
Dissolved Antimony	2050451		<1.0	<1.0	NA	< 1.0	104%	70%	130%	103%	80%	120%	109%	70%	130%
Dissolved Arsenic	2050451		<1.0	<1.0	NA	< 1.0	88%	70%	130%	102%	80%	120%	114%	70%	130%
Dissolved Barium	2050451		63.3	63.7	0.6%	< 2.0	102%	70%	130%	102%	80%	120%	101%	70%	130%
Dissolved Beryllium	2050451		<0.50	<0.50	NA	< 0.50	97%	70%	130%	104%	80%	120%	112%	70%	130%
Dissolved Boron	2050451		71.8	73.1	1.8%	< 10.0	100%	70%	130%	102%	80%	120%	109%	70%	130%
Dissolved Cadmium	2050451		<0.20	<0.20	NA	< 0.20	101%	70%	130%	100%	80%	120%	111%	70%	130%
Dissolved Chromium	2050451		<2.0	<2.0	NA	< 2.0	98%	70%	130%	93%	80%	120%	99%	70%	130%
Dissolved Cobalt	2050451		<0.50	<0.50	NA	< 0.50	98%	70%	130%	94%	80%	120%	98%	70%	130%
Dissolved Copper	2050451		<1.0	<1.0	NA	< 1.0	96%	70%	130%	94%	80%	120%	95%	70%	130%
Dissolved Lead	2050451		<0.50	<0.50	NA	< 0.50	99%	70%	130%	98%	80%	120%	103%	70%	130%
Dissolved Molybdenum	2050451		5.05	5.73	12.6%	< 0.50	100%	70%	130%	102%	80%	120%	107%	70%	130%
Dissolved Nickel	2050451		<3.0	<3.0	NA	< 3.0	99%	70%	130%	94%	80%	120%	98%	70%	130%
Dissolved Selenium	2050451		<1.0	<1.0	NA	< 1.0	97%	70%	130%	101%	80%	120%	118%	70%	130%
Dissolved Silver	2050451		<0.20	<0.20	NA	< 0.20	98%	70%	130%	93%	80%	120%	95%	70%	130%
Dissolved Thallium	2050451		<0.30	<0.30	NA	< 0.30	103%	70%	130%	99%	80%	120%	104%	70%	130%
Dissolved Uranium	2050451		7.47	7.30	2.3%	< 0.50	108%	70%	130%	104%	80%	120%	112%	70%	130%
Dissolved Vanadium	2050451		0.84	0.63	NA	< 0.40	102%	70%	130%	96%	80%	120%	100%	70%	130%
Dissolved Zinc	2050451		5.4	6.7	NA	< 5.0	106%	70%	130%	106%	80%	120%	113%	70%	130%
Mercury	2045847	2045847	<0.02	<0.02	NA	< 0.02	102%	70%	130%	104%	80%	120%	100%	70%	130%
Chromium VI	2050022		<2.000	<2.000	NA	< 2	105%	70%	130%	108%	80%	120%	109%	70%	130%
Cyanide, Free	2050225		<2	<2	NA	< 2	91%	70%	130%	98%	80%	120%	110%	70%	130%
Dissolved Sodium	2047398		7310	7460	2.0%	< 50	100%	70%	130%	100%	80%	120%	98%	70%	130%
Chloride	2050225		85300	87100	2.1%	< 100	97%	70%	130%	104%	80%	120%	103%	70%	130%
Electrical Conductivity	2050022		1450	1450	0.0%	< 2	103%	90%	110%						
pH	2050022		7.70	7.73	0.4%	NA	101%	90%	110%						

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

O. Reg. 153(511) - Metals & Inorganics (Water)															
Chromium VI	2045929	2045929	<2.000	<2.000	NA	< 2	104%	70%	130%	101%	80%	120%	104%	70%	130%
Electrical Conductivity	2045929	2045929	6270	6290	0.3%	< 2	103%	90%	110%						
pH	2045929	2045929	7.83	7.87	0.5%	NA	101%	90%	110%						

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

Certified By:

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:227-212 Cross

SAMPLED BY:TVM/AB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Fluorene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(a)anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Chrysene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
2-and 1-methyl Naphthalene	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5105	modified from EPA 3510C and EPA 8270E	GC/MS
Sediment			
Toluene-d8	VOL-91-5009	modified from EPA SW-846 5030C & 8260D	(P&T)GC/MS
F1 (C6 - C10)	VOL-91- 5010	modified from MOE PHC E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	modified from MOE PHC E3421	(P&T)GC/FID
F2 (C10 to C16)	VOL-91-5010	modified from MOE PHC E3421	GC / FID
F3 (C16 to C34)	VOL-91-5010	modified from MOE PHC E3421	GC / FID
F4 (C34 to C50)	VOL-91-5010	modified from MOE PHC E3421	GC / FID
Gravimetric Heavy Hydrocarbons	VOL-91-5010	modified from MOE PHC E3421	BALANCE
Terphenyl	VOL-91-5010	modified from MOE PHC E3421	GC/FID
F1 (C6-C10)	VOL-91- 5010	modified from MOE PHC-E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	modified from MOE PHC-E3421	P&T GC/FID
F2 (C10 to C16)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F2 (C10 to C16) minus Naphthalene	VOL-91-5010	modified from MOE PHC-E3421	GC/FID

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:227-212 Cross

SAMPLED BY:TVM/AB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
F3 (C16 to C34)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F3 (C16 to C34) minus PAHs	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F4 (C34 to C50)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5010	modified from MOE PHC-E3421	BALANCE
Terphenyl	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Dichlorodifluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromomethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Acetone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methylene Chloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
trans- 1,2-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl tert-butyl ether	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
cis- 1,2-Dichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Chloroform	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Benzene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Trichloroethylene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Bromodichloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Toluene	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Dibromochloromethane	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:227-212 Cross

SAMPLED BY:TVM/AB

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

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Method Summary

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AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:227-212 Cross

SAMPLED BY:TVM/AB

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Water Analysis			
Dissolved Antimony	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Arsenic	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Barium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Beryllium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Boron	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cadmium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Chromium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cobalt	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Copper	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Lead	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Molybdenum	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Nickel	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Selenium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Silver	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Thallium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Uranium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Vanadium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Zinc	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Mercury	MET-93-6100	modified from EPA 245.2 and SM 3112 B	CVAAS
Chromium VI	INOR-93-6034	modified from QuickChem Method 10-124-13-1-B	LACHAT FIA
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Dissolved Sodium	MET-93-6105	modified from EPA 6010D	ICP/OES
Chloride	INOR-93-6004	modified from SM 4110 B	ION CHROMATOGRAPH
Electrical Conductivity	INOR-93-6000	SM 2510 B	PC TITRATE
pH	INOR-93-6000	modified from SM 4500-H+ B	PC TITRATE

1 Cy Blk

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5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
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Chain of Custody Record

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

Laboratory Use Only

Work Order #: 21T707091

Cooler Quantity:

Arrival Temperatures: 8.5 | 8.1 | 7.7

Custody Seal Intact: ☑ Yes ☐ No ☐ N/A

Notes: FREE ICE

Report Information:

Company: Bile Consulting Inc
Contact: Fernando Contreras
Address: 5500 Tomken Rd. Unit 12, Mississauga
Phone: 647-966-6894 Fax:
Reports to be sent to:
1. Email: FContreras@brownfieldeng.com
2. Email:

Project Information:

Project: 227-217 Cross BileC-ENV-349B
Site Location:
Sampled By: TVH / AB
AGAT ID #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: Bile Consulting Inc
Contact: Laine Daugherty
Address: 5500 Tomken Rd Mississauga
Email: LDaugherty@brownfieldeng.com

Regulatory Requirements:

(Please check all applicable boxes)

☑ Regulation 153/04
Table 2 (Indicate One)
☐ Ind/Com
☑ Res/Park
☐ Agriculture
Soil Texture (Check One)
☑ Coarse
☐ Fine

☐ Excess Soils R406
Table (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use
☐ Sanitary ☐ Storm
(Region)
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
(Indicate One)

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

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

Turnaround Time (TAT) Required:

Regular TAT (Most Analysis) ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs, Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: Total PCBs ☐ Aroclor	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Vapour Intrusion						Potentially Hazardous or High Concentration (Y/N)
BH/MW101	Feb 3, 2021	AM PM	1	GW		Y	✓		✓			✓											
BH/MW103		AM PM	2														✓						
BH/MW104		AM PM	10		Sediment, proceed with analysis				✓	✓		✓											
BH/MW107		AM PM	2														✓						
BH/MW108		AM PM	6			Y	✓																
BH/MW111		AM PM	2							✓													
BH/MW112		AM PM	16			Y	✓		✓	✓		✓											
BH/MW113		AM PM	2							✓													
DUP112021		AM PM	16			Y	✓		✓	✓		✓											
BH/MW115		AM PM	6			Y	✓																
Trip Blank		AM PM	2						✓			✓											

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Travis Van Holst	Feb 3/2021	6:15 pm	M. JOHN		

Page 1 of 1

Nº: T114600

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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Fernando Contento

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T700748

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Jan 25, 2021

PAGES (INCLUDING COVER): 16

VERSION*: 1

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

*Notes

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Certificate of Analysis

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-18

DATE REPORTED: 2021-01-25

SAMPLE DESCRIPTION:				BH101-SS1	BH102-SS1	BH103-SS1	BH104-SS1	BH105-SS1
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-01-13 09:30	2021-01-13 11:00	2021-01-13 12:30	2021-01-13 14:00	2021-01-14 10:00
Parameter	Unit	G / S	RDL	1966584	1966586	1966588	1966589	1966590
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	13	8	9	10	12
Barium	µg/g	390	2	122	141	40	48	41
Beryllium	µg/g	4	0.5	0.5	0.6	<0.5	<0.5	<0.5
Boron	µg/g	120	5	10	7	12	11	9
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.33	0.58	0.20	0.18	0.21
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	<0.5	0.5	<0.5
Chromium	µg/g	160	5	18	17	7	6	6
Cobalt	µg/g	22	0.5	11.5	10.7	5.9	5.4	4.9
Copper	µg/g	140	1	493	80	33	31	44
Lead	µg/g	120	1	18	21	21	23	28
Molybdenum	µg/g	6.9	0.5	1.6	1.3	1.1	1.2	1.1
Nickel	µg/g	100	1	23	22	10	11	10
Selenium	µg/g	2.4	0.4	0.8	0.9	0.5	0.5	0.5
Silver	µg/g	20	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Thallium	µg/g	1	0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Uranium	µg/g	23	0.5	1.3	1.4	0.5	0.6	<0.5
Vanadium	µg/g	86	1	26	27	12	10	11
Zinc	µg/g	340	5	121	101	142	169	106
Chromium, Hexavalent	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide, Free	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	0.27	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	0.470	0.664	0.912	0.269	0.488
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A	4.15	6.67	8.99	1.03	6.01
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	6.18	7.66	7.83	7.83	7.91

Certified By:

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Certificate of Analysis

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-18

DATE REPORTED: 2021-01-25

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

1966584-1966590 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-18

DATE REPORTED: 2021-01-25

		SAMPLE DESCRIPTION:		BH101-SS1	BH102-SS1	BH103-SS1	BH104-SS1	BH105-SS1
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2021-01-13 09:30	2021-01-13 11:00	2021-01-13 12:30	2021-01-13 14:00	2021-01-14 10:00
Parameter	Unit	G / S	RDL	1966584	1966586	1966588	1966589	1966590
Naphthalene	µg/g	0.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.5	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	7	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	16.6	13.4	7.2	8.5	10.9
Surrogate	Unit	Acceptable Limits						
Naphthalene-d8	%	50-140		84	96	96	79	115
Acenaphthene-d10	%	50-140		91	90	84	85	102
Chrysene-d12	%	50-140		83	72	70	73	85

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

1966584-1966590 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-18

DATE REPORTED: 2021-01-25

				SAMPLE DESCRIPTION:	BH101-SS2	BH102-SS2	BH105-SS3
				SAMPLE TYPE:	Soil	Soil	Soil
				DATE SAMPLED:	2021-01-13 09:35	2021-01-13 11:05	2021-01-14 10:15
Parameter	Unit	G / S	RDL		1966585	1966587	1966591
F1 (C6 to C10)	µg/g	55	5		<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	55	5		<5	<5	<5
F2 (C10 to C16)	µg/g	98	10		<10	<10	<10
F3 (C16 to C34)	µg/g	300	50		<50	<50	<50
F4 (C34 to C50)	µg/g	2800	50		<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	2800	50		NA	NA	NA
Moisture Content	%		0.1		16.9	12.8	10.9
Surrogate	Unit	Acceptable Limits					
Terphenyl	%	60-140			77	72	94

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

1966585-1966591 Results are based on sample dry weight.
The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified without the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

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Certificate of Analysis

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-18

DATE REPORTED: 2021-01-25

SAMPLE DESCRIPTION:				BH101-SS2	BH102-SS2	BH105-SS3
SAMPLE TYPE:				Soil	Soil	Soil
DATE SAMPLED:				2021-01-13 09:35	2021-01-13 11:05	2021-01-14 10:15
Parameter	Unit	G / S	RDL	1966585	1966587	1966591
Dichlorodifluoromethane	µg/g	16	0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.02	0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05	<0.05	<0.05
Acetone	ug/g	16	0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.05	0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	0.1	0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	0.084	0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	0.75	0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	16	0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.05	0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	0.38	0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.05	0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.21	0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.05	0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.061	0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	1.7	0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04
Toluene	ug/g	2.3	0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	0.28	0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.058	0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05	<0.05	<0.05

Certified By: NPopowkolof

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Certificate of Analysis

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-18

DATE REPORTED: 2021-01-25

				SAMPLE DESCRIPTION:	BH101-SS2	BH102-SS2	BH105-SS3
				SAMPLE TYPE:	Soil	Soil	Soil
				DATE SAMPLED:	2021-01-13 09:35	2021-01-13 11:05	2021-01-14 10:15
Parameter	Unit	G / S	RDL		1966585	1966587	1966591
m & p-Xylene	ug/g		0.05		<0.05	<0.05	<0.05
Bromoform	ug/g	0.27	0.05		<0.05	<0.05	<0.05
Styrene	ug/g	0.7	0.05		<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05		<0.05	<0.05	<0.05
o-Xylene	ug/g		0.05		<0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	4.8	0.05		<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.083	0.05		<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.05		<0.05	<0.05	<0.05
Xylenes (Total)	ug/g	3.1	0.05		<0.05	<0.05	<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g	0.05	0.04		<0.04	<0.04	<0.04
n-Hexane	µg/g	2.8	0.05		<0.05	<0.05	<0.05
Moisture Content	%		0.1		16.9	12.8	10.9
Surrogate	Unit	Acceptable Limits					
Toluene-d8	% Recovery	50-140			110	108	103
4-Bromofluorobenzene	% Recovery	50-140			81	81	80

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

1966585-1966591 The sample was analyzed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

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Exceedance Summary

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
1966584	BH101-SS1	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Copper	µg/g	140	493
1966586	BH102-SS1	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	6.67
1966588	BH103-SS1	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	mS/cm	0.7	0.912
1966588	BH103-SS1	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	8.99
1966590	BH105-SS1	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	6.01

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T700748
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:
SAMPLED BY:

Soil Analysis

RPT Date: Jan 25, 2021

PARAMETER	Batch	Sample Id	DUPLICATE Dup #1	DUPLICATE Dup #2	DUPLICATE RPD	Method Blank	REFERENCE MATERIAL Measured Value	REFERENCE MATERIAL Acceptable Limits Lower	REFERENCE MATERIAL Acceptable Limits Upper	METHOD BLANK SPIKE Recovery	METHOD BLANK SPIKE Acceptable Limits Lower	METHOD BLANK SPIKE Acceptable Limits Upper	MATRIX SPIKE Recovery	MATRIX SPIKE Acceptable Limits Lower	MATRIX SPIKE Acceptable Limits Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	1954940		<0.8	<0.8	NA	< 0.8	113%	70%	130%	102%	80%	120%	93%	70%	130%
Arsenic	1954940		4	4	NA	< 1	99%	70%	130%	97%	80%	120%	108%	70%	130%
Barium	1954940		59	61	3.3%	< 2	106%	70%	130%	97%	80%	120%	104%	70%	130%
Beryllium	1954940		<0.5	<0.5	NA	< 0.5	74%	70%	130%	117%	80%	120%	96%	70%	130%
Boron	1954940		8	8	NA	< 5	100%	70%	130%	109%	80%	120%	91%	70%	130%
Boron (Hot Water Soluble)	1966584	1966584	0.33	0.35	NA	< 0.10	95%	60%	140%	101%	70%	130%	98%	60%	140%
Cadmium	1954940		<0.5	<0.5	NA	< 0.5	105%	70%	130%	101%	80%	120%	97%	70%	130%
Chromium	1954940		23	23	NA	< 5	86%	70%	130%	102%	80%	120%	102%	70%	130%
Cobalt	1954940		3.1	3.0	3.3%	< 0.5	87%	70%	130%	95%	80%	120%	98%	70%	130%
Copper	1954940		8	8	0.0%	< 1	87%	70%	130%	101%	80%	120%	93%	70%	130%
Lead	1954940		8	8	0.0%	< 1	105%	70%	130%	95%	80%	120%	90%	70%	130%
Molybdenum	1954940		<0.5	<0.5	NA	< 0.5	90%	70%	130%	97%	80%	120%	99%	70%	130%
Nickel	1954940		6	6	0.0%	< 1	88%	70%	130%	100%	80%	120%	96%	70%	130%
Selenium	1954940		0.5	0.5	NA	< 0.4	116%	70%	130%	101%	80%	120%	101%	70%	130%
Silver	1954940		<0.2	<0.2	NA	< 0.2	104%	70%	130%	101%	80%	120%	88%	70%	130%
Thallium	1954940		<0.4	<0.4	NA	< 0.4	101%	70%	130%	102%	80%	120%	97%	70%	130%
Uranium	1954940		<0.5	<0.5	NA	< 0.5	101%	70%	130%	100%	80%	120%	105%	70%	130%
Vanadium	1954940		13	13	0.0%	< 1	87%	70%	130%	91%	80%	120%	100%	70%	130%
Zinc	1954940		29	29	0.0%	< 5	93%	70%	130%	101%	80%	120%	93%	70%	130%
Chromium, Hexavalent	1954829		<0.2	<0.2	NA	< 0.2	99%	70%	130%	93%	80%	120%	91%	70%	130%
Cyanide, Free	1982741		< 0.040	< 0.040	NA	< 0.040	103%	70%	130%	94%	80%	120%	110%	70%	130%
Mercury	1954940		0.25	0.25	NA	< 0.10	100%	70%	130%	101%	80%	120%	94%	70%	130%
Electrical Conductivity (2:1)	1966584	1966584	0.470	0.436	7.5%	< 0.005	103%	80%	120%						
Sodium Adsorption Ratio (2:1) (Calc.)	1966584	1966584	4.15	4.17	0.5%	NA									
pH, 2:1 CaCl2 Extraction	1963928		6.87	7.00	1.9%	NA	100%	80%	120%						

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

Certified By:

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T700748
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:
SAMPLED BY:

Trace Organics Analysis

RPT Date: Jan 25, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	1966588	1966588	<0.05	<0.05	NA	< 0.05	118%	50%	140%	83%	50%	140%	86%	50%	140%
Acenaphthylene	1966588	1966588	<0.05	<0.05	NA	< 0.05	111%	50%	140%	78%	50%	140%	86%	50%	140%
Acenaphthene	1966588	1966588	<0.05	<0.05	NA	< 0.05	111%	50%	140%	81%	50%	140%	89%	50%	140%
Fluorene	1966588	1966588	<0.05	<0.05	NA	< 0.05	107%	50%	140%	88%	50%	140%	97%	50%	140%
Phenanthrene	1966588	1966588	<0.05	<0.05	NA	< 0.05	97%	50%	140%	71%	50%	140%	80%	50%	140%
Anthracene	1966588	1966588	<0.05	<0.05	NA	< 0.05	108%	50%	140%	79%	50%	140%	98%	50%	140%
Fluoranthene	1966588	1966588	<0.05	<0.05	NA	< 0.05	108%	50%	140%	81%	50%	140%	89%	50%	140%
Pyrene	1966588	1966588	<0.05	<0.05	NA	< 0.05	101%	50%	140%	75%	50%	140%	83%	50%	140%
Benz(a)anthracene	1966588	1966588	<0.05	<0.05	NA	< 0.05	68%	50%	140%	82%	50%	140%	69%	50%	140%
Chrysene	1966588	1966588	<0.05	<0.05	NA	< 0.05	81%	50%	140%	73%	50%	140%	77%	50%	140%
Benzo(b)fluoranthene	1966588	1966588	<0.05	<0.05	NA	< 0.05	67%	50%	140%	76%	50%	140%	85%	50%	140%
Benzo(k)fluoranthene	1966588	1966588	<0.05	<0.05	NA	< 0.05	99%	50%	140%	111%	50%	140%	97%	50%	140%
Benzo(a)pyrene	1966588	1966588	<0.05	<0.05	NA	< 0.05	71%	50%	140%	73%	50%	140%	82%	50%	140%
Indeno(1,2,3-cd)pyrene	1966588	1966588	<0.05	<0.05	NA	< 0.05	65%	50%	140%	82%	50%	140%	79%	50%	140%
Dibenz(a,h)anthracene	1966588	1966588	<0.05	<0.05	NA	< 0.05	66%	50%	140%	78%	50%	140%	92%	50%	140%
Benzo(g,h,i)perylene	1966588	1966588	<0.05	<0.05	NA	< 0.05	76%	50%	140%	75%	50%	140%	69%	50%	140%
O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Soil)															
F1 (C6 to C10)	1966591	1966591	< 5	< 5	NA	< 5	86%	60%	140%	108%	60%	140%	119%	60%	140%
F2 (C10 to C16)	1977071		< 10	< 10	NA	< 10	90%	60%	140%	109%	60%	140%	97%	60%	140%
F3 (C16 to C34)	1977071		< 50	< 50	NA	< 50	90%	60%	140%	110%	60%	140%	79%	60%	140%
F4 (C34 to C50)	1977071		< 50	< 50	NA	< 50	112%	60%	140%	96%	60%	140%	96%	60%	140%
O. Reg. 153(511) - VOCs (Soil)															
Dichlorodifluoromethane	1966591	1966591	<0.05	<0.05	NA	< 0.05	76%	50%	140%	73%	50%	140%	87%	50%	140%
Vinyl Chloride	1966591	1966591	<0.02	<0.02	NA	< 0.02	96%	50%	140%	77%	50%	140%	87%	50%	140%
Bromomethane	1966591	1966591	<0.05	<0.05	NA	< 0.05	105%	50%	140%	107%	50%	140%	73%	50%	140%
Trichlorofluoromethane	1966591	1966591	<0.05	<0.05	NA	< 0.05	102%	50%	140%	71%	50%	140%	74%	50%	140%
Acetone	1966591	1966591	<0.50	<0.50	NA	< 0.50	81%	50%	140%	97%	50%	140%	100%	50%	140%
1,1-Dichloroethylene	1966591	1966591	<0.05	<0.05	NA	< 0.05	77%	50%	140%	109%	60%	130%	97%	50%	140%
Methylene Chloride	1966591	1966591	<0.05	<0.05	NA	< 0.05	99%	50%	140%	81%	60%	130%	82%	50%	140%
Trans- 1,2-Dichloroethylene	1966591	1966591	<0.05	<0.05	NA	< 0.05	88%	50%	140%	93%	60%	130%	82%	50%	140%
Methyl tert-butyl Ether	1966591	1966591	<0.05	<0.05	NA	< 0.05	78%	50%	140%	80%	60%	130%	76%	50%	140%
1,1-Dichloroethane	1966591	1966591	<0.02	<0.02	NA	< 0.02	96%	50%	140%	90%	60%	130%	83%	50%	140%
Methyl Ethyl Ketone	1966591	1966591	<0.50	<0.50	NA	< 0.50	87%	50%	140%	80%	50%	140%	86%	50%	140%
Cis- 1,2-Dichloroethylene	1966591	1966591	<0.02	<0.02	NA	< 0.02	86%	50%	140%	70%	60%	130%	78%	50%	140%
Chloroform	1966591	1966591	<0.04	<0.04	NA	< 0.04	88%	50%	140%	73%	60%	130%	106%	50%	140%
1,2-Dichloroethane	1966591	1966591	<0.03	<0.03	NA	< 0.03	92%	50%	140%	92%	60%	130%	84%	50%	140%
1,1,1-Trichloroethane	1966591	1966591	<0.05	<0.05	NA	< 0.05	80%	50%	140%	102%	60%	130%	73%	50%	140%
Carbon Tetrachloride	1966591	1966591	<0.05	<0.05	NA	< 0.05	72%	50%	140%	79%	60%	130%	83%	50%	140%

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T700748
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:
SAMPLED BY:

Trace Organics Analysis (Continued)

RPT Date: Jan 25, 2021

PARAMETER	Batch	Sample Id	DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
			Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Benzene	1966591	1966591	<0.02	<0.02	NA	< 0.02	84%	50%	140%	85%	60%	130%	70%	50%	140%
1,2-Dichloropropane	1966591	1966591	<0.03	<0.03	NA	< 0.03	75%	50%	140%	83%	60%	130%	79%	50%	140%
Trichloroethylene	1966591	1966591	<0.03	<0.03	NA	< 0.03	84%	50%	140%	90%	60%	130%	70%	50%	140%
Bromodichloromethane	1966591	1966591	<0.05	<0.05	NA	< 0.05	71%	50%	140%	71%	60%	130%	75%	50%	140%
Methyl Isobutyl Ketone	1966591	1966591	<0.50	<0.50	NA	< 0.50	80%	50%	140%	96%	50%	140%	88%	50%	140%
1,1,2-Trichloroethane	1966591	1966591	<0.04	<0.04	NA	< 0.04	99%	50%	140%	94%	60%	130%	105%	50%	140%
Toluene	1966591	1966591	<0.05	<0.05	NA	< 0.05	93%	50%	140%	73%	60%	130%	74%	50%	140%
Dibromochloromethane	1966591	1966591	<0.05	<0.05	NA	< 0.05	75%	50%	140%	79%	60%	130%	74%	50%	140%
Ethylene Dibromide	1966591	1966591	<0.04	<0.04	NA	< 0.04	88%	50%	140%	82%	60%	130%	96%	50%	140%
Tetrachloroethylene	1966591	1966591	<0.05	<0.05	NA	< 0.05	85%	50%	140%	71%	60%	130%	75%	50%	140%
1,1,1,2-Tetrachloroethane	1966591	1966591	<0.04	<0.04	NA	< 0.04	75%	50%	140%	76%	60%	130%	76%	50%	140%
Chlorobenzene	1966591	1966591	<0.05	<0.05	NA	< 0.05	92%	50%	140%	77%	60%	130%	82%	50%	140%
Ethylbenzene	1966591	1966591	<0.05	<0.05	NA	< 0.05	86%	50%	140%	71%	60%	130%	88%	50%	140%
m & p-Xylene	1966591	1966591	<0.05	<0.05	NA	< 0.05	94%	50%	140%	76%	60%	130%	87%	50%	140%
Bromoform	1966591	1966591	<0.05	<0.05	NA	< 0.05	72%	50%	140%	73%	60%	130%	81%	50%	140%
Styrene	1966591	1966591	<0.05	<0.05	NA	< 0.05	81%	50%	140%	84%	60%	130%	83%	50%	140%
1,1,2,2-Tetrachloroethane	1966591	1966591	<0.05	<0.05	NA	< 0.05	109%	50%	140%	109%	60%	130%	118%	50%	140%
o-Xylene	1966591	1966591	<0.05	<0.05	NA	< 0.05	95%	50%	140%	77%	60%	130%	79%	50%	140%
1,3-Dichlorobenzene	1966591	1966591	<0.05	<0.05	NA	< 0.05	98%	50%	140%	83%	60%	130%	92%	50%	140%
1,4-Dichlorobenzene	1966591	1966591	<0.05	<0.05	NA	< 0.05	99%	50%	140%	85%	60%	130%	95%	50%	140%
1,2-Dichlorobenzene	1966591	1966591	<0.05	<0.05	NA	< 0.05	99%	50%	140%	85%	60%	130%	96%	50%	140%
n-Hexane	1966591	1966591	<0.05	<0.05	NA	< 0.05	71%	50%	140%	74%	60%	130%	74%	50%	140%

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

Certified By: N Popowkof

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6036	modified from MSA PART 3, CH 14 and SM 2510 B	EC METER
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6031	modified from EPA 9045D and MCKEAGUE 3.11	PH METER

AGAT Laboratories

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	ORG-91-5106	Tier 1 Method	BALANCE
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene-d10	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene-d12	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
F1 (C6 to C10)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F2 (C10 to C16)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F4 (C34 to C50)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Dichlorodifluoromethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Bromoform	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5002	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Moisture Content		Tier 1 method	BALANCE

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Chain of Custody Record

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

Laboratory Use Only

Work Order #: 21T700748

Cooler Quantity: 1

Arrival Temperatures: 2.3 | 2.4 | 2.6

Custody Seal Intact: ☑ Yes ☐ No ☐ N/A

Notes: bagged ice

Report Information:

Company: BLK consulting Inc
Contact: Fernando Contento
Address: 5560 Tomken Rd. Unit 12 Mississauga
Phone: 647 966-6894 Fax:
Reports to be sent to:
1. Email: FContento@brownfieldgi.com
2. Email:

Project Information:

Project: BLK - ENV - 349B
Site Location: 227 Cross Av.
Sampled By: TVH
AGAT ID #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: BLK Consulting Inc
Contact: Laine Dougherty
Address: 5500 Tomken Rd. Unit 12, Mississauga
Email: LDougherty@brownfieldgi.com

Regulatory Requirements:

(Please check all applicable boxes)

☑ Regulation 153/04
Table 2 (Indicate One)
☐ Ind/Com
☑ Res/Park
☐ Agriculture

Soil Texture (Check One)
☑ Coarse
☐ Fine

☐ Excess Soils R406
Table ____ (Indicate One)

☐ Regulation 558

☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm
Region

☐ Prov. Water Quality Objectives (PWQO)

☐ Other
Indicate One

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

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

Turnaround Time (TAT) Required:

Regular TAT (Most Analysis) ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs; Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: Total PCBs ☐ Aroclor	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH101-SS1	Jan 13, 2021	9:30 AM/PM	2	S			✓			✓							
BH101-SS2	↓	9:35 AM/PM	3						✓			✓					
BH102-SS1		11:00 AM/PM	2				✓			✓							
BH102-SS2		11:05 AM/PM	3						✓			✓					
BH103-SS1		12:30 AM/PM	2				✓			✓							
BH104-SS1	↓	2:00 AM/PM	2				✓			✓							
BH105-SS1	Jan 14, 2021	10:00 AM/PM	2				✓			✓							
BH105-SS3	↓	10:15 AM/PM	3	↓					✓			✓					

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Travis Van Holst Travis Van Holst	Jan 18, 2021	4:10 pm	Lakshanya		
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time

'21 JAN 18 4:05PM

Page 1 of 1

N°: T114666

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CANADA L4Z 1Y2
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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Fernando Contento

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T703878

SOIL ANALYSIS REVIEWED BY: Yris Verastegui, Report Reviewer

TRACE ORGANICS REVIEWED BY: Pinkal Patel, Report Reviewer

DATE REPORTED: Feb 02, 2021

PAGES (INCLUDING COVER): 19

VERSION*: 1

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

*Notes

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Certificate of Analysis

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

SAMPLE DESCRIPTION:				BH106-SS2	BH107-SS1	BH108-SS1	BH109-SS1	BH110-SS1	BH111-SS1	BH112-SS1	BH113-SS1
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-01-20 08:45	2021-01-20 10:10	2021-01-20 11:45	2021-01-21 13:30	2021-01-21 09:15	2021-01-21 11:00	2021-01-21 13:00	2021-01-21 15:00
Parameter	Unit	G / S	RDL	2011445	2011446	2011447	2011448	2011449	2011451	2011452	2011454
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	7	6	7	7	7	7	6	10
Barium	µg/g	390	2.0	72.2	99.3	78.2	92.3	46.4	65.6	89.5	109
Beryllium	µg/g	4	0.4	0.6	0.6	0.6	0.6	<0.4	0.4	0.6	0.4
Boron	µg/g	120	5	10	7	8	9	9	10	9	9
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.62	0.37	0.39	0.28	0.29	0.31	0.64	0.57
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	5	22	23	23	24	10	17	24	19
Cobalt	µg/g	22	0.5	13.6	14.2	14.3	14.0	6.0	9.1	14.6	10.5
Copper	µg/g	140	1.0	188	46.9	37.9	43.3	25.4	47.7	37.4	62.3
Lead	µg/g	120	1	12	13	17	14	19	17	14	47
Molybdenum	µg/g	6.9	0.5	0.7	<0.5	0.5	<0.5	0.9	1.0	<0.5	0.9
Nickel	µg/g	100	1	27	30	29	30	11	21	30	22
Selenium	µg/g	2.4	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g	20	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.78	0.73	0.80	0.66	0.51	0.77	1.05	0.85
Vanadium	µg/g	86	0.4	29.8	32.6	29.2	33.1	15.1	25.3	31.7	27.0
Zinc	µg/g	340	5	66	68	74	75	77	84	74	96
Chromium, Hexavalent	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide, Free	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	0.27	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	0.402	0.386	0.331	0.362	0.648	0.444	0.267	0.808
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A	4.81	4.25	1.83	2.08	1.33	1.99	0.911	1.25
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	7.93	7.80	7.70	7.76	7.99	7.70	7.67	7.70

Certified By: Iris Verástegui

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Certificate of Analysis

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

SAMPLE DESCRIPTION:				BH114-SS1	BH114-SS2	BH115-SS1	BH115-SS2
SAMPLE TYPE:				Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-01-21 16:00	2021-01-21 16:15	2021-01-22 09:00	2021-01-22 09:15
Parameter	Unit	G / S	RDL	2011456	2011457	2011458	2011459
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	7	6	7	6
Barium	µg/g	390	2.0	85.2	76.5	67.5	62.4
Beryllium	µg/g	4	0.4	0.5	0.5	<0.4	0.6
Boron	µg/g	120	5	8	7	10	8
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.54	0.45	0.54	0.31
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	0.7	<0.5
Chromium	µg/g	160	5	19	21	10	23
Cobalt	µg/g	22	0.5	9.7	12.1	5.8	15.0
Copper	µg/g	140	1.0	70.7	59.7	37.2	34.6
Lead	µg/g	120	1	29	13	34	16
Molybdenum	µg/g	6.9	0.5	0.8	0.7	1.1	<0.5
Nickel	µg/g	100	1	22	26	12	30
Selenium	µg/g	2.4	0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g	20	0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.86	0.77	0.80	0.59
Vanadium	µg/g	86	0.4	26.4	31.4	16.6	29.3
Zinc	µg/g	340	5	81	62	238	72
Chromium, Hexavalent	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2
Cyanide, Free	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	0.27	0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	0.319	0.371	1.63	0.248
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A	0.595	0.864	0.332	1.24
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	7.66	7.60	7.66	7.71

Certified By: Iris Verástegui

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2011445-2011459 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Iris Verástegui

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

SAMPLE DESCRIPTION:				BH106-SS2	BH107-SS1	BH108-SS1	BH109-SS1	BH110-SS1	BH111-SS1	BH112-SS1	BH113-SS1
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-01-20 08:45	2021-01-20 10:10	2021-01-20 11:45	2021-01-21 13:30	2021-01-21 09:15	2021-01-21 11:00	2021-01-21 13:00	2021-01-21 15:00
Parameter	Unit	G / S	RDL	2011445	2011446	2011447	2011448	2011449	2011451	2011452	2011454
Naphthalene	µg/g	0.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.5	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	7	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	13.1	11.6	9.8	10.9	6.2	8.4	11.0	10.6
Surrogate	Unit	Acceptable Limits									
Naphthalene-d8	%	50-140		91	80	77	86	85	81	92	85
Acenaphthene-d10	%	50-140		80	82	82	80	79	77	87	79
Chrysene-d12	%	50-140		110	98	100	100	119	110	116	110

Certified By:

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AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

SAMPLE DESCRIPTION:				BH114-SS1	BH114-SS2	BH115-SS1	BH115-SS2
SAMPLE TYPE:				Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-01-21 16:00	2021-01-21 16:15	2021-01-22 09:00	2021-01-22 09:15
Parameter	Unit	G / S	RDL	2011456	2011457	2011458	2011459
Naphthalene	µg/g	0.6	0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	78	0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.5	0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	7	0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05	<0.05	<0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	8.3	13.7	10.1	13.6
Surrogate	Unit	Acceptable Limits					
Naphthalene-d8	%	50-140		88	79	96	111
Acenaphthene-d10	%	50-140		83	75	93	85
Chrysene-d12	%	50-140		110	100	100	100

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2011445-2011459 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Pinkal Patel

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Certificate of Analysis

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

SAMPLE DESCRIPTION:				BH106-SS1	BH110-SS2	BH112-SS2	BH113-SS2
SAMPLE TYPE:				Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-01-20 08:30	2021-01-21 09:30	2021-01-21 13:15	2021-01-21 15:15
Parameter	Unit	G / S	RDL	2011444	2011450	2011453	2011455
F1 (C6 to C10)	µg/g	55	5	<5	<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	55	5	<5	<5	<5	<5
F2 (C10 to C16)	µg/g	98	10	<10	<10	<10	<10
F3 (C16 to C34)	µg/g	300	50	<50	<50	<50	<50
F4 (C34 to C50)	µg/g	2800	50	<50	<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	2800	50	NA	NA	NA	NA
Moisture Content	%		0.1	11.9	12.0	11.1	11.6
Surrogate	Unit	Acceptable Limits					
Terphenyl	%	60-140		86	82	79	87

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2011444-2011455 Results are based on sample dry weight.
The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified without the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.

Analysis performed at AGAT Toronto (unless marked by *)

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AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

SAMPLE DESCRIPTION:				BH106-SS1	BH110-SS2	BH112-SS2	BH113-SS2
SAMPLE TYPE:				Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-01-20 08:30	2021-01-21 09:30	2021-01-21 13:15	2021-01-21 15:15
Parameter	Unit	G / S	RDL	2011444	2011450	2011453	2011455
Dichlorodifluoromethane	µg/g	16	0.05	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.02	0.02	<0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05	<0.05	<0.05	<0.05
Acetone	ug/g	16	0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	0.084	0.05	<0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	0.75	0.05	<0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	16	0.50	<0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	0.38	0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.21	0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.061	0.03	<0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	<0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	1.7	0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04
Toluene	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	0.28	0.05	<0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.058	0.04	<0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05	<0.05	<0.05	<0.05

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Certificate of Analysis

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

				SAMPLE DESCRIPTION:	BH106-SS1	BH110-SS2	BH112-SS2	BH113-SS2
				SAMPLE TYPE:	Soil	Soil	Soil	Soil
				DATE SAMPLED:	2021-01-20 08:30	2021-01-21 09:30	2021-01-21 13:15	2021-01-21 15:15
Parameter	Unit	G / S	RDL		2011444	2011450	2011453	2011455
m & p-Xylene	ug/g		0.05		<0.05	<0.05	<0.05	<0.05
Bromoform	ug/g	0.27	0.05		<0.05	<0.05	<0.05	<0.05
Styrene	ug/g	0.7	0.05		<0.05	<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05		<0.05	<0.05	<0.05	<0.05
o-Xylene	ug/g		0.05		<0.05	<0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	4.8	0.05		<0.05	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.083	0.05		<0.05	<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.05		<0.05	<0.05	<0.05	<0.05
Xylenes (Total)	ug/g	3.1	0.05		<0.05	<0.05	<0.05	<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g	0.05	0.04		<0.04	<0.04	<0.04	<0.04
n-Hexane	µg/g	2.8	0.05		<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1		11.9	12.0	11.1	11.6
Surrogate	Unit	Acceptable Limits						
Toluene-d8	% Recovery	50-140			106	105	104	102
4-Bromofluorobenzene	% Recovery	50-140			92	90	91	91

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2011444-2011455 The sample was analyzed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Exceedance Summary

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
2011445	BH106-SS2	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Copper	µg/g	140	188
2011454	BH113-SS1	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	mS/cm	0.7	0.808
2011458	BH115-SS1	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	mS/cm	0.7	1.63

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T703878
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:
SAMPLED BY:

Soil Analysis

RPT Date: Feb 02, 2021

PARAMETER	Batch	Sample Id	DUPLICATE Dup #1	Dup #2	RPD	Method Blank	REFERENCE MATERIAL Measured Value	Acceptable Limits Lower	Upper	METHOD BLANK SPIKE Recovery	Acceptable Limits Lower	Upper	MATRIX SPIKE Recovery	Acceptable Limits Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	2011458	2011458	<0.8	<0.8	NA	< 0.8	97%	70%	130%	101%	80%	120%	88%	70%	130%
Arsenic	2011458	2011458	7	8	13.3%	< 1	109%	70%	130%	99%	80%	120%	104%	70%	130%
Barium	2011458	2011458	67.5	66.1	2.1%	< 2.0	100%	70%	130%	96%	80%	120%	106%	70%	130%
Beryllium	2011458	2011458	<0.4	<0.4	NA	< 0.4	95%	70%	130%	102%	80%	120%	81%	70%	130%
Boron	2011458	2011458	10	10	NA	< 5	101%	70%	130%	97%	80%	120%	74%	70%	130%
Boron (Hot Water Soluble)	2011458	2011458	0.54	0.58	7.1%	< 0.10	99%	60%	140%	102%	70%	130%	101%	60%	140%
Cadmium	2011458	2011458	0.7	<0.5	NA	< 0.5	104%	70%	130%	98%	80%	120%	94%	70%	130%
Chromium	2011458	2011458	10	10	NA	< 5	97%	70%	130%	98%	80%	120%	100%	70%	130%
Cobalt	2011458	2011458	5.8	5.8	0.0%	< 0.5	95%	70%	130%	100%	80%	120%	100%	70%	130%
Copper	2011458	2011458	37.2	36.8	1.1%	< 1.0	90%	70%	130%	105%	80%	120%	99%	70%	130%
Lead	2011458	2011458	34	37	8.5%	< 1	105%	70%	130%	98%	80%	120%	94%	70%	130%
Molybdenum	2011458	2011458	1.1	1.2	NA	< 0.5	100%	70%	130%	95%	80%	120%	104%	70%	130%
Nickel	2011458	2011458	12	11	8.7%	< 1	95%	70%	130%	102%	80%	120%	93%	70%	130%
Selenium	2011458	2011458	<0.8	<0.8	NA	< 0.8	113%	70%	130%	93%	80%	120%	102%	70%	130%
Silver	2011458	2011458	<0.5	<0.5	NA	< 0.5	94%	70%	130%	106%	80%	120%	91%	70%	130%
Thallium	2011458	2011458	<0.5	<0.5	NA	< 0.5	106%	70%	130%	97%	80%	120%	95%	70%	130%
Uranium	2011458	2011458	0.80	0.85	NA	< 0.50	112%	70%	130%	100%	80%	120%	103%	70%	130%
Vanadium	2011458	2011458	16.6	16.5	0.6%	< 0.4	94%	70%	130%	94%	80%	120%	106%	70%	130%
Zinc	2011458	2011458	238	199	17.8%	< 5	99%	70%	130%	105%	80%	120%	118%	70%	130%
Chromium, Hexavalent	2015817		<0.2	<0.2	NA	< 0.2	93%	70%	130%	96%	80%	120%	94%	70%	130%
Cyanide, Free	2011445	2011445	<0.040	<0.040	NA	< 0.040	92%	70%	130%	92%	80%	120%	97%	70%	130%
Mercury	2011458	2011458	<0.10	<0.10	NA	< 0.10	99%	70%	130%	97%	80%	120%	93%	70%	130%
Electrical Conductivity (2:1)	2023492		0.191	0.191	0.0%	< 0.005	109%	80%	120%						
Sodium Adsorption Ratio (2:1) (Calc.)	2011458	2011458	0.332	0.358	7.5%	N/A	NA								
pH, 2:1 CaCl2 Extraction	2011445	2011445	7.93	7.96	0.4%	NA	100%	80%	120%						

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

Certified By: Iris Verástegui

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T703878
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:
SAMPLED BY:

Trace Organics Analysis

RPT Date: Feb 02, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - VOCs (Soil)															
Dichlorodifluoromethane	2011403		<0.05	<0.05	NA	< 0.05	76%	50%	140%	86%	50%	140%	71%	50%	140%
Vinyl Chloride	2011403		<0.02	<0.02	NA	< 0.02	98%	50%	140%	74%	50%	140%	76%	50%	140%
Bromomethane	2011403		<0.05	<0.05	NA	< 0.05	104%	50%	140%	71%	50%	140%	80%	50%	140%
Trichlorofluoromethane	2011403		<0.05	<0.05	NA	< 0.05	98%	50%	140%	83%	50%	140%	73%	50%	140%
Acetone	2011403		<0.50	<0.50	NA	< 0.50	86%	50%	140%	97%	50%	140%	102%	50%	140%
1,1-Dichloroethylene	2011403		<0.05	<0.05	NA	< 0.05	95%	50%	140%	94%	60%	130%	73%	50%	140%
Methylene Chloride	2011403		<0.05	<0.05	NA	< 0.05	107%	50%	140%	97%	60%	130%	99%	50%	140%
Trans- 1,2-Dichloroethylene	2011403		<0.05	<0.05	NA	< 0.05	87%	50%	140%	84%	60%	130%	81%	50%	140%
Methyl tert-butyl Ether	2011403		<0.05	<0.05	NA	< 0.05	118%	50%	140%	116%	60%	130%	118%	50%	140%
1,1-Dichloroethane	2011403		<0.02	<0.02	NA	< 0.02	80%	50%	140%	81%	60%	130%	89%	50%	140%
Methyl Ethyl Ketone	2011403		<0.50	<0.50	NA	< 0.50	95%	50%	140%	99%	50%	140%	85%	50%	140%
Cis- 1,2-Dichloroethylene	2011403		<0.02	<0.02	NA	< 0.02	81%	50%	140%	79%	60%	130%	88%	50%	140%
Chloroform	2011403		<0.04	<0.04	NA	< 0.04	76%	50%	140%	79%	60%	130%	87%	50%	140%
1,2-Dichloroethane	2011403		<0.03	<0.03	NA	< 0.03	79%	50%	140%	76%	60%	130%	92%	50%	140%
1,1,1-Trichloroethane	2011403		<0.05	<0.05	NA	< 0.05	81%	50%	140%	93%	60%	130%	91%	50%	140%
Carbon Tetrachloride	2011403		<0.05	<0.05	NA	< 0.05	72%	50%	140%	74%	60%	130%	73%	50%	140%
Benzene	2011403		<0.02	<0.02	NA	< 0.02	81%	50%	140%	80%	60%	130%	89%	50%	140%
1,2-Dichloropropane	2011403		<0.03	<0.03	NA	< 0.03	84%	50%	140%	84%	60%	130%	93%	50%	140%
Trichloroethylene	2011403		<0.03	<0.03	NA	< 0.03	81%	50%	140%	77%	60%	130%	80%	50%	140%
Bromodichloromethane	2011403		<0.05	<0.05	NA	< 0.05	70%	50%	140%	77%	60%	130%	77%	50%	140%
Methyl Isobutyl Ketone	2011403		<0.50	<0.50	NA	< 0.50	88%	50%	140%	84%	50%	140%	96%	50%	140%
1,1,2-Trichloroethane	2011403		<0.04	<0.04	NA	< 0.04	89%	50%	140%	84%	60%	130%	100%	50%	140%
Toluene	2011403		<0.05	<0.05	NA	< 0.05	80%	50%	140%	71%	60%	130%	75%	50%	140%
Dibromochloromethane	2011403		<0.05	<0.05	NA	< 0.05	81%	50%	140%	74%	60%	130%	79%	50%	140%
Ethylene Dibromide	2011403		<0.04	<0.04	NA	< 0.04	89%	50%	140%	82%	60%	130%	93%	50%	140%
Tetrachloroethylene	2011403		<0.05	<0.05	NA	< 0.05	77%	50%	140%	70%	60%	130%	74%	50%	140%
1,1,1,2-Tetrachloroethane	2011403		<0.04	<0.04	NA	< 0.04	84%	50%	140%	77%	60%	130%	76%	50%	140%
Chlorobenzene	2011403		<0.05	<0.05	NA	< 0.05	76%	50%	140%	71%	60%	130%	76%	50%	140%
Ethylbenzene	2011403		<0.05	<0.05	NA	< 0.05	70%	50%	140%	73%	60%	130%	81%	50%	140%
m & p-Xylene	2011403		<0.05	<0.05	NA	< 0.05	73%	50%	140%	101%	60%	130%	96%	50%	140%
Bromoform	2011403		<0.05	<0.05	NA	< 0.05	80%	50%	140%	79%	60%	130%	81%	50%	140%
Styrene	2011403		<0.05	<0.05	NA	< 0.05	89%	50%	140%	71%	60%	130%	78%	50%	140%
1,1,2,2-Tetrachloroethane	2011403		<0.05	<0.05	NA	< 0.05	103%	50%	140%	88%	60%	130%	106%	50%	140%
o-Xylene	2011403		<0.05	<0.05	NA	< 0.05	76%	50%	140%	76%	60%	130%	74%	50%	140%
1,3-Dichlorobenzene	2011403		<0.05	<0.05	NA	< 0.05	80%	50%	140%	87%	60%	130%	78%	50%	140%
1,4-Dichlorobenzene	2011403		<0.05	<0.05	NA	< 0.05	81%	50%	140%	72%	60%	130%	81%	50%	140%
1,2-Dichlorobenzene	2011403		<0.05	<0.05	NA	< 0.05	85%	50%	140%	72%	60%	130%	78%	50%	140%
n-Hexane	2011403		<0.05	<0.05	NA	< 0.05	113%	50%	140%	103%	60%	130%	74%	50%	140%

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis (Continued)

RPT Date: Feb 02, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Soil)															
F1 (C6 to C10)	2011403		< 5	< 5	NA	< 5	89%	60%	140%	111%	60%	140%	110%	60%	140%
F2 (C10 to C16)	2004390		< 10	< 10	NA	< 10	112%	60%	140%	96%	60%	140%	78%	60%	140%
F3 (C16 to C34)	2004390		< 50	< 50	NA	< 50	109%	60%	140%	95%	60%	140%	71%	60%	140%
F4 (C34 to C50)	2004390		< 50	< 50	NA	< 50	101%	60%	140%	87%	60%	140%	82%	60%	140%
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	2011449	2011449	<0.05	<0.05	NA	< 0.05	109%	50%	140%	83%	50%	140%	78%	50%	140%
Acenaphthylene	2011449	2011449	<0.05	<0.05	NA	< 0.05	114%	50%	140%	79%	50%	140%	82%	50%	140%
Acenaphthene	2011449	2011449	<0.05	<0.05	NA	< 0.05	114%	50%	140%	82%	50%	140%	81%	50%	140%
Fluorene	2011449	2011449	<0.05	<0.05	NA	< 0.05	99%	50%	140%	81%	50%	140%	75%	50%	140%
Phenanthrene	2011449	2011449	<0.05	<0.05	NA	< 0.05	93%	50%	140%	71%	50%	140%	75%	50%	140%
Anthracene	2011449	2011449	<0.05	<0.05	NA	< 0.05	111%	50%	140%	81%	50%	140%	99%	50%	140%
Fluoranthene	2011449	2011449	<0.05	<0.05	NA	< 0.05	105%	50%	140%	82%	50%	140%	93%	50%	140%
Pyrene	2011449	2011449	<0.05	<0.05	NA	< 0.05	112%	50%	140%	77%	50%	140%	90%	50%	140%
Benz(a)anthracene	2011449	2011449	<0.05	<0.05	NA	< 0.05	111%	50%	140%	76%	50%	140%	106%	50%	140%
Chrysene	2011449	2011449	<0.05	<0.05	NA	< 0.05	102%	50%	140%	99%	50%	140%	105%	50%	140%
Benzo(b)fluoranthene	2011449	2011449	<0.05	<0.05	NA	< 0.05	69%	50%	140%	79%	50%	140%	74%	50%	140%
Benzo(k)fluoranthene	2011449	2011449	<0.05	<0.05	NA	< 0.05	77%	50%	140%	85%	50%	140%	84%	50%	140%
Benzo(a)pyrene	2011449	2011449	<0.05	<0.05	NA	< 0.05	60%	50%	140%	76%	50%	140%	77%	50%	140%
Indeno(1,2,3-cd)pyrene	2011449	2011449	<0.05	<0.05	NA	< 0.05	67%	50%	140%	72%	50%	140%	93%	50%	140%
Dibenz(a,h)anthracene	2011449	2011449	<0.05	<0.05	NA	< 0.05	64%	50%	140%	80%	50%	140%	78%	50%	140%
Benzo(g,h,i)perylene	2011449	2011449	<0.05	<0.05	NA	< 0.05	77%	50%	140%	82%	50%	140%	78%	50%	140%

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

Certified By: Jinkal Patel

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6036	modified from MSA PART 3, CH 14 and SM 2510 B	EC METER
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6031	modified from EPA 9045D and MCKEAGUE 3.11	PH METER

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	ORG-91-5106	Tier 1 Method	BALANCE
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene-d10	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene-d12	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
F1 (C6 to C10)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F2 (C10 to C16)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F4 (C34 to C50)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Dichlorodifluoromethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS

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Method Summary

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AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

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

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Bromoform	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5002	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Moisture Content		Tier 1 method	BALANCE

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Chain of Custody Record

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

Laboratory Use Only 878
Work Order #: 21T703 ~~878~~
Cooler Quantity: 1 tray
Arrival Temperatures: 1.8 | 1.1 | 1.7
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: Free + CE

Report Information:
Company: B.I.G. Consulting Inc.
Contact: Fernando Contento
Address: 5500 Tomken Road, Unit 12, Mississauga, ON
Phone: 6479666894 Fax:
Reports to be sent to:
1. Email: fcontento@brownfieldigi.com
2. Email:

Project Information:
Project: BIGC-ENV-349B
Site Location: Cros Avenue
Sampled By: TVH
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:
Bill To Same: Yes ☐ No ☐
Company: B.I.G. Consulting Inc.
Contact: Laine Dougherty
Address: 5500 Tomken Road, Unit 12, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Regulatory Requirements:
☐ No Regulatory Requirement
(Please check all applicable boxes)

☑ Regulation 153/04
Table 02 (Indicate One)
☐ Ind/Com
☑ Res/Park
☐ Agriculture
Soil Texture (Check One)
☑ Coarse
☐ Fine

☐ Sewer Use
☐ Sanitary
☐ Storm
Region (Indicate One)
☐ MISA

☐ Regulation 558
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
(Indicate One)

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

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

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

Sample Matrix Legend
B Biota
GW Ground Water
O Oil
P Paint
S Soil
SD Sediment
SW Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Y/N	Field Filtered - Metals, Hg, CrVI	O. Reg 153: Metals and Inorganics (☐ All Metals ☐ 153 Metals (excl. Hydrides) ☐ Hydride Metals ☑ 153 Metals (incl. Hydrides))	ORPs: ☐ B-HWS ☐ Cl ☐ CN ☐ Cr6+ ☐ EC ☐ FOC ☐ Hg ☐ pH ☐ SAR	Full Metals Scan	Regulation/Custom Metals	Nutrients: ☐ TP ☐ NH3 ☐ TKN ☐ NO3 ☐ NO2 ☐ NO3+NO2	Volatiles: ☑ VOC ☐ BTEX ☐ THM	PHCs F1 - F4	ABNs	PAHs	PCBs: ☐ Total ☐ Aroclors	Organochlorine Pesticides	TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Sewer Use						Potentially Hazardous or High Concentration (*/N)
BH106-SS1	20 Jan 2021	08:30	3	S									☑	☑															
BH106-SS2	20 Jan 2021	08:45	2	S				☑								☑													
BH107-SS1	20 Jan 2021	10:10	2	S				☑								☑													
BH108-SS1	20 Jan 2021	11:45	2	S				☑								☑													
BH109-SS1	20 Jan 2021	13:30	2	S				☑								☑													
BH110-SS1	21 Jan 2021	09:15	2	S				☑								☑													
BH110-SS2	21 Jan 2021	09:30	3	S									☑	☑															
BH111-SS1	21 Jan 2021	11:00	2	S				☑								☑													
BH112-SS1	21 Jan 2021	13:00	2	S				☑								☑													
BH112-SS2	21 Jan 2021	13:15	3	S									☑	☑															
BH113-SS1	21 Jan 2021	15:00	2	S				☑								☑													

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	
Sai S	26/Jan/2021	14:25	NEAC G 28			
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	Page 1 of 2
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	N°:

21 JAN 26 2:55 PM

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

AGAT Laboratories
5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: B.I.G. Consulting Inc.
Contact: Fernando Contento
Address: 5500 Tomken Road, Unit 12, Mississauga, ON
Phone: 6479666894 Fax:
Reports to be sent to:
1. Email: fcontento@brownfieldigi.com
2. Email:

Project Information:

Project: BIGC-ENV-349B
Site Location: Cros Avenue
Sampled By: TVI I
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: B.I.G. Consulting Inc.
Contact: Laine Dougherty
Address: 5500 Tomken Road, Unit 12, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Regulatory Requirements:

☐ No Regulatory Requirement

(Please check all applicable boxes)

☑ Regulation 153/04
Table 02 *Indicate One*
☐ Ind/Com
☑ Res/Park
☐ Agriculture

Soil Texture *(Check One)*
☑ Coarse
☐ Fine

☐ Sewer Use
☐ Sanitary
☐ Storm
Region *Indicate One*
☐ MISA

☐ Regulation 558
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
Indicate One

Is this submission for a Record of Site Condition? ☑ Yes ☐ No

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

Laboratory Use Only

Work Order #:
Cooler Quantity: See pg 1
Arrival Temperatures:
Custody Seal Intact: ☐Yes ☐No ☐N/A
Notes:

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI (Y/N)	O. Reg 153: Metals and Inorganics	O. Reg 153: All Metals ☐ / 153 Metals (excl. Hydrides) ☐ / Hydride Metals ☐ / 153 Metals (incl. Hydrides) ☑	O. Reg 153: ORPs: ☐ B-HWS ☐ Cl ☐ CN ☐ Cr⁶⁺ ☐ EC ☐ FOC ☐ Hg ☐ pH ☐ SAR	O. Reg 153: Full Metals Scan	O. Reg 153: Regulation/Custom Metals	O. Reg 153: Nutrients: ☐ TP ☐ NH_3 ☐ TKN ☐ NO_3 ☐ NO_2 ☐ NO_3+NO_2	O. Reg 153: Volatiles: ☑ VOC ☐ BTEX ☐ THM	O. Reg 153: PHCs F1 - F4	O. Reg 153: ABNs	O. Reg 153: PAHs	O. Reg 153: PCBs: ☐ Total ☐ Aroclors	O. Reg 153: Organochlorine Pesticides	O. Reg 153: TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 153: Sewer Use						Potentially Hazardous or High Concentration (Y/N)
BH113-SS2	21 Jan 2021	15:15	3	S									☑	☑														
BH114-SS1	21 Jan 2021	16:00	2	S			☑									☑												
BH114-SS2	21 Jan 2021	16:15	2	S			☑									☑												
BH115-SS1	22 Jan 2021	09:00	2	S			☑									☑												
BH115-SS2	22 Jan 2021	09:15	2	S			☑									☑												

21 JAN 23 2:53PM

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	
Sai S	26/Jan/2021	14:25				
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	Page 2 of 2
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	N°:

Pink Copy - Client I Yellow Copy - AGAT I White Copy- AGAT

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

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Fernando Contento

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T705007

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Feb 05, 2021

PAGES (INCLUDING COVER): 16

VERSION*: 1

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

*Notes

AGAT Laboratories

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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

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

DATE RECEIVED: 2021-01-28

DATE REPORTED: 2021-02-05

		SAMPLE DESCRIPTION:		DUP011402
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2021-01-21 16:15
Parameter	Unit	G / S	RDL	2020967
Antimony	µg/g	7.5	0.8	<0.8
Arsenic	µg/g	18	1	5
Barium	µg/g	390	2.0	70.6
Beryllium	µg/g	4	0.4	0.5
Boron	µg/g	120	5	10
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.35
Cadmium	µg/g	1.2	0.5	<0.5
Chromium	µg/g	160	5	19
Cobalt	µg/g	22	0.5	10.2
Copper	µg/g	140	1.0	42.6
Lead	µg/g	120	1	10
Molybdenum	µg/g	6.9	0.5	0.6
Nickel	µg/g	100	1	21
Selenium	µg/g	2.4	0.8	<0.8
Silver	µg/g	20	0.5	<0.5
Thallium	µg/g	1	0.5	<0.5
Uranium	µg/g	23	0.50	0.67
Vanadium	µg/g	86	0.4	30.1
Zinc	µg/g	340	5	53
Chromium, Hexavalent	µg/g	8	0.2	<0.2
Cyanide, Free	µg/g	0.051	0.040	<0.040
Mercury	µg/g	0.27	0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	0.300
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A	0.925
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	7.37

Certified By:

AGAT Laboratories

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

Certificate of Analysis

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

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

DATE RECEIVED: 2021-01-28

DATE REPORTED: 2021-02-05

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2020967 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

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

DATE RECEIVED: 2021-01-28

DATE REPORTED: 2021-02-05

				SAMPLE DESCRIPTION:	DUP011402
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2021-01-21 16:15
Parameter	Unit	G / S	RDL		2020967
Naphthalene	µg/g	0.6	0.05		<0.05
Acenaphthylene	µg/g	0.15	0.05		<0.05
Acenaphthene	µg/g	7.9	0.05		<0.05
Fluorene	µg/g	62	0.05		<0.05
Phenanthrene	µg/g	6.2	0.05		<0.05
Anthracene	µg/g	0.67	0.05		<0.05
Fluoranthene	µg/g	0.69	0.05		<0.05
Pyrene	µg/g	78	0.05		<0.05
Benz(a)anthracene	µg/g	0.5	0.05		<0.05
Chrysene	µg/g	7	0.05		<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05		<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05		<0.05
Benzo(a)pyrene	µg/g	0.3	0.05		<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05		<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05		<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05		<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05		<0.05
Moisture Content	%		0.1		14.2
Surrogate	Unit	Acceptable Limits			
Naphthalene-d8	%	50-140			92
Acenaphthene-d10	%	50-140			87
Chrysene-d12	%	50-140			82

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2020967 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

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

DATE RECEIVED: 2021-01-28

DATE REPORTED: 2021-02-05

				SAMPLE DESCRIPTION:	DUP011002
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2021-01-21 09:30
Parameter	Unit	G / S	RDL		2020966
F1 (C6 to C10)	µg/g	55	5		<5
F1 (C6 to C10) minus BTEX	µg/g	55	5		<5
F2 (C10 to C16)	µg/g	98	10		<10
F3 (C16 to C34)	µg/g	300	50		<50
F4 (C34 to C50)	µg/g	2800	50		<50
Gravimetric Heavy Hydrocarbons	µg/g	2800	50		NA
Moisture Content	%		0.1		12.3
Surrogate	Unit	Acceptable Limits			
Terphenyl	%	60-140			115

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2020966 Results are based on sample dry weight.
The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified without the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: 

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

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

DATE RECEIVED: 2021-01-28

DATE REPORTED: 2021-02-05

		SAMPLE DESCRIPTION:		DUP011002
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2021-01-21 09:30
Parameter	Unit	G / S	RDL	2020966
Dichlorodifluoromethane	µg/g	16	0.05	<0.05
Vinyl Chloride	ug/g	0.02	0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05
Acetone	ug/g	16	0.50	<0.50
1,1-Dichloroethylene	ug/g	0.05	0.05	<0.05
Methylene Chloride	ug/g	0.1	0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	0.084	0.05	<0.05
Methyl tert-butyl Ether	ug/g	0.75	0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02
Methyl Ethyl Ketone	ug/g	16	0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02
Chloroform	ug/g	0.05	0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03
1,1,1-Trichloroethane	ug/g	0.38	0.05	<0.05
Carbon Tetrachloride	ug/g	0.05	0.05	<0.05
Benzene	ug/g	0.21	0.02	<0.02
1,2-Dichloropropane	ug/g	0.05	0.03	<0.03
Trichloroethylene	ug/g	0.061	0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	<0.05
Methyl Isobutyl Ketone	ug/g	1.7	0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04
Toluene	ug/g	2.3	0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04
Tetrachloroethylene	ug/g	0.28	0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.058	0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05

Certified By: NPopowkof

AGAT Laboratories

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

Certificate of Analysis

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

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

DATE RECEIVED: 2021-01-28

DATE REPORTED: 2021-02-05

		SAMPLE DESCRIPTION:		DUP011002
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2021-01-21 09:30
Parameter	Unit	G / S	RDL	2020966
m & p-Xylene	ug/g		0.05	<0.05
Bromoform	ug/g	0.27	0.05	<0.05
Styrene	ug/g	0.7	0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05
o-Xylene	ug/g		0.05	<0.05
1,3-Dichlorobenzene	ug/g	4.8	0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.083	0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.05	<0.05
Xylenes (Total)	ug/g	3.1	0.05	<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g	0.05	0.04	<0.04
n-Hexane	µg/g	2.8	0.05	<0.05
Moisture Content	%		0.1	12.3
Surrogate	Unit	Acceptable Limits		
Toluene-d8	% Recovery	50-140		104
4-Bromofluorobenzene	% Recovery	50-140		85

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2020966 The sample was analyzed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

AGAT Laboratories
5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T705007
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:Cros Avenue
SAMPLED BY:TVH

Soil Analysis

RPT Date: Feb 05, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	2023842		<0.8	<0.8	NA	< 0.8	107%	70%	130%	98%	80%	120%	100%	70%	130%
Arsenic	2023842		9	9	0.0%	< 1	112%	70%	130%	100%	80%	120%	98%	70%	130%
Barium	2023842		51.2	52.2	1.9%	< 2.0	109%	70%	130%	100%	80%	120%	105%	70%	130%
Beryllium	2023842		0.8	0.8	NA	< 0.4	75%	70%	130%	112%	80%	120%	74%	70%	130%
Boron	2023842		11	12	NA	< 5	81%	70%	130%	114%	80%	120%	102%	70%	130%
Boron (Hot Water Soluble)	2028652		0.13	0.13	NA	< 0.10	102%	60%	140%	104%	70%	130%	103%	60%	140%
Cadmium	2023842		<0.5	<0.5	NA	< 0.5	90%	70%	130%	101%	80%	120%	103%	70%	130%
Chromium	2023842		30	30	0.0%	< 5	102%	70%	130%	105%	80%	120%	99%	70%	130%
Cobalt	2023842		22.2	22.2	0.0%	< 0.5	96%	70%	130%	103%	80%	120%	92%	70%	130%
Copper	2023842		36.7	35.8	2.5%	< 1.0	88%	70%	130%	106%	80%	120%	96%	70%	130%
Lead	2023842		5	5	0.0%	< 1	105%	70%	130%	102%	80%	120%	95%	70%	130%
Molybdenum	2023842		<0.5	<0.5	NA	< 0.5	104%	70%	130%	102%	80%	120%	96%	70%	130%
Nickel	2023842		37	36	2.7%	< 1	92%	70%	130%	103%	80%	120%	89%	70%	130%
Selenium	2023842		<0.8	<0.8	NA	< 0.8	138%	70%	130%	102%	80%	120%	98%	70%	130%
Silver	2023842		<0.5	<0.5	NA	< 0.5	99%	70%	130%	101%	80%	120%	97%	70%	130%
Thallium	2023842		<0.5	<0.5	NA	< 0.5	110%	70%	130%	100%	80%	120%	95%	70%	130%
Uranium	2023842		0.65	0.63	NA	< 0.50	109%	70%	130%	104%	80%	120%	102%	70%	130%
Vanadium	2023842		39.6	38.8	2.0%	< 0.4	104%	70%	130%	104%	80%	120%	105%	70%	130%
Zinc	2023842		76	75	1.3%	< 5	100%	70%	130%	110%	80%	120%	115%	70%	130%
Chromium, Hexavalent	2042170		<0.2	<0.2	NA	< 0.2	98%	70%	130%	99%	80%	120%	82%	70%	130%
Cyanide, Free	2036707		<0.040	<0.040	NA	< 0.040	90%	70%	130%	103%	80%	120%	109%	70%	130%
Mercury	2023842		<0.10	<0.10	NA	< 0.10	115%	70%	130%	100%	80%	120%	100%	70%	130%
Electrical Conductivity (2:1)	2023784		0.176	0.180	2.2%	< 0.005	108%	80%	120%						
Sodium Adsorption Ratio (2:1) (Calc.)	2023784		1.18	1.15	2.6%	NA									
pH, 2:1 CaCl2 Extraction	2023262		7.22	7.27	0.7%	NA	100%	80%	120%						

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

More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

Certified By:

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T705007
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:Cros Avenue
SAMPLED BY:TVH

Trace Organics Analysis

RPT Date: Feb 05, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - VOCs (Soil)															
Dichlorodifluoromethane	2023833		<0.05	<0.05	NA	< 0.05	84%	50%	140%	76%	50%	140%	109%	50%	140%
Vinyl Chloride	2023833		<0.02	<0.02	NA	< 0.02	73%	50%	140%	88%	50%	140%	93%	50%	140%
Bromomethane	2023833		<0.05	<0.05	NA	< 0.05	90%	50%	140%	96%	50%	140%	104%	50%	140%
Trichlorofluoromethane	2023833		<0.05	<0.05	NA	< 0.05	90%	50%	140%	85%	50%	140%	89%	50%	140%
Acetone	2023833		<0.50	<0.50	NA	< 0.50	99%	50%	140%	97%	50%	140%	96%	50%	140%
1,1-Dichloroethylene	2023833		<0.05	<0.05	NA	< 0.05	72%	50%	140%	70%	60%	130%	80%	50%	140%
Methylene Chloride	2023833		<0.05	<0.05	NA	< 0.05	113%	50%	140%	107%	60%	130%	105%	50%	140%
Trans- 1,2-Dichloroethylene	2023833		<0.05	<0.05	NA	< 0.05	91%	50%	140%	87%	60%	130%	83%	50%	140%
Methyl tert-butyl Ether	2023833		<0.05	<0.05	NA	< 0.05	110%	50%	140%	99%	60%	130%	108%	50%	140%
1,1-Dichloroethane	2023833		<0.02	<0.02	NA	< 0.02	89%	50%	140%	86%	60%	130%	91%	50%	140%
Methyl Ethyl Ketone	2023833		<0.50	<0.50	NA	< 0.50	101%	50%	140%	99%	50%	140%	92%	50%	140%
Cis- 1,2-Dichloroethylene	2023833		<0.02	<0.02	NA	< 0.02	90%	50%	140%	82%	60%	130%	89%	50%	140%
Chloroform	2023833		<0.04	<0.04	NA	< 0.04	89%	50%	140%	85%	60%	130%	94%	50%	140%
1,2-Dichloroethane	2023833		<0.03	<0.03	NA	< 0.03	99%	50%	140%	90%	60%	130%	99%	50%	140%
1,1,1-Trichloroethane	2023833		<0.05	<0.05	NA	< 0.05	87%	50%	140%	76%	60%	130%	92%	50%	140%
Carbon Tetrachloride	2023833		<0.05	<0.05	NA	< 0.05	76%	50%	140%	75%	60%	130%	70%	50%	140%
Benzene	2023833		<0.02	<0.02	NA	< 0.02	83%	50%	140%	78%	60%	130%	82%	50%	140%
1,2-Dichloropropane	2023833		<0.03	<0.03	NA	< 0.03	85%	50%	140%	82%	60%	130%	86%	50%	140%
Trichloroethylene	2023833		<0.03	<0.03	NA	< 0.03	74%	50%	140%	71%	60%	130%	81%	50%	140%
Bromodichloromethane	2023833		<0.05	<0.05	NA	< 0.05	75%	50%	140%	76%	60%	130%	78%	50%	140%
Methyl Isobutyl Ketone	2023833		<0.50	<0.50	NA	< 0.50	86%	50%	140%	95%	50%	140%	98%	50%	140%
1,1,2-Trichloroethane	2023833		<0.04	<0.04	NA	< 0.04	103%	50%	140%	99%	60%	130%	99%	50%	140%
Toluene	2023833		<0.05	<0.05	NA	< 0.05	78%	50%	140%	77%	60%	130%	73%	50%	140%
Dibromochloromethane	2023833		<0.05	<0.05	NA	< 0.05	79%	50%	140%	74%	60%	130%	71%	50%	140%
Ethylene Dibromide	2023833		<0.04	<0.04	NA	< 0.04	99%	50%	140%	93%	60%	130%	90%	50%	140%
Tetrachloroethylene	2023833		<0.05	<0.05	NA	< 0.05	77%	50%	140%	76%	60%	130%	80%	50%	140%
1,1,1,2-Tetrachloroethane	2023833		<0.04	<0.04	NA	< 0.04	103%	50%	140%	75%	60%	130%	86%	50%	140%
Chlorobenzene	2023833		<0.05	<0.05	NA	< 0.05	81%	50%	140%	81%	60%	130%	85%	50%	140%
Ethylbenzene	2023833		<0.05	<0.05	NA	< 0.05	85%	50%	140%	72%	60%	130%	79%	50%	140%
m & p-Xylene	2023833		<0.05	<0.05	NA	< 0.05	72%	50%	140%	108%	60%	130%	103%	50%	140%
Bromoform	2023833		<0.05	<0.05	NA	< 0.05	81%	50%	140%	75%	60%	130%	71%	50%	140%
Styrene	2023833		<0.05	<0.05	NA	< 0.05	83%	50%	140%	85%	60%	130%	73%	50%	140%
1,1,2,2-Tetrachloroethane	2023833		<0.05	<0.05	NA	< 0.05	88%	50%	140%	108%	60%	130%	104%	50%	140%
o-Xylene	2023833		<0.05	<0.05	NA	< 0.05	77%	50%	140%	75%	60%	130%	80%	50%	140%
1,3-Dichlorobenzene	2023833		<0.05	<0.05	NA	< 0.05	81%	50%	140%	78%	60%	130%	81%	50%	140%
1,4-Dichlorobenzene	2023833		<0.05	<0.05	NA	< 0.05	87%	50%	140%	79%	60%	130%	87%	50%	140%
1,2-Dichlorobenzene	2023833		<0.05	<0.05	NA	< 0.05	81%	50%	140%	76%	60%	130%	83%	50%	140%
n-Hexane	2023833		<0.05	<0.05	NA	< 0.05	84%	50%	140%	77%	60%	130%	117%	50%	140%

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T705007
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:Cros Avenue
SAMPLED BY:TVH

Trace Organics Analysis (Continued)

RPT Date: Feb 05, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Soil)															
F1 (C6 to C10)	2023833		< 5	< 5	NA	< 5	99%	60%	140%	110%	60%	140%	95%	60%	140%
F2 (C10 to C16)	2036904		< 10	< 10	NA	< 10	106%	60%	140%	100%	60%	140%	86%	60%	140%
F3 (C16 to C34)	2036904		< 50	< 50	NA	< 50	104%	60%	140%	94%	60%	140%	87%	60%	140%
F4 (C34 to C50)	2036904		< 50	< 50	NA	< 50	92%	60%	140%	114%	60%	140%	91%	60%	140%
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	2021830		< 0.05	< 0.05	NA	< 0.05	96%	50%	140%	74%	50%	140%	112%	50%	140%
Acenaphthylene	2021830		< 0.05	< 0.05	NA	< 0.05	110%	50%	140%	78%	50%	140%	75%	50%	140%
Acenaphthene	2021830		< 0.05	< 0.05	NA	< 0.05	118%	50%	140%	86%	50%	140%	86%	50%	140%
Fluorene	2021830		< 0.05	< 0.05	NA	< 0.05	108%	50%	140%	83%	50%	140%	89%	50%	140%
Phenanthrene	2021830		0.18	0.22	NA	< 0.05	83%	50%	140%	72%	50%	140%	96%	50%	140%
Anthracene	2021830		0.10	0.15	NA	< 0.05	111%	50%	140%	81%	50%	140%	96%	50%	140%
Fluoranthene	2021830		0.36	0.44	NA	< 0.05	115%	50%	140%	75%	50%	140%	85%	50%	140%
Pyrene	2021830		0.29	0.34	NA	< 0.05	110%	50%	140%	75%	50%	140%	89%	50%	140%
Benz(a)anthracene	2021830		0.09	0.10	NA	< 0.05	78%	50%	140%	70%	50%	140%	74%	50%	140%
Chrysene	2021830		0.10	0.11	NA	< 0.05	104%	50%	140%	70%	50%	140%	105%	50%	140%
Benzo(b)fluoranthene	2021830		0.12	0.12	NA	< 0.05	72%	50%	140%	98%	50%	140%	108%	50%	140%
Benzo(k)fluoranthene	2021830		0.10	0.11	NA	< 0.05	87%	50%	140%	85%	50%	140%	100%	50%	140%
Benzo(a)pyrene	2021830		0.06	0.06	NA	< 0.05	68%	50%	140%	75%	50%	140%	88%	50%	140%
Indeno(1,2,3-cd)pyrene	2021830		0.06	0.05	NA	< 0.05	65%	50%	140%	71%	50%	140%	79%	50%	140%
Dibenz(a,h)anthracene	2021830		< 0.05	<0.05	NA	< 0.05	69%	50%	140%	91%	50%	140%	82%	50%	140%
Benzo(g,h,i)perylene	2021830		0.06	0.06	NA	< 0.05	74%	50%	140%	88%	50%	140%	81%	50%	140%

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

Certified By: N Popowkolof

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QA Violation

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

RPT Date: Feb 05, 2021

PARAMETER	Sample Id	Sample Description	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
			Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
				Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)											
Selenium		DUP011402	138%	70%	130%	102%	80%	120%	98%	70%	130%

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

More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6036	modified from MSA PART 3, CH 14 and SM 2510 B	EC METER
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6031	modified from EPA 9045D and MCKEAGUE 3.11	PH METER

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	ORG-91-5106	Tier 1 Method	BALANCE
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene-d10	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene-d12	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
F1 (C6 to C10)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F2 (C10 to C16)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F4 (C34 to C50)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Dichlorodifluoromethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

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

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FAX (905)712-5122
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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Bromoform	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5002	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Moisture Content		Tier 1 method	BALANCE

AGAT Laboratories

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

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

Laboratory Use Only
Work Order #: 21T705007

Cooler Quantity:
Arrival Temperatures: 1.3 | 1.6 | 1.6
Custody Seal Intact: ☐Yes ☐No ☐N/A
Notes: Free Free

Report Information:
Company: B.I.G. Consulting Inc.
Contact: Fernando Contento
Address: 5500 Tomken Road, Unit 12, Mississauga, ON
Phone: 6479666894 Fax:
Reports to be sent to:
1. Email: fcontento@brownfieldigi.com
2. Email:

Regulatory Requirements: ☐ No Regulatory Requirement
(Please check all applicable boxes)

☑ Regulation 153/04 — Table 02 (Indicate One) — ☐ Ind/Com ☑ Res/Park ☐ Agriculture
Soil Texture (Check One): ☑ Coarse ☐ Fine
☐ Sewer Use — ☐ Sanitary ☐ Storm — Region (Indicate One) — ☐ MISA
☐ Regulation 558
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other (Indicate One)

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

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

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

Project Information:
Project: BIGC-ENV-349B
Site Location: Cros Avenue
Sampled By: TVH
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:
Bill To Same: Yes ☐ No ☐
Company: B.I.G. Consulting Inc.
Contact: Laine Dougherty
Address: 5500 Tomken Road, Unit 12, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Sample Matrix Legend
B Biota
GW Ground Water
O Oil
P Paint
S Soil
SD Sediment
SW Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI (Y/N)	Metals and Inorganics: O. Reg 153 — ☐ All Metals ☐ 153 Metals (excl. Hydrides) ☐ Hydride Metals ☑ 153 Metals (incl. Hydrides); ORPs: ☐ B-HWS ☐ Cl ☐ CN ☐ Cr^{6+} ☐ EC ☐ FOC ☐ Hg ☐ pH ☐ SAR	Full Metals Scan	Regulation/Custom Metals	Nutrients: ☐ TP ☐ NH_3 ☐ TKN ☐ NO_3 ☐ NO_2 ☐ NO_3+NO_2	Volatiles: ☑ VOC ☐ BTEX ☐ THM	PHCs F1 - F4	ABNs	PAHs	PCBs: ☐ Total ☐ Aroclors	Organochlorine Pesticides	TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Sewer Use	Potentially Hazardous or High Concentration (Y/N)
DUP011002	21Jan 2021	09:30	3	S							☑	☑						
DUP011402	21 Jan 2021	16:15	2	S			☑							☑				

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Sai S	28/Jan/2021	18:30	NEAL G		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

21 JAN 28 8:57 PM

Page 1 of 1

N°:

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

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CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-349D

AGAT WORK ORDER: 21T780215

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

TRACE ORGANICS REVIEWED BY: Pinkal Patel, Report Reviewer

DATE REPORTED: Aug 05, 2021

PAGES (INCLUDING COVER): 10

VERSION*: 1

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

*Notes

Disclaimer:

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

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:Timothy Damdar

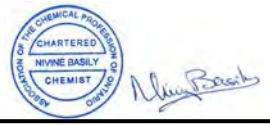
O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2021-07-27

DATE REPORTED: 2021-08-05

				SAMPLE DESCRIPTION:	BH116-AS1
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2021-07-27 15:30
Parameter	Unit	G / S	RDL		2787591
Antimony	µg/g	7.5	0.8		<0.8
Arsenic	µg/g	18	1		6
Barium	µg/g	390	2.0		82.1
Beryllium	µg/g	4	0.4		0.5
Boron	µg/g	120	5		10
Boron (Hot Water Soluble)	µg/g	1.5	0.10		0.42
Cadmium	µg/g	1.2	0.5		<0.5
Chromium	µg/g	160	5		25
Cobalt	µg/g	22	0.5		7.8
Copper	µg/g	140	1.0		55.6
Lead	µg/g	120	1		43
Molybdenum	µg/g	6.9	0.5		0.8
Nickel	µg/g	100	1		19
Selenium	µg/g	2.4	0.8		<0.8
Silver	µg/g	20	0.5		<0.5
Thallium	µg/g	1	0.5		<0.5
Uranium	µg/g	23	0.50		1.01
Vanadium	µg/g	86	0.4		30.5
Zinc	µg/g	340	5		112
Chromium, Hexavalent	µg/g	8	0.2		<0.2
Cyanide, Free	µg/g	0.051	0.040		<0.040
Mercury	µg/g	0.27	0.10		0.11
Electrical Conductivity (2:1)	mS/cm	0.7	0.005		0.305
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A		0.914
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA		7.53

Certified By:



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Certificate of Analysis

AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:Timothy Damdar

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

DATE RECEIVED: 2021-07-27

DATE REPORTED: 2021-08-05

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2787591 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:Timothy Damdar

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

DATE RECEIVED: 2021-07-27

DATE REPORTED: 2021-08-05

		SAMPLE DESCRIPTION:		BH116-AS1
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2021-07-27 15:30
Parameter	Unit	G / S	RDL	2787591
Naphthalene	µg/g	0.6	0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	0.09
Pyrene	µg/g	78	0.05	0.07
Benz(a)anthracene	µg/g	0.5	0.05	<0.05
Chrysene	µg/g	7	0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05
Moisture Content	%		0.1	9.8
Surrogate	Unit	Acceptable Limits		
Naphthalene-d8	%	50-140		78
Acridine-d9	%	50-140		79
Terphenyl-d14	%	50-140		61

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2787591 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Pinkal Patel

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T780215
PROJECT: BIGC-ENV-349D
ATTENTION TO: Rebecca Morrison
SAMPLING SITE:217-227 Cross Avenue, Oakville, ON
SAMPLED BY:Timothy Damdar

Soil Analysis

RPT Date: Aug 05, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	2808061		<0.8	<0.8	NA	< 0.8	127%	70%	130%	100%	80%	120%	91%	70%	130%
Arsenic	2808061		1	2	NA	< 1	114%	70%	130%	102%	80%	120%	109%	70%	130%
Barium	2808061		35.4	36.6	3.3%	< 2.0	102%	70%	130%	101%	80%	120%	102%	70%	130%
Beryllium	2808061		<0.4	<0.4	NA	< 0.4	107%	70%	130%	94%	80%	120%	91%	70%	130%
Boron	2808061		6	7	NA	< 5	88%	70%	130%	107%	80%	120%	98%	70%	130%
Boron (Hot Water Soluble)	2798761		0.18	0.18	NA	< 0.10	83%	60%	140%	94%	70%	130%	98%	60%	140%
Cadmium	2808061		<0.5	<0.5	NA	< 0.5	107%	70%	130%	101%	80%	120%	99%	70%	130%
Chromium	2808061		14	15	NA	< 5	112%	70%	130%	101%	80%	120%	112%	70%	130%
Cobalt	2808061		3.3	3.3	0.0%	< 0.5	113%	70%	130%	103%	80%	120%	109%	70%	130%
Copper	2808061		7.6	6.6	14.1%	< 1.0	97%	70%	130%	100%	80%	120%	93%	70%	130%
Lead	2808061		5	5	0.0%	< 1	105%	70%	130%	102%	80%	120%	94%	70%	130%
Molybdenum	2808061		1.0	1.0	NA	< 0.5	114%	70%	130%	110%	80%	120%	118%	70%	130%
Nickel	2808061		4	3	NA	< 1	109%	70%	130%	101%	80%	120%	102%	70%	130%
Selenium	2808061		<0.8	<0.8	NA	< 0.8	132%	70%	130%	111%	80%	120%	110%	70%	130%
Silver	2808061		<0.5	<0.5	NA	< 0.5	100%	70%	130%	100%	80%	120%	93%	70%	130%
Thallium	2808061		<0.5	<0.5	NA	< 0.5	111%	70%	130%	106%	80%	120%	98%	70%	130%
Uranium	2808061		<0.50	<0.50	NA	< 0.50	110%	70%	130%	105%	80%	120%	107%	70%	130%
Vanadium	2808061		18.3	18.8	2.7%	< 0.4	124%	70%	130%	103%	80%	120%	115%	70%	130%
Zinc	2808061		17	17	NA	< 5	104%	70%	130%	107%	80%	120%	100%	70%	130%
Chromium, Hexavalent	2793642		<0.2	<0.2	NA	< 0.2	95%	70%	130%	93%	80%	120%	93%	70%	130%
Cyanide, Free	2792510		<0.040	<0.040	NA	< 0.040	98%	70%	130%	108%	80%	120%	102%	70%	130%
Mercury	2808061		<0.10	<0.10	NA	< 0.10	105%	70%	130%	107%	80%	120%	101%	70%	130%
Electrical Conductivity (2:1)	2808061		0.199	0.204	2.5%	< 0.005	110%	80%	120%						
Sodium Adsorption Ratio (2:1) (Calc.)	2798761		1.80	1.81	0.6%	NA									
pH, 2:1 CaCl2 Extraction	2808061		7.93	7.92	0.1%	NA	100%	80%	120%						

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

More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

Certified By:

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:Timothy Damdar

Trace Organics Analysis

RPT Date: Aug 05, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	2663807		< 0.05	< 0.05	NA	< 0.05	99%	50%	140%	99%	50%	140%	99%	50%	140%
Acenaphthylene	2663807		< 0.05	< 0.05	NA	< 0.05	98%	50%	140%	98%	50%	140%	98%	50%	140%
Acenaphthene	2663807		< 0.05	< 0.05	NA	< 0.05	96%	50%	140%	96%	50%	140%	96%	50%	140%
Fluorene	2663807		< 0.05	< 0.05	NA	< 0.05	98%	50%	140%	98%	50%	140%	95%	50%	140%
Phenanthrene	2663807		< 0.05	< 0.05	NA	< 0.05	96%	50%	140%	95%	50%	140%	84%	50%	140%
Anthracene	2663807		< 0.05	< 0.05	NA	< 0.05	95%	50%	140%	98%	50%	140%	85%	50%	140%
Fluoranthene	2663807		< 0.05	< 0.05	NA	< 0.05	94%	50%	140%	85%	50%	140%	96%	50%	140%
Pyrene	2663807		< 0.05	< 0.05	NA	< 0.05	85%	50%	140%	81%	50%	140%	84%	50%	140%
Benz(a)anthracene	2663807		< 0.05	< 0.05	NA	< 0.05	96%	50%	140%	92%	50%	140%	85%	50%	140%
Chrysene	2663807		< 0.05	< 0.05	NA	< 0.05	82%	50%	140%	98%	50%	140%	81%	50%	140%
Benzo(b)fluoranthene	2663807		< 0.05	< 0.05	NA	< 0.05	102%	50%	140%	95%	50%	140%	82%	50%	140%
Benzo(k)fluoranthene	2663807		< 0.05	< 0.05	NA	< 0.05	98%	50%	140%	96%	50%	140%	86%	50%	140%
Benzo(a)pyrene	2663807		< 0.05	< 0.05	NA	< 0.05	96%	50%	140%	85%	50%	140%	84%	50%	140%
Indeno(1,2,3-cd)pyrene	2663807		< 0.05	< 0.05	NA	< 0.05	102%	50%	140%	96%	50%	140%	105%	50%	140%
Dibenz(a,h)anthracene	2663807		< 0.05	< 0.05	NA	< 0.05	98%	50%	140%	85%	50%	140%	105%	50%	140%
Benzo(g,h,i)perylene	2663807		< 0.05	< 0.05	NA	< 0.05	96%	50%	140%	91%	50%	140%	106%	50%	140%

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

Certified By: Jinkal Patel

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CANADA L4Z 1Y2
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QA Violation

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

ATTENTION TO: Rebecca Morrison

RPT Date: Aug 05, 2021

PARAMETER	Sample Id	Sample Description	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
			Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
				Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)											
Selenium		BH116-AS1	132%	70%	130%	111%	80%	120%	110%	70%	130%

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

More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:Timothy Damdar

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6036	modified from MSA PART 3, CH 14 and SM 2510 B	EC METER
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6031	modified from EPA 9045D and MCKEAGUE 3.11	PH METER

5835 COOPERS AVENUE
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http://www.agatlabs.com

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:Timothy Damdar

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	CCME Tier 1 Method	BALANCE

AGAT Laboratories
5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
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Chain of Custody Record

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

Report Information:

Company: B.I.G. Consulting
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road
Mississauga, ON L4W 2Z4
Phone: 905-782-0315 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email:

Project Information:

Project: BIGC-ENV-349D
Site Location: 217-227 Cross Avenue in Oakville, Ontario
Sampled By: Timothy Damdar
AGAT Quote #: PO:
Please note: if quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☑ No ☐
Company: BIG Consulting Inc.
Contact: Laine Dougherty
Address: 12-5500 Tomken Rd, Mississauga, ON L4W 2Z4
Email: LDougherty@brownfieldigi.com; NKepics@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

☐ Regulation 558

☑ Regulation 153/04
Table 2 *Indicate One*
☐ Ind/Com
☑ Res/Park
☐ Agriculture
Soil Texture *(Check One)*
☑ Coarse
☐ Fine

☐ Excess Soils R406
Table *Indicate One*
Sample from APEC?
☐ Yes
☐ No
☐ Stockpile ☐ In-situ

☐ Sewer Use
☐ Sanitary ☐ Storm
Region
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
Indicate One

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 21T780215 ISMC
Cooler Quantity:
Arrival Temperatures: 4.6 | 7.8 |
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: Free Ice

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics, inc. EC/SAR	Metals - ICPMS, ☐ CrVI, ☐ Hg, ☐ HWSB	BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Excess Soils SPLP Rainwater Leach ☐ Metals ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH116-AS2	Jul 27/21	3:30 PM	2	S			✓			✓							N
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Timothy Damdar	July 27/21	5:13pm	NEAL		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

Page 1 of 1

N°:

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

AGAT Laboratories

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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-349E

AGAT WORK ORDER: 21T791121

SOIL ANALYSIS REVIEWED BY: Amanjot Bhela, Inorganic Lab Manager

DATE REPORTED: Aug 30, 2021

PAGES (INCLUDING COVER): 6

VERSION*: 1

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

*Notes

Disclaimer:

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

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T791121

PROJECT: BIGC-ENV-349E

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-277 Cross Avenue, Oakville, ON

SAMPLED BY:TVH

O. Reg. 153(511) - All Metals (Soil)

DATE RECEIVED: 2021-08-20

DATE REPORTED: 2021-08-30

SAMPLE DESCRIPTION:				BH201-SS2	BH202-SS2	BH203-SS2	BH204-SS2
SAMPLE TYPE:				Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-08-20 11:05	2021-08-20 10:35	2021-08-20 10:05	2021-08-20 09:10
Parameter	Unit	G / S	RDL	2878405	2878406	2878407	2878408
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	7	9	7	9
Barium	µg/g	390	2.0	122	79.7	90.4	58.7
Beryllium	µg/g	4	0.4	0.7	0.9	0.6	0.7
Boron	µg/g	120	5	13	17	15	16
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.29	0.23	0.35	0.31
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	5	20	25	21	22
Cobalt	µg/g	22	0.5	11.3	16.4	10.4	13.6
Copper	µg/g	140	1.0	38.7	97.1	84.8	135
Lead	µg/g	120	1	21	8	13	10
Molybdenum	µg/g	6.9	0.5	0.7	<0.5	0.9	0.6
Nickel	µg/g	100	1	24	33	23	27
Selenium	µg/g	2.4	0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g	20	0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.56	0.80	0.85	0.85
Vanadium	µg/g	86	0.4	30.9	34.7	33.9	31.9
Zinc	µg/g	340	5	85	69	71	60
Chromium, Hexavalent	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2
Mercury	µg/g	0.27	0.10	<0.10	<0.10	<0.10	<0.10

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

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T791121
PROJECT: BIGC-ENV-349E
ATTENTION TO: Rebecca Morrison
SAMPLING SITE:217-277 Cross Avenue, Oakville, ON
SAMPLED BY:TVH

Soil Analysis

RPT Date: Aug 30, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - All Metals (Soil)															
Antimony	2886229		<0.8	<0.8	NA	< 0.8	124%	70%	130%	102%	80%	120%	81%	70%	130%
Arsenic	2886229		4	4	NA	< 1	116%	70%	130%	105%	80%	120%	106%	70%	130%
Barium	2886229		51.5	48.9	5.2%	< 2.0	110%	70%	130%	99%	80%	120%	101%	70%	130%
Beryllium	2886229		0.4	<0.4	NA	< 0.4	100%	70%	130%	83%	80%	120%	88%	70%	130%
Boron	2886229		<5	5	NA	< 5	90%	70%	130%	99%	80%	120%	95%	70%	130%
Boron (Hot Water Soluble)	2878405	2878405	0.29	0.30	NA	< 0.10	106%	60%	140%	98%	70%	130%	100%	60%	140%
Cadmium	2886229		<0.5	<0.5	NA	< 0.5	109%	70%	130%	101%	80%	120%	103%	70%	130%
Chromium	2886229		12	12	NA	< 5	104%	70%	130%	95%	80%	120%	93%	70%	130%
Cobalt	2886229		4.7	4.8	2.1%	< 0.5	99%	70%	130%	100%	80%	120%	97%	70%	130%
Copper	2886229		13.2	13.3	0.8%	< 1.0	97%	70%	130%	103%	80%	120%	101%	70%	130%
Lead	2886229		16	15	6.5%	< 1	103%	70%	130%	96%	80%	120%	94%	70%	130%
Molybdenum	2886229		<0.5	<0.5	NA	< 0.5	114%	70%	130%	111%	80%	120%	113%	70%	130%
Nickel	2886229		10	10	0.0%	< 1	100%	70%	130%	107%	80%	120%	102%	70%	130%
Selenium	2886229		<0.8	<0.8	NA	< 0.8	131%	70%	130%	98%	80%	120%	103%	70%	130%
Silver	2886229		<0.5	<0.5	NA	< 0.5	110%	70%	130%	103%	80%	120%	104%	70%	130%
Thallium	2886229		<0.5	<0.5	NA	< 0.5	106%	70%	130%	101%	80%	120%	99%	70%	130%
Uranium	2886229		<0.50	<0.50	NA	< 0.50	107%	70%	130%	104%	80%	120%	105%	70%	130%
Vanadium	2886229		20.6	21.5	4.3%	< 0.4	103%	70%	130%	96%	80%	120%	97%	70%	130%
Zinc	2886229		47	47	0.0%	< 5	98%	70%	130%	100%	80%	120%	107%	70%	130%
Chromium, Hexavalent	2895642		<0.2	<0.2	NA	< 0.2	95%	70%	130%	91%	80%	120%	78%	70%	130%
Mercury	2886229		<0.10	<0.10	NA	< 0.10	112%	70%	130%	97%	80%	120%	93%	70%	130%

Comments: NA signifies Not Applicable.
If the RPD value is NA, the results of the duplicates are under 5X the RDL and will not be calculated.
More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

Certified By:

AGAT Laboratories

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http://www.agatlabs.com

QA Violation

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T791121

PROJECT: BIGC-ENV-349E

ATTENTION TO: Rebecca Morrison

RPT Date: Aug 30, 2021

PARAMETER	Sample Id	Sample Description	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
			Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
				Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - All Metals (Soil)											
Selenium		BH201-SS2	131%	70%	130%	98%	80%	120%	103%	70%	130%

Comments: NA signifies Not Applicable.
If the RPD value is NA, the results of the duplicates are under 5X the RDL and will not be calculated.
More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

AGAT Laboratories

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CANADA L4Z 1Y2
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http://www.agatlabs.com

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T791121

PROJECT: BIGC-ENV-349E

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-277 Cross Avenue, Oakville, ON

SAMPLED BY:TVH

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS

AGAT Laboratories

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: B.I.G. Consulting
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road
Mississauga, ON L4W 2Z4
Phone: 905-782-0315 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email:

Project Information:

Project: BIGC-ENV-349E
Site Location: 217-227 Cross Avenue, Oakville, ON
Sampled By: TVH
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis

Invoice Information:

Bill To Same: Yes ☑ No ☐
Company:
Contact:
Address:
Email: LDougherty@brownfieldigi.com; NKepics@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

☐ Regulation 558

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

☐ Excess Soils R406
Table (Indicate One)
Sample from APEC?
☐ Yes
☐ No
☐ Stockpile ☐ In-situ

☐ Sewer Use
☐ Sanitary ☐ Storm
Region
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
(Indicate One)

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 21T791121
Cooler Quantity:
Arrival Temperatures: 13.1 | 14.8 | 15.3
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: Bagged ice

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics, inc. EC/SAR	O. Reg 153: Metals - ICPMS, ☒ CrVI, ☒ Hg, ☒ HWSB	O. Reg 153: BTEX, F1-F4 PHCs, Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH201-SS2	20-08-21	11:05 AM/PM	1	Soil				☑									
BH202-SS2	20-08-21	10:35 AM/PM	1	Soil				☑									
BH203-SS2	20-08-21	10:05 AM/PM	1	Soil				☑									
BH204-SS2	20-08-21	9:10 AM/PM	1	Soil				☑									
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															

Samples Relinquished By (Print Name and Sign): TRAVIS VAN HOLST	Date: Aug 20/2021	Time: 3:30	Samples Received By (Print Name and Sign):	Date:	Time: 21 AUG 20 3:44PM
Samples Relinquished By (Print Name and Sign):	Date:	Time:	Samples Received By (Print Name and Sign):	Date:	Time: Page 1 of 1
Samples Relinquished By (Print Name and Sign):	Date:	Time:	Samples Received By (Print Name and Sign):	Date:	Time: N°:

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

Page 6 of 6

AGAT Laboratories

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

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-349E

AGAT WORK ORDER: 21T796236

SOIL ANALYSIS REVIEWED BY: Jacky Zhu, Spectroscopy Technician

DATE REPORTED: Sep 03, 2021

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

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

AGAT Laboratories

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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21T796236

PROJECT: BIGC-ENV-349E

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - All Metals (Soil)

DATE RECEIVED: 2021-09-01

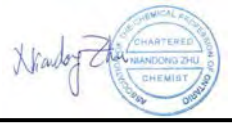
DATE REPORTED: 2021-09-03

		SAMPLE DESCRIPTION:		BH201-SS1
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2021-08-20
Parameter	Unit	G / S	RDL	2918865
Antimony	µg/g	7.5	0.8	<0.8
Arsenic	µg/g	18	1	7
Barium	µg/g	390	2.0	122
Beryllium	µg/g	4	0.4	1.0
Boron	µg/g	120	5	15
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.24
Cadmium	µg/g	1.2	0.5	<0.5
Chromium	µg/g	160	5	26
Cobalt	µg/g	22	0.5	14.5
Copper	µg/g	140	1.0	51.6
Lead	µg/g	120	1	12
Molybdenum	µg/g	6.9	0.5	0.5
Nickel	µg/g	100	1	30
Selenium	µg/g	2.4	0.8	<0.8
Silver	µg/g	20	0.5	<0.5
Thallium	µg/g	1	0.5	<0.5
Uranium	µg/g	23	0.50	0.58
Vanadium	µg/g	86	0.4	35.0
Zinc	µg/g	340	5	73
Chromium, Hexavalent	µg/g	8	0.2	<0.2
Mercury	µg/g	0.27	0.10	<0.10

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

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



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TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Quality Assurance

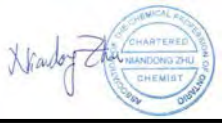
CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T796236
PROJECT: BIGC-ENV-349E
ATTENTION TO: Rebecca Morrison
SAMPLING SITE:
SAMPLED BY:

Soil Analysis

RPT Date: Sep 03, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - All Metals (Soil)															
Antimony	2905781		<0.8	<0.8	NA	< 0.8	111%	70%	130%	108%	80%	120%	74%	70%	130%
Arsenic	2905781		20	20	0.0%	< 1	116%	70%	130%	107%	80%	120%	100%	70%	130%
Barium	2905781		102	96.9	5.1%	< 2.0	110%	70%	130%	97%	80%	120%	91%	70%	130%
Beryllium	2905781		0.8	0.8	NA	< 0.4	107%	70%	130%	105%	80%	120%	96%	70%	130%
Boron	2905781		14	14	NA	< 5	95%	70%	130%	110%	80%	120%	90%	70%	130%
Boron (Hot Water Soluble)	2918865	2918865	0.24	0.24	NA	< 0.10	95%	60%	140%	109%	70%	130%	103%	60%	140%
Cadmium	2905781		<0.5	<0.5	NA	< 0.5	115%	70%	130%	108%	80%	120%	100%	70%	130%
Chromium	2905781		49	51	4.0%	< 5	109%	70%	130%	106%	80%	120%	99%	70%	130%
Cobalt	2905781		6.9	6.7	2.9%	< 0.5	101%	70%	130%	103%	80%	120%	88%	70%	130%
Copper	2905781		21.9	18.9	14.7%	< 1.0	96%	70%	130%	103%	80%	120%	80%	70%	130%
Lead	2905781		25	23	8.3%	< 1	107%	70%	130%	97%	80%	120%	90%	70%	130%
Molybdenum	2905781		1.6	1.7	NA	< 0.5	118%	70%	130%	116%	80%	120%	109%	70%	130%
Nickel	2905781		13	12	8.0%	< 1	105%	70%	130%	106%	80%	120%	88%	70%	130%
Selenium	2905781		2.6	2.4	NA	< 0.8	129%	70%	130%	104%	80%	120%	94%	70%	130%
Silver	2905781		<0.5	<0.5	NA	< 0.5	112%	70%	130%	102%	80%	120%	89%	70%	130%
Thallium	2905781		<0.5	<0.5	NA	< 0.5	107%	70%	130%	102%	80%	120%	91%	70%	130%
Uranium	2905781		1.40	1.36	NA	< 0.50	104%	70%	130%	103%	80%	120%	102%	70%	130%
Vanadium	2905781		48.2	46.5	3.6%	< 0.4	106%	70%	130%	98%	80%	120%	81%	70%	130%
Zinc	2905781		138	137	0.7%	< 5	112%	70%	130%	114%	80%	120%	91%	70%	130%
Chromium, Hexavalent	2916755		<0.2	<0.2	NA	< 0.2	95%	70%	130%	92%	80%	120%	80%	70%	130%
Mercury	2905781		0.14	0.13	NA	< 0.10	109%	70%	130%	109%	80%	120%	101%	70%	130%

Comments: NA Signifies Not Applicable.
Duplicate NA: results are less than 5X the RDL and RPD will not be calculated.

Certified By:



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

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T796236

PROJECT: BIGC-ENV-349E

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph 905 712-5100 Fax 905 712-5122
webaarm.agatlabs.com

AGAT Laboratories

Chain of Custody Record

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

Laboratory Use Only
Work Order #: 21T796236

Cooler Quantity:
Arrival Temperatures: 2.8 | 2.9 | | |
Custody Seal Intact: ☐Yes ☐No ☐N/A
Notes: On Ice

Report Information:
Company: B.I.G. Consulting
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road
Mississauga, ON L4W 2Z4
Phone: 905-782-0315 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email:

Regulatory Requirements:
(Please check all applicable boxes)

☐ Regulation 558

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

☐ Excess Soils R406
Table ____ (Indicate One)
Sample from APEC?
☐ Yes
☐ No
☐ Stockpile ☐ In-situ

☐ Sewer Use
☐ Sanitary ☐ Storm
Region
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
(Indicate One)

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

Project Information:
Project: BIGC-ENV-349E
Site Location: 217-227 Cross Avenue, Oakville, ON
Sampled By:
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

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

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

Invoice Information:
Bill To Same: Yes ☑ No ☐
Company:
Contact:
Address:
Email: LDougherty@brownfieldigi.com; NKepics@brownfieldigi.com

Sample Matrix Legend
B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics, inc. EC/SAR	O. Reg 153: Metals - ICPMS, ☒ CrVI, ☒ Hg, ☒ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Excess Soils SPLP Rainwater Leach ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH201-SS1	20-08-21	AM PM	1	Soil				☑									
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
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		AM PM															

21 SEP 1 5:15 PM

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	
~~TRAVIS VAN HOLST~~ Khagendra Kandel	9/1/21	5:00 PM	Joseph			
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	Page 1 of 1
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	N°:

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CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-349E

AGAT WORK ORDER: 21T796238

SOIL ANALYSIS REVIEWED BY: Amanjot Bhela, Inorganic Lab Manager

DATE REPORTED: Sep 03, 2021

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days after receipt unless a Long Term Storage Agreement is signed and returned. Some specialty analysis may be exempt, please contact your Client Project Manager for details.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
- The test results reported herewith relate only to the samples as received by the laboratory.
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- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

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TEL (905)712-5100
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Certificate of Analysis

AGAT WORK ORDER: 21T796238

PROJECT: BIGC-ENV-349E

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - All Metals (Soil)

DATE RECEIVED: 2021-09-01

DATE REPORTED: 2021-09-03

		SAMPLE DESCRIPTION:		BH204-SS1
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2021-08-20
Parameter	Unit	G / S	RDL	2918895
Antimony	µg/g	7.5	0.8	<0.8
Arsenic	µg/g	18	1	8
Barium	µg/g	390	2.0	57.2
Beryllium	µg/g	4	0.4	<0.4
Boron	µg/g	120	5	15
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.13
Cadmium	µg/g	1.2	0.5	<0.5
Chromium	µg/g	160	5	10
Cobalt	µg/g	22	0.5	5.9
Copper	µg/g	140	1.0	34.4
Lead	µg/g	120	1	26
Molybdenum	µg/g	6.9	0.5	0.9
Nickel	µg/g	100	1	11
Selenium	µg/g	2.4	0.8	<0.8
Silver	µg/g	20	0.5	<0.5
Thallium	µg/g	1	0.5	<0.5
Uranium	µg/g	23	0.50	<0.50
Vanadium	µg/g	86	0.4	14.9
Zinc	µg/g	340	5	101
Chromium, Hexavalent	µg/g	8	0.2	<0.2
Mercury	µg/g	0.27	0.10	<0.10

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

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories
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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T796238
PROJECT: BIGC-ENV-349E
ATTENTION TO: Rebecca Morrison
SAMPLING SITE:
SAMPLED BY:

Soil Analysis

RPT Date: Sep 03, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - All Metals (Soil)															
Antimony	2902957		<0.8	<0.8	NA	< 0.8	104%	70%	130%	98%	80%	120%	83%	70%	130%
Arsenic	2902957		7	7	0.0%	< 1	106%	70%	130%	98%	80%	120%	108%	70%	130%
Barium	2902957		84.6	82.0	3.1%	< 2.0	100%	70%	130%	94%	80%	120%	93%	70%	130%
Beryllium	2902957		<0.4	<0.4	NA	< 0.4	89%	70%	130%	93%	80%	120%	97%	70%	130%
Boron	2902957		13	13	NA	< 5	85%	70%	130%	100%	80%	120%	103%	70%	130%
Boron (Hot Water Soluble)	2918865		0.24	0.24	NA	< 0.10	95%	60%	140%	109%	70%	130%	103%	60%	140%
Cadmium	2902957		<0.5	<0.5	NA	< 0.5	103%	70%	130%	98%	80%	120%	101%	70%	130%
Chromium	2902957		14	14	NA	< 5	99%	70%	130%	103%	80%	120%	105%	70%	130%
Cobalt	2902957		7.9	7.8	1.3%	< 0.5	93%	70%	130%	93%	80%	120%	98%	70%	130%
Copper	2902957		46.3	45.2	2.4%	< 1.0	88%	70%	130%	95%	80%	120%	82%	70%	130%
Lead	2902957		12	12	0.0%	< 1	96%	70%	130%	93%	80%	120%	87%	70%	130%
Molybdenum	2902957		0.7	0.7	NA	< 0.5	105%	70%	130%	102%	80%	120%	115%	70%	130%
Nickel	2902957		14	14	0.0%	< 1	95%	70%	130%	97%	80%	120%	97%	70%	130%
Selenium	2902957		<0.8	<0.8	NA	< 0.8	103%	70%	130%	92%	80%	120%	103%	70%	130%
Silver	2902957		<0.5	<0.5	NA	< 0.5	108%	70%	130%	92%	80%	120%	89%	70%	130%
Thallium	2902957		<0.5	<0.5	NA	< 0.5	96%	70%	130%	96%	80%	120%	94%	70%	130%
Uranium	2902957		<0.50	<0.50	NA	< 0.50	95%	70%	130%	98%	80%	120%	102%	70%	130%
Vanadium	2902957		20.8	20.8	0.0%	< 0.4	96%	70%	130%	87%	80%	120%	99%	70%	130%
Zinc	2902957		55	55	0.0%	< 5	100%	70%	130%	103%	80%	120%	99%	70%	130%
Chromium, Hexavalent	2916755		<0.2	<0.2	NA	< 0.2	95%	70%	130%	92%	80%	120%	80%	70%	130%
Mercury	2902957		<0.10	<0.10	NA	< 0.10	100%	70%	130%	98%	80%	120%	97%	70%	130%

Comments: NA signifies Not Applicable.
If the RPD value is NA, the results of the duplicates are under 5X the RDL and will not be calculated.

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T796238

PROJECT: BIGC-ENV-349E

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS

AGAT Laboratories

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Mississauga, Ontario L4Z 1Y2
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Chain of Custody Record

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

Laboratory Use Only
Work Order #: 21T796238

Cooler Quantity: 1
Arrival Temperatures: 2.8 | 2.9
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: on ice

Report Information:
Company: B.I.G. Consulting
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road
Mississauga, ON L4W 2Z4
Phone: 905-782-0315 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email:

Regulatory Requirements:
(Please check all applicable boxes)

☐ Regulation 558

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

☐ Excess Soils R406
Table (Indicate One)
Sample from APEC?
☐ Yes
☐ No
☐ Stockpile ☐ In-situ

☐ Sewer Use
☐ Sanitary ☐ Storm
Region
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
(Indicate One)

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

Project Information:
Project: BIGC-ENV-349E
Site Location: 217-227 Cross Avenue, Oakville, ON
Sampled By:
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:
Bill To Same: Yes ☑ No ☐
Company:
Contact:
Address:
Email: LDougherty@brownfieldigi.com; NKepics@brownfieldigi.com

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

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

Sample Matrix Legend
B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics, inc. EC/SAR	Metals - ICPMS, ☒ CrVI, ☒ Hg, ☒ HWSB	BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	Landfill Disposal Characterization TCLP: TC_P: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH204-SS1	20-08-21	AM PM	1	Soil				☑									
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
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		AM PM															

2152P 1 Jul 15pm

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
~~TRAVIS VAN HOLST~~ Khagendra Kandel	[illegible]	5:00 PM	Joseph		
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time

Page 1 of 1

N°:

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

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CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-349D

AGAT WORK ORDER: 21T780214

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

WATER ANALYSIS REVIEWED BY: Jacky Zhu, Spectroscopy Technician

DATE REPORTED: Aug 04, 2021

PAGES (INCLUDING COVER): 8

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

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Certificate of Analysis

AGAT WORK ORDER: 21T780214

PROJECT: BIGC-ENV-349D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Ave, Oakville, ON

SAMPLED BY:Timothy Damdar

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

DATE RECEIVED: 2021-07-27

DATE REPORTED: 2021-08-04

				SAMPLE DESCRIPTION:	BH/MW103
				SAMPLE TYPE:	Water
				DATE SAMPLED:	2021-07-27 12:30
Parameter	Unit	G / S	RDL		2787629
Benzene	µg/L	5.0	0.20		<0.20
Toluene	µg/L	24	0.20		<0.20
Ethylbenzene	µg/L	2.4	0.10		<0.10
m & p-Xylene	µg/L		0.20		<0.20
o-Xylene	µg/L		0.10		<0.10
Xylenes (Total)	µg/L	300	0.20		<0.20
F1 (C6 - C10)	µg/L	750	25		<25
F1 (C6 to C10) minus BTEX	µg/L	750	25		<25
F2 (C10 to C16)	µg/L	150	100		<100
F3 (C16 to C34)	µg/L	500	100		<100
F4 (C34 to C50)	µg/L	500	100		<100
Gravimetric Heavy Hydrocarbons	µg/L		500		NA
Sediment					Yes
Surrogate	Unit	Acceptable Limits			
Toluene-d8	% Recovery	60-140			83.2
Terphenyl	% Recovery	60-140			71

Certified By: NPopowkolof

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T780214

PROJECT: BIGC-ENV-349D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Ave, Oakville, ON

SAMPLED BY:Timothy Damdar

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

DATE RECEIVED: 2021-07-27

DATE REPORTED: 2021-08-04

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2787629 The C6-C10 fraction is calculated using Toluene response factor.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene and o-Xylene.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and nC34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16 - C50 and are only determined if the chromatogram of the C34 - C50 Hydrocarbons indicated that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6-C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified with the contribution of PAHs. Under Ontario Regulation 153/04, results are considered valid without determining the PAH contribution if not requested by the client.
NA = Not Applicable

Sediment parameter is comment only based on visual inspection of the sample prior to extraction and is not an accredited test.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: 

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Certificate of Analysis

AGAT WORK ORDER: 21T780214

PROJECT: BIGC-ENV-349D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Ave, Oakville, ON

SAMPLED BY:Timothy Damdar

O. Reg. 153(511) - Metals (Including Hydrides) (Water)

DATE RECEIVED: 2021-07-27

DATE REPORTED: 2021-08-04

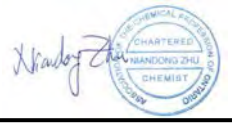
		SAMPLE DESCRIPTION:		BH/MW106
		SAMPLE TYPE:		Water
		DATE SAMPLED:		2021-07-27 15:00
Parameter	Unit	G / S	RDL	2787630
Dissolved Antimony	µg/L	6	1.0	<1.0
Dissolved Arsenic	µg/L	25	1.0	1.1
Dissolved Barium	µg/L	1000	2.0	71.8
Dissolved Beryllium	µg/L	4	0.50	<0.50
Dissolved Boron	µg/L	5000	10.0	639
Dissolved Cadmium	µg/L	2.7	0.20	<0.20
Dissolved Chromium	µg/L	50	2.0	<2.0
Dissolved Cobalt	µg/L	3.8	0.50	<0.50
Dissolved Copper	µg/L	87	1.0	2.2
Dissolved Lead	µg/L	10	0.50	<0.50
Dissolved Molybdenum	µg/L	70	0.50	1.50
Dissolved Nickel	µg/L	100	3.0	<3.0
Dissolved Selenium	µg/L	10	1.0	<1.0
Dissolved Silver	µg/L	1.5	0.20	<0.20
Dissolved Thallium	µg/L	2	0.30	<0.30
Dissolved Uranium	µg/L	20	0.50	0.74
Dissolved Vanadium	µg/L	6.2	0.40	<0.40
Dissolved Zinc	µg/L	1100	5.0	<5.0

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Potable Ground Water - All Types of Property Uses - Coarse Textured Soils
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2787630 Metals analysis completed on a filtered sample.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T780214

PROJECT: BIGC-ENV-349D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Ave, Oakville, ON

SAMPLED BY:Timothy Damdar

Trace Organics Analysis

RPT Date: Aug 04, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (Water)															
Benzene	2787629	2787629	<0.20	<0.20	NA	< 0.20	75%	60%	140%	87%	60%	140%	83%	60%	140%
Toluene	2787629	2787629	<0.20	<0.20	NA	< 0.20	79%	60%	140%	73%	60%	140%	81%	60%	140%
Ethylbenzene	2787629	2787629	<0.10	<0.10	NA	< 0.10	76%	60%	140%	102%	60%	140%	74%	60%	140%
m & p-Xylene	2787629	2787629	<0.20	<0.20	NA	< 0.20	100%	60%	140%	92%	60%	140%	100%	60%	140%
o-Xylene	2787629	2787629	<0.10	<0.10	NA	< 0.10	76%	60%	140%	74%	60%	140%	82%	60%	140%
F1 (C6 - C10)	2787629	2787629	<25	<25	NA	< 25	91%	60%	140%	84%	60%	140%	86%	60%	140%
F2 (C10 to C16)	2786718		< 100	< 100	NA	< 100	106%	60%	140%	85%	60%	140%	101%	60%	140%
F3 (C16 to C34)	2786718		< 100	< 100	NA	< 100	100%	60%	140%	86%	60%	140%	85%	60%	140%
F4 (C34 to C50)	2786718		< 100	< 100	NA	< 100	96%	60%	140%	92%	60%	140%	109%	60%	140%

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

Certified By: N Popowkolof

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T780214
PROJECT: BIGC-ENV-349D
ATTENTION TO: Rebecca Morrison
SAMPLING SITE:217-227 Cross Ave, Oakville, ON
SAMPLED BY:Timothy Damdar

Water Analysis

RPT Date: Aug 04, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals (Including Hydrides) (Water)															
Dissolved Antimony	2789721		<1.0	<1.0	NA	< 1.0	99%	70%	130%	103%	80%	120%	106%	70%	130%
Dissolved Arsenic	2789721		2.2	2.3	NA	< 1.0	93%	70%	130%	106%	80%	120%	108%	70%	130%
Dissolved Barium	2789721		47.3	46.0	2.8%	< 2.0	92%	70%	130%	96%	80%	120%	97%	70%	130%
Dissolved Beryllium	2789721		<0.50	<0.50	NA	< 0.50	97%	70%	130%	108%	80%	120%	111%	70%	130%
Dissolved Boron	2789721		99.8	98.2	1.6%	< 10.0	98%	70%	130%	107%	80%	120%	105%	70%	130%
Dissolved Cadmium	2789721		<0.20	<0.20	NA	< 0.20	100%	70%	130%	104%	80%	120%	107%	70%	130%
Dissolved Chromium	2789721		<2.0	<2.0	NA	< 2.0	97%	70%	130%	103%	80%	120%	104%	70%	130%
Dissolved Cobalt	2789721		<0.50	<0.50	NA	< 0.50	96%	70%	130%	103%	80%	120%	106%	70%	130%
Dissolved Copper	2789721		<1.0	<1.0	NA	< 1.0	94%	70%	130%	102%	80%	120%	104%	70%	130%
Dissolved Lead	2789721		<0.50	<0.50	NA	< 0.50	100%	70%	130%	98%	80%	120%	96%	70%	130%
Dissolved Molybdenum	2789721		0.83	1.32	NA	< 0.50	101%	70%	130%	107%	80%	120%	108%	70%	130%
Dissolved Nickel	2789721		<3.0	<3.0	NA	< 3.0	96%	70%	130%	101%	80%	120%	103%	70%	130%
Dissolved Selenium	2789721		<1.0	<1.0	NA	< 1.0	101%	70%	130%	110%	80%	120%	111%	70%	130%
Dissolved Silver	2789721		<0.20	<0.20	NA	< 0.20	99%	70%	130%	106%	80%	120%	103%	70%	130%
Dissolved Thallium	2789721		<0.30	<0.30	NA	< 0.30	99%	70%	130%	105%	80%	120%	104%	70%	130%
Dissolved Uranium	2789721		<0.50	<0.50	NA	< 0.50	105%	70%	130%	108%	80%	120%	110%	70%	130%
Dissolved Vanadium	2789721		<0.40	<0.40	NA	< 0.40	96%	70%	130%	103%	80%	120%	106%	70%	130%
Dissolved Zinc	2789721		<5.0	<5.0	NA	< 5.0	98%	70%	130%	107%	80%	120%	115%	70%	130%

Comments: NA Signifies Not Applicable.
Duplicate NA: results are less than 5X the RDL and RPD will not be calculated.

Certified By:

AGAT Laboratories

5835 COOPERS AVENUE
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FAX (905)712-5122
http://www.agatlabs.com

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T780214

PROJECT: BIGC-ENV-349D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Ave, Oakville, ON

SAMPLED BY:Timothy Damdar

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Benzene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
Toluene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
Ethylbenzene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
m & p-Xylene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
o-Xylene	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
Xylenes (Total)	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
F1 (C6 - C10)	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/FID
Toluene-d8	VOL-91-5010	modified from MOE PHC-E3421	(P&T)GC/MS
F2 (C10 to C16)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F3 (C16 to C34)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
F4 (C34 to C50)	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5010	modified from MOE PHC-E3421	BALANCE
Terphenyl	VOL-91-5010	modified from MOE PHC-E3421	GC/FID
Sediment			
Water Analysis			
Dissolved Antimony	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Arsenic	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Barium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Beryllium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Boron	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cadmium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Chromium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Cobalt	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Copper	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Lead	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Molybdenum	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Nickel	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Selenium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Silver	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Thallium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Uranium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Vanadium	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS
Dissolved Zinc	MET-93-6103	modified from EPA 200.8 and EPA 3005A	ICP-MS

AGAT Laboratories
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Mississauga, Ontario L4Z 1Y2
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Chain of Custody Record

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

Report Information:

Company: B.I.G. Consulting
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road
Mississauga, ON L4W 2Z4
Phone: 905-782-0315 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email:

Project Information:

Project: BIGC-ENV-349D
Site Location: 217-227 Cross Avenue in Oakville, Ontario
Sampled By: Timothy Damdar
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☑ No ☐
Company: BIG Consulting Inc.
Contact: Laine Dougherty
Address: 12-5500 Tomken Rd, Mississauga, ON L4W 2Z4
Email: LDougherty@brownfieldigi.com; NKepics@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

☐ Regulation 558

☑ Regulation 153/04
Table 2 *Indicate One*
☐ Ind/Com
☑ Res/Park
☐ Agriculture
Soil Texture *(Check One)*
☑ Coarse
☐ Fine

☐ Excess Soils R406
Table *Indicate One*
Sample from APEC?
☐ Yes
☐ No
☐ Stockpile ☐ In-situ

☐ Sewer Use
☐ Sanitary ☐ Storm
Region
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
Indicate One

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 21T750214
Cooler Quantity: 1 SMC
Arrival Temperatures: 7.6 | 7.8 | 6.2
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: Free Ice

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics, inc. EC/SAR	O. Reg 153: Metals - ICPMS, ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs, Analyze F4G if required ☑ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Excess Soils SPLP Rainwater Leach ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH/MW103	Jul 27/21	12:30 AM/PM	5	GW					✓								N
BH/MW106	↓	3:00 AM/PM	1	GW		Y		✓									N
Trip Blank	—	—	5		bottles delivered empty												
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Timothy Damdar	July 27/21	5:13pm	NEAL G		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

Page 1 of 1

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

AGAT Laboratories

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CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T871686

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Mar 16, 2022

PAGES (INCLUDING COVER): 7

VERSION*: 1

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

*Notes

Disclaimer:

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

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON

SAMPLED BY:TD

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

DATE RECEIVED: 2022-03-09

DATE REPORTED: 2022-03-16

SAMPLE DESCRIPTION:				BH104NA-SS1	BH104NA-SS3	BH104WA-SS1	DUPW4A030	BH104EA-SS1	BH104SA-SS1
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2022-03-09 09:30	2022-03-09 09:35	2022-03-09 09:51	2022-03-09	2022-03-09 10:07	2022-03-09 10:21
Parameter	Unit	G / S	RDL	3604499	3604501	3604502	3604504	3604505	3604507
Naphthalene	µg/g	0.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	0.28	<0.05	0.78	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	0.10	<0.05	0.12	<0.05	<0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	0.34	0.05	1.12	<0.05	0.07	0.06
Pyrene	µg/g	78	0.05	0.27	<0.05	0.94	<0.05	0.06	<0.05
Benz(a)anthracene	µg/g	0.5	0.05	0.14	<0.05	0.51	<0.05	<0.05	<0.05
Chrysene	µg/g	7	0.05	0.15	<0.05	0.62	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	0.17	<0.05	0.78	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	0.06	<0.05	0.23	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	0.11	<0.05	0.40	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	0.05	<0.05	0.21	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	0.05	<0.05	0.25	<0.05	<0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05	<0.05	0.15	<0.05	<0.05	<0.05
Moisture Content	%		0.1	12.2	13.6	11.9	11.2	20.0	15.4
Surrogate	Unit	Acceptable Limits							
Naphthalene-d8	%	50-140		65	73	74	68	81	89
Acridine-d9	%	50-140		85	96	69	85	79	96
Terphenyl-d14	%	50-140		79	87	84	84	81	84

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

3604499-3604507 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON

SAMPLED BY:TD

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

DATE RECEIVED: 2022-03-09

DATE REPORTED: 2022-03-16

				SAMPLE DESCRIPTION:	BH105-SS1	DUP010501
				SAMPLE TYPE:	Soil	Soil
				DATE SAMPLED:	2022-03-09 10:40	2022-03-09
Parameter	Unit	G / S	RDL		3604527	3604528
Polychlorinated Biphenyls	µg/g	0.35	0.1		<0.1	<0.1
Moisture Content	%		0.1		10.5	9.8
wet weight PCB	g		0.01		10.44	10.05
Surrogate	Unit	Acceptable Limits				
Decachlorobiphenyl	%	50-140			96	96

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

3604527-3604528 Results are based on the dry weight of soil extracted.
PCB total is a calculated parameter. The calculated value is the sum of Aroclor 1242, Aroclor 1248, Aroclor 1254 and Aroclor 1260. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

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Exceedance Summary

AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
3604502	BH104WA-SS1	ON T3 S RPI CT	O. Reg. 153(511) - PAHs (Soil)	Benz(a)anthracene	µg/g	0.5	0.51
3604502	BH104WA-SS1	ON T3 S RPI CT	O. Reg. 153(511) - PAHs (Soil)	Benzo(a)pyrene	µg/g	0.3	0.40
3604502	BH104WA-SS1	ON T3 S RPI CT	O. Reg. 153(511) - PAHs (Soil)	Fluoranthene	µg/g	0.69	1.12

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON

SAMPLED BY:TD

Trace Organics Analysis

RPT Date: Mar 16, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	3604505	3604505	<0.05	<0.05	NA	< 0.05	110%	50%	140%	68%	50%	140%	70%	50%	140%
Acenaphthylene	3604505	3604505	<0.05	<0.05	NA	< 0.05	89%	50%	140%	73%	50%	140%	75%	50%	140%
Acenaphthene	3604505	3604505	<0.05	<0.05	NA	< 0.05	97%	50%	140%	77%	50%	140%	87%	50%	140%
Fluorene	3604505	3604505	<0.05	<0.05	NA	< 0.05	116%	50%	140%	91%	50%	140%	103%	50%	140%
Phenanthrene	3604505	3604505	<0.05	<0.05	NA	< 0.05	119%	50%	140%	92%	50%	140%	105%	50%	140%
Anthracene	3604505	3604505	<0.05	<0.05	NA	< 0.05	113%	50%	140%	92%	50%	140%	107%	50%	140%
Fluoranthene	3604505	3604505	<0.05	<0.05	NA	< 0.05	122%	50%	140%	101%	50%	140%	116%	50%	140%
Pyrene	3604505	3604505	<0.05	<0.05	NA	< 0.05	115%	50%	140%	99%	50%	140%	112%	50%	140%
Benz(a)anthracene	3604505	3604505	<0.05	<0.05	NA	< 0.05	112%	50%	140%	88%	50%	140%	98%	50%	140%
Chrysene	3604505	3604505	<0.05	<0.05	NA	< 0.05	109%	50%	140%	87%	50%	140%	86%	50%	140%
Benzo(b)fluoranthene	3604505	3604505	<0.05	<0.05	NA	< 0.05	80%	50%	140%	83%	50%	140%	78%	50%	140%
Benzo(k)fluoranthene	3604505	3604505	<0.05	<0.05	NA	< 0.05	108%	50%	140%	76%	50%	140%	63%	50%	140%
Benzo(a)pyrene	3604505	3604505	<0.05	<0.05	NA	< 0.05	121%	50%	140%	78%	50%	140%	99%	50%	140%
Indeno(1,2,3-cd)pyrene	3604505	3604505	<0.05	<0.05	NA	< 0.05	94%	50%	140%	78%	50%	140%	76%	50%	140%
Dibenz(a,h)anthracene	3604505	3604505	<0.05	<0.05	NA	< 0.05	110%	50%	140%	79%	50%	140%	76%	50%	140%
Benzo(g,h,i)perylene	3604505	3604505	<0.05	<0.05	NA	< 0.05	113%	50%	140%	71%	50%	140%	68%	50%	140%
O. Reg. 153(511) - PCBs (Soil)															
Polychlorinated Biphenyls	3608369		< 0.1	< 0.1	NA	< 0.1	104%	50%	140%	74%	50%	140%	82%	50%	140%

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

Certified By: N Popowkolof

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

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	CCME Tier 1 Method	BALANCE
Polychlorinated Biphenyls	ORG-91-5113	modified from EPA SW-846 3541 & 8082A	GC/ECD
Decachlorobiphenyl	ORG-91-5113	modified from EPA SW-846 3541 & 8082A	GC/ECD
wet weight PCB	ORG-91-5113		BALANCE

AGAT Laboratories

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
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Chain of Custody Record

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

Laboratory Use Only

Work Order #: 22T871686

Cooler Quantity: 1 Large

Arrival Temperatures: 20.3 | 20.0 | 18.2

Custody Seal Intact: ☐ Yes ☐ No ☐ N/A

Notes: Bagged Ice

Report Information:

Company: B-I.e. Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5500 Tomken Rd. Mississauga, ON L4W 2Z4
Phone: 416-214-4880 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldgi.com
2. Email:

Regulatory Requirements:

(Please check all applicable boxes)

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

☐ Excess Soils R406
Table (Indicate One)

☐ Regulation 558

☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm
(Region)

☐ Prov. Water Quality Objectives (PWQO)

☐ Other
(Indicate One)

Is this submission for a Record of Site Condition? ☐ Yes ☐ No

Report Guideline on Certificate of Analysis ☑ Yes ☐ No

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Project Information:

Project: BIGC-ENV-490D
Site Location: 581 Argus Rd, Oakville, ON
Sampled By: TD
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: same as report info
Contact: Laine Dougherty
Address: Same as report info
Email: ldougherty@brownfieldgi.com

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs	O. Reg 153: Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH104NA-SS1	Mar 9/22	9:30 AM/PM	1	S							✓							N
BH104NA-SS3		9:35 AM/PM	1	S							✓							N
BH104WA-SS1		9:51 AM/PM	1	S							✓							N
BH104WA-SS3		9:56 AM/PM	1	S							✓							N
DUPW4A030		[redacted] AM/PM	1	S							✓							N
BH104EA-SS1		10:07 AM/PM	1	S							✓							N
BH104EA-SS3		10:14 AM/PM	1	S							✓							N
BH104SA-SS1		10:21 AM/PM	1	S							✓							N
BH104SA-SS3		10:29 AM/PM	1	S							✓							N
BH105-SS1		10:40 AM/PM	1	S								✓						N
DUP010501		[redacted] AM/PM	1	S								✓						N

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Timothy Damdar	Mar 9/22	2:13pm	Armando Rivas		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

22 MAR 9 2:30

Page 1 of 1

Nº: T 125925

Document ID: DIV 78 1511 021

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Date Issued: March 9, 2021

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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T871693

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Mar 17, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

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Certificate of Analysis

AGAT WORK ORDER: 22T871693

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON

SAMPLED BY:TD

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

DATE RECEIVED: 2022-03-09

DATE REPORTED: 2022-03-17

		SAMPLE DESCRIPTION:		BH104WB-SS1
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2022-03-09
Parameter	Unit	G / S	RDL	3603000
Naphthalene	µg/g	0.6	0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05
Pyrene	µg/g	78	0.05	<0.05
Benz(a)anthracene	µg/g	0.5	0.05	<0.05
Chrysene	µg/g	7	0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05
Moisture Content	%		0.1	20.5
Surrogate	Unit	Acceptable Limits		
Naphthalene-d8	%	50-140		85
Acridine-d9	%	50-140		79
Terphenyl-d14	%	50-140		84

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

3603000 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T871693

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON

SAMPLED BY:TD

Trace Organics Analysis

RPT Date: Mar 17, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	3607886		<0.05	<0.05	NA	< 0.05	104%	50%	140%	76%	50%	140%	72%	50%	140%
Acenaphthylene	3607886		<0.05	<0.05	NA	< 0.05	99%	50%	140%	78%	50%	140%	75%	50%	140%
Acenaphthene	3607886		<0.05	<0.05	NA	< 0.05	100%	50%	140%	81%	50%	140%	83%	50%	140%
Fluorene	3607886		<0.05	<0.05	NA	< 0.05	123%	50%	140%	102%	50%	140%	100%	50%	140%
Phenanthrene	3607886		<0.05	<0.05	NA	< 0.05	119%	50%	140%	103%	50%	140%	102%	50%	140%
Anthracene	3607886		<0.05	<0.05	NA	< 0.05	119%	50%	140%	105%	50%	140%	101%	50%	140%
Fluoranthene	3607886		<0.05	<0.05	NA	< 0.05	118%	50%	140%	112%	50%	140%	111%	50%	140%
Pyrene	3607886		<0.05	<0.05	NA	< 0.05	115%	50%	140%	109%	50%	140%	108%	50%	140%
Benz(a)anthracene	3607886		<0.05	<0.05	NA	< 0.05	124%	50%	140%	100%	50%	140%	98%	50%	140%
Chrysene	3607886		<0.05	<0.05	NA	< 0.05	125%	50%	140%	75%	50%	140%	88%	50%	140%
Benzo(b)fluoranthene	3607886		<0.05	<0.05	NA	< 0.05	123%	50%	140%	76%	50%	140%	84%	50%	140%
Benzo(k)fluoranthene	3607886		<0.05	<0.05	NA	< 0.05	99%	50%	140%	67%	50%	140%	76%	50%	140%
Benzo(a)pyrene	3607886		<0.05	<0.05	NA	< 0.05	101%	50%	140%	92%	50%	140%	98%	50%	140%
Indeno(1,2,3-cd)pyrene	3607886		<0.05	<0.05	NA	< 0.05	87%	50%	140%	71%	50%	140%	67%	50%	140%
Dibenz(a,h)anthracene	3607886		<0.05	<0.05	NA	< 0.05	102%	50%	140%	73%	50%	140%	79%	50%	140%
Benzo(g,h,i)perylene	3607886		<0.05	<0.05	NA	< 0.05	101%	50%	140%	65%	50%	140%	69%	50%	140%

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

Certified By: N Popowkolof

AGAT Laboratories

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TEL (905)712-5100
FAX (905)712-5122
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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T871693

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	CCME Tier 1 Method	BALANCE

AGAT Laboratories
5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

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

Laboratory Use Only

Work Order #: 22T871693

Cooler Quantity: 1 Large coolers

Arrival Temperatures: 20.6 | 19.5 | 17.7

Custody Seal Intact: ☐ Yes ☐ No ☐ N/A

Notes: Bagged Ice

Report Information:

Company: B.I.G. Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5506 Tomken Rd, Mississauga, ON L4W 2Z4
Phone: 416-214-4882 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldgi.com
2. Email:

Project Information:

Project: BIGE-ENV-490D
Site Location: 581 Argus Rd, Oakville, ON
Sampled By: YD
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: Same as report info
Contact: Laine Daugherty
Address: Same as report info
Email: ldaugherty@brownfieldgi.com

Regulatory Requirements:

(Please check all applicable boxes)

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

☐ Excess Soils R406 — Table ____ (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm — Region
☐ Prov. Water Quality Objectives (PWQO)
☐ Other — Indicate One

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

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

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs	O. Reg 153: Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach	O. Reg 406: Excess Soils SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH104WB-SS1	Mar9/22	10:00 AM/PM	1	S	Place on hold						✓								N
BH104EB-SS1	↓	10:19 AM/PM	1	S	Place on hold						✓								N
BH104SB-SS1	↓	10:35 AM/PM	1	S	Place on hold						✓								N
		AM/PM																	
		AM/PM																	
		AM/PM																	
		AM/PM																	
		AM/PM																	
		AM/PM																	
		AM/PM																	
		AM/PM																	

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
T. Mathew Dambar	Mar9/22	2:13pm	Armando Rivas		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

'22 MAR 9 2:35PM

Page 1 of 1

Nº: T 130103

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Date Issued: March 9, 2021

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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T872055

TRACE ORGANICS REVIEWED BY: Pinkal Patel, Report Reviewer

DATE REPORTED: Mar 17, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

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Certificate of Analysis

AGAT WORK ORDER: 22T872055

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

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

DATE RECEIVED: 2022-03-10

DATE REPORTED: 2022-03-17

SAMPLE DESCRIPTION:				BH104NA-SS2	BH104SA-SS2	BH104EA-SS2	BH104WA-SS2	DUPWA020
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2022-03-09 09:53	2022-03-09 10:07	2022-03-09 10:29	2022-03-09 10:47	2022-03-09
Parameter	Unit	G / S	RDL	3607391	3607392	3607393	3607394	3607395
Naphthalene	µg/g	0.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	0.07	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	78	0.05	0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.5	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	7	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	12.3	15.0	15.0	15.0	11.7
Surrogate	Unit	Acceptable Limits						
Naphthalene-d8	%	50-140		68	71	63	67	61
Acridine-d9	%	50-140		85	79	84	79	96
Terphenyl-d14	%	50-140		60	64	74	110	62

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

3607391-3607395 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Pinkal Patel

AGAT Laboratories

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
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FAX (905)712-5122
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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T872055

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

Trace Organics Analysis

RPT Date: Mar 17, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	3574871		<0.05	<0.05	NA	< 0.05	99%	50%	140%	101%	50%	140%	99%	50%	140%
Acenaphthylene	3574871		<0.05	<0.05	NA	< 0.05	112%	50%	140%	100%	50%	140%	109%	50%	140%
Acenaphthene	3574871		<0.05	<0.05	NA	< 0.05	108%	50%	140%	77%	50%	140%	91%	50%	140%
Fluorene	3574871		<0.05	<0.05	NA	< 0.05	109%	50%	140%	84%	50%	140%	93%	50%	140%
Phenanthrene	3574871		<0.05	<0.05	NA	< 0.05	102%	50%	140%	78%	50%	140%	90%	50%	140%
Anthracene	3574871		<0.05	<0.05	NA	< 0.05	105%	50%	140%	84%	50%	140%	76%	50%	140%
Fluoranthene	3574871		<0.05	<0.05	NA	< 0.05	109%	50%	140%	83%	50%	140%	96%	50%	140%
Pyrene	3574871		<0.05	<0.05	NA	< 0.05	105%	50%	140%	81%	50%	140%	96%	50%	140%
Benz(a)anthracene	3574871		<0.05	<0.05	NA	< 0.05	91%	50%	140%	96%	50%	140%	88%	50%	140%
Chrysene	3574871		<0.05	<0.05	NA	< 0.05	117%	50%	140%	76%	50%	140%	83%	50%	140%
Benzo(b)fluoranthene	3574871		<0.05	<0.05	NA	< 0.05	71%	50%	140%	72%	50%	140%	72%	50%	140%
Benzo(k)fluoranthene	3574871		<0.05	<0.05	NA	< 0.05	80%	50%	140%	78%	50%	140%	81%	50%	140%
Benzo(a)pyrene	3574871		<0.05	<0.05	NA	< 0.05	67%	50%	140%	86%	50%	140%	74%	50%	140%
Indeno(1,2,3-cd)pyrene	3574871		<0.05	<0.05	NA	< 0.05	72%	50%	140%	71%	50%	140%	75%	50%	140%
Dibenz(a,h)anthracene	3574871		<0.05	<0.05	NA	< 0.05	70%	50%	140%	75%	50%	140%	83%	50%	140%
Benzo(g,h,i)perylene	3574871		<0.05	<0.05	NA	< 0.05	77%	50%	140%	85%	50%	140%	80%	50%	140%

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

Certified By: Jinkal Patel

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

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T872055

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	CCME Tier 1 Method	BALANCE

AGAT Laboratories
5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905 712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: B.I.G. Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road, Mississauga, ON L4W 2Z4
Phone: 416-214-4880 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfiedigi.com
2. Email:

Project Information:

Project: BIGC-ENV-490D
Site Location: 581 Argus Road, Oakville, ON
Sampled By: TD
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: Same as report info
Contact: Laine Dougherty
Address: Same as report info
Email: ldougherty@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

☑ Regulation 153/04 — Table 3 (Indicate One) — ☐ Ind/Com ☑ Rcs/Park ☐ Agriculture
Soil Texture (Check One): ☑ Coarse ☐ Fine

☐ Excess Soils R406 — Table (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm — Region
☐ Prov. Water Quality Objectives (PWQO)
☐ Other — Indicate One

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 22T872055

Cooler Quantity: 1 medium
Arrival Temperatures: 3.3 | 4.2 | 5.6
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: Bagged Ice

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	O. Reg 558: Landfill Disposal Characterization TCLP: TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH104NA-SS2	Mar 9/22	9:53 AM PM	1	S						☑							N
BH104SA-SS2	Mar 9/22	10:07 AM PM	1	S						☑							N
BH104EA-SS2	Mar 9/22	10:29 AM PM	1	S						☑							N
BH104WA-SS2	Mar 9/22	10:47 AM PM	1	S						☑							N
DUPWA020	Mar 9/22	AM PM	1	S						☑							N
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Timothy Damdar	Mar 10/22	12:29 pm	Armando Rivas		
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time

'22 MAR 10 12:30pm

Page 1 of 1

N°:

Your Project #: BIGC-ENV-349F
Site Location: Cross Ave/Argus Road
Your C.O.C. #: 881885-01-01

Attention: Rebecca Morrison

B.I.G Consulting Inc.
12-5500 Tomken Road
Mississauga, ON
CANADA L4W 2Z4

Report Date: 2022/06/09
Report #: R7159058
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2F2564
Received: 2022/06/03, 19:47

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Chloride by Automated Colourimetry	2	N/A	2022/06/07	CAM SOP-00463	SM 23 4500-Cl E m
Chromium (VI) in Water	2	N/A	2022/06/07	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	1	N/A	2022/06/04	CAM SOP-00457	OMOE E3015 m
Free (WAD) Cyanide	1	N/A	2022/06/06	CAM SOP-00457	OMOE E3015 m
Mercury	2	2022/06/08	2022/06/08	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	2	N/A	2022/06/09	CAM SOP-00447	EPA 6020B m

Remarks:

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

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

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

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

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Your Project #: BIGC-ENV-349F
Site Location: Cross Ave/Argus Road
Your C.O.C. #: 881885-01-01

Attention: Rebecca Morrison

B.I.G Consulting Inc.
12-5500 Tomken Road
Mississauga, ON
CANADA L4W 2Z4

Report Date: 2022/06/09
Report #: R7159058
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2F2564
Received: 2022/06/03, 19:47

Encryption Key

Bureau Veritas
09 Jun 2022 19:25:50

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Deepthi Shaji, Project Manager
Email: Deepthi.Shaji@bureauveritas.com
Phone# (905)817-5700 Ext:7065843

==========

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

Bureau Veritas Job #: C2F2564
Report Date: 2022/06/09

B.I.G Consulting Inc.
Client Project #: BIGC-ENV-349F
Site Location: Cross Ave/Argus Road
Sampler Initials: KML

O.REG 153 METALS & INORGANICS PKG (WTR)

Bureau Veritas ID			SUO235		SUO236			SUO236		
Sampling Date			2022/06/03 14:00		2022/06/03 14:05			2022/06/03 14:05		
COC Number			881885-01-01		881885-01-01			881885-01-01		
	UNITS	Criteria	BH/ MW115	RDL	DUP 1150	RDL	QC Batch	DUP 1150 Lab-Dup	RDL	QC Batch
Inorganics										
WAD Cyanide (Free)	ug/L	66	ND	1	ND	1	8034339	ND	1	8034339
Dissolved Chloride (Cl-)	mg/L	790	**2000**	25	**5200**	60	8035973			
Metals										
Chromium (VI)	ug/L	25	ND	0.50	ND	2.5	8034995			
Mercury (Hg)	ug/L	0.29	ND	0.10	ND	0.10	8040107			
Dissolved Antimony (Sb)	ug/L	6.0	0.94	0.50	1.1	0.50	8033932	0.92	0.50	8033932
Dissolved Arsenic (As)	ug/L	25	ND	1.0	ND	1.0	8033932	ND	1.0	8033932
Dissolved Barium (Ba)	ug/L	1000	82	2.0	79	2.0	8033932	81	2.0	8033932
Dissolved Beryllium (Be)	ug/L	4.0	ND	0.40	ND	0.40	8033932	ND	0.40	8033932
Dissolved Boron (B)	ug/L	5000	430	10	420	10	8033932	430	10	8033932
Dissolved Cadmium (Cd)	ug/L	2.7	ND	0.090	ND	0.090	8033932	ND	0.090	8033932
Dissolved Chromium (Cr)	ug/L	50	ND	5.0	ND	5.0	8033932	ND	5.0	8033932
Dissolved Cobalt (Co)	ug/L	3.8	ND	0.50	ND	0.50	8033932	ND	0.50	8033932
Dissolved Copper (Cu)	ug/L	87	1.0	0.90	1.3	0.90	8033932	1.2	0.90	8033932
Dissolved Lead (Pb)	ug/L	10	ND	0.50	ND	0.50	8033932	ND	0.50	8033932
Dissolved Molybdenum (Mo)	ug/L	70	8.2	0.50	8.1	0.50	8033932	8.3	0.50	8033932
Dissolved Nickel (Ni)	ug/L	100	2.9	1.0	4.9	1.0	8033932	3.1	1.0	8033932
Dissolved Selenium (Se)	ug/L	10	ND	2.0	ND	2.0	8033932	ND	2.0	8033932
Dissolved Silver (Ag)	ug/L	1.5	ND	0.090	ND	0.090	8033932	ND	0.090	8033932
Dissolved Sodium (Na)	ug/L	490000	**1000000**	500	**980000**	500	8033932	**970000**	500	8033932
Dissolved Thallium (Tl)	ug/L	2.0	ND	0.050	ND	0.050	8033932	ND	0.050	8033932
Dissolved Uranium (U)	ug/L	20	1.7	0.10	1.8	0.10	8033932	1.7	0.10	8033932
Dissolved Vanadium (V)	ug/L	6.2	ND	0.50	ND	0.50	8033932	ND	0.50	8033932
Dissolved Zinc (Zn)	ug/L	1100	16	5.0	17	5.0	8033932	17	5.0	8033932

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

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

GENERAL COMMENTS

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

Package 1	18.0°C

Sample SUO236 [DUP 1150] : Hexavalent Chromium: Due to the sample matrix, sample required dilution. Detection limits were adjusted accordingly.

Results relate only to the items tested.

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

Bureau Veritas Job #: C2F2564
Report Date: 2022/06/09

QUALITY ASSURANCE REPORT

B.I.G Consulting Inc.
Client Project #: BIGC-ENV-349F
Site Location: Cross Ave/Argus Road
Sampler Initials: KML

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8033932	Dissolved Antimony (Sb)	2022/06/09	108	80 - 120	102	80 - 120	ND, RDL=0.50	ug/L	18	20
8033932	Dissolved Arsenic (As)	2022/06/09	103	80 - 120	99	80 - 120	ND, RDL=1.0	ug/L	NC	20
8033932	Dissolved Barium (Ba)	2022/06/09	106	80 - 120	100	80 - 120	ND, RDL=2.0	ug/L	2.4	20
8033932	Dissolved Beryllium (Be)	2022/06/09	96	80 - 120	100	80 - 120	ND, RDL=0.40	ug/L	NC	20
8033932	Dissolved Boron (B)	2022/06/09	94	80 - 120	95	80 - 120	ND, RDL=10	ug/L	1.1	20
8033932	Dissolved Cadmium (Cd)	2022/06/09	101	80 - 120	100	80 - 120	ND, RDL=0.090	ug/L	NC	20
8033932	Dissolved Chromium (Cr)	2022/06/09	101	80 - 120	97	80 - 120	ND, RDL=5.0	ug/L	NC	20
8033932	Dissolved Cobalt (Co)	2022/06/09	102	80 - 120	101	80 - 120	ND, RDL=0.50	ug/L	NC	20
8033932	Dissolved Copper (Cu)	2022/06/09	104	80 - 120	103	80 - 120	ND, RDL=0.90	ug/L	10	20
8033932	Dissolved Lead (Pb)	2022/06/09	94	80 - 120	100	80 - 120	ND, RDL=0.50	ug/L	NC	20
8033932	Dissolved Molybdenum (Mo)	2022/06/09	118	80 - 120	103	80 - 120	ND, RDL=0.50	ug/L	2.8	20
8033932	Dissolved Nickel (Ni)	2022/06/09	96	80 - 120	99	80 - 120	ND, RDL=1.0	ug/L	NC	20
8033932	Dissolved Selenium (Se)	2022/06/09	101	80 - 120	98	80 - 120	ND, RDL=2.0	ug/L	NC	20
8033932	Dissolved Silver (Ag)	2022/06/09	97	80 - 120	104	80 - 120	ND, RDL=0.090	ug/L	NC	20
8033932	Dissolved Sodium (Na)	2022/06/09	NC	80 - 120	95	80 - 120	ND, RDL=100	ug/L	0.86	20
8033932	Dissolved Thallium (Tl)	2022/06/09	94	80 - 120	102	80 - 120	ND, RDL=0.050	ug/L	NC	20
8033932	Dissolved Uranium (U)	2022/06/09	93	80 - 120	101	80 - 120	ND, RDL=0.10	ug/L	5.6	20
8033932	Dissolved Vanadium (V)	2022/06/09	105	80 - 120	97	80 - 120	ND, RDL=0.50	ug/L	NC	20
8033932	Dissolved Zinc (Zn)	2022/06/09	96	80 - 120	97	80 - 120	ND, RDL=5.0	ug/L	3.5	20
8034339	WAD Cyanide (Free)	2022/06/04	87	80 - 120	98	80 - 120	ND,RDL=1	ug/L	NC	20
8034995	Chromium (VI)	2022/06/07	100	80 - 120	103	80 - 120	ND, RDL=0.50	ug/L	NC	20
8035973	Dissolved Chloride (Cl-)	2022/06/07	NC	80 - 120	103	80 - 120	ND, RDL=1.0	mg/L	2.2	20
8040107	Mercury (Hg)	2022/06/08	94	75 - 125	96	80 - 120	ND, RDL=0.10	ug/L	NC	20

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

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

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

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

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

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

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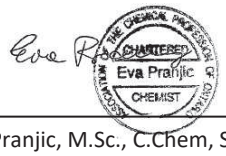
Bureau Veritas Job #: C2F2564
Report Date: 2022/06/09

B.I.G Consulting Inc.
Client Project #: BIGC-ENV-349F
Site Location: Cross Ave/Argus Road
Sampler Initials: KML

VALIDATION SIGNATURE PAGE

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



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

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

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Bureau Veritas Job #: C2F2564
Report Date: 2022/06/09

B.I.G Consulting Inc.
Client Project #: BIGC-ENV-349F
Site Location: Cross Ave/Argus Road
Sampler Initials: KML

Exceedance Summary Table – Reg153/04 T2-GW-C

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
BH/ MW115	SUO235-01	Dissolved Chloride (Cl-)	790	2000	25	mg/L
BH/ MW115	SUO235-03	Dissolved Sodium (Na)	490000	1000000	500	ug/L
DUP 1150	SUO236-01	Dissolved Chloride (Cl-)	790	5200	60	mg/L
DUP 1150	SUO236-03-Lab Dup	Dissolved Sodium (Na)	490000	970000	500	ug/L
DUP 1150	SUO236-03	Dissolved Sodium (Na)	490000	980000	500	ug/L

The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to applicable regulatory guidelines.

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Your Project #: BIGC-ENV-349G
Site Location: 227 Cross Avenue in Oakville
Your C.O.C. #: 921205-01-01

Attention: Rebecca Morrison

B.I.G Consulting Inc.
12-5500 Tomken Road
Mississauga, ON
CANADA L4W 2Z4

Report Date: 2023/02/17
Report #: R7513932
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C342679
Received: 2023/02/13, 17:17

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
1,3-Dichloropropene Sum	1	N/A	2023/02/15		EPA 8260C m
1,3-Dichloropropene Sum	2	N/A	2023/02/17		EPA 8260C m
Chloride by Automated Colourimetry	2	N/A	2023/02/15	CAM SOP-00463	SM 23 4500-Cl E m
Chromium (VI) in Water	2	N/A	2023/02/14	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	2	N/A	2023/02/15	CAM SOP-00457	OMOE E3015 m
Petroleum Hydrocarbons F2-F4 in Water (1)	2	2023/02/14	2023/02/15	CAM SOP-00316	CCME PHC-CWS m
Mercury	2	2023/02/15	2023/02/15	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	2	N/A	2023/02/17	CAM SOP-00447	EPA 6020B m
Volatile Organic Compounds and F1 PHCs	2	N/A	2023/02/16	CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds in Water	1	N/A	2023/02/15	CAM SOP-00228	EPA 8260D

Remarks:

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

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

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

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

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Your Project #: BIGC-ENV-349G
Site Location: 227 Cross Avenue in Oakville
Your C.O.C. #: 921205-01-01

Attention: Rebecca Morrison

B.I.G Consulting Inc.
12-5500 Tomken Road
Mississauga, ON
CANADA L4W 2Z4

Report Date: 2023/02/17
Report #: R7513932
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C342679
Received: 2023/02/13, 17:17

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

Encryption Key

Bureau Veritas
17 Feb 2023 15:57:22

Please direct all questions regarding this Certificate of Analysis to:
Deepthi Shaji, Project Manager
Email: Deepthi.Shaji@bureauveritas.com
Phone# (905)817-5700 Ext:7065843

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Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C342679
Report Date: 2023/02/17

B.I.G Consulting Inc.
Client Project #: BIGC-ENV-349G
Site Location: 227 Cross Avenue in Oakville
Sampler Initials: KML

O.REG 153 METALS & INORGANICS PKG (WTR)

Bureau Veritas ID			VBA390	VBA391			VBA391		
Sampling Date			2023/02/13 15:45	2023/02/13 15:45			2023/02/13 15:45		
COC Number			921205-01-01	921205-01-01			921205-01-01		
	UNITS	Criteria	MW301	DUP3010	RDL	QC Batch	DUP3010 Lab-Dup	RDL	QC Batch
Inorganics									
WAD Cyanide (Free)	ug/L	66	ND	ND	1	8505159			
Dissolved Chloride (Cl-)	mg/L	790	**1200**	**1200**	15	8504213			
Metals									
Chromium (VI)	ug/L	25	ND	ND	0.50	8501092			
Mercury (Hg)	ug/L	0.29	ND	ND	0.10	8505541	ND	0.10	8505541
Dissolved Antimony (Sb)	ug/L	6.0	ND	ND	0.50	8508112			
Dissolved Arsenic (As)	ug/L	25	ND	ND	1.0	8508112			
Dissolved Barium (Ba)	ug/L	1000	95	93	2.0	8508112			
Dissolved Beryllium (Be)	ug/L	4.0	ND	ND	0.40	8508112			
Dissolved Boron (B)	ug/L	5000	240	240	10	8508112			
Dissolved Cadmium (Cd)	ug/L	2.7	ND	ND	0.090	8508112			
Dissolved Chromium (Cr)	ug/L	50	ND	ND	5.0	8508112			
Dissolved Cobalt (Co)	ug/L	3.8	ND	0.56	0.50	8508112			
Dissolved Copper (Cu)	ug/L	87	7.3	7.4	0.90	8508112			
Dissolved Lead (Pb)	ug/L	10	ND	ND	0.50	8508112			
Dissolved Molybdenum (Mo)	ug/L	70	2.1	2.1	0.50	8508112			
Dissolved Nickel (Ni)	ug/L	100	2.5	2.4	1.0	8508112			
Dissolved Selenium (Se)	ug/L	10	ND	ND	2.0	8508112			
Dissolved Silver (Ag)	ug/L	1.5	ND	ND	0.090	8508112			
Dissolved Sodium (Na)	ug/L	490000	**660000**	**680000**	500	8508112			
Dissolved Thallium (Tl)	ug/L	2.0	ND	ND	0.050	8508112			
Dissolved Uranium (U)	ug/L	20	2.6	2.6	0.10	8508112			
Dissolved Vanadium (V)	ug/L	6.2	0.52	ND	0.50	8508112			
Dissolved Zinc (Zn)	ug/L	1100	ND	ND	5.0	8508112			

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

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Bureau Veritas Job #: C342679
Report Date: 2023/02/17

B.I.G Consulting Inc.
Client Project #: BIGC-ENV-349G
Site Location: 227 Cross Avenue in Oakville
Sampler Initials: KML

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

Bureau Veritas ID			VBA390	VBA391			VBA391		
Sampling Date			2023/02/13 15:45	2023/02/13 15:45			2023/02/13 15:45		
COC Number			921205-01-01	921205-01-01			921205-01-01		
	UNITS	Criteria	MW301	DUP3010	RDL	QC Batch	DUP3010 Lab-Dup	RDL	QC Batch
Calculated Parameters									
1,3-Dichloropropene (cis+trans)	ug/L	0.5	ND	ND	0.50	8502019			
Volatile Organics									
Acetone (2-Propanone)	ug/L	2700	ND	ND	10	8501712			
Benzene	ug/L	5.0	ND	ND	0.17	8501712			
Bromodichloromethane	ug/L	16.0	ND	ND	0.50	8501712			
Bromoform	ug/L	25.0	ND	ND	1.0	8501712			
Bromomethane	ug/L	0.89	ND	ND	0.50	8501712			
Carbon Tetrachloride	ug/L	0.79	ND	ND	0.20	8501712			
Chlorobenzene	ug/L	30	ND	ND	0.20	8501712			
Chloroform	ug/L	2.4	ND	ND	0.20	8501712			
Dibromochloromethane	ug/L	25.0	ND	ND	0.50	8501712			
1,2-Dichlorobenzene	ug/L	3.0	ND	ND	0.50	8501712			
1,3-Dichlorobenzene	ug/L	59	ND	ND	0.50	8501712			
1,4-Dichlorobenzene	ug/L	1.0	ND	ND	0.50	8501712			
Dichlorodifluoromethane (FREON 12)	ug/L	590	ND	ND	1.0	8501712			
1,1-Dichloroethane	ug/L	5	ND	ND	0.20	8501712			
1,2-Dichloroethane	ug/L	1.6	ND	ND	0.50	8501712			
1,1-Dichloroethylene	ug/L	1.6	ND	ND	0.20	8501712			
cis-1,2-Dichloroethylene	ug/L	1.6	ND	ND	0.50	8501712			
trans-1,2-Dichloroethylene	ug/L	1.6	ND	ND	0.50	8501712			
1,2-Dichloropropane	ug/L	5.0	ND	ND	0.20	8501712			
cis-1,3-Dichloropropene	ug/L	0.5	ND	ND	0.30	8501712			
trans-1,3-Dichloropropene	ug/L	0.5	ND	ND	0.40	8501712			
Ethylbenzene	ug/L	2.4	ND	ND	0.20	8501712			
Ethylene Dibromide	ug/L	0.2	ND	ND	0.20	8501712			
Hexane	ug/L	51	ND	ND	1.0	8501712			

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

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

Bureau Veritas ID			VBA390	VBA391			VBA391		
Sampling Date			2023/02/13 15:45	2023/02/13 15:45			2023/02/13 15:45		
COC Number			921205-01-01	921205-01-01			921205-01-01		
	UNITS	Criteria	MW301	DUP3010	RDL	QC Batch	DUP3010 Lab-Dup	RDL	QC Batch
Methylene Chloride(Dichloromethane)	ug/L	50	ND	ND	2.0	8501712			
Methyl Ethyl Ketone (2-Butanone)	ug/L	1800	ND	ND	10	8501712			
Methyl Isobutyl Ketone	ug/L	640	ND	ND	5.0	8501712			
Methyl t-butyl ether (MTBE)	ug/L	15	ND	ND	0.50	8501712			
Styrene	ug/L	5.4	ND	ND	0.50	8501712			
1,1,1,2-Tetrachloroethane	ug/L	1.1	ND	ND	0.50	8501712			
1,1,2,2-Tetrachloroethane	ug/L	1.0	ND	ND	0.50	8501712			
Tetrachloroethylene	ug/L	1.6	ND	ND	0.20	8501712			
Toluene	ug/L	24	ND	ND	0.20	8501712			
1,1,1-Trichloroethane	ug/L	200	ND	ND	0.20	8501712			
1,1,2-Trichloroethane	ug/L	4.7	ND	ND	0.50	8501712			
Trichloroethylene	ug/L	1.6	ND	ND	0.20	8501712			
Trichlorofluoromethane (FREON 11)	ug/L	150	ND	ND	0.50	8501712			
Vinyl Chloride	ug/L	0.5	ND	ND	0.20	8501712			
p+m-Xylene	ug/L	-	ND	ND	0.20	8501712			
o-Xylene	ug/L	-	ND	ND	0.20	8501712			
Total Xylenes	ug/L	300	ND	ND	0.20	8501712			
F1 (C6-C10)	ug/L	750	ND	ND	25	8501712			
F1 (C6-C10) - BTEX	ug/L	750	ND	ND	25	8501712			
F2-F4 Hydrocarbons									
F2 (C10-C16 Hydrocarbons)	ug/L	150	ND	ND	100	8504821	ND	100	8504821
F3 (C16-C34 Hydrocarbons)	ug/L	500	ND	ND	200	8504821	ND	200	8504821
F4 (C34-C50 Hydrocarbons)	ug/L	500	ND	ND	200	8504821	ND	200	8504821
Reached Baseline at C50	ug/L	-	Yes	Yes		8504821	Yes		8504821
Surrogate Recovery (%)									
o-Terphenyl	%	-	94	91		8504821	94		8504821
4-Bromofluorobenzene	%	-	86	85		8501712			

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

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Bureau Veritas Job #: C342679
Report Date: 2023/02/17

B.I.G Consulting Inc.
Client Project #: BIGC-ENV-349G
Site Location: 227 Cross Avenue in Oakville
Sampler Initials: KML

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

Bureau Veritas ID			VBA390	VBA391			VBA391		
Sampling Date			2023/02/13 15:45	2023/02/13 15:45			2023/02/13 15:45		
COC Number			921205-01-01	921205-01-01			921205-01-01		
	UNITS	Criteria	MW301	DUP3010	RDL	QC Batch	DUP3010 Lab-Dup	RDL	QC Batch
D4-1,2-Dichloroethane	%	-	119	117		8501712			
D8-Toluene	%	-	99	99		8501712			

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil

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Bureau Veritas Job #: C342679
Report Date: 2023/02/17

B.I.G Consulting Inc.
Client Project #: BIGC-ENV-349G
Site Location: 227 Cross Avenue in Oakville
Sampler Initials: KML

O.REG 153 VOCS BY HS (WATER)

Bureau Veritas ID			VBA392		
Sampling Date					
COC Number			921205-01-01		
	UNITS	Criteria	TRIP BLANK	RDL	QC Batch
Calculated Parameters					
1,3-Dichloropropene (cis+trans)	ug/L	0.5	ND	0.50	8502019
Volatile Organics					
Acetone (2-Propanone)	ug/L	2700	ND	10	8503608
Benzene	ug/L	5.0	ND	0.20	8503608
Bromodichloromethane	ug/L	16.0	ND	0.50	8503608
Bromoform	ug/L	25.0	ND	1.0	8503608
Bromomethane	ug/L	0.89	ND	0.50	8503608
Carbon Tetrachloride	ug/L	0.79	ND	0.19	8503608
Chlorobenzene	ug/L	30	ND	0.20	8503608
Chloroform	ug/L	2.4	ND	0.20	8503608
Dibromochloromethane	ug/L	25.0	ND	0.50	8503608
1,2-Dichlorobenzene	ug/L	3.0	ND	0.40	8503608
1,3-Dichlorobenzene	ug/L	59	ND	0.40	8503608
1,4-Dichlorobenzene	ug/L	1.0	ND	0.40	8503608
Dichlorodifluoromethane (FREON 12)	ug/L	590	ND	1.0	8503608
1,1-Dichloroethane	ug/L	5	ND	0.20	8503608
1,2-Dichloroethane	ug/L	1.6	ND	0.49	8503608
1,1-Dichloroethylene	ug/L	1.6	ND	0.20	8503608
cis-1,2-Dichloroethylene	ug/L	1.6	ND	0.50	8503608
trans-1,2-Dichloroethylene	ug/L	1.6	ND	0.50	8503608
1,2-Dichloropropane	ug/L	5.0	ND	0.20	8503608
cis-1,3-Dichloropropene	ug/L	0.5	ND	0.30	8503608
trans-1,3-Dichloropropene	ug/L	0.5	ND	0.40	8503608
Ethylbenzene	ug/L	2.4	ND	0.20	8503608
Ethylene Dibromide	ug/L	0.2	ND	0.19	8503608
Hexane	ug/L	51	ND	1.0	8503608

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil
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Bureau Veritas Job #: C342679
Report Date: 2023/02/17

B.I.G Consulting Inc.
Client Project #: BIGC-ENV-349G
Site Location: 227 Cross Avenue in Oakville
Sampler Initials: KML

O.REG 153 VOCS BY HS (WATER)

Bureau Veritas ID			VBA392		
Sampling Date					
COC Number			921205-01-01		
	UNITS	Criteria	TRIP BLANK	RDL	QC Batch
Methylene Chloride(Dichloromethane)	ug/L	50	ND	2.0	8503608
Methyl Ethyl Ketone (2-Butanone)	ug/L	1800	ND	10	8503608
Methyl Isobutyl Ketone	ug/L	640	ND	5.0	8503608
Methyl t-butyl ether (MTBE)	ug/L	15	ND	0.50	8503608
Styrene	ug/L	5.4	ND	0.40	8503608
1,1,1,2-Tetrachloroethane	ug/L	1.1	ND	0.50	8503608
1,1,2,2-Tetrachloroethane	ug/L	1.0	ND	0.40	8503608
Tetrachloroethylene	ug/L	1.6	ND	0.20	8503608
Toluene	ug/L	24	ND	0.20	8503608
1,1,1-Trichloroethane	ug/L	200	ND	0.20	8503608
1,1,2-Trichloroethane	ug/L	4.7	ND	0.40	8503608
Trichloroethylene	ug/L	1.6	ND	0.20	8503608
Trichlorofluoromethane (FREON 11)	ug/L	150	ND	0.50	8503608
Vinyl Chloride	ug/L	0.5	ND	0.20	8503608
p+m-Xylene	ug/L	-	ND	0.20	8503608
o-Xylene	ug/L	-	ND	0.20	8503608
Total Xylenes	ug/L	300	ND	0.20	8503608
Surrogate Recovery (%)					
4-Bromofluorobenzene	%	-	101		8503608
D4-1,2-Dichloroethane	%	-	106		8503608
D8-Toluene	%	-	96		8503608

No Fill	No Exceedance
Grey	Exceeds 1 criteria policy/level
Black	Exceeds both criteria/levels

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Criteria: Ontario Reg. 153/04 (Amended April 15, 2011)
Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition
Potable Ground Water- All Types of Property Uses - Coarse Textured Soil
ND = Not Detected at a concentration equal or greater than the indicated Detection Limit.

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GENERAL COMMENTS

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

Package 1	10.0°C

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8501712	4-Bromofluorobenzene	2023/02/16	91	70 - 130	94	70 - 130	85	%		
8501712	D4-1,2-Dichloroethane	2023/02/16	115	70 - 130	112	70 - 130	112	%		
8501712	D8-Toluene	2023/02/16	104	70 - 130	105	70 - 130	99	%		
8503608	4-Bromofluorobenzene	2023/02/14	100	70 - 130	100	70 - 130	95	%		
8503608	D4-1,2-Dichloroethane	2023/02/14	101	70 - 130	96	70 - 130	101	%		
8503608	D8-Toluene	2023/02/14	105	70 - 130	105	70 - 130	93	%		
8504821	o-Terphenyl	2023/02/15	100	60 - 130	99	60 - 130	97	%		
8501092	Chromium (VI)	2023/02/14	102	80 - 120	103	80 - 120	ND, RDL=0.50	ug/L	5.1	20
8501712	1,1,1,2-Tetrachloroethane	2023/02/16	91	70 - 130	94	70 - 130	ND, RDL=0.50	ug/L	NC	30
8501712	1,1,1-Trichloroethane	2023/02/16	104	70 - 130	109	70 - 130	ND, RDL=0.20	ug/L	NC	30
8501712	1,1,2,2-Tetrachloroethane	2023/02/16	85	70 - 130	86	70 - 130	ND, RDL=0.50	ug/L	NC	30
8501712	1,1,2-Trichloroethane	2023/02/16	110	70 - 130	109	70 - 130	ND, RDL=0.50	ug/L	NC	30
8501712	1,1-Dichloroethane	2023/02/16	97	70 - 130	100	70 - 130	ND, RDL=0.20	ug/L	NC	30
8501712	1,1-Dichloroethylene	2023/02/16	107	70 - 130	112	70 - 130	ND, RDL=0.20	ug/L	NC	30
8501712	1,2-Dichlorobenzene	2023/02/16	89	70 - 130	91	70 - 130	ND, RDL=0.50	ug/L	NC	30
8501712	1,2-Dichloroethane	2023/02/16	103	70 - 130	105	70 - 130	ND, RDL=0.50	ug/L	NC	30
8501712	1,2-Dichloropropane	2023/02/16	99	70 - 130	101	70 - 130	ND, RDL=0.20	ug/L	NC	30
8501712	1,3-Dichlorobenzene	2023/02/16	88	70 - 130	90	70 - 130	ND, RDL=0.50	ug/L	NC	30
8501712	1,4-Dichlorobenzene	2023/02/16	101	70 - 130	105	70 - 130	ND, RDL=0.50	ug/L	NC	30
8501712	Acetone (2-Propanone)	2023/02/16	116	60 - 140	111	60 - 140	ND, RDL=10	ug/L	NC	30
8501712	Benzene	2023/02/16	91	70 - 130	93	70 - 130	ND, RDL=0.17	ug/L	NC	30
8501712	Bromodichloromethane	2023/02/16	104	70 - 130	107	70 - 130	ND, RDL=0.50	ug/L	NC	30
8501712	Bromoform	2023/02/16	84	70 - 130	85	70 - 130	ND, RDL=1.0	ug/L	NC	30
8501712	Bromomethane	2023/02/16	92	60 - 140	96	60 - 140	ND, RDL=0.50	ug/L	NC	30
8501712	Carbon Tetrachloride	2023/02/16	101	70 - 130	106	70 - 130	ND, RDL=0.20	ug/L	NC	30
8501712	Chlorobenzene	2023/02/16	91	70 - 130	94	70 - 130	ND, RDL=0.20	ug/L	NC	30
8501712	Chloroform	2023/02/16	100	70 - 130	102	70 - 130	ND, RDL=0.20	ug/L	NC	30
8501712	cis-1,2-Dichloroethylene	2023/02/16	99	70 - 130	101	70 - 130	ND, RDL=0.50	ug/L	NC	30
8501712	cis-1,3-Dichloropropene	2023/02/16	93	70 - 130	96	70 - 130	ND, RDL=0.30	ug/L	NC	30
8501712	Dibromochloromethane	2023/02/16	91	70 - 130	93	70 - 130	ND, RDL=0.50	ug/L	NC	30
8501712	Dichlorodifluoromethane (FREON 12)	2023/02/16	110	60 - 140	119	60 - 140	ND, RDL=1.0	ug/L	NC	30

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8501712	Ethylbenzene	2023/02/16	86	70 - 130	90	70 - 130	ND, RDL=0.20	ug/L	NC	30
8501712	Ethylene Dibromide	2023/02/16	91	70 - 130	92	70 - 130	ND, RDL=0.20	ug/L	NC	30
8501712	F1 (C6-C10) - BTEX	2023/02/16					ND, RDL=25	ug/L	NC	30
8501712	F1 (C6-C10)	2023/02/16	93	60 - 140	94	60 - 140	ND, RDL=25	ug/L	NC	30
8501712	Hexane	2023/02/16	100	70 - 130	107	70 - 130	ND, RDL=1.0	ug/L	NC	30
8501712	Methyl Ethyl Ketone (2-Butanone)	2023/02/16	115	60 - 140	112	60 - 140	ND, RDL=10	ug/L	NC	30
8501712	Methyl Isobutyl Ketone	2023/02/16	100	70 - 130	104	70 - 130	ND, RDL=5.0	ug/L	NC	30
8501712	Methyl t-butyl ether (MTBE)	2023/02/16	91	70 - 130	95	70 - 130	ND, RDL=0.50	ug/L	NC	30
8501712	Methylene Chloride(Dichloromethane)	2023/02/16	102	70 - 130	104	70 - 130	ND, RDL=2.0	ug/L	NC	30
8501712	o-Xylene	2023/02/16	86	70 - 130	90	70 - 130	ND, RDL=0.20	ug/L	NC	30
8501712	p+m-Xylene	2023/02/16	90	70 - 130	95	70 - 130	ND, RDL=0.20	ug/L	NC	30
8501712	Styrene	2023/02/16	90	70 - 130	97	70 - 130	ND, RDL=0.50	ug/L	NC	30
8501712	Tetrachloroethylene	2023/02/16	84	70 - 130	87	70 - 130	ND, RDL=0.20	ug/L	NC	30
8501712	Toluene	2023/02/16	91	70 - 130	95	70 - 130	ND, RDL=0.20	ug/L	1.4	30
8501712	Total Xylenes	2023/02/16					ND, RDL=0.20	ug/L	NC	30
8501712	trans-1,2-Dichloroethylene	2023/02/16	93	70 - 130	98	70 - 130	ND, RDL=0.50	ug/L	NC	30
8501712	trans-1,3-Dichloropropene	2023/02/16	96	70 - 130	95	70 - 130	ND, RDL=0.40	ug/L	NC	30
8501712	Trichloroethylene	2023/02/16	96	70 - 130	101	70 - 130	ND, RDL=0.20	ug/L	NC	30
8501712	Trichlorofluoromethane (FREON 11)	2023/02/16	103	70 - 130	110	70 - 130	ND, RDL=0.50	ug/L	NC	30
8501712	Vinyl Chloride	2023/02/16	94	70 - 130	98	70 - 130	ND, RDL=0.20	ug/L	NC	30
8503608	1,1,1,2-Tetrachloroethane	2023/02/14	92	70 - 130	92	70 - 130	ND, RDL=0.50	ug/L	NC	30
8503608	1,1,1-Trichloroethane	2023/02/14	92	70 - 130	96	70 - 130	ND, RDL=0.20	ug/L	NC	30
8503608	1,1,2,2-Tetrachloroethane	2023/02/14	92	70 - 130	87	70 - 130	ND, RDL=0.40	ug/L	NC	30
8503608	1,1,2-Trichloroethane	2023/02/14	92	70 - 130	89	70 - 130	ND, RDL=0.40	ug/L	NC	30
8503608	1,1-Dichloroethane	2023/02/14	88	70 - 130	91	70 - 130	ND, RDL=0.20	ug/L	NC	30
8503608	1,1-Dichloroethylene	2023/02/14	88	70 - 130	95	70 - 130	ND, RDL=0.20	ug/L	NC	30
8503608	1,2-Dichlorobenzene	2023/02/14	89	70 - 130	90	70 - 130	ND, RDL=0.40	ug/L	NC	30
8503608	1,2-Dichloroethane	2023/02/14	87	70 - 130	85	70 - 130	ND, RDL=0.49	ug/L	NC	30
8503608	1,2-Dichloropropane	2023/02/14	92	70 - 130	94	70 - 130	ND, RDL=0.20	ug/L	NC	30
8503608	1,3-Dichlorobenzene	2023/02/14	86	70 - 130	90	70 - 130	ND, RDL=0.40	ug/L	NC	30
8503608	1,4-Dichlorobenzene	2023/02/14	101	70 - 130	104	70 - 130	ND, RDL=0.40	ug/L	NC	30

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8503608	Acetone (2-Propanone)	2023/02/14	100	60 - 140	90	60 - 140	ND, RDL=10	ug/L	NC	30
8503608	Benzene	2023/02/14	85	70 - 130	89	70 - 130	ND, RDL=0.20	ug/L	NC	30
8503608	Bromodichloromethane	2023/02/14	94	70 - 130	94	70 - 130	ND, RDL=0.50	ug/L	NC	30
8503608	Bromoform	2023/02/14	92	70 - 130	87	70 - 130	ND, RDL=1.0	ug/L	NC	30
8503608	Bromomethane	2023/02/14	88	60 - 140	91	60 - 140	ND, RDL=0.50	ug/L	NC	30
8503608	Carbon Tetrachloride	2023/02/14	89	70 - 130	94	70 - 130	ND, RDL=0.19	ug/L	NC	30
8503608	Chlorobenzene	2023/02/14	87	70 - 130	90	70 - 130	ND, RDL=0.20	ug/L	NC	30
8503608	Chloroform	2023/02/14	90	70 - 130	92	70 - 130	ND, RDL=0.20	ug/L	NC	30
8503608	cis-1,2-Dichloroethylene	2023/02/14	92	70 - 130	95	70 - 130	ND, RDL=0.50	ug/L	NC	30
8503608	cis-1,3-Dichloropropene	2023/02/14	88	70 - 130	90	70 - 130	ND, RDL=0.30	ug/L	NC	30
8503608	Dibromochloromethane	2023/02/14	90	70 - 130	87	70 - 130	ND, RDL=0.50	ug/L	NC	30
8503608	Dichlorodifluoromethane (FREON 12)	2023/02/14	82	60 - 140	94	60 - 140	ND, RDL=1.0	ug/L	NC	30
8503608	Ethylbenzene	2023/02/14	80	70 - 130	87	70 - 130	ND, RDL=0.20	ug/L	NC	30
8503608	Ethylene Dibromide	2023/02/14	88	70 - 130	84	70 - 130	ND, RDL=0.19	ug/L	NC	30
8503608	Hexane	2023/02/14	93	70 - 130	101	70 - 130	ND, RDL=1.0	ug/L	NC	30
8503608	Methyl Ethyl Ketone (2-Butanone)	2023/02/14	108	60 - 140	99	60 - 140	ND, RDL=10	ug/L	NC	30
8503608	Methyl Isobutyl Ketone	2023/02/14	104	70 - 130	99	70 - 130	ND, RDL=5.0	ug/L	NC	30
8503608	Methyl t-butyl ether (MTBE)	2023/02/14	86	70 - 130	88	70 - 130	ND, RDL=0.50	ug/L	NC	30
8503608	Methylene Chloride(Dichloromethane)	2023/02/14	107	70 - 130	107	70 - 130	ND, RDL=2.0	ug/L	NC	30
8503608	o-Xylene	2023/02/14	79	70 - 130	89	70 - 130	ND, RDL=0.20	ug/L	NC	30
8503608	p+m-Xylene	2023/02/14	87	70 - 130	94	70 - 130	ND, RDL=0.20	ug/L	NC	30
8503608	Styrene	2023/02/14	95	70 - 130	101	70 - 130	ND, RDL=0.40	ug/L	NC	30
8503608	Tetrachloroethylene	2023/02/14	83	70 - 130	87	70 - 130	ND, RDL=0.20	ug/L	4.2	30
8503608	Toluene	2023/02/14	89	70 - 130	93	70 - 130	ND, RDL=0.20	ug/L	NC	30
8503608	Total Xylenes	2023/02/14					ND, RDL=0.20	ug/L	NC	30
8503608	trans-1,2-Dichloroethylene	2023/02/14	90	70 - 130	95	70 - 130	ND, RDL=0.50	ug/L	NC	30
8503608	trans-1,3-Dichloropropene	2023/02/14	95	70 - 130	92	70 - 130	ND, RDL=0.40	ug/L	NC	30
8503608	Trichloroethylene	2023/02/14	94	70 - 130	99	70 - 130	ND, RDL=0.20	ug/L	NC	30
8503608	Trichlorofluoromethane (FREON 11)	2023/02/14	87	70 - 130	93	70 - 130	ND, RDL=0.50	ug/L	NC	30
8503608	Vinyl Chloride	2023/02/14	82	70 - 130	89	70 - 130	ND, RDL=0.20	ug/L	NC	30
8504213	Dissolved Chloride (Cl-)	2023/02/15	NC	80 - 120	105	80 - 120	ND, RDL=1.0	mg/L	0.32	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8504821	F2 (C10-C16 Hydrocarbons)	2023/02/15	108	60 - 130	103	60 - 130	ND, RDL=100	ug/L	NC	30
8504821	F3 (C16-C34 Hydrocarbons)	2023/02/15	106	60 - 130	104	60 - 130	ND, RDL=200	ug/L	NC	30
8504821	F4 (C34-C50 Hydrocarbons)	2023/02/15	106	60 - 130	101	60 - 130	ND, RDL=200	ug/L	NC	30
8505159	WAD Cyanide (Free)	2023/02/15	102	80 - 120	104	80 - 120	ND,RDL=1	ug/L	NC	20
8505541	Mercury (Hg)	2023/02/15	107	75 - 125	109	80 - 120	ND, RDL=0.10	ug/L	NC	20
8508112	Dissolved Antimony (Sb)	2023/02/16	108	80 - 120	102	80 - 120	ND, RDL=0.50	ug/L	NC	20
8508112	Dissolved Arsenic (As)	2023/02/16	107	80 - 120	97	80 - 120	ND, RDL=1.0	ug/L	NC	20
8508112	Dissolved Barium (Ba)	2023/02/16	105	80 - 120	99	80 - 120	ND, RDL=2.0	ug/L	0.69	20
8508112	Dissolved Beryllium (Be)	2023/02/16	102	80 - 120	95	80 - 120	ND, RDL=0.40	ug/L	NC	20
8508112	Dissolved Boron (B)	2023/02/16	110	80 - 120	106	80 - 120	ND, RDL=10	ug/L	0.94	20
8508112	Dissolved Cadmium (Cd)	2023/02/16	105	80 - 120	99	80 - 120	ND, RDL=0.090	ug/L	NC	20
8508112	Dissolved Chromium (Cr)	2023/02/16	105	80 - 120	97	80 - 120	ND, RDL=5.0	ug/L	NC	20
8508112	Dissolved Cobalt (Co)	2023/02/16	103	80 - 120	96	80 - 120	ND, RDL=0.50	ug/L	1.8	20
8508112	Dissolved Copper (Cu)	2023/02/16	103	80 - 120	99	80 - 120	ND, RDL=0.90	ug/L	12	20
8508112	Dissolved Lead (Pb)	2023/02/16	97	80 - 120	94	80 - 120	ND, RDL=0.50	ug/L	NC	20
8508112	Dissolved Molybdenum (Mo)	2023/02/16	110	80 - 120	101	80 - 120	ND, RDL=0.50	ug/L	16	20
8508112	Dissolved Nickel (Ni)	2023/02/16	103	80 - 120	98	80 - 120	ND, RDL=1.0	ug/L	17	20
8508112	Dissolved Selenium (Se)	2023/02/16	109	80 - 120	100	80 - 120	ND, RDL=2.0	ug/L	NC	20
8508112	Dissolved Silver (Ag)	2023/02/16	102	80 - 120	99	80 - 120	ND, RDL=0.090	ug/L	NC	20
8508112	Dissolved Sodium (Na)	2023/02/16	NC	80 - 120	101	80 - 120	ND, RDL=100	ug/L	0.47	20
8508112	Dissolved Thallium (Tl)	2023/02/16	100	80 - 120	96	80 - 120	ND, RDL=0.050	ug/L	NC	20
8508112	Dissolved Uranium (U)	2023/02/16	109	80 - 120	103	80 - 120	ND, RDL=0.10	ug/L	2.4	20
8508112	Dissolved Vanadium (V)	2023/02/16	107	80 - 120	98	80 - 120	ND, RDL=0.50	ug/L	NC	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8508112	Dissolved Zinc (Zn)	2023/02/16	101	80 - 120	100	80 - 120	ND, RDL=5.0	ug/L	NC	20

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

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

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

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

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

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

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

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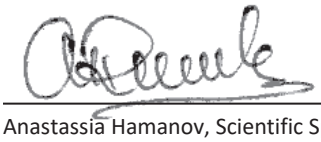
Bureau Veritas Job #: C342679
Report Date: 2023/02/17

B.I.G Consulting Inc.
Client Project #: BIGC-ENV-349G
Site Location: 227 Cross Avenue in Oakville
Sampler Initials: KML

VALIDATION SIGNATURE PAGE

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



Anastassia Hamanov, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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Bureau Veritas Job #: C342679
Report Date: 2023/02/17

B.I.G Consulting Inc.
Client Project #: BIGC-ENV-349G
Site Location: 227 Cross Avenue in Oakville
Sampler Initials: KML

Exceedance Summary Table – Reg153/04 T2-GW-C

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
MW301	VBA390-01	Dissolved Chloride (Cl-)	790	1200	15	mg/L
MW301	VBA390-02	Dissolved Sodium (Na)	490000	660000	500	ug/L
DUP3010	VBA391-01	Dissolved Chloride (Cl-)	790	1200	15	mg/L
DUP3010	VBA391-02	Dissolved Sodium (Na)	490000	680000	500	ug/L

The exceedance summary table is for information purposes only and should not be considered a comprehensive listing or statement of conformance to applicable regulatory guidelines.

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Appendix G – Remediation Report

SOIL REMEDIATION REPORT

217 and 227 Cross Avenue and 581-595 Argus Road, Oakville, Ontario

Client

Mr. Marcus Boekelman
Oakville Argus Cross LP
1-90 Wingold Avenue
Toronto, Ontario
M6B 1P5

Project Number

BIGC-ENV-349F

Prepared By:

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Date Submitted

November 15, 2022

Executive Summary

B.I.G. Consulting Inc. (BIG) was retained by Mr. Marcus Boekelman, on behalf Oakville Argus Cross LP (Client) to complete soil remediation at 217 and 227 Cross Avenue and 581-595 Argus Road, Oakville, ON (the Site). The objective of this project was to remediate the previously identified copper and PAH impacts in soil so that the Site meets the applicable Ministry of the Environment, Conservation and Parks (MECP) Table 2 Full Depth Generic Site Condition Standards (SCS) in a Potable Ground Water Condition for Residential/Parkland/Institutional land use with coarse textured soil. Once the Site has been successfully remediated a Record of Site Condition (RSC) can be filed for the Site.

Remedial activities were conducted at the Site between March 22 and 25, 2022 and included the removal of copper and PAH impacted soil material from two (2) excavations advanced at the Site. One of the excavations was advanced in the southern portion of 581-595 Argus Road and the second excavation was advanced in the northeast portion of 217 and 227 Cross Avenue. Confirmatory wall and floor samples submitted to the Laboratory for analysis confirmed that all of the impacted soil was removed and that the soil remaining at the Site meets the applicable MECP Table 2 SCS.The results and findings of the remedial activities conducted at the Site are summarized as follows:

a) Between March 22 and 25, 2022, approximately 260 m^3 of impacted soil material was removed from the Site. The impacted soil material was transported and disposed of at the York1 facility located at 195 Bethridge Road in Toronto, Ontario.
b) The excavation advanced to remediate the PAH impacted soil was approximately 6 m in length, 4 m in width and extended to 1 m below ground surface (bgs). Approximately 24 m^3 of PAH impacted soil was excavated and disposed of off-Site.
c) The excavation advanced to remediate the copper impacted soil was approximately 15 m in length, 7.5 m in width and extended to the depth of bedrock which was approximately 2 m bgs.
d) Approximately 260 m^3 of impacted soil in total was excavated and disposed of off-Site.
e) All confirmatory soil sample results analyzed met the applicable MECP Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional Property Use and coarse textured soil.

As a result of the remedial excavation activities conducted, the copper and PAHs impacts identified in soil have been successfully remediated. The soil meets the applicable MECP (2011) Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition with Residential/Parkland/Institutional Land Use and coarse textured soil. As such, an RSC can now be filed for the Site.

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1 Introduction

B.I.G. Consulting Inc. (BIG) was retained by Mr. Marcus Boekelman, on behalf of Oakville Argus Cross LP (Client) to complete soil remediation at 217 and 227 Cross Avenue and 581-595 Argus Road, Oakville, ON (hereinafter referred to as the Site). It is BIG's understanding that a Record of Site Condition (RSC) in accordance with Ontario Regulation 153/04, as amended is required for the Site.

1.1 Site Description

The Site is located north of Cross Avenue and east of Argus Road, in Oakville, Ontario, as shown on Figure 1. For ease of review, Argus Road is considered to be towards the north and west of the Site and Cross Avenue is considered to be towards the south of the Site. The Site is irregular in shape and measures approximately 12,600 m² in size. The Site is currently occupied by four (4) commercial buildings (Site buildings). The Site at 217 Cross Avenue is developed with one (1) single-story commercial building that is occupied by Swiss Chalet and Harvey's. The Site at 227 Cross Avenue is currently developed with one (1) single-story commercial building that is occupied by McDonald's. The Site at 571 Argus Road is currently vacant and undeveloped. The Site at 581 Argus Road is currently occupied by one (1) three-story commercial building that is occupied by various medical practices. The Site at 587 to 595 Argus Road is currently occupied by one (1) single story commercial building that is occupied by various medical practices. The Site buildings have a combined footprint of approximately 1,900 m², occupying approximately 15 % of the Site. The areas surrounding the Site building are covered with asphalt with some landscaping.

1.2 Location of Site Impacts

There are two (2) impacted areas at the Site.

Zone 1

A PAH impact was detected in soil at borehole BH/MW4 during a previous environmental investigation conducted by BIG, the impact was detected from 0.0 m to 0.61 m bgs.

Boreholes BH104NA, BH104EA, BH104SA and BH104WA were advanced to delineate the impact detected at BH/MW4, samples were collected from 0.0 – 0.61 m bgs and submitted for PAHs analysis. The samples submitted were all detected below the applicable MECP (2011) Table 2 SCS at all of the boreholes with the exception of BH104WA where exceedances of benzo(a)anthracene, benzo(a)pyrene, and fluoranthene were identified. As such, an additional borehole BH104WB was advanced 1 m to the west of BH104WA. A sample was collected from 0.0 – 0.61 m bgs and was submitted for analysis of PAHs. The sample results from BH104WB were below the applicable MECP Table 2 SCS. As such, the soil impacts had been horizontally delineated. Vertical delineation of the PAH impacts was achieved at 0.76 – 1.37 m bgs at BH104NA, BH104EA, BH104SA and BH104WA. BH/MW4A was sampled for PAHs in groundwater, the sample collected was below the applicable MECP Table 2 SCS for PAHs. Please refer to Figure 4A for the PAH soil delineation.

Zone 2

Copper impacts were identified at BH/MW101 at 0.0 – 0.61 m bgs and at BH/MW106 from 0.76 – 1.37 m bgs. The copper impacts in soil were horizontally delineated by boreholes BH201 to BH204 and samples were submitted from 0.0 – 0.61 m bgs and/or 0.76 – 1.37 m bgs. Bedrock at the Site is deeper than 2.0 m over two-thirds of the Site, however within the eastern portion of the Site where the copper impacts were identified, bedrock was encountered between approximately 1.7 m to 2.3 m bgs. As the copper impacts extended to 1.37 m bgs, it was assumed that the impacts extended to the depth of bedrock. Please refer to Figure 14A for the metals soil delineation.

Monitoring wells BH/MW101 and BH/MW106 were sampled for metals in groundwater, the samples collected were below the applicable MECP Table 2 SCS for metals. Please refer to Figure 5A for the metals soil delineation.

2 Previous Environmental Investigations

Previous environmental investigations have been conducted at the Site, including a Fill Material Characterization Memorandum.

The following environmental investigation was reviewed in support of this remediation report:

1. BIG (2022) Phase Two Environmental Site Assessment, 217 & 227 Cross Avenue and 571 – 595 Argus Road, Oakville, Ontario. B.I.G. Consulting Inc. October 31, 2022.

A Brief summary of the investigation is included below:

BIG (2022) Phase Two Environmental Site Assessment	
Objective	Investigate soil and groundwater quality at the Site
Program	• Advancement of thirty-one (31) boreholes (BH/MW1A to BH/MW5A, BH/MW101 to BH116, BH105, BH104NA, BH104EA, BH104SA, BH104WA, BH104WB, BH201 to BH204) to a maximum depth of 27.6 m bgs. • Instrument twenty (20) boreholes as monitoring wells (BH/MW1A to BH/MW5A, BH/MW101 to BH/MW115) with depths ranging from 2.44 to 22.9 m bgs; • Soil samples submitted for the analysis of petroleum hydrocarbons (PHCs), benzene, toluene, ethylbenzene and xylenes (BTEX), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), metals and inorganics; • Groundwater samples submitted for the analysis of PHCs, BTEX, VOCs, PAHs, metals and inorganics.
Site Condition Standards	• MECP (2011a) Table 2 Full depth SCS for residential/parkland/institutional land use with potable groundwater coarse textured soil.
Soil	• The stratigraphy at the Site comprised of asphalt or topsoil at the ground surface, underlain by fill material comprised of clayey silt, silty clay and sandy silt underlain by native material characterized by clayey silt till/silty clay till followed by shale bedrock.
Groundwater	• Groundwater levels ranged from 2.18 m – 5.27 m bgs m bgs in shallow wells and 16.01 m – 20.47 m bgs in deep wells (June 3, 2022).
Soil Conditions	• Benzo(a)anthracene was detected at BH104WA from 0.0 – 0.61 m bgs (0.51 µg/g) above the applicable MECP Table 2 SCS of 0.50 µg/g. • Benzo(a)pyrene was detected at BH104WA from 0.0 – 0.61 m bgs (0.40 µg/g) above the applicable MECP Table 2 SCS of 0.30 µg/g. • Fluoranthene was detected at BH4-SS1 from 0.0 - 0.61 m bgs (0.93 µg/g) and at BH104WA from 0.0 – 0.6 1 m bgs (1.12 µg/g) above the applicable MECP Table 2 SCS of 0.69 µg/g. • Copper was detected at BH/MW101 from 0.0 – 0.61 m bgs (493 µg/g) and at BH/MW106 from 0.76 – 1.37 m bgs (188 µg/g) above the applicable MECP Table 2 SCS of 140 µg/g.
Groundwater Conditions	• No groundwater COCs were identified at the Site.

3 Remedial Objectives

The remedial objective at the Site is for soil to meet the MECP (2011) Table 2 Full Depth Generic Site Condition Standards (SCS) in a Potable Ground Water Condition for Residential/Parkland/Institutional land use with coarse textured soil.

4 Remedial Action Plan

The remedial action plan for the soil impacts identified at the Site in exceedance of the applicable MECP (2011) Table 2 SCS is the following:

1. Excavate the impacted soil.
2. Collect confirmatory soil samples from the excavation walls and floor.
3. Submit confirmatory soil samples to the lab for analysis of PAHs.
4. Export impacted soil off-Site to a registered landfill facility.
5. Backfill the excavations with crushed with sand and granular 'A' material.

5 Remedial Actions

5.1 Soil Excavation

On March 22, 2022, PAH impacted soil was excavated from the Site by Nexxgen Environmental under the full-time supervision of BIG staff. Impacted soil was excavated and removed from the Site. Details on the excavation advanced at the Site are provided below.

5.2.1 Excavation 1

The excavation to remediate the PAH soil impacts identified at BH/MW4 and BH104WA was located in the southern portion of 581 Argus Road. The excavation was advanced from the ground surface to 1.0 m below ground surface (bgs) and was 6 m in length and 4 m in width (6 m x 4 m x 1.0 m). Approximately 24 m^3 of soil was excavated and disposed of off-site at a landfill facility.

5.2.2 Confirmatory Soil Sampling – Excavation 1

Confirmatory soil samples were collected from the excavation floor and the north, east, south and west walls and submitted for PAH analysis. The analysis indicated that all parameters were either non-detect or detected below the applicable MECP (2011) Table 2 SCS. A summary of the confirmatory soil samples submitted for PAHs is presented below in Table 5-1.

Table 5-1: Confirmatory Excavation Soil Samples

Sample Locations	Sample ID	Sample Date	Approximate Sample Depth (m)	Parameters Analyzed	Confirmatory Sample Met Applicable MECP Table 2 SCS
North Wall	N001	March 22, 2022	0.30	PAHs	Yes
East Wall	E001	March 22, 2022	0.30	PAHs	Yes
South Wall	S001	March 22, 2022	0.30	PAHs	Yes
West Wall	W001	March 22, 2022	0.30	PAHs	Yes
Excavation Floor	F001	March 22, 2022	1.0	PAHs	Yes
	F002	March 22, 2022	1.0	PAHs	Yes

Refer to Figure 4D for the excavation and confirmatory sample locations. Please also refer to Table A.1 in Appendix A for the analytical results and to Appendix B for the laboratory certificates of analysis.

5.2.3 Excavation 2

The excavation to remediate the copper soil impacts identified at BH/MW101 and BH/MW106 was located in the northeastern portion of 217 and 227 Cross Avenue. The excavation was advanced from the ground surface to the depth of bedrock which ranged from 1.7 – 2.3 m below ground surface (bgs) and was 15 m in length and 7.5 m in width (15 m x 7.5 m x 2 m). Approximately 225 m^3 of soil was excavated and disposed of off-site at a landfill facility.

5.2.4 Confirmatory Soil Sampling – Excavation 2

Confirmatory soil samples were collected from the south and west walls and submitted for metals analysis. Confirmatory soil samples were not collected from the north and east excavation walls as the excavation was extended to the property boundaries. Confirmatory samples were also not collected from the excavation floor as the excavation was extended to the shale bedrock. The analysis indicated that all parameters were either non-detect or detected below the applicable MECP (2011) Table 2 SCS. A summary of the confirmatory soil samples submitted for metals is presented in Table 5-2.

Table 5-2: Confirmatory Excavation Soil Samples

Sample Locations	Sample ID	Sample Date	Approximate Sample Depth (m)	Parameters Analyzed	Confirmatory Sample Met Applicable MECP Table 2 SCS
South Wall	Ex1-E001	March 21, 2022	0.50	Metals	Yes
	Ex1-S001	March 21, 2022	0.50	Metals	Yes
	Ex1-S002	March 21, 2022	0.80	Metals	Yes
	Ex1-S003	March 21, 2022	0.80	Metals	Yes
	Ex1-S004	March 21, 2022	0.80	Metals	Yes
West Wall	Ex1-W001	March 21, 2022	0.80	Metals	Yes

5.2 Quantity of Soil Excavated and Disposed of Off-Site

A total of approximately 260 m^3 of impacted soil material was removed from the Site. The impacted soil material was transported and disposed of at the York1 facility located at 195 Bethridge Road in Toronto, Ontario.

5.3 Waste Manifests

Copies of disposal documentation for the impacted soil material that was excavated and disposed of off-Site are provided in Appendix C.

6 Analytical Testing

All analytical testing was performed by AGAT, an accredited laboratory under the Standards Council of Canada/Canadian Association of Environmental Analytical Laboratories (Accredited Laboratory No. A3200) in accordance with ISO/IEC 17025:2017 - "General Requirements for the Competence of Testing and Calibration Laboratories".

7 Excavation Backfilling

The excavation was backfilled with imported sand and granular 'A' material from Brock Aggregates located in Concord, Ontario. The ground surface was then repaved with asphalt.

8 Conclusions

As a result of the remedial excavation activities conducted, the copper and PAH impacts in soil have been successfully remediated. The soil meets the applicable MECP (2011) Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition with Residential/Parkland/Institutional Land Use and coarse textured soil. As such, an RSC can now be filed for the Site.

9 General Limitations

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

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Yours Truly,

B.I.G. Consulting Inc.

Rebecca Morrison, M.Env.Sc.
Project Manager

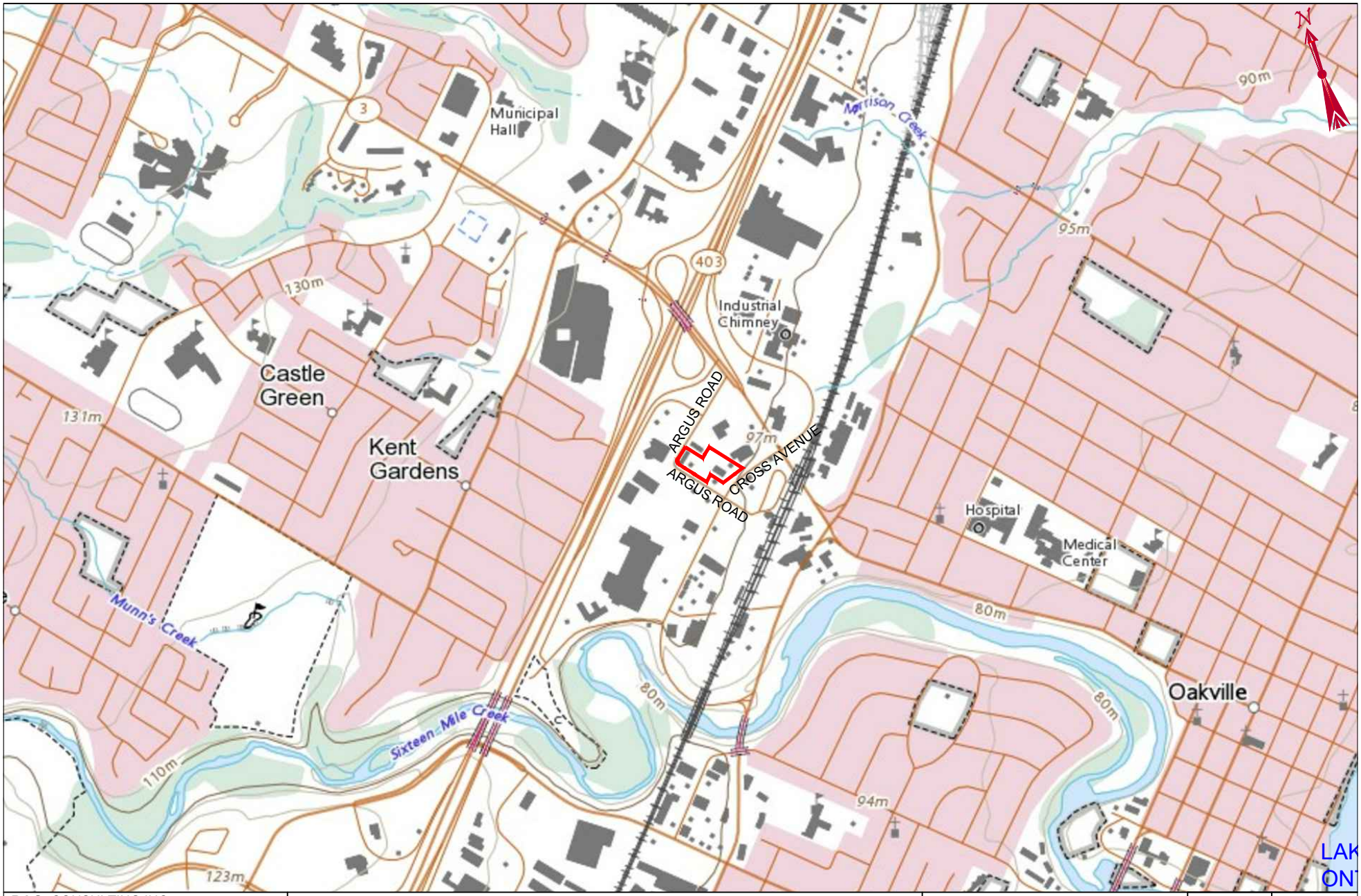
Darko Strajin, P.Eng.
Managing Partner

10 References

BIG (2022) Phase Two Environmental Site Assessment, 217 & 227 Cross Avenue and 571 – 595 Argus Road, Oakville, Ontario. B.I.G. Consulting Inc. October 31, 2022.

MECP (2011a) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the *Environmental Protection Act".*

Figures



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LEGEND

SITE BOUNDARY

SCALE

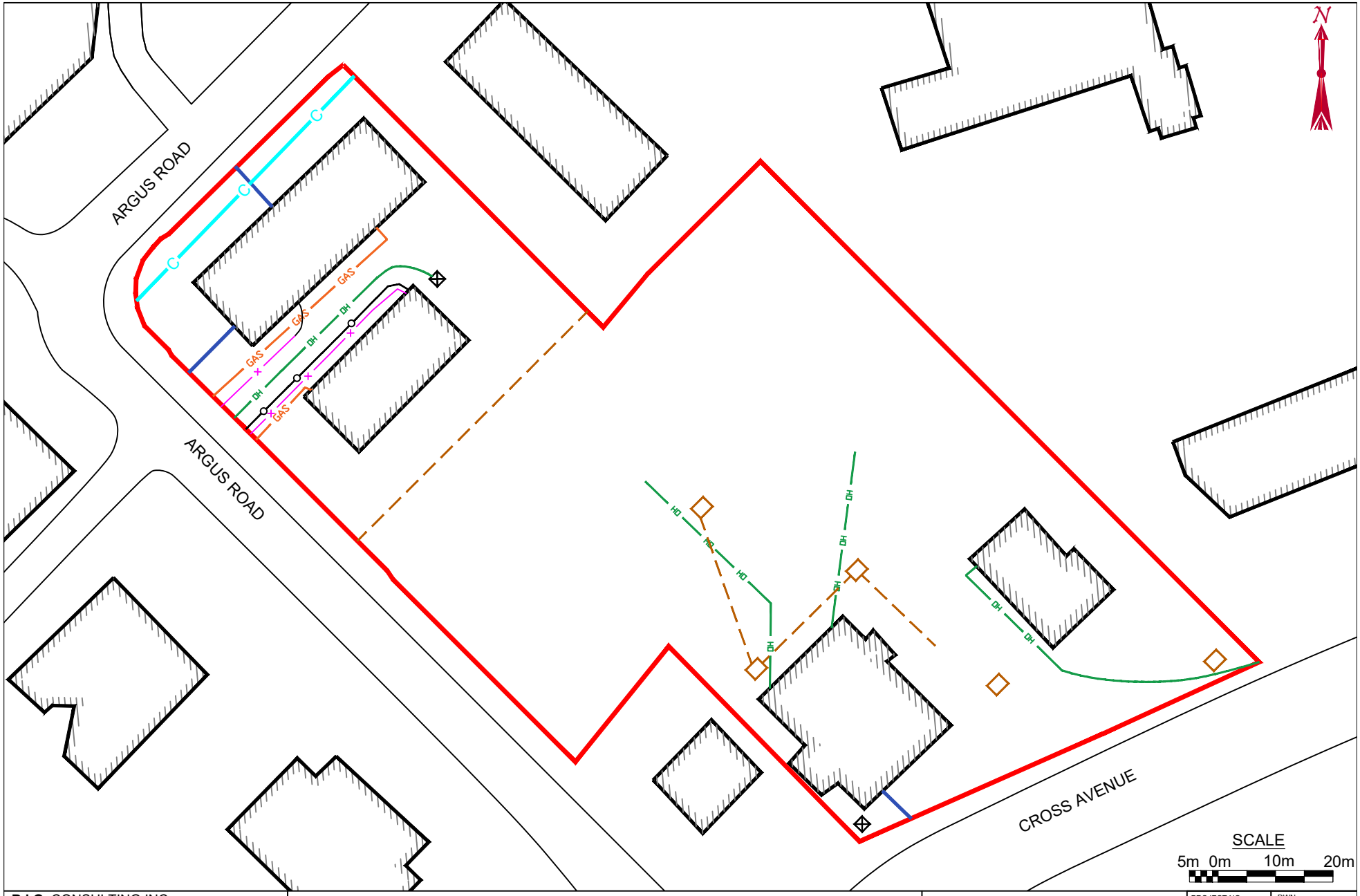
100m 0m 100m 200m 300m 400m 500m

IMAGERY OBTAINED FROM TOPORAMA, NATURAL RESOURCES CANADA, 2021

TITLE AND LOCATION

SITE LOCATION PLAN
REMEDIATION REPORT
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
OCTOBER 2022	1



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LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT
- WATER
- GAS LINE
- TELEPHONE CONDUIT
- HYDRO
- FIBRE OPTIC CABLE
- TV CONDUIT
- STORM SEWER
- LOCATION OF TRANSFORMER
- LOCATION OF CATCH BASIN

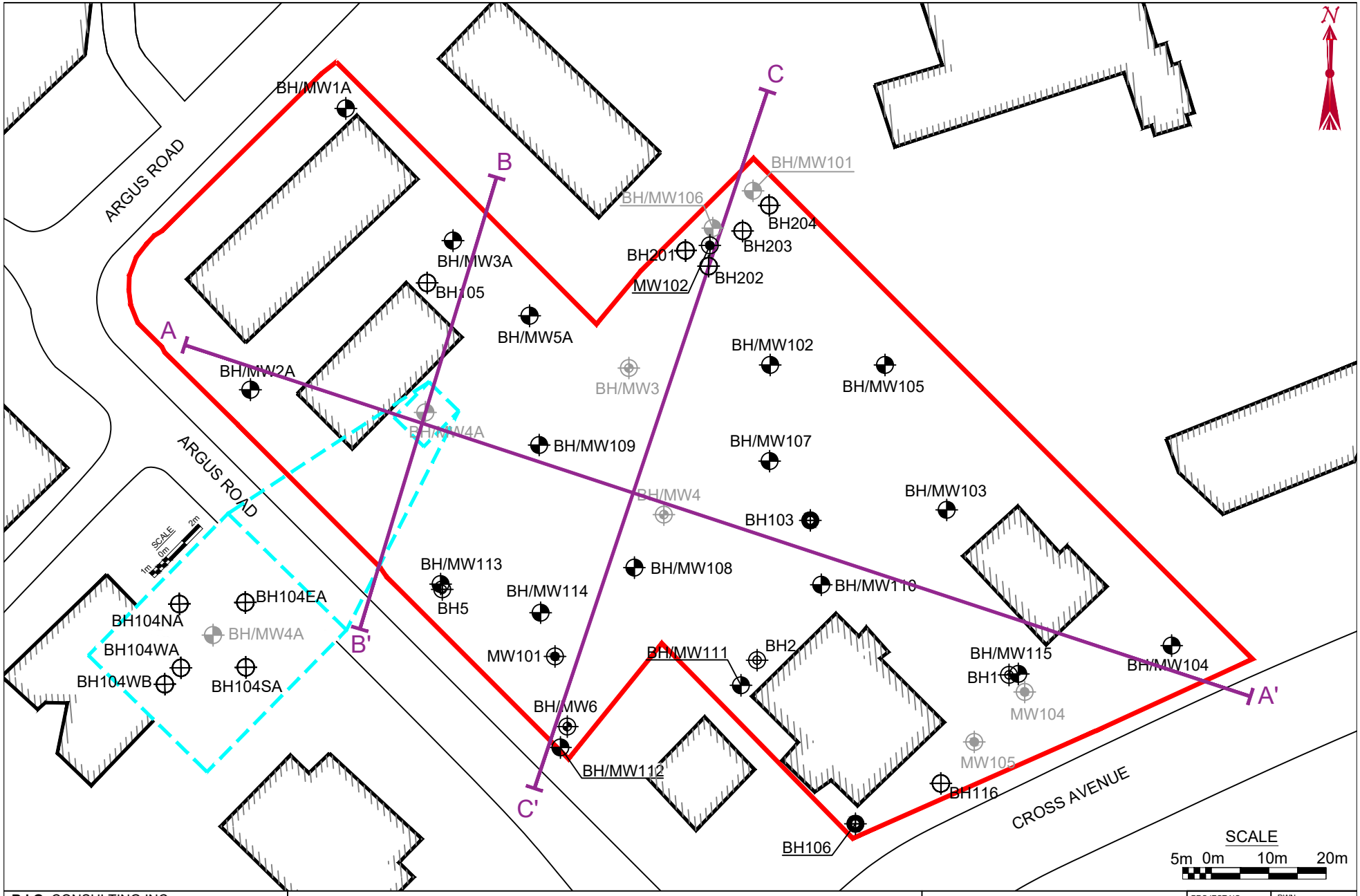
TITLE AND LOCATION

SITE LAYOUT AND UTILITIES PLAN

REMEDIATION REPORT

217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
OCTOBER 2022	2



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LEGEND

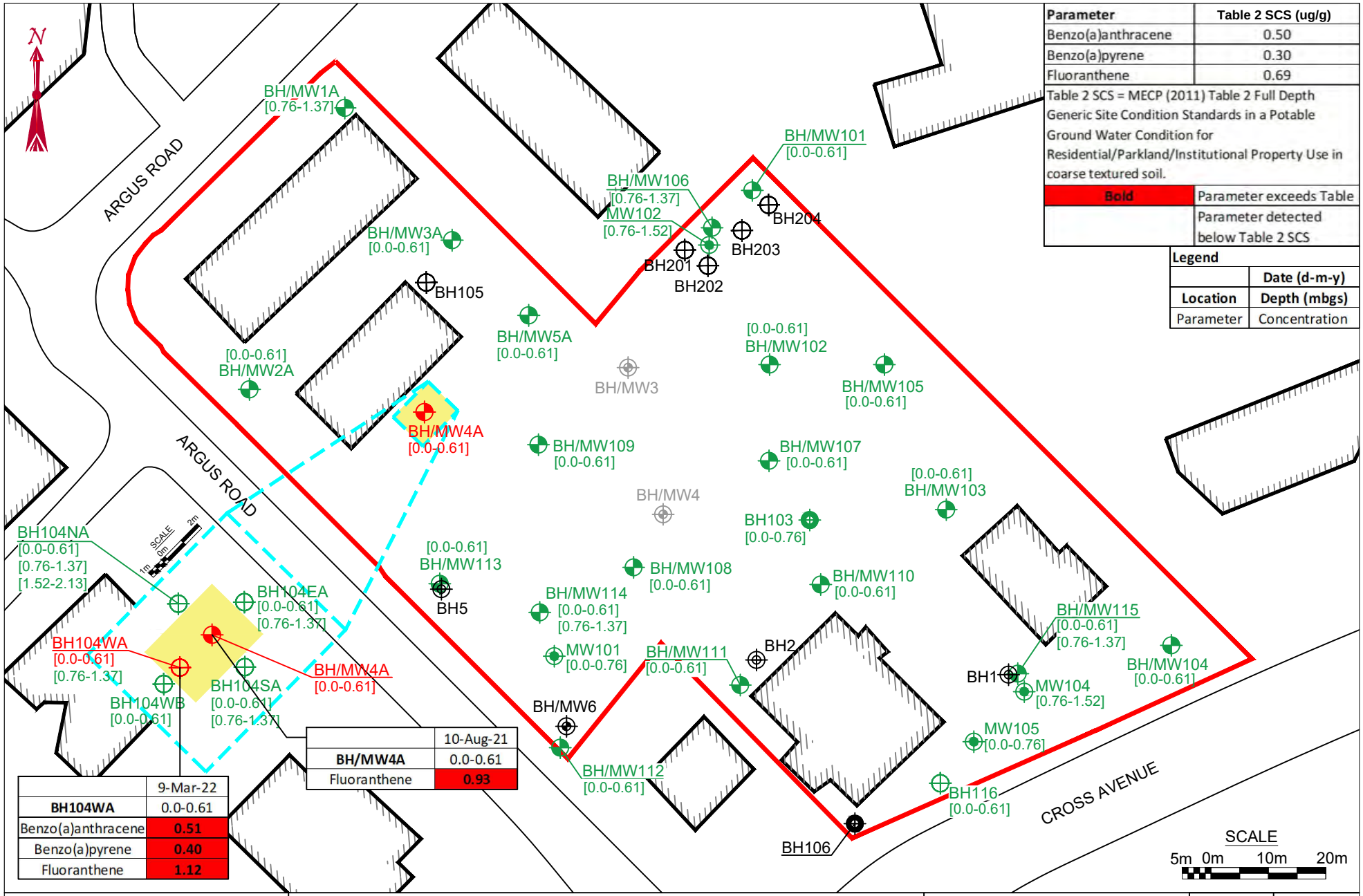
- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- DESTROYED BOREHOLE/MONITORING WELL
- A–A' GEOLOGICAL CROSS SECTION (SEE FIGURE 7)
- B–B' GEOLOGICAL CROSS SECTION (SEE FIGURE 8)
- C–C' GEOLOGICAL CROSS SECTION (SEE FIGURE 9)

TITLE AND LOCATION

BOREHOLE/MONTORING WELL LOCATION PLAN

REMEDIATION REPORT
217 AND 227 CROSS AVENUE
AND 571, 581 AND 587-595
ARGUS ROAD, OAKVILLE,
ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
OCTOBER 2022	3



Parameter	Table 2 SCS (ug/g)
Benzo(a)anthracene	0.50
Benzo(a)pyrene	0.30
Fluoranthene	0.69

Table 2 SCS = MECP (2011) Table 2 Full Depth Generic Site Condition Standards in a Potable Ground Water Condition for Residential/Parkland/Institutional Property Use in coarse textured soil.

Bold	Parameter exceeds Table
	Parameter detected below Table 2 SCS

Legend	
	Date (d-m-y)
Location	**Depth (mbgs)**
Parameter	Concentration

	9-Mar-22
BH104WA	0.0-0.61
Benzo(a)anthracene	**0.51**
Benzo(a)pyrene	**0.40**
Fluoranthene	**1.12**

	10-Aug-21
BH/MW4A	0.0-0.61
Fluoranthene	**0.93**

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LEGEND

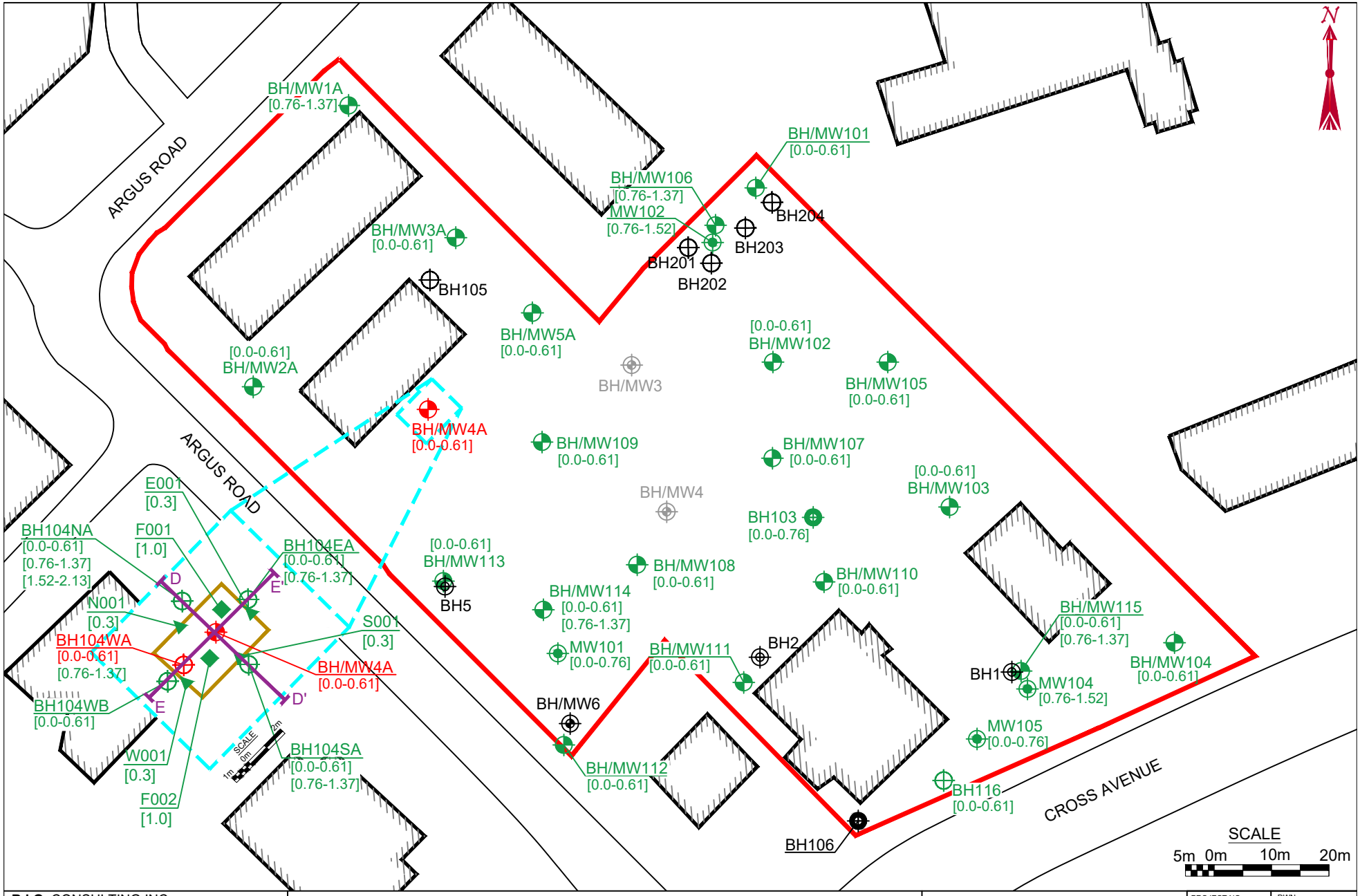
- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- DESTROYED BOREHOLE/MONITORING WELL
- MEETS MECP TABLE 3 SCS
- EXCEEDS MECP TABLE 3 SCS
- APPROXIMATE EXTENT OF SOIL IMPACTS
- [xx.xx] SOIL SAMPLE DEPTH (m bgs)

TITLE AND LOCATION

PAH IMPACTS IN SOIL PRIOR TO REMEDIATION

REMEDIATION REPORT
217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
OCTOBER 2022	4A



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LEGEND

- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- DESTROYED BOREHOLE/MONITORING WELL
- MEETS MECP TABLE 3 SCS
- EXCEEDS MECP TABLE 3 SCS
- [xx.xx] SOIL SAMPLE DEPTH (m bgs)
- REMEDIATION EXCAVATION BOUNDARY
- LOCATION OF EXCAVATION FLOOR SAMPLE
- LOCATION OF EXCAVATION WALL SAMPLE
- D D' GEOLOGICAL CROSS SECTION (SEE FIGURE 12C)
- E E' GEOLOGICAL CROSS SECTION (SEE FIGURE 12D)

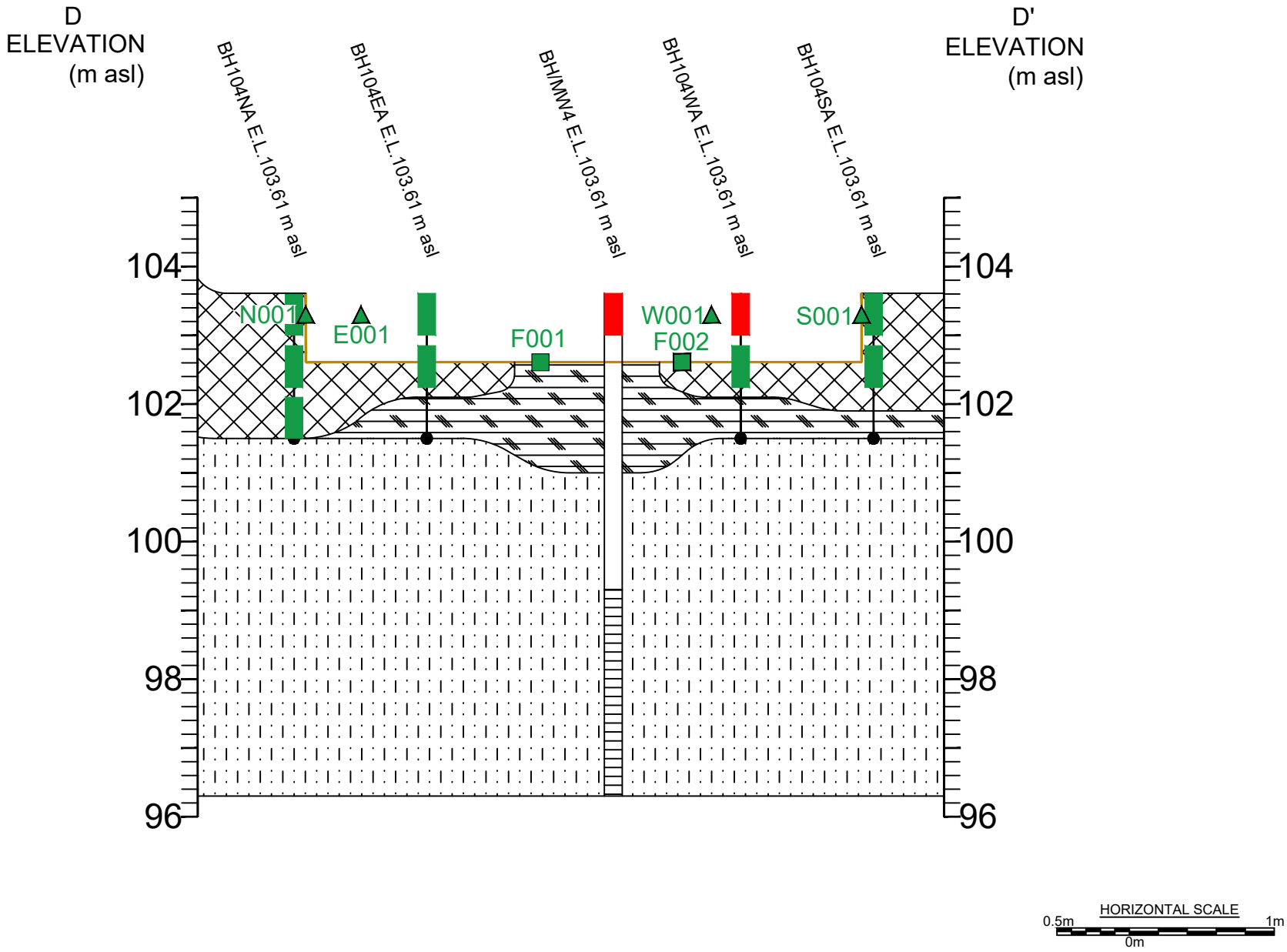
TITLE AND LOCATION

PAH IMPACTS IN SOIL POST REMEDIATION

REMEDIATION REPORT

217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
OCTOBER 2022	4B



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LEGEND

- FILL
- CLAYEY SILT TILL
- BEDROCK
- LOCATION OF EXCAVATION WALL SAMPLE
- LOCATION OF EXCAVATION FLOOR SAMPLE
- EXCEEDS TABLE 2 SCS
- MEETS TABLE 2 SCS
- REMEDIAL EXCAVATION BOUNDARY

TITLE AND LOCATION

POST REMEDIATION CROSS SECTION D-D' WITH PAHs IN SOIL

REMEDIATION REPORT
217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

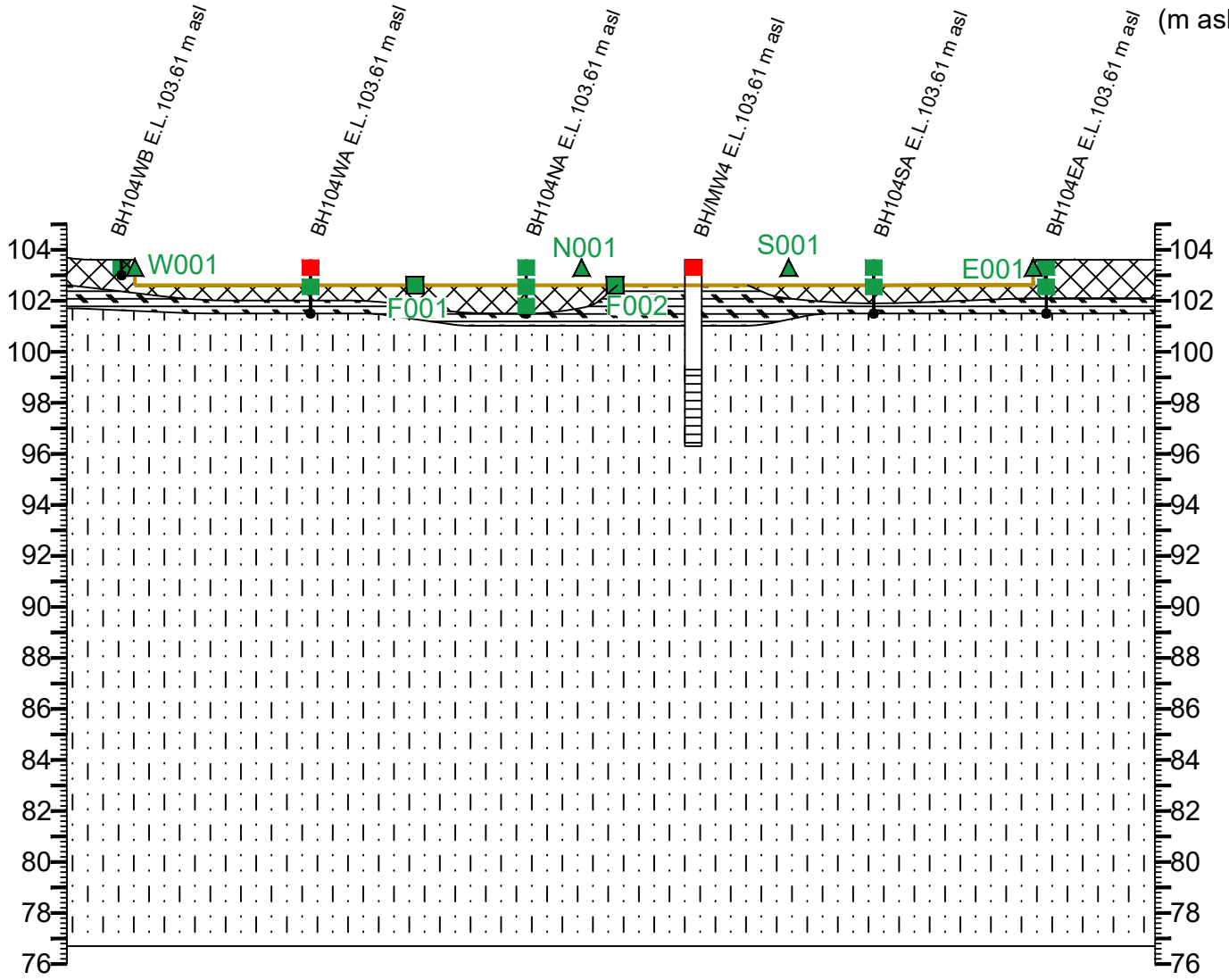
PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
OCTOBER 2022	4C

E

ELEVATION
(m asl)

E'

ELEVATION
(m asl)



HORIZONTAL SCALE
0.5m 1m
0m

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LEGEND

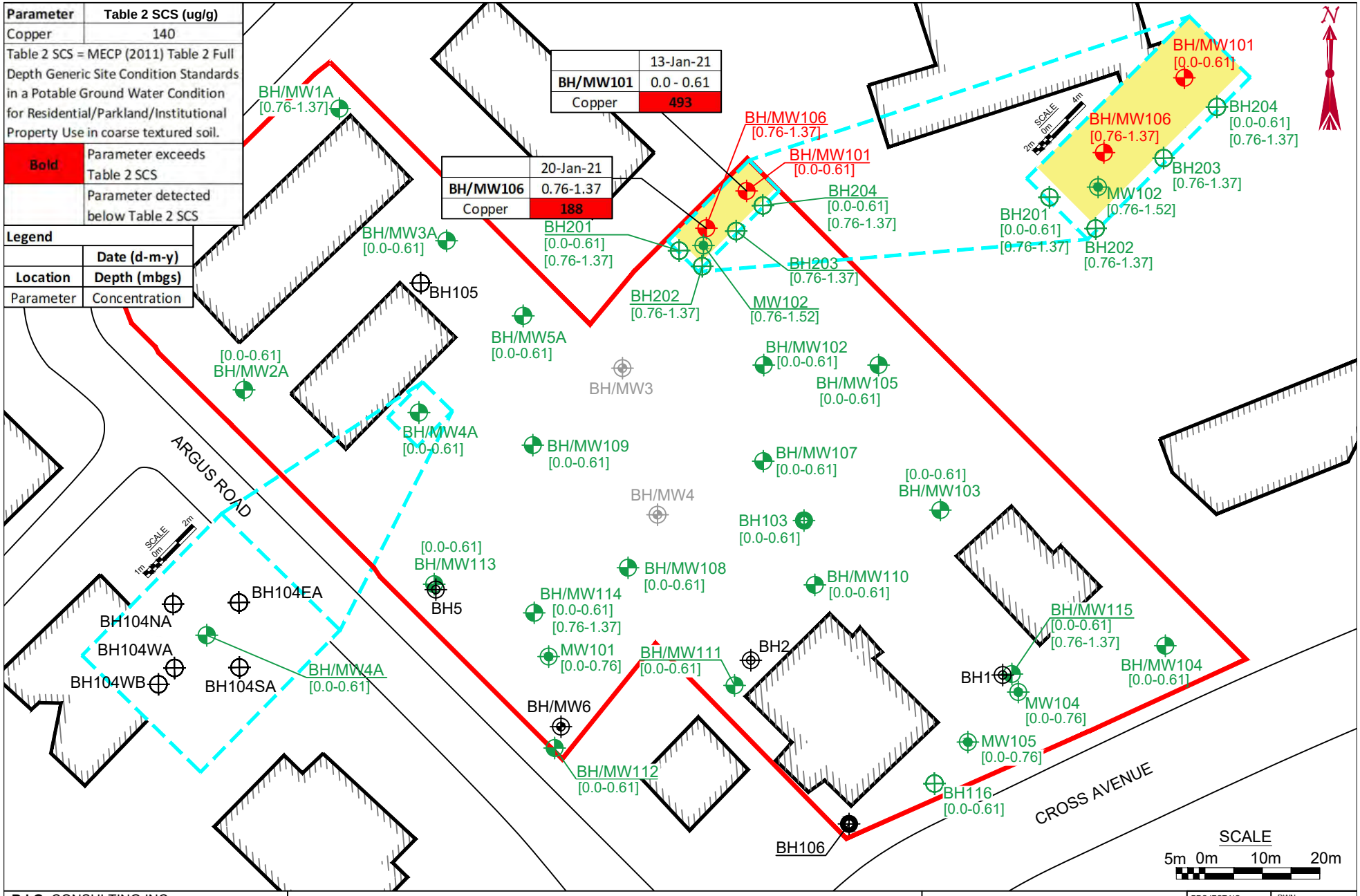
- FILL
- CLAYEY SILT TILL
- BEDROCK
- LOCATION OF EXCAVATION WALL SAMPLE
- LOCATION OF EXCAVATION FLOOR SAMPLE
- EXCEEDS TABLE 2 SCS
- MEETS TABLE 2 SCS
- REMEDIAL EXCAVATION BOUNDARY

TITLE AND LOCATION

POST REMEDIATION CROSS SECTION E-E' WITH PAHs IN SOIL

REMEDIATION REPORT
217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
OCTOBER 2022	4D



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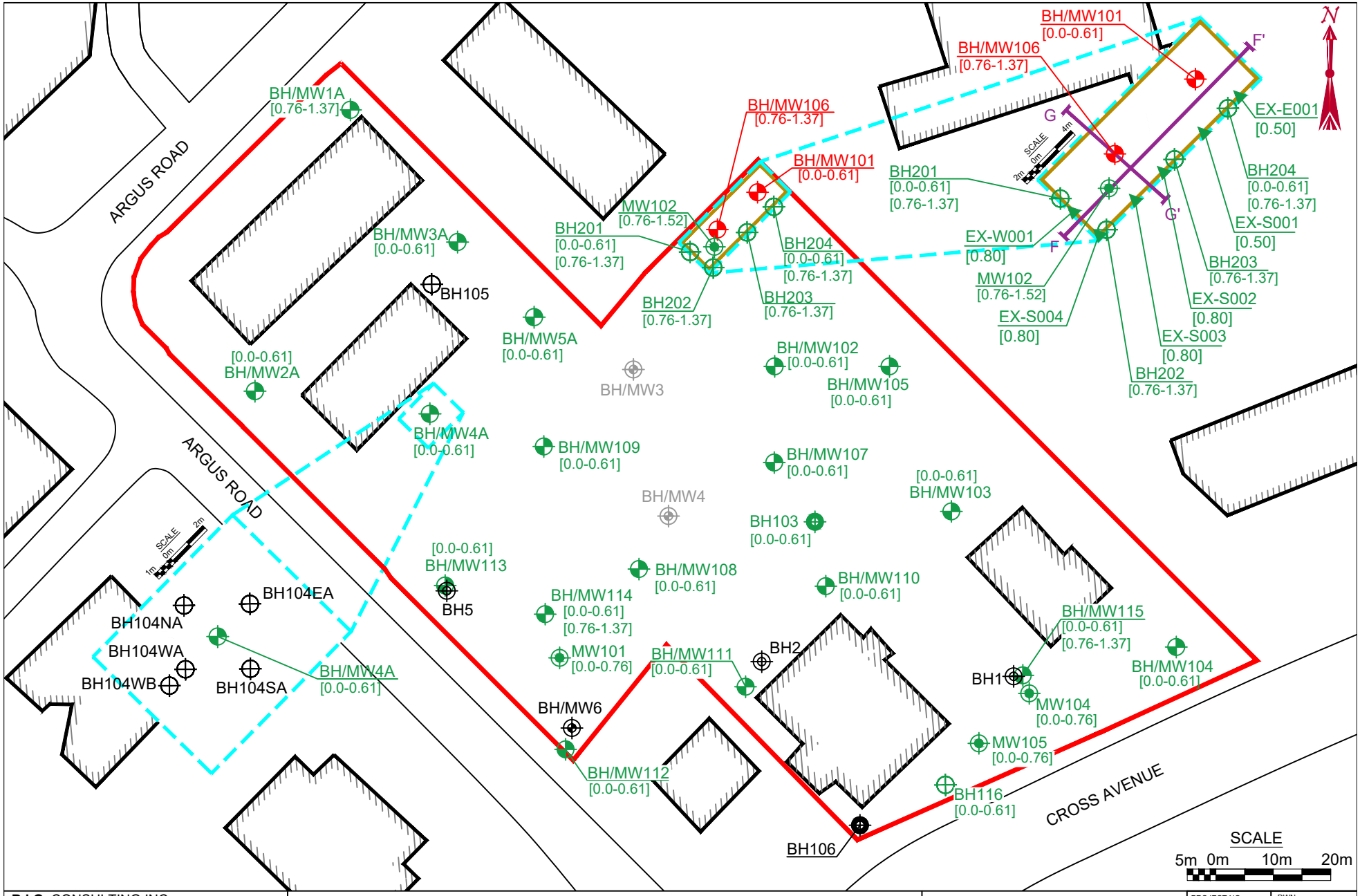
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- DESTROYED BOREHOLE/MONITORING WELL
- MEETS MECP TABLE 3 SCS
- EXCEEDS MECP TABLE 3 SCS
- APPROXIMATE EXTENT OF SOIL IMPACTS
- [xx.xx] SOIL SAMPLE DEPTH (m bgs)

TITLE AND LOCATION

METALS (As, Sb, Se, Cr(VI), Hg, CN- AND B-HWS) IN SOIL PRIOR TO REMEDIATION

REMEDIATION REPORT
217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
OCTOBER 2022	5A



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LEGEND

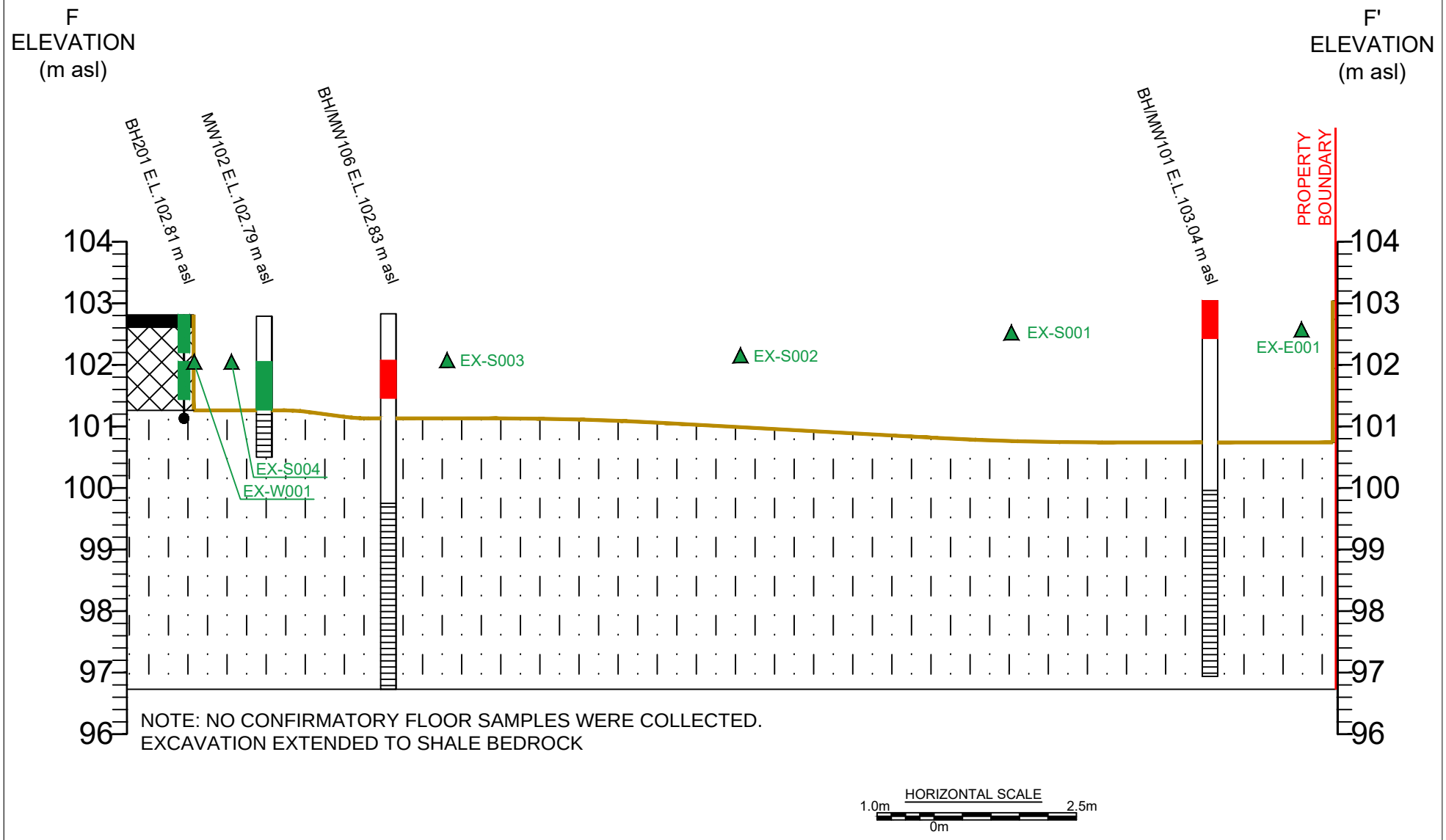
- SITE BOUNDARY
- BUILDING FOOTPRINT
- LOCATION OF BOREHOLE (BIG 2021)
- LOCATION OF BOREHOLE/MONITORING WELL (BIG 2021)
- LOCATION OF BOREHOLE/PIEZOMETER (BIG 2019)
- LOCATION OF BOREHOLE (BIG 2019)
- LOCATION OF BOREHOLE/MONITORING (TERRAPEX)
- LOCATION OF BOREHOLE (TERRAPEX)
- DESTROYED BOREHOLE/MONITORING WELL
- MEETS MECP TABLE 3 SCS
- EXCEEDS MECP TABLE 3 SCS
- [xx.xx] SOIL SAMPLE DEPTH (m bgs)
- REMEDIATION EXCAVATION BOUNDARY
- LOCATION OF EXCAVATION FLOOR SAMPLE
- LOCATION OF EXCAVATION WALL SAMPLE
- F—F' GEOLOGICAL CROSS SECTION (SEE FIGURE 14C)
- G—G' GEOLOGICAL CROSS SECTION (SEE FIGURE 14D)

TITLE AND LOCATION

METALS (As, Sb, Se, Cr(VI), Hg, CN- AND B-HWS) IN SOIL PRIOR TO REMEDIATION

REMEDIATION REPORT
217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
OCTOBER 2022	5B



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LEGEND

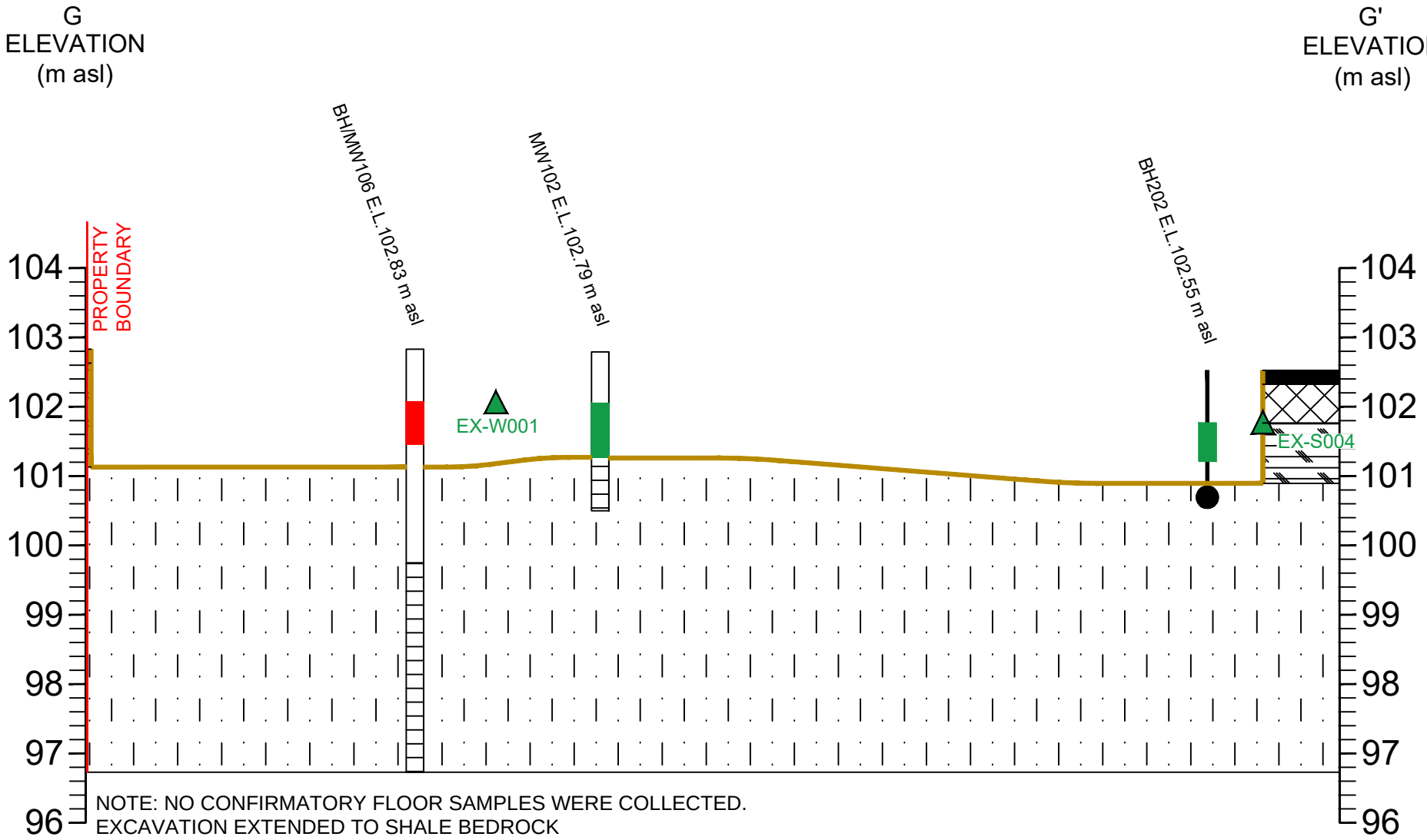
- ASPHALT
- FILL
- SILTY CLAY / CLAYEY SILT TILL
- BEDROCK
- CONFIRMATORY WALL SAMPLE
- EXCEEDS TABLE 2 SCS
- MEETS TABLE 2 SCS
- REMEDIAL EXCAVATION BOUNDARY

TITLE AND LOCATION

POST REMEDIATION CROSS SECTION F-F' WITH METALS (As, Sb, Se, Cr(VI), Hg, CN-) IN SOIL

REMEDIATION REPORT
217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
OCTOBER 2022	5C



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LEGEND

- ASPHALT
- FILL
- SILTY CLAY / CLAYEY SILT TILL
- BEDROCK
- CONFIRMATORY WALL SAMPLE
- EXCEEDS TABLE 2 SCS
- MEETS TABLE 2 SCS
- REMEDIAL EXCAVATION BOUNDARY

TITLE AND LOCATION

POST REMEDIATION CROSS SECTION G-G' WITH METALS (As, Sb, Se, Cr(VI), Hg, CN-) IN SOIL

REMEDIATION REPORT
217 AND 227 CROSS AVENUE AND 571, 581 AND 587-595 ARGUS ROAD, OAKVILLE, ONTARIO

PROJECT NO.	DWN.
BIGC-ENV-349F	T.S.
SCALE	CK.
AS NOTED	R.M.
DATE	FIG NO.
OCTOBER 2022	5D

Appendix A – Analytical Data Tables

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	MW101-1a	MW9101-1a (Dup of MW101-1a)	MW102-1b	BH103-1a	MW104-1b	MW9104-1b (Dup of MW104-1b)	MW105-1a	BH101-SS1	BH102-SS1	BH103-SS1
Lab ID		1837443-01	1837443-02	1837443-05	1837443-08	1837443-09	1837443-10	1837443-12	1966584	1966586	1966588
Sampling Date		11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	13/Jan/21	13/Jan/21	13/Jan/21
Soil Sample Depth (m)		0.0-0.76	0.0-0.76	0.76-1.52	0.0-0.76	0.76-1.52	0.76-1.52	0.0-0.76	0.00-0.61	0.00-0.61	0.00-0.61
Consultant		Terrapex	Terrapex	Terrapex	Terrapex	Terrapex	Terrapex	Terrapex	BIG	BIG	BIG
Laboratory		Paracel	Paracel	Paracel	Paracel	Paracel	Paracel	Paracel	AGAT	AGAT	AGAT
Acenaphthene	7.9	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	0.15	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	0.67	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)anthracene	0.5	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	0.3	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	0.78	0.02	0.03	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(ghi)perylene	6.6	0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	0.78	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	7	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	0.1	<0.02	<0.02	<0.02	<0.02	<0.10	<0.10	<0.10	<0.05	<0.05	<0.05
Fluoranthene	0.69	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	62	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	0.38	<0.02	<0.02	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1&2-Methylnaphthalene	0.99	<0.04	<0.04	<0.04	<0.04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	0.6	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	6.2	<0.02	0.06	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	78	0.03	0.05	<0.02	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH104-SS1	BH105-SS1	BH106-SS2	BH107-SS1	BH108-SS1	BH109-SS1	BH110-SS1	BH111-SS1	BH112-SS1	BH113-SS1
Lab ID		1966589	1966590	2011445	2011446	2011447	2011448	2011449	2011451	2011452	2011454
Sampling Date		13/Jan/21	14/Jan/21	20/Jan/21	20/Jan/21	20/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21
Soil Sample Depth (m)		0.00-0.61	0.00-0.61	0.76-1.37	0.00-0.61	0.00-0.61	0.00-0.61	0.00-0.61	0.00-0.61	0.00-0.61	0.00-0.61
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Acenaphthene	7.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	0.67	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)anthracene	0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	0.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	0.78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(ghi)perylene	6.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	0.78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	7	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	0.69	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	62	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	0.38	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1&2-Methylnaphthalene	0.99	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	6.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH114-SS1	BH114-SS2	DUP011402 (Dup of BH114-SS2)	BH115-SS1	BH115-SS2	BH116-AS1	BH/MW1A-SS2	BH/MW2A-SS1	BH/MW3A-SS1	BH/MW4A-SS1
Lab ID		2011456	2011457	2020967	2011458	2011459	2787591	3196779	3196864	3196865	3196866
Sampling Date		21/Jan/21	21/Jan/21	21/Jan/21	22/Jan/21	22/Jan/21	27/Jul/21	8/Oct/21	7/Oct/21	8/Oct/21	8/Oct/21
Soil Sample Depth (m)		0.00-0.61	0.76-1.37	0.76-1.37	0.00-0.61	0.76-1.37	0.0-0.61	0.76-1.37	0.00-0.61	0.00-0.61	0.00-0.61
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Acenaphthene	7.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	0.67	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08
Benzo(a)anthracene	0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.5
Benzo(a)pyrene	0.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.26
Benzo(b)fluoranthene	0.78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.4
Benzo(ghi)perylene	6.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.16
Benzo(k)fluoranthene	0.78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.2
Chrysene	7	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.37
Dibenz(a,h)anthracene	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	0.69	<0.05	<0.05	<0.05	<0.05	<0.05	0.09	<0.05	<0.05	0.08	**0.93**
Fluorene	62	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	0.38	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.1
1&2-Methylnaphthalene	0.99	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	6.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.25
Pyrene	78	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05	<0.05	0.08	0.85

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH/MW5A-SS1	BH104NA-SS1	BH104NA-SS2	DUPWA020 (Dup of BH104NA-SS2)	BH104NA-SS3	DUPW4A030 (Dup of BH104NA-SS3)	BH104WA-SS1	BH104WA-SS2	BH104WB-SS1	BH104EA-SS1
Lab ID		3196867	3604499	3607391	3607395	3604501	3604504	3604502	3607394	3603000	3604505
Sampling Date		6/Oct/21	9/Mar/22	9/Mar/22	9/Mar/22	9/Mar/22	9/Mar/22	9/Mar/22	9/Mar/22	9/Mar/22	9/Mar/22
Soil Sample Depth (m)		0.00-0.61	0.0-0.61	0.76-1.37	0.76-1.37	1.52-2.13	1.52-2.13	0.0-0.61	0.76-1.37	0.0-0.61	0.0-0.61
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Acenaphthene	7.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	0.67	<0.05	0.1	<0.05	<0.05	<0.05	<0.05	0.12	<0.05	<0.05	<0.05
Benzo(a)anthracene	0.5	0.11	0.14	<0.05	<0.05	<0.05	<0.05	**0.51**	<0.05	<0.05	<0.05
Benzo(a)pyrene	0.3	0.07	0.11	<0.05	<0.05	<0.05	<0.05	**0.4**	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	0.78	0.09	0.17	<0.05	<0.05	<0.05	<0.05	0.78	<0.05	<0.05	<0.05
Benzo(ghi)perylene	6.6	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.25	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	0.78	0.08	0.06	<0.05	<0.05	<0.05	<0.05	0.23	<0.05	<0.05	<0.05
Chrysene	7	0.08	0.15	<0.05	<0.05	<0.05	<0.05	0.62	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	0.69	0.3	0.34	0.07	<0.05	0.05	<0.05	**1.12**	<0.05	<0.05	0.07
Fluorene	62	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	0.38	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.21	<0.05	<0.05	<0.05
1&2-Methylnaphthalene	0.99	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.15	<0.05	<0.05	<0.05
Naphthalene	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	6.2	0.1	0.28	<0.05	<0.05	<0.05	<0.05	0.78	<0.05	<0.05	<0.05
Pyrene	78	0.26	0.27	0.05	<0.05	<0.05	<0.05	0.94	<0.05	<0.05	0.06

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH104EA-SS2	BH104SA-SS1	BH104SA-SS2	N001	W001	E001	S001	F001	F002
Lab ID		3607393	3604507	3607392	3648391	3647953	3648077	3648783	3648420	3648225
Sampling Date		9/Mar/22	9/Mar/22	9/Mar/22	22/Mar/22	22/Mar/22	22/Mar/22	22/Mar/22	22/Mar/22	22/Mar/22
Soil Sample Depth (m)		0.76-1.37	0.0-0.61	0.76-1.37	0.3	0.3	0.3	0.3	1.0	1.0
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Acenaphthene	7.9	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05
Acenaphthylene	0.15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	0.67	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.18	<0.05
Benzo(a)anthracene	0.5	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.19	<0.05
Benzo(a)pyrene	0.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.14	<0.05
Benzo(b)fluoranthene	0.78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.18	<0.05
Benzo(ghi)perylene	6.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05
Benzo(k)fluoranthene	0.78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05
Chrysene	7	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.15	<0.05
Dibenz(a,h)anthracene	0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	0.69	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	0.47	<0.05
Fluorene	62	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.07	<0.05
Indeno(1,2,3-cd)pyrene	0.38	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05
1&2-Methylnaphthalene	0.99	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	0.6	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	6.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.45	<0.05
Pyrene	78	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.35	<0.05

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	MW101-1a	MW9101-1a (Dup of MW101-1a)	MW102-1b	BH103-1a	MW104-1a	MW105-1a	BH101-SS1	BH102-SS1	BH103-SS1
Lab ID		1837443-01	1837443-02	1837443-05	1837443-08	1837443-08	1837443-12	1966584	1966586	1966588
Sampling Date		11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	11/Sep/18	13/Jan/21	13/Jan/21	13/Jan/21
Soil Sample Depth (m)		0.0-0.76	0.0-0.76	0.76-1.52	0.0-0.76	0.0-0.76	0.0-0.76	0.00-0.61	0.00-0.61	0.00-0.61
Consultant		Terrapex	Terrapex	Terrapex	Terrapex	Terrapex	Terrapex	BIG	BIG	BIG
Laboratory		Paracel	Paracel	Paracel	Paracel	Paracel	Paracel	AGAT	AGAT	AGAT
Antimony	7.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.8	<0.8	<0.8
Arsenic	18	4.2	4.6	3.8	6.3	5.4	4.1	13	8	9
Barium	390	71.8	87.4	108	44	80	86.2	122	141	40
Beryllium	4	0.6	0.6	0.6	<0.5	<0.5	0.6	0.5	0.6	<0.5
Boron (Total)	120	26.3	22.4	15.9	14.7	13.1	10.7	10	7	12
Boron (Hot water soluble)	1.5	<0.5	0.6	0.6	<0.5	<0.5	<0.5	0.3	0.6	0.2
Cadmium	1.2	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (total)	160	15.4	18.4	15.8	10.8	12.0	14.9	18	17	7
Chromium VI	8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cobalt	22	7.8	9.3	7.3	6.5	6.8	7.0	11.5	10.7	5.9
Copper	140	56.1	65.6	62.6	18.9	59.5	81.1	**493**	80	33
Lead	120	25.5	31.8	18.6	48.2	24.1	22.1	18	21	21
Mercury	0.27	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10	<0.10	<0.10
Molybdenum	6.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	1.3	1.1
Nickel	100	19.3	22.4	18.8	17.1	16.9	19.2	23	22	10
Selenium	2.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.8	0.9	0.5
Silver	20	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.2	<0.2	<0.2
Thallium	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.4	<0.4	<0.4
Uranium	23	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	1.3	1.4	0.5
Vanadium	86	23.5	27.7	25.3	15.9	21.1	24.0	26	27	12
Zinc	340	51.4	62	60	254	65.0	49.7	121	101	142
Electrical Conductivity (mS/cm)	0.7	0.328	0.316	0.474	0.346	**1.020**	**1.240**	0.470	0.664	**0.912**
Sodium Adsorption Ratio (unitless)	5	0.59	0.49	3.71	2.34	1.05	**13.5**	4.150	**6.670**	**8.990**
Free Cyanide	0.051	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.040	<0.040	<0.040
pH (pH units)	5-9 (surface soil); 5-11 (subsurface soil)	7.77	7.67	7.46	7.65	7.70	7.78	6.18	7.66	7.83

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
pH level outside of the acceptable MECP range

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH104-SS1	BH105-SS1	BH106-SS2	BH107-SS1	BH108-SS1	BH109-SS1	BH110-SS1	BH111-SS1	BH112-SS1
Lab ID		1966589	1966590	2011445	2011446	2011447	2011448	2011449	2011451	2011452
Sampling Date		13/Jan/21	14/Jan/21	20/Jan/21	20/Jan/21	20/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21
Soil Sample Depth (m)		0.00-0.61	0.00-0.61	0.76-1.37	0.00-0.61	0.00-0.61	0.00-0.61	0.00-0.61	0.00-0.61	0.00-0.61
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Antimony	7.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	18	10	12	7	6	7	7	7	7	6
Barium	390	48	41	72	99	78	92	46	66	90
Beryllium	4	<0.5	<0.5	0.6	0.6	0.6	0.6	<0.4	0.4	0.6
Boron (Total)	120	11	9	10	7	8	9	9	10	9
Boron (Hot water soluble)	1.5	0.2	0.2	0.6	0.4	0.4	0.3	0.3	0.3	0.6
Cadmium	1.2	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (total)	160	6	6	22	23	23	24	10	17	24
Chromium VI	8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cobalt	22	5.4	4.9	13.6	14.2	14.3	14.0	6.0	9.1	14.6
Copper	140	31	44	**188**	47	38	43	25	48	37
Lead	120	23	28	12	13	17	14	19	17	14
Mercury	0.27	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Molybdenum	6.9	1.2	1.1	0.7	<0.5	0.5	<0.5	0.9	1.0	<0.5
Nickel	100	11	10	27	30	29	30	11	21	30
Selenium	2.4	0.5	0.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Silver	20	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	1	<0.4	<0.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	23	0.6	<0.5	0.8	0.7	0.8	0.7	0.5	0.8	1.1
Vanadium	86	10	11	30	33	29	33	15	25	32
Zinc	340	169	106	66	68	74	75	77	84	74
Electrical Conductivity (mS/cm)	0.7	0.269	0.488	0.402	0.386	0.331	0.362	0.648	0.444	0.267
Sodium Adsorption Ratio (unitless)	5	1.030	**6.010**	4.810	4.250	1.830	2.080	1.330	1.990	0.911
Free Cyanide	0.051	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
pH (pH units)	5-9 (surface soil); 5-11 (subsurface soil)	7.83	7.91	7.93	7.80	7.70	7.76	7.99	7.70	7.67

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
pH level outside of the acceptable MECP range

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH113-SS1	BH114-SS1	BH114-SS2	DUP011402 (DUP of BH114-SS2)	BH115-SS1	BH115-SS2	BH116-AS1	BH201-SS1
Lab ID		2011454	2011456	2011457	2020967	2011458	2011459	2787591	2918865
Sampling Date		21/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21	22/Jan/21	22/Jan/21	27/Jul/21	20/Aug/21
Soil Sample Depth (m)		0.00-0.61	0.00-0.61	0.76-1.37	0.76-1.37	0.00-0.61	0.76-1.37	0.0-0.61	0.0-0.61
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Antimony	7.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	18	10	7	6	5	7	6	6	7
Barium	390	109	85	77	71	68	62	82	122
Beryllium	4	0.4	0.5	0.5	0.5	<0.4	0.6	0.5	1.0
Boron (Total)	120	9	8	7	10	10	8	10	15
Boron (Hot water soluble)	1.5	0.6	0.5	0.5	0.4	0.5	0.3	0.4	0.2
Cadmium	1.2	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5
Chromium (total)	160	19	19	21	19	10	23	25	26
Chromium VI	8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cobalt	22	10.5	9.7	12.1	10.2	5.8	15.0	7.8	14.5
Copper	140	62	71	60	43	37	35	56	52
Lead	120	47	29	13	10	34	16	43	12
Mercury	0.27	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.11	<0.10
Molybdenum	6.9	0.9	0.8	0.7	0.6	1.1	<0.5	0.8	0.5
Nickel	100	22	22	26	21	12	30	19	30
Selenium	2.4	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Silver	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	23	0.9	0.9	0.8	0.7	0.8	0.6	1.0	0.6
Vanadium	86	27	26	31	30	17	29	31	35
Zinc	340	96	81	62	53	238	72	112	73
Electrical Conductivity (mS/cm)	0.7	**0.808**	0.319	0.371	0.300	**1.630**	0.248	0.305	-
Sodium Adsorption Ratio (unitless)	5	1.250	0.595	0.864	0.925	0.332	1.240	0.914	-
Free Cyanide	0.051	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	-
pH (pH units)	5-9 (surface soil); 5-11 (subsurface soil)	7.70	7.66	7.60	7.37	7.66	7.71	7.53	-

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
pH level outside of the acceptable MECP range

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH201-SS2	BH202-SS2	BH203-SS2	BH204-SS1	BH204-SS2	BH/MW1A-SS2	BH/MW2A-SS1	BH/MW3A-SS1
Lab ID		2878405	2878406	2878407	2918895	2878408	3196779	3196864	3196865
Sampling Date		20/Aug/21	20/Aug/21	20/Aug/21	20/Aug/21	20/Aug/21	8/Oct/21	7/Oct/21	8/Oct/21
Soil Sample Depth (m)		0.76-1.37	0.76-1.37	0.76-1.37	0.0-0.61	0.76-1.37	0.76-1.37	0.00-0.61	0.00-0.61
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Antimony	7.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	18	7	9	7	8	9	7	8	7
Barium	390	122	80	90	57	59	89	104	147
Beryllium	4	0.7	0.9	0.6	<0.4	0.7	0.7	0.8	0.9
Boron (Total)	120	13	17	15	15	16	15	14	19
Boron (Hot water soluble)	1.5	0.3	0.2	0.4	0.1	0.3	0.2	0.4	0.3
Cadmium	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (total)	160	20	25	21	10	22	19	19	27
Chromium VI	8	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
Cobalt	22	11.3	16.4	10.4	5.9	13.6	9.2	10.4	13.7
Copper	140	39	97	85	34	135	78	89	99
Lead	120	21	8	13	26	10	16	17	14
Mercury	0.27	<0.10	<0.10	<0.10	<0.10	<0.10	-	-	-
Molybdenum	6.9	0.7	<0.5	0.9	0.9	0.6	1.4	1.4	1.7
Nickel	100	24	33	23	11	27	20	21	31
Selenium	2.4	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Silver	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	23	0.6	0.8	0.9	<0.50	0.9	1.0	0.9	1.0
Vanadium	86	31	35	34	15	32	30	32	44
Zinc	340	85	69	71	101	60	134	89	94
Electrical Conductivity (mS/cm)	0.7	-	-	-	-	-	-	-	-
Sodium Adsorption Ratio (unitless)	5	-	-	-	-	-	-	-	-
Free Cyanide	0.051	-	-	-	-	-	-	-	-
pH (pH units)	5-9 (surface soil); 5-11 (subsurface soil)	-	-	-	-	-	-	-	-

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
pH level outside of the acceptable MECP range

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use (coarse textured soil)	BH/MW4A-SS1	BH/MW5A-SS1	EX-W001	EX-E001	EX-S001	EX-S002	EX-S003	EX-S004
Lab ID		3196866	3196867	3644519	3644109	3644521	3644513	3644416	3644410
Sampling Date		8/Oct/21	6/Oct/21	21/Mar/22	21/Mar/22	21/Mar/22	21/Mar/22	21/Mar/22	21/Mar/22
Soil Sample Depth (m)		0.00-0.61	0.00-0.61	0.8	0.5	0.5	0.8	0.8	0.8
Consultant		BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory		AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT	AGAT
Antimony	7.5	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	18	5	12	8	8	8	7	5	6
Barium	390	64	56	72	113	120	91	134	88
Beryllium	4	0.4	0.6	0.8	0.8	1.0	0.8	0.9	0.8
Boron (Total)	120	12	16	11	14	10	9	7	7
Boron (Hot water soluble)	1.5	0.4	0.6	-	-	-	-	-	-
Cadmium	1.2	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium (total)	160	16	15	24	25	25	21	23	22
Chromium VI	8	-	-	-	-	-	-	-	-
Cobalt	22	5.3	8.2	14.1	15.4	14.3	11.8	9.4	13.7
Copper	140	26	71	116	56	89	106	88	35
Lead	120	28	34	13	12	19	12	12	12
Mercury	0.27	-	-	-	-	-	-	-	-
Molybdenum	6.9	1.0	1.2	0.5	<0.5	1.0	0.7	1.0	<0.5
Nickel	100	13	16	30	32	30	26	20	28
Selenium	2.4	<0.8	<0.8	<0.8	<0.8	0.9	<0.8	<0.8	<0.8
Silver	20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	23	0.7	0.7	0.8	0.7	1.8	1.0	2.5	0.6
Vanadium	86	29	24	34	36	38	30	35	30
Zinc	340	84	129	73	69	101	62	72	68
Electrical Conductivity (mS/cm)	0.7	-	-	-	-	-	-	-	-
Sodium Adsorption Ratio (unitless)	5	-	-	-	-	-	-	-	-
Free Cyanide	0.051	-	-	-	-	-	-	-	-
pH (pH units)	5-9 (surface soil); 5-11 (subsurface soil)	-	-	-	-	-	-	-	-

All soil concentrations reported in µg/g.
'<' = Parameter below detection limit, as indicated
'NV'= No value
Bold Concentration exceeds MECP (2011) SCS.
Non-detect but detection limit exceeds the MECP (2011) SCS.
pH level outside of the acceptable MECP range

Appendix B – Laboratory Certificates of Analysis

AGAT Laboratories

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ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490C

AGAT WORK ORDER: 21T828695

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Nov 18, 2021

PAGES (INCLUDING COVER): 10

VERSION*: 1

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

*Notes

AGAT Laboratories

5835 COOPERS AVENUE
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Certificate of Analysis

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581-587 Argus Road, Oakville

SAMPLED BY:MV

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)

DATE RECEIVED: 2021-11-10

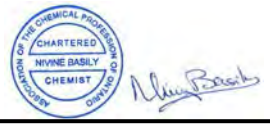
DATE REPORTED: 2021-11-18

SAMPLE DESCRIPTION:				BH/MW1-SS2	BH/MW2-SS1	BH/MW3-SS1	BH/MW4-SS1	BH/MW5-SS1
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-10-08 09:00	2021-10-07 08:20	2021-10-08 11:30	2021-10-08 14:50	2021-10-06 08:30
Parameter	Unit	G / S	RDL	3196779	3196864	3196865	3196866	3196867
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	7	8	7	5	12
Barium	µg/g	390	2.0	89.0	104	147	63.6	56.1
Beryllium	µg/g	4	0.4	0.7	0.8	0.9	0.4	0.6
Boron	µg/g	120	5	15	14	19	12	16
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	<0.5	<0.5	0.6
Chromium	µg/g	160	5	19	19	27	16	15
Cobalt	µg/g	22	0.5	9.2	10.4	13.7	5.3	8.2
Copper	µg/g	140	1.0	78.4	88.8	98.8	26.2	71.3
Lead	µg/g	120	1	16	17	14	28	34
Molybdenum	µg/g	6.9	0.5	1.4	1.4	1.7	1.0	1.2
Nickel	µg/g	100	1	20	21	31	13	16
Selenium	µg/g	2.4	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g	20	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.98	0.89	0.96	0.68	0.71
Vanadium	µg/g	86	0.4	30.3	31.7	43.7	28.8	24.4
Zinc	µg/g	340	5	134	89	94	84	129

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



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Certificate of Analysis

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581-587 Argus Road, Oakville

SAMPLED BY:MV

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

DATE RECEIVED: 2021-11-10

DATE REPORTED: 2021-11-18

				SAMPLE DESCRIPTION:	BH/MW1-SS2	BH/MW2-SS1	BH/MW3-SS1	BH/MW4-SS1	BH/MW5-SS1
				SAMPLE TYPE:	Soil	Soil	Soil	Soil	Soil
				DATE SAMPLED:	2021-10-08 09:00	2021-10-07 08:20	2021-10-08 11:30	2021-10-08 14:50	2021-10-06 08:30
Parameter	Unit	G / S	RDL		3196779	3196864	3196865	3196866	3196867
Boron (Hot Water Soluble)	µg/g	1.5	0.10		0.19	0.39	0.31	0.43	0.62

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
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Certificate of Analysis

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581-587 Argus Road, Oakville

SAMPLED BY:MV

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

DATE RECEIVED: 2021-11-10

DATE REPORTED: 2021-11-18

SAMPLE DESCRIPTION:				BH/MW1-SS2	BH/MW2-SS1	BH/MW3-SS1	BH/MW4-SS1	BH/MW5-SS1
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-10-08 09:00	2021-10-07 08:20	2021-10-08 11:30	2021-10-08 14:50	2021-10-06 08:30
Parameter	Unit	G / S	RDL	3196779	3196864	3196865	3196866	3196867
Naphthalene	µg/g	0.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05	<0.05	<0.05	0.25	0.10
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	0.08	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05	<0.05	0.08	0.93	0.30
Pyrene	µg/g	78	0.05	<0.05	<0.05	0.08	0.85	0.26
Benz(a)anthracene	µg/g	0.5	0.05	<0.05	<0.05	<0.05	0.47	0.11
Chrysene	µg/g	7	0.05	<0.05	<0.05	<0.05	0.37	0.08
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	0.40	0.09
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	0.15	0.08
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	0.26	0.07
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05	<0.05	<0.05	0.11	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05	<0.05	<0.05	0.16	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	17.1	14.2	10.0	15.1	15.2
Surrogate	Unit	Acceptable Limits						
Naphthalene-d8	%	50-140		105	78	124	112	106
Acridine-d9	%	50-140		77	85	91	103	107
Terphenyl-d14	%	50-140		85	99	117	105	63

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

3196779-3196867 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

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Exceedance Summary

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
3196866	BH/MW4-SS1	ON T2 S RPI CT	O. Reg. 153(511) - PAHs (Soil)	Fluoranthene	µg/g	0.69	0.93

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C
ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581-587 Argus Road, Oakville
SAMPLED BY:MV

Soil Analysis

RPT Date: Nov 18, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals (Including Hydrides) (Soil)															
Antimony	3196874		<0.8	<0.8	NA	< 0.8	118%	70%	130%	108%	80%	120%	106%	70%	130%
Arsenic	3196874		5	5	0.0%	< 1	113%	70%	130%	108%	80%	120%	105%	70%	130%
Barium	3196874		119	111	7.0%	< 2.0	108%	70%	130%	105%	80%	120%	100%	70%	130%
Beryllium	3196874		1.2	1.2	NA	< 0.4	108%	70%	130%	110%	80%	120%	114%	70%	130%
Boron	3196874		8	6	NA	< 5	77%	70%	130%	110%	80%	120%	108%	70%	130%
Cadmium	3196874		<0.5	<0.5	NA	< 0.5	95%	70%	130%	103%	80%	120%	105%	70%	130%
Chromium	3196874		35	33	5.9%	< 5	103%	70%	130%	104%	80%	120%	102%	70%	130%
Cobalt	3196874		14.1	14.1	0.0%	< 0.5	97%	70%	130%	105%	80%	120%	101%	70%	130%
Copper	3196874		23.0	23.0	0.0%	< 1.0	92%	70%	130%	107%	80%	120%	99%	70%	130%
Lead	3196874		24	22	8.7%	< 1	104%	70%	130%	107%	80%	120%	100%	70%	130%
Molybdenum	3196874		0.7	0.6	NA	< 0.5	107%	70%	130%	117%	80%	120%	113%	70%	130%
Nickel	3196874		27	27	0.0%	< 1	98%	70%	130%	105%	80%	120%	99%	70%	130%
Selenium	3196874		<0.8	<0.8	NA	< 0.8	104%	70%	130%	106%	80%	120%	105%	70%	130%
Silver	3196874		<0.5	<0.5	NA	< 0.5	104%	70%	130%	104%	80%	120%	101%	70%	130%
Thallium	3196874		<0.5	<0.5	NA	< 0.5	117%	70%	130%	111%	80%	120%	104%	70%	130%
Uranium	3196874		1.35	1.22	NA	< 0.50	117%	70%	130%	111%	80%	120%	107%	70%	130%
Vanadium	3196874		48.2	45.9	4.9%	< 0.4	112%	70%	130%	104%	80%	120%	100%	70%	130%
Zinc	3196874		94	92	2.2%	< 5	100%	70%	130%	107%	80%	120%	97%	70%	130%

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

O. Reg. 153(511) - ORPs (Soil)															
Boron (Hot Water Soluble)	3196874		0.41	0.40	NA	< 0.10	88%	60%	140%	103%	70%	130%	113%	60%	140%

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

Certified By:

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581-587 Argus Road, Oakville

SAMPLED BY:MV

Trace Organics Analysis

RPT Date: Nov 18, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	3188273		< 0.05	< 0.05	NA	< 0.05	105%	50%	140%	70%	50%	140%	114%	50%	140%
Acenaphthylene	3188273		< 0.05	< 0.05	NA	< 0.05	78%	50%	140%	75%	50%	140%	75%	50%	140%
Acenaphthene	3188273		< 0.05	< 0.05	NA	< 0.05	85%	50%	140%	94%	50%	140%	96%	50%	140%
Fluorene	3188273		< 0.05	< 0.05	NA	< 0.05	78%	50%	140%	85%	50%	140%	93%	50%	140%
Phenanthrene	3188273		< 0.05	< 0.05	NA	< 0.05	90%	50%	140%	78%	50%	140%	92%	50%	140%
Anthracene	3188273		< 0.05	< 0.05	NA	< 0.05	85%	50%	140%	74%	50%	140%	104%	50%	140%
Fluoranthene	3188273		< 0.05	< 0.05	NA	< 0.05	96%	50%	140%	109%	50%	140%	78%	50%	140%
Pyrene	3188273		< 0.05	< 0.05	NA	< 0.05	105%	50%	140%	86%	50%	140%	85%	50%	140%
Benz(a)anthracene	3188273		< 0.05	< 0.05	NA	< 0.05	78%	50%	140%	95%	50%	140%	93%	50%	140%
Chrysene	3188273		< 0.05	< 0.05	NA	< 0.05	88%	50%	140%	77%	50%	140%	92%	50%	140%
Benzo(b)fluoranthene	3188273		< 0.05	< 0.05	NA	< 0.05	74%	50%	140%	71%	50%	140%	91%	50%	140%
Benzo(k)fluoranthene	3188273		< 0.05	< 0.05	NA	< 0.05	85%	50%	140%	85%	50%	140%	114%	50%	140%
Benzo(a)pyrene	3188273		< 0.05	< 0.05	NA	< 0.05	93%	50%	140%	93%	50%	140%	78%	50%	140%
Indeno(1,2,3-cd)pyrene	3188273		< 0.05	< 0.05	NA	< 0.05	92%	50%	140%	92%	50%	140%	95%	50%	140%
Dibenz(a,h)anthracene	3188273		< 0.05	< 0.05	NA	< 0.05	91%	50%	140%	104%	50%	140%	93%	50%	140%
Benzo(g,h,i)perylene	3188273		< 0.05	< 0.05	NA	< 0.05	97%	50%	140%	77%	50%	140%	92%	50%	140%

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

Certified By: N Popowkolof

AGAT Laboratories

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581-587 Argus Road, Oakville

SAMPLED BY:MV

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581-587 Argus Road, Oakville

SAMPLED BY:MV

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	CCME Tier 1 Method	BALANCE

AGAT Laboratories

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Chain of Custody Record

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

Report Information:

Company: BIG Consulting Inc
Contact: Rebecca Morrison
Address: 12-5500 Tonken Road, Mississauga, Ontario, L4W2Z4
Phone: 6476748087 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email: mvaughan@brownfieldigi.com

Project Information:

Project: BIGC-ENV-490A
Site Location: 581-587 Argus Road, Oakville
Sampled By: MV
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis

Invoice Information:

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

Regulatory Requirements:

(Please check all applicable boxes)

☑ Regulation 153/04
Table 2 (Indicate One)
☐ Ind/Com
☑ Res/Park
☐ Agriculture
Soil Texture (Check One)
☑ Coarse
☐ Fine

☐ Excess Soils R406
Table (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use
☐ Sanitary ☐ Storm
(Region)
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
(Indicate One)

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 21T828695
Cooler Quantity: 2 coolers
Arrival Temperatures: 4.8 | 5.2 | 5.5 / 3.7 | 4.2 | 4.6
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: online

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	Metals - ☐ CrVI, ☐ Hg, ☑ HWSB	BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	O. Reg 558: Landfill Disposal Characterization TCLP: TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH/MW1-SS2	21-10-8	9:00 AM/PM	2	S				☑		☑							
BH/MW2-SS1	21-10-7	8:20 AM/PM	2	S				☑		☑							
BH/MW3-SS1	21-10-8	11:30 AM/PM	2	S				☑		☑							
BH/MW4-SS1	21-10-8	14:50 AM/PM	2	S				☑		☑							
BH/MW5-SS1	21-10-6	8:30 AM/PM	2	S				☑		☑							
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Matt Vaughan	21-11-10	16:50		21/Nov/10	4:53
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time

Page ____ of ____

N°:

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

AGAT Laboratories

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CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T871686

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Mar 16, 2022

PAGES (INCLUDING COVER): 7

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

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Certificate of Analysis

AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON

SAMPLED BY:TD

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

DATE RECEIVED: 2022-03-09

DATE REPORTED: 2022-03-16

SAMPLE DESCRIPTION:				BH104NA-SS1	BH104NA-SS3	BH104WA-SS1	DUPW4A030	BH104EA-SS1	BH104SA-SS1
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2022-03-09 09:30	2022-03-09 09:35	2022-03-09 09:51	2022-03-09	2022-03-09 10:07	2022-03-09 10:21
Parameter	Unit	G / S	RDL	3604499	3604501	3604502	3604504	3604505	3604507
Naphthalene	µg/g	0.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	0.28	<0.05	0.78	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	0.10	<0.05	0.12	<0.05	<0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	0.34	0.05	1.12	<0.05	0.07	0.06
Pyrene	µg/g	78	0.05	0.27	<0.05	0.94	<0.05	0.06	<0.05
Benz(a)anthracene	µg/g	0.5	0.05	0.14	<0.05	0.51	<0.05	<0.05	<0.05
Chrysene	µg/g	7	0.05	0.15	<0.05	0.62	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	0.17	<0.05	0.78	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	0.06	<0.05	0.23	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	0.11	<0.05	0.40	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	0.05	<0.05	0.21	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	0.05	<0.05	0.25	<0.05	<0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05	<0.05	0.15	<0.05	<0.05	<0.05
Moisture Content	%		0.1	12.2	13.6	11.9	11.2	20.0	15.4
Surrogate	Unit	Acceptable Limits							
Naphthalene-d8	%	50-140		65	73	74	68	81	89
Acridine-d9	%	50-140		85	96	69	85	79	96
Terphenyl-d14	%	50-140		79	87	84	84	81	84

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

3604499-3604507 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON

SAMPLED BY:TD

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

DATE RECEIVED: 2022-03-09

DATE REPORTED: 2022-03-16

				SAMPLE DESCRIPTION:	BH105-SS1	DUP010501
				SAMPLE TYPE:	Soil	Soil
				DATE SAMPLED:	2022-03-09 10:40	2022-03-09
Parameter	Unit	G / S	RDL		3604527	3604528
Polychlorinated Biphenyls	µg/g	0.35	0.1		<0.1	<0.1
Moisture Content	%		0.1		10.5	9.8
wet weight PCB	g		0.01		10.44	10.05
Surrogate	Unit	Acceptable Limits				
Decachlorobiphenyl	%	50-140			96	96

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

3604527-3604528 Results are based on the dry weight of soil extracted.
PCB total is a calculated parameter. The calculated value is the sum of Aroclor 1242, Aroclor 1248, Aroclor 1254 and Aroclor 1260. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

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Guideline Violation

AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

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CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
3604502	BH104WA-SS1	ON T3 S RPI CT	O. Reg. 153(511) - PAHs (Soil)	Benz(a)anthracene	µg/g	0.5	0.51
3604502	BH104WA-SS1	ON T3 S RPI CT	O. Reg. 153(511) - PAHs (Soil)	Benzo(a)pyrene	µg/g	0.3	0.40
3604502	BH104WA-SS1	ON T3 S RPI CT	O. Reg. 153(511) - PAHs (Soil)	Fluoranthene	µg/g	0.69	1.12

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON

SAMPLED BY:TD

Trace Organics Analysis

RPT Date: Mar 16, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	3604505	3604505	<0.05	<0.05	NA	< 0.05	110%	50%	140%	68%	50%	140%	70%	50%	140%
Acenaphthylene	3604505	3604505	<0.05	<0.05	NA	< 0.05	89%	50%	140%	73%	50%	140%	75%	50%	140%
Acenaphthene	3604505	3604505	<0.05	<0.05	NA	< 0.05	97%	50%	140%	77%	50%	140%	87%	50%	140%
Fluorene	3604505	3604505	<0.05	<0.05	NA	< 0.05	116%	50%	140%	91%	50%	140%	103%	50%	140%
Phenanthrene	3604505	3604505	<0.05	<0.05	NA	< 0.05	119%	50%	140%	92%	50%	140%	105%	50%	140%
Anthracene	3604505	3604505	<0.05	<0.05	NA	< 0.05	113%	50%	140%	92%	50%	140%	107%	50%	140%
Fluoranthene	3604505	3604505	<0.05	<0.05	NA	< 0.05	122%	50%	140%	101%	50%	140%	116%	50%	140%
Pyrene	3604505	3604505	<0.05	<0.05	NA	< 0.05	115%	50%	140%	99%	50%	140%	112%	50%	140%
Benz(a)anthracene	3604505	3604505	<0.05	<0.05	NA	< 0.05	112%	50%	140%	88%	50%	140%	98%	50%	140%
Chrysene	3604505	3604505	<0.05	<0.05	NA	< 0.05	109%	50%	140%	87%	50%	140%	86%	50%	140%
Benzo(b)fluoranthene	3604505	3604505	<0.05	<0.05	NA	< 0.05	80%	50%	140%	83%	50%	140%	78%	50%	140%
Benzo(k)fluoranthene	3604505	3604505	<0.05	<0.05	NA	< 0.05	108%	50%	140%	76%	50%	140%	63%	50%	140%
Benzo(a)pyrene	3604505	3604505	<0.05	<0.05	NA	< 0.05	121%	50%	140%	78%	50%	140%	99%	50%	140%
Indeno(1,2,3-cd)pyrene	3604505	3604505	<0.05	<0.05	NA	< 0.05	94%	50%	140%	78%	50%	140%	76%	50%	140%
Dibenz(a,h)anthracene	3604505	3604505	<0.05	<0.05	NA	< 0.05	110%	50%	140%	79%	50%	140%	76%	50%	140%
Benzo(g,h,i)perylene	3604505	3604505	<0.05	<0.05	NA	< 0.05	113%	50%	140%	71%	50%	140%	68%	50%	140%
O. Reg. 153(511) - PCBs (Soil)															
Polychlorinated Biphenyls	3608369		< 0.1	< 0.1	NA	< 0.1	104%	50%	140%	74%	50%	140%	82%	50%	140%

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

Certified By: N Popowkolof

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http://www.agatlabs.com

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	CCME Tier 1 Method	BALANCE
Polychlorinated Biphenyls	ORG-91-5113	modified from EPA SW-846 3541 & 8082A	GC/ECD
Decachlorobiphenyl	ORG-91-5113	modified from EPA SW-846 3541 & 8082A	GC/ECD
wet weight PCB	ORG-91-5113		BALANCE

AGAT Laboratories

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

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

Laboratory Use Only

Work Order #: 22T871686

Cooler Quantity: 1 Large

Arrival Temperatures: 20.3 | 20.0 | 18.2

Custody Seal Intact: ☐ Yes ☐ No ☐ N/A

Notes: Bagged Ice

Report Information:

Company: B-I.e. Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5500 Tomken Rd. Mississauga, ON L4W 2Z4
Phone: 416-214-4880 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldgi.com
2. Email:

Regulatory Requirements:

(Please check all applicable boxes)

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

☐ Excess Soils R406
Table (Indicate One)

☐ Regulation 558

☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm
(Region)

☐ Prov. Water Quality Objectives (PWQO)

☐ Other
(Indicate One)

Is this submission for a Record of Site Condition? ☐ Yes ☐ No

Report Guideline on Certificate of Analysis ☑ Yes ☐ No

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Project Information:

Project: BIGC-ENV-490D
Site Location: 581 Argus Rd, Oakville, ON
Sampled By: TD
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: same as report info
Contact: Laine Dougherty
Address: Same as report info
Email: ldougherty@brownfieldgi.com

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs	O. Reg 153: Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH104NA-SS1	Mar 9/22	9:30 AM/PM	1	S							✓							N
BH104NA-SS3		9:35 AM/PM	1	S							✓							N
BH104WA-SS1		9:51 AM/PM	1	S							✓							N
BH104WA-SS3		9:56 AM/PM	1	S							✓							N
DUPW4A030		[redacted] AM/PM	1	S							✓							N
BH104EA-SS1		10:07 AM/PM	1	S							✓							N
BH104EA-SS3		10:14 AM/PM	1	S							✓							N
BH104SA-SS1		10:21 AM/PM	1	S							✓							N
BH104SA-SS3		10:29 AM/PM	1	S							✓							N
BH105-SS1		10:40 AM/PM	1	S								✓						N
DUP010501		[redacted] AM/PM	1	S								✓						N

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Timothy Damdar	Mar 9/22	2:13pm	Armando Rivas		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

22 MAR 9 2:30

Page 1 of 1

Nº: T 125925

Document ID: DIV 78 1511 021

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Date Issued: March 9, 2021

AGAT Laboratories

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CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T871693

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Mar 17, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories

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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 22T871693

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON

SAMPLED BY:TD

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

DATE RECEIVED: 2022-03-09

DATE REPORTED: 2022-03-17

		SAMPLE DESCRIPTION:		BH104WB-SS1
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2022-03-09
Parameter	Unit	G / S	RDL	3603000
Naphthalene	µg/g	0.6	0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05
Pyrene	µg/g	78	0.05	<0.05
Benz(a)anthracene	µg/g	0.5	0.05	<0.05
Chrysene	µg/g	7	0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05
Moisture Content	%		0.1	20.5
Surrogate	Unit	Acceptable Limits		
Naphthalene-d8	%	50-140		85
Acridine-d9	%	50-140		79
Terphenyl-d14	%	50-140		84

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

3603000 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T871693

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON

SAMPLED BY:TD

Trace Organics Analysis

RPT Date: Mar 17, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	3607886		<0.05	<0.05	NA	< 0.05	104%	50%	140%	76%	50%	140%	72%	50%	140%
Acenaphthylene	3607886		<0.05	<0.05	NA	< 0.05	99%	50%	140%	78%	50%	140%	75%	50%	140%
Acenaphthene	3607886		<0.05	<0.05	NA	< 0.05	100%	50%	140%	81%	50%	140%	83%	50%	140%
Fluorene	3607886		<0.05	<0.05	NA	< 0.05	123%	50%	140%	102%	50%	140%	100%	50%	140%
Phenanthrene	3607886		<0.05	<0.05	NA	< 0.05	119%	50%	140%	103%	50%	140%	102%	50%	140%
Anthracene	3607886		<0.05	<0.05	NA	< 0.05	119%	50%	140%	105%	50%	140%	101%	50%	140%
Fluoranthene	3607886		<0.05	<0.05	NA	< 0.05	118%	50%	140%	112%	50%	140%	111%	50%	140%
Pyrene	3607886		<0.05	<0.05	NA	< 0.05	115%	50%	140%	109%	50%	140%	108%	50%	140%
Benz(a)anthracene	3607886		<0.05	<0.05	NA	< 0.05	124%	50%	140%	100%	50%	140%	98%	50%	140%
Chrysene	3607886		<0.05	<0.05	NA	< 0.05	125%	50%	140%	75%	50%	140%	88%	50%	140%
Benzo(b)fluoranthene	3607886		<0.05	<0.05	NA	< 0.05	123%	50%	140%	76%	50%	140%	84%	50%	140%
Benzo(k)fluoranthene	3607886		<0.05	<0.05	NA	< 0.05	99%	50%	140%	67%	50%	140%	76%	50%	140%
Benzo(a)pyrene	3607886		<0.05	<0.05	NA	< 0.05	101%	50%	140%	92%	50%	140%	98%	50%	140%
Indeno(1,2,3-cd)pyrene	3607886		<0.05	<0.05	NA	< 0.05	87%	50%	140%	71%	50%	140%	67%	50%	140%
Dibenz(a,h)anthracene	3607886		<0.05	<0.05	NA	< 0.05	102%	50%	140%	73%	50%	140%	79%	50%	140%
Benzo(g,h,i)perylene	3607886		<0.05	<0.05	NA	< 0.05	101%	50%	140%	65%	50%	140%	69%	50%	140%

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

Certified By: N Popowkolof

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T871693

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	CCME Tier 1 Method	BALANCE

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Chain of Custody Record

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

Laboratory Use Only

Work Order #: 22T871693

Cooler Quantity: 1 Large coolers

Arrival Temperatures: 20.6 | 19.5 | 17.7

Custody Seal Intact: ☐ Yes ☐ No ☐ N/A

Notes: Bagged Ice

Report Information:

Company: B.I.G. Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5506 Tomken Rd, Mississauga, ON L4W 2Z4
Phone: 416-214-4882 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldgi.com
2. Email:

Project Information:

Project: BIGE-ENV-490D
Site Location: 581 Argus Rd, Oakville, ON
Sampled By: YD
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: Same as report info
Contact: Laine Daugherty
Address: Same as report info
Email: ldaugherty@brownfieldgi.com

Regulatory Requirements:

(Please check all applicable boxes)

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

☐ Excess Soils R406 — Table ____ (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm — Region
☐ Prov. Water Quality Objectives (PWQO)
☐ Other — Indicate One

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

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

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs	O. Reg 153: Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach	O. Reg 406: Excess Soils SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH104WB-SS1	Mar9/22	10:00 AM/PM	1	S	Place on hold						✓								N
BH104EB-SS1	↓	10:19 AM/PM	1	S	Place on hold						✓								N
BH104SB-SS1	↓	10:35 AM/PM	1	S	Place on hold						✓								N
		AM/PM																	
		AM/PM																	
		AM/PM																	
		AM/PM																	
		AM/PM																	
		AM/PM																	
		AM/PM																	
		AM/PM																	

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
T. Mathew Dambar	Mar9/22	2:13pm	Armando Rivas		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

'22 MAR 9 2:35PM

Page 1 of 1

Nº: T 130103

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

Date Issued: March 9, 2021

AGAT Laboratories

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CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T872055

TRACE ORGANICS REVIEWED BY: Pinkal Patel, Report Reviewer

DATE REPORTED: Mar 17, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
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- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

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Certificate of Analysis

AGAT WORK ORDER: 22T872055

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

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

DATE RECEIVED: 2022-03-10

DATE REPORTED: 2022-03-17

SAMPLE DESCRIPTION:				BH104NA-SS2	BH104SA-SS2	BH104EA-SS2	BH104WA-SS2	DUPWA020
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2022-03-09 09:53	2022-03-09 10:07	2022-03-09 10:29	2022-03-09 10:47	2022-03-09
Parameter	Unit	G / S	RDL	3607391	3607392	3607393	3607394	3607395
Naphthalene	µg/g	0.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	0.07	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	78	0.05	0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.5	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	7	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	12.3	15.0	15.0	15.0	11.7
Surrogate	Unit	Acceptable Limits						
Naphthalene-d8	%	50-140		68	71	63	67	61
Acridine-d9	%	50-140		85	79	84	79	96
Terphenyl-d14	%	50-140		60	64	74	110	62

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

3607391-3607395 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Pinkal Patel

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T872055

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

Trace Organics Analysis

RPT Date: Mar 17, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	3574871		<0.05	<0.05	NA	< 0.05	99%	50%	140%	101%	50%	140%	99%	50%	140%
Acenaphthylene	3574871		<0.05	<0.05	NA	< 0.05	112%	50%	140%	100%	50%	140%	109%	50%	140%
Acenaphthene	3574871		<0.05	<0.05	NA	< 0.05	108%	50%	140%	77%	50%	140%	91%	50%	140%
Fluorene	3574871		<0.05	<0.05	NA	< 0.05	109%	50%	140%	84%	50%	140%	93%	50%	140%
Phenanthrene	3574871		<0.05	<0.05	NA	< 0.05	102%	50%	140%	78%	50%	140%	90%	50%	140%
Anthracene	3574871		<0.05	<0.05	NA	< 0.05	105%	50%	140%	84%	50%	140%	76%	50%	140%
Fluoranthene	3574871		<0.05	<0.05	NA	< 0.05	109%	50%	140%	83%	50%	140%	96%	50%	140%
Pyrene	3574871		<0.05	<0.05	NA	< 0.05	105%	50%	140%	81%	50%	140%	96%	50%	140%
Benz(a)anthracene	3574871		<0.05	<0.05	NA	< 0.05	91%	50%	140%	96%	50%	140%	88%	50%	140%
Chrysene	3574871		<0.05	<0.05	NA	< 0.05	117%	50%	140%	76%	50%	140%	83%	50%	140%
Benzo(b)fluoranthene	3574871		<0.05	<0.05	NA	< 0.05	71%	50%	140%	72%	50%	140%	72%	50%	140%
Benzo(k)fluoranthene	3574871		<0.05	<0.05	NA	< 0.05	80%	50%	140%	78%	50%	140%	81%	50%	140%
Benzo(a)pyrene	3574871		<0.05	<0.05	NA	< 0.05	67%	50%	140%	86%	50%	140%	74%	50%	140%
Indeno(1,2,3-cd)pyrene	3574871		<0.05	<0.05	NA	< 0.05	72%	50%	140%	71%	50%	140%	75%	50%	140%
Dibenz(a,h)anthracene	3574871		<0.05	<0.05	NA	< 0.05	70%	50%	140%	75%	50%	140%	83%	50%	140%
Benzo(g,h,i)perylene	3574871		<0.05	<0.05	NA	< 0.05	77%	50%	140%	85%	50%	140%	80%	50%	140%

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

Certified By: Jinkal Patel

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T872055

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	CCME Tier 1 Method	BALANCE

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Mississauga, Ontario L4Z 1Y2
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webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: B.I.G. Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road, Mississauga, ON L4W 2Z4
Phone: 416-214-4880 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfiedigi.com
2. Email:

Project Information:

Project: BIGC-ENV-490D
Site Location: 581 Argus Road, Oakville, ON
Sampled By: TD
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: Same as report info
Contact: Laine Dougherty
Address: Same as report info
Email: ldougherty@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

☑ Regulation 153/04 — Table 3 (Indicate One) — ☐ Ind/Com ☑ Rcs/Park ☐ Agriculture
Soil Texture (Check One): ☑ Coarse ☐ Fine

☐ Excess Soils R406 — Table (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm — Region
☐ Prov. Water Quality Objectives (PWQO)
☐ Other — Indicate One

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 22T872055

Cooler Quantity: 1 medium
Arrival Temperatures: 3.3 | 4.2 | 5.6
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: Bagged Ice

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	O. Reg 558: Landfill Disposal Characterization TCLP: TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH104NA-SS2	Mar 9/22	9:53 AM PM	1	S						☑							N
BH104SA-SS2	Mar 9/22	10:07 AM PM	1	S						☑							N
BH104EA-SS2	Mar 9/22	10:29 AM PM	1	S						☑							N
BH104WA-SS2	Mar 9/22	10:47 AM PM	1	S						☑							N
DUPWA020	Mar 9/22	AM PM	1	S						☑							N
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Timothy Damdar	Mar 10/22	12:29 pm	Armando Rivas		
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time

'22 MAR 10 12:30pm

Page 1 of 1

N°:

AGAT Laboratories

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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T875643

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

DATE REPORTED: Mar 22, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

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Certificate of Analysis

AGAT WORK ORDER: 22T875643

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:TD

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)

DATE RECEIVED: 2022-03-21

DATE REPORTED: 2022-03-22

				SAMPLE DESCRIPTION:	Ex1-W001
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2022-03-21 12:15
Parameter	Unit	G / S	RDL	3644519	
Antimony	µg/g	7.5	0.8	<0.8	
Arsenic	µg/g	18	1	8	
Barium	µg/g	390	2.0	72.3	
Beryllium	µg/g	4	0.4	0.8	
Boron	µg/g	120	5	11	
Cadmium	µg/g	1.2	0.5	<0.5	
Chromium	µg/g	160	5	24	
Cobalt	µg/g	22	0.5	14.1	
Copper	µg/g	140	1.0	116	
Lead	µg/g	120	1	13	
Molybdenum	µg/g	6.9	0.5	0.5	
Nickel	µg/g	100	1	30	
Selenium	µg/g	2.4	0.8	<0.8	
Silver	µg/g	20	0.5	<0.5	
Thallium	µg/g	1	0.5	<0.5	
Uranium	µg/g	23	0.50	0.75	
Vanadium	µg/g	86	0.4	33.8	
Zinc	µg/g	340	5	73	

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

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 22T875643
PROJECT: BIGC-ENV-490D
ATTENTION TO: Rebecca Morrison
SAMPLING SITE:217-227 Cross Avenue, Oakville, ON
SAMPLED BY:TD

Soil Analysis

RPT Date: Mar 22, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals (Including Hydrides) (Soil)															
Antimony	3622029		<0.8	<0.8	NA	< 0.8	102%	70%	130%	100%	80%	120%	78%	70%	130%
Arsenic	3622029		10	9	10.5%	< 1	117%	70%	130%	100%	80%	120%	96%	70%	130%
Barium	3622029		89.6	89.8	0.2%	< 2.0	108%	70%	130%	110%	80%	120%	112%	70%	130%
Beryllium	3622029		0.5	0.5	NA	< 0.4	103%	70%	130%	105%	80%	120%	92%	70%	130%
Boron	3622029		8	8	NA	< 5	73%	70%	130%	101%	80%	120%	85%	70%	130%
Cadmium	3622029		<0.5	<0.5	NA	< 0.5	108%	70%	130%	106%	80%	120%	92%	70%	130%
Chromium	3622029		36	33	8.7%	< 5	91%	70%	130%	106%	80%	120%	102%	70%	130%
Cobalt	3622029		6.2	6.1	1.6%	< 0.5	95%	70%	130%	95%	80%	120%	94%	70%	130%
Copper	3622029		12.7	12.6	0.8%	< 1.0	92%	70%	130%	101%	80%	120%	91%	70%	130%
Lead	3622029		17	15	12.5%	< 1	102%	70%	130%	102%	80%	120%	92%	70%	130%
Molybdenum	3622029		<0.5	0.5	NA	< 0.5	113%	70%	130%	112%	80%	120%	113%	70%	130%
Nickel	3622029		11	11	0.0%	< 1	98%	70%	130%	98%	80%	120%	93%	70%	130%
Selenium	3622029		<0.8	<0.8	NA	< 0.8	130%	70%	130%	106%	80%	120%	106%	70%	130%
Silver	3622029		<0.5	<0.5	NA	< 0.5	104%	70%	130%	104%	80%	120%	95%	70%	130%
Thallium	3622029		<0.5	<0.5	NA	< 0.5	105%	70%	130%	101%	80%	120%	98%	70%	130%
Uranium	3622029		0.58	0.60	NA	< 0.50	100%	70%	130%	96%	80%	120%	97%	70%	130%
Vanadium	3622029		26.8	26.2	2.3%	< 0.4	99%	70%	130%	95%	80%	120%	97%	70%	130%
Zinc	3622029		45	44	2.2%	< 5	98%	70%	130%	99%	80%	120%	88%	70%	130%

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

Certified By:

AGAT Laboratories

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http://www.agatlabs.com

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T875643

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS

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webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: B.I.G Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road, Mississauga, ON L4W 2Z4
Phone: 416-214-4880 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email: tdamdar@brownfieldigi.com

Project Information:

Project: BIGC-ENV-490D
Site Location: 217-227 Cross Avenue, Oakville, ON
Sampled By: TD
AGAT Quote #: PO:
Please note: if quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐
Company: B.I.G Consulting Inc.
Contact: Laine Dougherty
Address: 12-5500 Tomken Rd, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

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

☐ Excess Soils R406 — Table (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm — Region
☐ Prov. Water Quality Objectives (PWQO)
☐ Other — Indicate One

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 22T875643
Cooler Quantity: 1 small
Arrival Temperatures: 14 8
Custody Seal Intact: ☑ Yes ☐ No ☐ N/A
Notes: Bagged Ice

Turnaround Time (TAT) Required:

Regular TAT ☐ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ vOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach ☐ Metals ☐ vOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	ICPMS Metals	Potentially Hazardous or High Concentration (Y/N)
EX1-W001	Mar 21/22	12:15 AM/PM	1	S													✓	N
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																
		AM/PM																

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Timothy Damdar	Mar 21/22	2:56pm	Anthony Daalwa	21/03	2:43
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time

Page 1 of 1

N°:

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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T875644

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

DATE REPORTED: Mar 22, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

AGAT Laboratories

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

Certificate of Analysis

AGAT WORK ORDER: 22T875644

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:TD

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)

DATE RECEIVED: 2022-03-21

DATE REPORTED: 2022-03-22

				SAMPLE DESCRIPTION:	Ex1-S001
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2022-03-21 12:32
Parameter	Unit	G / S	RDL		3644521
Antimony	µg/g	7.5	0.8		<0.8
Arsenic	µg/g	18	1		8
Barium	µg/g	390	2.0		120
Beryllium	µg/g	4	0.4		1.0
Boron	µg/g	120	5		10
Cadmium	µg/g	1.2	0.5		<0.5
Chromium	µg/g	160	5		25
Cobalt	µg/g	22	0.5		14.3
Copper	µg/g	140	1.0		89.2
Lead	µg/g	120	1		19
Molybdenum	µg/g	6.9	0.5		1.0
Nickel	µg/g	100	1		30
Selenium	µg/g	2.4	0.8		0.9
Silver	µg/g	20	0.5		<0.5
Thallium	µg/g	1	0.5		<0.5
Uranium	µg/g	23	0.50		1.81
Vanadium	µg/g	86	0.4		37.7
Zinc	µg/g	340	5		101

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

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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

Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 22T875644
PROJECT: BIGC-ENV-490D
ATTENTION TO: Rebecca Morrison
SAMPLING SITE:217-227 Cross Avenue, Oakville, ON
SAMPLED BY:TD

Soil Analysis

RPT Date: Mar 22, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals (Including Hydrides) (Soil)															
Antimony	3622029		<0.8	<0.8	NA	< 0.8	102%	70%	130%	100%	80%	120%	78%	70%	130%
Arsenic	3622029		10	9	10.5%	< 1	117%	70%	130%	100%	80%	120%	96%	70%	130%
Barium	3622029		89.6	89.8	0.2%	< 2.0	108%	70%	130%	110%	80%	120%	112%	70%	130%
Beryllium	3622029		0.5	0.5	NA	< 0.4	103%	70%	130%	105%	80%	120%	92%	70%	130%
Boron	3622029		8	8	NA	< 5	73%	70%	130%	101%	80%	120%	85%	70%	130%
Cadmium	3622029		<0.5	<0.5	NA	< 0.5	108%	70%	130%	106%	80%	120%	92%	70%	130%
Chromium	3622029		36	33	8.7%	< 5	91%	70%	130%	106%	80%	120%	102%	70%	130%
Cobalt	3622029		6.2	6.1	1.6%	< 0.5	95%	70%	130%	95%	80%	120%	94%	70%	130%
Copper	3622029		12.7	12.6	0.8%	< 1.0	92%	70%	130%	101%	80%	120%	91%	70%	130%
Lead	3622029		17	15	12.5%	< 1	102%	70%	130%	102%	80%	120%	92%	70%	130%
Molybdenum	3622029		<0.5	0.5	NA	< 0.5	113%	70%	130%	112%	80%	120%	113%	70%	130%
Nickel	3622029		11	11	0.0%	< 1	98%	70%	130%	98%	80%	120%	93%	70%	130%
Selenium	3622029		<0.8	<0.8	NA	< 0.8	130%	70%	130%	106%	80%	120%	106%	70%	130%
Silver	3622029		<0.5	<0.5	NA	< 0.5	104%	70%	130%	104%	80%	120%	95%	70%	130%
Thallium	3622029		<0.5	<0.5	NA	< 0.5	105%	70%	130%	101%	80%	120%	98%	70%	130%
Uranium	3622029		0.58	0.60	NA	< 0.50	100%	70%	130%	96%	80%	120%	97%	70%	130%
Vanadium	3622029		26.8	26.2	2.3%	< 0.4	99%	70%	130%	95%	80%	120%	97%	70%	130%
Zinc	3622029		45	44	2.2%	< 5	98%	70%	130%	99%	80%	120%	88%	70%	130%

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

Certified By:

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

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T875644

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS

AGAT Laboratories
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Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: B.I.G Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road, Mississauga, ON L4W 2Z4
Phone: 416-214-4880 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email: tdamdar@brownfieldigi.com

Project Information:

Project: BIGC-ENV-490D
Site Location: 217-227 Cross Avenue, Oakville, ON
Sampled By: TD
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐
Company: B.I.G Consulting Inc.
Contact: Laine Dougherty
Address: 12-5500 Tomken Rd, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

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

☐ Excess Soils R406
Table ____ (Indicate One)

☐ Regulation 558

☐ CCME

☐ Sewer Use
☐ Sanitary ☐ Storm
____ (Region)

☐ Prov. Water Quality Objectives (PWQO)

☐ Other
____ (Indicate One)

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

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

Laboratory Use Only

Work Order #: 22 T875649
Cooler Quantity: 1 small
Arrival Temperatures: 14.8
Custody Seal Intact: ☑ Yes ☐ No ☐ N/A
Notes: Bagged Ice

Turnaround Time (TAT) Required:

Regular TAT ☐ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply): _____

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs, Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ vOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	ICPMS Metals	Potentially Hazardous or High Concentration (Y/N)
EX1-S001	Mar 21/22	12:32 PM	1	S												✓	N
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Timothy Damdar	Mar 21/22	2:50pm	Anthony Dasilva	21/03	2:40
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

Page 1 of 1

N°

AGAT Laboratories

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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T875646

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

DATE REPORTED: Mar 22, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 22T875646

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:TD

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)

DATE RECEIVED: 2022-03-21

DATE REPORTED: 2022-03-22

				SAMPLE DESCRIPTION:	Ex1-S002
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2022-03-21 12:50
Parameter	Unit	G / S	RDL	3644513	
Antimony	µg/g	7.5	0.8	<0.8	
Arsenic	µg/g	18	1	7	
Barium	µg/g	390	2.0	91.1	
Beryllium	µg/g	4	0.4	0.8	
Boron	µg/g	120	5	9	
Cadmium	µg/g	1.2	0.5	<0.5	
Chromium	µg/g	160	5	21	
Cobalt	µg/g	22	0.5	11.8	
Copper	µg/g	140	1.0	106	
Lead	µg/g	120	1	12	
Molybdenum	µg/g	6.9	0.5	0.7	
Nickel	µg/g	100	1	26	
Selenium	µg/g	2.4	0.8	<0.8	
Silver	µg/g	20	0.5	<0.5	
Thallium	µg/g	1	0.5	<0.5	
Uranium	µg/g	23	0.50	1.01	
Vanadium	µg/g	86	0.4	30.0	
Zinc	µg/g	340	5	62	

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

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 22T875646
PROJECT: BIGC-ENV-490D
ATTENTION TO: Rebecca Morrison
SAMPLING SITE:217-227 Cross Avenue, Oakville, ON
SAMPLED BY:TD

Soil Analysis

RPT Date: Mar 22, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals (Including Hydrides) (Soil)															
Antimony	3622029		<0.8	<0.8	NA	< 0.8	102%	70%	130%	100%	80%	120%	78%	70%	130%
Arsenic	3622029		10	9	10.5%	< 1	117%	70%	130%	100%	80%	120%	96%	70%	130%
Barium	3622029		89.6	89.8	0.2%	< 2.0	108%	70%	130%	110%	80%	120%	112%	70%	130%
Beryllium	3622029		0.5	0.5	NA	< 0.4	103%	70%	130%	105%	80%	120%	92%	70%	130%
Boron	3622029		8	8	NA	< 5	73%	70%	130%	101%	80%	120%	85%	70%	130%
Cadmium	3622029		<0.5	<0.5	NA	< 0.5	108%	70%	130%	106%	80%	120%	92%	70%	130%
Chromium	3622029		36	33	8.7%	< 5	91%	70%	130%	106%	80%	120%	102%	70%	130%
Cobalt	3622029		6.2	6.1	1.6%	< 0.5	95%	70%	130%	95%	80%	120%	94%	70%	130%
Copper	3622029		12.7	12.6	0.8%	< 1.0	92%	70%	130%	101%	80%	120%	91%	70%	130%
Lead	3622029		17	15	12.5%	< 1	102%	70%	130%	102%	80%	120%	92%	70%	130%
Molybdenum	3622029		<0.5	0.5	NA	< 0.5	113%	70%	130%	112%	80%	120%	113%	70%	130%
Nickel	3622029		11	11	0.0%	< 1	98%	70%	130%	98%	80%	120%	93%	70%	130%
Selenium	3622029		<0.8	<0.8	NA	< 0.8	130%	70%	130%	106%	80%	120%	106%	70%	130%
Silver	3622029		<0.5	<0.5	NA	< 0.5	104%	70%	130%	104%	80%	120%	95%	70%	130%
Thallium	3622029		<0.5	<0.5	NA	< 0.5	105%	70%	130%	101%	80%	120%	98%	70%	130%
Uranium	3622029		0.58	0.60	NA	< 0.50	100%	70%	130%	96%	80%	120%	97%	70%	130%
Vanadium	3622029		26.8	26.2	2.3%	< 0.4	99%	70%	130%	95%	80%	120%	97%	70%	130%
Zinc	3622029		45	44	2.2%	< 5	98%	70%	130%	99%	80%	120%	88%	70%	130%

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

Certified By:

AGAT Laboratories

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

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T875646

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS

AGAT Laboratories

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

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

Laboratory Use Only

Work Order #: 22T875646

Cooler Quantity: 1 small

Arrival Temperatures: 14.8

Custody Seal Intact: ☑ Yes ☐ No ☐ N/A

Notes: Bagged Ice

Report Information:

Company: B.I.G Consulting Inc.

Contact: Rebecca Morrison

Address: 12-5500 Tomken Road, Mississauga, ON L4W 2Z4

Phone: 416-214-4880 Fax:

Reports to be sent to:

1. Email: rmorrison@brownfieldigi.com
2. Email: tdamdar@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

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

Soil Texture (Check One) ☑ Coarse ☐ Fine

☐ Excess Soils R406 — Table (Indicate One)

☐ Regulation 558

☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm — Region

☐ Prov. Water Quality Objectives (PWQO)

☐ Other (Indicate One)

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

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

Turnaround Time (TAT) Required:

Regular TAT ☐ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT

*TAT is exclusive of weekends and statutory holidays

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

Project Information:

Project: BIGC-ENV-490D

Site Location: 217-227 Cross Avenue, Oakville, ON

Sampled By: TD

AGAT Quote #: PO:

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

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: B.I.G Consulting Inc.

Contact: Laine Dougherty

Address: 12-5500 Tomken Rd, Mississauga, ON

Email: ldougherty@brownfieldigi.com

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y / N)	O. Reg 153: Metals & Inorganics	Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	BTEX, F1-F4 PHCs	Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	O. Reg 558: Landfill Disposal Characterization TCLP: TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	ICPMS Metals							Potentially Hazardous or High Concentration (Y/N)
EX1 - S002	Mar 21/22	12:50 PM	1	S														✓							N
		AM PM																							
		AM PM																							
		AM PM																							
		AM PM																							
		AM PM																							
		AM PM																							
		AM PM																							
		AM PM																							
		AM PM																							
		AM PM																							

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Timothy Damdar [signature]	Mar 21/22	2:56pm	Anthony Dasilva [signature]	21/03	2:42
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time

Page 1 of 1

Nº:

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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T875648

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

DATE REPORTED: Mar 22, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories

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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 22T875648

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:TD

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)

DATE RECEIVED: 2022-03-21

DATE REPORTED: 2022-03-22

				SAMPLE DESCRIPTION:	EX1-S003
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2022-03-21 13:13
Parameter	Unit	G / S	RDL		3644416
Antimony	µg/g	7.5	0.8		<0.8
Arsenic	µg/g	18	1		5
Barium	µg/g	390	2.0		134
Beryllium	µg/g	4	0.4		0.9
Boron	µg/g	120	5		7
Cadmium	µg/g	1.2	0.5		<0.5
Chromium	µg/g	160	5		23
Cobalt	µg/g	22	0.5		9.4
Copper	µg/g	140	1.0		88.3
Lead	µg/g	120	1		12
Molybdenum	µg/g	6.9	0.5		1.0
Nickel	µg/g	100	1		20
Selenium	µg/g	2.4	0.8		<0.8
Silver	µg/g	20	0.5		<0.5
Thallium	µg/g	1	0.5		<0.5
Uranium	µg/g	23	0.50		2.49
Vanadium	µg/g	86	0.4		34.7
Zinc	µg/g	340	5		72

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

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 22T875648
PROJECT: BIGC-ENV-490D
ATTENTION TO: Rebecca Morrison
SAMPLING SITE:217-227 Cross Avenue, Oakville, ON
SAMPLED BY:TD

Soil Analysis

RPT Date: Mar 22, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals (Including Hydrides) (Soil)															
Antimony	3622029		<0.8	<0.8	NA	< 0.8	102%	70%	130%	100%	80%	120%	78%	70%	130%
Arsenic	3622029		10	9	10.5%	< 1	117%	70%	130%	100%	80%	120%	96%	70%	130%
Barium	3622029		89.6	89.8	0.2%	< 2.0	108%	70%	130%	110%	80%	120%	112%	70%	130%
Beryllium	3622029		0.5	0.5	NA	< 0.4	103%	70%	130%	105%	80%	120%	92%	70%	130%
Boron	3622029		8	8	NA	< 5	73%	70%	130%	101%	80%	120%	85%	70%	130%
Cadmium	3622029		<0.5	<0.5	NA	< 0.5	108%	70%	130%	106%	80%	120%	92%	70%	130%
Chromium	3622029		36	33	8.7%	< 5	91%	70%	130%	106%	80%	120%	102%	70%	130%
Cobalt	3622029		6.2	6.1	1.6%	< 0.5	95%	70%	130%	95%	80%	120%	94%	70%	130%
Copper	3622029		12.7	12.6	0.8%	< 1.0	92%	70%	130%	101%	80%	120%	91%	70%	130%
Lead	3622029		17	15	12.5%	< 1	102%	70%	130%	102%	80%	120%	92%	70%	130%
Molybdenum	3622029		<0.5	0.5	NA	< 0.5	113%	70%	130%	112%	80%	120%	113%	70%	130%
Nickel	3622029		11	11	0.0%	< 1	98%	70%	130%	98%	80%	120%	93%	70%	130%
Selenium	3622029		<0.8	<0.8	NA	< 0.8	130%	70%	130%	106%	80%	120%	106%	70%	130%
Silver	3622029		<0.5	<0.5	NA	< 0.5	104%	70%	130%	104%	80%	120%	95%	70%	130%
Thallium	3622029		<0.5	<0.5	NA	< 0.5	105%	70%	130%	101%	80%	120%	98%	70%	130%
Uranium	3622029		0.58	0.60	NA	< 0.50	100%	70%	130%	96%	80%	120%	97%	70%	130%
Vanadium	3622029		26.8	26.2	2.3%	< 0.4	99%	70%	130%	95%	80%	120%	97%	70%	130%
Zinc	3622029		45	44	2.2%	< 5	98%	70%	130%	99%	80%	120%	88%	70%	130%

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

Certified By:

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T875648

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS

AGAT Laboratories
5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webmail@agatlabs.com

Chain of Custody Record

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

Report Information:

Company: B.I.G Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road, Mississauga, ON L4W 2Z4
Phone: 416-214-4880 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email: tdamdar@brownfieldigi.com

Project Information:

Project: BIGC-ENV-490D
Site Location: 217-227 Cross Avenue, Oakville, ON
Sampled By: TD
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: B.I.G Consulting Inc.
Contact: Laine Dougherty
Address: 12-5500 Tomken Rd, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

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

☐ Excess Soils R406
Table ____ (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use
☐ Sanitary ☐ Storm
____ (Region)
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
____ (Indicate One)

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 22T875648
Cooler Quantity: 1 small
Arrival Temperatures: 4.8
Custody Seal Intact: ☑ Yes ☐ No ☐ N/A
Notes: bagged ice

Turnaround Time (TAT) Required:

Regular TAT ☐ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs, Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	ICPMS Metals	Potentially Hazardous or High Concentration (Y/N)
Ex 1 - 5003	Mar 21/22	1:13 AM PM	1	S													✓	N
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Timothy Damdar	Mar 21/22	2:56pm	Anthony Dascha	21/03	2:40
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time

Page 1 of 1
No:

AGAT Laboratories

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CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T875650

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

DATE REPORTED: Mar 22, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 22T875650

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:TD

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)

DATE RECEIVED: 2022-03-21

DATE REPORTED: 2022-03-22

				SAMPLE DESCRIPTION:	EX1-S004
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2022-03-21 13:40
Parameter	Unit	G / S	RDL	3644410	
Antimony	µg/g	7.5	0.8	<0.8	
Arsenic	µg/g	18	1	6	
Barium	µg/g	390	2.0	87.8	
Beryllium	µg/g	4	0.4	0.8	
Boron	µg/g	120	5	7	
Cadmium	µg/g	1.2	0.5	<0.5	
Chromium	µg/g	160	5	22	
Cobalt	µg/g	22	0.5	13.7	
Copper	µg/g	140	1.0	34.6	
Lead	µg/g	120	1	12	
Molybdenum	µg/g	6.9	0.5	<0.5	
Nickel	µg/g	100	1	28	
Selenium	µg/g	2.4	0.8	<0.8	
Silver	µg/g	20	0.5	<0.5	
Thallium	µg/g	1	0.5	<0.5	
Uranium	µg/g	23	0.50	0.58	
Vanadium	µg/g	86	0.4	29.7	
Zinc	µg/g	340	5	68	

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

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T875650

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:TD

Soil Analysis

RPT Date: Mar 22, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals (Including Hydrides) (Soil)															
Antimony	3622029		<0.8	<0.8	NA	< 0.8	102%	70%	130%	100%	80%	120%	78%	70%	130%
Arsenic	3622029		10	9	10.5%	< 1	117%	70%	130%	100%	80%	120%	96%	70%	130%
Barium	3622029		89.6	89.8	0.2%	< 2.0	108%	70%	130%	110%	80%	120%	112%	70%	130%
Beryllium	3622029		0.5	0.5	NA	< 0.4	103%	70%	130%	105%	80%	120%	92%	70%	130%
Boron	3622029		8	8	NA	< 5	73%	70%	130%	101%	80%	120%	85%	70%	130%
Cadmium	3622029		<0.5	<0.5	NA	< 0.5	108%	70%	130%	106%	80%	120%	92%	70%	130%
Chromium	3622029		36	33	8.7%	< 5	91%	70%	130%	106%	80%	120%	102%	70%	130%
Cobalt	3622029		6.2	6.1	1.6%	< 0.5	95%	70%	130%	95%	80%	120%	94%	70%	130%
Copper	3622029		12.7	12.6	0.8%	< 1.0	92%	70%	130%	101%	80%	120%	91%	70%	130%
Lead	3622029		17	15	12.5%	< 1	102%	70%	130%	102%	80%	120%	92%	70%	130%
Molybdenum	3622029		<0.5	0.5	NA	< 0.5	113%	70%	130%	112%	80%	120%	113%	70%	130%
Nickel	3622029		11	11	0.0%	< 1	98%	70%	130%	98%	80%	120%	93%	70%	130%
Selenium	3622029		<0.8	<0.8	NA	< 0.8	130%	70%	130%	106%	80%	120%	106%	70%	130%
Silver	3622029		<0.5	<0.5	NA	< 0.5	104%	70%	130%	104%	80%	120%	95%	70%	130%
Thallium	3622029		<0.5	<0.5	NA	< 0.5	105%	70%	130%	101%	80%	120%	98%	70%	130%
Uranium	3622029		0.58	0.60	NA	< 0.50	100%	70%	130%	96%	80%	120%	97%	70%	130%
Vanadium	3622029		26.8	26.2	2.3%	< 0.4	99%	70%	130%	95%	80%	120%	97%	70%	130%
Zinc	3622029		45	44	2.2%	< 5	98%	70%	130%	99%	80%	120%	88%	70%	130%

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

Certified By:

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CANADA L4Z 1Y2
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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T875650

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS

AGAT Laboratories
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Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: B.I.G Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road, Mississauga, ON L4W 2Z4
Phone: 416-214-4880 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email: tdamdar@brownfieldigi.com

Project Information:

Project: BIGC-ENV-490D
Site Location: 217-227 Cross Avenue, Oakville, ON
Sampled By: TD
AGAT Quote #: PO:
Please note: if quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: B.I.G Consulting Inc.
Contact: Laine Dougherty
Address: 12-5500 Tomken Rd, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

- ☑ Regulation 153/04 — Table 3 (Indicate One) — ☐ Ind/Com ☑ Res/Park ☐ Agriculture — Soil Texture (Check One): ☑ Coarse ☐ Fine
- ☐ Excess Soils R406 — Table (Indicate One)
- ☐ Regulation 558
- ☐ CCME
- ☐ Sewer Use — ☐ Sanitary ☐ Storm — Region
- ☐ Prov. Water Quality Objectives (PWQO)
- ☐ Other (Indicate One)

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 22T35650
Cooler Quantity: 1 small
Arrival Temperatures: 17.8
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: Bagged Ice

Turnaround Time (TAT) Required:

Regular TAT ☐ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs, Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	ICPMS Metals	Potentially Hazardous or High Concentration (Y/N)
EX1 - S004	Mar 21/22	1:40 AM PM	1	S													✓	N
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																
		AM PM																

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Timothy Damdar	Mar 21/22	2:56 pm	Anthony Da Silva	21/03	2:45
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time

Page 1 of 1
N°:

AGAT Laboratories

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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T875652

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

DATE REPORTED: Mar 22, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
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- The test results reported herewith relate only to the samples as received by the laboratory.
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- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 22T875652

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:TD

O. Reg. 153(511) - Metals (Including Hydrides) (Soil)

DATE RECEIVED: 2022-03-21

DATE REPORTED: 2022-03-22

				SAMPLE DESCRIPTION:	EX1-E001
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2022-03-21 13:57
Parameter	Unit	G / S	RDL		3644109
Antimony	µg/g	7.5	0.8		<0.8
Arsenic	µg/g	18	1		8
Barium	µg/g	390	2.0		113
Beryllium	µg/g	4	0.4		0.8
Boron	µg/g	120	5		14
Cadmium	µg/g	1.2	0.5		<0.5
Chromium	µg/g	160	5		25
Cobalt	µg/g	22	0.5		15.4
Copper	µg/g	140	1.0		56.3
Lead	µg/g	120	1		12
Molybdenum	µg/g	6.9	0.5		<0.5
Nickel	µg/g	100	1		32
Selenium	µg/g	2.4	0.8		<0.8
Silver	µg/g	20	0.5		<0.5
Thallium	µg/g	1	0.5		<0.5
Uranium	µg/g	23	0.50		0.67
Vanadium	µg/g	86	0.4		36.3
Zinc	µg/g	340	5		69

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

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 22T875652
PROJECT: BIGC-ENV-490D
ATTENTION TO: Rebecca Morrison
SAMPLING SITE:217-227 Cross Avenue, Oakville, ON
SAMPLED BY:TD

Soil Analysis

RPT Date: Mar 22, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals (Including Hydrides) (Soil)															
Antimony	3622029		<0.8	<0.8	NA	< 0.8	102%	70%	130%	100%	80%	120%	78%	70%	130%
Arsenic	3622029		10	9	10.5%	< 1	117%	70%	130%	100%	80%	120%	96%	70%	130%
Barium	3622029		89.6	89.8	0.2%	< 2.0	108%	70%	130%	110%	80%	120%	112%	70%	130%
Beryllium	3622029		0.5	0.5	NA	< 0.4	103%	70%	130%	105%	80%	120%	92%	70%	130%
Boron	3622029		8	8	NA	< 5	73%	70%	130%	101%	80%	120%	85%	70%	130%
Cadmium	3622029		<0.5	<0.5	NA	< 0.5	108%	70%	130%	106%	80%	120%	92%	70%	130%
Chromium	3622029		36	33	8.7%	< 5	91%	70%	130%	106%	80%	120%	102%	70%	130%
Cobalt	3622029		6.2	6.1	1.6%	< 0.5	95%	70%	130%	95%	80%	120%	94%	70%	130%
Copper	3622029		12.7	12.6	0.8%	< 1.0	92%	70%	130%	101%	80%	120%	91%	70%	130%
Lead	3622029		17	15	12.5%	< 1	102%	70%	130%	102%	80%	120%	92%	70%	130%
Molybdenum	3622029		<0.5	0.5	NA	< 0.5	113%	70%	130%	112%	80%	120%	113%	70%	130%
Nickel	3622029		11	11	0.0%	< 1	98%	70%	130%	98%	80%	120%	93%	70%	130%
Selenium	3622029		<0.8	<0.8	NA	< 0.8	130%	70%	130%	106%	80%	120%	106%	70%	130%
Silver	3622029		<0.5	<0.5	NA	< 0.5	104%	70%	130%	104%	80%	120%	95%	70%	130%
Thallium	3622029		<0.5	<0.5	NA	< 0.5	105%	70%	130%	101%	80%	120%	98%	70%	130%
Uranium	3622029		0.58	0.60	NA	< 0.50	100%	70%	130%	96%	80%	120%	97%	70%	130%
Vanadium	3622029		26.8	26.2	2.3%	< 0.4	99%	70%	130%	95%	80%	120%	97%	70%	130%
Zinc	3622029		45	44	2.2%	< 5	98%	70%	130%	99%	80%	120%	88%	70%	130%

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

Certified By:

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T875652

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS

AGAT Laboratories

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Chain of Custody Record

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

Laboratory Use Only

Work Order #: 22T 875652

Cooler Quantity: 1 small

Arrival Temperatures: 14.8

Custody Seal Intact: ☐Yes ☐No ☐N/A

Notes: bagged ice

Report Information:

Company: B.I.G Consulting Inc.

Contact: Rebecca Morrison

Address: 12-5500 Tomken Road, Mississauga, ON L4W 2Z4

Phone: 416-214-4880 Fax:

Reports to be sent to:

1. Email: rmorrison@brownfieldigi.com

2. Email: tdamdar@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

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

Soil Texture (Check One): ☑Coarse ☐Fine

☐ Excess Soils R406 — Table (Indicate One)

☐ Regulation 558

☐ CCME

☐ Sewer Use ☐Sanitary ☐Storm — Region

☐ Prov. Water Quality Objectives (PWQO)

☐ Other (Indicate One)

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

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

Turnaround Time (TAT) Required:

Regular TAT ☐ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

Please provide prior notification for rush TAT

*TAT is exclusive of weekends and statutory holidays

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

Project Information:

Project: BIGC-ENV-490D

Site Location: 217-227 Cross Avenue, Oakville, ON

Sampled By: TD

AGAT Quote #: PO:

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

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: B.I.G Consulting Inc.

Contact: Laine Dougherty

Address: 12-5500 Tomken Rd, Mississauga, ON

Email: ldougherty@brownfieldigi.com

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	BTEX, F1-F4 PHCs	Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	O. Reg 558: Landfill Disposal Characterization TCLP: TCLP: ☐ M&I ☐VOCs ☐ABNs ☐B(a)P☐PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐Metals ☐VOCs ☐SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	ICPMS Metals							Potentially Hazardous or High Concentration (Y/N)
Ex 1-E001	Mar 21/22	1:57 PM	1	S														✓							N
		AM PM																							
		AM PM																							
		AM PM																							
		AM PM																							
		AM PM																							
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		AM PM																							

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Timothy Damdar [signature]	Mar 21/22	2:56pm	Anthony Daarhe [signature]	21/03	2:45PM

Page 1 of 1

N°:

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CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T876098

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Mar 23, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

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- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

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Certificate of Analysis

AGAT WORK ORDER: 22T876098

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

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

DATE RECEIVED: 2022-03-22

DATE REPORTED: 2022-03-23

		SAMPLE DESCRIPTION:		W001
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2022-03-22 13:10
Parameter	Unit	G / S	RDL	3647953
Naphthalene	µg/g	0.6	0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05
Pyrene	µg/g	78	0.05	<0.05
Benz(a)anthracene	µg/g	0.5	0.05	<0.05
Chrysene	µg/g	7	0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05
Moisture Content	%		0.1	14.6
Surrogate	Unit	Acceptable Limits		
Naphthalene-d8	%	50-140		79
Acridine-d9	%	50-140		85
Terphenyl-d14	%	50-140		79

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

3647953 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T876098

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

Trace Organics Analysis

RPT Date: Mar 23, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	3629664		<0.05	<0.05	NA	< 0.05	112%	50%	140%	108%	50%	140%	82%	50%	140%
Acenaphthylene	3629664		<0.05	<0.05	NA	< 0.05	104%	50%	140%	110%	50%	140%	89%	50%	140%
Acenaphthene	3629664		<0.05	<0.05	NA	< 0.05	123%	50%	140%	86%	50%	140%	91%	50%	140%
Fluorene	3629664		<0.05	<0.05	NA	< 0.05	119%	50%	140%	85%	50%	140%	91%	50%	140%
Phenanthrene	3629664		<0.05	<0.05	NA	< 0.05	104%	50%	140%	77%	50%	140%	83%	50%	140%
Anthracene	3629664		<0.05	<0.05	NA	< 0.05	89%	50%	140%	87%	50%	140%	95%	50%	140%
Fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	122%	50%	140%	84%	50%	140%	90%	50%	140%
Pyrene	3629664		<0.05	<0.05	NA	< 0.05	121%	50%	140%	83%	50%	140%	90%	50%	140%
Benz(a)anthracene	3629664		<0.05	<0.05	NA	< 0.05	94%	50%	140%	68%	50%	140%	79%	50%	140%
Chrysene	3629664		<0.05	<0.05	NA	< 0.05	103%	50%	140%	83%	50%	140%	89%	50%	140%
Benzo(b)fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	114%	50%	140%	68%	50%	140%	75%	50%	140%
Benzo(k)fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	106%	50%	140%	82%	50%	140%	82%	50%	140%
Benzo(a)pyrene	3629664		<0.05	<0.05	NA	< 0.05	120%	50%	140%	75%	50%	140%	78%	50%	140%
Indeno(1,2,3-cd)pyrene	3629664		<0.05	<0.05	NA	< 0.05	99%	50%	140%	95%	50%	140%	87%	50%	140%
Dibenz(a,h)anthracene	3629664		<0.05	<0.05	NA	< 0.05	100%	50%	140%	67%	50%	140%	63%	50%	140%
Benzo(g,h,i)perylene	3629664		<0.05	<0.05	NA	< 0.05	96%	50%	140%	101%	50%	140%	67%	50%	140%

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

Certified By: N Popowkolof

AGAT Laboratories

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TEL (905)712-5100
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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T876098

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE

AGAT Laboratories
5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: B.I.G. Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5500 Tomken Rd., Mississauga, ON, L4W 2Z4
Phone: 416-214-4880 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email: tdamdar@brownfieldigi.com

Project Information:

Project: BIGC-ENV-490D
Site Location: 581 Argus Road, Oakville, ON
Sampled By: TD
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: B.I.G. Consulting
Contact: Laine Dougherty
Address: 12-5500 Tomken Road, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

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

☐ Excess Soils R406 — Table ____ (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm — ____ (Region)
☐ Prov. Water Quality Objectives (PWQO)
☐ Other ____ (Indicate One)

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 22T876098
Cooler Quantity: 1 Large
Arrival Temperatures: 9.1 | 9.3 | 9.9
Custody Seal Intact: ☑ Yes ☐ No ☐ N/A
Notes: Bagged Ice

Turnaround Time (TAT) Required:

Regular TAT ☐ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply): ____

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Y / N (Field Filtered - Metals, Hg, CrVI, DOC)	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVi, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs — Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach — SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package — pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
W001	Mar 22/22	1:10 AM PM	1	S						☑							N
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Timothy Damdar	Mar 22/22	2:26pm	Anthony Da Silva		
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time

22 MAR 22 2:53PM

Page 1 of 1

N°:

AGAT Laboratories

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

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T876100

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Mar 23, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories

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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 22T876100

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

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

DATE RECEIVED: 2022-03-22

DATE REPORTED: 2022-03-23

				SAMPLE DESCRIPTION:	E001
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2022-03-22 12:39
Parameter	Unit	G / S	RDL		3648077
Naphthalene	µg/g	0.6	0.05		<0.05
Acenaphthylene	µg/g	0.15	0.05		<0.05
Acenaphthene	µg/g	7.9	0.05		<0.05
Fluorene	µg/g	62	0.05		<0.05
Phenanthrene	µg/g	6.2	0.05		<0.05
Anthracene	µg/g	0.67	0.05		<0.05
Fluoranthene	µg/g	0.69	0.05		<0.05
Pyrene	µg/g	78	0.05		<0.05
Benz(a)anthracene	µg/g	0.5	0.05		<0.05
Chrysene	µg/g	7	0.05		<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05		<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05		<0.05
Benzo(a)pyrene	µg/g	0.3	0.05		<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05		<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05		<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05		<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05		<0.05
Moisture Content	%		0.1		16.8
Surrogate	Unit	Acceptable Limits			
Naphthalene-d8	%	50-140			79
Acridine-d9	%	50-140			85
Terphenyl-d14	%	50-140			87

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

3648077 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T876100

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

Trace Organics Analysis

RPT Date: Mar 23, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	3629664		<0.05	<0.05	NA	< 0.05	112%	50%	140%	108%	50%	140%	82%	50%	140%
Acenaphthylene	3629664		<0.05	<0.05	NA	< 0.05	104%	50%	140%	110%	50%	140%	89%	50%	140%
Acenaphthene	3629664		<0.05	<0.05	NA	< 0.05	123%	50%	140%	86%	50%	140%	91%	50%	140%
Fluorene	3629664		<0.05	<0.05	NA	< 0.05	119%	50%	140%	85%	50%	140%	91%	50%	140%
Phenanthrene	3629664		<0.05	<0.05	NA	< 0.05	104%	50%	140%	77%	50%	140%	83%	50%	140%
Anthracene	3629664		<0.05	<0.05	NA	< 0.05	89%	50%	140%	87%	50%	140%	95%	50%	140%
Fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	122%	50%	140%	84%	50%	140%	90%	50%	140%
Pyrene	3629664		<0.05	<0.05	NA	< 0.05	121%	50%	140%	83%	50%	140%	90%	50%	140%
Benz(a)anthracene	3629664		<0.05	<0.05	NA	< 0.05	94%	50%	140%	68%	50%	140%	79%	50%	140%
Chrysene	3629664		<0.05	<0.05	NA	< 0.05	103%	50%	140%	83%	50%	140%	89%	50%	140%
Benzo(b)fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	114%	50%	140%	68%	50%	140%	75%	50%	140%
Benzo(k)fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	106%	50%	140%	82%	50%	140%	82%	50%	140%
Benzo(a)pyrene	3629664		<0.05	<0.05	NA	< 0.05	120%	50%	140%	75%	50%	140%	78%	50%	140%
Indeno(1,2,3-cd)pyrene	3629664		<0.05	<0.05	NA	< 0.05	99%	50%	140%	95%	50%	140%	87%	50%	140%
Dibenz(a,h)anthracene	3629664		<0.05	<0.05	NA	< 0.05	100%	50%	140%	67%	50%	140%	63%	50%	140%
Benzo(g,h,i)perylene	3629664		<0.05	<0.05	NA	< 0.05	96%	50%	140%	101%	50%	140%	67%	50%	140%

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

Certified By: N Popowkolof

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

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T876100

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE

AGAT Laboratories
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webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: B.I.G. Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5500 Tomken Rd., Mississauga, ON, L4W 2Z4
Phone: 416-214-4880 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email: tdamdar@brownfieldigi.com

Project Information:

Project: BIGC-ENV-490D
Site Location: 581 Argus Road, Oakville, ON
Sampled By: TD
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐
Company: B.I.G. Consulting
Contact: Laine Dougherty
Address: 12-5500 Tomken Road, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

- ☑ Regulation 153/04 — Table 3 (Indicate One) — ☐ Ind/Com ☑ Res/Park ☐ Agriculture — Soil Texture (Check One): ☑ Coarse ☐ Fine
- ☐ Excess Soils R406 — Table (Indicate One)
- ☐ Regulation 558
- ☐ CCME
- ☐ Sewer Use — ☐ Sanitary ☐ Storm — Region
- ☐ Prov. Water Quality Objectives (PWQO)
- ☐ Other (Indicate One)

Is this submission for a Record of Site Condition? ☑ Yes ☐ No

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 22T876100
Cooler Quantity: 1 Large
Arrival Temperatures: 9.1 | 9.3 | 9.9
Custody Seal Intact: ☑ Yes ☐ No ☐ N/A
Notes: Bagged Ice

Turnaround Time (TAT) Required:

Regular TAT ☐ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ vOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH01	Mar 22/22	12:39 AM PM	1	S						☑							N
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Timothy Damdar	Mar 22/22	2:26 pm	Anthony Daáilva		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

22 MAR 22 2:30PM

Page 1 of 1

N°:

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CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T876102

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Mar 23, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

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Certificate of Analysis

AGAT WORK ORDER: 22T876102

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

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

DATE RECEIVED: 2022-03-22

DATE REPORTED: 2022-03-23

				SAMPLE DESCRIPTION:	F002
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2022-03-22 12:53
Parameter	Unit	G / S	RDL		3648225
Naphthalene	µg/g	0.6	0.05		<0.05
Acenaphthylene	µg/g	0.15	0.05		<0.05
Acenaphthene	µg/g	7.9	0.05		<0.05
Fluorene	µg/g	62	0.05		<0.05
Phenanthrene	µg/g	6.2	0.05		<0.05
Anthracene	µg/g	0.67	0.05		<0.05
Fluoranthene	µg/g	0.69	0.05		<0.05
Pyrene	µg/g	78	0.05		<0.05
Benz(a)anthracene	µg/g	0.5	0.05		<0.05
Chrysene	µg/g	7	0.05		<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05		<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05		<0.05
Benzo(a)pyrene	µg/g	0.3	0.05		<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05		<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05		<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05		<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05		<0.05
Moisture Content	%		0.1		15.2
Surrogate	Unit	Acceptable Limits			
Naphthalene-d8	%	50-140			89
Acridine-d9	%	50-140			85
Terphenyl-d14	%	50-140			79

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

3648225 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

AGAT Laboratories

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CANADA L4Z 1Y2
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http://www.agatlabs.com

Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T876102

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

Trace Organics Analysis

RPT Date: Mar 23, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	3629664		<0.05	<0.05	NA	< 0.05	112%	50%	140%	108%	50%	140%	82%	50%	140%
Acenaphthylene	3629664		<0.05	<0.05	NA	< 0.05	104%	50%	140%	110%	50%	140%	89%	50%	140%
Acenaphthene	3629664		<0.05	<0.05	NA	< 0.05	123%	50%	140%	86%	50%	140%	91%	50%	140%
Fluorene	3629664		<0.05	<0.05	NA	< 0.05	119%	50%	140%	85%	50%	140%	91%	50%	140%
Phenanthrene	3629664		<0.05	<0.05	NA	< 0.05	104%	50%	140%	77%	50%	140%	83%	50%	140%
Anthracene	3629664		<0.05	<0.05	NA	< 0.05	89%	50%	140%	87%	50%	140%	95%	50%	140%
Fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	122%	50%	140%	84%	50%	140%	90%	50%	140%
Pyrene	3629664		<0.05	<0.05	NA	< 0.05	121%	50%	140%	83%	50%	140%	90%	50%	140%
Benz(a)anthracene	3629664		<0.05	<0.05	NA	< 0.05	94%	50%	140%	68%	50%	140%	79%	50%	140%
Chrysene	3629664		<0.05	<0.05	NA	< 0.05	103%	50%	140%	83%	50%	140%	89%	50%	140%
Benzo(b)fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	114%	50%	140%	68%	50%	140%	75%	50%	140%
Benzo(k)fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	106%	50%	140%	82%	50%	140%	82%	50%	140%
Benzo(a)pyrene	3629664		<0.05	<0.05	NA	< 0.05	120%	50%	140%	75%	50%	140%	78%	50%	140%
Indeno(1,2,3-cd)pyrene	3629664		<0.05	<0.05	NA	< 0.05	99%	50%	140%	95%	50%	140%	87%	50%	140%
Dibenz(a,h)anthracene	3629664		<0.05	<0.05	NA	< 0.05	100%	50%	140%	67%	50%	140%	63%	50%	140%
Benzo(g,h,i)perylene	3629664		<0.05	<0.05	NA	< 0.05	96%	50%	140%	101%	50%	140%	67%	50%	140%

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

Certified By: N Popowkolof

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

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T876102

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE

AGAT Laboratories

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Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
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Chain of Custody Record

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

Laboratory Use Only

Work Order #: 22T876102

Cooler Quantity: 1 Large

Arrival Temperatures: 9.1 | 9.3 | 9.9

Custody Seal Intact: ☐ Yes ☐ No ☐ N/A

Notes: Bagged Ice

Report Information:

Company: B.I.G. Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5500 Tomken Rd., Mississauga, ON, L4W 2Z4
Phone: 416-214-4880 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email: tdamdar@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

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

☐ Excess Soils R406 — Table (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm — Region
☐ Prov. Water Quality Objectives (PWQO)
☐ Other — Indicate One

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

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

Turnaround Time (TAT) Required:

Regular TAT ☐ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Project Information:

Project: BIGC-ENV-490D
Site Location: 581 Argus Road, Oakville, ON
Sampled By: TD
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: B.I.G. Consulting
Contact: Laine Dougherty
Address: 12-5500 Tomken Road, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
F002	Mar 22/22	12:53 AM PM	1	S						☑							N
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Timothy Damdar	Mar 22/22	2:26pm	Anthony Tasilva		
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time

22 MAR 22 2:33 PM

Page 1 of 1

N°:

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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T876109

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Mar 23, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 22T876109

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2022-03-22

DATE REPORTED: 2022-03-23

		SAMPLE DESCRIPTION:		F001
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2022-03-22 12:48
Parameter	Unit	G / S	RDL	3648420
Naphthalene	µg/g	0.6	0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	0.05
Fluorene	µg/g	62	0.05	0.07
Phenanthrene	µg/g	6.2	0.05	0.45
Anthracene	µg/g	0.67	0.05	0.18
Fluoranthene	µg/g	0.69	0.05	0.47
Pyrene	µg/g	78	0.05	0.35
Benz(a)anthracene	µg/g	0.5	0.05	0.19
Chrysene	µg/g	7	0.05	0.15
Benzo(b)fluoranthene	µg/g	0.78	0.05	0.18
Benzo(k)fluoranthene	µg/g	0.78	0.05	0.05
Benzo(a)pyrene	µg/g	0.3	0.05	0.14
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	0.06
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05
Moisture Content	%		0.1	18.9
Surrogate	Unit	Acceptable Limits		
Naphthalene-d8	%	50-140		64
Acridine-d9	%	50-140		81
Terphenyl-d14	%	50-140		85

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

3648420 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T876109

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis

RPT Date: Mar 23, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	3629664		<0.05	<0.05	NA	< 0.05	112%	50%	140%	108%	50%	140%	82%	50%	140%
Acenaphthylene	3629664		<0.05	<0.05	NA	< 0.05	104%	50%	140%	110%	50%	140%	89%	50%	140%
Acenaphthene	3629664		<0.05	<0.05	NA	< 0.05	123%	50%	140%	86%	50%	140%	91%	50%	140%
Fluorene	3629664		<0.05	<0.05	NA	< 0.05	119%	50%	140%	85%	50%	140%	91%	50%	140%
Phenanthrene	3629664		<0.05	<0.05	NA	< 0.05	104%	50%	140%	77%	50%	140%	83%	50%	140%
Anthracene	3629664		<0.05	<0.05	NA	< 0.05	89%	50%	140%	87%	50%	140%	95%	50%	140%
Fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	122%	50%	140%	84%	50%	140%	90%	50%	140%
Pyrene	3629664		<0.05	<0.05	NA	< 0.05	121%	50%	140%	83%	50%	140%	90%	50%	140%
Benz(a)anthracene	3629664		<0.05	<0.05	NA	< 0.05	94%	50%	140%	68%	50%	140%	79%	50%	140%
Chrysene	3629664		<0.05	<0.05	NA	< 0.05	103%	50%	140%	83%	50%	140%	89%	50%	140%
Benzo(b)fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	114%	50%	140%	68%	50%	140%	75%	50%	140%
Benzo(k)fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	106%	50%	140%	82%	50%	140%	82%	50%	140%
Benzo(a)pyrene	3629664		<0.05	<0.05	NA	< 0.05	120%	50%	140%	75%	50%	140%	78%	50%	140%
Indeno(1,2,3-cd)pyrene	3629664		<0.05	<0.05	NA	< 0.05	99%	50%	140%	95%	50%	140%	87%	50%	140%
Dibenz(a,h)anthracene	3629664		<0.05	<0.05	NA	< 0.05	100%	50%	140%	67%	50%	140%	63%	50%	140%
Benzo(g,h,i)perylene	3629664		<0.05	<0.05	NA	< 0.05	96%	50%	140%	101%	50%	140%	67%	50%	140%

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

Certified By: N Popowkolof

AGAT Laboratories

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http://www.agatlabs.com

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T876109

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE

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Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: B.I.G. Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5500 Tomken Rd., Mississauga, ON, L4W 2Z4
Phone: 416-214-4880 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email: tdamdar@brownfieldigi.com

Project Information:

Project: BIGC-ENV-490D
Site Location: 581 Argus Road, Oakville, ON
Sampled By: TD
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐
Company: B.I.G. Consulting
Contact: Laine Dougherty
Address: 12-5500 Tomken Road, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

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

☐ Excess Soils R406
Table *Indicate One*

☐ Regulation 558

☐ CCME

☐ Sewer Use
☐ Sanitary ☐ Storm
Region

☐ Prov. Water Quality Objectives (PWQO)

☐ Other
Indicate One

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 22T876109
Cooler Quantity: 1 Large
Arrival Temperatures: 9.1 | 9.3 | 9.9
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: Bagged Ice

Turnaround Time (TAT) Required:

Regular TAT ☐ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M,I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
TP01	Mar 22/22	12:48 AM PM	1	S						☑							N
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Timothy Damdar	Mar 22/22	2:26pm	Anthony Draicher		22 MAR 22 2:33PM
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

Page 1 of 1
No:

AGAT Laboratories

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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
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416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T876112

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Mar 23, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories

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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 22T876112

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2022-03-22

DATE REPORTED: 2022-03-23

		SAMPLE DESCRIPTION:		N001
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2022-03-22 13:23
Parameter	Unit	G / S	RDL	3648391
Naphthalene	µg/g	0.6	0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05
Pyrene	µg/g	78	0.05	<0.05
Benz(a)anthracene	µg/g	0.5	0.05	<0.05
Chrysene	µg/g	7	0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05
Moisture Content	%		0.1	12.5
Surrogate	Unit	Acceptable Limits		
Naphthalene-d8	%	50-140		85
Acridine-d9	%	50-140		79
Terphenyl-d14	%	50-140		85

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

3648391 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T876112

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis

RPT Date: Mar 23, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	3629664		<0.05	<0.05	NA	< 0.05	112%	50%	140%	108%	50%	140%	82%	50%	140%
Acenaphthylene	3629664		<0.05	<0.05	NA	< 0.05	104%	50%	140%	110%	50%	140%	89%	50%	140%
Acenaphthene	3629664		<0.05	<0.05	NA	< 0.05	123%	50%	140%	86%	50%	140%	91%	50%	140%
Fluorene	3629664		<0.05	<0.05	NA	< 0.05	119%	50%	140%	85%	50%	140%	91%	50%	140%
Phenanthrene	3629664		<0.05	<0.05	NA	< 0.05	104%	50%	140%	77%	50%	140%	83%	50%	140%
Anthracene	3629664		<0.05	<0.05	NA	< 0.05	89%	50%	140%	87%	50%	140%	95%	50%	140%
Fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	122%	50%	140%	84%	50%	140%	90%	50%	140%
Pyrene	3629664		<0.05	<0.05	NA	< 0.05	121%	50%	140%	83%	50%	140%	90%	50%	140%
Benz(a)anthracene	3629664		<0.05	<0.05	NA	< 0.05	94%	50%	140%	68%	50%	140%	79%	50%	140%
Chrysene	3629664		<0.05	<0.05	NA	< 0.05	103%	50%	140%	83%	50%	140%	89%	50%	140%
Benzo(b)fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	114%	50%	140%	68%	50%	140%	75%	50%	140%
Benzo(k)fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	106%	50%	140%	82%	50%	140%	82%	50%	140%
Benzo(a)pyrene	3629664		<0.05	<0.05	NA	< 0.05	120%	50%	140%	75%	50%	140%	78%	50%	140%
Indeno(1,2,3-cd)pyrene	3629664		<0.05	<0.05	NA	< 0.05	99%	50%	140%	95%	50%	140%	87%	50%	140%
Dibenz(a,h)anthracene	3629664		<0.05	<0.05	NA	< 0.05	100%	50%	140%	67%	50%	140%	63%	50%	140%
Benzo(g,h,i)perylene	3629664		<0.05	<0.05	NA	< 0.05	96%	50%	140%	101%	50%	140%	67%	50%	140%

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

Certified By: N Popowkolof

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T876112

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE

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webearth.agatlabs.com

Chain of Custody Record

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

Laboratory Use Only

Work Order #: 22T876112

Cooler Quantity: 1 Large

Arrival Temperatures: 9.1 | 9.3 | 9.9

Custody Seal Intact: ☑ Yes ☐ No ☐ N/A

Notes: Bagged Ice

Report Information:

Company: B.I.G. Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5500 Tomken Rd., Mississauga, ON, L4W 2Z4
Phone: 416-214-4880 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email: tdamdar@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

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

☐ Excess Soils R406
Table (Indicate One)
☐ Regulation 558
☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm
(Region)
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
(Indicate One)

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

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

Turnaround Time (TAT) Required:

Regular TAT ☐ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Project Information:

Project: BIGC-ENV-490D
Site Location: 581 Argus Road, Oakville, ON
Sampled By: TD
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: B.I.G. Consulting
Contact: Laine Dougherty
Address: 12-5500 Tomken Road, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
N001	Mar 22/22	1:23 AM/PM	1	S						☑							N
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
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		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Timothy Damdar	Mar 22/22	2:26pm	Anthony Dsilva		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

22 MAR 22 2:33PM

Page 1 of 1

N°:

AGAT Laboratories

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CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T876115

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Mar 23, 2022

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may incorporate modifications from the specified reference methods to improve performance.
- All samples will be disposed of within 30 days following analysis, unless expressly agreed otherwise in writing. Please contact your Client Project Manager if you require additional sample storage time.
- AGAT's liability in connection with any delay, performance or non-performance of these services is only to the Client and does not extend to any other third party. Unless expressly agreed otherwise in writing, AGAT's liability is limited to the actual cost of the specific analysis or analyses included in the services.
- This report shall not be reproduced or distributed, in whole or in part, without the prior written consent of AGAT Laboratories.
- The test results reported herewith relate only to the samples as received by the laboratory.
- Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to, warranties of merchantability, fitness for a particular purpose, or non-infringement. AGAT assumes no responsibility for any errors or omissions in the information contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

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Certificate of Analysis

AGAT WORK ORDER: 22T876115

PROJECT: BIGC-ENV-490D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakvillle ON

SAMPLED BY:TD

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

DATE RECEIVED: 2022-03-22

DATE REPORTED: 2022-03-23

				SAMPLE DESCRIPTION:	S001
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2022-03-22 13:32
Parameter	Unit	G / S	RDL		3648783
Naphthalene	µg/g	0.6	0.05		<0.05
Acenaphthylene	µg/g	0.15	0.05		<0.05
Acenaphthene	µg/g	7.9	0.05		<0.05
Fluorene	µg/g	62	0.05		<0.05
Phenanthrene	µg/g	6.2	0.05		<0.05
Anthracene	µg/g	0.67	0.05		<0.05
Fluoranthene	µg/g	0.69	0.05		<0.05
Pyrene	µg/g	78	0.05		<0.05
Benz(a)anthracene	µg/g	0.5	0.05		<0.05
Chrysene	µg/g	7	0.05		<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05		<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05		<0.05
Benzo(a)pyrene	µg/g	0.3	0.05		<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05		<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05		<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05		<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05		<0.05
Moisture Content	%		0.1		12.2
Surrogate	Unit	Acceptable Limits			
Naphthalene-d8	%	50-140			79
Acridine-d9	%	50-140			74
Terphenyl-d14	%	50-140			89

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

3648783 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T876115

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakvillle ON

SAMPLED BY:TD

Trace Organics Analysis

RPT Date: Mar 23, 2022			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	3629664		<0.05	<0.05	NA	< 0.05	112%	50%	140%	108%	50%	140%	82%	50%	140%
Acenaphthylene	3629664		<0.05	<0.05	NA	< 0.05	104%	50%	140%	110%	50%	140%	89%	50%	140%
Acenaphthene	3629664		<0.05	<0.05	NA	< 0.05	123%	50%	140%	86%	50%	140%	91%	50%	140%
Fluorene	3629664		<0.05	<0.05	NA	< 0.05	119%	50%	140%	85%	50%	140%	91%	50%	140%
Phenanthrene	3629664		<0.05	<0.05	NA	< 0.05	104%	50%	140%	77%	50%	140%	83%	50%	140%
Anthracene	3629664		<0.05	<0.05	NA	< 0.05	89%	50%	140%	87%	50%	140%	95%	50%	140%
Fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	122%	50%	140%	84%	50%	140%	90%	50%	140%
Pyrene	3629664		<0.05	<0.05	NA	< 0.05	121%	50%	140%	83%	50%	140%	90%	50%	140%
Benz(a)anthracene	3629664		<0.05	<0.05	NA	< 0.05	94%	50%	140%	68%	50%	140%	79%	50%	140%
Chrysene	3629664		<0.05	<0.05	NA	< 0.05	103%	50%	140%	83%	50%	140%	89%	50%	140%
Benzo(b)fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	114%	50%	140%	68%	50%	140%	75%	50%	140%
Benzo(k)fluoranthene	3629664		<0.05	<0.05	NA	< 0.05	106%	50%	140%	82%	50%	140%	82%	50%	140%
Benzo(a)pyrene	3629664		<0.05	<0.05	NA	< 0.05	120%	50%	140%	75%	50%	140%	78%	50%	140%
Indeno(1,2,3-cd)pyrene	3629664		<0.05	<0.05	NA	< 0.05	99%	50%	140%	95%	50%	140%	87%	50%	140%
Dibenz(a,h)anthracene	3629664		<0.05	<0.05	NA	< 0.05	100%	50%	140%	67%	50%	140%	63%	50%	140%
Benzo(g,h,i)perylene	3629664		<0.05	<0.05	NA	< 0.05	96%	50%	140%	101%	50%	140%	67%	50%	140%

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

Certified By: N Popowkolof

AGAT Laboratories

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 22T876115

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakvillle ON

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE

AGAT Laboratories
5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: B.I.G. Consulting Inc.
Contact: Rebecca Morrison
Address: 12-5500 Tomken Rd., Mississauga, ON, L4W 2Z4
Phone: 416-214-4880 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email: tdamdar@brownfieldigi.com

Project Information:

Project: BIGC-ENV-490D
Site Location: 581 Argus Road, Oakville, ON
Sampled By: TD
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: B.I.G. Consulting
Contact: Laine Dougherty
Address: 12-5500 Tomken Road, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

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

☐ Excess Soils R406
Table *Indicate One*

☐ Regulation 558

☐ CCME

☐ Sewer Use
☐ Sanitary ☐ Storm
Region

☐ Prov. Water Quality Objectives (PWQO)

☐ Other
Indicate One

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

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

Laboratory Use Only

Work Order #: 22T876115
Cooler Quantity: 1 Large
Arrival Temperatures: 9.1 | 9.3 | 9.9
Custody Seal Intact: ☑ Yes ☐ No ☐ N/A
Notes: Bagged Ice

Turnaround Time (TAT) Required:

Regular TAT ☐ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC Y/N	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: PCBs	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
SOO1	Mar 22/22	1:32 AM/PM	1	S						☑							N
		AM/PM															
		AM/PM															
		AM/PM															
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		AM/PM															
		AM/PM															

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Timothy Damdar	Mar 22/22	2:26pm	Anthony Da Silva		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

22 MAR 22 2:33PM

Page 1 of 1

No:

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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Fernando Contento

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T700748

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Jan 25, 2021

PAGES (INCLUDING COVER): 16

VERSION*: 1

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

*Notes

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-18

DATE REPORTED: 2021-01-25

SAMPLE DESCRIPTION:				BH101-SS1	BH102-SS1	BH103-SS1	BH104-SS1	BH105-SS1
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-01-13 09:30	2021-01-13 11:00	2021-01-13 12:30	2021-01-13 14:00	2021-01-14 10:00
Parameter	Unit	G / S	RDL	1966584	1966586	1966588	1966589	1966590
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	13	8	9	10	12
Barium	µg/g	390	2	122	141	40	48	41
Beryllium	µg/g	4	0.5	0.5	0.6	<0.5	<0.5	<0.5
Boron	µg/g	120	5	10	7	12	11	9
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.33	0.58	0.20	0.18	0.21
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	<0.5	0.5	<0.5
Chromium	µg/g	160	5	18	17	7	6	6
Cobalt	µg/g	22	0.5	11.5	10.7	5.9	5.4	4.9
Copper	µg/g	140	1	493	80	33	31	44
Lead	µg/g	120	1	18	21	21	23	28
Molybdenum	µg/g	6.9	0.5	1.6	1.3	1.1	1.2	1.1
Nickel	µg/g	100	1	23	22	10	11	10
Selenium	µg/g	2.4	0.4	0.8	0.9	0.5	0.5	0.5
Silver	µg/g	20	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Thallium	µg/g	1	0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Uranium	µg/g	23	0.5	1.3	1.4	0.5	0.6	<0.5
Vanadium	µg/g	86	1	26	27	12	10	11
Zinc	µg/g	340	5	121	101	142	169	106
Chromium, Hexavalent	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide, Free	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	0.27	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	0.470	0.664	0.912	0.269	0.488
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A	4.15	6.67	8.99	1.03	6.01
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	6.18	7.66	7.83	7.83	7.91

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-18

DATE REPORTED: 2021-01-25

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

1966584-1966590 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-18

DATE REPORTED: 2021-01-25

		SAMPLE DESCRIPTION:		BH101-SS1	BH102-SS1	BH103-SS1	BH104-SS1	BH105-SS1
		SAMPLE TYPE:		Soil	Soil	Soil	Soil	Soil
		DATE SAMPLED:		2021-01-13 09:30	2021-01-13 11:00	2021-01-13 12:30	2021-01-13 14:00	2021-01-14 10:00
Parameter	Unit	G / S	RDL	1966584	1966586	1966588	1966589	1966590
Naphthalene	µg/g	0.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.5	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	7	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	16.6	13.4	7.2	8.5	10.9
Surrogate	Unit	Acceptable Limits						
Naphthalene-d8	%	50-140		84	96	96	79	115
Acenaphthene-d10	%	50-140		91	90	84	85	102
Chrysene-d12	%	50-140		83	72	70	73	85

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

1966584-1966590 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

AGAT Laboratories

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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-18

DATE REPORTED: 2021-01-25

				SAMPLE DESCRIPTION:	BH101-SS2	BH102-SS2	BH105-SS3
				SAMPLE TYPE:	Soil	Soil	Soil
				DATE SAMPLED:	2021-01-13 09:35	2021-01-13 11:05	2021-01-14 10:15
Parameter	Unit	G / S	RDL		1966585	1966587	1966591
F1 (C6 to C10)	µg/g	55	5		<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	55	5		<5	<5	<5
F2 (C10 to C16)	µg/g	98	10		<10	<10	<10
F3 (C16 to C34)	µg/g	300	50		<50	<50	<50
F4 (C34 to C50)	µg/g	2800	50		<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	2800	50		NA	NA	NA
Moisture Content	%		0.1		16.9	12.8	10.9
Surrogate	Unit	Acceptable Limits					
Terphenyl	%	60-140			77	72	94

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

1966585-1966591 Results are based on sample dry weight.
The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified without the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

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Certificate of Analysis

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-18

DATE REPORTED: 2021-01-25

SAMPLE DESCRIPTION:				BH101-SS2	BH102-SS2	BH105-SS3
SAMPLE TYPE:				Soil	Soil	Soil
DATE SAMPLED:				2021-01-13 09:35	2021-01-13 11:05	2021-01-14 10:15
Parameter	Unit	G / S	RDL	1966585	1966587	1966591
Dichlorodifluoromethane	µg/g	16	0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.02	0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05	<0.05	<0.05
Acetone	ug/g	16	0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.05	0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	0.1	0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	0.084	0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	0.75	0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	16	0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.05	0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	0.38	0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.05	0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.21	0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.05	0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.061	0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	1.7	0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04
Toluene	ug/g	2.3	0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	0.28	0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.058	0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05	<0.05	<0.05

Certified By: NPopowkolof

AGAT Laboratories

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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-18

DATE REPORTED: 2021-01-25

				SAMPLE DESCRIPTION:	BH101-SS2	BH102-SS2	BH105-SS3
				SAMPLE TYPE:	Soil	Soil	Soil
				DATE SAMPLED:	2021-01-13 09:35	2021-01-13 11:05	2021-01-14 10:15
Parameter	Unit	G / S	RDL		1966585	1966587	1966591
m & p-Xylene	ug/g		0.05		<0.05	<0.05	<0.05
Bromoform	ug/g	0.27	0.05		<0.05	<0.05	<0.05
Styrene	ug/g	0.7	0.05		<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05		<0.05	<0.05	<0.05
o-Xylene	ug/g		0.05		<0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	4.8	0.05		<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.083	0.05		<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.05		<0.05	<0.05	<0.05
Xylenes (Total)	ug/g	3.1	0.05		<0.05	<0.05	<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g	0.05	0.04		<0.04	<0.04	<0.04
n-Hexane	µg/g	2.8	0.05		<0.05	<0.05	<0.05
Moisture Content	%		0.1		16.9	12.8	10.9
Surrogate	Unit	Acceptable Limits					
Toluene-d8	% Recovery	50-140			110	108	103
4-Bromofluorobenzene	% Recovery	50-140			81	81	80

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

1966585-1966591 The sample was analyzed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

AGAT Laboratories

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

Exceedance Summary

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
1966584	BH101-SS1	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Copper	µg/g	140	493
1966586	BH102-SS1	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	6.67
1966588	BH103-SS1	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	mS/cm	0.7	0.912
1966588	BH103-SS1	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	8.99
1966590	BH105-SS1	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	6.01

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T700748
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:
SAMPLED BY:

Soil Analysis

RPT Date: Jan 25, 2021

PARAMETER	Batch	Sample Id	DUPLICATE Dup #1	DUPLICATE Dup #2	DUPLICATE RPD	Method Blank	REFERENCE MATERIAL Measured Value	REFERENCE MATERIAL Acceptable Limits Lower	REFERENCE MATERIAL Acceptable Limits Upper	METHOD BLANK SPIKE Recovery	METHOD BLANK SPIKE Acceptable Limits Lower	METHOD BLANK SPIKE Acceptable Limits Upper	MATRIX SPIKE Recovery	MATRIX SPIKE Acceptable Limits Lower	MATRIX SPIKE Acceptable Limits Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	1954940		<0.8	<0.8	NA	< 0.8	113%	70%	130%	102%	80%	120%	93%	70%	130%
Arsenic	1954940		4	4	NA	< 1	99%	70%	130%	97%	80%	120%	108%	70%	130%
Barium	1954940		59	61	3.3%	< 2	106%	70%	130%	97%	80%	120%	104%	70%	130%
Beryllium	1954940		<0.5	<0.5	NA	< 0.5	74%	70%	130%	117%	80%	120%	96%	70%	130%
Boron	1954940		8	8	NA	< 5	100%	70%	130%	109%	80%	120%	91%	70%	130%
Boron (Hot Water Soluble)	1966584	1966584	0.33	0.35	NA	< 0.10	95%	60%	140%	101%	70%	130%	98%	60%	140%
Cadmium	1954940		<0.5	<0.5	NA	< 0.5	105%	70%	130%	101%	80%	120%	97%	70%	130%
Chromium	1954940		23	23	NA	< 5	86%	70%	130%	102%	80%	120%	102%	70%	130%
Cobalt	1954940		3.1	3.0	3.3%	< 0.5	87%	70%	130%	95%	80%	120%	98%	70%	130%
Copper	1954940		8	8	0.0%	< 1	87%	70%	130%	101%	80%	120%	93%	70%	130%
Lead	1954940		8	8	0.0%	< 1	105%	70%	130%	95%	80%	120%	90%	70%	130%
Molybdenum	1954940		<0.5	<0.5	NA	< 0.5	90%	70%	130%	97%	80%	120%	99%	70%	130%
Nickel	1954940		6	6	0.0%	< 1	88%	70%	130%	100%	80%	120%	96%	70%	130%
Selenium	1954940		0.5	0.5	NA	< 0.4	116%	70%	130%	101%	80%	120%	101%	70%	130%
Silver	1954940		<0.2	<0.2	NA	< 0.2	104%	70%	130%	101%	80%	120%	88%	70%	130%
Thallium	1954940		<0.4	<0.4	NA	< 0.4	101%	70%	130%	102%	80%	120%	97%	70%	130%
Uranium	1954940		<0.5	<0.5	NA	< 0.5	101%	70%	130%	100%	80%	120%	105%	70%	130%
Vanadium	1954940		13	13	0.0%	< 1	87%	70%	130%	91%	80%	120%	100%	70%	130%
Zinc	1954940		29	29	0.0%	< 5	93%	70%	130%	101%	80%	120%	93%	70%	130%
Chromium, Hexavalent	1954829		<0.2	<0.2	NA	< 0.2	99%	70%	130%	93%	80%	120%	91%	70%	130%
Cyanide, Free	1982741		< 0.040	< 0.040	NA	< 0.040	103%	70%	130%	94%	80%	120%	110%	70%	130%
Mercury	1954940		0.25	0.25	NA	< 0.10	100%	70%	130%	101%	80%	120%	94%	70%	130%
Electrical Conductivity (2:1)	1966584	1966584	0.470	0.436	7.5%	< 0.005	103%	80%	120%						
Sodium Adsorption Ratio (2:1) (Calc.)	1966584	1966584	4.15	4.17	0.5%	NA									
pH, 2:1 CaCl2 Extraction	1963928		6.87	7.00	1.9%	NA	100%	80%	120%						

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

Certified By:

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T700748
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:
SAMPLED BY:

Trace Organics Analysis

RPT Date: Jan 25, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	1966588	1966588	<0.05	<0.05	NA	< 0.05	118%	50%	140%	83%	50%	140%	86%	50%	140%
Acenaphthylene	1966588	1966588	<0.05	<0.05	NA	< 0.05	111%	50%	140%	78%	50%	140%	86%	50%	140%
Acenaphthene	1966588	1966588	<0.05	<0.05	NA	< 0.05	111%	50%	140%	81%	50%	140%	89%	50%	140%
Fluorene	1966588	1966588	<0.05	<0.05	NA	< 0.05	107%	50%	140%	88%	50%	140%	97%	50%	140%
Phenanthrene	1966588	1966588	<0.05	<0.05	NA	< 0.05	97%	50%	140%	71%	50%	140%	80%	50%	140%
Anthracene	1966588	1966588	<0.05	<0.05	NA	< 0.05	108%	50%	140%	79%	50%	140%	98%	50%	140%
Fluoranthene	1966588	1966588	<0.05	<0.05	NA	< 0.05	108%	50%	140%	81%	50%	140%	89%	50%	140%
Pyrene	1966588	1966588	<0.05	<0.05	NA	< 0.05	101%	50%	140%	75%	50%	140%	83%	50%	140%
Benz(a)anthracene	1966588	1966588	<0.05	<0.05	NA	< 0.05	68%	50%	140%	82%	50%	140%	69%	50%	140%
Chrysene	1966588	1966588	<0.05	<0.05	NA	< 0.05	81%	50%	140%	73%	50%	140%	77%	50%	140%
Benzo(b)fluoranthene	1966588	1966588	<0.05	<0.05	NA	< 0.05	67%	50%	140%	76%	50%	140%	85%	50%	140%
Benzo(k)fluoranthene	1966588	1966588	<0.05	<0.05	NA	< 0.05	99%	50%	140%	111%	50%	140%	97%	50%	140%
Benzo(a)pyrene	1966588	1966588	<0.05	<0.05	NA	< 0.05	71%	50%	140%	73%	50%	140%	82%	50%	140%
Indeno(1,2,3-cd)pyrene	1966588	1966588	<0.05	<0.05	NA	< 0.05	65%	50%	140%	82%	50%	140%	79%	50%	140%
Dibenz(a,h)anthracene	1966588	1966588	<0.05	<0.05	NA	< 0.05	66%	50%	140%	78%	50%	140%	92%	50%	140%
Benzo(g,h,i)perylene	1966588	1966588	<0.05	<0.05	NA	< 0.05	76%	50%	140%	75%	50%	140%	69%	50%	140%
O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Soil)															
F1 (C6 to C10)	1966591	1966591	< 5	< 5	NA	< 5	86%	60%	140%	108%	60%	140%	119%	60%	140%
F2 (C10 to C16)	1977071		< 10	< 10	NA	< 10	90%	60%	140%	109%	60%	140%	97%	60%	140%
F3 (C16 to C34)	1977071		< 50	< 50	NA	< 50	90%	60%	140%	110%	60%	140%	79%	60%	140%
F4 (C34 to C50)	1977071		< 50	< 50	NA	< 50	112%	60%	140%	96%	60%	140%	96%	60%	140%
O. Reg. 153(511) - VOCs (Soil)															
Dichlorodifluoromethane	1966591	1966591	<0.05	<0.05	NA	< 0.05	76%	50%	140%	73%	50%	140%	87%	50%	140%
Vinyl Chloride	1966591	1966591	<0.02	<0.02	NA	< 0.02	96%	50%	140%	77%	50%	140%	87%	50%	140%
Bromomethane	1966591	1966591	<0.05	<0.05	NA	< 0.05	105%	50%	140%	107%	50%	140%	73%	50%	140%
Trichlorofluoromethane	1966591	1966591	<0.05	<0.05	NA	< 0.05	102%	50%	140%	71%	50%	140%	74%	50%	140%
Acetone	1966591	1966591	<0.50	<0.50	NA	< 0.50	81%	50%	140%	97%	50%	140%	100%	50%	140%
1,1-Dichloroethylene	1966591	1966591	<0.05	<0.05	NA	< 0.05	77%	50%	140%	109%	60%	130%	97%	50%	140%
Methylene Chloride	1966591	1966591	<0.05	<0.05	NA	< 0.05	99%	50%	140%	81%	60%	130%	82%	50%	140%
Trans- 1,2-Dichloroethylene	1966591	1966591	<0.05	<0.05	NA	< 0.05	88%	50%	140%	93%	60%	130%	82%	50%	140%
Methyl tert-butyl Ether	1966591	1966591	<0.05	<0.05	NA	< 0.05	78%	50%	140%	80%	60%	130%	76%	50%	140%
1,1-Dichloroethane	1966591	1966591	<0.02	<0.02	NA	< 0.02	96%	50%	140%	90%	60%	130%	83%	50%	140%
Methyl Ethyl Ketone	1966591	1966591	<0.50	<0.50	NA	< 0.50	87%	50%	140%	80%	50%	140%	86%	50%	140%
Cis- 1,2-Dichloroethylene	1966591	1966591	<0.02	<0.02	NA	< 0.02	86%	50%	140%	70%	60%	130%	78%	50%	140%
Chloroform	1966591	1966591	<0.04	<0.04	NA	< 0.04	88%	50%	140%	73%	60%	130%	106%	50%	140%
1,2-Dichloroethane	1966591	1966591	<0.03	<0.03	NA	< 0.03	92%	50%	140%	92%	60%	130%	84%	50%	140%
1,1,1-Trichloroethane	1966591	1966591	<0.05	<0.05	NA	< 0.05	80%	50%	140%	102%	60%	130%	73%	50%	140%
Carbon Tetrachloride	1966591	1966591	<0.05	<0.05	NA	< 0.05	72%	50%	140%	79%	60%	130%	83%	50%	140%

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T700748
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:
SAMPLED BY:

Trace Organics Analysis (Continued)

RPT Date: Jan 25, 2021

PARAMETER	Batch	Sample Id	DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
			Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
Benzene	1966591	1966591	<0.02	<0.02	NA	< 0.02	84%	50%	140%	85%	60%	130%	70%	50%	140%
1,2-Dichloropropane	1966591	1966591	<0.03	<0.03	NA	< 0.03	75%	50%	140%	83%	60%	130%	79%	50%	140%
Trichloroethylene	1966591	1966591	<0.03	<0.03	NA	< 0.03	84%	50%	140%	90%	60%	130%	70%	50%	140%
Bromodichloromethane	1966591	1966591	<0.05	<0.05	NA	< 0.05	71%	50%	140%	71%	60%	130%	75%	50%	140%
Methyl Isobutyl Ketone	1966591	1966591	<0.50	<0.50	NA	< 0.50	80%	50%	140%	96%	50%	140%	88%	50%	140%
1,1,2-Trichloroethane	1966591	1966591	<0.04	<0.04	NA	< 0.04	99%	50%	140%	94%	60%	130%	105%	50%	140%
Toluene	1966591	1966591	<0.05	<0.05	NA	< 0.05	93%	50%	140%	73%	60%	130%	74%	50%	140%
Dibromochloromethane	1966591	1966591	<0.05	<0.05	NA	< 0.05	75%	50%	140%	79%	60%	130%	74%	50%	140%
Ethylene Dibromide	1966591	1966591	<0.04	<0.04	NA	< 0.04	88%	50%	140%	82%	60%	130%	96%	50%	140%
Tetrachloroethylene	1966591	1966591	<0.05	<0.05	NA	< 0.05	85%	50%	140%	71%	60%	130%	75%	50%	140%
1,1,1,2-Tetrachloroethane	1966591	1966591	<0.04	<0.04	NA	< 0.04	75%	50%	140%	76%	60%	130%	76%	50%	140%
Chlorobenzene	1966591	1966591	<0.05	<0.05	NA	< 0.05	92%	50%	140%	77%	60%	130%	82%	50%	140%
Ethylbenzene	1966591	1966591	<0.05	<0.05	NA	< 0.05	86%	50%	140%	71%	60%	130%	88%	50%	140%
m & p-Xylene	1966591	1966591	<0.05	<0.05	NA	< 0.05	94%	50%	140%	76%	60%	130%	87%	50%	140%
Bromoform	1966591	1966591	<0.05	<0.05	NA	< 0.05	72%	50%	140%	73%	60%	130%	81%	50%	140%
Styrene	1966591	1966591	<0.05	<0.05	NA	< 0.05	81%	50%	140%	84%	60%	130%	83%	50%	140%
1,1,2,2-Tetrachloroethane	1966591	1966591	<0.05	<0.05	NA	< 0.05	109%	50%	140%	109%	60%	130%	118%	50%	140%
o-Xylene	1966591	1966591	<0.05	<0.05	NA	< 0.05	95%	50%	140%	77%	60%	130%	79%	50%	140%
1,3-Dichlorobenzene	1966591	1966591	<0.05	<0.05	NA	< 0.05	98%	50%	140%	83%	60%	130%	92%	50%	140%
1,4-Dichlorobenzene	1966591	1966591	<0.05	<0.05	NA	< 0.05	99%	50%	140%	85%	60%	130%	95%	50%	140%
1,2-Dichlorobenzene	1966591	1966591	<0.05	<0.05	NA	< 0.05	99%	50%	140%	85%	60%	130%	96%	50%	140%
n-Hexane	1966591	1966591	<0.05	<0.05	NA	< 0.05	71%	50%	140%	74%	60%	130%	74%	50%	140%

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

Certified By: N Popowkof

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6036	modified from MSA PART 3, CH 14 and SM 2510 B	EC METER
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6031	modified from EPA 9045D and MCKEAGUE 3.11	PH METER

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	ORG-91-5106	Tier 1 Method	BALANCE
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene-d10	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene-d12	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
F1 (C6 to C10)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F2 (C10 to C16)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F4 (C34 to C50)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Dichlorodifluoromethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Bromoform	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5002	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Moisture Content		Tier 1 method	BALANCE

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Chain of Custody Record

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

Laboratory Use Only

Work Order #: 21T700748

Cooler Quantity: 1

Arrival Temperatures: 2.3 | 2.4 | 2.6

Custody Seal Intact: ☑ Yes ☐ No ☐ N/A

Notes: bagged ice

Report Information:

Company: BLK consulting Inc
Contact: Fernando Contento
Address: 5560 Tomken Rd. Unit 12 Mississauga
Phone: 647 966-6894 Fax:
Reports to be sent to:
1. Email: FContento@brownfieldgi.com
2. Email:

Project Information:

Project: BLK - ENV - 349B
Site Location: 227 Cross Av.
Sampled By: TVH
AGAT ID #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: BLK Consulting Inc
Contact: Laine Dougherty
Address: 5500 Tomken Rd. Unit 12, Mississauga
Email: LDougherty@brownfieldgi.com

Regulatory Requirements:

(Please check all applicable boxes)

☑ Regulation 153/04
Table 2 (Indicate One)
☐ Ind/Com
☑ Res/Park
☐ Agriculture

Soil Texture (Check One)
☑ Coarse
☐ Fine

☐ Excess Soils R406
Table ____ (Indicate One)

☐ Regulation 558

☐ CCME

☐ Sewer Use ☐ Sanitary ☐ Storm
Region

☐ Prov. Water Quality Objectives (PWQO)

☐ Other
Indicate One

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

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

Turnaround Time (TAT) Required:

Regular TAT (Most Analysis) ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics	O. Reg 153: Metals - ☐ CrVI, ☐ Hg, ☐ HWSB	O. Reg 153: BTEX, F1-F4 PHCs; Analyze F4G if required ☐ Yes ☐ No	O. Reg 153: PAHs	O. Reg 153: Total PCBs ☐ Aroclor	O. Reg 153: VOC	O. Reg 558: Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 406: Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	O. Reg 406: Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH101-SS1	Jan 13, 2021	9:30 AM/PM	2	S			✓			✓							
BH101-SS2	↓	9:35 AM/PM	3						✓			✓					
BH102-SS1		11:00 AM/PM	2				✓			✓							
BH102-SS2		11:05 AM/PM	3						✓			✓					
BH103-SS1		12:30 AM/PM	2				✓			✓							
BH104-SS1	↓	2:00 AM/PM	2				✓			✓							
BH105-SS1	Jan 14, 2021	10:00 AM/PM	2				✓			✓							
BH105-SS3	↓	10:15 AM/PM	3	↓					✓			✓					

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Travis Van Holst Travis Van Holst	Jan 18, 2021	4:10 pm	Lakshanya		
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time

'21 JAN 18 4:05PM

Page 1 of 1

N°: T114666

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CANADA L4Z 1Y2
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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Fernando Contento

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T703878

SOIL ANALYSIS REVIEWED BY: Yris Verastegui, Report Reviewer

TRACE ORGANICS REVIEWED BY: Pinkal Patel, Report Reviewer

DATE REPORTED: Feb 02, 2021

PAGES (INCLUDING COVER): 19

VERSION*: 1

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

*Notes

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Certificate of Analysis

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

SAMPLE DESCRIPTION:				BH106-SS2	BH107-SS1	BH108-SS1	BH109-SS1	BH110-SS1	BH111-SS1	BH112-SS1	BH113-SS1
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-01-20 08:45	2021-01-20 10:10	2021-01-20 11:45	2021-01-21 13:30	2021-01-21 09:15	2021-01-21 11:00	2021-01-21 13:00	2021-01-21 15:00
Parameter	Unit	G / S	RDL	2011445	2011446	2011447	2011448	2011449	2011451	2011452	2011454
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	7	6	7	7	7	7	6	10
Barium	µg/g	390	2.0	72.2	99.3	78.2	92.3	46.4	65.6	89.5	109
Beryllium	µg/g	4	0.4	0.6	0.6	0.6	0.6	<0.4	0.4	0.6	0.4
Boron	µg/g	120	5	10	7	8	9	9	10	9	9
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.62	0.37	0.39	0.28	0.29	0.31	0.64	0.57
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	5	22	23	23	24	10	17	24	19
Cobalt	µg/g	22	0.5	13.6	14.2	14.3	14.0	6.0	9.1	14.6	10.5
Copper	µg/g	140	1.0	188	46.9	37.9	43.3	25.4	47.7	37.4	62.3
Lead	µg/g	120	1	12	13	17	14	19	17	14	47
Molybdenum	µg/g	6.9	0.5	0.7	<0.5	0.5	<0.5	0.9	1.0	<0.5	0.9
Nickel	µg/g	100	1	27	30	29	30	11	21	30	22
Selenium	µg/g	2.4	0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g	20	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.78	0.73	0.80	0.66	0.51	0.77	1.05	0.85
Vanadium	µg/g	86	0.4	29.8	32.6	29.2	33.1	15.1	25.3	31.7	27.0
Zinc	µg/g	340	5	66	68	74	75	77	84	74	96
Chromium, Hexavalent	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide, Free	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	0.27	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	0.402	0.386	0.331	0.362	0.648	0.444	0.267	0.808
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A	4.81	4.25	1.83	2.08	1.33	1.99	0.911	1.25
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	7.93	7.80	7.70	7.76	7.99	7.70	7.67	7.70

Certified By: Iris Verástegui

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Certificate of Analysis

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

SAMPLE DESCRIPTION:				BH114-SS1	BH114-SS2	BH115-SS1	BH115-SS2
SAMPLE TYPE:				Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-01-21 16:00	2021-01-21 16:15	2021-01-22 09:00	2021-01-22 09:15
Parameter	Unit	G / S	RDL	2011456	2011457	2011458	2011459
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	7	6	7	6
Barium	µg/g	390	2.0	85.2	76.5	67.5	62.4
Beryllium	µg/g	4	0.4	0.5	0.5	<0.4	0.6
Boron	µg/g	120	5	8	7	10	8
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.54	0.45	0.54	0.31
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	0.7	<0.5
Chromium	µg/g	160	5	19	21	10	23
Cobalt	µg/g	22	0.5	9.7	12.1	5.8	15.0
Copper	µg/g	140	1.0	70.7	59.7	37.2	34.6
Lead	µg/g	120	1	29	13	34	16
Molybdenum	µg/g	6.9	0.5	0.8	0.7	1.1	<0.5
Nickel	µg/g	100	1	22	26	12	30
Selenium	µg/g	2.4	0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g	20	0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.86	0.77	0.80	0.59
Vanadium	µg/g	86	0.4	26.4	31.4	16.6	29.3
Zinc	µg/g	340	5	81	62	238	72
Chromium, Hexavalent	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2
Cyanide, Free	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	0.27	0.10	<0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	0.319	0.371	1.63	0.248
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A	0.595	0.864	0.332	1.24
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	7.66	7.60	7.66	7.71

Certified By: Iris Verástegui

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2011445-2011459 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Iris Verástegui

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

SAMPLE DESCRIPTION:				BH106-SS2	BH107-SS1	BH108-SS1	BH109-SS1	BH110-SS1	BH111-SS1	BH112-SS1	BH113-SS1
SAMPLE TYPE:				Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-01-20 08:45	2021-01-20 10:10	2021-01-20 11:45	2021-01-21 13:30	2021-01-21 09:15	2021-01-21 11:00	2021-01-21 13:00	2021-01-21 15:00
Parameter	Unit	G / S	RDL	2011445	2011446	2011447	2011448	2011449	2011451	2011452	2011454
Naphthalene	µg/g	0.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.5	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	7	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	13.1	11.6	9.8	10.9	6.2	8.4	11.0	10.6
Surrogate	Unit	Acceptable Limits									
Naphthalene-d8	%	50-140		91	80	77	86	85	81	92	85
Acenaphthene-d10	%	50-140		80	82	82	80	79	77	87	79
Chrysene-d12	%	50-140		110	98	100	100	119	110	116	110

Certified By:

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AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

SAMPLE DESCRIPTION:				BH114-SS1	BH114-SS2	BH115-SS1	BH115-SS2
SAMPLE TYPE:				Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-01-21 16:00	2021-01-21 16:15	2021-01-22 09:00	2021-01-22 09:15
Parameter	Unit	G / S	RDL	2011456	2011457	2011458	2011459
Naphthalene	µg/g	0.6	0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05	<0.05	<0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05	<0.05	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05	<0.05	<0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	<0.05	<0.05	<0.05	<0.05
Pyrene	µg/g	78	0.05	<0.05	<0.05	<0.05	<0.05
Benz(a)anthracene	µg/g	0.5	0.05	<0.05	<0.05	<0.05	<0.05
Chrysene	µg/g	7	0.05	<0.05	<0.05	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05	<0.05	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05	<0.05	<0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	8.3	13.7	10.1	13.6
Surrogate	Unit	Acceptable Limits					
Naphthalene-d8	%	50-140		88	79	96	111
Acenaphthene-d10	%	50-140		83	75	93	85
Chrysene-d12	%	50-140		110	100	100	100

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2011445-2011459 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Pinkal Patel

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Certificate of Analysis

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

SAMPLE DESCRIPTION:				BH106-SS1	BH110-SS2	BH112-SS2	BH113-SS2
SAMPLE TYPE:				Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-01-20 08:30	2021-01-21 09:30	2021-01-21 13:15	2021-01-21 15:15
Parameter	Unit	G / S	RDL	2011444	2011450	2011453	2011455
F1 (C6 to C10)	µg/g	55	5	<5	<5	<5	<5
F1 (C6 to C10) minus BTEX	µg/g	55	5	<5	<5	<5	<5
F2 (C10 to C16)	µg/g	98	10	<10	<10	<10	<10
F3 (C16 to C34)	µg/g	300	50	<50	<50	<50	<50
F4 (C34 to C50)	µg/g	2800	50	<50	<50	<50	<50
Gravimetric Heavy Hydrocarbons	µg/g	2800	50	NA	NA	NA	NA
Moisture Content	%		0.1	11.9	12.0	11.1	11.6
Surrogate	Unit	Acceptable Limits					
Terphenyl	%	60-140		86	82	79	87

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2011444-2011455 Results are based on sample dry weight.
The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified without the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

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AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

SAMPLE DESCRIPTION:				BH106-SS1	BH110-SS2	BH112-SS2	BH113-SS2
SAMPLE TYPE:				Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-01-20 08:30	2021-01-21 09:30	2021-01-21 13:15	2021-01-21 15:15
Parameter	Unit	G / S	RDL	2011444	2011450	2011453	2011455
Dichlorodifluoromethane	µg/g	16	0.05	<0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.02	0.02	<0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05	<0.05	<0.05	<0.05
Acetone	ug/g	16	0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	0.1	0.05	<0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	0.084	0.05	<0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	0.75	0.05	<0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	16	0.50	<0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	0.38	0.05	<0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.05	0.05	<0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.21	0.02	<0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.05	0.03	<0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.061	0.03	<0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	<0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	1.7	0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04
Toluene	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	<0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	0.28	0.05	<0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.058	0.04	<0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05	<0.05	<0.05	<0.05

Certified By:

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AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

DATE RECEIVED: 2021-01-26

DATE REPORTED: 2021-02-02

				SAMPLE DESCRIPTION:	BH106-SS1	BH110-SS2	BH112-SS2	BH113-SS2
				SAMPLE TYPE:	Soil	Soil	Soil	Soil
				DATE SAMPLED:	2021-01-20 08:30	2021-01-21 09:30	2021-01-21 13:15	2021-01-21 15:15
Parameter	Unit	G / S	RDL		2011444	2011450	2011453	2011455
m & p-Xylene	ug/g		0.05		<0.05	<0.05	<0.05	<0.05
Bromoform	ug/g	0.27	0.05		<0.05	<0.05	<0.05	<0.05
Styrene	ug/g	0.7	0.05		<0.05	<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05		<0.05	<0.05	<0.05	<0.05
o-Xylene	ug/g		0.05		<0.05	<0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	4.8	0.05		<0.05	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.083	0.05		<0.05	<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.05		<0.05	<0.05	<0.05	<0.05
Xylenes (Total)	ug/g	3.1	0.05		<0.05	<0.05	<0.05	<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g	0.05	0.04		<0.04	<0.04	<0.04	<0.04
n-Hexane	µg/g	2.8	0.05		<0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1		11.9	12.0	11.1	11.6
Surrogate	Unit	Acceptable Limits						
Toluene-d8	% Recovery	50-140			106	105	104	102
4-Bromofluorobenzene	% Recovery	50-140			92	90	91	91

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2011444-2011455 The sample was analyzed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Exceedance Summary

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	UNIT	GUIDEVALUE	RESULT
2011445	BH106-SS2	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Copper	µg/g	140	188
2011454	BH113-SS1	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	mS/cm	0.7	0.808
2011458	BH115-SS1	ON T2 S RPI CT	O. Reg. 153(511) - Metals & Inorganics (Soil)	Electrical Conductivity (2:1)	mS/cm	0.7	1.63

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T703878
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:
SAMPLED BY:

Soil Analysis

RPT Date: Feb 02, 2021

PARAMETER	Batch	Sample Id	DUPLICATE Dup #1	Dup #2	RPD	Method Blank	REFERENCE MATERIAL Measured Value	Acceptable Limits Lower	Upper	METHOD BLANK SPIKE Recovery	Acceptable Limits Lower	Upper	MATRIX SPIKE Recovery	Acceptable Limits Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	2011458	2011458	<0.8	<0.8	NA	< 0.8	97%	70%	130%	101%	80%	120%	88%	70%	130%
Arsenic	2011458	2011458	7	8	13.3%	< 1	109%	70%	130%	99%	80%	120%	104%	70%	130%
Barium	2011458	2011458	67.5	66.1	2.1%	< 2.0	100%	70%	130%	96%	80%	120%	106%	70%	130%
Beryllium	2011458	2011458	<0.4	<0.4	NA	< 0.4	95%	70%	130%	102%	80%	120%	81%	70%	130%
Boron	2011458	2011458	10	10	NA	< 5	101%	70%	130%	97%	80%	120%	74%	70%	130%
Boron (Hot Water Soluble)	2011458	2011458	0.54	0.58	7.1%	< 0.10	99%	60%	140%	102%	70%	130%	101%	60%	140%
Cadmium	2011458	2011458	0.7	<0.5	NA	< 0.5	104%	70%	130%	98%	80%	120%	94%	70%	130%
Chromium	2011458	2011458	10	10	NA	< 5	97%	70%	130%	98%	80%	120%	100%	70%	130%
Cobalt	2011458	2011458	5.8	5.8	0.0%	< 0.5	95%	70%	130%	100%	80%	120%	100%	70%	130%
Copper	2011458	2011458	37.2	36.8	1.1%	< 1.0	90%	70%	130%	105%	80%	120%	99%	70%	130%
Lead	2011458	2011458	34	37	8.5%	< 1	105%	70%	130%	98%	80%	120%	94%	70%	130%
Molybdenum	2011458	2011458	1.1	1.2	NA	< 0.5	100%	70%	130%	95%	80%	120%	104%	70%	130%
Nickel	2011458	2011458	12	11	8.7%	< 1	95%	70%	130%	102%	80%	120%	93%	70%	130%
Selenium	2011458	2011458	<0.8	<0.8	NA	< 0.8	113%	70%	130%	93%	80%	120%	102%	70%	130%
Silver	2011458	2011458	<0.5	<0.5	NA	< 0.5	94%	70%	130%	106%	80%	120%	91%	70%	130%
Thallium	2011458	2011458	<0.5	<0.5	NA	< 0.5	106%	70%	130%	97%	80%	120%	95%	70%	130%
Uranium	2011458	2011458	0.80	0.85	NA	< 0.50	112%	70%	130%	100%	80%	120%	103%	70%	130%
Vanadium	2011458	2011458	16.6	16.5	0.6%	< 0.4	94%	70%	130%	94%	80%	120%	106%	70%	130%
Zinc	2011458	2011458	238	199	17.8%	< 5	99%	70%	130%	105%	80%	120%	118%	70%	130%
Chromium, Hexavalent	2015817		<0.2	<0.2	NA	< 0.2	93%	70%	130%	96%	80%	120%	94%	70%	130%
Cyanide, Free	2011445	2011445	<0.040	<0.040	NA	< 0.040	92%	70%	130%	92%	80%	120%	97%	70%	130%
Mercury	2011458	2011458	<0.10	<0.10	NA	< 0.10	99%	70%	130%	97%	80%	120%	93%	70%	130%
Electrical Conductivity (2:1)	2023492		0.191	0.191	0.0%	< 0.005	109%	80%	120%						
Sodium Adsorption Ratio (2:1) (Calc.)	2011458	2011458	0.332	0.358	7.5%	N/A	NA								
pH, 2:1 CaCl2 Extraction	2011445	2011445	7.93	7.96	0.4%	NA	100%	80%	120%						

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

Certified By: Iris Verástegui

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T703878
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:
SAMPLED BY:

Trace Organics Analysis

RPT Date: Feb 02, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - VOCs (Soil)															
Dichlorodifluoromethane	2011403		<0.05	<0.05	NA	< 0.05	76%	50%	140%	86%	50%	140%	71%	50%	140%
Vinyl Chloride	2011403		<0.02	<0.02	NA	< 0.02	98%	50%	140%	74%	50%	140%	76%	50%	140%
Bromomethane	2011403		<0.05	<0.05	NA	< 0.05	104%	50%	140%	71%	50%	140%	80%	50%	140%
Trichlorofluoromethane	2011403		<0.05	<0.05	NA	< 0.05	98%	50%	140%	83%	50%	140%	73%	50%	140%
Acetone	2011403		<0.50	<0.50	NA	< 0.50	86%	50%	140%	97%	50%	140%	102%	50%	140%
1,1-Dichloroethylene	2011403		<0.05	<0.05	NA	< 0.05	95%	50%	140%	94%	60%	130%	73%	50%	140%
Methylene Chloride	2011403		<0.05	<0.05	NA	< 0.05	107%	50%	140%	97%	60%	130%	99%	50%	140%
Trans- 1,2-Dichloroethylene	2011403		<0.05	<0.05	NA	< 0.05	87%	50%	140%	84%	60%	130%	81%	50%	140%
Methyl tert-butyl Ether	2011403		<0.05	<0.05	NA	< 0.05	118%	50%	140%	116%	60%	130%	118%	50%	140%
1,1-Dichloroethane	2011403		<0.02	<0.02	NA	< 0.02	80%	50%	140%	81%	60%	130%	89%	50%	140%
Methyl Ethyl Ketone	2011403		<0.50	<0.50	NA	< 0.50	95%	50%	140%	99%	50%	140%	85%	50%	140%
Cis- 1,2-Dichloroethylene	2011403		<0.02	<0.02	NA	< 0.02	81%	50%	140%	79%	60%	130%	88%	50%	140%
Chloroform	2011403		<0.04	<0.04	NA	< 0.04	76%	50%	140%	79%	60%	130%	87%	50%	140%
1,2-Dichloroethane	2011403		<0.03	<0.03	NA	< 0.03	79%	50%	140%	76%	60%	130%	92%	50%	140%
1,1,1-Trichloroethane	2011403		<0.05	<0.05	NA	< 0.05	81%	50%	140%	93%	60%	130%	91%	50%	140%
Carbon Tetrachloride	2011403		<0.05	<0.05	NA	< 0.05	72%	50%	140%	74%	60%	130%	73%	50%	140%
Benzene	2011403		<0.02	<0.02	NA	< 0.02	81%	50%	140%	80%	60%	130%	89%	50%	140%
1,2-Dichloropropane	2011403		<0.03	<0.03	NA	< 0.03	84%	50%	140%	84%	60%	130%	93%	50%	140%
Trichloroethylene	2011403		<0.03	<0.03	NA	< 0.03	81%	50%	140%	77%	60%	130%	80%	50%	140%
Bromodichloromethane	2011403		<0.05	<0.05	NA	< 0.05	70%	50%	140%	77%	60%	130%	77%	50%	140%
Methyl Isobutyl Ketone	2011403		<0.50	<0.50	NA	< 0.50	88%	50%	140%	84%	50%	140%	96%	50%	140%
1,1,2-Trichloroethane	2011403		<0.04	<0.04	NA	< 0.04	89%	50%	140%	84%	60%	130%	100%	50%	140%
Toluene	2011403		<0.05	<0.05	NA	< 0.05	80%	50%	140%	71%	60%	130%	75%	50%	140%
Dibromochloromethane	2011403		<0.05	<0.05	NA	< 0.05	81%	50%	140%	74%	60%	130%	79%	50%	140%
Ethylene Dibromide	2011403		<0.04	<0.04	NA	< 0.04	89%	50%	140%	82%	60%	130%	93%	50%	140%
Tetrachloroethylene	2011403		<0.05	<0.05	NA	< 0.05	77%	50%	140%	70%	60%	130%	74%	50%	140%
1,1,1,2-Tetrachloroethane	2011403		<0.04	<0.04	NA	< 0.04	84%	50%	140%	77%	60%	130%	76%	50%	140%
Chlorobenzene	2011403		<0.05	<0.05	NA	< 0.05	76%	50%	140%	71%	60%	130%	76%	50%	140%
Ethylbenzene	2011403		<0.05	<0.05	NA	< 0.05	70%	50%	140%	73%	60%	130%	81%	50%	140%
m & p-Xylene	2011403		<0.05	<0.05	NA	< 0.05	73%	50%	140%	101%	60%	130%	96%	50%	140%
Bromoform	2011403		<0.05	<0.05	NA	< 0.05	80%	50%	140%	79%	60%	130%	81%	50%	140%
Styrene	2011403		<0.05	<0.05	NA	< 0.05	89%	50%	140%	71%	60%	130%	78%	50%	140%
1,1,2,2-Tetrachloroethane	2011403		<0.05	<0.05	NA	< 0.05	103%	50%	140%	88%	60%	130%	106%	50%	140%
o-Xylene	2011403		<0.05	<0.05	NA	< 0.05	76%	50%	140%	76%	60%	130%	74%	50%	140%
1,3-Dichlorobenzene	2011403		<0.05	<0.05	NA	< 0.05	80%	50%	140%	87%	60%	130%	78%	50%	140%
1,4-Dichlorobenzene	2011403		<0.05	<0.05	NA	< 0.05	81%	50%	140%	72%	60%	130%	81%	50%	140%
1,2-Dichlorobenzene	2011403		<0.05	<0.05	NA	< 0.05	85%	50%	140%	72%	60%	130%	78%	50%	140%
n-Hexane	2011403		<0.05	<0.05	NA	< 0.05	113%	50%	140%	103%	60%	130%	74%	50%	140%

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

Trace Organics Analysis (Continued)

RPT Date: Feb 02, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Soil)															
F1 (C6 to C10)	2011403		< 5	< 5	NA	< 5	89%	60%	140%	111%	60%	140%	110%	60%	140%
F2 (C10 to C16)	2004390		< 10	< 10	NA	< 10	112%	60%	140%	96%	60%	140%	78%	60%	140%
F3 (C16 to C34)	2004390		< 50	< 50	NA	< 50	109%	60%	140%	95%	60%	140%	71%	60%	140%
F4 (C34 to C50)	2004390		< 50	< 50	NA	< 50	101%	60%	140%	87%	60%	140%	82%	60%	140%
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	2011449	2011449	<0.05	<0.05	NA	< 0.05	109%	50%	140%	83%	50%	140%	78%	50%	140%
Acenaphthylene	2011449	2011449	<0.05	<0.05	NA	< 0.05	114%	50%	140%	79%	50%	140%	82%	50%	140%
Acenaphthene	2011449	2011449	<0.05	<0.05	NA	< 0.05	114%	50%	140%	82%	50%	140%	81%	50%	140%
Fluorene	2011449	2011449	<0.05	<0.05	NA	< 0.05	99%	50%	140%	81%	50%	140%	75%	50%	140%
Phenanthrene	2011449	2011449	<0.05	<0.05	NA	< 0.05	93%	50%	140%	71%	50%	140%	75%	50%	140%
Anthracene	2011449	2011449	<0.05	<0.05	NA	< 0.05	111%	50%	140%	81%	50%	140%	99%	50%	140%
Fluoranthene	2011449	2011449	<0.05	<0.05	NA	< 0.05	105%	50%	140%	82%	50%	140%	93%	50%	140%
Pyrene	2011449	2011449	<0.05	<0.05	NA	< 0.05	112%	50%	140%	77%	50%	140%	90%	50%	140%
Benz(a)anthracene	2011449	2011449	<0.05	<0.05	NA	< 0.05	111%	50%	140%	76%	50%	140%	106%	50%	140%
Chrysene	2011449	2011449	<0.05	<0.05	NA	< 0.05	102%	50%	140%	99%	50%	140%	105%	50%	140%
Benzo(b)fluoranthene	2011449	2011449	<0.05	<0.05	NA	< 0.05	69%	50%	140%	79%	50%	140%	74%	50%	140%
Benzo(k)fluoranthene	2011449	2011449	<0.05	<0.05	NA	< 0.05	77%	50%	140%	85%	50%	140%	84%	50%	140%
Benzo(a)pyrene	2011449	2011449	<0.05	<0.05	NA	< 0.05	60%	50%	140%	76%	50%	140%	77%	50%	140%
Indeno(1,2,3-cd)pyrene	2011449	2011449	<0.05	<0.05	NA	< 0.05	67%	50%	140%	72%	50%	140%	93%	50%	140%
Dibenz(a,h)anthracene	2011449	2011449	<0.05	<0.05	NA	< 0.05	64%	50%	140%	80%	50%	140%	78%	50%	140%
Benzo(g,h,i)perylene	2011449	2011449	<0.05	<0.05	NA	< 0.05	77%	50%	140%	82%	50%	140%	78%	50%	140%

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

Certified By: Jinkal Patel

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6036	modified from MSA PART 3, CH 14 and SM 2510 B	EC METER
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6031	modified from EPA 9045D and MCKEAGUE 3.11	PH METER

AGAT Laboratories

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	ORG-91-5106	Tier 1 Method	BALANCE
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene-d10	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene-d12	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
F1 (C6 to C10)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F2 (C10 to C16)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F4 (C34 to C50)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Dichlorodifluoromethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

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

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Bromoform	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5002	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Moisture Content		Tier 1 method	BALANCE

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Chain of Custody Record

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

Laboratory Use Only 878
Work Order #: 21T703 ~~878~~
Cooler Quantity: 1 tray
Arrival Temperatures: 1.8 | 1.1 | 1.7
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: Free + CE

Report Information:
Company: B.I.G. Consulting Inc.
Contact: Fernando Contento
Address: 5500 Tomken Road, Unit 12, Mississauga, ON
Phone: 6479666894 Fax:
Reports to be sent to:
1. Email: fcontento@brownfieldigi.com
2. Email:

Project Information:
Project: BIGC-ENV-349B
Site Location: Cros Avenue
Sampled By: TVH
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:
Bill To Same: Yes ☐ No ☐
Company: B.I.G. Consulting Inc.
Contact: Laine Dougherty
Address: 5500 Tomken Road, Unit 12, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Regulatory Requirements:
☐ No Regulatory Requirement
(Please check all applicable boxes)

☑ Regulation 153/04
Table 02 (Indicate One)
☐ Ind/Com
☑ Res/Park
☐ Agriculture
Soil Texture (Check One)
☑ Coarse
☐ Fine

☐ Sewer Use
☐ Sanitary
☐ Storm
Region (Indicate One)
☐ MISA

☐ Regulation 558
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
(Indicate One)

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

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

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

Sample Matrix Legend
B Biota
GW Ground Water
O Oil
P Paint
S Soil
SD Sediment
SW Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Y/N	Field Filtered - Metals, Hg, CrVI	O. Reg 153: Metals and Inorganics (☐ All Metals ☐ 153 Metals (excl. Hydrides) ☐ Hydride Metals ☑ 153 Metals (incl. Hydrides))	ORPs: ☐ B-HWS ☐ Cl ☐ CN ☐ Cr6+ ☐ EC ☐ FOC ☐ Hg ☐ pH ☐ SAR	Full Metals Scan	Regulation/Custom Metals	Nutrients: ☐ TP ☐ NH3 ☐ TKN ☐ NO3 ☐ NO2 ☐ NO3+NO2	Volatiles: ☑ VOC ☐ BTEX ☐ THM	PHCs F1 - F4	ABNs	PAHs	PCBs: ☐ Total ☐ Aroclors	Organochlorine Pesticides	TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Sewer Use						Potentially Hazardous or High Concentration (*/N)
BH106-SS1	20 Jan 2021	08:30	3	S									☑	☑															
BH106-SS2	20 Jan 2021	08:45	2	S				☑								☑													
BH107-SS1	20 Jan 2021	10:10	2	S				☑								☑													
BH108-SS1	20 Jan 2021	11:45	2	S				☑								☑													
BH109-SS1	20 Jan 2021	13:30	2	S				☑								☑													
BH110-SS1	21 Jan 2021	09:15	2	S				☑								☑													
BH110-SS2	21 Jan 2021	09:30	3	S									☑	☑															
BH111-SS1	21 Jan 2021	11:00	2	S				☑								☑													
BH112-SS1	21 Jan 2021	13:00	2	S				☑								☑													
BH112-SS2	21 Jan 2021	13:15	3	S									☑	☑															
BH113-SS1	21 Jan 2021	15:00	2	S				☑								☑													

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	
Sai S	26/Jan/2021	14:25	NEAC G 28			
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	Page 1 of 2
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	N°:

21 JAN 26 2:55 PM

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

AGAT Laboratories
5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: B.I.G. Consulting Inc.
Contact: Fernando Contento
Address: 5500 Tomken Road, Unit 12, Mississauga, ON
Phone: 6479666894 Fax:
Reports to be sent to:
1. Email: fcontento@brownfieldigi.com
2. Email:

Project Information:

Project: BIGC-ENV-349B
Site Location: Cros Avenue
Sampled By: TVI I
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☐ No ☐

Company: B.I.G. Consulting Inc.
Contact: Laine Dougherty
Address: 5500 Tomken Road, Unit 12, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Regulatory Requirements:

☐ No Regulatory Requirement

(Please check all applicable boxes)

☑ Regulation 153/04
Table 02 *Indicate One*
☐ Ind/Com
☑ Res/Park
☐ Agriculture

Soil Texture *(Check One)*
☑ Coarse
☐ Fine

☐ Sewer Use
☐ Sanitary
☐ Storm
Region *Indicate One*
☐ MISA

☐ Regulation 558
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
Indicate One

Is this submission for a Record of Site Condition? ☑ Yes ☐ No

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

Laboratory Use Only

Work Order #:
Cooler Quantity: See pg 1
Arrival Temperatures:
Custody Seal Intact: ☐Yes ☐No ☐N/A
Notes:

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI (Y/N)	O. Reg 153: Metals and Inorganics	O. Reg 153: All Metals ☐ / 153 Metals (excl. Hydrides) ☐ / Hydride Metals ☐ / 153 Metals (incl. Hydrides) ☑	O. Reg 153: ORPs: ☐ B-HWS ☐ Cl ☐ CN ☐ Cr⁶⁺ ☐ EC ☐ FOC ☐ Hg ☐ pH ☐ SAR	O. Reg 153: Full Metals Scan	O. Reg 153: Regulation/Custom Metals	O. Reg 153: Nutrients: ☐ TP ☐ NH_3 ☐ TKN ☐ NO_3 ☐ NO_2 ☐ NO_3+NO_2	O. Reg 153: Volatiles: ☑ VOC ☐ BTEX ☐ THM	O. Reg 153: PHCs F1 - F4	O. Reg 153: ABNs	O. Reg 153: PAHs	O. Reg 153: PCBs: ☐ Total ☐ Aroclors	O. Reg 153: Organochlorine Pesticides	O. Reg 153: TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	O. Reg 153: Sewer Use						Potentially Hazardous or High Concentration (Y/N)
BH113-SS2	21 Jan 2021	15:15	3	S									☑	☑														
BH114-SS1	21 Jan 2021	16:00	2	S			☑									☑												
BH114-SS2	21 Jan 2021	16:15	2	S			☑									☑												
BH115-SS1	22 Jan 2021	09:00	2	S			☑									☑												
BH115-SS2	22 Jan 2021	09:15	2	S			☑									☑												

21 JAN 23 2:53PM

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	
Sai S	26/Jan/2021	14:25				
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	Page 2 of 2
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	N°:

Pink Copy - Client I Yellow Copy - AGAT I White Copy- AGAT

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

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Fernando Contento

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T705007

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

TRACE ORGANICS REVIEWED BY: Neli Popnikolova, Senior Chemist

DATE REPORTED: Feb 05, 2021

PAGES (INCLUDING COVER): 16

VERSION*: 1

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

*Notes

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

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

DATE RECEIVED: 2021-01-28

DATE REPORTED: 2021-02-05

		SAMPLE DESCRIPTION:		DUP011402
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2021-01-21 16:15
Parameter	Unit	G / S	RDL	2020967
Antimony	µg/g	7.5	0.8	<0.8
Arsenic	µg/g	18	1	5
Barium	µg/g	390	2.0	70.6
Beryllium	µg/g	4	0.4	0.5
Boron	µg/g	120	5	10
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.35
Cadmium	µg/g	1.2	0.5	<0.5
Chromium	µg/g	160	5	19
Cobalt	µg/g	22	0.5	10.2
Copper	µg/g	140	1.0	42.6
Lead	µg/g	120	1	10
Molybdenum	µg/g	6.9	0.5	0.6
Nickel	µg/g	100	1	21
Selenium	µg/g	2.4	0.8	<0.8
Silver	µg/g	20	0.5	<0.5
Thallium	µg/g	1	0.5	<0.5
Uranium	µg/g	23	0.50	0.67
Vanadium	µg/g	86	0.4	30.1
Zinc	µg/g	340	5	53
Chromium, Hexavalent	µg/g	8	0.2	<0.2
Cyanide, Free	µg/g	0.051	0.040	<0.040
Mercury	µg/g	0.27	0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	0.7	0.005	0.300
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A	0.925
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	7.37

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

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

DATE RECEIVED: 2021-01-28

DATE REPORTED: 2021-02-05

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2020967 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

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

DATE RECEIVED: 2021-01-28

DATE REPORTED: 2021-02-05

				SAMPLE DESCRIPTION:	DUP011402
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2021-01-21 16:15
Parameter	Unit	G / S	RDL		2020967
Naphthalene	µg/g	0.6	0.05		<0.05
Acenaphthylene	µg/g	0.15	0.05		<0.05
Acenaphthene	µg/g	7.9	0.05		<0.05
Fluorene	µg/g	62	0.05		<0.05
Phenanthrene	µg/g	6.2	0.05		<0.05
Anthracene	µg/g	0.67	0.05		<0.05
Fluoranthene	µg/g	0.69	0.05		<0.05
Pyrene	µg/g	78	0.05		<0.05
Benz(a)anthracene	µg/g	0.5	0.05		<0.05
Chrysene	µg/g	7	0.05		<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05		<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05		<0.05
Benzo(a)pyrene	µg/g	0.3	0.05		<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05		<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05		<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05		<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05		<0.05
Moisture Content	%		0.1		14.2
Surrogate	Unit	Acceptable Limits			
Naphthalene-d8	%	50-140			92
Acenaphthene-d10	%	50-140			87
Chrysene-d12	%	50-140			82

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2020967 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: NPopowkolof

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Certificate of Analysis

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

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

DATE RECEIVED: 2021-01-28

DATE REPORTED: 2021-02-05

				SAMPLE DESCRIPTION:	DUP011002
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2021-01-21 09:30
Parameter	Unit	G / S	RDL		2020966
F1 (C6 to C10)	µg/g	55	5		<5
F1 (C6 to C10) minus BTEX	µg/g	55	5		<5
F2 (C10 to C16)	µg/g	98	10		<10
F3 (C16 to C34)	µg/g	300	50		<50
F4 (C34 to C50)	µg/g	2800	50		<50
Gravimetric Heavy Hydrocarbons	µg/g	2800	50		NA
Moisture Content	%		0.1		12.3
Surrogate	Unit	Acceptable Limits			
Terphenyl	%	60-140			115

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2020966 Results are based on sample dry weight.
The C6-C10 fraction is calculated using toluene response factor.
C6–C10 (F1 minus BTEX) is a calculated parameter. The calculated value is F1 minus BTEX. The calculated parameter is non-accredited. The parameters that are components of the calculation are accredited.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16-C50 and are only determined if the chromatogram of the C34 - C50 hydrocarbons indicates that hydrocarbons >C50 are present.
The chromatogram has returned to baseline by the retention time of nC50.
Total C6 - C50 results are corrected for BTEX contribution.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 + nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified without the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: 

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Certificate of Analysis

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

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

DATE RECEIVED: 2021-01-28

DATE REPORTED: 2021-02-05

		SAMPLE DESCRIPTION:		DUP011002
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2021-01-21 09:30
Parameter	Unit	G / S	RDL	2020966
Dichlorodifluoromethane	µg/g	16	0.05	<0.05
Vinyl Chloride	ug/g	0.02	0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05
Acetone	ug/g	16	0.50	<0.50
1,1-Dichloroethylene	ug/g	0.05	0.05	<0.05
Methylene Chloride	ug/g	0.1	0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	0.084	0.05	<0.05
Methyl tert-butyl Ether	ug/g	0.75	0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02
Methyl Ethyl Ketone	ug/g	16	0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02
Chloroform	ug/g	0.05	0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03
1,1,1-Trichloroethane	ug/g	0.38	0.05	<0.05
Carbon Tetrachloride	ug/g	0.05	0.05	<0.05
Benzene	ug/g	0.21	0.02	<0.02
1,2-Dichloropropane	ug/g	0.05	0.03	<0.03
Trichloroethylene	ug/g	0.061	0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	<0.05
Methyl Isobutyl Ketone	ug/g	1.7	0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04
Toluene	ug/g	2.3	0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04
Tetrachloroethylene	ug/g	0.28	0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.058	0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05

Certified By: NPopowkof

AGAT Laboratories

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CANADA L4Z 1Y2
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FAX (905)712-5122
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

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

DATE RECEIVED: 2021-01-28

DATE REPORTED: 2021-02-05

		SAMPLE DESCRIPTION:		DUP011002
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2021-01-21 09:30
Parameter	Unit	G / S	RDL	2020966
m & p-Xylene	ug/g		0.05	<0.05
Bromoform	ug/g	0.27	0.05	<0.05
Styrene	ug/g	0.7	0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05
o-Xylene	ug/g		0.05	<0.05
1,3-Dichlorobenzene	ug/g	4.8	0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.083	0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.05	<0.05
Xylenes (Total)	ug/g	3.1	0.05	<0.05
1,3-Dichloropropene (Cis + Trans)	µg/g	0.05	0.04	<0.04
n-Hexane	µg/g	2.8	0.05	<0.05
Moisture Content	%		0.1	12.3
Surrogate	Unit	Acceptable Limits		
Toluene-d8	% Recovery	50-140		104
4-Bromofluorobenzene	% Recovery	50-140		85

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2020966 The sample was analyzed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.
Xylenes total is a calculated parameter. The calculated value is the sum of m&p-Xylene + o-Xylene.
1,3-Dichloropropene total is a calculated parameter. The calculated value is the sum of Cis-1,3-Dichloropropene and Trans-1,3-Dichloropropene.
The calculated parameters are non-accredited. The parameters that are components of the calculation are accredited.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: N Popowkolof

AGAT Laboratories
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MISSISSAUGA, ONTARIO
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TEL (905)712-5100
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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T705007
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:Cros Avenue
SAMPLED BY:TVH

Soil Analysis

RPT Date: Feb 05, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	2023842		<0.8	<0.8	NA	< 0.8	107%	70%	130%	98%	80%	120%	100%	70%	130%
Arsenic	2023842		9	9	0.0%	< 1	112%	70%	130%	100%	80%	120%	98%	70%	130%
Barium	2023842		51.2	52.2	1.9%	< 2.0	109%	70%	130%	100%	80%	120%	105%	70%	130%
Beryllium	2023842		0.8	0.8	NA	< 0.4	75%	70%	130%	112%	80%	120%	74%	70%	130%
Boron	2023842		11	12	NA	< 5	81%	70%	130%	114%	80%	120%	102%	70%	130%
Boron (Hot Water Soluble)	2028652		0.13	0.13	NA	< 0.10	102%	60%	140%	104%	70%	130%	103%	60%	140%
Cadmium	2023842		<0.5	<0.5	NA	< 0.5	90%	70%	130%	101%	80%	120%	103%	70%	130%
Chromium	2023842		30	30	0.0%	< 5	102%	70%	130%	105%	80%	120%	99%	70%	130%
Cobalt	2023842		22.2	22.2	0.0%	< 0.5	96%	70%	130%	103%	80%	120%	92%	70%	130%
Copper	2023842		36.7	35.8	2.5%	< 1.0	88%	70%	130%	106%	80%	120%	96%	70%	130%
Lead	2023842		5	5	0.0%	< 1	105%	70%	130%	102%	80%	120%	95%	70%	130%
Molybdenum	2023842		<0.5	<0.5	NA	< 0.5	104%	70%	130%	102%	80%	120%	96%	70%	130%
Nickel	2023842		37	36	2.7%	< 1	92%	70%	130%	103%	80%	120%	89%	70%	130%
Selenium	2023842		<0.8	<0.8	NA	< 0.8	138%	70%	130%	102%	80%	120%	98%	70%	130%
Silver	2023842		<0.5	<0.5	NA	< 0.5	99%	70%	130%	101%	80%	120%	97%	70%	130%
Thallium	2023842		<0.5	<0.5	NA	< 0.5	110%	70%	130%	100%	80%	120%	95%	70%	130%
Uranium	2023842		0.65	0.63	NA	< 0.50	109%	70%	130%	104%	80%	120%	102%	70%	130%
Vanadium	2023842		39.6	38.8	2.0%	< 0.4	104%	70%	130%	104%	80%	120%	105%	70%	130%
Zinc	2023842		76	75	1.3%	< 5	100%	70%	130%	110%	80%	120%	115%	70%	130%
Chromium, Hexavalent	2042170		<0.2	<0.2	NA	< 0.2	98%	70%	130%	99%	80%	120%	82%	70%	130%
Cyanide, Free	2036707		<0.040	<0.040	NA	< 0.040	90%	70%	130%	103%	80%	120%	109%	70%	130%
Mercury	2023842		<0.10	<0.10	NA	< 0.10	115%	70%	130%	100%	80%	120%	100%	70%	130%
Electrical Conductivity (2:1)	2023784		0.176	0.180	2.2%	< 0.005	108%	80%	120%						
Sodium Adsorption Ratio (2:1) (Calc.)	2023784		1.18	1.15	2.6%	NA									
pH, 2:1 CaCl2 Extraction	2023262		7.22	7.27	0.7%	NA	100%	80%	120%						

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

More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

Certified By:

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T705007
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:Cros Avenue
SAMPLED BY:TVH

Trace Organics Analysis

RPT Date: Feb 05, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - VOCs (Soil)															
Dichlorodifluoromethane	2023833		<0.05	<0.05	NA	< 0.05	84%	50%	140%	76%	50%	140%	109%	50%	140%
Vinyl Chloride	2023833		<0.02	<0.02	NA	< 0.02	73%	50%	140%	88%	50%	140%	93%	50%	140%
Bromomethane	2023833		<0.05	<0.05	NA	< 0.05	90%	50%	140%	96%	50%	140%	104%	50%	140%
Trichlorofluoromethane	2023833		<0.05	<0.05	NA	< 0.05	90%	50%	140%	85%	50%	140%	89%	50%	140%
Acetone	2023833		<0.50	<0.50	NA	< 0.50	99%	50%	140%	97%	50%	140%	96%	50%	140%
1,1-Dichloroethylene	2023833		<0.05	<0.05	NA	< 0.05	72%	50%	140%	70%	60%	130%	80%	50%	140%
Methylene Chloride	2023833		<0.05	<0.05	NA	< 0.05	113%	50%	140%	107%	60%	130%	105%	50%	140%
Trans- 1,2-Dichloroethylene	2023833		<0.05	<0.05	NA	< 0.05	91%	50%	140%	87%	60%	130%	83%	50%	140%
Methyl tert-butyl Ether	2023833		<0.05	<0.05	NA	< 0.05	110%	50%	140%	99%	60%	130%	108%	50%	140%
1,1-Dichloroethane	2023833		<0.02	<0.02	NA	< 0.02	89%	50%	140%	86%	60%	130%	91%	50%	140%
Methyl Ethyl Ketone	2023833		<0.50	<0.50	NA	< 0.50	101%	50%	140%	99%	50%	140%	92%	50%	140%
Cis- 1,2-Dichloroethylene	2023833		<0.02	<0.02	NA	< 0.02	90%	50%	140%	82%	60%	130%	89%	50%	140%
Chloroform	2023833		<0.04	<0.04	NA	< 0.04	89%	50%	140%	85%	60%	130%	94%	50%	140%
1,2-Dichloroethane	2023833		<0.03	<0.03	NA	< 0.03	99%	50%	140%	90%	60%	130%	99%	50%	140%
1,1,1-Trichloroethane	2023833		<0.05	<0.05	NA	< 0.05	87%	50%	140%	76%	60%	130%	92%	50%	140%
Carbon Tetrachloride	2023833		<0.05	<0.05	NA	< 0.05	76%	50%	140%	75%	60%	130%	70%	50%	140%
Benzene	2023833		<0.02	<0.02	NA	< 0.02	83%	50%	140%	78%	60%	130%	82%	50%	140%
1,2-Dichloropropane	2023833		<0.03	<0.03	NA	< 0.03	85%	50%	140%	82%	60%	130%	86%	50%	140%
Trichloroethylene	2023833		<0.03	<0.03	NA	< 0.03	74%	50%	140%	71%	60%	130%	81%	50%	140%
Bromodichloromethane	2023833		<0.05	<0.05	NA	< 0.05	75%	50%	140%	76%	60%	130%	78%	50%	140%
Methyl Isobutyl Ketone	2023833		<0.50	<0.50	NA	< 0.50	86%	50%	140%	95%	50%	140%	98%	50%	140%
1,1,2-Trichloroethane	2023833		<0.04	<0.04	NA	< 0.04	103%	50%	140%	99%	60%	130%	99%	50%	140%
Toluene	2023833		<0.05	<0.05	NA	< 0.05	78%	50%	140%	77%	60%	130%	73%	50%	140%
Dibromochloromethane	2023833		<0.05	<0.05	NA	< 0.05	79%	50%	140%	74%	60%	130%	71%	50%	140%
Ethylene Dibromide	2023833		<0.04	<0.04	NA	< 0.04	99%	50%	140%	93%	60%	130%	90%	50%	140%
Tetrachloroethylene	2023833		<0.05	<0.05	NA	< 0.05	77%	50%	140%	76%	60%	130%	80%	50%	140%
1,1,1,2-Tetrachloroethane	2023833		<0.04	<0.04	NA	< 0.04	103%	50%	140%	75%	60%	130%	86%	50%	140%
Chlorobenzene	2023833		<0.05	<0.05	NA	< 0.05	81%	50%	140%	81%	60%	130%	85%	50%	140%
Ethylbenzene	2023833		<0.05	<0.05	NA	< 0.05	85%	50%	140%	72%	60%	130%	79%	50%	140%
m & p-Xylene	2023833		<0.05	<0.05	NA	< 0.05	72%	50%	140%	108%	60%	130%	103%	50%	140%
Bromoform	2023833		<0.05	<0.05	NA	< 0.05	81%	50%	140%	75%	60%	130%	71%	50%	140%
Styrene	2023833		<0.05	<0.05	NA	< 0.05	83%	50%	140%	85%	60%	130%	73%	50%	140%
1,1,2,2-Tetrachloroethane	2023833		<0.05	<0.05	NA	< 0.05	88%	50%	140%	108%	60%	130%	104%	50%	140%
o-Xylene	2023833		<0.05	<0.05	NA	< 0.05	77%	50%	140%	75%	60%	130%	80%	50%	140%
1,3-Dichlorobenzene	2023833		<0.05	<0.05	NA	< 0.05	81%	50%	140%	78%	60%	130%	81%	50%	140%
1,4-Dichlorobenzene	2023833		<0.05	<0.05	NA	< 0.05	87%	50%	140%	79%	60%	130%	87%	50%	140%
1,2-Dichlorobenzene	2023833		<0.05	<0.05	NA	< 0.05	81%	50%	140%	76%	60%	130%	83%	50%	140%
n-Hexane	2023833		<0.05	<0.05	NA	< 0.05	84%	50%	140%	77%	60%	130%	117%	50%	140%

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T705007
PROJECT: BIGC-ENV-349B
ATTENTION TO: Fernando Contento
SAMPLING SITE:Cros Avenue
SAMPLED BY:TVH

Trace Organics Analysis (Continued)

RPT Date: Feb 05, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Soil)															
F1 (C6 to C10)	2023833		< 5	< 5	NA	< 5	99%	60%	140%	110%	60%	140%	95%	60%	140%
F2 (C10 to C16)	2036904		< 10	< 10	NA	< 10	106%	60%	140%	100%	60%	140%	86%	60%	140%
F3 (C16 to C34)	2036904		< 50	< 50	NA	< 50	104%	60%	140%	94%	60%	140%	87%	60%	140%
F4 (C34 to C50)	2036904		< 50	< 50	NA	< 50	92%	60%	140%	114%	60%	140%	91%	60%	140%
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	2021830		< 0.05	< 0.05	NA	< 0.05	96%	50%	140%	74%	50%	140%	112%	50%	140%
Acenaphthylene	2021830		< 0.05	< 0.05	NA	< 0.05	110%	50%	140%	78%	50%	140%	75%	50%	140%
Acenaphthene	2021830		< 0.05	< 0.05	NA	< 0.05	118%	50%	140%	86%	50%	140%	86%	50%	140%
Fluorene	2021830		< 0.05	< 0.05	NA	< 0.05	108%	50%	140%	83%	50%	140%	89%	50%	140%
Phenanthrene	2021830		0.18	0.22	NA	< 0.05	83%	50%	140%	72%	50%	140%	96%	50%	140%
Anthracene	2021830		0.10	0.15	NA	< 0.05	111%	50%	140%	81%	50%	140%	96%	50%	140%
Fluoranthene	2021830		0.36	0.44	NA	< 0.05	115%	50%	140%	75%	50%	140%	85%	50%	140%
Pyrene	2021830		0.29	0.34	NA	< 0.05	110%	50%	140%	75%	50%	140%	89%	50%	140%
Benz(a)anthracene	2021830		0.09	0.10	NA	< 0.05	78%	50%	140%	70%	50%	140%	74%	50%	140%
Chrysene	2021830		0.10	0.11	NA	< 0.05	104%	50%	140%	70%	50%	140%	105%	50%	140%
Benzo(b)fluoranthene	2021830		0.12	0.12	NA	< 0.05	72%	50%	140%	98%	50%	140%	108%	50%	140%
Benzo(k)fluoranthene	2021830		0.10	0.11	NA	< 0.05	87%	50%	140%	85%	50%	140%	100%	50%	140%
Benzo(a)pyrene	2021830		0.06	0.06	NA	< 0.05	68%	50%	140%	75%	50%	140%	88%	50%	140%
Indeno(1,2,3-cd)pyrene	2021830		0.06	0.05	NA	< 0.05	65%	50%	140%	71%	50%	140%	79%	50%	140%
Dibenz(a,h)anthracene	2021830		< 0.05	<0.05	NA	< 0.05	69%	50%	140%	91%	50%	140%	82%	50%	140%
Benzo(g,h,i)perylene	2021830		0.06	0.06	NA	< 0.05	74%	50%	140%	88%	50%	140%	81%	50%	140%

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

Certified By: N Popowkolof

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QA Violation

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

RPT Date: Feb 05, 2021

PARAMETER	Sample Id	Sample Description	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
			Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
				Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)											
Selenium		DUP011402	138%	70%	130%	102%	80%	120%	98%	70%	130%

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

More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6036	modified from MSA PART 3, CH 14 and SM 2510 B	EC METER
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6031	modified from EPA 9045D and MCKEAGUE 3.11	PH METER

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	ORG-91-5106	Tier 1 Method	BALANCE
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene-d10	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene-d12	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
F1 (C6 to C10)	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5009	modified from CCME Tier 1 Method	(P&T)GC/FID
F2 (C10 to C16)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F3 (C16 to C34)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
F4 (C34 to C50)	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE
Terphenyl	VOL-91-5009	modified from CCME Tier 1 Method	GC/FID
Dichlorodifluoromethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

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

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue

SAMPLED BY:TVH

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Bromoform	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Styrene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
o-Xylene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Xylenes (Total)	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
1,3-Dichloropropene (Cis + Trans)	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
n-Hexane	VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
Toluene-d8	VOL-91-5002	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
Moisture Content		Tier 1 method	BALANCE

AGAT Laboratories

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
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Chain of Custody Record

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

Laboratory Use Only
Work Order #: 21T705007

Cooler Quantity:
Arrival Temperatures: 1.3 | 1.6 | 1.6
Custody Seal Intact: ☐Yes ☐No ☐N/A
Notes: Free Free

Report Information:
Company: B.I.G. Consulting Inc.
Contact: Fernando Contento
Address: 5500 Tomken Road, Unit 12, Mississauga, ON
Phone: 6479666894 Fax:
Reports to be sent to:
1. Email: fcontento@brownfieldigi.com
2. Email:

Regulatory Requirements: ☐ No Regulatory Requirement
(Please check all applicable boxes)

☑ Regulation 153/04 — Table 02 (Indicate One) — ☐ Ind/Com ☑ Res/Park ☐ Agriculture
Soil Texture (Check One): ☑ Coarse ☐ Fine
☐ Sewer Use — ☐ Sanitary ☐ Storm — Region (Indicate One) — ☐ MISA
☐ Regulation 558
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other (Indicate One)

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

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

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

Project Information:
Project: BIGC-ENV-349B
Site Location: Cros Avenue
Sampled By: TVH
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:
Bill To Same: Yes ☐ No ☐
Company: B.I.G. Consulting Inc.
Contact: Laine Dougherty
Address: 5500 Tomken Road, Unit 12, Mississauga, ON
Email: ldougherty@brownfieldigi.com

Sample Matrix Legend
B Biota
GW Ground Water
O Oil
P Paint
S Soil
SD Sediment
SW Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI (Y/N)	Metals and Inorganics: O. Reg 153 — ☐ All Metals ☐ 153 Metals (excl. Hydrides) ☐ Hydride Metals ☑ 153 Metals (incl. Hydrides); ORPs: ☐ B-HWS ☐ Cl ☐ CN ☐ Cr^{6+} ☐ EC ☐ FOC ☐ Hg ☐ pH ☐ SAR	Full Metals Scan	Regulation/Custom Metals	Nutrients: ☐ TP ☐ NH_3 ☐ TKN ☐ NO_3 ☐ NO_2 ☐ NO_3+NO_2	Volatiles: ☑ VOC ☐ BTEX ☐ THM	PHCs F1 - F4	ABNs	PAHs	PCBs: ☐ Total ☐ Aroclors	Organochlorine Pesticides	TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Sewer Use	Potentially Hazardous or High Concentration (Y/N)
DUP011002	21Jan 2021	09:30	3	S							☑	☑						
DUP011402	21 Jan 2021	16:15	2	S			☑							☑				

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Sai S	28/Jan/2021	18:30	NEAL G		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

21 JAN 28 8:57 PM

Page 1 of 1

N°:

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

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CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-349D

AGAT WORK ORDER: 21T780215

SOIL ANALYSIS REVIEWED BY: Nivine Basily, Inorganics Report Writer

TRACE ORGANICS REVIEWED BY: Pinkal Patel, Report Reviewer

DATE REPORTED: Aug 05, 2021

PAGES (INCLUDING COVER): 10

VERSION*: 1

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

*Notes

Disclaimer:

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

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:Timothy Damdar

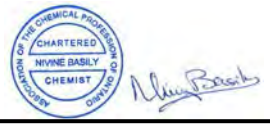
O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE RECEIVED: 2021-07-27

DATE REPORTED: 2021-08-05

				SAMPLE DESCRIPTION:	BH116-AS1
				SAMPLE TYPE:	Soil
				DATE SAMPLED:	2021-07-27 15:30
Parameter	Unit	G / S	RDL		2787591
Antimony	µg/g	7.5	0.8		<0.8
Arsenic	µg/g	18	1		6
Barium	µg/g	390	2.0		82.1
Beryllium	µg/g	4	0.4		0.5
Boron	µg/g	120	5		10
Boron (Hot Water Soluble)	µg/g	1.5	0.10		0.42
Cadmium	µg/g	1.2	0.5		<0.5
Chromium	µg/g	160	5		25
Cobalt	µg/g	22	0.5		7.8
Copper	µg/g	140	1.0		55.6
Lead	µg/g	120	1		43
Molybdenum	µg/g	6.9	0.5		0.8
Nickel	µg/g	100	1		19
Selenium	µg/g	2.4	0.8		<0.8
Silver	µg/g	20	0.5		<0.5
Thallium	µg/g	1	0.5		<0.5
Uranium	µg/g	23	0.50		1.01
Vanadium	µg/g	86	0.4		30.5
Zinc	µg/g	340	5		112
Chromium, Hexavalent	µg/g	8	0.2		<0.2
Cyanide, Free	µg/g	0.051	0.040		<0.040
Mercury	µg/g	0.27	0.10		0.11
Electrical Conductivity (2:1)	mS/cm	0.7	0.005		0.305
Sodium Adsorption Ratio (2:1) (Calc.)	N/A	5	N/A		0.914
pH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA		7.53

Certified By:



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Certificate of Analysis

AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:Timothy Damdar

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

DATE RECEIVED: 2021-07-27

DATE REPORTED: 2021-08-05

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2787591 EC was determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio. SAR is a calculated parameter.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:Timothy Damdar

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

DATE RECEIVED: 2021-07-27

DATE REPORTED: 2021-08-05

		SAMPLE DESCRIPTION:		BH116-AS1
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2021-07-27 15:30
Parameter	Unit	G / S	RDL	2787591
Naphthalene	µg/g	0.6	0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05
Acenaphthene	µg/g	7.9	0.05	<0.05
Fluorene	µg/g	62	0.05	<0.05
Phenanthrene	µg/g	6.2	0.05	<0.05
Anthracene	µg/g	0.67	0.05	<0.05
Fluoranthene	µg/g	0.69	0.05	0.09
Pyrene	µg/g	78	0.05	0.07
Benz(a)anthracene	µg/g	0.5	0.05	<0.05
Chrysene	µg/g	7	0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.78	0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.78	0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.38	0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	<0.05
Benzo(g,h,i)perylene	µg/g	6.6	0.05	<0.05
1 and 2 Methlynaphthalene	µg/g	0.99	0.05	<0.05
Moisture Content	%		0.1	9.8
Surrogate	Unit	Acceptable Limits		
Naphthalene-d8	%	50-140		78
Acridine-d9	%	50-140		79
Terphenyl-d14	%	50-140		61

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Table 2: Full Depth Generic Site Condition Standards in a Potable Ground Water Condition - Soil - Residential/Parkland/Institutional Property Use - Coarse Textured Soils **pH range listed applies to surface soil only**
Guideline values are for general reference only. The guidelines provided may or may not be relevant for the intended use. Refer directly to the applicable standard for regulatory interpretation.

2787591 Results are based on the dry weight of the soil.
Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&j)Fluoranthene isomers because the isomers co-elute on the GC column.
2- and 1-Methyl Naphthalene is a calculated parameter. The calculated value is the sum of 2-Methyl Naphthalene and 1-Methyl Naphthalene.

Analysis performed at AGAT Toronto (unless marked by *)

Certified By: Pinkal Patel

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T780215
PROJECT: BIGC-ENV-349D
ATTENTION TO: Rebecca Morrison
SAMPLING SITE:217-227 Cross Avenue, Oakville, ON
SAMPLED BY:Timothy Damdar

Soil Analysis

RPT Date: Aug 05, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	2808061		<0.8	<0.8	NA	< 0.8	127%	70%	130%	100%	80%	120%	91%	70%	130%
Arsenic	2808061		1	2	NA	< 1	114%	70%	130%	102%	80%	120%	109%	70%	130%
Barium	2808061		35.4	36.6	3.3%	< 2.0	102%	70%	130%	101%	80%	120%	102%	70%	130%
Beryllium	2808061		<0.4	<0.4	NA	< 0.4	107%	70%	130%	94%	80%	120%	91%	70%	130%
Boron	2808061		6	7	NA	< 5	88%	70%	130%	107%	80%	120%	98%	70%	130%
Boron (Hot Water Soluble)	2798761		0.18	0.18	NA	< 0.10	83%	60%	140%	94%	70%	130%	98%	60%	140%
Cadmium	2808061		<0.5	<0.5	NA	< 0.5	107%	70%	130%	101%	80%	120%	99%	70%	130%
Chromium	2808061		14	15	NA	< 5	112%	70%	130%	101%	80%	120%	112%	70%	130%
Cobalt	2808061		3.3	3.3	0.0%	< 0.5	113%	70%	130%	103%	80%	120%	109%	70%	130%
Copper	2808061		7.6	6.6	14.1%	< 1.0	97%	70%	130%	100%	80%	120%	93%	70%	130%
Lead	2808061		5	5	0.0%	< 1	105%	70%	130%	102%	80%	120%	94%	70%	130%
Molybdenum	2808061		1.0	1.0	NA	< 0.5	114%	70%	130%	110%	80%	120%	118%	70%	130%
Nickel	2808061		4	3	NA	< 1	109%	70%	130%	101%	80%	120%	102%	70%	130%
Selenium	2808061		<0.8	<0.8	NA	< 0.8	132%	70%	130%	111%	80%	120%	110%	70%	130%
Silver	2808061		<0.5	<0.5	NA	< 0.5	100%	70%	130%	100%	80%	120%	93%	70%	130%
Thallium	2808061		<0.5	<0.5	NA	< 0.5	111%	70%	130%	106%	80%	120%	98%	70%	130%
Uranium	2808061		<0.50	<0.50	NA	< 0.50	110%	70%	130%	105%	80%	120%	107%	70%	130%
Vanadium	2808061		18.3	18.8	2.7%	< 0.4	124%	70%	130%	103%	80%	120%	115%	70%	130%
Zinc	2808061		17	17	NA	< 5	104%	70%	130%	107%	80%	120%	100%	70%	130%
Chromium, Hexavalent	2793642		<0.2	<0.2	NA	< 0.2	95%	70%	130%	93%	80%	120%	93%	70%	130%
Cyanide, Free	2792510		<0.040	<0.040	NA	< 0.040	98%	70%	130%	108%	80%	120%	102%	70%	130%
Mercury	2808061		<0.10	<0.10	NA	< 0.10	105%	70%	130%	107%	80%	120%	101%	70%	130%
Electrical Conductivity (2:1)	2808061		0.199	0.204	2.5%	< 0.005	110%	80%	120%						
Sodium Adsorption Ratio (2:1) (Calc.)	2798761		1.80	1.81	0.6%	NA									
pH, 2:1 CaCl2 Extraction	2808061		7.93	7.92	0.1%	NA	100%	80%	120%						

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

More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

Certified By:

AGAT Laboratories

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Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:Timothy Damdar

Trace Organics Analysis

RPT Date: Aug 05, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	2663807		< 0.05	< 0.05	NA	< 0.05	99%	50%	140%	99%	50%	140%	99%	50%	140%
Acenaphthylene	2663807		< 0.05	< 0.05	NA	< 0.05	98%	50%	140%	98%	50%	140%	98%	50%	140%
Acenaphthene	2663807		< 0.05	< 0.05	NA	< 0.05	96%	50%	140%	96%	50%	140%	96%	50%	140%
Fluorene	2663807		< 0.05	< 0.05	NA	< 0.05	98%	50%	140%	98%	50%	140%	95%	50%	140%
Phenanthrene	2663807		< 0.05	< 0.05	NA	< 0.05	96%	50%	140%	95%	50%	140%	84%	50%	140%
Anthracene	2663807		< 0.05	< 0.05	NA	< 0.05	95%	50%	140%	98%	50%	140%	85%	50%	140%
Fluoranthene	2663807		< 0.05	< 0.05	NA	< 0.05	94%	50%	140%	85%	50%	140%	96%	50%	140%
Pyrene	2663807		< 0.05	< 0.05	NA	< 0.05	85%	50%	140%	81%	50%	140%	84%	50%	140%
Benz(a)anthracene	2663807		< 0.05	< 0.05	NA	< 0.05	96%	50%	140%	92%	50%	140%	85%	50%	140%
Chrysene	2663807		< 0.05	< 0.05	NA	< 0.05	82%	50%	140%	98%	50%	140%	81%	50%	140%
Benzo(b)fluoranthene	2663807		< 0.05	< 0.05	NA	< 0.05	102%	50%	140%	95%	50%	140%	82%	50%	140%
Benzo(k)fluoranthene	2663807		< 0.05	< 0.05	NA	< 0.05	98%	50%	140%	96%	50%	140%	86%	50%	140%
Benzo(a)pyrene	2663807		< 0.05	< 0.05	NA	< 0.05	96%	50%	140%	85%	50%	140%	84%	50%	140%
Indeno(1,2,3-cd)pyrene	2663807		< 0.05	< 0.05	NA	< 0.05	102%	50%	140%	96%	50%	140%	105%	50%	140%
Dibenz(a,h)anthracene	2663807		< 0.05	< 0.05	NA	< 0.05	98%	50%	140%	85%	50%	140%	105%	50%	140%
Benzo(g,h,i)perylene	2663807		< 0.05	< 0.05	NA	< 0.05	96%	50%	140%	91%	50%	140%	106%	50%	140%

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

Certified By: Jinkal Patel

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
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QA Violation

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

ATTENTION TO: Rebecca Morrison

RPT Date: Aug 05, 2021

PARAMETER	Sample Id	Sample Description	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
			Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
				Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)											
Selenium		BH116-AS1	132%	70%	130%	111%	80%	120%	110%	70%	130%

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

More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

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Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:Timothy Damdar

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Cyanide, Free	INOR-93-6052	modified from ON MOECC E3015, SM 4500-CN- I, G-387	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6036	modified from MSA PART 3, CH 14 and SM 2510 B	EC METER
Sodium Adsorption Ratio (2:1) (Calc.)	INOR-93-6007	modified from EPA 6010D & Analytical Protocol	ICP/OES
pH, 2:1 CaCl2 Extraction	INOR-93-6031	modified from EPA 9045D and MCKEAGUE 3.11	PH METER

5835 COOPERS AVENUE
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http://www.agatlabs.com

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

SAMPLED BY:Timothy Damdar

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acenaphthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluorene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Phenanthrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benz(a)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Chrysene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(a)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
1 and 2 Methlynaphthalene	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Naphthalene-d8	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Acridine-d9	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Terphenyl-d14	ORG-91-5106	modified from EPA 3570 and EPA 8270E	GC/MS
Moisture Content	VOL-91-5009	CCME Tier 1 Method	BALANCE

AGAT Laboratories
5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
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Chain of Custody Record

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

Report Information:

Company: B.I.G. Consulting
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road
Mississauga, ON L4W 2Z4
Phone: 905-782-0315 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email:

Project Information:

Project: BIGC-ENV-349D
Site Location: 217-227 Cross Avenue in Oakville, Ontario
Sampled By: Timothy Damdar
AGAT Quote #: PO:
Please note: if quotation number is not provided, client will be billed full price for analysis.

Invoice Information:

Bill To Same: Yes ☑ No ☐
Company: BIG Consulting Inc.
Contact: Laine Dougherty
Address: 12-5500 Tomken Rd, Mississauga, ON L4W 2Z4
Email: LDougherty@brownfieldigi.com; NKepics@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

☐ Regulation 558

☑ Regulation 153/04
Table 2 *Indicate One*
☐ Ind/Com
☑ Res/Park
☐ Agriculture
Soil Texture *(Check One)*
☑ Coarse
☐ Fine

☐ Excess Soils R406
Table *Indicate One*
Sample from APEC?
☐ Yes
☐ No
☐ Stockpile ☐ In-situ

☐ Sewer Use
☐ Sanitary ☐ Storm
Region
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
Indicate One

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 21T780215 ISMC
Cooler Quantity:
Arrival Temperatures: 4.6 | 7.8 |
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: Free Ice

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics, inc. EC/SAR	Metals - ICPMS, ☐ CrVI, ☐ Hg, ☐ HWSB	BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Excess Soils SPLP Rainwater Leach ☐ Metals ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH116-AS2	Jul 27/21	3:30 PM	2	S			✓			✓							N
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Timothy Damdar	July 27/21	5:13pm	NEAL		
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time

Page 1 of 1

N°:

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

AGAT Laboratories

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CANADA L4Z 1Y2
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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-349E

AGAT WORK ORDER: 21T791121

SOIL ANALYSIS REVIEWED BY: Amanjot Bhela, Inorganic Lab Manager

DATE REPORTED: Aug 30, 2021

PAGES (INCLUDING COVER): 6

VERSION*: 1

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

*Notes

Disclaimer:

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

AGAT Laboratories

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Certificate of Analysis

AGAT WORK ORDER: 21T791121

PROJECT: BIGC-ENV-349E

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-277 Cross Avenue, Oakville, ON

SAMPLED BY:TVH

O. Reg. 153(511) - All Metals (Soil)

DATE RECEIVED: 2021-08-20

DATE REPORTED: 2021-08-30

SAMPLE DESCRIPTION:				BH201-SS2	BH202-SS2	BH203-SS2	BH204-SS2
SAMPLE TYPE:				Soil	Soil	Soil	Soil
DATE SAMPLED:				2021-08-20 11:05	2021-08-20 10:35	2021-08-20 10:05	2021-08-20 09:10
Parameter	Unit	G / S	RDL	2878405	2878406	2878407	2878408
Antimony	µg/g	7.5	0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	7	9	7	9
Barium	µg/g	390	2.0	122	79.7	90.4	58.7
Beryllium	µg/g	4	0.4	0.7	0.9	0.6	0.7
Boron	µg/g	120	5	13	17	15	16
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.29	0.23	0.35	0.31
Cadmium	µg/g	1.2	0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	5	20	25	21	22
Cobalt	µg/g	22	0.5	11.3	16.4	10.4	13.6
Copper	µg/g	140	1.0	38.7	97.1	84.8	135
Lead	µg/g	120	1	21	8	13	10
Molybdenum	µg/g	6.9	0.5	0.7	<0.5	0.9	0.6
Nickel	µg/g	100	1	24	33	23	27
Selenium	µg/g	2.4	0.8	<0.8	<0.8	<0.8	<0.8
Silver	µg/g	20	0.5	<0.5	<0.5	<0.5	<0.5
Thallium	µg/g	1	0.5	<0.5	<0.5	<0.5	<0.5
Uranium	µg/g	23	0.50	0.56	0.80	0.85	0.85
Vanadium	µg/g	86	0.4	30.9	34.7	33.9	31.9
Zinc	µg/g	340	5	85	69	71	60
Chromium, Hexavalent	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2
Mercury	µg/g	0.27	0.10	<0.10	<0.10	<0.10	<0.10

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

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

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http://www.agatlabs.com

Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T791121
PROJECT: BIGC-ENV-349E
ATTENTION TO: Rebecca Morrison
SAMPLING SITE:217-277 Cross Avenue, Oakville, ON
SAMPLED BY:TVH

Soil Analysis

RPT Date: Aug 30, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - All Metals (Soil)															
Antimony	2886229		<0.8	<0.8	NA	< 0.8	124%	70%	130%	102%	80%	120%	81%	70%	130%
Arsenic	2886229		4	4	NA	< 1	116%	70%	130%	105%	80%	120%	106%	70%	130%
Barium	2886229		51.5	48.9	5.2%	< 2.0	110%	70%	130%	99%	80%	120%	101%	70%	130%
Beryllium	2886229		0.4	<0.4	NA	< 0.4	100%	70%	130%	83%	80%	120%	88%	70%	130%
Boron	2886229		<5	5	NA	< 5	90%	70%	130%	99%	80%	120%	95%	70%	130%
Boron (Hot Water Soluble)	2878405	2878405	0.29	0.30	NA	< 0.10	106%	60%	140%	98%	70%	130%	100%	60%	140%
Cadmium	2886229		<0.5	<0.5	NA	< 0.5	109%	70%	130%	101%	80%	120%	103%	70%	130%
Chromium	2886229		12	12	NA	< 5	104%	70%	130%	95%	80%	120%	93%	70%	130%
Cobalt	2886229		4.7	4.8	2.1%	< 0.5	99%	70%	130%	100%	80%	120%	97%	70%	130%
Copper	2886229		13.2	13.3	0.8%	< 1.0	97%	70%	130%	103%	80%	120%	101%	70%	130%
Lead	2886229		16	15	6.5%	< 1	103%	70%	130%	96%	80%	120%	94%	70%	130%
Molybdenum	2886229		<0.5	<0.5	NA	< 0.5	114%	70%	130%	111%	80%	120%	113%	70%	130%
Nickel	2886229		10	10	0.0%	< 1	100%	70%	130%	107%	80%	120%	102%	70%	130%
Selenium	2886229		<0.8	<0.8	NA	< 0.8	131%	70%	130%	98%	80%	120%	103%	70%	130%
Silver	2886229		<0.5	<0.5	NA	< 0.5	110%	70%	130%	103%	80%	120%	104%	70%	130%
Thallium	2886229		<0.5	<0.5	NA	< 0.5	106%	70%	130%	101%	80%	120%	99%	70%	130%
Uranium	2886229		<0.50	<0.50	NA	< 0.50	107%	70%	130%	104%	80%	120%	105%	70%	130%
Vanadium	2886229		20.6	21.5	4.3%	< 0.4	103%	70%	130%	96%	80%	120%	97%	70%	130%
Zinc	2886229		47	47	0.0%	< 5	98%	70%	130%	100%	80%	120%	107%	70%	130%
Chromium, Hexavalent	2895642		<0.2	<0.2	NA	< 0.2	95%	70%	130%	91%	80%	120%	78%	70%	130%
Mercury	2886229		<0.10	<0.10	NA	< 0.10	112%	70%	130%	97%	80%	120%	93%	70%	130%

Comments: NA signifies Not Applicable.
If the RPD value is NA, the results of the duplicates are under 5X the RDL and will not be calculated.
More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

Certified By:

AGAT Laboratories

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QA Violation

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T791121

PROJECT: BIGC-ENV-349E

ATTENTION TO: Rebecca Morrison

RPT Date: Aug 30, 2021

PARAMETER	Sample Id	Sample Description	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
			Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
				Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - All Metals (Soil)											
Selenium		BH201-SS2	131%	70%	130%	98%	80%	120%	103%	70%	130%

Comments: NA signifies Not Applicable.
If the RPD value is NA, the results of the duplicates are under 5X the RDL and will not be calculated.
More than 90% of the elements met acceptance limits and overall data quality is acceptable for use. For a multi-element scan up to 10% of analytes may exceed the quoted limits by up to 10% absolute.

AGAT Laboratories

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CANADA L4Z 1Y2
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http://www.agatlabs.com

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T791121

PROJECT: BIGC-ENV-349E

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-277 Cross Avenue, Oakville, ON

SAMPLED BY:TVH

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS

AGAT Laboratories

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Ph: 905.712.5100 Fax: 905.712.5122
webearth.agatlabs.com

Chain of Custody Record

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

Report Information:

Company: B.I.G. Consulting
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road
Mississauga, ON L4W 2Z4
Phone: 905-782-0315 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email:

Project Information:

Project: BIGC-ENV-349E
Site Location: 217-227 Cross Avenue, Oakville, ON
Sampled By: TVH
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis

Invoice Information:

Bill To Same: Yes ☑ No ☐
Company:
Contact:
Address:
Email: LDougherty@brownfieldigi.com; NKepics@brownfieldigi.com

Regulatory Requirements:

(Please check all applicable boxes)

☐ Regulation 558

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

☐ Excess Soils R406
Table (Indicate One)
Sample from APEC?
☐ Yes
☐ No
☐ Stockpile ☐ In-situ

☐ Sewer Use
☐ Sanitary ☐ Storm
Region
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
(Indicate One)

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

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

Sample Matrix Legend

B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Laboratory Use Only

Work Order #: 21T791121
Cooler Quantity:
Arrival Temperatures: 13.1 | 14.8 | 15.3
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: Bagged ice

Turnaround Time (TAT) Required:

Regular TAT ☑ 5 to 7 Business Days

Rush TAT (Rush Surcharges Apply)

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

OR Date Required (Rush Surcharges May Apply):

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

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

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics, inc. EC/SAR	O. Reg 153: Metals - ICPMS, ☒ CrVI, ☒ Hg, ☒ HWSB	O. Reg 153: BTEX, F1-F4 PHCs, Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH201-SS2	20-08-21	11:05 AM/PM	1	Soil				☑									
BH202-SS2	20-08-21	10:35 AM/PM	1	Soil				☑									
BH203-SS2	20-08-21	10:05 AM/PM	1	Soil				☑									
BH204-SS2	20-08-21	9:10 AM/PM	1	Soil				☑									
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															
		AM/PM															

Samples Relinquished By (Print Name and Sign): TRAVIS VAN HOLST	Date: Aug 20/2021	Time: 3:30	Samples Received By (Print Name and Sign):	Date:	Time: 21 AUG 20 3:44PM
Samples Relinquished By (Print Name and Sign):	Date:	Time:	Samples Received By (Print Name and Sign):	Date:	Time: Page 1 of 1
Samples Relinquished By (Print Name and Sign):	Date:	Time:	Samples Received By (Print Name and Sign):	Date:	Time: N°:

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

Page 6 of 6

AGAT Laboratories

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

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-349E

AGAT WORK ORDER: 21T796236

SOIL ANALYSIS REVIEWED BY: Jacky Zhu, Spectroscopy Technician

DATE REPORTED: Sep 03, 2021

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

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

AGAT Laboratories

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

Certificate of Analysis

AGAT WORK ORDER: 21T796236

PROJECT: BIGC-ENV-349E

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - All Metals (Soil)

DATE RECEIVED: 2021-09-01

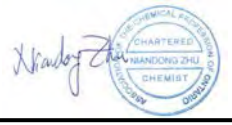
DATE REPORTED: 2021-09-03

		SAMPLE DESCRIPTION:		BH201-SS1
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2021-08-20
Parameter	Unit	G / S	RDL	2918865
Antimony	µg/g	7.5	0.8	<0.8
Arsenic	µg/g	18	1	7
Barium	µg/g	390	2.0	122
Beryllium	µg/g	4	0.4	1.0
Boron	µg/g	120	5	15
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.24
Cadmium	µg/g	1.2	0.5	<0.5
Chromium	µg/g	160	5	26
Cobalt	µg/g	22	0.5	14.5
Copper	µg/g	140	1.0	51.6
Lead	µg/g	120	1	12
Molybdenum	µg/g	6.9	0.5	0.5
Nickel	µg/g	100	1	30
Selenium	µg/g	2.4	0.8	<0.8
Silver	µg/g	20	0.5	<0.5
Thallium	µg/g	1	0.5	<0.5
Uranium	µg/g	23	0.50	0.58
Vanadium	µg/g	86	0.4	35.0
Zinc	µg/g	340	5	73
Chromium, Hexavalent	µg/g	8	0.2	<0.2
Mercury	µg/g	0.27	0.10	<0.10

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

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:



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TEL (905)712-5100
FAX (905)712-5122
http://www.agatlabs.com

Quality Assurance

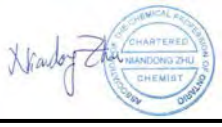
CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T796236
PROJECT: BIGC-ENV-349E
ATTENTION TO: Rebecca Morrison
SAMPLING SITE:
SAMPLED BY:

Soil Analysis

RPT Date: Sep 03, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - All Metals (Soil)															
Antimony	2905781		<0.8	<0.8	NA	< 0.8	111%	70%	130%	108%	80%	120%	74%	70%	130%
Arsenic	2905781		20	20	0.0%	< 1	116%	70%	130%	107%	80%	120%	100%	70%	130%
Barium	2905781		102	96.9	5.1%	< 2.0	110%	70%	130%	97%	80%	120%	91%	70%	130%
Beryllium	2905781		0.8	0.8	NA	< 0.4	107%	70%	130%	105%	80%	120%	96%	70%	130%
Boron	2905781		14	14	NA	< 5	95%	70%	130%	110%	80%	120%	90%	70%	130%
Boron (Hot Water Soluble)	2918865	2918865	0.24	0.24	NA	< 0.10	95%	60%	140%	109%	70%	130%	103%	60%	140%
Cadmium	2905781		<0.5	<0.5	NA	< 0.5	115%	70%	130%	108%	80%	120%	100%	70%	130%
Chromium	2905781		49	51	4.0%	< 5	109%	70%	130%	106%	80%	120%	99%	70%	130%
Cobalt	2905781		6.9	6.7	2.9%	< 0.5	101%	70%	130%	103%	80%	120%	88%	70%	130%
Copper	2905781		21.9	18.9	14.7%	< 1.0	96%	70%	130%	103%	80%	120%	80%	70%	130%
Lead	2905781		25	23	8.3%	< 1	107%	70%	130%	97%	80%	120%	90%	70%	130%
Molybdenum	2905781		1.6	1.7	NA	< 0.5	118%	70%	130%	116%	80%	120%	109%	70%	130%
Nickel	2905781		13	12	8.0%	< 1	105%	70%	130%	106%	80%	120%	88%	70%	130%
Selenium	2905781		2.6	2.4	NA	< 0.8	129%	70%	130%	104%	80%	120%	94%	70%	130%
Silver	2905781		<0.5	<0.5	NA	< 0.5	112%	70%	130%	102%	80%	120%	89%	70%	130%
Thallium	2905781		<0.5	<0.5	NA	< 0.5	107%	70%	130%	102%	80%	120%	91%	70%	130%
Uranium	2905781		1.40	1.36	NA	< 0.50	104%	70%	130%	103%	80%	120%	102%	70%	130%
Vanadium	2905781		48.2	46.5	3.6%	< 0.4	106%	70%	130%	98%	80%	120%	81%	70%	130%
Zinc	2905781		138	137	0.7%	< 5	112%	70%	130%	114%	80%	120%	91%	70%	130%
Chromium, Hexavalent	2916755		<0.2	<0.2	NA	< 0.2	95%	70%	130%	92%	80%	120%	80%	70%	130%
Mercury	2905781		0.14	0.13	NA	< 0.10	109%	70%	130%	109%	80%	120%	101%	70%	130%

Comments: NA Signifies Not Applicable.
Duplicate NA: results are less than 5X the RDL and RPD will not be calculated.

Certified By:



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

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T796236

PROJECT: BIGC-ENV-349E

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS

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Mississauga, Ontario L4Z 1Y2
Ph 905 712-5100 Fax 905 712-5122
webaarm.agatlabs.com

AGAT Laboratories

Chain of Custody Record

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

Laboratory Use Only
Work Order #: 21T796236

Cooler Quantity:
Arrival Temperatures: 2.8 | 2.9 | | |
Custody Seal Intact: ☐Yes ☐No ☐N/A
Notes: On Ice

Report Information:
Company: B.I.G. Consulting
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road
Mississauga, ON L4W 2Z4
Phone: 905-782-0315 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email:

Regulatory Requirements:
(Please check all applicable boxes)

☐ Regulation 558

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

☐ Excess Soils R406
Table ____ (Indicate One)
Sample from APEC?
☐ Yes
☐ No
☐ Stockpile ☐ In-situ

☐ Sewer Use
☐ Sanitary ☐ Storm
Region
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
(Indicate One)

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

Project Information:
Project: BIGC-ENV-349E
Site Location: 217-227 Cross Avenue, Oakville, ON
Sampled By:
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

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

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

Invoice Information:
Bill To Same: Yes ☑ No ☐
Company:
Contact:
Address:
Email: LDougherty@brownfieldigi.com; NKepics@brownfieldigi.com

Sample Matrix Legend
B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics, inc. EC/SAR	O. Reg 153: Metals - ICPMS, ☒ CrVI, ☒ Hg, ☒ HWSB	O. Reg 153: BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	Landfill Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Excess Soils SPLP Rainwater Leach ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH201-SS1	20-08-21	AM PM	1	Soil				☑									
		AM PM															
		AM PM															
		AM PM															
		AM PM															
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21 SEP 1 5:15 PM

Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	
~~TRAVIS VAN HOLST~~ Khagendra Kandel	9/1/21	5:00 PM	Joseph			
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	Page 1 of 1
Samples Relinquished By (Print Name and Sign):	Date	Time	Samples Received By (Print Name and Sign):	Date	Time	N°:

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http://www.agatlabs.com

CLIENT NAME: B.I.G. CONSULTING INC.
12-5500 TOMKEN ROAD
MISSISSAUGA, ON L4W 2Z4
416-214-4880

ATTENTION TO: Rebecca Morrison

PROJECT: BIGC-ENV-349E

AGAT WORK ORDER: 21T796238

SOIL ANALYSIS REVIEWED BY: Amanjot Bhela, Inorganic Lab Manager

DATE REPORTED: Sep 03, 2021

PAGES (INCLUDING COVER): 5

VERSION*: 1

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

*Notes

Disclaimer:

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

AGAT Laboratories

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TEL (905)712-5100
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http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 21T796238

PROJECT: BIGC-ENV-349E

CLIENT NAME: B.I.G. CONSULTING INC.

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:

SAMPLED BY:

O. Reg. 153(511) - All Metals (Soil)

DATE RECEIVED: 2021-09-01

DATE REPORTED: 2021-09-03

		SAMPLE DESCRIPTION:		BH204-SS1
		SAMPLE TYPE:		Soil
		DATE SAMPLED:		2021-08-20
Parameter	Unit	G / S	RDL	2918895
Antimony	µg/g	7.5	0.8	<0.8
Arsenic	µg/g	18	1	8
Barium	µg/g	390	2.0	57.2
Beryllium	µg/g	4	0.4	<0.4
Boron	µg/g	120	5	15
Boron (Hot Water Soluble)	µg/g	1.5	0.10	0.13
Cadmium	µg/g	1.2	0.5	<0.5
Chromium	µg/g	160	5	10
Cobalt	µg/g	22	0.5	5.9
Copper	µg/g	140	1.0	34.4
Lead	µg/g	120	1	26
Molybdenum	µg/g	6.9	0.5	0.9
Nickel	µg/g	100	1	11
Selenium	µg/g	2.4	0.8	<0.8
Silver	µg/g	20	0.5	<0.5
Thallium	µg/g	1	0.5	<0.5
Uranium	µg/g	23	0.50	<0.50
Vanadium	µg/g	86	0.4	14.9
Zinc	µg/g	340	5	101
Chromium, Hexavalent	µg/g	8	0.2	<0.2
Mercury	µg/g	0.27	0.10	<0.10

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

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

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

Quality Assurance

CLIENT NAME: B.I.G. CONSULTING INC.
AGAT WORK ORDER: 21T796238
PROJECT: BIGC-ENV-349E
ATTENTION TO: Rebecca Morrison
SAMPLING SITE:
SAMPLED BY:

Soil Analysis

RPT Date: Sep 03, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - All Metals (Soil)															
Antimony	2902957		<0.8	<0.8	NA	< 0.8	104%	70%	130%	98%	80%	120%	83%	70%	130%
Arsenic	2902957		7	7	0.0%	< 1	106%	70%	130%	98%	80%	120%	108%	70%	130%
Barium	2902957		84.6	82.0	3.1%	< 2.0	100%	70%	130%	94%	80%	120%	93%	70%	130%
Beryllium	2902957		<0.4	<0.4	NA	< 0.4	89%	70%	130%	93%	80%	120%	97%	70%	130%
Boron	2902957		13	13	NA	< 5	85%	70%	130%	100%	80%	120%	103%	70%	130%
Boron (Hot Water Soluble)	2918865		0.24	0.24	NA	< 0.10	95%	60%	140%	109%	70%	130%	103%	60%	140%
Cadmium	2902957		<0.5	<0.5	NA	< 0.5	103%	70%	130%	98%	80%	120%	101%	70%	130%
Chromium	2902957		14	14	NA	< 5	99%	70%	130%	103%	80%	120%	105%	70%	130%
Cobalt	2902957		7.9	7.8	1.3%	< 0.5	93%	70%	130%	93%	80%	120%	98%	70%	130%
Copper	2902957		46.3	45.2	2.4%	< 1.0	88%	70%	130%	95%	80%	120%	82%	70%	130%
Lead	2902957		12	12	0.0%	< 1	96%	70%	130%	93%	80%	120%	87%	70%	130%
Molybdenum	2902957		0.7	0.7	NA	< 0.5	105%	70%	130%	102%	80%	120%	115%	70%	130%
Nickel	2902957		14	14	0.0%	< 1	95%	70%	130%	97%	80%	120%	97%	70%	130%
Selenium	2902957		<0.8	<0.8	NA	< 0.8	103%	70%	130%	92%	80%	120%	103%	70%	130%
Silver	2902957		<0.5	<0.5	NA	< 0.5	108%	70%	130%	92%	80%	120%	89%	70%	130%
Thallium	2902957		<0.5	<0.5	NA	< 0.5	96%	70%	130%	96%	80%	120%	94%	70%	130%
Uranium	2902957		<0.50	<0.50	NA	< 0.50	95%	70%	130%	98%	80%	120%	102%	70%	130%
Vanadium	2902957		20.8	20.8	0.0%	< 0.4	96%	70%	130%	87%	80%	120%	99%	70%	130%
Zinc	2902957		55	55	0.0%	< 5	100%	70%	130%	103%	80%	120%	99%	70%	130%
Chromium, Hexavalent	2916755		<0.2	<0.2	NA	< 0.2	95%	70%	130%	92%	80%	120%	80%	70%	130%
Mercury	2902957		<0.10	<0.10	NA	< 0.10	100%	70%	130%	98%	80%	120%	97%	70%	130%

Comments: NA signifies Not Applicable.
If the RPD value is NA, the results of the duplicates are under 5X the RDL and will not be calculated.

Certified By:

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

Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.

AGAT WORK ORDER: 21T796238

PROJECT: BIGC-ENV-349E

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Arsenic	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Barium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Beryllium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	modified from EPA 6010D and MSA PART 3, CH 21	ICP/OES
Cadmium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Cobalt	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Copper	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Lead	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Molybdenum	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Nickel	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Selenium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Silver	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Thallium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Uranium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Vanadium	MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Zinc	MET 93 -6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
Chromium, Hexavalent	INOR-93-6068	modified from EPA 3060 and EPA 7196	SPECTROPHOTOMETER
Mercury	MET-93-6103	modified from EPA 7471B and SM 3112 B	ICP-MS

AGAT Laboratories

5835 Coopers Avenue
Mississauga, Ontario L4Z 1Y2
Tel: 905 712 5100 Fax: 905 712 5122
www.agatlabs.com

Chain of Custody Record

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

Laboratory Use Only
Work Order #: 21T796238

Cooler Quantity: 1
Arrival Temperatures: 2.8 | 2.9
Custody Seal Intact: ☐ Yes ☐ No ☐ N/A
Notes: on ice

Report Information:
Company: B.I.G. Consulting
Contact: Rebecca Morrison
Address: 12-5500 Tomken Road
Mississauga, ON L4W 2Z4
Phone: 905-782-0315 Fax:
Reports to be sent to:
1. Email: rmorrison@brownfieldigi.com
2. Email:

Regulatory Requirements:
(Please check all applicable boxes)

☐ Regulation 558

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

☐ Excess Soils R406
Table (Indicate One)
Sample from APEC?
☐ Yes
☐ No
☐ Stockpile ☐ In-situ

☐ Sewer Use
☐ Sanitary ☐ Storm
Region
☐ CCME
☐ Prov. Water Quality Objectives (PWQO)
☐ Other
(Indicate One)

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

Project Information:
Project: BIGC-ENV-349E
Site Location: 217-227 Cross Avenue, Oakville, ON
Sampled By:
AGAT Quote #: PO:
Please note: If quotation number is not provided, client will be billed full price for analysis.

Invoice Information:
Bill To Same: Yes ☑ No ☐
Company:
Contact:
Address:
Email: LDougherty@brownfieldigi.com; NKepics@brownfieldigi.com

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

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

Sample Matrix Legend
B	Biota
GW	Ground Water
O	Oil
P	Paint
S	Soil
SD	Sediment
SW	Surface Water

Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Field Filtered - Metals, Hg, CrVI, DOC (Y/N)	O. Reg 153: Metals & Inorganics, inc. EC/SAR	Metals - ICPMS, ☒ CrVI, ☒ Hg, ☒ HWSB	BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No	PAHs	PCBs	VOC	Landfill Disposal Characterization TCLP: TC_P: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	Excess Soils SPLP Rainwater Leach SPLP: ☐ Metals ☐ VOCs ☐ SVOCs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR	Potentially Hazardous or High Concentration (Y/N)
BH204-SS1	20-08-21	AM PM	1	Soil				☑									
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															
		AM PM															

2152P 1 Jul 15pm

Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
~~TRAVIS VAN HOLST~~ Khagendra Kandel	[illegible]	5:00 PM	Joseph		
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time
Samples Relinquished By (Print Name and Sign)	Date	Time	Samples Received By (Print Name and Sign)	Date	Time

Page 1 of 1

N°:

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

Appendix C – Disposal Documentation

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101070**	MARIE

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 7:26 am	3/22/22 7:26 am	YORK DEMO		

REFERENCE	ORIGIN
ROGERS TRUCKING 2 LIC#AN96756	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 38620 kg Manual In
TARE 14000 kg Manual Out
NET 24620 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
24.62	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101071**	MARIE

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 7:33 am	3/22/22 7:33 am	YORK DEMO		

REFERENCE	ORIGIN
1191669 Ont Inc 500 LIC# BL36040	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 36790 kg Manual In
TARE 13500 kg Manual Out
NET 23290 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
23.29	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101072**	MARIE

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 8:01 am	3/22/22 8:01 am	YORK DEMO		

REFERENCE	
9931872Ccanada Inc 740 LIC# BB39555	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 34720 kg Manual In
TARE 14200 kg Manual Out
NET 20520 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
20.52	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101073**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 8:27 am	3/22/22 8:27 am	YORK DEMO		

REFERENCE	
1296701 CAN INC 01 LIC#BK54705	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 40550 kg Manual In
TARE 13500 kg Manual Out
NET 27050 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
27.05	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101074**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 8:43 am	3/22/22 8:43 am	YORK DEMO		

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

REFERENCE
ROGERS TRUCKING 2 LIC#AN96756

GROSS 37610 kg Manual In
TARE 14000 kg Manual Out
NET 23610 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
23.61	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHTMASTER
02	**101075**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 8:50 am	3/22/22 8:50 am	YORK DEMO		

REFERENCE	
1191669 ONT INC 500 LIC# BL36040	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 37660 kg Manual In
TARE 13500 kg Manual Out
NET 24160 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
24.16	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101076**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 9:12 am	3/22/22 9:12 am	YORK DEMO		

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

REFERENCE
9931872 CANADA INC 740 LIC# BB39555

GROSS 38500 kg Manual In
TARE 14200 kg Manual Out
NET 24300 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
24.30	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101077**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 9:40 am	3/22/22 9:40 am	YORK DEMO		

REFERENCE	
1296701 CAN INC 01 LIC#BK54705	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 39790 kg Manual In
TARE 13500 kg Manual Out
NET 26290 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
26.29	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101078**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 9:51 am	3/22/22 9:51 am	YORK DEMO		

REFERENCE	
ROGERS TRUCKING 2 LIC#AN96756	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 36800 kg Manual In
TARE 14000 kg Manual Out
NET 22800 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
22.80	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101079**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 10:20 am	3/22/22 10:20 am	YORK DEMO		

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

REFERENCE
9931872CANADA INC 740 LIC# BB39555

GROSS 35220 kg Manual In
TARE 14200 kg Manual Out
NET 21020 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
21.02	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101080**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 10:29 am	3/22/22 10:29 am	YORK DEMO		

REFERENCE	
1191669 ONT INC 500 LIC# BL36040	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 36770 kg Manual In
TARE 13500 kg Manual Out
NET 23270 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
23.27	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101081**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 10:59 am	3/22/22 10:59 am	YORK DEMO		

REFERENCE	
1296701 CAN INC 01 LIC#BK54705	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 39580 kg Manual In
TARE 13500 kg Manual Out
NET 26080 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
26.08	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101082**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 11:03 am	3/22/22 11:03 am	YORK DEMO		

REFERENCE	
ROGERS TRUCKING 2 LIC#AN96756	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 37750 kg Manual In
TARE 14000 kg Manual Out
NET 23750 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
23.75	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101083**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 11:25 am	3/22/22 11:25 am	YORK DEMO		

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

REFERENCE
9931872CANADA INC 740 LIC# BB39555

GROSS 38140 kg Manual In
TARE 14200 kg Manual Out
NET 23940 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
23.94	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101084**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 11:39 am	3/22/22 11:39 am	YORK DEMO		

REFERENCE	
1191669 ONT INC 500 LIC# BL36040	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 37050 kg Manual In
TARE 13500 kg Manual Out
NET 23550 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
23.55	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101085**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 12:13 pm	3/22/22 12:13 pm	YORK DEMO		

REFERENCE	
1296701 CAN INC 01 LIC#BK54705	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 40770 kg Manual In
TARE 13500 kg Manual Out
NET 27270 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
27.27	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101086**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 1:22 pm	3/22/22 1:22 pm	YORK DEMO		

REFERENCE	
ROGERS TRUCKING 2 LIC#AN96756	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 40590 kg Manual In
TARE 14000 kg Manual Out
NET 26590 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
26.59	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101087**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 1:36 pm	3/22/22 1:36 pm	YORK DEMO		

REFERENCE	
9931872CANADA INC 740 LIC# BB39555	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 38480 kg Manual In
TARE 14200 kg Manual Out
NET 24280 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
24.28	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101088**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 1:40 pm	3/22/22 1:40 pm	YORK DEMO		

REFERENCE	
1191669 ONT INC 500 LIC# BL36040	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 38660 kg Manual In
TARE 13500 kg Manual Out
NET 25160 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
25.16	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101091**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/22/22 2:46 pm	3/22/22 2:46 pm	YORK DEMO		

REFERENCE	
1191669 ONT INC 500 LIC# BL36040	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 37810 kg Manual In
TARE 13500 kg Manual Out
NET 24310 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
24.31	MT	Dirt				

H.S.T #

YORK1 TRILLIUM TRANSFER LTD.
(Bethridge)
195 Bethridge Road
Toronto, ON M9W 1N4

Phone: 416-743-2230
MOE: 2340-BGMNDY

SITE	TICKET #	WEIGHMASTER
02	**101107**	KDaniel

IN	OUT	TRUCK	CONT.	LICENCE
3/25/22 8:38 am	3/25/22 8:38 am	YORK DEMO		

REFERENCE	ORIGIN
12196701 CAN INC #1 LIC#BK54705	

CUSTOMER: 001208 - YORK1 DEMOLITION CORP
125 VILLARBOIT CRES
VAUGHAN, ON L4K 4K2

CONTRACT: 227 Cross Ave

INVOICE
INBOUND

GROSS 47050 kg Manual In
TARE 12500 kg Manual Out
NET 34550 kg

COMMENTS:

BOL:

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
34.55	MT	Dirt				

H.S.T #

Appendix D – Borehole/Monitoring Well Logs

RECORD OF BOREHOLE No. BH/MW1

Project Number:	BIGC-GEO-490A	Drilling Location:	See Borehole Location Plan	Logged by:	MV
Project Client:	Oakville Argus Cross LP	Drilling Method:	150 mm Mud Rotary/ HQ Core	Compiled by:	MV
Project Name:	Preliminary Geotechnical Investigation	Drilling Machine:	Truck Mounted Drill	Reviewed by:	SS
Project Location:	581-587 Argus Road, Oakville	Date Started:	8 Oct 21	Date Completed: 8 Oct 21	Revision No.: 0, 25/10/21

Geodetic Ground Surface Elevation: 104.53 m

Depth (m)	Elevation (m)	Description	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%
0	104.38	**ASPHALT PAVEMENT:** 50mm Asphalt over 100mm granular base (0.2)	SS	1	62	5
		FILL: silty clay to clayey silt, possibly reworked, mottled brown, moist, firm				

1	103.46	silty sand with clay, trace gravel, compact, possibly reworked below 0.76 m (1.1)	SS	2	59	22
		SILTY CLAY TILL: trace sand, trace gravel, occasional Shale fragments, reddish brown, moist, very stiff to hard				
		----------	SS	3	100	43
2		pale grey, hard below 1.83 m				
	101.98		SS	4	100	50/15
		BEDROCK: Shale, highly weathered, occasional limetone layers throughout, grey, moist to damp (2.6)				
3			SS	5	100	50/8
4						
			SS	6	100	50/5
		- first water strike				
5						
6			SS	7	100	50/5
7						
	96.86		SS	8	100	50/5
	7.7	**End of Borehole**				

Notes:
1. Borehole open and dry upon completion of drilling.
2. Groundwater level reading at 4.38 m bgs on October 18, 2021.

FIELD TESTING: Penetration Testing — SPT, DCPT; MTO Vane* (Intact, Remould); Nilcon Vane* (Intact, Remould); * Undrained Shear Strength (kPa) 20 40 60 80

LAB TESTING: Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading, parts per million (ppm) 100 200 300 400; Lower Explosive Limit (LEL); W_P W W_L; Plastic Liquid; 20 40 60 80

INSTRUMENTATION INSTALLATION

COMMENTS

B.I.G. Consulting Inc.
12-5500 Tomken Rd.
Mississauga, ON L4W 2Z4
Canada
T: 416-214-4880
F: 416-551-2633

Groundwater depth on completion of drilling: Dry m.

Groundwater depth observed on 18/10/2021 at a depth of: 4.38 m.

RECORD OF BOREHOLE No. BM/MW2

Project Number:	BIGC-GEO-490A	Drilling Location:	See Borehole Location Plan	Logged by:	MV
Project Client:	Oakville Argus Cross LP	Drilling Method:	96 mm Mud Rotary/ HQ Core	Compiled by:	MV
Project Name:	Preliminary Geotechnical Investigation	Drilling Machine:	Truck Mounted Drill	Reviewed by:	SS
Project Location:	581-587 Argus Road, Oakville	Date Started:	7 Oct 21	Date Completed: 7 Oct 21	Revision No.: 0, 25/10/21

Lithology Plot	DESCRIPTION (Geodetic Ground Surface Elevation: 104.24 m)	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING: Penetration Testing (SPT / DCPT), MTO Vane* (Intact / Remould), Nilcon Vane* (Intact / Remould), * Undrained Shear Strength (kPa)	LAB TESTING: Rinse pH Values, Soil Vapour Reading (parts per million (ppm)), Lower Explosive Limit (LEL), Plastic / Liquid	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT PAVEMENT: 70mm Asphalt over 200mm granular base (103.97)										
	0.3	SS	1	70	16		104				
	FILL: silty clay to clayey silt, trace gravel, dark greenish black, damp, very stiff										
	----------										
	mottled greenish brown, stiff below 0.76 m	SS	2	75	12	1	103				
	102.72										
	CLAYEY SILT TILL: trace sand, trace gravel, grey to reddish brown, damp, hard 1.5	SS	3	79	34	2	102				
	101.65	SS	4	100	50/23			50/23			
	BEDROCK: Shale, highly weathered to excellent quality, occasional limetone layers throughout, grey, moist to damp 2.6	SS	5	100	50/5	3	101	50/5			
		SS	6	100	50/8	4	100	50/8			
						5	99				
	- first water strike	SS	7	100	50/5	6	98	50/5			
						7	97				
	ROCK CORE BEGINS at 7.32 m	RC	1	83	0						
	----------					8	96				
	- Very Poor Quality										
	- Fair Quality	RC	2	100	70	9 ▼	95				
	- Fair Quality	RC	3	99	72	10	94				
	- Good Quality soft zone from 12.06 to 12.2 m					11	93				
		RC	4	97	78	12	92				
	- Good Quality	RC	5	100	77	13	91				
						14					

B.I.G. Consulting Inc.
12-5500 Tomken Rd.
Mississauga, ON L4W 2Z4
Canada
T: 416-214-4880
F: 416-551-2633

▽ Groundwater depth on completion of drilling: Not measured m.

▼ Groundwater depth observed on 18/10/2021 at a depth of: 9.05 m.

Scale: 1 : 74

Continued on Next Page

RECORD OF BOREHOLE No. BM/MW2

Project Number: **BIGC-GEO-490A** Drilling Location: **See Borehole Location Plan** Logged by: **MV**

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING: Penetration Testing (○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80)	LAB TESTING: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent quality, occasional limetone layers throughout, grey, moist to damp					15	90				
	- Good Quality some oxidised laminae at 13.87 m soft zone from 14.38 to 14.54 m	RC	6	100	79						
	- Excellent Quality	RC	7	100	90	16	89				
	- Excellent Quality some oxidised laminae at 16.92 m	RC	8	97	95	17	88				
	- Good Quality	RC	9	97	89	18	87				
	- Excellent Quality	RC	10	100	100	19	86				
	- Excellent Quality	RC	11	100	99	20	85				
	- Good Quality fracture zone with slickenside from 24.01 to 24.29 m	RC	12	97	79	21	84				
	- Good Quality	RC	13	97	88	22	83				
	- Good Quality soft zones at 26.25 m and 27.02 to 27.07 m	RC	14	100	84	23	82				
	76.66					24	81				
	End of Borehole 27.6					25	80				
	Notes: 1. Borehole open completion of drilling. 2. Groundwater level reading not measured upon completion of drilling due to introduced drilling water. 3. Groundwater level reading at 9.05 m bgs on October 18, 2021.					26	79				
						27	78				
							77				

Scale: 1 : 74

RECORD OF BOREHOLE No. BM/MW3

Project Number:	BIGC-GEO-490A	Drilling Location:	See Borehole Location Plan	Logged by:	MV
Project Client:	Oakville Argus Cross LP	Drilling Method:	150 mm Solid Stem Augering	Compiled by:	MV
Project Name:	Preliminary Geotechnical Investigation	Drilling Machine:	Truck Mounted Drill	Reviewed by:	SS
Project Location:	581-587 Argus Road, Oakville	Date Started:	8 Oct 21 — Date Completed: 8 Oct 21	Revision No.:	0, 25/10/21

Geodetic Ground Surface Elevation: 104.37 m

DESCRIPTION	Elev. (m) / Depth (m)	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%
ASPHALT PAVEMENT: 50mm Asphalt over 150mm granular base	104.17 / 0.2				
FILL: silty clay to clayey silt, possibly reworked, trace sand, trace gravel, mottled brown, moist, stiff to very stiff		SS	1	38	9
---------- silty sand with clay, trace gravel, mottled pale grey, possibly reworked, compact below 0.76 m	103.30 / 1.1	SS	2	70	18
CLAYEY SILT TILL: trace sand, trace gravel, occasional Shale fragments, reddish brown to grey, moist, very stiff to hard	101.93 / 2.4	SS	3	100	39
BEDROCK: Shale, highly weathered, occasional limetone layers throughout, grey, moist to damp		SS	4	100	50/8
		SS	5	100	50/5
- first water strike	99.49 / 4.9	SS	6	100	50/5
End of Borehole on Auger Refusal					

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 4.72 m bgs upon completion of drilling.
3. Groundwater level reading at 4.24 m bgs on October 18, 2021.

FIELD TESTING: Penetration Testing (○ SPT, ● DCPT); MTO Vane* (△ Intact, ▲ Remould); Nilcon Vane* (◇ Intact, ◆ Remould); * Undrained Shear Strength (kPa) 20 40 60 80

LAB TESTING: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL); W_P W W_L Plastic Liquid 20 40 60 80

INSTRUMENTATION INSTALLATION

COMMENTS

B.I.G. Consulting Inc.
12-5500 Tomken Rd.
Mississauga, ON L4W 2Z4
Canada
T: 416-214-4880
F: 416-551-2633

▽ Groundwater depth on completion of drilling: 4.72 m.

▼ Groundwater depth observed on 18/10/2021 at a depth of: 4.24 m.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and requires interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commisioned and the accompanying'Notes to Record of Boreholes'.

Scale: 1 : 74

RECORD OF BOREHOLE No. BM/MW4

Project Number:	BIGC-GEO-490A	Drilling Location:	See Borehole Location Plan	Logged by:	MV
Project Client:	Oakville Argus Cross LP	Drilling Method:	150 mm Solid Stem Augering	Compiled by:	MV
Project Name:	Preliminary Geotechnical Investigation	Drilling Machine:	Truck Mounted Drill	Reviewed by:	SS
Project Location:	581-587 Argus Road, Oakville	Date Started:	8 Oct 21	Date Completed: 8 Oct 21	Revision No.: 0, 25/10/21

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
	Geodetic Ground Surface Elevation: 103.61 m							Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80		
	ASPHALT PAVEMENT: 50mm Asphalt over 150mm granular base 103.41 / 0.2										
	FILL: silty clay to clayey silt, thale fragments, brown to grey, moist, stiff 102.70	SS	1	75	14		103	○			
	CLAYEY SILT TILL: trace sand, trace gravel, pale slightly mottled brown to grey, moist to damp, stiff to hard 0.9	SS	2	51	31	1					
		SS	3	82	14		102	○			
	101.02	SS	4	47	75/23	2		75/23			
	BEDROCK: Shale, highly weathered, occasional limetone layers throughout, grey, moist to damp 2.6	SS	5	100	50/8	3	101	50/8			
	- first water strike	SS	6	100	50/8	4	100	50/8			
	96.29	SS	7	100	50/8	5	99	50/8			
	End of Borehole on Auger Refusal 7.3					6	98				
						7	97				

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 7.01 m bgs upon completion of drilling.
3. Groundwater level reading at 4.71 m bgs on October 18, 2021.

B.I.G. Consulting Inc.
12-5500 Tomken Rd.
Mississauga, ON L4W 2Z4
Canada
T: 416-214-4880
F: 416-551-2633

▽ Groundwater depth on completion of drilling: 7.01 m.

▼ Groundwater depth observed on 18/10/2021 at a depth of: 4.71 m.

RECORD OF BOREHOLE No. BM/MW5

Project Number:	BIGC-GEO-490A	Drilling Location:	See Borehole Location Plan	Logged by:	MV
Project Client:	Oakville Argus Cross LP	Drilling Method:	96 mm Solid Stem Augers	Compiled by:	MV
Project Name:	Preliminary Geotechnical Investigation	Drilling Machine:	Truck Mounted Drill	Reviewed by:	SS
Project Location:	581-587 Argus Road, Oakville	Date Started:	6 Oct 21	Date Completed: 6 Oct 21	Revision No.: 0, 25/10/21

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
	Geodetic Ground Surface Elevation: 103.75 m							Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80		
	ASPHALT PAVEMENT: 70mm Asphalt over 130mm granular base (103.55 / 0.2)	SS	1	70	9						
	FILL: silty clay to clayey silt, trace sand, trace gravel, mottled pale grey, damp, stiff to hard										
	occasional cobble, mottled greenish brown, hard below 0.76 m	SS	2	48	50/15	1	103	50/15			
	(102.23)										
	SILTY CLAY TO CLAYEY SILT TILL: trace gravel and pebbles, pale grey, damp, hard (1.5 / 101.46)	SS	3	62	32	2	102				
	BEDROCK: Shale, highly weathered to excellent quality, occasional limetone layers throughout, grey, moist to damp (2.3)	SS	4	100	50/8			50/8			
		SS	5	100	50/8	3	101	50/8			
		SS	6	100	50/10	4	100	50/10			
		SS	7	100	50/8	5	99	50/8			
	- first water strike					6	98				
	ROCK CORE BEGINS at 7.32 m	RC	1	87	0	7	97				
	- Very Poor Quality					8	96				
	- Fair Quality fracture zone from 8.16 to 8.72 m some conglomeratic layers throughout run	RC	2	100	61	9	95				
	- Fair Quality	RC	3	95	70	10	94				
	- Good Quality	RC	4	100	87	11	93				
	- Fair Quality some oxidised laminae from 12.34 to 15.39 m	RC	5	98	72	12	92				
						13	91				
						14	90				

Continued on Next Page

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12-5500 Tomken Rd.
Mississauga, ON L4W 2Z4
Canada
T: 416-214-4880
F: 416-551-2633

▽ Groundwater depth on completion of drilling: Not measured m.

▼ Groundwater depth observed on 18/10/2021 at a depth of: 19.04 m.

Scale: 1 : 74

RECORD OF BOREHOLE No. BM/MW5

Project Number: **BIGC-GEO-490A** Drilling Location: **See Borehole Location Plan** Logged by: **MV**

LITHOLOGY PROFILE	SOIL SAMPLING						FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)				
BEDROCK: Shale, highly weathered to excellent quality, occasional limetone layers throughout, grey, moist to damp - Excellent Quality	RC	6	100	93	15	89				
- Fair Quality sub vertical fracture from from 15.84 to 15.92 m	RC	7	100	74	16	88				
- Excellent Quality	RC	8	95	93	17–18	87–86				
- Excellent Quality	RC	9	100	92	19	85				
- Excellent Quality	RC	10	98	90	20–21	84–83				
- Fair Quality	RC	11	95	70	22	82–81				
- Excellent Quality fracture zone from 23.81 to 23.91 m	RC	12	100	99	23–24	80				
- Good Quality	RC	13	100	88	25	79				
78.45 / 25.3 **End of Borehole**										

Field Testing legend: Penetration Testing: ○ SPT ● DCPT; MTO Vane*: △ Intact ▲ Remould; Nilcon Vane*: ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80

Lab Testing legend: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL); W_P W W_L Plastic Liquid 20 40 60 80

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level reading not measured upon completion of drilling due to introduced drilling water.
3. Groundwater level reading at 19.04 m bgs on October 18, 2021.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and requires interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commisioned and the accompanying'Notes to Record of Boreholes'.

Scale: 1 : 74

RECORD OF BOREHOLE No. BH/MW101

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augering	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	13 Jan 21	Date Completed: 13 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)
	ASPHALT: 100 mm asphalt concrete over 200 mm granular base						
	FILL: clayey silt, trace sand, trace gravel, mottled, grey, moist, very stiff to hard (0.3)	SS	1	41	22		
		SS	2	100	60	1	
	CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, grey, moist, hard (1.1)	SS	3	93	71	2	
	BEDROCK: Shale, highly weathered, occasional limestone seams, grey, damp, hard (2.3)	SS	4	53	50/15		
		SS	5	63	50/8	3	
	-first water strike					4	
		SS	6	100	50/3	5	
		SS	7	100	50/3	6	
	End of Borehole (6.1)						

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 5.18 m bgs measured upon completion of drilling.

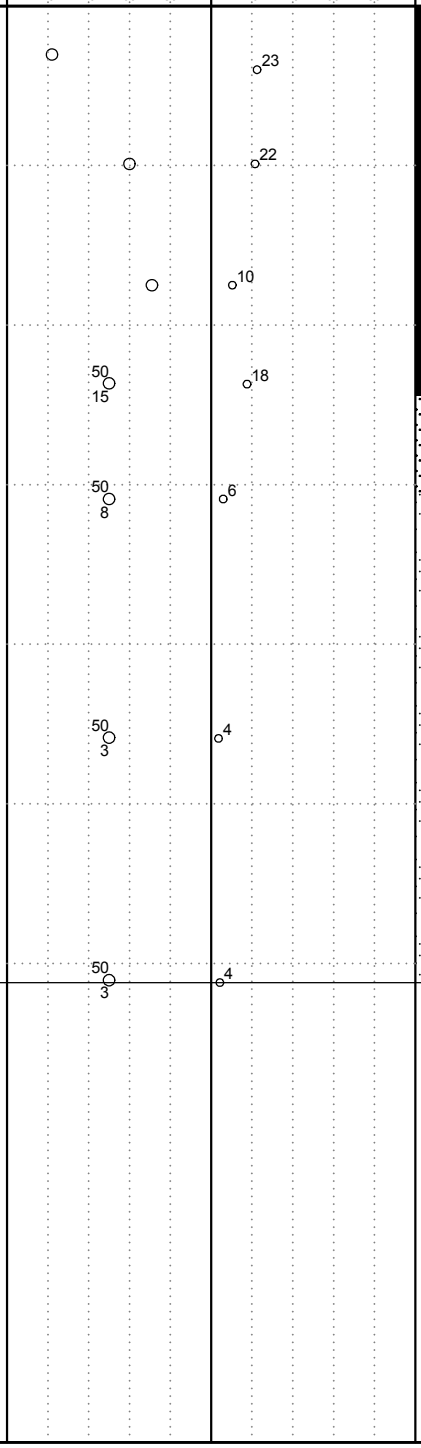
FIELD TESTING

Penetration Testing: ○ SPT ● DCPT

MTO Vane*: △ Intact ▲ Remould

Nilcon Vane*: ◇ Intact ◆ Remould

* Undrained Shear Strength (kPa): 20 40 60 80



LAB TESTING

★ Rinse pH Values: 2 4 6 8 10 12

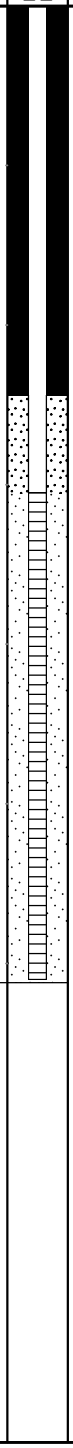
Soil Vapour Reading △ parts per million (ppm): 100 200 300 400

▲ Lower Explosive Limit (LEL)

W_P W W_L

Plastic Liquid: 20 40 60 80

INSTRUMENTATION INSTALLATION



COMMENTS

B.I.G. Consulting Inc.
12-5500 Tomken Rd.
Mississauga, ON L4W 2Z4
Canada
T: 416-214-4880
F: 416-551-2633

▽ Groundwater depth on completion of drilling: 5.18 m.

RECORD OF BOREHOLE No. BH/MW102

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augering	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	13 Jan 21	Date Completed: 13 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING: Penetration Testing (SPT / DCPT); MTO Vane* (Intact / Remould); Nilcon Vane* (Intact / Remould); * Undrained Shear Strength (kPa)	LAB TESTING: Rinse pH Values; Soil Vapour Reading (parts per million (ppm)); Lower Explosive Limit (LEL); W_P W W_L; Plastic / Liquid	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 100 mm asphalt concrete over 200 mm granular base	SS	1	90	50/15			50 / 15	19		
	FILL: sandy silt, some clay, mottled, brown/grey, very moist, compact 0.3										
	CLAYEY SILT TILL: trace sand, trace sand, trace gravel, fragments of Shale, grey, moist, very stiff to hard 0.8 - sand seam, 100 mm thick	SS	2	46	24	1			16		
		SS	3	90	50/15			50 / 15	13		
		SS	4	100	50/13	2		50 / 13	7		
	BEDROCK: Shale, highly weathered, occasional limestone fragments, grey, damp, hard 2.6	SS	5	100	50/3	3		50 / 3	6		
	-first water strike	SS	6	63	50/8	4		50 / 8	6		
		SS	7	60	50/5	5	▽	50 / 5	6		
	End of Borehole 6.2 Notes: 1. Borehole open upon completion of drilling. 2. Groundwater level at 5.18 m bgs measured upon completion of drilling.					6					

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▽ Groundwater depth on completion of drilling: 5.18 m.

RECORD OF BOREHOLE No. BH/MW103

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augering	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	13 Jan 21	Date Completed: 13 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 100 mm asphalt concrete over 300 mm granular bases	SS	1	51	13			○ 13			
	FILL: sand and gravel, brown, moist, compact 0.4 **CLAYEY SILT TILL:** some sand, trace gravel, fragments of Shale, reddish brown, moist, very stiff to hard 0.5	SS	2	84	26	1		○	○ 15		
		SS	3	93	70			○	○ 11		
	BEDROCK: Shale, highly weathered, occasional limestone fragments, grey, damp, hard 2.3	SS	4	87	50/15	2		50 ○ 15	○ 6		
		SS	5	100	50/5	3		50 ○ 5	○ 2		
		SS	6	60	50/5	4	▽	50 ○ 5	○ 4		
	Borehole terminated at 5.49 m due to auger refussal on inferred Limestone bedrock 5.5 Notes: 1. Borehole open upon completion of drilling. 2. Groundwater level at 4.57 m bgs measured upon completion of drilling.					5					

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▽ Groundwater depth on completion of drilling: 4.57 m.

RECORD OF BOREHOLE No. BH/MW104

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augering	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	13 Jan 21	Date Completed: 13 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING Penetration Testing: ○ SPT ● DCPT MTO Vane*: △ Intact ▲ Remould Nilcon Vane*: ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING ★ Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading △ parts per million (ppm) 100 200 300 400 ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 100 mm asphalt concrete over 200 mm granular bases										
	FILL: sand and gravel, brown, moist, compact 0.3	SS	1	62	23			○	○ 4		
	------- sandy silt, some clay, trace gravel	SS	2	62	13	1		○	○ 12		
	CLAYEY SILT TILL: some sand, trace gravel, fragments of Shale, brown, moist, hard 1.4	SS	3	95	42	2		○	○ 13		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, moist, hard 2.3	SS	4	63	50/8			50/8 ○	○ 7		
		SS	5	100	50/3	3		50/3 ○	○ 6		
		SS	6	100	50/5	4		50/5 ○	○ 7		
		SS	7	100	50/3	5 ▽ 6		50/3 ○	○ 8		
	End of Borehole 6.1										

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 4.88 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 4.88 m.

RECORD OF BOREHOLE No. BH/MW105

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Hollow Stem Augering + Rock Coring	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	14 Jan 21	Date Completed: 15 Jan 21	Revision No.: 1, 1/2/21

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 100 mm asphalt concrete over 200 mm granular base										
	FILL: clayey silt, trace to some sand and gravel, brown/grey, moist, hard to very stiff (0.3)	SS	1	62	37			○ 50	○ 6		
		SS	2	70	23	1		○	○ 14		
	CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, grey, moist, very stiff to hard (1.1)										
		SS	3	84	55	2		○	○ 9		
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist (2.3)	SS	4	100	50/8			○ 50/8	○ 7		
		SS	5	100	50/5	3		○ 50/5	○ 7		
	-first water strike	SS	6	100	50/5	4		○ 50/5	○ 18		
		SS	7	100	50/5	6		○ 50/5	○ 16		
		SS	8	100	50/5	7		○ 50/5	○ 16		
	ROCK CORE BEGINS - Poor Quality	RC	1	78	27	8		○			
						9					

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▽ No freestanding groundwater measured in open borehole on completion of drilling. ■ Cave in depth recorded on completion of drilling: Not Measured m.

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RECORD OF BOREHOLE No. BH/MW105

Project Number: **BIGC-ENV-349B** Drilling Location: **See BH Location Plan** Logged by: **TVH**

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	- Good Quality **BEDROCK:** Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist	RC	2	100	81						
	- Good Quality	RC	3	99	82	10		○			
	- Excellent Quality	RC	4	99	91	11 12		○			
	- Excellent Quality	RC	5	99	97	13 14		○			
	- Excellent Quality	RC	6	99	96	15		○			
	- Excellent Quality	RC	7	99	95	16 17		○			
	- Excellent Quality	RC	8	97	98	18		○			
						19					

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and requires interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commisioned and the accompanying'Notes to Record of Boreholes'.

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RECORD OF BOREHOLE No. BH/MW105

Project Number: **BIGC-ENV-349B** Drilling Location: **See BH Location Plan** Logged by: **TVH**

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist										
	- Good Quality	RC	9	98	83	20		○			
	- Excellent Quality	RC	10	99	93	21		○			
	- Excellent Quality	RC	11	99	92	22		○			
						23					
	Borehole terminated at 23.42 23.4										
	Notes: 1. Borehole open upon completion of drilling. 2. Groundwater level not measured upon completion of drilling due to introduced drilling water										

Scale: 1 : 47

RECORD OF BOREHOLE No. BH/MW106

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	20 Jan 21	Date Completed: 20 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING Penetration Testing: ○ SPT ● DCPT MTO Vane*: △ Intact ▲ Remould Nilcon Vane*: ◇ Intact ◆ Remould * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING ★ Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading △ parts per million (ppm) 100 200 300 400 ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 75 mm asphalt concrete over 150 mm granular base											
	FILL: clayey silt, trace sand, trace gravel, rootlets, mottled, brown, moist, stiff to hard	0.2	SS	1	92	12			○ 50	○ 14		
			SS	2	95	63/23	1		○ 63 (23)	○ 14		
	CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, brown, moist, hard	1.1	SS	3	93	50/15			○ 50 (15)	○ 15		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, damp, hard	1.7	SS	4	100	50/5	2		○ 50 (5)	○ 6		
			SS	5	100	50/5	3		○ 50 (5)	○ 6		
	-first water strike						4 ▽					
			SS	6	100	50/3	5		○ 50 (3)	○ 3		
			SS	7	100	50/3	6		○ 50 (3)	○ 2		
	End of Borehole	6.1										

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 4.88 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 3.96 m.

RECORD OF BOREHOLE No. BH/MW107

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	20 Jan 21	Date Completed: 20 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING: Penetration Testing (○ SPT ● DCPT); MTO Vane* (△ Intact ▲ Remould); Nilcon Vane* (◇ Intact ◆ Remould); * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 120 mm asphalt concrete over 170 mm granular base										
	FILL: clayey silt, trace gravel, rootlets, mottled, brown, moist, stiff 0.3	SS	1	59	12			○ 50/5	○ 16		
	CLAYEY SILT TILL: trace sand, trace gravel, oxidized fissures, mottled, brownish grey, moist, very stiff to hard 0.8	SS	2	92	28	1		○	○ 12		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, damp to moist, hard 1.8	SS	3	70	51	2		○	○ 11		
		SS	4	100	50/5			○ 50/5	○ 8		
		SS	5	60	50/5	3		○ 50/5	○ 6		
	-first water strike					4	▽				
		SS	6	100	50/5			○ 50/5	○ 23		
						5					
		SS	7	100	50/3	6		○ 50/3	○ 23		
	End of Borehole 6.1										

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 3.66 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 3.66 m.

RECORD OF BOREHOLE No. BH/MW108

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	20 Jan 21	Date Completed: 20 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L; Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 150 mm asphalt concrete over 200 mm granular base	SS	1	75	9			○	○ 15		
	FILL: clayey silt, trace gravel, rootlets, organic staining, mottled, brown, moist, stiff 0.4										
	CLAYEY SILT TILL: trace sand, trace gravel, oxidized fissures, mottled, brown, moist, very stiff to hard 0.8	SS	2	100	25	1		○	○ 12		
		SS	3	100	65	2		○	○ 11		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, moist 2.1	SS	4	100	50/5			50/5 ○	○ 8		
		SS	5	100	50/5	3		50/5 ○	○ 6		
	-first water strike					4 ▽					
		SS	6	100	50/3			50/3 ○	○ 5		
						5					
		SS	7	100	50/3	6		50/3 ○	○ 21		
	End of Borehole 6.1										

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 3.96 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 3.96 m.

RECORD OF BOREHOLE No. BH/MW109

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	20 Jan 21	Date Completed: 20 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING: Penetration Testing (○ SPT ● DCPT); MTO Vane* (△ Intact ▲ Remould); Nilcon Vane* (◇ Intact ◆ Remould); * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L; Plastic 20 40 60 80 Liquid	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 140 mm asphalt concrete over 160 mm granular base										
	FILL: clayey silt, trace gravel, rootlets, mottled, brown, moist, stiff 0.3 0.5	SS	1	92	13			○ 50	○ 14		
	CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, oxidized fissures, mottled, brownish grey, moist, hard	SS	2	100	33	1		○ 50	○ 11		
		SS	3	83	76/20			○ 76/20	○ 10		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, moist to damp, hard 1.8	SS	4	100	50/5	2		○ 50/5	○ 8		
		SS	5	100	50/3	3		○ 50/3	○ 6		
	-first water strike	SS	6	100	50/5	4 5	▽	○ 50/5	○ 4		
	End of Borehole 6.1	SS	7	100	50/3	6		○ 50/3	○ 30		

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 5.18 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 5.18 m.

RECORD OF BOREHOLE No. BH/MW110

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	21 Jan 21	Date Completed: 21 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 120 mm asphalt concrete over 300 mm granular base	SS	1	79	21			○	12		
	FILL: sandy silt, some gravel, occasional glass fragments, rootlets, brown, moist, compact 0.4										
	CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, oxidized fissures, mottled, brownish grey, moist, stiff to hard 1.1	SS	2	95	12	1		○	12		
		SS	3	100	37	2		○	10		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, damp, hard 2.3	SS	4	100	50/5			50/5 ○	7		
		SS	5	100	50/5	3		50/5 ○	3		
	-first water strike	SS	6	60	50/5	4 ▽ 5		50/5 ○	7		
	End of Borehole 6.1	SS	7	100	50/3	6		50/3 ○	17		

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 3.96 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 3.96 m.

RECORD OF BOREHOLE No. BH/MW111

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	21 Jan 21	Date Completed: 21 Jan 21	Revision No.: 1, 1/2/21

Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING: Penetration Testing (○ SPT ● DCPT); MTO Vane* (△ Intact ▲ Remould); Nilcon Vane* (◇ Intact ◆ Remould); * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L; Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
ASPHALT: 75 mm asphalt concrete over 250 mm granular base										
FILL: sandy silt, trace gravel, rootlets, organic staining, brown, moist, compact 0.2	SS	1	95	15			○ 13			
------- clayey silt, firm	SS	2	100	8	1		○	○ 15		
CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, oxidized fissures, mottled, grey, moist, hard 1.7	SS	3	100	34	2		○	○ 13		
BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, moist 2.3	SS	4	63	50/8			50 ○ 8	○ 5		
	SS	5	100	50/5	3		50 ○ 5	○ 7		
-first water strike					4 ▽					
	SS	6	60	50/5			50 ○ 5	○ 8		
					5					
	SS	7	100	50/3	6		50 ○ 3	○ 7		
End of Borehole 6.1										

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 3.96 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 3.96 m.

RECORD OF BOREHOLE No. BH/MW112

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	21 Jan 21	Date Completed: 21 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	LAB TESTING ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	TOPSOIL: 150 mm										
	FILL: clayey silt, trace gravel, rootlets, brown, moist, stiff 0.2	SS	1	59	9			○ 9	○ 13		
	------- grey										
	CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, oxidized fissures, mottled, grey, moist, very stiffto hard 1.1	SS	2	100	21	1		○ 21	○ 15		
		SS	3	95	44	2		○ 44	○ 13		
		SS	4	100	75/25			○ 75/25	○ 5		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, moist, hard 2.6	SS	5	100	50/5	3		○ 50/5	○ 7		
	-first water strike	SS	6	60	50/5	4		○ 50/5	○ 8		
						5	▽				
	End of Borehole 6.1	SS	7	100	50/3	6		○ 50/3	○ 7		

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 5.18 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 5.18 m.

RECORD OF BOREHOLE No. BH/MW113

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	21 Jan 21	Date Completed: 21 Jan 21	Revision No.: 1, 1/2/21

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
	Geodetic Ground Surface Elevation:							Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80		
	GRAVEL: 50 mm 0.1										
	FILL: clayey silt, trace gravel, rootlets, organic staining, brown, moist, very stiff to stiff	SS	1	100	19			○	○ 14		
		SS	2	100	13	1		○	○ 12		
	CLAYEY SILT TILL: trace sand, trace gravel, fragments of Shale, oxidized fissures, mottled, grey, moist, stiff to hard 1.1	SS	3	100	44	2		○	○ 11		
		SS	4	100	90			○	○ 13		
	BEDROCK: Shale, highly weathered, occasional Limestone fragments, grey, moist 2.6	SS	5	100	50/5	3		○ 50/5	○ 5		
	-first water strike	SS	6	100	50/3	4		○ 50/3	○ 7		
		SS	7	100	50/5	5	▽	○ 50/5	○ 21		
	End of Borehole 6.1					6					

Notes:
1. Borehole open upon completion of drilling.
2. Groundwater level at 5.48 m bgs measured upon completion of drilling.

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▽ Groundwater depth on completion of drilling: 5.48 m.

RECORD OF BOREHOLE No. BH/MW114

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Hollow Stem Augering + Rock Coring	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	21 Jan 21 — Date Completed: 27 Jan 21	Revision No.:	1, 1/2/21

LITHOLOGY PROFILE | **SOIL SAMPLING** | **FIELD TESTING** | **LAB TESTING** | **INSTRUMENTATION INSTALLATION** | **COMMENTS**

Field Testing legend: PenetrationTesting: O SPT, ● DCPT; MTO Vane*: △ Intact, ▲ Remould; Nilcon Vane*: ◇ Intact, ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80

Lab Testing legend: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL); W_P W W_L, Plastic — Liquid, 20 40 60 80

Geodetic Ground Surface Elevation:

Description	Depth (m)	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	Lab (W)
TOPSOIL: 150 mm						
FILL: clayey silt, trace gravel, mottled, grey, moist, very stiff to firm	0.2	SS	1	100	20	11
		SS	2	100	8	19
CLAYEY SILT TILL: trace sand, trace gravel, frgments of Shalr, oxidized fissures, mottled, grey, moist, hard	1.7	SS	3	100	37	11
		SS	4	100	57	11
BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist to damp	2.8	SS	5	100	50/5	9
- first water strike		SS	6	60	50/5	7
		SS	7	60	50/5	19
ROCK CORE BEGINS - Poor Quality		RC	1	98	35	
- Poor Quality		RC	2	69	28	

Depth scale: 1, 2, 3, 4, 5, 6, 7, 8, 9

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No freestanding groundwater measured in open borehole on completion of drilling.

Cave in depth recorded on completion of drilling: Not Measured m.

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and requires interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commisioned and the accompanying'Notes to Record of Boreholes'.

Scale: 1 : 47

Continued on Next Page

RECORD OF BOREHOLE No. BH/MW114

Project Number: **BIGC-ENV-349B** Drilling Location: **See BH Location Plan** Logged by: **TVH**

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist to damp										
	- Fair Quality	RC	3	98	62	10					
	- Good Quality	RC	4	100	87	11					
	- Good Quality	RC	5	100	76	12					
	- Good Quality	RC	6	100	83	13					
	- Excellent Quality	RC	7	100	98	14					
	- Good Quality	RC	8	97	89	15					
						16					
						17					
						18					
						19					

FIELD TESTING: Penetration Testing — ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80

LAB TESTING: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80

Scale: 1 : 47

Continued on Next Page

RECORD OF BOREHOLE No. BH/MW114

Project Number: **BIGC-ENV-349B** Drilling Location: **See BH Location Plan** Logged by: **TVH**

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING: Penetration Testing (○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80)	LAB TESTING: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist to damp - Excellent Quality	RC	9	100	94	20		○			
	- Excellent Quality	RC	10	100	90	21		○			
	- Excellent Quality	RC	11	100	97	22		○			
						23					
	Borehole terminated at 23.32 23.3 Notes: 1. Borehole open upon completion of drilling. 2. Groundwater level not measured upon completion of drilling due to introduced drilling water										

Borehole details as presented, do not constitute a thorough understanding of all potential conditions present and requires interpretative assistance from a qualified Geotechnical Engineer. Also, borehole information should be read in conjunction with the geotechnical report for which it was commisioned and the accompanying'Notes to Record of Boreholes'.

Scale: 1 : 47

RECORD OF BOREHOLE No. BH/MW115

Project Number:	BIGC-ENV-349B	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Hollow Stem Augering + Rock Coring	Compiled by:	TVH
Project Name:	BIGC-ENV-349B	Drilling Machine:	Truck Mounted Drill Rig	Reviewed by:	SS
Project Location:	217 & 227 Cross Ave. and 571 Argus Rd., Oakville, ON	Date Started:	22 Jan 21	Date Completed: 26 Jan 21	Revision No.: 1, 1/2/21

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 100 mm asphalt concrete over 300 mm granular bases	SS	1	59	16			○ 16	○ 15		
	FILL: clayey silt, trace gravel, rootlets, organic staining, dark brown, moist, very stiff 0.4										
	CLAYEY SILT TILL: trace sand. trace gravel, oxidized fissures, mottled, grey, moist, stiff to hard 0.8	SS	2	100	12	1		○ 13	○ 13		
		SS	3	84	32	2		○ 32	○ 12		
		SS	4	100	50/13			○ 50/13	○ 10		
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist to damp 2.4	SS	5	100	50/5	3		○ 50/5	○ 6		
	- first water strike					4					
		SS	6	60	50/5			○ 50/5	○ 5		
						5					
		SS	7	60	50/5	6		○ 50/5	○ 5		
	ROCK CORE BEGINS - Poor Quality	RC	1	83	30	7		○ 30			
	- Fair Quality	RC	2	98	74	8		○ 74			
						9					

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▽ No freestanding groundwater measured in open borehole on completion of drilling. ■ Cave in depth recorded on completion of drilling: Not Measured m.

Scale: 1 : 47

Continued on Next Page

RECORD OF BOREHOLE No. BH/MW115

Project Number: **BIGC-ENV-349B** Drilling Location: **See BH Location Plan** Logged by: **TVH**

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	FIELD TESTING	LAB TESTING	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist to damp										
	- Fair Quality	RC	3	99	61	10					
	- Good Quality	RC	4	99	77	11					
	- Excellent Quality	RC	5	100	98	12					
	- Good Quality	RC	6	98	87	13					
	- Excellent Quality	RC	7	100	95	14					
	- Excellent Quality	RC	8	100	92	15					
						16					
						17					
						18					
						19					

FIELD TESTING: Penetration Testing — ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80

LAB TESTING: ★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80

Scale: 1 : 47

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RECORD OF BOREHOLE No. BH/MW115

Project Number: **BIGC-ENV-349B** Drilling Location: **See BH Location Plan** Logged by: **TVH**

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist to damp - Excellent Quality	RC	9	100	91	20		○			
	- Good Quality	RC	10	96	89	21		○			
	- Excellent Quality	RC	11	100	92	22		○			
						23					
	Borehole terminated at 23.32 23.3 Notes: 1. Borehole open upon completion of drilling. 2. Groundwater level not measured upon completion of drilling due to introduced drilling water										

Scale: 1 : 47

RECORD OF BOREHOLE No. BH104EA

Project Number:	BIGC-ENV-490D	Drilling Location:	See BH Location Plan	Logged by:	TD
Project Client:	Oakville Argus Cross LP	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TD
Project Name:	Remediation Report	Drilling Machine:	Truck Mounted Drill	Reviewed by:	
Project Location:	581-587 Argus Road, Oakville, Ontario	Date Started:	22 Mar 9	Date Completed: 22 Mar 9	Revision No.: 0, 22-4-4

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 103.61 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: SPT ○ DCPT ●; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT PAVEMENT: 76 mm Asphalt over 254 mm granular	103.53 0.1										
	FILL: Silty clay, some sand, some gravel, oxidation, brown, moist		SS	1	79	11		103	○			
	------ Cobble pieces	102.09	SS	2	51	38	1		○			
	CLAYE SILT TILL: grey, moist	1.5 101.48	SS	3	100	40		102	○			
	End of Borehole	2.1					2					

Notes:
1. Borehole open upon completion of drilling.

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH104NA

Project Number: **BIGC-ENV-490D** | Drilling Location: **See BH Location Plan** | Logged by: **TD**

Project Client: **Oakville Argus Cross LP** | Drilling Method: **150 mm Solid Stem Augers** | Compiled by: **TD**

Project Name: **Remediation Report** | Drilling Machine: **Truck Mounted Drill** | Reviewed by:

Project Location: **581-587 Argus Road, Oakville, Ontario** | Date Started: **22 Mar 9** | Date Completed: **22 Mar 9** | Revision No.: **0, 22-4-4**

Geodetic Ground Surface Elevation: 103.61 m

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)
	ASPHALT: 76 mm Asphalt over 280 mm Granular (103.53, 0.1)						
	FILL: Sandy silt, reddish brown, moist	SS	1	84	12		
							103
		SS	2	75	4	1	
							102
	(101.48)	SS	3	41	13	2	
	End of Borehole 2.1						

Notes:

1. Borehole open upon completion of drilling.

FIELD TESTING

Penetration Testing: ○ SPT ● DCPT

MTO Vane*: △ Intact ▲ Remould

Nilcon Vane*: ◇ Intact ◆ Remould

* Undrained Shear Strength (kPa) 20 40 60 80

LAB TESTING

★ Rinse pH Values 2 4 6 8 10 12

Soil Vapour Reading △ parts per million (ppm) 100 200 300 400

▲ Lower Explosive Limit (LEL) W_P W W_L

Plastic Liquid 20 40 60 80

INSTRUMENTATION INSTALLATION

COMMENTS

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH104SA

Project Number:	BIGC-ENV-490D	Drilling Location:	See BH Location Plan	Logged by:	TD
Project Client:	Oakville Argus Cross LP	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TD
Project Name:	Remediation Report	Drilling Machine:	Truck Mounted Drill	Reviewed by:	
Project Location:	581-587 Argus Road, Oakville, Ontario	Date Started:	22 Mar 9	Date Completed: 22 Mar 9	Revision No.: 0, 22-4-4

Geodetic Ground Surface Elevation: 103.61 m

Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)
	ASPHALT: 50 mm Asphalt over 200 mm granular 103.56						
	FILL: Silty clay, black staining, dark brown, moist	SS	1	70	9		
	------ trace gravel, oxidation, cobble pieces	SS	2	100	38	1	103
	102.00						
	CLAYEY SILT TILL: grey, moist 1.6	SS	3	75	50		102
	101.48					2	
	End of Borehole 2.1						

Notes:
1. Borehole open upon completion of drilling.

FIELD TESTING

Penetration Testing: ○ SPT ● DCPT

MTO Vane*: △ Intact ▲ Remould

Nilcon Vane*: ◇ Intact ◆ Remould

* Undrained Shear Strength (kPa): 20 40 60 80

LAB TESTING

★ Rinse pH Values: 2 4 6 8 10 12

Soil Vapour Reading: △ parts per million (ppm): 100 200 300 400

▲ Lower Explosive Limit (LEL): W_P W W_L

Plastic Liquid: 20 40 60 80

INSTRUMENTATION INSTALLATION

COMMENTS

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH104WA

Project Number:	BIGC-ENV-490D	Drilling Location:	See BH Location Plan	Logged by:	TD
Project Client:	Oakville Argus Cross LP	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TD
Project Name:	Remediation Report	Drilling Machine:	Truck Mounted Drill	Reviewed by:	
Project Location:	581-587 Argus Road, Oakville, Ontario	Date Started:	22 Mar 9	Date Completed: 22 Mar 9	Revision No.: 0, 22-4-4

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 103.61 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 76 mm Asphalt over 254 mm granular	103.53 0.1										
	FILL: Silty clay, grey, moist		SS	1	51	15			○			
	------ Slag inclusions and cobble pieces		SS	2	84	25	1	103	○			
		102.09										
	CLAYEY SILT TILL: mottled grey, moist	1.5	SS	3	100	50		102	○			
		101.48					2					
	End of Borehole	2.1										
	Notes: 1. Borehole open upon completion of drilling.											

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH104WB

Project Number: **BIGC-ENV-490D** | Drilling Location: **See BH Location Plan** | Logged by: **TD**

Project Client: **Oakville Argus Cross LP** | Drilling Method: **150 mm Solid Stem Augers** | Compiled by: **TD**

Project Name: **Remediation Report** | Drilling Machine: **Truck Mounted Drill** | Reviewed by:

Project Location: **581-587 Argus Road, Oakville, Ontario** | Date Started: **22 Mar 9** | Date Completed: **22 Mar 9** | Revision No.: **0, 22-4-4**

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 103.61 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 76 mm Asphalt over 254 mm granular 103.53 0.1 **FILL:** Silty clay, black staining, brown moist 103.00	SS	1	87	10			○			
	End of Borehole 0.6						103				
	Notes: 1. Borehole was open upon completion of drilling.										

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 53

RECORD OF BOREHOLE No. BH105

Project Number: **BIGC-ENV-490D** | Drilling Location: **See BH Location Plan** | Logged by: **TD**

Project Client: **Oakville Argus Cross LP** | Drilling Method: **150 mm Solid Stem Augers** | Compiled by: **TD**

Project Name: **Remediation Report** | Drilling Machine: **Truck Mounted Drill** | Reviewed by:

Project Location: **581-587 Argus Road, Oakville, Ontario** | Date Started: **22 Mar 9** | Date Completed: **22 Mar 9** | Revision No.: **0, 22-4-4**

LITHOLOGY PROFILE		SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 104.37 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 114 mm Asphalt over 228 mm granular 104.26 0.1										
	FILL: Silty clay, cobble pieces, brown to reddish brown, moistt 103.76	SS	1	62	15		104	○			
	End of Borehole 0.6										

Notes:
1. Borehole was open upon completion of drilling.

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

Scale: 1 : 53

RECORD OF BOREHOLE No. BH201

Project Number:	BIGC-ENV-349E	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TD
Project Name:	Phase Two ESA Update	Drilling Machine:	Truck Mounted Drill	Reviewed by:	
Project Location:	217 & 227 Cross Ave, and 571 Argus Rd, Oakville Ontario	Date Started:	21 Aug 20	Date Completed: 21 Aug 20	Revision No.: 0, 22-4-5

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 102.83 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L; Plastic 20 40 60 80 Liquid	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT PAVEMENT: 150 mm Asphalt over 150 mm granular	102.68 0.2										
	FILL: Clayey silt, trace sand, trace gravel, brown, moist		SS	1	59	13			○			
			SS	2	17	50/3	1	102				
			SS	3	20	50/5						
		101.31										
	BEDROCK: Shale, highly weathered, grey, moist	101.16 1.7										
	End of Borehole						2	101				
	Notes: 1. Borehole open upon completion of drilling.											

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH202

Project Number:	BIGC-ENV-349E	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TD
Project Name:	Phase Two ESA Update	Drilling Machine:	Truck Mounted Drill	Reviewed by:	
Project Location:	217 & 227 Cross Ave, and 571 Argus Rd, Oakville Ontario	Date Started:	21 Aug 20	Date Completed: 21 Aug 20	Revision No.: 0, 22-4-5

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 102.83 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 150 mm Asphalt over 150 mm Granular	102.68 0.2										
	FILL: Clayey silt, trace sand, trace gravel, brown, moist	102.07	SS	1	75	10			○			
	CLAYEY SILT TILL: trace sand and gravel, mottled grey-brown, moist	0.8 101.31	SS	2	84	30	1	102	○			
	BEDROCK: Shale, highly weathered, grey, moist	1.5 101.00	SS	3	81	50/4						
	End of Borehole	1.8					2	101				
	Notes: 1. Borehole open upon completion of drilling.											

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH203

Project Number:	BIGC-ENV-349E	Drilling Location:	See BH Location Plan	Logged by:	TVH
Project Client:	Distrikt Capital	Drilling Method:	150 mm Solid Stem Augers	Compiled by:	TD
Project Name:	Phase Two ESA Update	Drilling Machine:	Truck Mounted Drill	Reviewed by:	
Project Location:	217 & 227 Cross Ave, and 571 Argus Rd, Oakville Ontario	Date Started:	21 Aug 20	Date Completed: 21 Aug 20	Revision No.: 0, 22-4-5

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 102.83 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 150 mm Asphalt over 200 mm granular	102.68 0.2										
	FILL: Sandy silt, trace clay and gravel, rootlets, brown to red, moist to very moist		SS	1	33	7			○			
		101.76	SS	2	16	50/5	1	102				
	BEDROCK: Shale, highly weather, grey, moist	1.1 101.31										
	End of Borehole	1.5					2	101				
	Notes: 1. Borehole open upon completion of drilling.											

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▽ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH204

Project Number: **BIGC-ENV-349E** | Drilling Location: **See BH Location Plan** | Logged by: **TVH**

Project Client: **Distrikt Capital** | Drilling Method: **150 mm Solid Stem Augers** | Compiled by: **TD**

Project Name: **Phase Two ESA Update** | Drilling Machine: **Truck Mounted Drill** | Reviewed by:

Project Location: **217 & 227 Cross Ave, and 571 Argus Rd, Oakville Ontario** | Date Started: **21 Aug 20** | Date Completed: **21 Aug 20** | Revision No.: **0, 22-4-5**

LITHOLOGY PROFILE			SOIL SAMPLING						FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 102.83 m		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetration Testing: ○ SPT ● DCPT; MTO Vane* △ Intact ▲ Remould; Nilcon Vane* ◇ Intact ◆ Remould; * Undrained Shear Strength (kPa) 20 40 60 80	★ Rinse pH Values 2 4 6 8 10 12; Soil Vapour Reading △ parts per million (ppm) 100 200 300 400; ▲ Lower Explosive Limit (LEL) W_P W W_L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 150 mm Asphalt over 300 mm granular	102.68 0.2										
	FILL: Silty sand, trace gravle, brown, moist	102.07	SS	1	33	14			○			
	CLAYEY SILT TILL: Trace sand, trace gravel, mottled grey, moist	0.8 101.31	SS	2	59	18	1	102	○			
	BEDROCK: Shale, highly weathered, grey, moist	1.5 100.85	SS	3	22	50/4		101				
	End of Borehole	2.0					2					

Notes:
1. Borehole open upon completion of drilling.

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▽ No freestanding groundwater measured in open borehole on completion of drilling.