

PHASE TWO ENVIRONMENTAL SITE ASSESSMENT

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

Client

Mr. Clarence Zichen Qian Oakville Argus Cross LP 1-90 Wingold Avenue Toronto, Ontario, M6B 1P5

Project Number

BIGC-ENV-349G

Prepared By:

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Date Submitted

May 23, 2023

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
- 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.



Oakville Argus Cross LP Phase Two Environmental Site Assessment 217 and 227 Cross Avenue and 571, 581 and 587 - 595 Argus Road, Oakville, Ontario BIGC-ENV-349G May 2023

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 m³ 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 m³ of PAH impacted soil was excavated and disposed of off-Site.
- 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 m³ 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.
	Oakville Argus Cross LP, Oakville Argus Cross GP Inc., Oakville Argus Cross II
Beneficial Owners	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
	Name: Mr. Emil Toma
Owner Contact Person	Position: President
	Email: emil@distrikt.com
	217 Cross Avenue: Part of Lot 13, 14 Concession 3 Trafalgar, South of Dundas
Legal Descriptions	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.	
	217 Cross Avenue: 24816-0044 (LT)	
Duamantu, Idantifiaatian	227 Cross Avenue: 24816-0043 (LT)	
Property Identification	571 Argus Road: 24816-0114 (LT)	
Numbers (PINs)	581 Argus Road: 24816-0035 (LT)	
	587-595 Argus Road: 24816-0034 (LT)	
Property Size	12,600 m² (1.26 hectares)	
Approximate Universal	Zone: 17	
	Easting: 606458.69	
Transverse Mercator	Northing: 4812432.12	
(UTM) coordinates	(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).
- 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	The Phase I ESA update work program did not identify any evidence to suggest that,
environmental	since the report date of the previous Phase I and II ESAs, there is any new or
impacts identified	materially changed potential environmental concerns at the Site.

BIG (2019) Geoted	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	Use of de-icing salts across the entire Site.
environmental	Fill material may have been imported to the Site.
impacts identified	

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	• Water level = 1.72 m to 21.09 m bgs (February 8, 2021).	
Observations		

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	Use of de-icing salts at the Site.	
Environmental	Importation of fill material of unknown quality at the Site.	
Concerns	Autobody shop at 570 Argus Road, approximately 20 m west.	
Identified	• Former sheet metal shop at 568, 570 and 572 Argus Road, approximately 20 m	
	west.	



BIG (2021c) Phase	e 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 x 10⁻⁵ to 1.58 x 10⁻⁸ m/s with a geometric mean of 3.95 x 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 μ g/g) and BH106-SS2 from 0.76-1.37 m bgs (188 μ g/g) above the applicable MECP Table 2 SCS of 140 μ g/g.
Groundwater Conditions	All groundwater samples submitted were detected below applicable SCS.

BIG (2021d) Hydro	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 x 10 ⁻⁵ to 1.58 x 10 ⁻⁸ m/s with a					
	geometric mean of 3.95 x 10 ⁻⁷ .					

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



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

BIG (2022a) Prelim	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	MECP (2011a) Table 2 Full depth SCS for residential/parkland/ institutional
Standards	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	The groundwater sample submitted for PAHs was detected below applicable
Conditions	SCS.

BIG (2022b) Phase	BIG (2022b) Phase One Environmental Site Assessment				
Objective	dentify existing or former potential sources of environmental concern at the Site at				
	217 & 227 Cross Avenue and 571 – 595 Argus Road.				
	Use of de-icing salts across the exterior of the Site.				
	Fill material has been imported to the Site.				
Potential	Copper impacts were previously identified on-Site in soil at 217 and 227				
environmental	Cross Avenue.				
impacts identified	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	Usage of De-icing Salts (PCA#Other – Usage of De- icing Salts)	On-Site		On-Site
2.	and 571, 581, 587 – 595 Argus Road	Importation of Fill Material (PCA#30 – Importation of Fill Material of Unknown Quality)	On-Site	Yes	
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.	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	Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site		
8.	Trafalgar Road	Former Fuel Tank (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	(15 m east)	Yes	Upgradient
9.	570 Argus	Current Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site		Inferred trans- gradient
10.	Road	Transformer (PCA#55 – Transformer Manufacturing, Processing and Use)	(20 m west)	No	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)	(20 III West)		gradient
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



				Contributing	
PCA Identifier	Address	PCA	PCA Location	to APEC at the Site?	Rationale
19.		Former Tannery			
		(PCA#53 – Tannery)			
20.		Auto Service Station (PCA#10 – Commercial Autobody Shops)			
21.	562 Trafalgar Road	Current USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (90 m northeast)	No	Inferred trans- gradient
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.		Former Autobody Shop (PCA#10 – Commercial Autobody Shop)			
27.	547 Trafalgar Road	Former UST (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (160 northeast)	No	Inferred trans- gradient
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.		Former Autobody Shop (PCA#10 – Commercial Autobody Shop)		No	Located downgradient
34.	125 Cross Avenue	Former ASTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (220	No	Located downgradient
35.	Avenue	Former Dry Cleaner (PCA#37 – Operation of Dry Cleaning Equipment (where chemicals are used))	southwest)	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	Former USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (220	No	Inferred trans- gradient
39.	Road	Former Autobody Shop (PCA#10 – Commercial Autobody Shop)	southeast)		gradient
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 oilwater 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

- 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; CI- = 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	Municipality –	On-Site and	Catch basins are located at 227 Cross Avenue, 581 Argus
Sewer	Town of Oakville	southeast	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		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	e collected for C	A/QC pu	irposes 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
БП110-332	D0P011002	PHCs
BH114-SS2	DUP011402	PAHs
вп114-332	D0P011402	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 \pm 1 pH units, the specific conductance within \pm 10%, and turbidity \pm 10% of the average value of the three readings with the temperature within \pm 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
		PAHs, Metals and	
BH/MW101-SS1	APECs 1 – 3 characterization	Inorganics	BIG
BH/MW101-SS2	Site characterization	PHCs, BTEX and VOCs	BIG
D11/NAV4402 664	ADEC: 4.0.2 de contest attac	PAHs, Metals and	DIC.
BH/MW102-SS1	APECs 1 & 2 characterization	Inorganics	BIG
BH/MW102-SS2	Site characterization	PHCs, BTEX and VOCs	BIG
D11/NAVA102 CC1	ADEC: 1.0.2 shows at a visation	PAHs, Metals and	DIC.
BH/MW103-SS1	APECs 1 & 2 characterization	inorganics	BIG
DLI/NAVA104 CC1	ADEC: 1.0.2 shows at a visation	PAHs, Metals and	DIC.
BH/MW104-SS1	APECs 1 & 2 characterization	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
DITAMATA OF CCA	ADEC- 1.0.2 shows to visation	PAHs, Metals and	DIC.
BH/MW105-SS1	APECs 1 & 2 characterization	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	BIG
B11/10100-332	AFECS 1 – 3 CHARACTERIZATION	Inorganics	ыс
BH/MW107-SS1	APECs 1 & 2 characterization	PAHs, Metals and	BIG
DIT/10100107 331	Al Les I & Z characterization	Inorganics	ыс
BH/MW108-SS1	APECs 1 & 2 characterization	PAHs, Metals and	BIG
D11/10100 331	711 263 1 & 2 characterization	Inorganics	210
BH/MW109-SS1	APECs 1 & 2 characterization	PAHs, Metals and	BIG
D11/10100105 551	711 263 1 & 2 characterization	Inorganics	5.0
BH/MW110-SS1	APEC 1 & 2 characterization	PAHs, Metals and	BIG
		Inorganics	
BH/MW110-SS2	Site characterization	PHCs, BTEX and VOCs	BIG
BH/MW111-SS1	APECs 1 & 2 characterization	PAHs, Metals and	BIG
, ==== 001		Inorganics	
BH/MW112-SS1	APECs 1 & 2 characterization	PAHs, Metals and	BIG
·		Inorganics	
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
		4.38	100.15	October 18, 2021
BH/MW1A	104.53	4.40	100.13	June 3, 2022
		4.37	100.16	February 13, 2023
		9.05	95.19	October 18, 2021
BH/MW2A	104.24	8.68	95.56	June 3, 2022
		8.32	95.92	October 18, 2021 June 3, 2022 February 13, 2023 October 18, 2021
		4.24	100.13	October 18, 2021
BH/MW3A	104.37	4.29	100.08	June 3, 2022
		4.14	100.23	February 13, 2023
		4.71	98.90	October 18, 2021
BH/MW4A	103.61	4.67	98.94	March 10, 2022
		Monitoring	well destroyed	June 3, 2022
		19.04	84.71	October 18, 2021
BH/MW5A	103.75	16.66	87.09	June 3, 2022
		16.27	87.48	February 13, 2023
D11/NAVA/1.01	103.04	3.38	99.66	February 8, 2021
BH/MW101	105.04	Monitoring	well destroyed	Sampling Date October 18, 2021 June 3, 2022 February 13, 2023 October 18, 2021 June 3, 2022 February 13, 2023 October 18, 2021 June 3, 2022 February 13, 2023 October 18, 2021 March 10, 2022 June 3, 2022 October 18, 2021 June 3, 2022 February 13, 2023 February 8, 2021 June 3, 2022 February 8, 2021 June 3, 2022 February 8, 2021 June 3, 2022 February 13, 2023 February 8, 2021 June 3, 2022 February 13, 2023 February 8, 2021 June 3, 2022 February 8, 2021 June 3, 2022 February 13, 2023 February 8, 2021 June 3, 2022 February 13, 2023 February 13, 2023 February 13, 2023 February 13, 2023 February 8, 2021 June 3, 2022 February 13, 2023 February 8, 2021 June 3, 2022 February 8, 2021 June 3, 2022 February 8, 2021 June 3, 2022
		3.67	98.88	February 8, 2021
BH/MW102	102.55	3.33	99.22	June 3, 2022
		3.16	99.39	February 13, 2023
		2.79	98.99	February 8, 2021
BH/MW103	101.78	2.51	99.27	June 3, 2022
		2.29	99.49	February 13, 2023
		2.45	98.51	February 8, 2021
BH/MW104	100.96	2.18	98.78	June 3, 2022
		2.04	98.92	February 13, 2023
BH105	104.37	-	-	-
		21.09	81.29	February 8, 2021
BH/MW105	102.38	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
טוון ועועע בטט	102.03	Monitoring	well destroyed	June 3, 2022
BH/MW107	102.40	3.61	98.79	February 8, 2021
טוון ועועע בטי	102.40	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
		4.20	98.69	February 8, 2021
BH/MW109	102.89	3.83	99.06	June 3, 2022
		2.75	100.14	February 13, 2023
		3.08	98.74	February 8, 2021
BH/MW110	101.82	2.74	99.08	June 3, 2022
		2.61	99.21	February 13, 2023
		3.37	98.57	February 8, 2021
BH/MW111	101.94	3.07	98.87	June 3, 2022
		3.00	98.94	February 13, 2023
		4.23	98.55	February 8, 2021
BH/MW112	102.78	4.69	98.09	June 3, 2022
		4.55	98.23	February 13, 2023
		4.77	98.68	February 8, 2021
BH/MW113	103.45	5.27	98.18	June 3, 2022
		4.33	99.12	February 13, 2023
		18.88	84.43	February 8, 2021
BH/MW114	103.31	16.01	87.30	June 3, 2022
·		15.91	87.39	February 13, 2023
		17.91	83.81	February 8, 2021
BH/MW115	101.72	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	-	-	-
		1.72	101.15	February 8, 2021
BH/MW3	102.87	Monitoring	well destroyed	June 3, 2022
		3.80	98.52	February 8, 2021
BH/MW4	102.32		well destroyed	June 3, 2022
BH5	103.39	-	-	-
		DRY	DRY	February 8, 2021
BH/MW6	102.74	DRY	DRY	June 3, 2022
, -		DRY	DRY	February 13, 2023
		DRY	DRY	September 19, 2018
MW101	99.37	DRY	DRY	June 3, 2022
	22.0.	DRY	DRY	February 13, 2023
		DRY	DRY	September 19, 2018
MW102	98.98	DRY	DRY	June 3, 2022
		D11.1	1 2111	34.10 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	-	-	-	-
NAVA/104	07.76	2.29	95.47	September 19, 2018
MW104	97.76	Monitoring	well destroyed	Sampling Date February 13, 2023
BH104EA	103.61	-	-	-
BH104NA	103.61	•	-	-
BH104SA	103.61	•	-	-
BH104WA	103.61	-	-	-
BH104WB	103.61	-	-	-
NAVA (1 O F	07.60	2.45	95.23	September 19, 2018
MW105	97.68	Monitoring	well destroyed	Sampling Date February 13, 2023 - September 19, 2018 June 3, 2022 September 19, 2018
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
BH110-332	D0P011002	PHCs
BH114-SS2	DUP011402	PAHs
БП114-332	D0P011402	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		PHCs	
	DUD11201	BTEX and VOCs	
	DUP11201	PAHs	
		Metals and inorganics	
BH/MW115	DUP1150 Metals and inorgani		
MW301	DI ID2010	PHCs, BTEX, VOCs, Metals and	
	DUP3010	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



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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;
- 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
DH110 CC2	DUP011002	BTEX and VOCs
BH110-SS2	D0P011002	PHCs
D11114 CC2	DUD011403	PAHs
BH114-SS2	DUP011402	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
		PHCs
BH/MW112	DUP11201	BTEX and VOCs
BH/WW112	D0P11201	PAHs
		Metals and inorganics
BH/MW115	DUP1150	Metals and inorganics
NAVA/201	DUP3010	PHCs, BTEX, VOCs, Metals and
MW301	D053010	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 Ourners	2739828 Ontario Inc., 2810685 Ontario Inc., Oakville Argus
Current Owners	Cross III Inc.
	Oakville Argus Cross LP, Oakville Argus Cross GP Inc., Oakville
Beneficial Owners	Argus Cross II LP, Oakville Argus Cross II GP Inc., Oakville Argus
Belleficial Owners	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)
• •	Zone: 17
Approximate Universal Transverse	Easting: 606458.69
Mercator (UTM) coordinates	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
	217 & 227	Usage of De-icing Salts			
1.	Cross	Usage of De-icing Salts (PCA#Other – Usage of De-icing Salts) Importation of Fill Material (PCA#30 – Importation of Fill Material of Unknown Quality)			
	Avenue	icing Salts)			
	and 571, Impo	Importation of Fill Material		Yes	On-Site
2.	581, 587 –	(PCA#30 – Importation of	On Site		
۷.	595 Argus	Fill Material of Unknown	OII-Site		
	Road	Quality)			
	217 & 227	Copper impacts in soil			
3.	Cross	(PCA#Other – Previously	On-Site	Yes	On-Site
	Avenue	identified copper impacts in			



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	PAH impacts in soil (PCA#Other – Previously identified PAH impacts in soil)	On-Site	Yes	On-Site
6.	Road	Transformer (PCA#55 – Transformer Manufacturing, Processing and Use)			
7.	570	Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site		
8.	Trafalgar Road	Former Fuel Tank (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	(15 m east)	Yes	Upgradient
9.	570 Argus	Current Autobody Shop (PCA#10 – Commercial Autobody Shop)	Off-Site		Inferred trans- gradient
10.	Road	Transformer (PCA#55 – Transformer Manufacturing, Processing and Use)	(20 m west)	No	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.	Nodu	Former Sheet Metal Workshop (PCA#34 – Metal Fabrication)	(20 III West)		gradient
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



					May 2023
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	No	Located downgradient
19.		Former Tannery (PCA#53 – Tannery)	southwest)		Ü
20.		Auto Service Station (PCA#10 – Commercial Autobody Shops)			
21.	562 Trafalgar Road	Current USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (90 m northeast)	No	Inferred trans- gradient
22.		Former gasoline spill (PCA#Other – Gasoline spill to ground surface)			
23.	494 Trafalgar Road	in Fixed Tanks) Former gasoline spill (PCA#Other – Gasoline spill to ground surface) Former USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks) Railway Tracks Ontrneast) Off-Site (105 m east)		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)	east) racks off-Site ards, Tracks (140 m No southeast) JSTs soline and ucts Storage east) Off-Site (155 No		Located downgradient
26.		Former Autobody Shop (PCA#10 – Commercial Autobody Shop)			
27.	547 Trafalgar Road	Former UST (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (160 northeast)	No	Inferred trans- gradient
28.		Former Paint Shop (PCA#39 – Paints Manufacturing, Processing and Bulk Storage)			
29.	142 – 148	Former Foundry	Off-Site	No	Located



	T	T	T	T =	May 202.
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)		Located downgradient	
33.		Former Autobody Shop (PCA#10 – Commercial Autobody Shop)		No	Located downgradient
34.	125 Cross Avenue	Former ASTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (220	No	Located downgradient
35.	Avenue	Former Dry Cleaner (PCA#37 – Operation of Dry Cleaning Equipment (where chemicals are used))	southwest)	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	Former USTs (PCA#28 – Gasoline and Associated Products Storage in Fixed Tanks)	Off-Site (220	No	Inferred trans- gradient
39.	Road	Former Autobody Shop (PCA#10 – Commercial Autobody Shop)	southeast)		gradient
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 oilwater 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
- $b. \quad \textit{Identification of potentially contaminating activities}.$
- 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 #
			BH/MW101	0.0 – 0.61	3.05 – 6.10	EC, SAR, Na and Cl-	
			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-	
	De-icing salt were used during the winter months on the exterior portion of the Site for vehicular and		BH/MW109	0.0 – 0.61	-	EC and SAR	
		ior se Site r and safety vinter	BH/MW110	0.0 – 0.61	-	EC and SAR	15 + 20
APEC 1			BH/MW111	0.0 – 0.61	-	EC and SAR	
	pedestrian safety during the winter		BH/MW112	0.0 – 0.61	3.05 – 6.10	EC, SAR, Na and Cl-	
	months		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-	
	Fill material of unknown quality was identified on-	quality fied on-	BH/MW1A	0.76 – 1.37	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B- HWS, CN-	124 :
APEC 2	Site. As the quality of the fill was unknown, it could be	Soil	BH/MW2A	0.0 – 0.61	-	PAHs, Metals, As, Sb, Se, Cr (VI), Hg, B- HWS, CN-	12A + 14A
	contaminated		BH/MW3A	0.76 – 1.37	-	PAHs, Metals,	



1		Boreholes/	Depth(s) of Soil				
APEC	APEC Details	Media Potentially Impacted	Monitoring Wells Advanced within APEC	Samples Submitted for Analysis (m bgs)	Well Screen Depth (m bgs)	Parameters Tested	Figure #
						As, Sb, Se, Cr	
						(VI), Hg, B-	
						HWS, CN-	
						PAHs, Metals,	
			BH/MW4A	0.0 – 0.61	-	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-	
				0.0 – 0.61	-	PAHs	
			BH104NA	0.76 – 1.37	-	PAHs	
				1.52 – 2.13	-	PAHs	
			DUIAGAEA	0.0 – 0.61	-	PAHs	
			BH104EA	0.76 – 1.37	-	PAHs	
			DU10464	0.0 - 0.61	-	PAHs	
			BH104SA	0.76 – 1.37	-	PAHs	
			DUITOANAA	0.0 - 0.61	-	PAHs	
			BH104WA	0.76 – 1.37	-	PAHs	
			BH104WB	0.0 - 0.61	-	PAHs	
				0.0 – 0.61	-	PAHs, Metals,	
						As, Sb, Se, Cr	
						(VI), Hg, B-	
						HWS, CN-	
			BH/MW101		-	Metals, As, Sb,	
			,	1.52 – 2.13		Se, Cr (VI), Hg,	
						B-HWS, CN-	
					2.05 6.40	Metals, As, Sb,	
				-	3.05 – 6.10	Se, Cr (VI), Hg,	
						B-HWS, CN-	
						PAHs, Metals,	
			BH/MW102	0.0 - 0.61	-	As, Sb, Se, Cr (VI), Hg, B-	
						HWS, CN-	
						PAHs, Metals,	
						As, Sb, Se, Cr	
			BH/MW103	0.0 – 0.61	-	(VI), Hg, B-	
						HWS, CN-	
						PAHs, Metals,	1
				0.0 0.01		As, Sb, Se, Cr	
			BH/MW104	0.0 – 0.61	-	(VI), Hg, B-	
						HWS, CN-	
				-	3.05 – 6.10	PAHs	
						PAHs, Metals,	
			BH/MW105	0.0 - 0.61	_	As, Sb, Se, Cr	
			D11/14/14/100	0.0 0.01	_	(VI), Hg, B- HWS, CN-	
			BH/MW106	0.76 – 1.37	-	PAHs, Metals,	
			1			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,	
				1.32 – 2.13		B-HWS, CN-	
						PAHs, Metals,	,
						As, Sb, Se, Cr	
				0.0 – 0.61	-	(VI), Hg, B-	
			BH/MW108			HWS, CN-	
						Metals, As, Sb,	
				-	3.05 - 6.10	Se, Cr (VI), Hg,	
						CN-	
						PAHs, Metals,	
			BH/MW109	0.0 - 0.61	_	As, Sb, Se, Cr	
			5, 11111	0.0 - 0.01	<u>-</u>	(VI), Hg, B-	
						HWS, CN-	
						PAHs, Metals,	
			BH/MW110	0.0 - 0.61	_	As, Sb, Se, Cr	
				0.0		(VI), Hg, B-	
						HWS, CN-	
			BH/MW111 0.0 - 0.61			PAHs, Metals,	
				-	As, Sb, Se, Cr		
				1		(VI), Hg, B- HWS, CN-	
				_	3.05 – 6.10	PAHs	
				-	3.03 - 0.10	PAHs, Metals,	
						As, Sb, Se, Cr	
			BH/MW112	0.0 - 0.61	3.05 – 6.10	(VI), Hg, B-	
						HWS, CN-	
						PAHs, Metals,	
				0.0.0.64		As, Sb, Se, Cr	
			BH/MW113	0.0 – 0.61	-	(VI), Hg, B-	
						HWS, CN-	
				-	3.05 - 6.10	PAHs	
			BH/MW114	0.0 – 0.61	-		
			DI I/ IVIVV 114	0.76 – 1.37	-		
			BH/MW115	0.0 – 0.61	-	PAHs, Metals,	
				0.76 – 1.37	-	As, Sb, Se, Cr	
			BH116	0.0 – 0.61	-	(VI), Hg, B-	
			MW101	0.0 – 0.76	-	HWS, CN-	
			MW102	0.76 – 1.52	-		
			BH103	0.0 - 0.76	-		
						PAHs, Metals,	
				0.76 – 1.52	_	As, Sb, Se, Cr	
			MW104	0.70 1.32	_	(VI), Hg, B-	
						HWS, CN-	
				-	0.91 - 3.05	PAHs	
			MW105	0.0 – 0.76		Metals, As, Sb,	
			IALAA TOO	0.0 - 0.70	_	Se, Cr (VI), Hg,	



Iviuy							
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	
			BH/MW101	0.0 - 0.61	3.05 – 6.10		
	Copper impacts	Ţ	MW102	0.76 – 1.52	-		
	were previously		BH/MW106	0.76 - 1.37	3.05 - 6.10		
APEC 3	identified in soil within the	Soil	BH201	0.0 - 0.61 0.76 - 1.37	-	Metals	14A +
	northwestern portion of 217		BH202	0.76 – 1.37	-		19
	and 227 Cross		BH203	0.76 – 1.37	-		
	Avenue		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
			BH/MW4A	0.0 - 0.61	4.3 – 7.3		
	Select PAH impacts were		BH104NA	0.0 - 0.61 0.76 - 1.37 1.52 - 2.13	-		
APEC 5	previously identified in soil		BH104EA	0.0 - 0.61 0.76 - 1.37	-	PAHs	12A +
	within the southern portion		BH104SA	0.0 - 0.61 0.76 - 1.37	-		18
	of 581 Argus Road		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
	An autobody shop is located off-Site, east adjacent to		BH/MW101	NA	3.05 – 6.10	VOCs, Metals, As, Sb, Se, Cr (VI), Hg, CN-	17 + 19
APEC 7	the Site. COCs could have migrated on-Site in groundwater	Groundwater	MW301	NA	3.05 – 6.10	VOCs, Metals, As, Sb, Se, Cr (VI), Hg, CN-	17 + 19
ADEC 9	A former fuel tank was located	Groundwater	BH/MW101	NA	3.05 – 6.10	PHCs and BTEX	16
APEC 8	off-Site	Groundwater	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) to 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.



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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.

<u>Bedrock</u>

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?
	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
Section 41	Soil at property has pH less than 5 or greater than 9 for surface soil	No
applies if	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	Property is a shallow soil property	No
43.1 applies if	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.



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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 m³ 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
	Not applicable
Section 41 Site	 The soil at the Site has pH values between 5 and 9 for surficial soil; and, between 5 and 11 for subsurface soil.
Sensitivity	 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.
	Not applicable
Section 43.1 Site	 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,
Sensitivity	 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	Potable
Ground	o The Site is supplied by the City of Oakville municipal water system however the
Water	Site is considered potable.
Land Use	Residential/Parkland/Institutional
Land OSE	o The future use of the Site will be residential land use.
Soil Texture	Coarse-textured
Joil Texture	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
DALL maramatara in	Benzo(a)anthracene	Likely associated with the
PAH parameters in soil	Benzo(a)pyrene	importation of fill material of
SOII	Fluoranthene	unknown quality at the Site
Motal parameter		Likely associated with the
Metal parameter in soil	Copper	importation of fill material of
111 2011		unknown quality at the Site

Table 11: Distribution of Soil Impacts

Parameter group and media	Contaminants associated with each group	Distribution	
PAH parameters in	Benzo(a)anthracene	Central portion of the Site (southern portion of 581 Argus	
soil	Benzo(a)pyrene Fluoranthene	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.



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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

Human Health Receptors and Exposure Pathways

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
	Adult	
Property Residents	(including pregnant female), Teen, Child,	None
	Toddler, Infant	
Workers – Long Term	Adult	None
(indoor)	(including pregnant female)	None
Workers – Short Term	Adult	None
(outdoor)	(including pregnant female)	None
Dranarty Visitar	Adult	
Property Visitor - Recreational	(including pregnant female), Teen, Child,	None
Recreational	Toddler, Infant	
Dranarty Visitar	Adult	
Property Visitor -	(including pregnant female), Teen, Child,	None
Trespassers	Toddler, Infant	
Workers Construction	Adult	None
Workers – Construction	(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
		Vegetation	Root uptake of soil, stem and foliar uptake
	Impacted soil	Soil invertebrates	Soil dermal contact, soil ingestion, soil inhalation and vapour inhalation
Impacted soil		Terrestrial birds and mammals	Soil dermal contact, soil ingestion, soil inhalation and vapour inhalation
	Immaatad	Terrestrial vegetation	None
	Impacted groundwater	Soil invertebrates	None
	groundwater	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
		Vegetation	None
	Impacted soil	Soil invertebrates	None
		Terrestrial birds and mammals	None
Impacted soil	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 clayer silt, silty clay and sandy silt underlain by native material characterized by clayer 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 m³ 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 m³ 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 m³ 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.

Raymond Co, M.Env.Sc. Environmental Scientist

Project Manager

Rebecca Morrison, M.Env.Sc.

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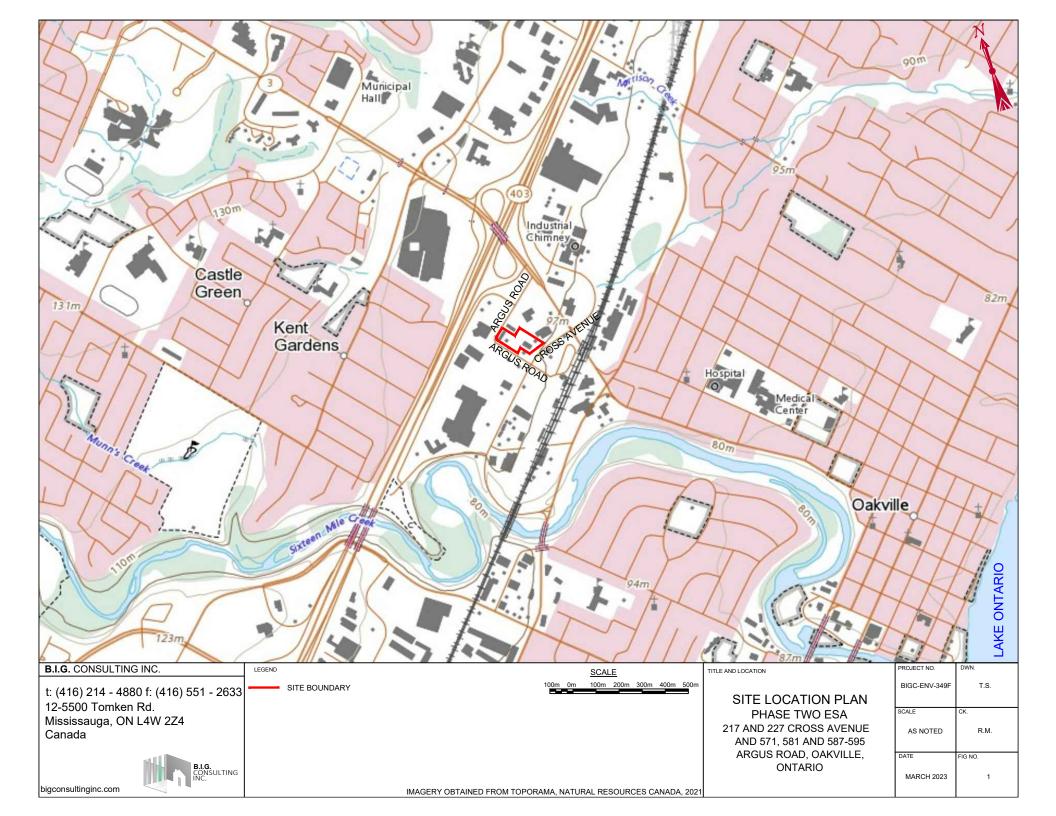
The following is a list of the environmental investigations reviewed in support of this report:

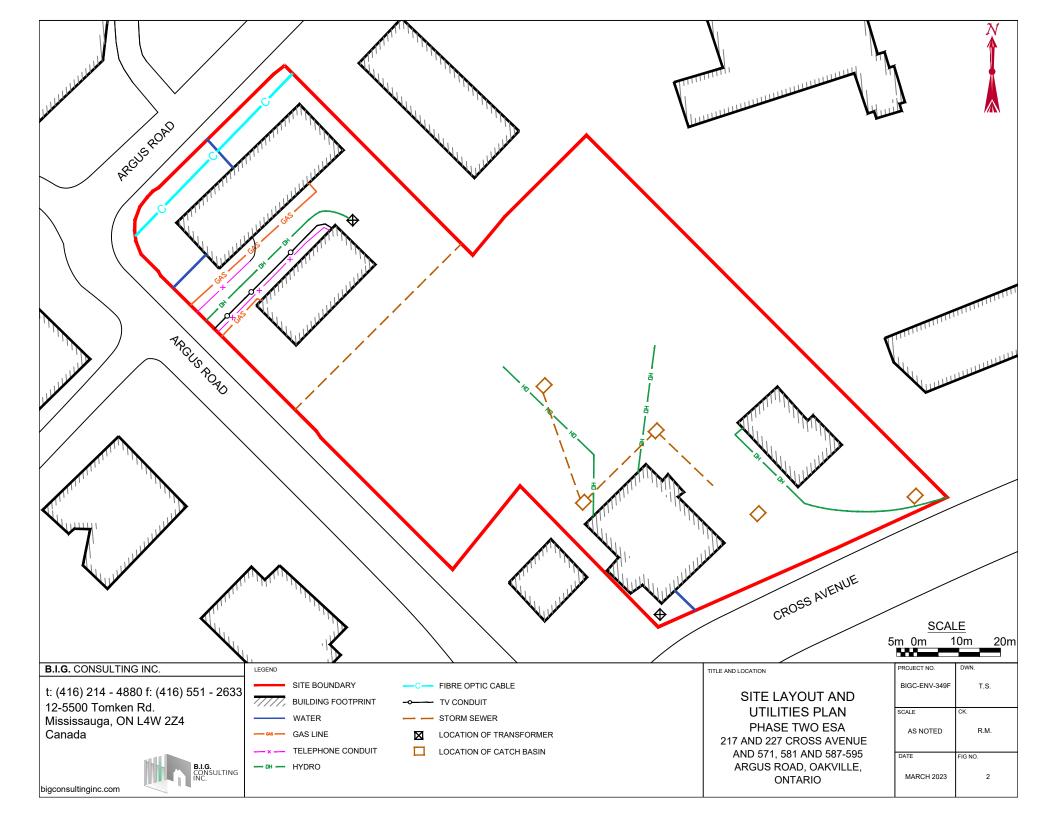
- 1. Terrapex (2019a) Phase I and Phase II Environmental Site Assessment, 217 Cross Avenue and 571 Argus Road, Oakville, Ontario. Terrapex Environmental Ltd. October 11, 2019.
- 2. Terrapex (2019b) Phase I Environmental Site Assessment Update, 217 Cross Avenue and 571 Argus Road, Oakville, Ontario. Terrapex 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.

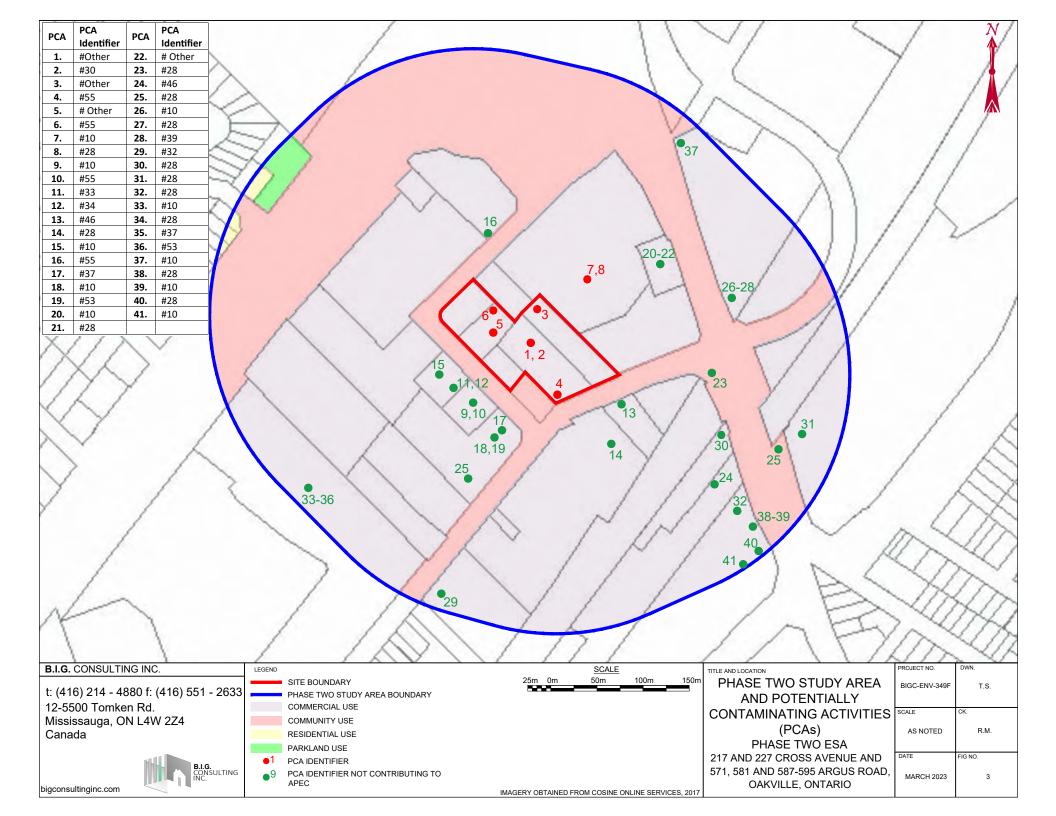


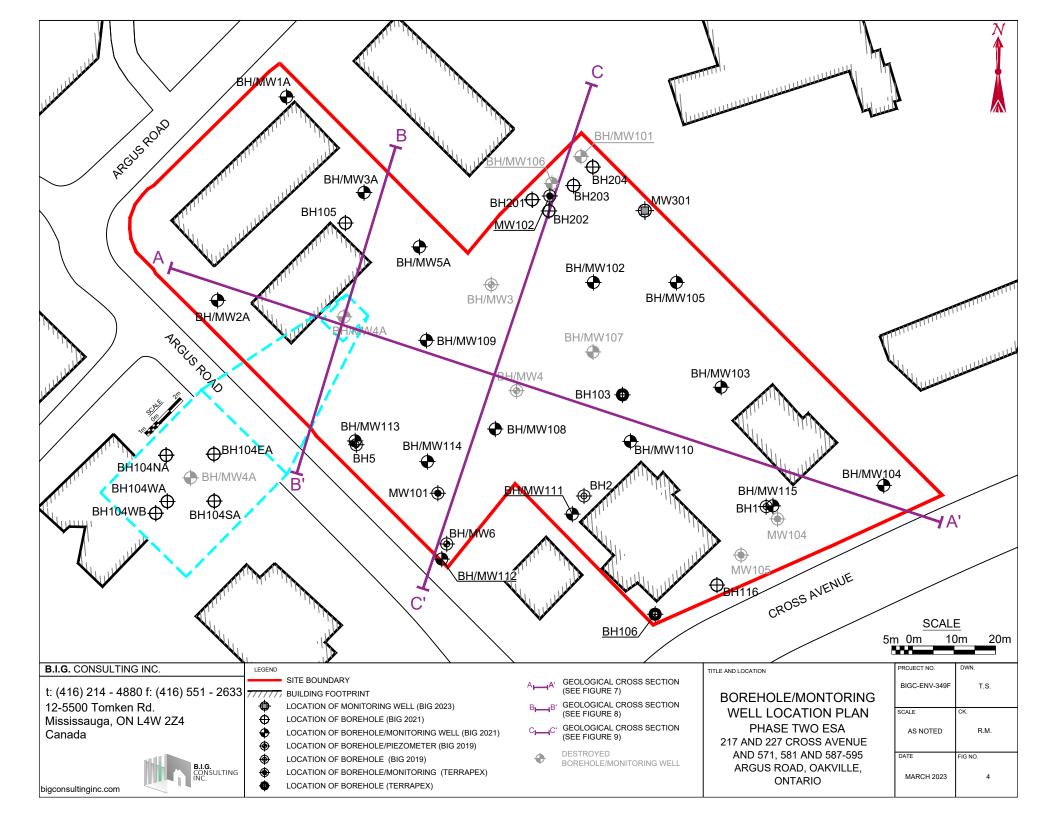
Figures

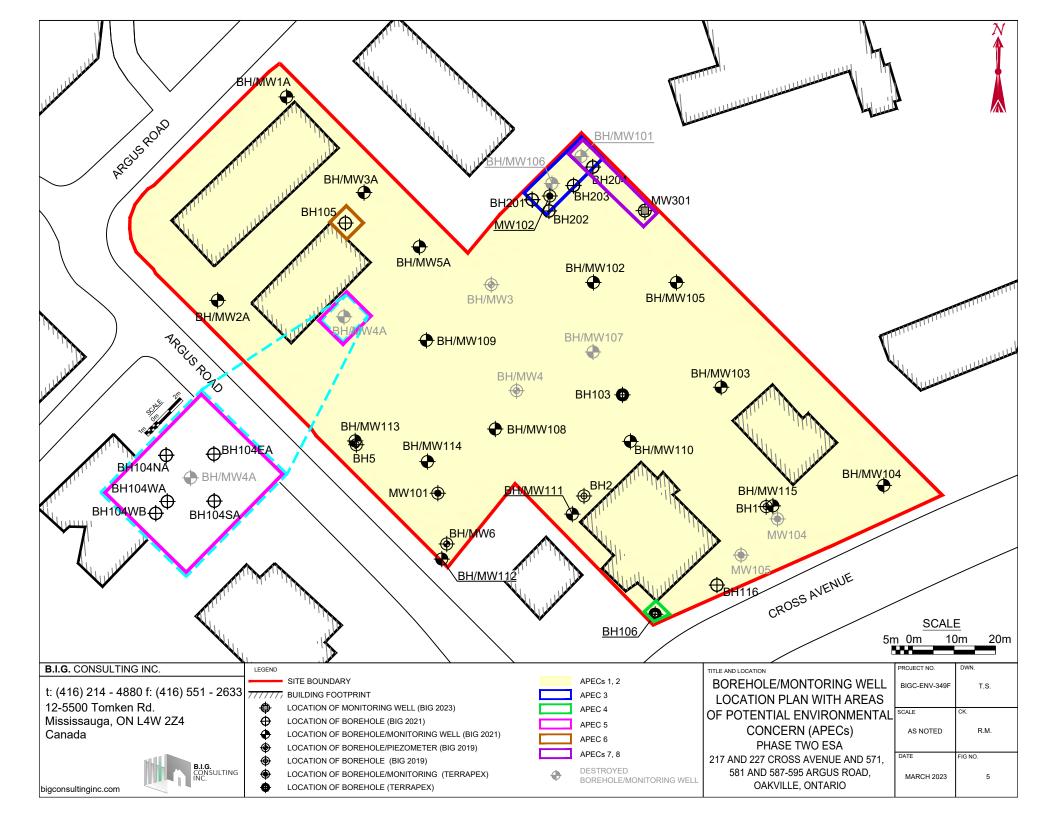


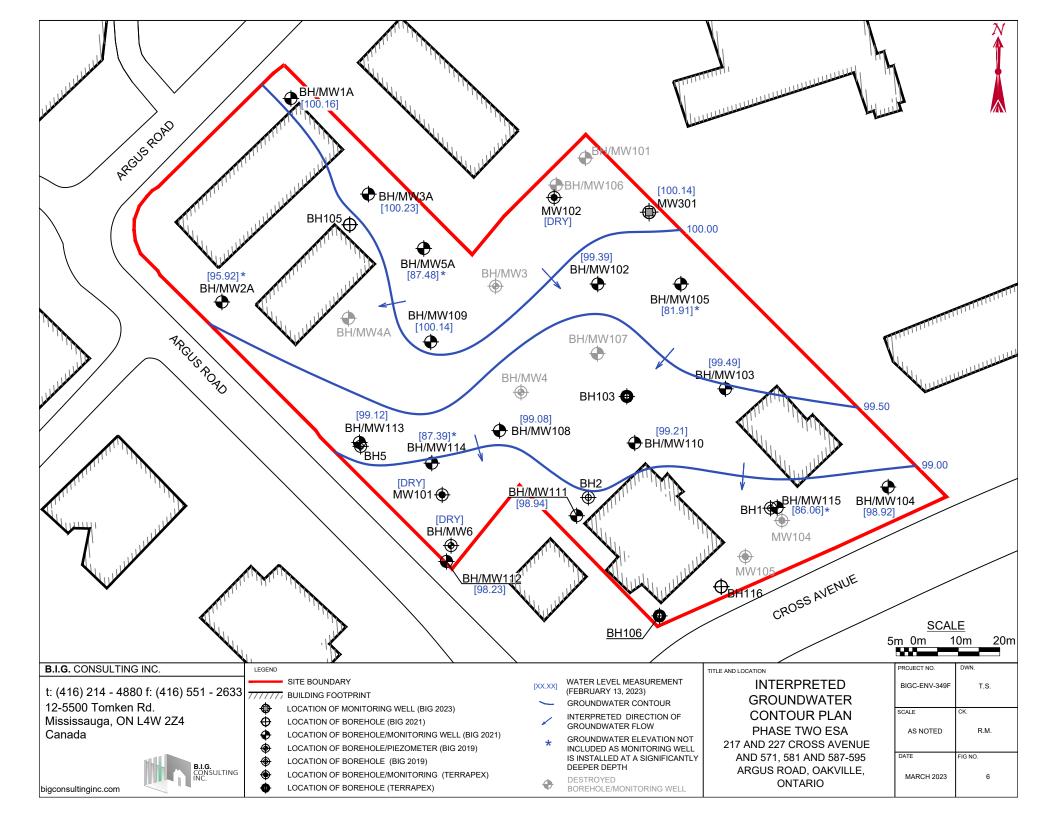


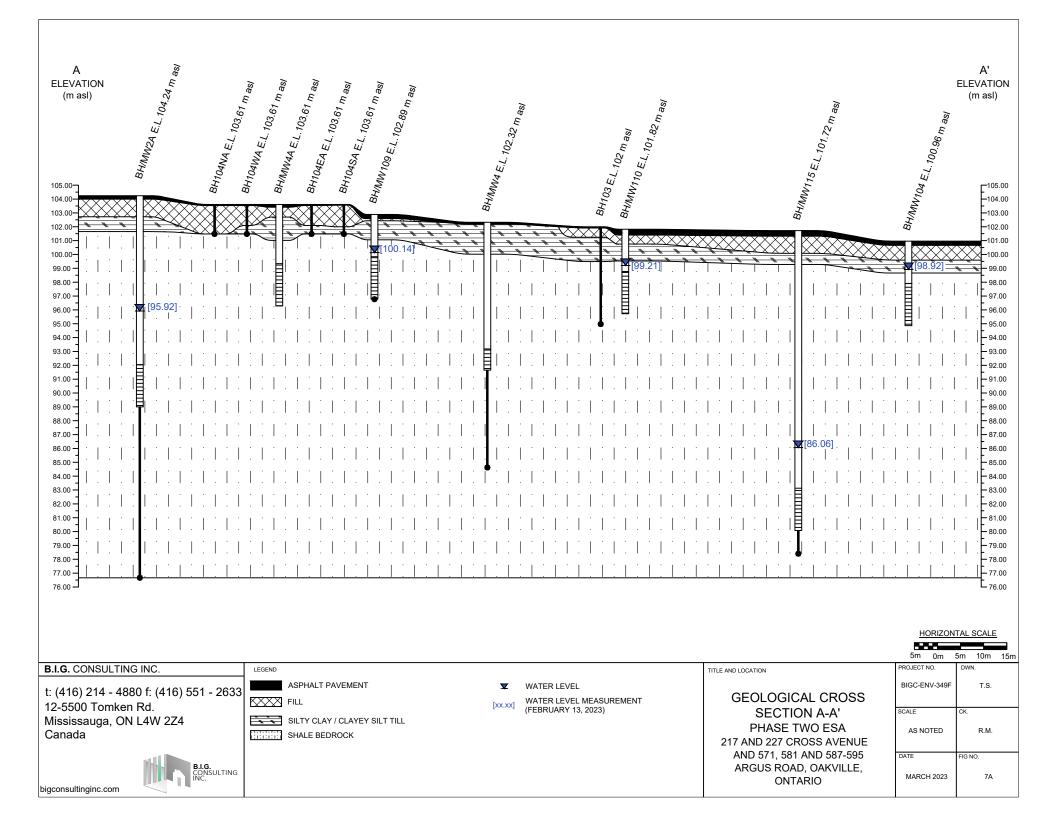


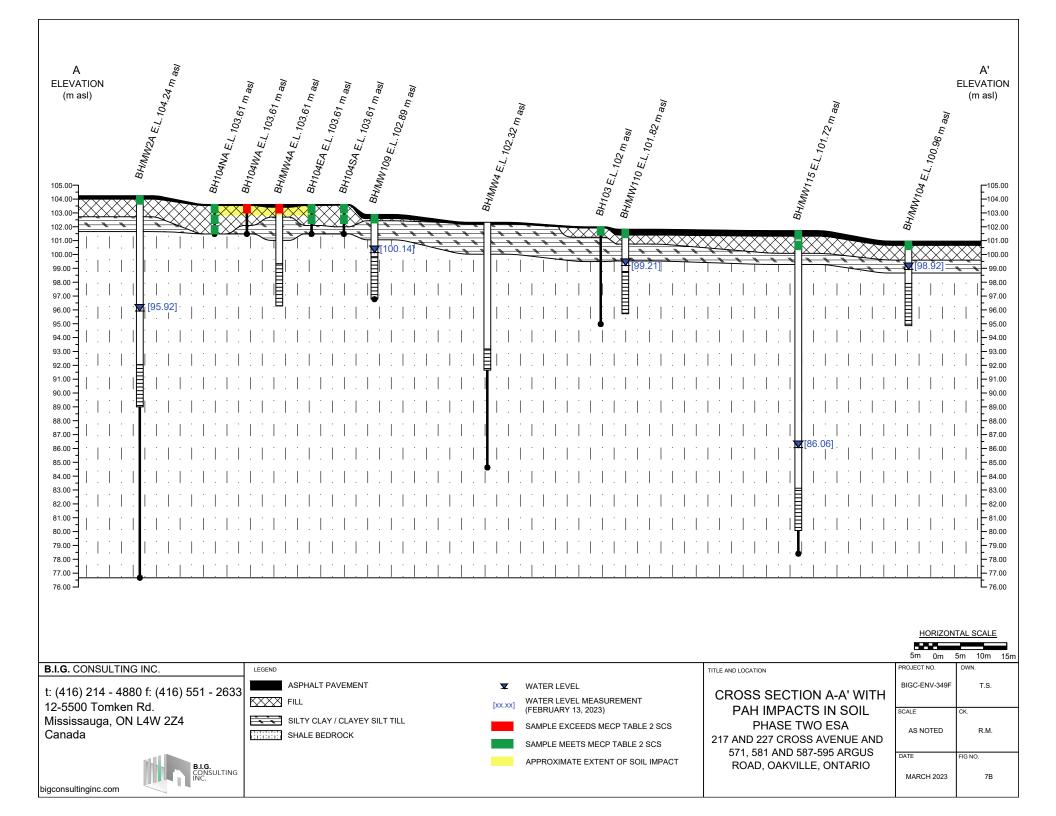


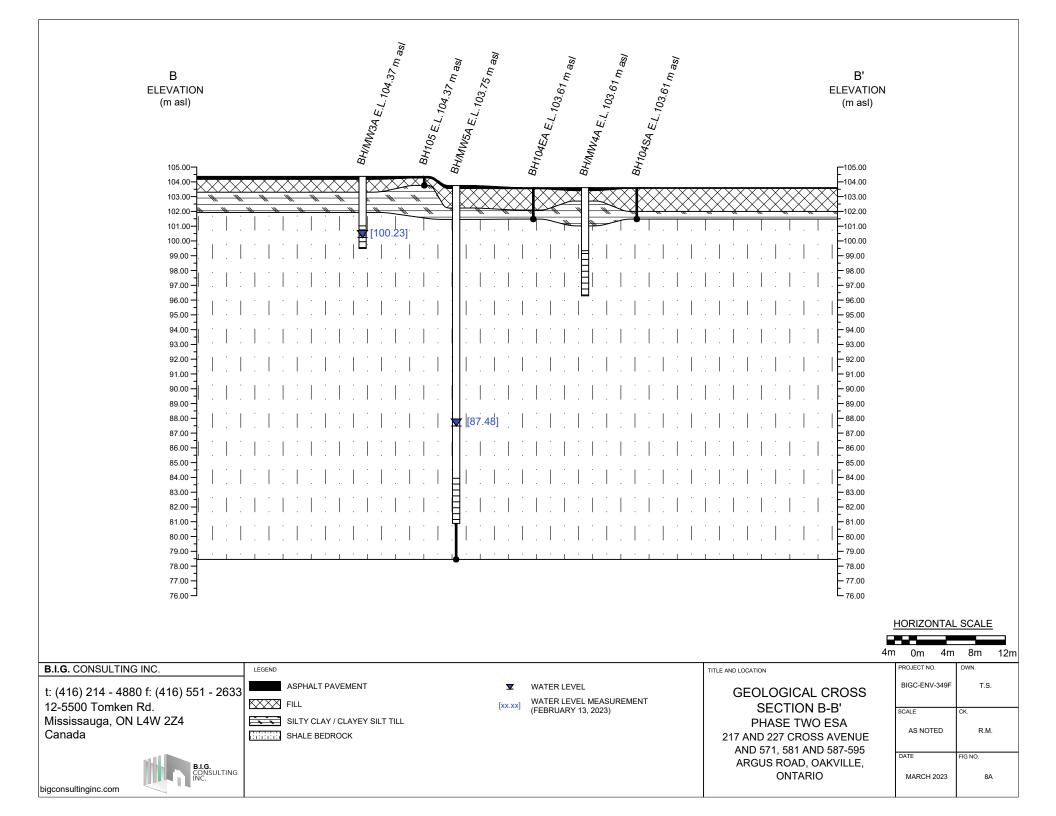


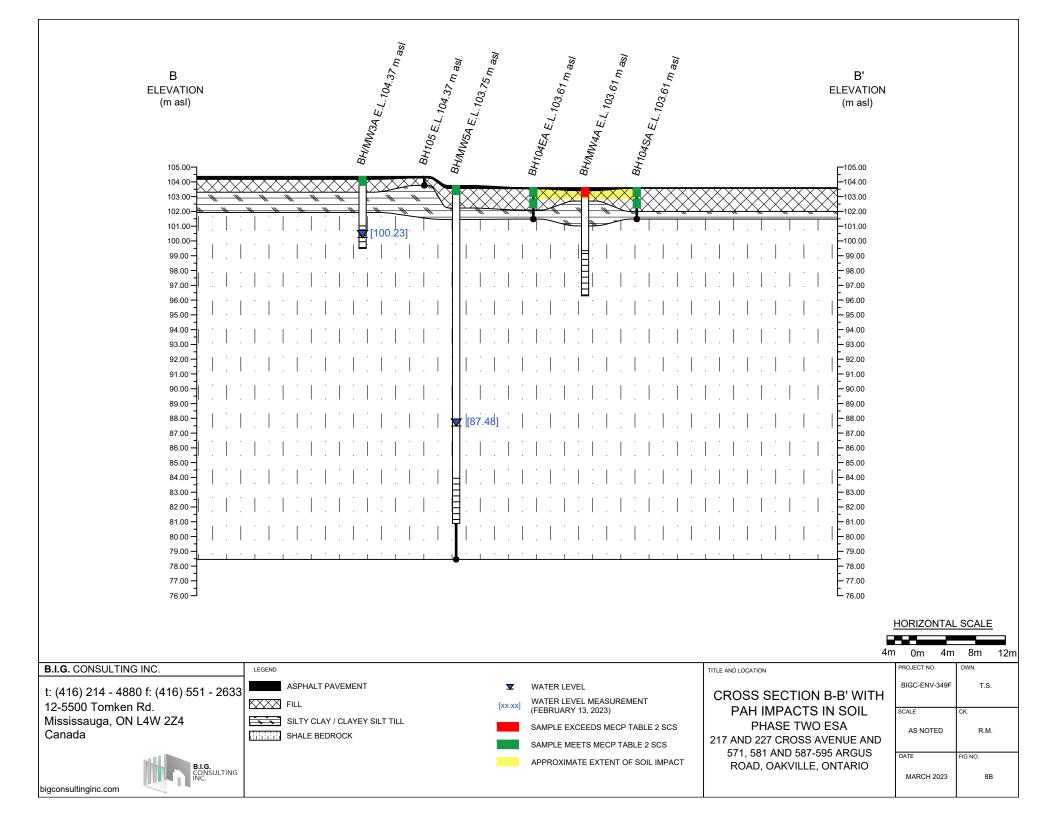


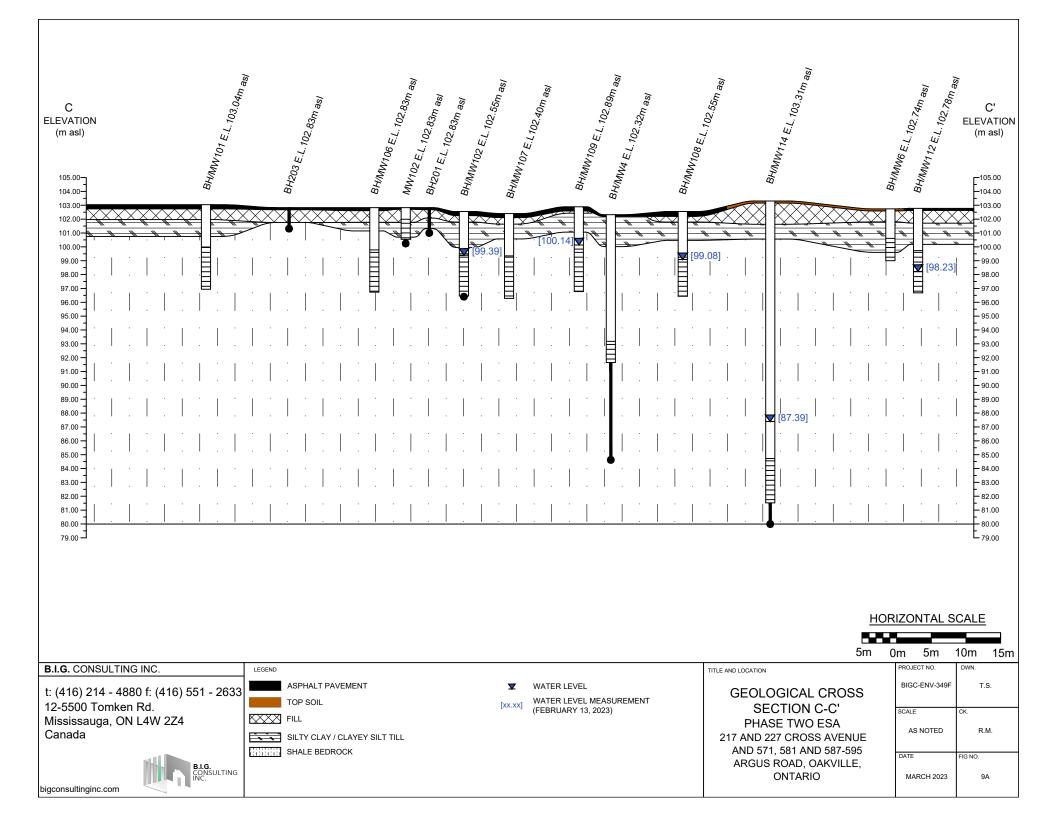


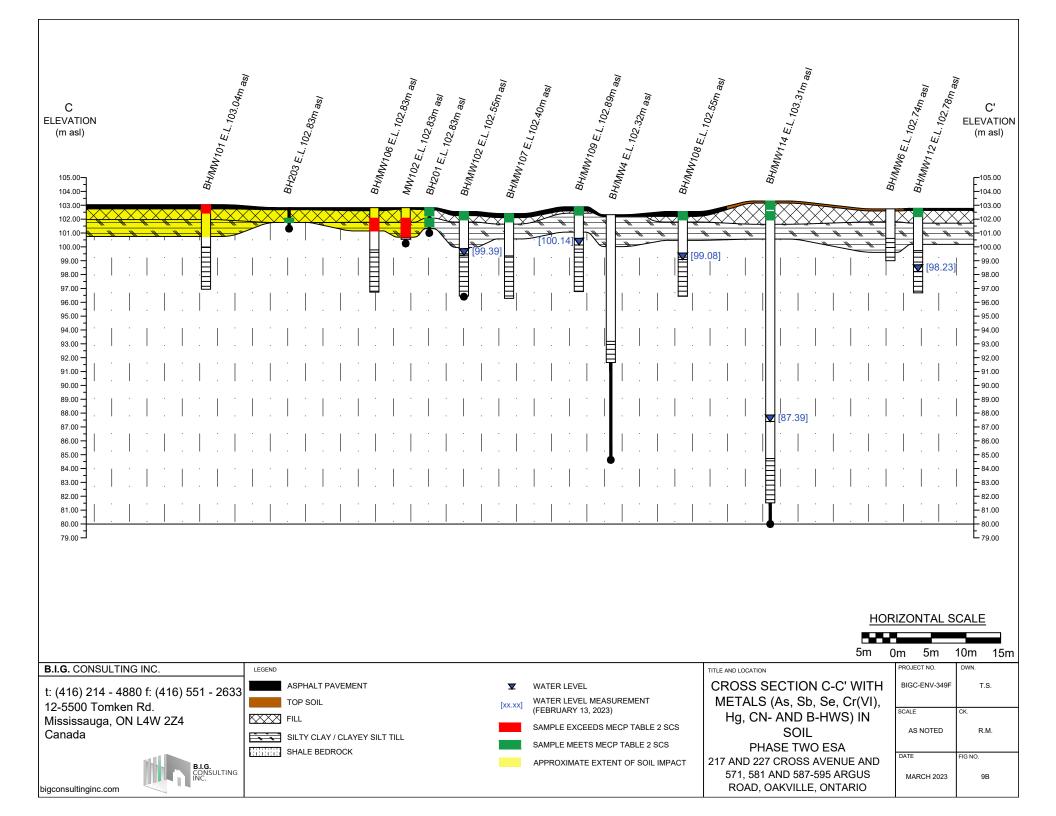


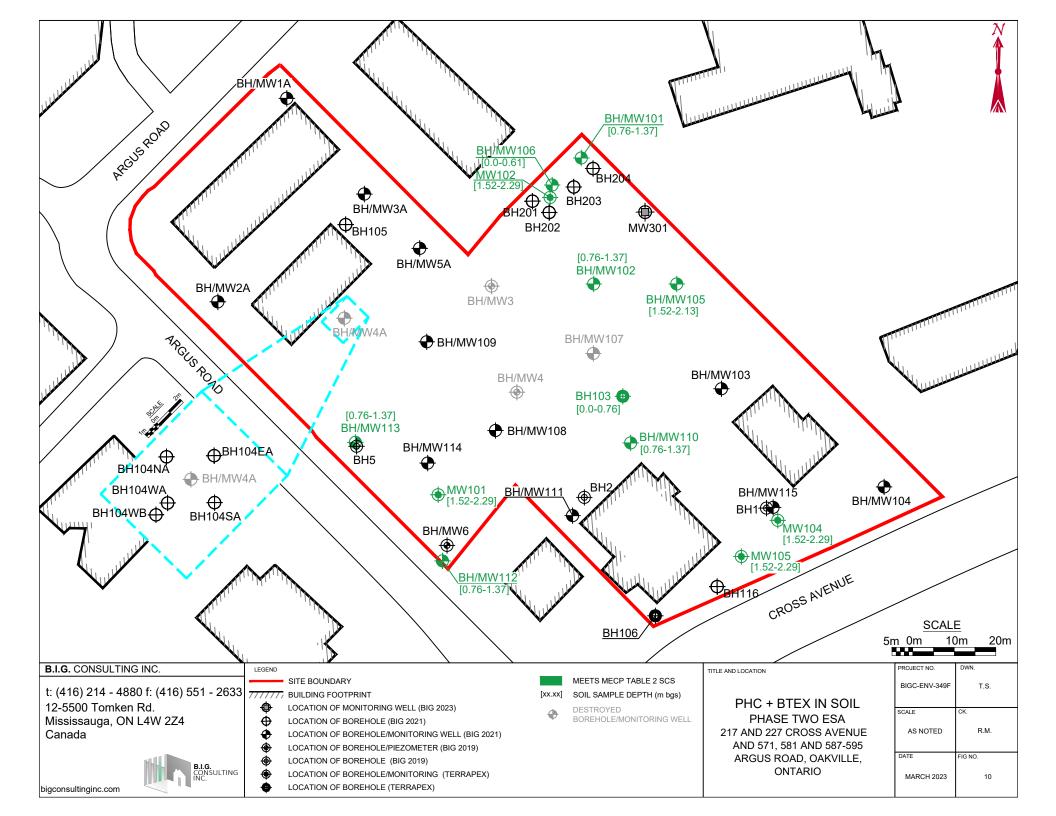


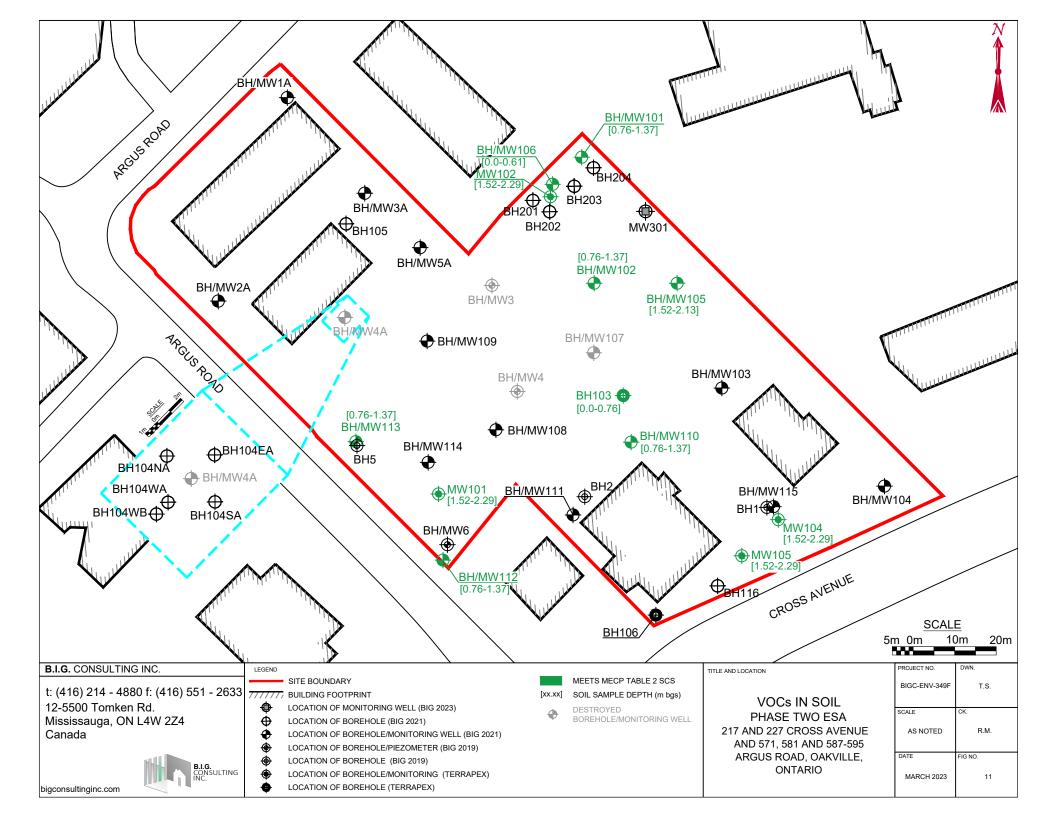


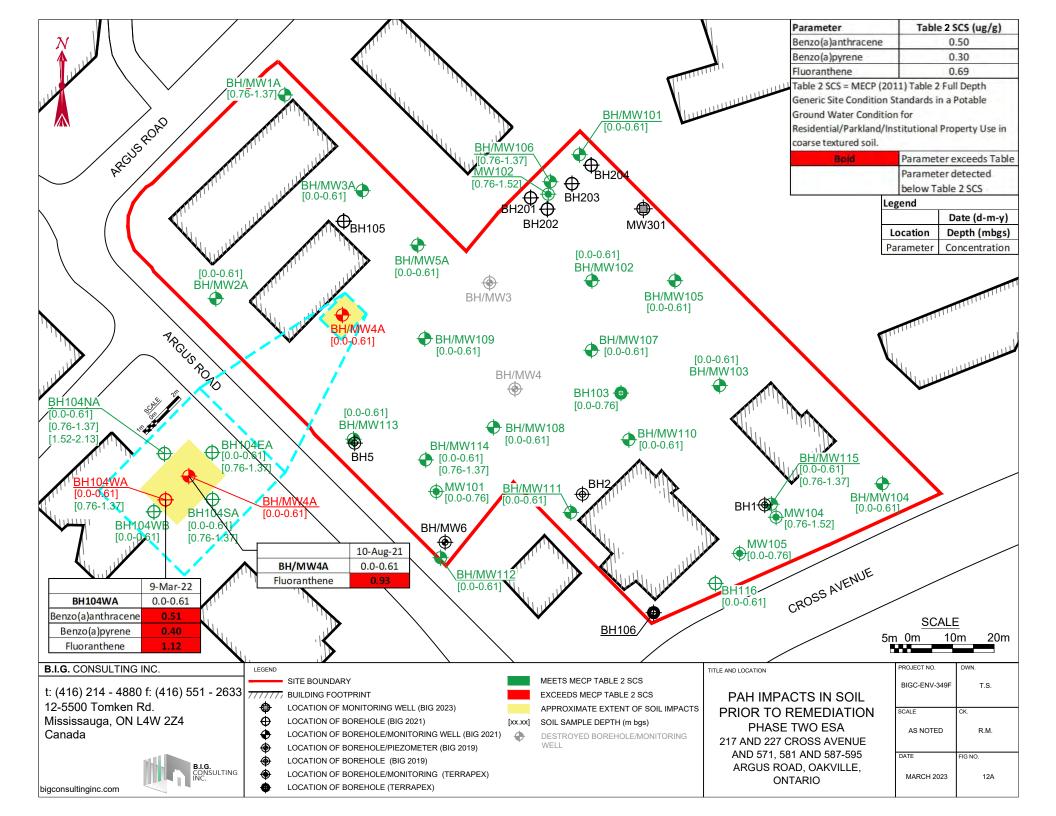


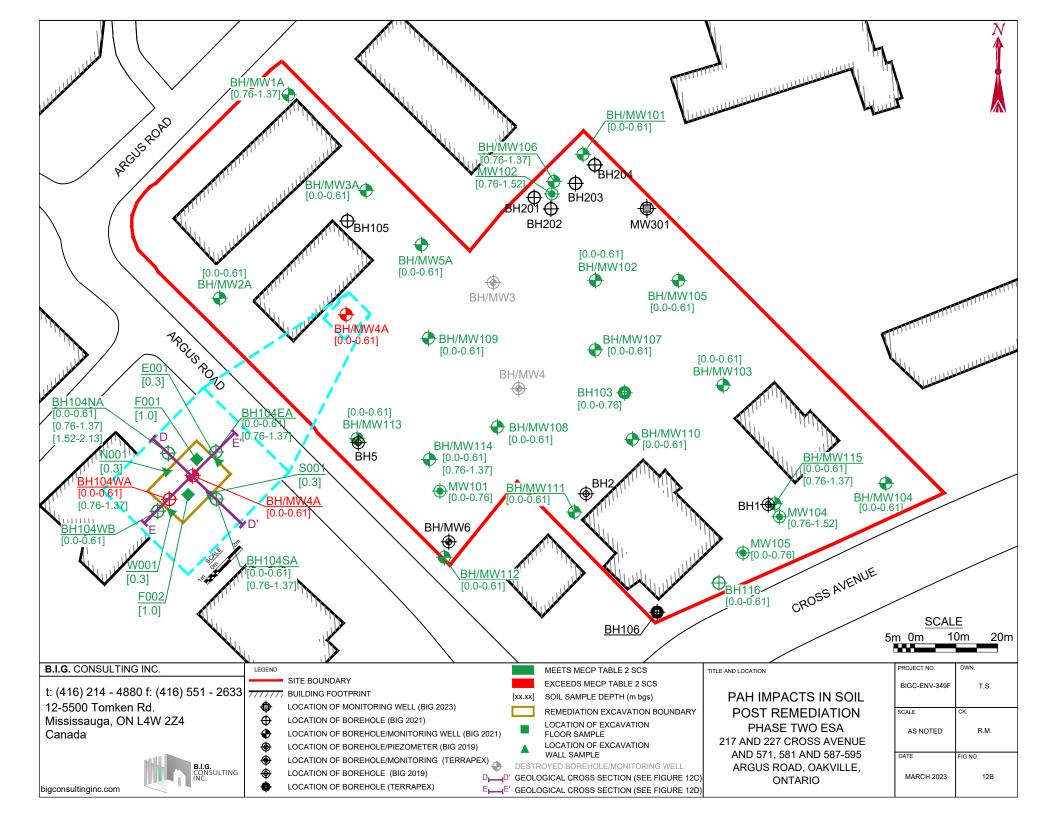


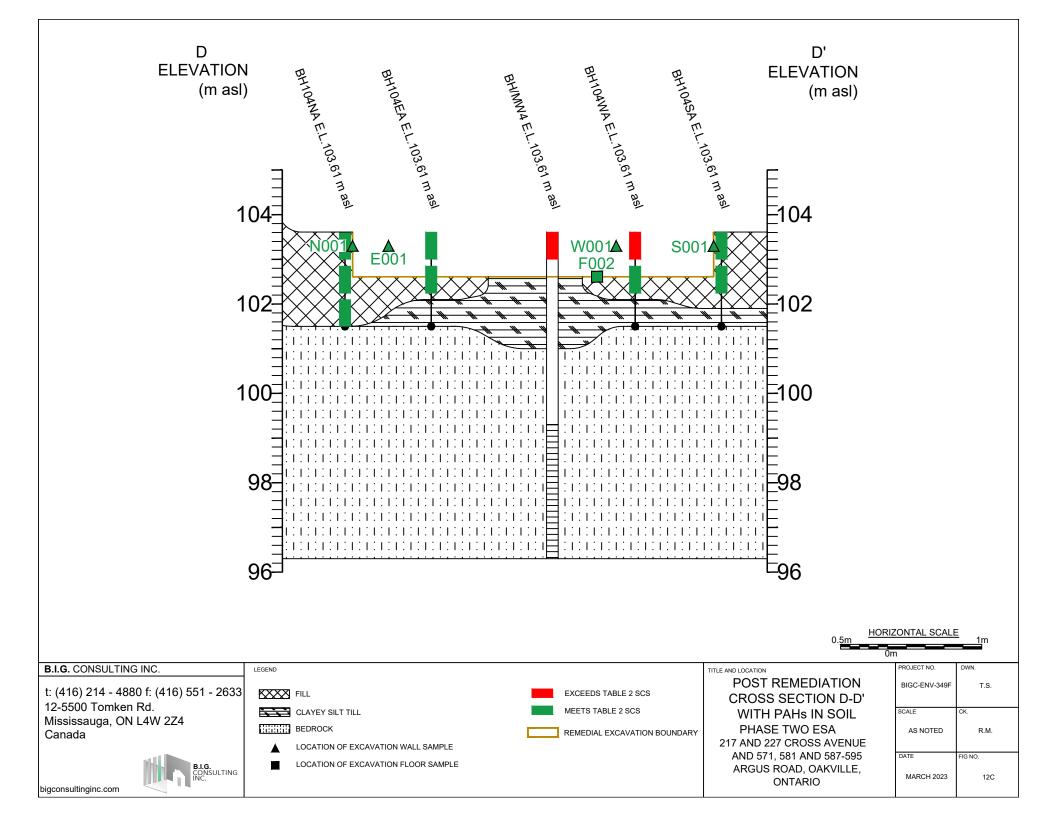


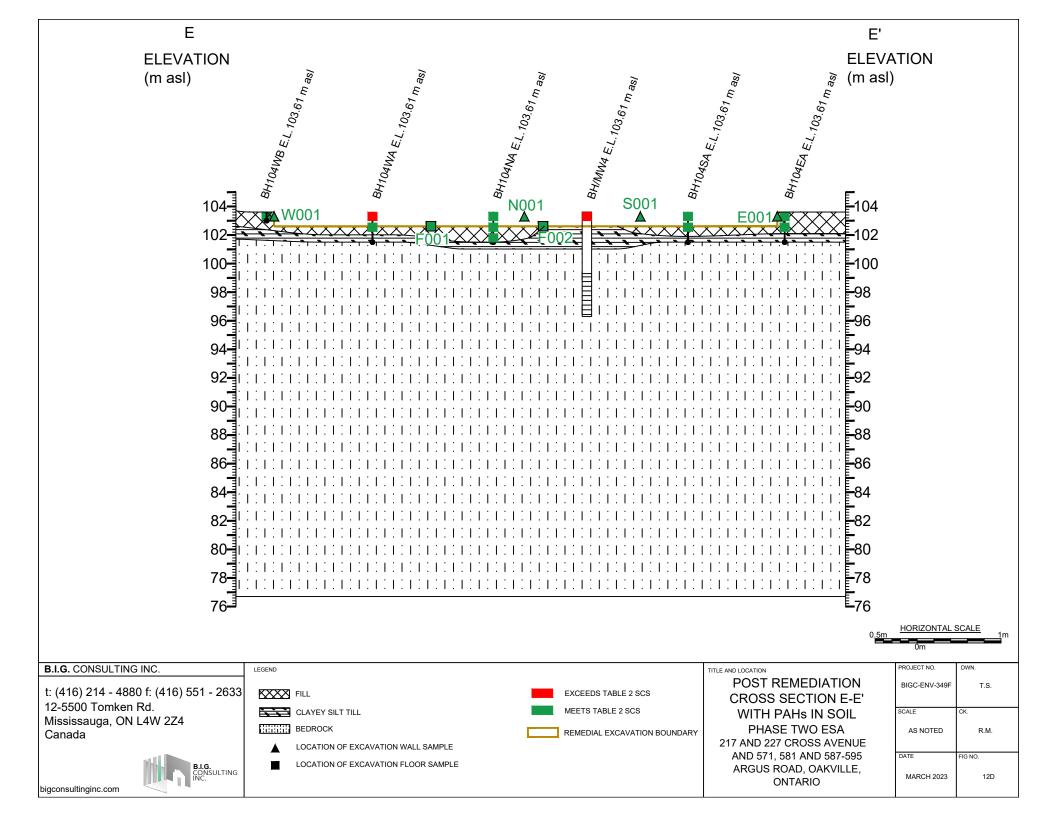


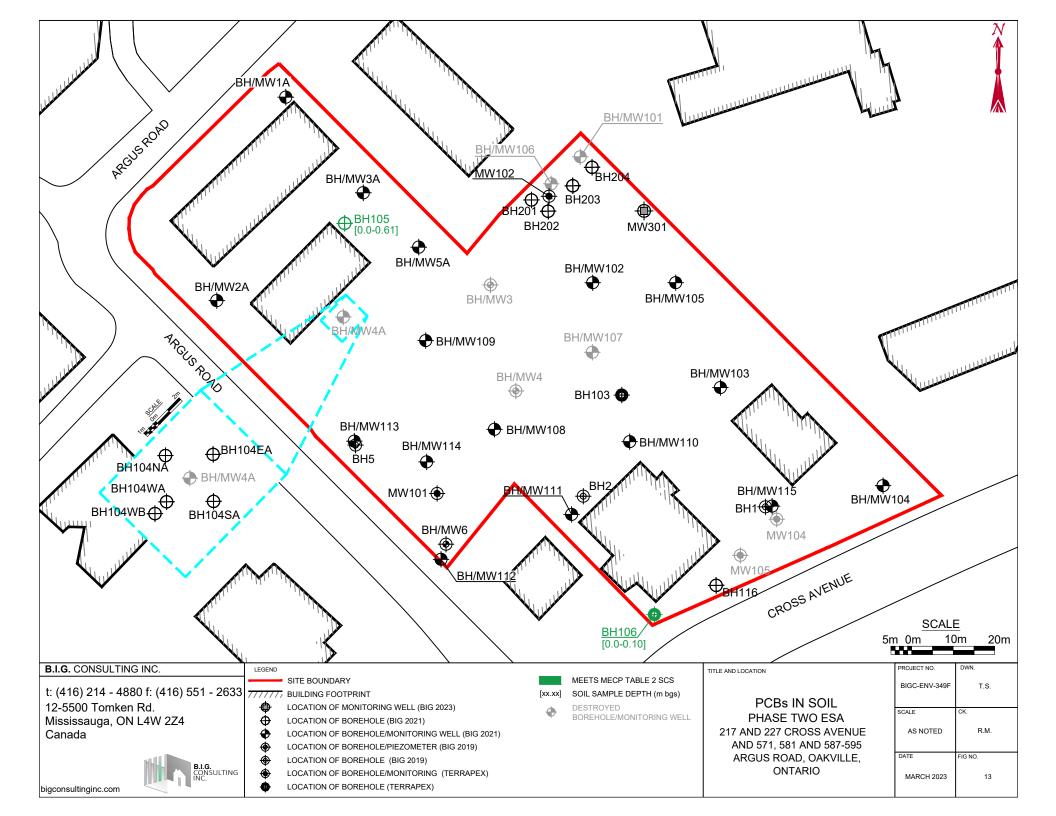


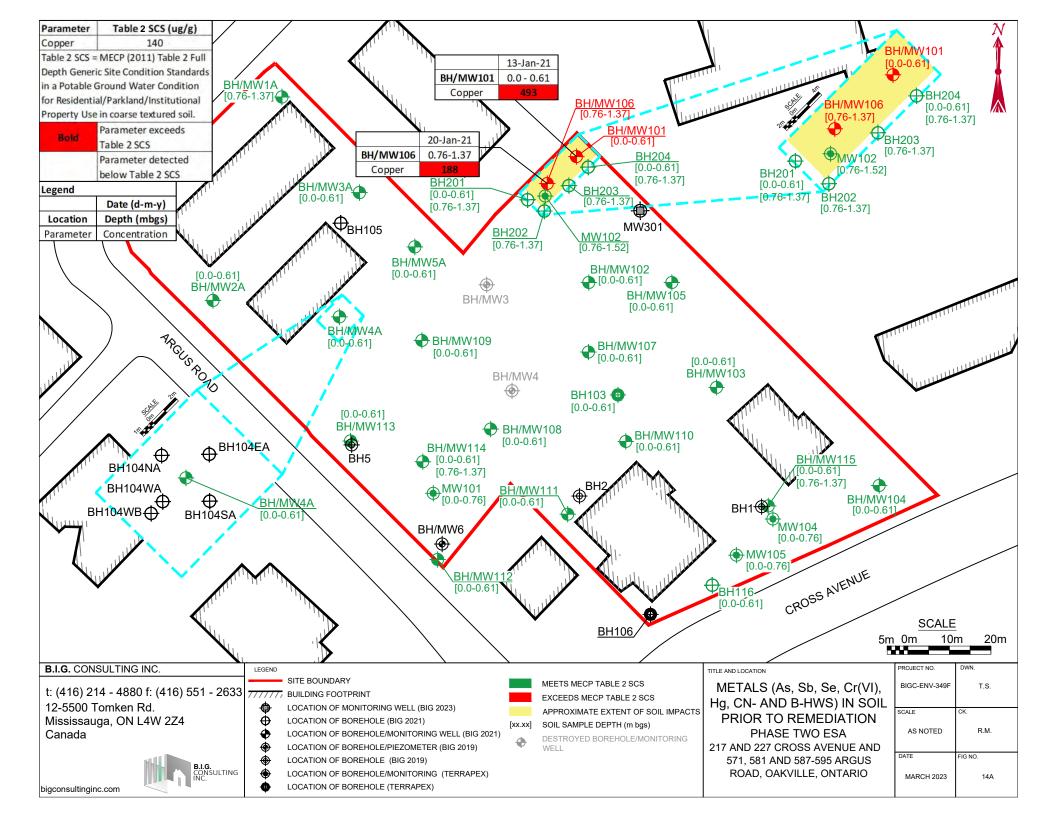


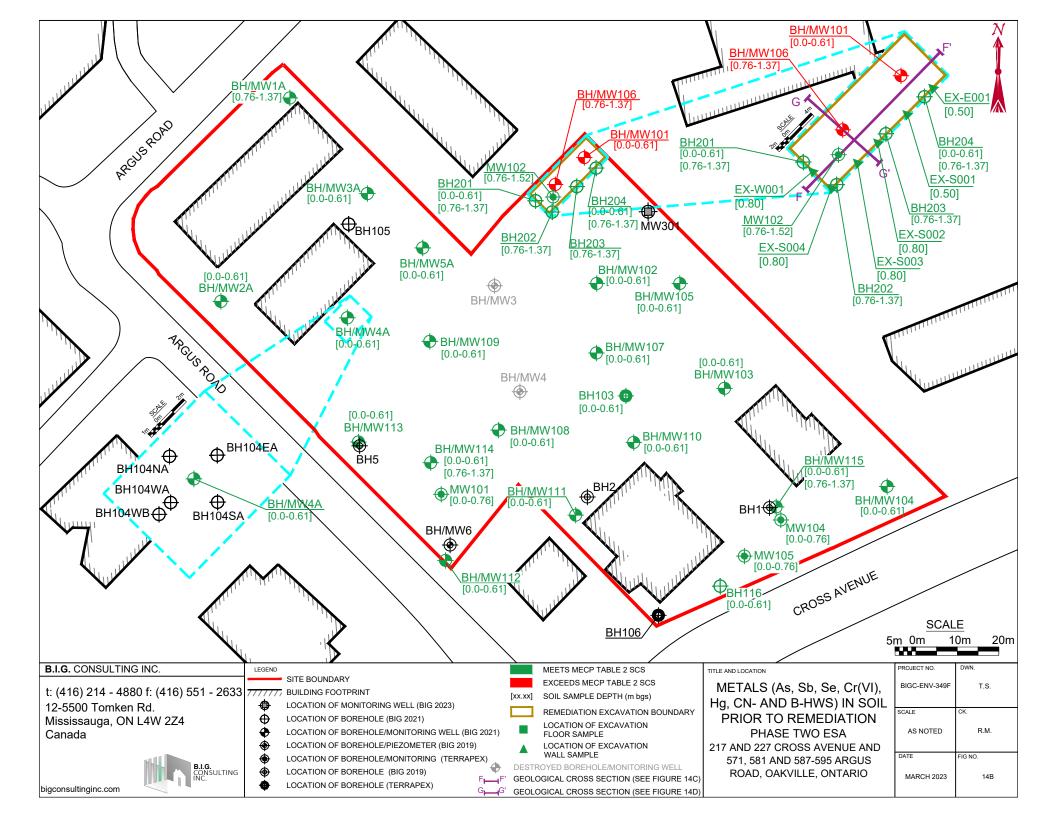


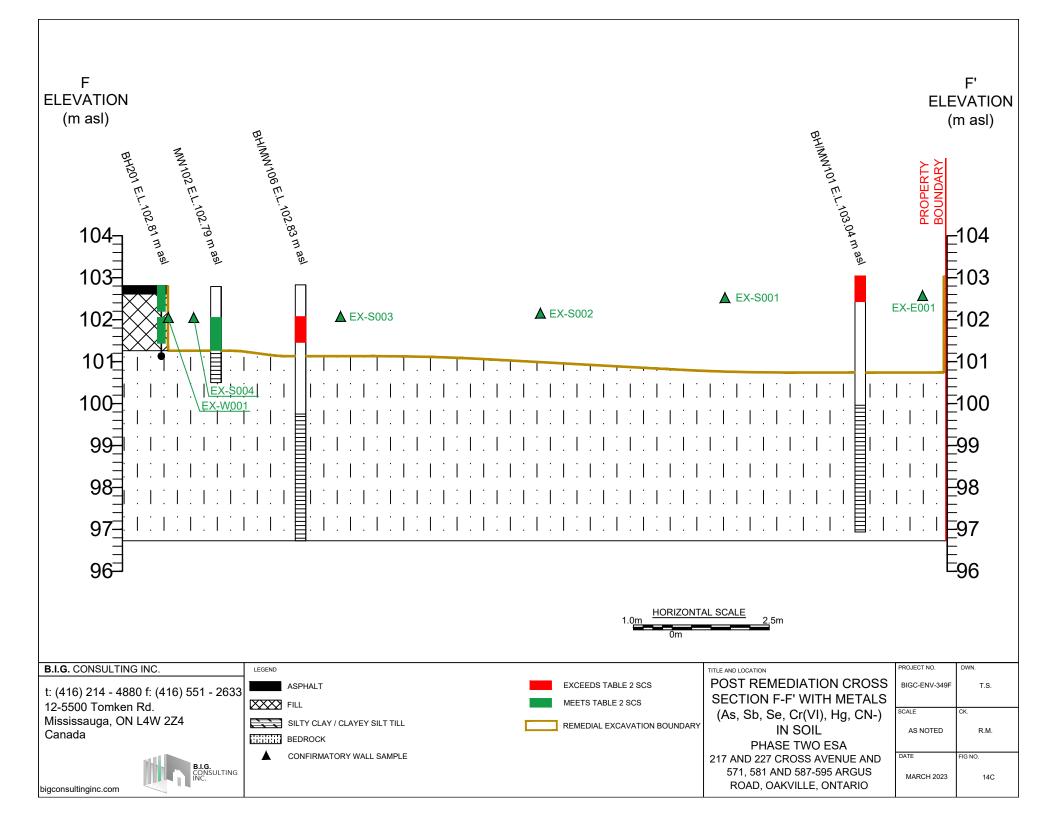


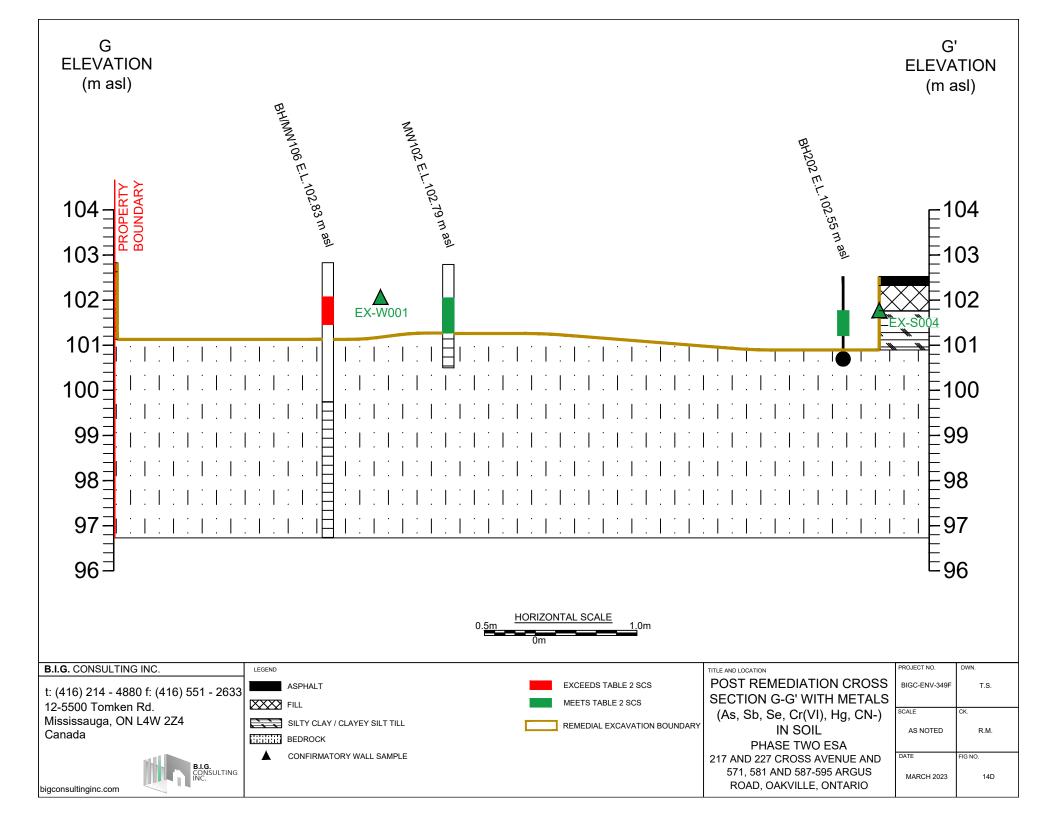


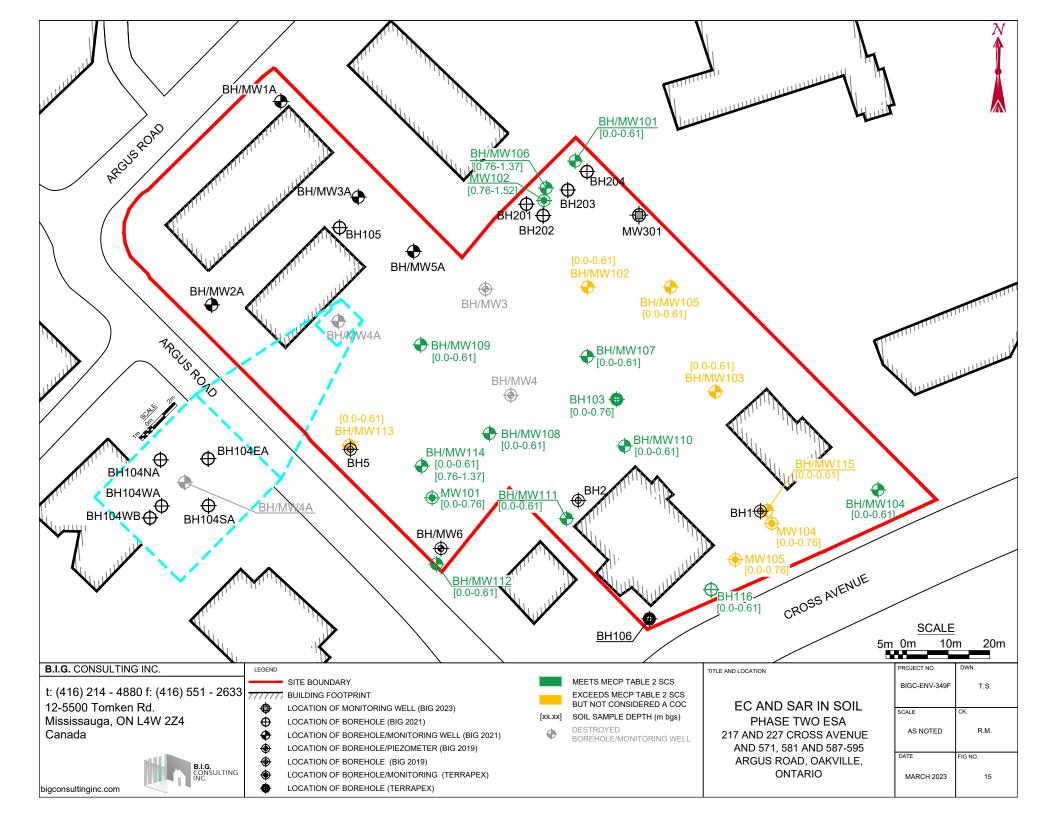


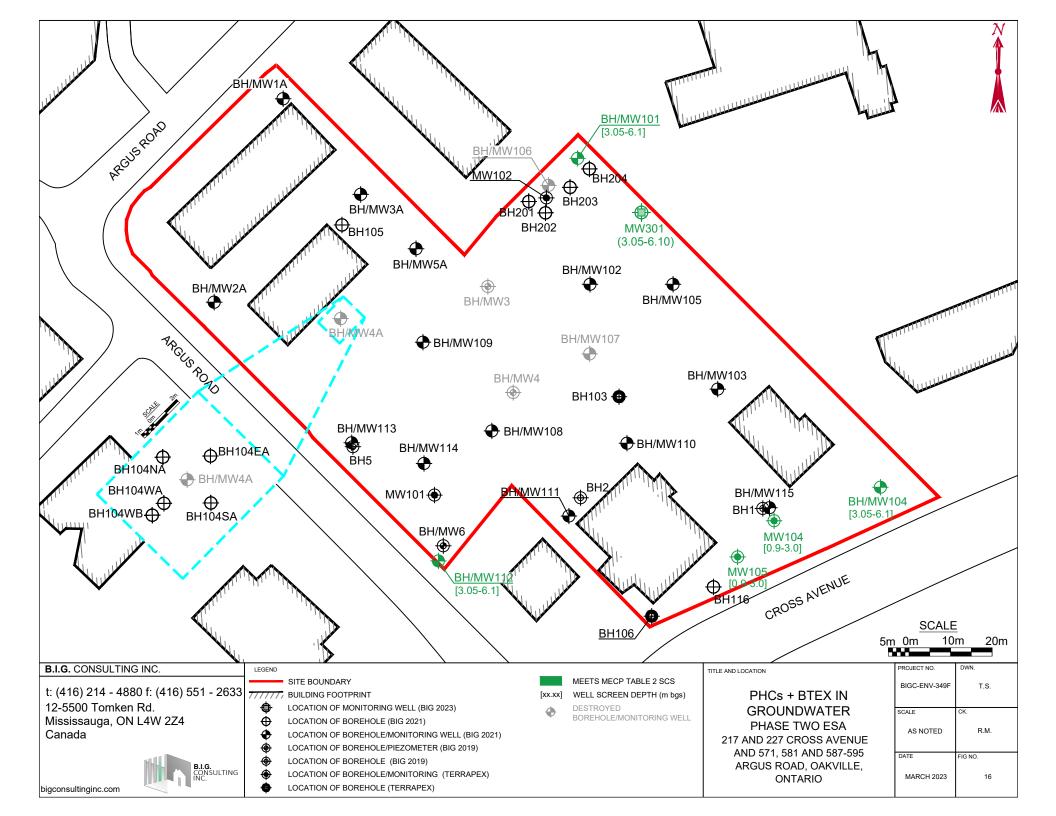


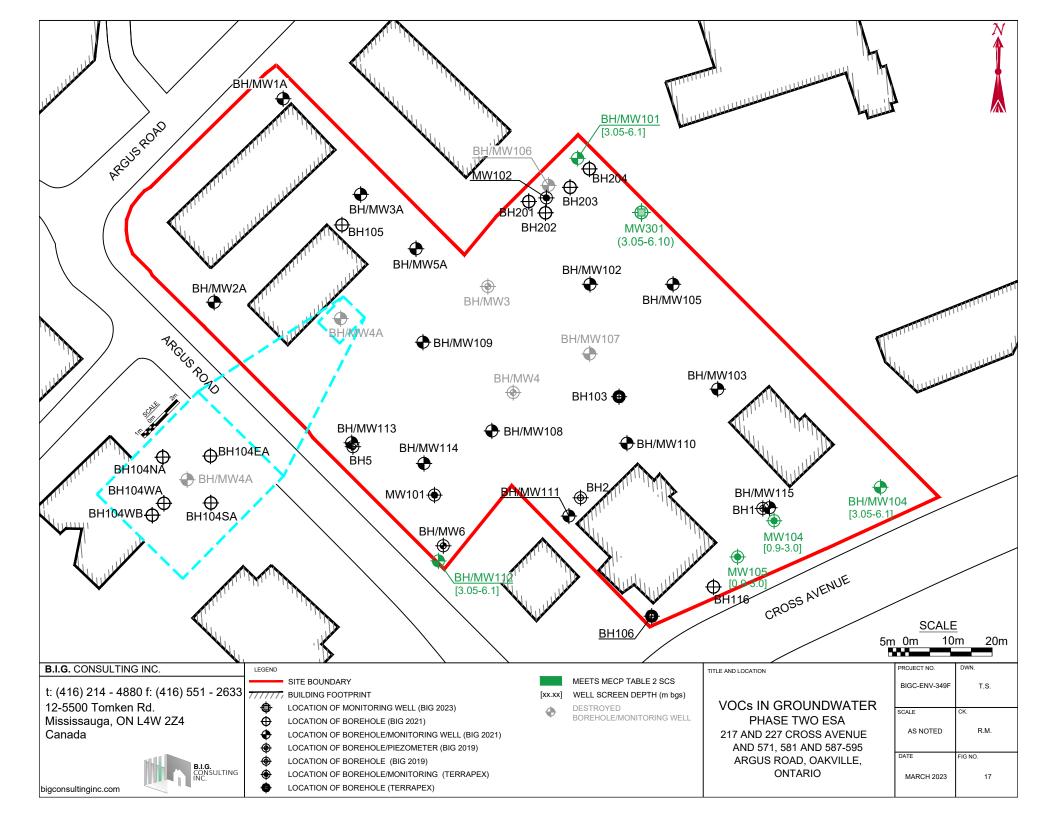


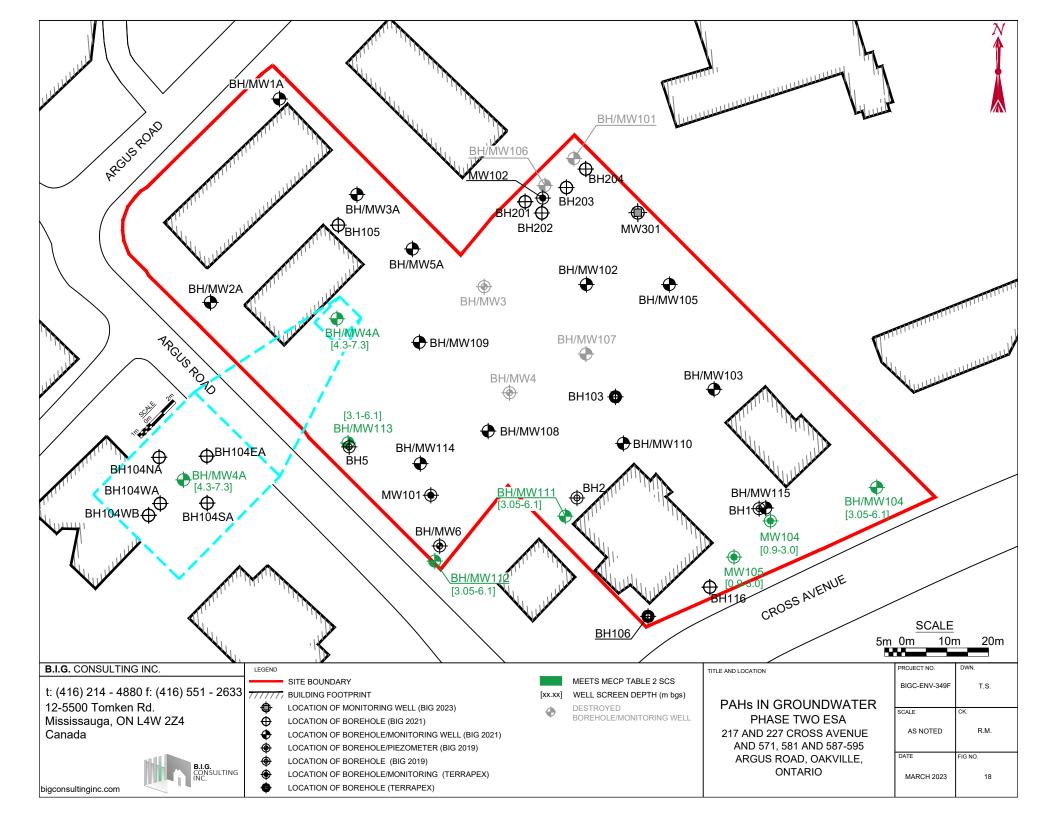


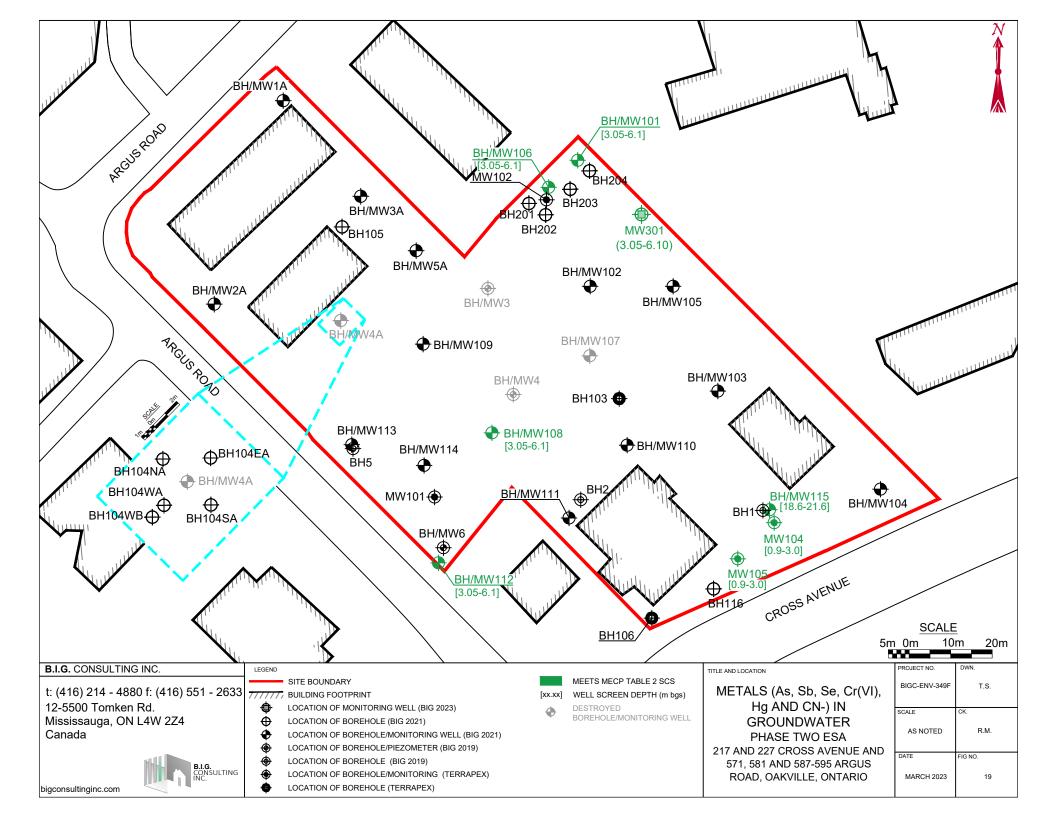


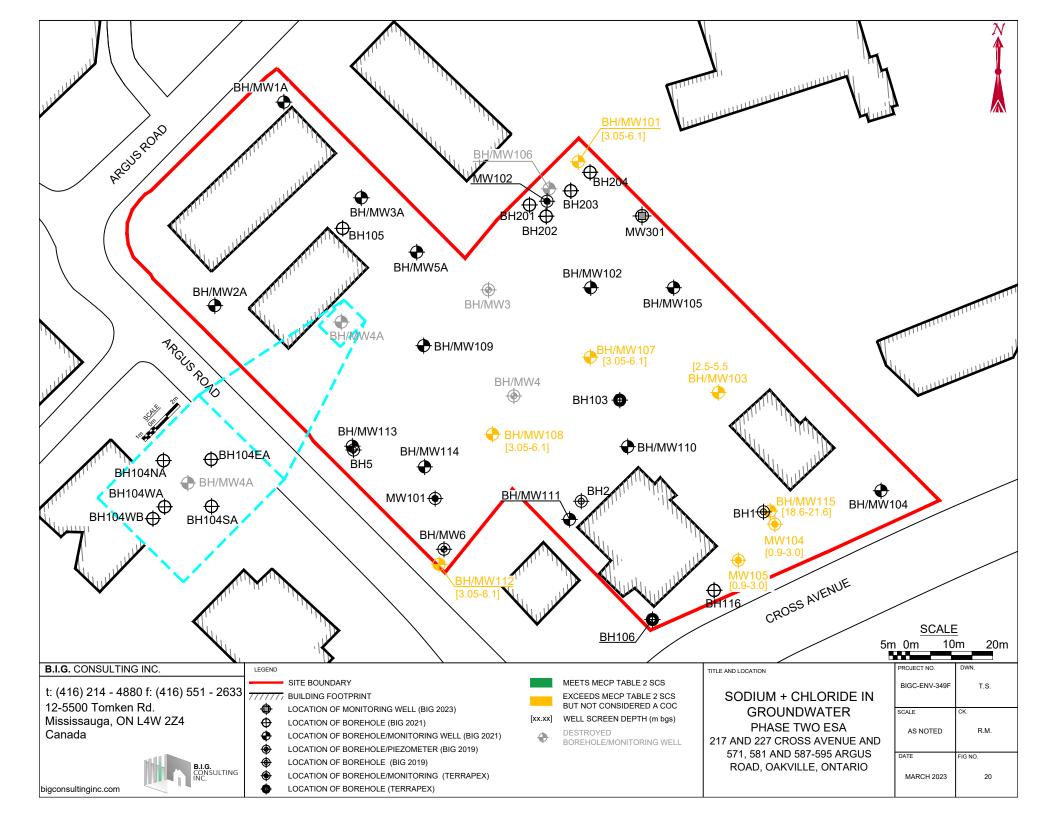












Tables



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

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		
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	lineation Metals	
BH204-SS2	Vertical delineation	Metals	BIG



TABLE 3 – Monitoring Well Installation Details

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)	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)	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	1	0.9	3.0	2.1	98.47	96.37	Sandy silt, silty clay, shale	Intact
MW102	Terrapex	98.98	1	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

Monitoring Well ID	Rationale	Requested Analyses	Consultant	
BH/MW101	APECs 1, 3, 7 and 8	PHCs, BTEX, VOCs, Metals	BIG	
BH/IVIVV101	characterization	and Inorganics	ыд	
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,	BIG	
DH/IVIVVIIZ	AFEC I and Site characterization	Metals and Inorganics	ыо	
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	BIG	
IVIVVOI	APECS 7 and 8 characterization	and Inorganics	ыд	
MW104	APEC 1 and Site characterization	PHCs, BTEX, VOCs, PAHs,	Terrapex	
10100104	AFEC I and Site characterization	Metals and Inorganics		
MW105	APEC 1 and Site characterization	PHCs, BTEX, VOCs, PAHs,	Terrapex	
INIANIO2	AFEC I and Site characterization	Metals and Inorganics		
BH/MW4A	APEC 5 characterization	PAHs	BIG	



TABLE 5 – Water Level Depths and Elevations

Borehole/Monitoring Well ID	Ground Surface Elevation	Groundwater Level (m bgs)	Groundwater Elevation (AMSL)	Groundwater Sampling Date		
		4.38	100.15	October 18, 2021		
BH/MW1A	104.53	4.40	100.13	June 3, 2022		
		4.37	100.16	February 13, 2023		
		9.05	95.19	October 18, 2021		
BH/MW2A	104.24	8.68	95.56	June 3, 2022		
		8.32	95.92	February 13, 2023		
		4.24	100.13	October 18, 2021		
BH/MW3A	104.37	4.29	100.08	June 3, 2022		
		4.14	100.23	February 13, 2023		
		4.71	98.90	October 18, 2021		
BH/MW4A	103.61	4.67	98.94	March 10, 2022		
		Monitoring	well destroyed	June 3, 2022 February 13, 2023 October 18, 2021 June 3, 2022 February 13, 2023 October 18, 2021 June 3, 2022 February 13, 2023 October 18, 2021 March 10, 2022 June 3, 2022 October 18, 2021 June 3, 2022 February 13, 2023 February 8, 2021 June 3, 2022 February 8, 2021 June 3, 2022 February 13, 2023 February 13, 2023 February 8, 2021 June 3, 2022 February 13, 2023 February 8, 2021 June 3, 2022 February 13, 2023 February 8, 2021 June 3, 2022 February 13, 2023 February 8, 2021 June 3, 2022 February 13, 2023 February 13, 2023 February 8, 2021 June 3, 2022 February 8, 2021 June 3, 2022		
		19.04	84.71	October 18, 2021		
BH/MW5A	103.75	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		
PU/MMM101	105.04	Monitoring	well destroyed	June 3, 2022		
		3.67	98.88	February 8, 2021		
BH/MW102	102.55	3.33	99.22	June 3, 2022		
		3.16	99.39	February 13, 2023		
		2.79	98.99	February 8, 2021		
BH/MW103	101.78	2.51	99.27	June 3, 2022		
		2.29	99.49	February 13, 2023		
		2.45	98.51	February 8, 2021		
BH/MW104	100.96	2.18	98.78	June 3, 2022		
		2.04	98.92	February 13, 2023		
BH105	104.37	-	-	-		
		21.09	81.29	February 8, 2021		
BH/MW105	102.38	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		
DI I/ IVI VV 100	102.03	Monitoring	well destroyed	June 3, 2022		
BH/MW107	102.40	3.61	98.79	February 8, 2021		
DI I/ IVI VV 1U/	102.40	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
		4.20	98.69	February 8, 2021
BH/MW109	102.89	3.83	99.06	June 3, 2022
		2.75	100.14	February 13, 2023
		3.08	98.74	February 8, 2021
BH/MW110	101.82	2.74	99.08	June 3, 2022
		2.61	99.21	February 13, 2023
		3.37	98.57	February 8, 2021
BH/MW111	101.94	3.07	98.87	June 3, 2022
		3.00	98.94	February 13, 2023
		4.23	98.55	February 8, 2021
BH/MW112	102.78	4.69	98.09	June 3, 2022
		4.55	98.23	February 13, 2023
		4.77	98.68	February 8, 2021
BH/MW113	103.45	5.27	98.18	June 3, 2022
		4.33	99.12	February 13, 2023
		18.88	84.43	February 8, 2021
BH/MW114	103.31	16.01	87.30	June 3, 2022
		15.91	87.39	February 13, 2023
		17.91	83.81	February 8, 2021
BH/MW115	101.72	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	-	-	-
D11/0404/2	402.07	1.72	101.15	February 8, 2021
BH/MW3	102.87	Monitoring	well destroyed	June 3, 2022
D11/N4)4/4	102.22	3.80	98.52	February 8, 2021
BH/MW4	102.32	Monitoring	well destroyed	June 3, 2022
BH5	103.39	-	-	-
		DRY	DRY	February 8, 2021
BH/MW6	102.74	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		
		DRY	DRY	September 19, 2018		
MW101	99.37	DRY	DRY	June 3, 2022		
		DRY	DRY	February 13, 2023		
		DRY	DRY	September 19, 2018		
MW102	98.98	DRY	DRY	June 3, 2022		
		DRY	DRY	February 13, 2023		
BH103	1	-	-	-		
MW104	97.76	2.29	95.47	September 19, 2018		
IVI VV 104	97.76	Monitoring v	well destroyed	September 19, 2018 June 3, 2022 February 13, 2023 September 19, 2018 June 3, 2022 February 13, 2023		
BH104EA	103.61	-	-	-		
BH104NA	103.61	-	-	-		
BH104SA	103.61	-	-	-		
BH104WA	103.61	-	-	-		
BH104WB	103.61	-	-	-		
NAVA/10F	97.68	2.45	95.23	September 19, 2018		
MW105	37.00	Monitoring v	well destroyed	Sampling Date September 19, 2018 June 3, 2022 February 13, 2023 September 19, 2018 June 3, 2022 February 13, 2023		
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 precleaned, 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



	MOSCO (2014) T. H. 2. S. H.D. H.		MW9101-2a						
Sample ID	MOECC (2011) Table 2: Full Depth	MW101-2a	(Dup of	MW102-2a	BH103-1a	MW104-2a	MW105-2a	BH101-SS2	BH102-SS2
	Generic SCS in a Potable Groundwater		MW101-2a)						
Lab ID	Condition	1837443-03	1837443-04	1837443-06	1837443-08	1837443-11	1837443-13	1966585	1966587
Sampling Date	Residential/Parkland/Institutional	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)	Land Use	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	(coarse textured soil)	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.



Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater	BH105-SS3	BH106-SS1	BH110-SS2	DUP011002 (Dup of BH110-SS2)	BH112-SS2	BH113-SS2
Lab ID	Condition	1966591	2011444	2011450	2020966	2011453	2011455
Sampling Date	Residential/Parkland/Institutional	14/Jan/21	20/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21	21/Jan/21
Soil Sample Depth (m)	Land Use	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	(coarse textured soil)	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	-	-	-	-	-	-
'<' = Parameter below do 'NV'= No value Bold Concentration exc	ons reported in µg/g. etection limit, as indicated eeds MECP (2011) SCS. tection limit exceeds the MECP (2011) S						



	1		MW9101-2a		1	1	1					1	DUP011002		1
Sample ID		MW101-2a	(Dup of	MW102-2a	BH103-1a	MW104-2a	MW105-2a	BH101-SS2	BH102-SS2	BH105-SS3	BH106-SS1	BH110-SS2	(Dup of	BH112-SS2	BH113-SS2
Sample 15	MOECC (2011) Table 2: Full Depth Generic	1V1VV101-2a	MW101-2a)	1V1VV 1UZ-Za	B11103-1a	1V1VV104-2a	1V1VV 103-2a	B11101-332	B11102-332	B11105-333	B11100-331	B11110-332	BH110-SS2)	D11112-332	B11113-332
Lab ID	SCS in a Potable Groundwater Condition	1837443-03	,	4027442.00	4027442.00	4027442.44	4027442.42	4000000	4066507	4000004	2044444	2044450	,	2044452	2044455
Sampling Date	Residential/Parkland/Institutional Land		1837443-04	1837443-06	1837443-08	1837443-11	1837443-13	1966585	1966587 13/Jan/21	1966591	2011444	2011450 21/Jan/21	2020966	2011453	2011455 21/Jan/21
Soil Sample Depth (m)	Use	11/Sep/18 1.52-2.29	11/Sep/18 1.52-2.29	11/Sep/18 1.52-2.29	11/Sep/18 0.0-0.76	11/Sep/18 1.52-2.29	11/Sep/18 1.52-2.29	13/Jan/21 0.76-1.37	0.76-1.37	14/Jan/21	20/Jan/21 0.00-0.61	-	21/Jan/21 0.76-1.37	21/Jan/21 0.76-1.37	0.76-1.37
Consultant	(coarse textured soil)								0.76-1.37 BIG	1.52-2.13 BIG		0.76-1.37	0.76-1.37 BIG		
Laboratory		Terrapex Paracel	Terrapex Paracel	Terrapex Paracel	Terrapex Paracel	Terrapex Paracel	Terrapex Paracel	BIG AGAT	AGAT	AGAT	BIG AGAT	BIG AGAT	AGAT	BIG AGAT	BIG AGAT
	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
Acetone Benzene	16 0.21	<0.02	<0.02	<0.50	<0.50	<0.50	<0.50	<0.50	<0.00	<0.02	<0.02	<0.02	<0.50	<0.50	<0.02
Bromodichloromethane	II I	<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
Bromoform	1.5						<0.05	<0.05	<0.05			<0.05		<0.05 <0.05	<0.05
Bromomethane	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 <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
	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
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	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
m-Xylene + p-Xylene	II I	<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
	NV 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 Xylenes (total)	NV 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 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05	<0.05 <0.05	<0.05 <0.05	<0.05
Ayrenes (total)	3.1	\0.03	\0.03	~0.03	\0.03	\0.03	\0.03	\0.03	\0.03	\0.03	\0.03	_ ~0.03	\0.03	\U.UJ	\0.03

All soil concentrations reported in $\mu g/g$.

'<' = 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	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	Residential/Parkland/Institutional Land	1837443-01	1837443-02	1837443-05	1837443-08	1837443-09	1837443-10	1837443-12	1966584	1966586	1966588
Sampling Date	Use	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)	(coarse textured soil)	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.



Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition	BH104-SS1	BH105-SS1	BH106-SS2	BH107-SS1	BH108-SS1	BH109-SS1	BH110-SS1	BH111-SS1	BH112-SS1	BH113-SS1
Lab ID	Residential/Parkland/Institutional Land	1966589	1966590	2011445	2011446	2011447	2011448	2011449	2011451	2011452	2011454
Sampling Date	Use	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)	(coarse textured soil)	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									
Laboratory		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.



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	2011456	2011457	2020967	2011458	2011459	2787591	3196779	3196864	3196865	3196866
Sampling Date	Use	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)	(coarse textured soil)	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 $\mu g/g$.

'<' = Parameter below detection limit, as indicated

'NV'= No value

Bold

Concentration exceeds MECP (2011) SCS.



Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition	BH/MW5A- SS1	BH104NA-SS1	BH104NA-SS2	DUPWA020 (Dup of BH104NA-SS2)	BH104NA-SS3	DUPW4A030 (Dup of BH104NA-SS3)		BH104WA-SS2	BH104WB-SS1	BH104EA-SS1
Lab ID	Residential/Parkland/Institutional Land	3196867	3604499	3607391	3607395	3604501	3604504	3604502	3607394	3603000	3604505
Sampling Date	Use	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)	(coarse textured soil)	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.



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 $\mu g/g$. '<' = Parameter below detection limit, as indicated

Concentration exceeds MECP (2011) SCS.

Non-detect but detection limit exceeds the MECP (2011) SCS.

'NV'= No value

Bold

_			BH9106-1		DUP010501
Sample ID	MOECC (2011) Table 2: Full Depth	BH106-1	(BH106-1	BH105-SS1	(Dup of
	Generic SCS in a Potable Groundwater		DUP)		BH105-SS1)
Lab ID	Condition	1837443-14	1837443-15	3604527	3604528
Sampling Date	Residential/Parkland/Institutional Land	11-Sep-18	11-Sep-18	9-Mar-22	9-Mar-22
Soil Sample Depth (m)	Use	0.0-0.1	0.0-0.1	0.0-0.61	0.0-0.61
Consultant	(coarse textured soil)	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.



Sample ID	MOECC (2011) Table 2: Full Depth Generic	MW101-1a	MW9101-1a (Dup of	MW102-1b	BH103-1a	MW104-1a	MW105-1a	BH101-SS1	BH102-SS1	BH103-SS1
	SCS in a Potable Groundwater Condition		MW101-1a)							
Lab ID	Residential/Parkland/Institutional Land	1837443-01	1837443-02	1837443-05	1837443-08	1837443-08	1837443-12	1966584	1966586	1966588
Sampling Date	Use	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)	(coarse textured soil)	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	(coarse textured soil)	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



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Sample ID	MOECC (2011) Table 2: Full Depth Generic	BH104-SS1	BH105-SS1	BH106-SS2	BH107-SS1	BH108-SS1	BH109-SS1	BH110-SS1	BH111-SS1	BH112-SS1
Lab ID	SCS in a Potable Groundwater Condition	1966589	1966590	2011445	2011446	2011447	2011448	2011449	2011451	2011452
Sampling Date	Residential/Parkland/Institutional Land	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)	Use	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	(coarse textured soil)	BIG								
Laboratory	1	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
	ction limit, as indicated									



Sample ID	MOECC (2011) Table 2: Full Depth Generic	BH113-SS1	BH114-SS1	BH114-SS2	DUP011402 (DUP of BH114- SS2)	BH115-SS1	BH115-SS2	BH116-AS1	BH201-SS1
Lab ID	SCS in a Potable Groundwater Condition	2011454	2011456	2011457	2020967	2011458	2011459	2787591	2918865
Sampling Date	Residential/Parkland/Institutional Land	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)	Use	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	(coarse textured soil)	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 in '<' = Parameter below detection 'NV' = No value Bold									



Sample ID	MOECC (2011) Table 2: Full Depth Generic	BH201-SS2	BH202-SS2	BH203-SS2	BH204-SS1	BH204-SS2	BH/MW1A- SS2	BH/MW2A- SS1	BH/MW3A- SS1
Lab ID	SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land	2878405	2878406	2878407	2918895	2878408	3196779	3196864	3196865
Sampling Date	Use	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)	(coarse textured soil)	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	(coarse textured soil)	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	BH/MW4A- SS1	BH/MW5A- SS1	EX-W001	EX-E001	EX-S001	EX-S002	EX-S003	EX-S004
Lab ID	Residential/Parkland/Institutional Land	3196866	3196867	3644519	3644109	3644521	3644513	3644416	3644410
Sampling Date	Use	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)	(coarse textured soil)	0.00-0.61	0.00-0.61	0.8	0.5	0.5	0.8	0.8	0.8
Consultant	(coarse textured soil)	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



May 2023

							DUP11201		DUP3010	
Sample ID		MW104	MW105	BH/MW101	BH/MW104	BH/MW112	(Dup of	MW301	(Dup of	Trip Blank
	MOECC (2011) Table 2: Full Depth Generic						BH/MW112)		MW301)	
Lab ID	SCS in a Potable Groundwater Condition	1838161-01	1838161-02	2045847	2045871	2045899	2045928	VBA390	VBA391	2045935
Sampling Date	All Types of Land Use	17/Sep/18	17/Sep/18	3/Feb/21	3/Feb/21	3/Fe	b/21	13/Feb/23	13/Feb/23	3/Feb/21
Screen Depth Interval (m)	(coarse textured soil)	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	В	IG	BIG	BIG	BIG
Laboratory		Paracel	Paracel	AGAT	AGAT	AG	AT	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 μ g/L.

'<' = Parameter below detection limit, as indicated

'NV'= No value

Bold

Concentration exceeds MECP (2011) SCS.



				MW9105		1		DUP11201		DUP3010		
Sample ID		MW104	MW105	(Dup of	BH/MW101	BH/MW104	BH/MW112	(Dup of	MW301	(Dup of	Trip Blank	Trip Blank
·	MOECC (2011) Table 2: Full Depth			MW105)	,	,	,	BH/MW112)		MW301)		
Lab ID	Generic SCS in a Potable Groundwater	1838161-01	1838161-02	1838161-03	2045847	2045871	2045899	2045928	VBA390	VBA391	2045935	VBA392
Sampling Date	Condition	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)	All Types of Land Use	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	(coarse textured soil)	Terrapex	Terrapex	Terrapex	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 <0.5	<0.5 <0.5	<0.10 <0.20	<0.10 <0.20	<0.10 <0.20	<0.10 <0.20	<0.20 <0.20	<0.20 <0.20	<0.10 <0.20	<0.20 <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 $\mu g/L$.

Bold

Concentration exceeds MECP (2011) SCS.



^{&#}x27;<' = Parameter below detection limit, as indicated

^{&#}x27;NV'= No value

Sample ID	MOSCC (2014) Table 2: Full Darah Canada	MW	104	MW105	BH/MW104	BH/MW111	BH/MW112	DUP11201 (Dup of	BH/MW113	BH/MW4A	Dup40 (Dup of
Lab ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition	1838161-01	1380246	1380247	2045871	2045897	2045899	BH/MW112) 2045928	2045902	3607380	BH/MW4A) 3607381
Sampling Date	All Types of Land Use	17/Sep/18	20/Sep/18	20/Sep/18	3/Feb/21	3/Feb/21		b/21	3/Feb/21		1ar/22
Screen Depth Interval (m)	1	0.9-		0.9-3.0	3.05 - 6.10	3.05 - 6.10		- 6.10	3.05 - 6.10	-	- 7.32
Consultant	(coarse textured soil)	Terra		Terrapex	BIG	BIG	3.03		BIG		IIG
Laboratory		Para		Paracel	AGAT	AGAT	AG		AGAT		GAT
Acenaphthene	4.1	<0.05	<0.05	<0.04	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
•	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	<0.04					<0.20		
Anthracene	2.4	<0.01			<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 $\mu g/L$.

'<' = Parameter below detection limit, as indicated

'NV'= No value

Bold Concentration exceeds MECP (2011) SCS.



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٨.	1=	11/	2	023	

Sample ID	MOECC (2011) Table 2: Full Depth Generic	MW	/104	MW105	MW9105 (Dup of MW105)	MW105	BH/MW101	BH/MW103	BH/MW106
Lab ID	SCS in a Potable Groundwater Condition	1838161-01	1838429-01	1838161-02	1838161-03	1838429-03	2045847	2045869	2787630
Sampling Date	All Types of Land Use	17/Sep/18	19/Sep/18	17/S	ep/18	19/Sep/18	3/Feb/21	3/Feb/21	27/Jul/21
Screen Depth Interval (m)	(coarse textured soil)	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		Terr	арех	Terr	apex	Terrapex	BIG	BIG	BIG
Laboratory		Para	acel	Par	acel	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 $\mu g/L$.

'<' = 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	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	SCS in a Potable Groundwater Condition	2045886	2045888	2045899	2045928	SUO235	SUO236	VBA390	VBA391
Sampling Date	All Types of Land Use	3/Feb/21	3/Feb/21	3/Fe	b/21	3/Ju	ın/22	13/Feb/23	13/Feb/23
Screen Depth Interval (m)	(coarse textured soil)	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	В	IG	В	IIG	BIG	BIG
Laboratory		AGAT	AGAT	AG	AT	E	3V	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 $\mu g/L$.

'<' = Parameter below detection limit, as indicated

'NV'= No value

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





				R	ECO	RD C	F BC	DREH	HOLE	E No	. BH	1					ME	TRIC	1 OF 1
PROJ	. NO. BIGC-GEO-349A	LOC	CATIO	ON _	571 Arg	gus Roac	and 21	7 Cross	Avenue	, Oakv	ille						ORIG	SINATED	BY F.V.G
DATU	M Geodetic	BOF	REHO	OLE T	/PE	Contino	ous flight	, 6 inche	es, Solid	d Stem	Auger						СОМ	PILED B'	Y S.L
	. NAME Geotechnical Investigation																		·
	SOIL PROFILE			SAMPL	FS			DYNA	MIC CC	NE PE	NETRA	TION		l					
	COLLITORILL	T _F), (IVII E		GROUND WATER CONDITIONS	ELEVATION SCALE					30 1	00	PLASTI LIMIT	C NATU	URAL STURE TENT	LIQUID LIMIT	UNIT	REMARKS &
ELEV		STRAT PLOT	NUMBER	ᆔ	'N" VALUES	ND W.	NO NO				TH kP		Ĭ	W _P		W	W _L	5 ⊞	GRAIN SIZE DISTRIBUTION
DEPTH	DESCRIPTION	IRAT	NOM	TYPE	\ > \ \ \	SOUN	EVAT		NCONF		+ - ×	FIELD		WA	TER CC	ONTENT	Γ(%)	γ	(%)
101.55		S,			<u></u>	5	ELE					30 1					SO /	kN/m³	GR SA SI CL
107:5	ASPHALT: 90 mm GRANULAR: 350 mm																		
0.1	GRANULAR. 550 IIIII	33																	
			1	SS1	25														
101.1 0.4	FILL: clayey silt to silty clay, some																		
0.4	sand, organic staining, dark brown to black, moist																		
	black, moist	\otimes																	
		\otimes	1			1								c					
		\otimes	1																
100 5																			
100.5	CLAYEY SILT TILL/SILTY CLAY TILL: brown, moist, hard	1/2	2	SS2	6														
	- trace rootlets between 1.1 m and 1.5 m		1																
	1.5111																		
		9	<u> </u>											0					
		97	1																
		1	1																
		11	3	SS3	55														
			1																
			1																
		17	—			-								0					
		1	1																
		9 /	ł																
98.9			4	SS4	80														
2.7	SHALE: highly weathered, grey, damp																		
	·		_																
			}																
00.1																			
98.4 3.2	Borehole terminated at 3.2 m	 	1																
	Notes: 1. Open and dry upon completion of																		
	drilling																		
			1																



				R	ECO	RD C	F BC	DREH	HOLE	E No	. BH	2					ME	TRIC	1 OF 1
PROJ.	NO. BIGC-GEO-349A	LOC	ATIO	ON _	571 Arg	gus Road	and 21	7 Cross	Avenue	, Oakvi	lle						ORIG	SINATED	BY F.V.G
DATU	M Geodetic	BOF	REHO	OLE T	/PE	Contino	ous flight	, 6 inche	es, Solic	d Stem	Auger						СОМ	PILED B'	Y S.L
	NAME_Geotechnical Investigation																		·
	SOIL PROFILE			SAMPL	EQ			DYNA	MIC CO	NE PEI	NETRA	TION							
	SOIL FROI ILL	Τ_		JAIVII L		GROUND WATER CONDITIONS	ELEVATION SCALE					30 1	nn	PLASTI LIMIT	C NATI MOIS CON	URAL TURE	LIQUID LIMIT	UNIT	REMARKS &
ELEV		PLO	BER	Щ	LUES	M OF	NO NO				TH kP	1	Ĭ	W _P		N	W_{L}	5 ⊞	GRAIN SIZE DISTRIBUTION
DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	'N" VALUES	SOUN	EVAT		NCONF		+ - ×	FIELD		WA	TER CC	ONTEN	Γ(%)	γ	(%)
101.93		S,			<u>-</u>	ß	ELE						00				SO /	kN/m³	GR SA SI CL
109:9	ASPHALT: 75 mm GRANULAR: 330 mm																		
			4																
			1	SS1	14														
101.5 0.4	FILL: clayey silt to silty clay, topsoil	$\langle \cdot \rangle$																	
	inclusion, some rootlets, dark brown to black, moist	\bigotimes	1																
		\otimes																	
		\bigotimes	_											0					
101.0	SILT TO CLAYEY SILT: trace	${\mathbb{R}}$	1																
0.0	rootlets, reddish brown, very moist, loose																		
			2	SS2	9														
100.4 1.5	CLAYEY SILT TILL/SILTY CLAY	 												0					
1.5	TILL: brown, moist, hard	1	ł																
		9%	1																
	- grey below 1.8 m		3	SS3	31														
			-																
		1	ļ																
99.6 2.3	SHALE: weathered, grey, damp	11.												0					
	, , ,																		
]		400														
			4	SS4	100														
			_			-													
98.7			5	SS5	100	1								0					
3.2	- limestone at 3.2 m Borehole terminated at 3.2 m	1																	
	Notes: 1. Open and dry upon completion of																		
	drilling																		



				REC	COR	D OF	BOR	EHO	LE N	lo. E	BH/M	W3					ME	TRIC	1 OF 1
PROJ	. NO. BIGC-GEO-349A	LOC	CATIO	ON _	571 Ar	gus Road	and 21	7 Cross	Avenue	, Oakvi	ille						ORIG	SINATED	BY <u>F.V.G</u>
DATU	M Geodetic	BOF	REH	OLE T	YPE .	Contino	ous flight	t, 8 inche	es, Hollo	ow Sten	n Auger						СОМ	PILED B	YS.L
PROJ	. NAME_Geotechnical Investigation	DAT	E _	2019.11	.21 - 20	19.11.21	_										CHE	CKED BY	<u> </u>
	SOIL PROFILE			SAMPL	FS		I	DYNA	MIC CC	NE PEI	NETRA	TION							
	OOIET NOTIEE	T_	\vdash			GROUND WATER CONDITIONS	ELEVATION SCALE	1				30 1	00	PLASTI LIMIT	C NATI	URAL TURE	LIQUID LIMIT	발	REMARKS &
[[[]		STRAT PLOT	Ä	ш	'N" VALUES	D W/	NO S		<u> </u>		TH kP		<u> </u>	W _P		TENT W	\mathbf{W}_{L}	UNIT	GRAIN SIZE
ELEV DEPTH	DESCRIPTION	RAT	NUMBER	TYPE	\ \	OUN	VATI	O UI	NCONF	INED	+	FIELD '		١٨/٨٠	TED CC	OONTENT	F (9/-)	γ	DISTRIBUTION (%)
102.87		ST	_		7	GR						LAB VA					60	kN/m³	GR SA SI CL
102.07	ASPHALT: 65 mm GRANULAR: 330 mm													\vdash					
0.1	GRANULAR: 330 IIIII																		
		33	1	SS1	14														
102.5 0.4	FILL: clayey silt, organic staining,																		
	dark brown, moist	\otimes	$\left\{ \right.$																
102.3 0.6	CLAYEY SILT TILL/SILTY CLAY TILL: mottled brown, moist, very stiff	-XX	╁																
	to hard													0					
		9	1																
		97	2	SS2	60														
		17	1																
		11/2	1																
		11]	•												
	 shale-till complex below 1.5 m, brownish grey, moist, hard 		1																
			. 3	SS3	100														
101.1	SHALE: weathered, grey, damp					₽₽								0					
			4	SS4	100														
100.6	Develople townshoots diet 0.0 m		_																
2.3	Borehole terminated at 2.3 m Notes:																		
	Open and dry upon completion of drilling Water level at 1.70 m bgs (Elev.																		
	101.17 m asl) on November 29, 2019																		
			1	L	1					1	1	1			1		1		ı

				REC	OR	D OF	BOR	EHO	OLE I	No. E	3H/N	IW4					ME	TRIC	1 OF 2
PROJ.	NO. BIGC-GEO-349A	LOC	ATI	ON _	571 Ar	gus Roa	d and 21	7 Cros	s Avenu	e, Oakvi	ille						ORIG	INATED	BY F.V.G
DATU	M Geodetic	BOF	REH	OLE TY	PE .	Contin	ous fligh	t, 8 inc	hes, Holl	ow Sten	n Auge	r					COM	PILED B	YS.L
PROJ.	NAME_Geotechnical Investigation	DAT	E _	2019.11	.21 - 20	19.11.25	5										CHE	CKED B	/
	SOIL PROFILE			SAMPL	.ES	~	щ	DYN.	AMIC CO	NE PEI	NETRA	TION			****	TID.:			DEMARKO
		15			s,	GROUND WATER CONDITIONS	ELEVATION SCALE					80 1	00	PLAST LIMIT	IC NAT MOIS CON	URAL STURE ITENT	LIQUID LIMIT	UNIT	REMARKS &
ELEV	DESCRIPTION	TPLC	NUMBER	TYPE	N" VALUES	V QNI	NOIT		AR ST					W _P	,	w 0	W _L		GRAIN SIZE DISTRIBUTION
DEPTH	BEOOK!! HOW	STRAT PLOT	Š	-	<u> </u>	SROU	EVA		JNCONF QUICK T			FIELD LAB V		WA	TER CO	ONTEN	T (%)	γ	(%)
102.32	ASPHALT: 75 mm				_	Ľ.	Ī		20 4	40 6	0 0	80 1	00	2	20 4	40 6	60	kN/m³	GR SA SI CL
10 2.0 0.1 102.0	GRANULAR: 280 mm		1	SS1	15														
0.4	CLAYEY SILT TILL/SILTY CLAY TILL: mottled brown, moist, very stiff	17	֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֓֓֡֓֓֓֓֡֓֓֡֓֡																
	to hard	112												0					
														ਁ					
		11	2	SS2	34														
	- shale-till complex below 1.5 m,													٥					
	brownish grey, moist, hard		3	SS3	100														
100.0		1												0					
2.3	SHALE: weathered, grey, damp		4	SS4	100														
99.6	- 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 			0005															
	vertical fracture at 2.9 m mottling due to water intrusion at 3.0		1	CORE															
	m - medium to hard rock																		
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 		2	CORE															
	- mottling at 4.0 m - fracture filling material observed at																		
	4.2 m - natural fractures between 4.7 m and																		
96.8 5.5	4.9 m - 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																		
	- grey snale, line-grained, medium to hard - slightly weathered to unweathered		3	CORE															
	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																		
95.3 7.0	5.6 m and 5.7 m - 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		4	CORE															
	- 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																		
93.8 8.5	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		5	CORE															
							:												
Ш	Continued Next Page	_===				<u> </u>	<u>:L</u>						<u> </u>	<u> </u>					<u> </u>

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

				REC	ORE	OF	BOR	ЕНО	LE N	lo. B	H/M	W4					ME	TRIC	2 OF 2
PROJ	. NO. BIGC-GEO-349A	LOC	ATIC)N _:	571 Arg	jus Road	and 217	Cross	Avenue	, Oakvil	le						ORIG	INATED	BY <u>F.V.G</u>
DATU	M Geodetic	BOR	EHC)LE TY	PΕ _	Contino	us flight,	8 inche	s, Hollo	w Stem	Auger						COM	PILED BY	S.L
PROJ	. NAME_Geotechnical Investigation	DAT	E _2	<u>:019.11.</u>	<u>21 - 20</u>	19.11.25											CHEC	CKED BY	
	SOIL PROFILE		S	SAMPL	ES	ER 3	ALE	DYNA! RESIS	MIC CO TANCE	NE PEN PLOT	IETRAT	TION		PLASTI	C NATU	JRAL	LIQUID	ıπ	REMARKS
ELEV DEPTH	DESCRIPTION	STRAT PLOT	NUMBER	TYPE	'N" VALUES	GROUND WATER CONDITIONS	ELEVATION SCALE	0 U	R STI	RENG INED	TH kP	FIELD V	ANE	W _P	CON	TENT V	LIMIT W _L	UNIT WEIGHT	& GRAIN SIZE DISTRIBUTION (%)
		ST	_		Z	GR	ELE		JICK TF 0 4	RIAXIAL 0 6		LAB VAN		2		NTENT 0 6		kN/m³	GR SA SI CL
92.2	- Run # 5: 8.5 m and 10.1 m 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) - Run # 6: 10.1 m and 11.6 m RQD = 80 %		6	CORE															
90.7	Recovery = 100 % - 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 - Run # 7: 11.6 m and 13.1 m RQD = 88 %		7	CORE															
89.2	Recovery = 100 % - 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 - Run # 8: 13.1 m and 14.6 m RQD = 97 % Recovery = 100 %		8	CORE															
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 - 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		9	CORE															
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 - 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		10	CORE															
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																		



				R	ECO	RD C)F B(DRE	HOLI	E No	. BH	5					ME	TRIC	1 OF 1
PROJ.	NO. BIGC-GEO-349A	LOC	ATIO	ON _	571 Arg	gus Road	l and 21	7 Cross	Avenue	e, Oakvi	ille						ORIG	SINATED	BY F.V.G
DATU	M Geodetic	BOR	REHO	DLE TY	/PE .	Contino	ous fligh	t, 6 inch	es, Solid	d Stem.	Auger						СОМ	PILED B	YS.L
PROJ.	. NAME_Geotechnical Investigation																		·
	SOIL PROFILE		-	SAMPL	FS	I	I	DYNA	MIC CC	NE PE	NETRA	TION		l					
	COILTROTILL	T_		, (IVII E		GROUND WATER CONDITIONS	ELEVATION SCALE					30 1	00	PLASTI LIMIT	C NATI	URAL TURE TENT	LIQUID LIMIT	UNIT	REMARKS &
ELEV		STRAT PLOT	HH.	й	'N" VALUES	M di	NO NO	_			TH kF	1		W _P		N O	$\mathbf{W}_{\!\scriptscriptstyle L}$	S E	GRAIN SIZE DISTRIBUTION
DEPTH	DESCRIPTION	RAT	NUMBER	TYPE	\ 	SOUN	.VAT	0 U	NCONF	INED	+	FIELD		WA.	TER CC	NTEN	Γ(%)	γ	(%)
103.39		SI	_		🗲	P. O						LAB V/	ANE 00				50	kN/m³	GR SA SI CL
0.0	FILL: clayey silt, some sand, mottled brown, moist	\otimes												\Box					
		\otimes	1	SS1	14														
400.0			1																
102.9 0.5	CLAYEY SILT TILL/SILTY CLAY	17																	
	TILL: mottled brown, moist, hard																		
		9																	
		9																	
		91	2	SS2	28														
		11																	
		11				1													
						4								0					
			3	SS3	38														
		97																	
		97																	
		4	-			-								0					
			4	SS4	51														
	 shale-till complex below 2.7 m, brownish grey, moist, hard 	1																	
		17	<u> </u>			4													
		1.																	
100.3 3.1	SHALE: weathered, grey, damp	1/2	\vdash			1								0					
			_	ÇÇF.	100														
			5	SS5	100														
			\vdash			-													
99.4																			
4.0	Borehole terminated at 4.0 m Notes:							t											
	Open and dry upon completion of drilling																		
	9																		

				REC	ORI	O OF	BOF	REHO	LE N	lo. E	3H/M	W6					ME	TRIC	1 OF 1
PROJ.	NO. BIGC-GEO-349A	LOC	ATIO	ON _	571 Arg	gus Ro	ad and 21	7 Cross	Avenue	e, Oakv	ille						ORIG	INATED	BY F.V.G
DATUN	✓ Geodetic	BOF	REHO	OLE TY	/PE	Conti	nous fligh	t, 8 inche	es, Holle	ow Ster	n Auger						COM	PILED B	YS.L
	NAME_Geotechnical Investigation	_																	 /
		_	_			1	_	DYNA	MIC CC	NE PE	NETRA	TION					- 1		
ELEV DEPTH	SOIL PROFILE DESCRIPTION	STRAT PLOT	NUMBER	SAMPL 3d L	"N" VALUES	GROUND WATER	ELEVATION SCALE	SHEA O UI	AR ST NCONF	RENG INED	50 8 TH kF + - ×	30 10 Pa FIELD	VANE ANE	W _P ⊢ WA	TER CC	TENT v D ONTEN	` ′	γ UNIT	REMARKS & GRAIN SIZE DISTRIBUTIOI (%)
102.74	TOPSOIL: 90 mm		_				#"	1 2	0 4	10 6	80 8	30 1	00	2	0 4	0 6	50	kN/m³	GR SA SI C
0.1	FILL: clayey silt, some sand, some rootlets, organic staining, dark brown, moist		1	SS1	8														
101.8 0.9	CLAYEY SILT TILL/SILTY CLAY TILL: mottled brown, moist, very stiff to hard		. 2	SS2	21									0					
			3	SS3	65									0					
	- shale-till complex below 2.3 m, grey, moist, hard		4	SS4	33									0					
99.6	SHALE: weathered, grey, damp		5	SS5	100									0					
99.0	Borehole terminated at 3.7 m Notes: 1. Open and dry upon completion of drilling 2. Dry on November 29, 2019																		

		OF BOREHOLE N	o. .	BH/	MW	<u>101</u>		_										B.I.G. CONSULTED INC	5
	ject Number:	BIGC-ENV-349B							Location:			cation P					_ Logged by:	TVH	-
	ject Client:	Distrikt Capital						_	Method:			olid Ster		gering			_ Compiled by:		-
	ject Name:	BIGC-ENV-349B	_						Machine:			nted Dril					Reviewed by:		-
Pro	ject Location:	217 & 227 Cross Ave. and 571	Argus	Rd., O	akville	, ON		Date S	tarted:	13	Jan 21	Date	Com	pleted	13 Ja	n 21	 Revision No.:	1, 1/2/21	_
	LITH	OLOGY PROFILE	SC	DIL SA	MPLI						STING			ESTIN	IG	_			
Lithology Plot	Geodetic Groun	DESCRIPTION d Surface Elevation: 0 mm asphalt concrete over 200	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT MTO Vane Δ Intact ▲ Remould * Undrained S	* Ni A Ni A Ni Bhear S	DCPT Icon Vane Intact Remould trength (kPa	▲ Low W _P	I Vapo s per mi 200 er Explo	ur Read Ilion (ppm 300 osive Limit V	ling 1) 400	INSTRUMENTATION INSTALLATION	COMMEN	ітѕ	
	mm granular b	ase		1	41	22	-		:0	· · ·			:	:	:				
***	FILL: clayey s mottled, grey,	ilt, trace sand, trace gravel, 0.3 moist, very stiff to hard	SS	'	41	22	- - -		0			o	23 :						
**	CLAYEY SILT fragments of S	TILL: trace sand, trace gravel, 1.1 hale, grey, moist, hard	SS	2	100	60	- - 1 - -			(D	o ²	22						
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			SS	3	93	71	- - - - - - 2				0	o ¹⁰				٠			
11	BEDROCK: S limestone sea	hale, highly weathered, occasiona2.3 ms, grey, damp, hard	SS	4	53	50/15	- - - -			50 15		o ¹⁸	3						
			SS	5	63	50/8	- - - 3 -			50 8		06							
	-first water stri	ке					- - - - - - - 4												
			-\$\$-	6	100	50/3	- - - - - - - - -	_		50		o ⁴							
							- <u>-</u> - - -	<u>Z</u>											
	End of Boreh	ple 6.1	- 33	7	100	50/3	— 6 —			50		o ⁴							
	Notes: 1. Borehole or	en upon completion of drilling. er level at 5.18 m bgs measured																	
	6. Consulting In 500 Tomken Rd		ater dep	oth on c	ompletio	on of drill	ing:	<u>5.18 m</u> .		•				•	•				_

Pro	pject Number: BIGC-ENV-349B pject Client: Distrikt Capital		0.	BH/	MW	102			Location	_	ee BH Lo							Logged by:	B.LG. GONGLING NC TVH
	ject Name:	BIGC-ENV-349B							Method: Machine	_	150 mm ruck Mo				<u>g</u>			Compiled by: Reviewed by:	TVH
		217 & 227 Cross Ave. and 571	Δταιις	Rd O)akville	ON			started:	_	3 Jan 21				d: 13 J a	n 21		Revision No.:	
110								. Date C								1	_	TREVISION NO	1, 1/2/21
Lithology Plot	LIIH	OLOGY PROFILE DESCRIPTION		Sample Number	Recovery (%)	SPT 'N' Value/RQD%	(m)	EVATION (m)	Pene O SPT MTO Var Δ Intact	etration	Testing DCPT Nilcon Van Intact	ie*	Soil Va parts per 100 2 Lower E	pour Re million (pr 00 300 plosive Li	10 12 ading om) 400 mit (LEL)	INSTRUMENTATION	LAIION	COMMEN	TS
holog			Sample Type	ample	ecove	,Z	DEРТН (m)	EVA.	▲ Remou	d Shear	Remould Strength (kP		W _P ■ Plastic	₩ ——	W _L Liquid	STRU	N AL		
Ë	ASPHALT:10	d Surface Elevation: O mm asphalt concrete over 200						ᆸ	2 <u>0</u>	40	60 80	+	20 4	; ; i0 60	80	<u>Z</u> 2			
•***	mm granular l		SS	1	90	50/15	F		:	50 15			o ¹⁹		*				
₩	very moist, co	·					- - -												
		TILL: trace sand, trace sand, 0.8 ragments of Shale, grey, moist, very	SS	2	46	24	- - - - - - -		0				···016···						
#			SS	3	90	50/15	-			:50 :15			o ¹³		•				
							- - - 2 -			15									
1			SS	4	100	50/42	Ė			50 13			7						
1/2	BEDROCK: S	hale, highly weathered, occasiona2.6	- 33	4	100	50/13	-		:	13			, . : :		•				
		ments, grey, damp, hard								:					*				
			-88-	5	100	50/3	- 3 - - - -			50 3			6						
							- - - -												
							- 4 - - -												
	-first water stri	ke	SS	6	63	50/8	-			50		c	6						
							- 5 - <u>Ş</u>	Z											
							- - -												
							-												
	End of Boreh	ole 6.2	ss	7	60	50/5	— 6 —		:	50 5			6 :			<u> ∷</u>			
	Notes: 1. Borehole o 2. Groundwate upon complet	pen upon completion of drilling. er level at 5.18 m bgs measured on of drilling.																	
															•				
													:		*				
	G. Consulting In 500 Tomken Ro		ater dep	pth on c	ompletion	on of dril	ling:	<u>5.18 m</u> .											

Proj Proj	ect Number: ect Client: ect Name:	OF BOREHOLE NO BIGC-ENV-349B Distrikt Capital BIGC-ENV-349B	0.	<u>BH/</u>	MW	<u>103</u>		Drilling	g Location: g Method: g Machine:	See BH Loc 150 mm Sc Truck Moun	olid Stem Auge	ering		Logged by: Compiled by: Reviewed by:	B.I.G. GCAGATRIS TVH TVH SS
Proj	ect Location:	217 & 227 Cross Ave. and 571	Argus	Rd., O	akville	, ON		Date	Started:	13 Jan 21	_ Date Comp	eleted: 13 Ja	n 21	Revision No.:	1, 1/2/21
±	LITH	OLOGY PROFILE			MPLI			(E)	Penetra O SPT	tionTesting DCPT	LAB TE ★ Rinse pH Valu 2 4 6 Soil Vapou Δ parts per milli 100 200	ues 8 10 12	NTATION ON	COMMEN	гѕ
Lithology Plot		d Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION	MTO Vane* △ Intact ▲ Remould * Undrained Sh 20 40	Nilcon Vane* ◆ Intact ◆ Remould ear Strength (kPa) 60 80	Lower Explos W _P W ■ O Plastic 20 40	1300 400 400 400 400 400 400 400 400 400	INSTRUMENTATION		
×	FILL: sand ar CLAYEY SILT fragments of S	0 mm asphalt concrete over 300 hases d gravel, brown, moist, compact 0.4- TILL: some sand, trace gravel, 0.5 Shale, reddish brown, moist, very	SS	1	51	13	- - - -		0		o ¹³				
******	stiff to hard		SS	2	84	26	- - - 1 - - -		0		o ¹⁵				
1/////			SS	3	93	70	- - - - - - 2			0	o ¹¹				
<i>\frac{\lambda}{\lambda}\</i>	BEDROCK: S limestone frag	hale, highly weathered, occasiona2.3 ments, grey, damp, hard	SS	4	87	50/15	- - - - -		5	0	o ⁶				
			SS	5	100	50/5	- - - - - - - - -			0	52				
		·	<u>-\$\$</u>	6	60	50/5	- 4 - - - - - - - - - - - - - - - - - -	Z =		005	o ⁴				
	Borehole terr	ninated at 5.49 m due to auger 5.5 ferred Limestone bedrock					- - -								
	Notes: 1. Borehole of 2. Groundwate upon completi	ben upon completion of drilling. er level at 4.57 m bgs measured on of drilling.													
B.I.G	i. Consulting Ir	c .	ator do	oth on a	omplo#:	on of delli	ing:	457~							

Project Number: Project Client: Project Name:	eject Client: Distrikt Capital		BH/	MW	<u>104</u>		Drilling	Location: Method: Machine:	See BH L 150 mm Truck Mo	Solid S	Stem A				Logged by: Compiled by: Reviewed by:	B.I.G. COMMUNICATION TVH TVH SS
-		Argus	Rd., O	akville	, ON		_	Started:	13 Jan 21			mpleted	: <u>13 Ja</u>	n 21	Revision No.:	
LITI	HOLOGY PROFILE	SC	OIL SA	MPLI	NG			FIELD	TESTING		LAB	TESTI	NG			
Ceodetic Grou	DESCRIPTION nd Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DЕРТН (m)	ELEVATION (m)	Penetra O SPT MTO Vane* Δ Intact ▲ Remould	■ DCPT Nilcon Var ♦ Intact Remoulement Strength (kf	★	Rinse pH 2 4 Soil Va parts per 100 20	Values 6 8 1 pour Rea million (ppr 00 300 plosive Lim W	0 12 ding n) 400	INSTRUMENTATION	COMMEN	тѕ
mm granulai	00 mm asphalt concrete over 200 bases and gravel, brown, moist, compact 0.3	SS	1	62	23	- - - - -		0		o ⁴						
sandy silt, so	ome clay, trace gravel	SS	2	62	13	- - - 1 - 1		0		0	12					
cLAYEY SIL fragments of	.T TILL: some sand, trace gravel, 1.4 Shale, brown, moist, hard	SS	3	95	42			C		c	,13					
BEDROCK:	Shale, highly weathered, occasiona 2.3	SS	4	63	50/8	— 2 - - -			50 O							
End of Bore Notes: 1. Borehole: 2. Groundws	agments, grey, moist, hard		5	100	50/3	- 3 - 3 4 5 5 	7) Se	o ⁷						

	ECORD	OF BOREHOLE N	lo.	BH/	MW	<u>105</u>		_ Drilling	Location	1:	See Bl	l Loca	ation	Plan					Logged by:	B.I.G. GOGLIPIG INC
Pro	ject Client:	Distrikt Capital						_ Drilling	Method:		150 m Coring		llow	Stem	Auge	ring + F	Rock		Compiled by:	TVH
	ect Name:	BIGC-ENV-349B						- '	Machine	:	Truck	Moun							Reviewed by:	
Pro		217 & 227 Cross Ave. and 571						_ Date S	Started:		14 Jan		_ Da	ate Co	mplet	ed: <u>15 .</u>	Jan 21	_	Revision No.:	1, 1/2/21
	LITH	OLOGY PROFILE	SC	OIL SA	MPLI						ESTIN		* R	inse pH	TEST Values		-			
Lithology Plot	Geodetic Groun	DESCRIPTION d Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Pene O SPT MTO Var Δ Intact ▲ Remou * Undrained	ne*	♦ Intac • Ren ar Strengt	Vane*	2 △ p 1 △ L V	Soil Var arts per 00 20 ower Ex	pour Remillion (po 300 plosive L	imit (LEL) W _L Liquid	INSTRUMENTATION		COMMEN	ITS
	ASPHALT: 10 mm granular b	0 mm asphalt concrete over 200		1	62	37	-	1		0			o ⁶							
	CLAYEY SILT fragments of S	TILL: trace sand, trace gravel, 1.1 Shale, grey, moist, very stiff to hard	- ss	2	70	23	- - 1 - - - -		0				···· ₆ 1	4						
			ss	3	84	55	- - - - - 2 -				0		o ⁹							
		hale, highly weathered to excellen£.3 onal Limestone layers, grey, moist	SS	4	100	50/8	- - - - - -			50	:		07							
				5	100	50/5	- - - - - - - - - - - -			50										
	-first water strike		SS	6	100	50/5	- - - - - 5 - - - -			500				18						
				7	100	50/5	- - - - - - - - - - - -			500			o	16						
	l l - Poor Quality	S.SRC	8	78	50/5 27	- / 8		0	50(5			0	16							
12-5	5. Consulting In	l. = No liees	tanding	groundv	water me	easured	- - - - - 9	en boreho	le on comp	eletio	n of drilli	ng.		Cave	e in dep	th record	ded on con	mpletion	of drilling: <u>No</u>	t Measured m.
Can T: 4	issauga, ON L4' ada 6-214-4880 6-551-2633	Borehole details from a qualified commissioned a	Geotechi	nical Eng	ineer. Als	o, boreho	ole info	rmation sh	nding of all p lould be read	otent	ial condit	ions pre	esent a ne geot	nd requ	ires inte	rpretative for which	assistance it was			Scale: 1 : 47 age: 1 of 3

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 # Rinse pH Values
2 4 6 8 10 12
Soil Vapour Reading
parts per million (ppm)
190 290 300 400

▲ Lower Explosive Limit (LEL)
W_p W W_t
Plastic Liquid
20 40 60 80 INSTRUMENTATION INSTALLATION PenetrationTesting 'N' Value/RQD% Ξ O SPT DCPT Sample Number **COMMENTS DESCRIPTION** ithology Plot Recovery (%) Sample Type ELEVATION MTO Vane* Nilcon Vane* Ξ △ Intact
 ◆ Remould
 ◆ Remould DEPTH * Undrained Shear Strength (kPa) SPT 20 40 60 - Good Quality **BEDROCK**: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist 10 RC 3 99 82 Ö - Good Quality 11 12 RC 4 99 91 .O - Excellent Quality 13 RC 97 5 99 - Excellent Quality 14 15 RC 6 99 96 - Excellent Quality 16 RC 95 99 - Excellent Quality 17 18 RC 8 98 - Excellent Quality 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 commissioned and the accompanying Notes to Record of Boreholes'.

Scale: 1:47

RECORD OF BOREHOLE No. BH/MW105



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

	LITHOLOGY PROFILE	SC	OIL SA	MPLI	NG			FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DЕРТН (m)	ELEVATION (m)	PenetrationTesting O SPT	★ Rinse pH Values	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent quality, occasional Limestone layers, grey, moist - Good Quality	RC	9	98	83	- - - - - - - 20 - -		0			
	- Excellent Quality	RC	10	99	93	- - - - - - - - - - -		0			
	- Excellent Quality	RC	11	99	92	22 - - - - - - - - - - - - - - - - -		0			
	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										

	ECORD	o.	BH/	MW	<u>106</u>													10	B.I.G. Government	pic.		
Pro Pro	ject Number: ject Client: ject Name:	Distrikt Capital BIGC-ENV-349B							Drilling Drilling	J Location: J Method: J Machine:		See BH Lo	Solid	Stem /	Auger Rig					Logged by: Compiled by: Reviewed by:		_ _ _
Pro	-	217 & 227 Cross A							Date S	Started:		0 Jan 21	_	Date C				n 21	_	Revision No.:	1, 1/2/21	_
Lithology Plot	Geodetic Groun	DESCRIPTION d Surface Elevation:		Sample Type	Samble Number	Recovery (%)	SPT 'N' Value/RQD%	DЕРТН (m)	ELEVATION (m)	Penei O SPT MTO Vane Δ Intact ▲ Remoule * Undrained	tration e* 1 dd Shear	Testing DCPT Nilcon Vane Intact Remould Strength (kPa 60 80		Rinse p 2 4 Soil Vi parts pe 100 2 Lower E W _P Plastic	H Values 6 8 apour F er million 200 3 explosive W	Readin (ppm) 00 40 Limit (L	12 9 00 EL) V _L	INSTRUMENTATION		COMMEN	ітѕ	
	mm granular l	mm asphalt concrete or pase silt, trace sand, trace gra ed, brown, moist, stiff to	ivel, 0.2	SS	1	92	12	- - - - -		0				o ¹⁴								
	CLAYEY SILT	FTILL: trace sand, trace Shale, brown, moist, har	e gravel, 1.1 . d	SS	2	95	63/23	- - 1 - - - -				63 23		o ¹⁴								
1 <i>*</i>	BEDROCK: S Limestone fra	Shale, highly weathered, gments, grey, damp, ha	occasionali.7 rd	SS	3	93	50/15	- - - - - 2 - -			50 15 50 5			o ¹⁵								
	-first water strike			SS	5		50/5	- - - - - 3 - - - - - - - - - - - - - -	Z =		5005		o									
				\$\$	6	100		- - - - - - - - - - - - - - - - - - -			5003		03									
	End of Boreh Notes: 1. Borehole o 2. Groundwat upon complet	pen upon completion of er level at 4.88 m bgs m	6.1 drilling. easured	33	7	100	50/3				3		9 -					<u>. </u>				
	G. Consulting Inc. 5500 Tomken Rd. □ Groundwater depth on completion of drilling:									:	:	: :		:								

Pro	ECORD ject Number:	OF BOREHOLE No	0.	BH/	MW	<u>107</u>		_	Location:	•	See BH Lo			unars				Logged by: Compiled b	<u>T\</u> /: T\	
	ject Name:	BIGC-ENV-349B						_	Machine:		Truck Mou							Reviewed b		
Pro	ject Location:	217 & 227 Cross Ave. and 571	Argus	Rd., O	akville	, ON		Date S	started:		20 Jan 21		Date Co	omplete	ed: 20 Ja	ın 21		Revision No	.: <u>1,</u>	1/2/21
	LITH	OLOGY PROFILE	SC	OIL SA	MPLI	NG			FIELD) T	ESTING	T	LAB	TEST	ING		Т			
Lithology Plot		DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEРТН (m)	ELEVATION (m)	O SPT MTO Vane Δ Intact ▲ Remould * Undrained	e* d	DCPT Nilcon Vane	e* A	Lower Ex W _P	pour Remillion (p	imit (LEL) W _L Liquid	INSTRUMENTATION	NSTALLATION	СОММЕ	NTS	
		d Surface Elevation: 0 mm asphalt concrete over 170 base	0)	0)		0)	<u> </u>	<u> </u>	<u> </u>	÷.0	: :	T	:							
		silt, trace gravel, rootlets, mottled, 0.3	SS	1	59	12	- - - -		0				o ¹⁶							
	CLAYEY SILT oxidized fissu very stiff to ha	FTILL: trace sand, trace gravel, 0.8 res, mottled, brownish grey, moist, rd	SS	2	92	28	- - - 1 - - -		O				· 012· · · ·							
11	BEDROCK: S Limestone fra	Shale, highly weathered, occasionall.8 gments, grey, damp to moist, hard	SS	3	70	51	- - - - 2				!!		o ¹¹			I				
			SS	4	100	50/5	- - - - -			50		•	₀ 8							
	-first water str	ike	-ss -	5	60	50/5	- 3	Z =		50		c	6							
			SS	6	100	50/5	- - - - - - - 5			50 5			₀ 23							
	End of Boreh	iole 6.1	-\$\$ -	7	100	50/3	- - - - - - - 6			:50 3			23							
	Notes: 1. Borehole o 2. Groundwat upon complet	pen upon completion of drilling. er level at 3.66 m bgs measured ion of drilling.																		
	G. Consulting Ir		ater dep	oth on c	ompletic	on of drillin	ng:	3.66 m.		:			:		•					

	ECORD	OF BOREHOLE N	No.	BH/	MW	<u> 108</u>		Drilling	Location:		oo BH I	Loca	ation Plan					Logged by:	B.I.G. Consume TVH
	ject Number.	Distrikt Capital							Method:	_			lid Stem A		s				TVH
Pro	ject Name:	BIGC-ENV-349B						Drilling	Machine:	Ī	ruck Mo	ount	ted Drill R	lig				Reviewed by:	ss
Pro	ject Location:	217 & 227 Cross Ave. and 57	1 Argus	Rd., C	Dakville	, ON		Date S	Started:	2	0 Jan 2	1	_ Date C	omple	ted: 20 J	an 21		Revision No.:	1, 1/2/21
	LITH	OLOGY PROFILE	S	OIL S/	MPLI	NG			FIEL) TE	STING	3			TING				
Lithology Plot	Goodatic Groun	DESCRIPTION d Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT MTO Vane Δ Intact ▲ Remoule * Undrained	e* N	DCPT Nilcon Va Intact Remou	ine* uld kPa)	▲ Lower E W _P ■ Plastic	apour F r million 200 30	Reading (ppm) 00 400 Limit (LEL) W _L Liquid	INSTRUMENTATION	NSTALLATION	COMMEN	TS
	ASPHALT:15 mm granular l	0 mm asphalt concrete over 200	1	0,					:	:			:						
	FILL: clayey s staining, mottl	silt, trace gravel, rootlets, organic 0.ed, brown, moist, stiff		1	75	9	- - - -		0				o ¹⁵						
	CLAYEY SILT oxidized fissu to hard	FTILL: trace sand, trace gravel, 0.3 res, mottled, brown, moist, very stiff	SS	2	100	25	- - 1 - 1 - -		0				012····						
			SS	3	100	65	- - - - - 2			: : : :	0		o ¹¹						
	BEDROCK: S Limestone fra	Shale, highly weathered, occasiona2. gments, grey, moist	1 SS	4	100	50/5				: :50 : 5			o ⁸						
			<u>ss</u>	5	100	50/5	- - - - - 3 - - - - -			5005			· o ⁶						
	-first water str	ike	\$\$ -	6	100	50/3	- - - - - - - - -	Z =		5003			o ⁵						
							- - - 5 - - - -												
							- - - 6												
	End of Boreh Notes: 1. Borehole o 2. Groundwat upon complet	pen upon completion of drilling. er level at 3.96 m bgs measured	1 \$\$	7	100	50/3				3			021				<u> </u>		
	G. Consulting Ir		water de	pth on c	completion	on of drill	ing:	3.96 m.					:						

	ECORD	OF BOREHOLE No	o.	BH/	MW	109		_ Drilling	Locati	on:				tion Plan					Logged b	y:	TVH	G.
	ject Client:	Distrikt Capital							Metho					id Stem A					Compiled	•	TVH	
	ject Name:	BIGC-ENV-349B						-	Machi					ed Drill R					Reviewed	-		
Pro	ject Location:	217 & 227 Cross Ave. and 571	Argus	Rd., O	akville	, ON		Date S	started:		20	Jan 21	<u></u>	_ Date Co	omplet	ed: 20 Ja	ın 21		Revision	No.:	1, 1/2/2	21
	LITH	OLOGY PROFILE	SC	DIL SA	MPLI				FIE	ELD .	TES	TING	i	LAB ★ Rinse pH	TEST	ING	_					
Lithology Plot	Geodetic Grour	DESCRIPTION ad Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEРТН (m)	ELEVATION (m)	O SPT MTO V Δ Intac ▲ Ren	/ane* ct nould	Nil Nil	DCPT con Var Intact Remoule trength (kl	ld	Soil Va parts per 100 2 Lower Ex W _P Plastic	pour Remillion (p	imit (LEL) W _L Liquid	INSTRUMENTATION	INOLALE ALL ALL ALL ALL ALL ALL ALL ALL ALL	COMI	WEN7	rs	
		0 mm asphalt concrete over 160					-		:	:	:	:		:	: :	:						
※	brown, moist,	F TILL: trace sand, trace gravel, Shale, oxidized fissures, mottled,	SS	1	92	13	- - - -		0					o ¹⁴								
	Siewnish grej	, mod, raid	SS	2	100	33	- - 1 - -			0				··· ₀ 11····								
1			SS	3	83	76/20	-			:	:	76 O 20		o ¹⁰		:						
51 <i>1:</i>	BEDROCK: S Limestone fra	Shale, highly weathered, occasionall.8 gments, grey, moist to damp, hard					- - - 2 -					20										
			ss	4	100	50/5	-			.5	005			08		:						
			-\$\$ -	5	100	50/3	- - 3 - - - -			5	0 3			o ⁶								
							- - - - 4 															
			SS	6	100	50/5	-			5	005			o ⁴								
	-first water str	ike					- 5 - <u>-</u> - -	<u>Z</u>														
							-															
=	End of Boreh	nole 6.1	SS	7	100	50/3	— 6 -			: 5	3			₀ 30)		ŀ∵⊟					
	Notes: 1. Borehole o 2. Groundwat upon complet	pen upon completion of drilling. er level at 5.18 m bgs measured ion of drilling.																				
	G. Consulting In		ater dep	oth on c	ompletic	on of drill	ing:	<u>5.18 m</u> .		•				:		*						

Project Number Project Client: Project Name:	DISTRICT OF BOREHOLE N BIGC-ENV-349B Distrikt Capital BIGC-ENV-349B 217 & 227 Cross Ave. and 571						Drilling	Location: Method: Machine:	150 mm \$	ocation Plan Solid Stem Augers unted Drill Rig Date Completed	: 21 Jan 21	Logged by: Compiled by: Reviewed by: Revision No.:	
	HOLOGY PROFILE		DIL SA						TESTING	LAB TESTIN			<u>.,</u>
To look of the control of the contro	DESCRIPTION und Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEРТН (m)	ELEVATION (m)	Penetra O SPT MTO Vane* Δ Intact ▲ Remould	■ DCPT Nilcon Vane ♦ Intact • Remould	* Rinse pH Values 2 4 6 8 1 Soil Vapour Rear △ parts per million (ppn 100 200 300 Lower Explosive Lim W _P W	0 12 VOIL V V VOIL V V V V V V V V V V V V V V V V V V V	COMMEN	TS
mm granula FILL: sandy	20 mm asphalt concrete over 300 r base silt, some gravel, occasional glass 0.4 ootlets, brown, moist, compact	SS	1	79	21	- - - - -		0		o ¹²			
CLAYEY Sli fragments o brownish gr	LT TILL: trace sand, trace gravel, 1.1 f Shale, oxidized fissures, mottled, ey, moist, stiff to hard	- SS	2	95	12	_ — 1 - - - -		0		012			
*		ss	3	100	37	- - - - - 2 -		O	50	o ¹⁰			
BEDROCK: Limestone f	Shale, highly weathered, occasiona2.3 agments, grey, damp, hard	ss	4	100	50/5				50	07			
		SS	5	100	50/5	- 3 - - - - - - - - - - - - - - - - - -	Z =		5	03			
-first water s	trike	SS	6	60	50/5	- - - - - - 5 - - -			50 O 5	٥٠			
Groundw	ophole 6.1 open upon completion of drilling. ater level at 3.96 m bgs measured etion of drilling.	\$\$	7	100	50/3	- - - - 6 -			3	o ¹⁷			
apon compi	Country.												

Pro	ject Number: ject Client:	BIGC-ENV-349B Distrikt Capital						Drilling	Location Method	:	150	BH Loo	olid S	tem A	Augers	3				Logged by: Compiled by:	TVH TVH
	ject Name:	BIGC-ENV-349B	A	D4 0	مالة مالاء	ON.			Machin			k Mou				10 d. 2	4 1	. 24		Reviewed by:	
-10		217 & 227 Cross Ave. and 571						Date	Started:			an 21				ted: 2		1 2 1	_	Revision No.:	1, 1/2/2
Lithology Plot	ЦІТН	OLOGY PROFILE DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DЕРТН (m)	EVATION (m)		netration	onTes Nilco	OCPT on Vane* ntact Remould	★ F 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Rinse pl 4 Soil Va arts pe 00 2	H Values 6 8 apour F r million 200 30	10 Ceading (ppm) 10 400 Limit (LE	12 J) EL)	INSTRUMENTATION	STALLATION	COMMEN	ITS
		d Surface Elevation: mm asphalt concrete over 250	Š	Š	8	R	ä	ᆸ	20	40 :	60	80	+		40 6	0,80		ΖZ	=		
	mm granular t		ss	1	95	15	- - - -		0				o	3							
**************************************	clayey silt, firn	1	SS	2	100	8	- 1 - - - -		0				C	15							
<u> </u>	fragments of S grey, moist, ha		SS	3	100	34	- - - - - 2 -			50			o ⁵	: 3 							
		shale, highly weathered, occasiona2.3 gments, grey, moist	SS	4	63	50/8				50) : 		0						1.1		
	-first water stri	ike	SS	5	100	50/5	- 3 - 3 	Z =		50(5			.7				•				
			SS	6	60	50/5	5			500			o ⁸								
	End of Boreh Notes: 1. Borehole oj 2. Groundwati upon complet	pen upon completion of drilling. er level at 3.96 m bgs measured	33	7	100	50/3				. 3			o'								

Pro Pro	ject Number: ject Client:	OF BOREHOLE No BIGC-ENV-349B Distrikt Capital	0.	BH/	<u>MW</u>	<u>/112</u>		Drilling	Location: Method:	_1	50 mm So	cation Plar	Augers				Logged by: Compiled by:	B.I.G. Coccurries TVH TVH
	ject Name:	BIGC-ENV-349B	A	D-1 -0	N = 1 = = = 111 =	ON		_	Machine:			nted Drill F		-1. 04. 1-	04		_ Reviewed by:	
Pro		217 & 227 Cross Ave. and 571						Date S	Started:		Jan 21		•	d: 21 Ja	ın 21		Revision No.:	1, 1/2/21
Lithology Plot	Geodetic Groun	OLOGY PROFILE DESCRIPTION d Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEРТН (m)	ELEVATION (m)	Penetr O SPT MTO Vane Δ Intact A Remould	ation * N hear:	STING Testing DCPT illcon Vane* Intact Remould Strength (kPa)	★ Rinse p 2 4 Soil Va begin parts per 100 2 Lower E Wp Plastic	6 8 apour Re er million (pp 200 300	10 12 ading om) 400	INSTRUMENTATION	INSTALLATION	COMMEN	TS
	FILL: clayey s moist, stiff	omm iit, trace gravel, rootlets, brown, 0.2	SS	1	59	9	- - - - -		0			o ¹³						
	grey CLAYEY SIL1 fragments of S grey, moist, ve	TTILL: trace sand, trace gravel, 1.1 Shale, oxidized fissures, mottled, ery stiffto hard	SS	2	100	21	- - - 1 - - -		O			····∂15···						
			SS	3	95	44	- - - - - 2 -			0		o ¹³						
1	BEDROCK: S Limestone fra	shale, highly weathered, occasiona2.6 gments, grey, moist, hard	SS	4	100	75/25	- - - -				75 25	o ⁵						
	-first water stri	ke	_ss_	6		50/5	3	<u>Z</u>		50°05		08						
	End of Boreh Notes: 1. Borehole of 2. Groundwat upon complet	pen upon completion of drilling. er level at 5.18 m bgs measured	=33	7	100	50/3	- - - - - 6			3		07						
	6. Consulting In		ater dep	oth on c	completion	on of drill	ing:	<u>5.18 m</u> .				:	<u>: :</u>	:				

Pro Pro Pro	ject Number: ject Client: ject Name:	OF BOREHOLE No BIGC-ENV-349B Distrikt Capital BIGC-ENV-349B 217 & 227 Cross Ave. and 571						_ Drilling _ Drilling	y Locatio y Method y Machin Started:	d: ie:	150 Truc	BH Lo mm S k Mou an 21	olid :	Stem	Auger Rig		21 Ja	n 21		Logged I Compiled Reviewe	d by: d by:		GAT#/C
	LITH	OLOGY PROFILE	SC	OIL SA	MPLI	_				LD T		TING sting		Rinse p	6 8	s 3 10	12	NOI					
Lithology Plot		DESCRIPTION d Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEРТН (m)	ELEVATION (m)	O SPT MTO Va Δ Intact ▲ Remo * Undraine 20	t ould	♦ I	on Vane ntact Remould	^	Soil V parts per 100 : Lower E W _p Plastic 20	Explosive W O	Limit (L	.EL) V∟ • iid	INSTRUMENTATION	INSTALLATION	СОМ	MEN	rs	
	GRAVEL:50 r FILL: clayey s staining, brow	nm	SS	1	100	19	- - - -		0					o ¹⁴									
₩	CLAYEY SILT fragments of S grey, moist, st	TILL: trace sand, trace gravel, 1.1 Shale, oxidized fissures, mottled, iff to hard	SS	2	100	13	- - 1 - - - -		0					12									
			SS	3	100	44	- - - - 2 -			0				11 513									
1	BEDROCK: S Limestone fra	shale, highly weathered, occasiona£.6 gments, grey, moist	SS	4	100	90	- - - - - -			50		0	- 1										
			SS	5	100	50/5	- - - - - - - - - 4 - -			50(
	-first water stri	ike			.00	33,3	- - - - - - - - -	<u>Z</u>															
	End of Boreh Notes: 1. Borehole of 2. Groundwate upon complet	pen upon completion of drilling. er level at 5.48 m bgs measured	- \$3	7	100	50/5	6			50				21									
	5. Consulting Ir 500 Tomken Ro		ater dei	pth on c	completic	on of drill	ing:	5.48 m.															

Proj		OF BOREHOLE N BIGC-ENV-349B Distrikt Capital	lo.	BH/	MW	114		- '	Location: Method:	See BH Loc			g + Ro	ck	_ Logged by: _ Compiled by:	BLG. GORGLING TVH
Proj	ect Name:	BIGC-ENV-349B						Drilling	Machine:	Truck Moun	ted Drill F	Rig			_ Reviewed by:	<u>ss</u>
Proj	ect Location:	217 & 227 Cross Ave. and 571	Argus	Rd., C	akville	, ON		Date S	Started:	21 Jan 21	_ Date C	completed:	<u>27 Ja</u>	n 21	Revision No.:	1, 1/2/21
	LITH	OLOGY PROFILE	SC	DIL SA	MPLI				FIELD	TESTING	LAE ★ Rinse p	H Values	G	7		
Lithology Plot		DESCRIPTION d Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT MTO Vane³ Δ Intact ▲ Remould	 ♦ Intact ♦ Remould hear Strength (kPa)	Soil V Soil V parts po 100 Lower I W _P Plastic	6 8 10 apour Readi er million (ppm) 200 300 4 Explosive Limit W O	400	INSTRUMENTATION INSTALLATION	COMMEN	тѕ
	FILL: clayey s moist, very sti	ilt, trace gravel, mottled, grey, 0.2	ss	1	100	20	- - - -		0		o ¹¹					
			SS	2	100	8	- - - 1 - -		0		019					
	CLAYEY SIL1 frgments of SI moist, hard	TILL: trace sand, trace gravel, 1.7 nalr, oxidized fissures, mottled, grey,	SS	3	100	37	- - - - - 2		0		o ¹¹					
	BEDROCK: S	hale, highly weathered to excellen 2 .6	SS	4	100	57	- - - -			0	o ¹¹					
	qaulity, occasi to damp	onal Limestone layers, grey, moist	SS	5	100	50/5	- 3 - -			50	9					
							- - - - 4 - -									
	- first water str	iike	SS	6	60	50/5	- - - - - 5 - -			50 O 5	o ⁷					
			ss	7	60	50/5	- - - - - 6			50 5	o ¹⁹					
							- - - - - - - 7									
	 - Poor Quality	ROCK CORE BEGINS	RC	1	98	35	-		0							
							— 8 - - - - -									
	- Poor Quality	ı	RC	2	69	28	- - 9		0	: :	:	: :	:			
12-5 Miss	i. Consulting In 500 Tomken Ro issauga, ON L4	l. = No liees	standing	ground	water me	asured i	in opei	n boreho	le on comple	tion of drilling.	⊞ Car	ve in depth r	ecorde	d on completion	on of drilling: <u>Not</u>	Measured m.
Cana T: 41		Borehole detail	Geotechi	nical Eng	ineer. Als	o, boreho	le infor	rmation sl	nding of all pot nould be read in	ential conditions pr n conjunction with t	esent and red he geotechni	quires interpre	etative as	ssistance was		Scale: 1 : 47 age: 1 of 3

RECORD OF BOREHOLE No. BH/MW114



Project Number: BIGC-ENV-349B Drilling Location: See BH Location Plan Logged by: TVH LITHOLOGY PROFILE SOIL SAMPLING FIELD TESTING LAB TESTING # Rinse pH Values
2 4 6 8 10 12
Soil Vapour Reading
parts per million (ppm)
190 290 300 400

▲ Lower Explosive Limit (LEL)
W_p W W_t
Plastic Liquid
20 40 60 80 INSTRUMENTATION INSTALLATION PenetrationTesting 'N' Value/RQD% Ξ O SPT DCPT Sample Number **COMMENTS DESCRIPTION** ithology Plot Recovery (%) Sample Type ELEVATION MTO Vane* Nilcon Vane* Ξ △ Intact
 ◆ Remould
 ◆ Remould DEPTH * Undrained Shear Strength (kPa) SPT 20 40 60 **BEDROCK:** Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist to damp 10 RC 3 98 62 Ö - Fair Quality 0 RC 4 100 87 - Good Quality 12 13 RC 5 100 76 0 - Good Quality 14 RC 6 100 83 0 - Good Quality 15 16 RC 100 98 - Excellent Quality 17 0 RC 8 97 89 18 - Good Quality - 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 commissioned and the accompanying Notes to Record of Boreholes'.

Scale: 1:47 Page: 2 of 3

RECORD OF BOREHOLE No. BH/MW114



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

	LITHOLOGY PROFILE	SC	OIL SA	MPLI	NG			FIELD TESTING	LAB TESTING		
					%QC			PenetrationTesting	* Rinse pH Values 2 4 6 8 10 12	INSTRUMENTATION INSTALLATION	
ot	DESCRIPTION	e	Sample Number	(%	SPT 'N' Value/RQD%	_	E Z	O SPT • DCPT MTO Vane* Nilcon Vane*	Soil Vapour Reading Description (ppm) Description	NOT	COMMENTS
gy PI		e Typ	e Nur	ery (5	r' <al< td=""><td>E</td><td>ATO</td><td>△ Intact ◇ Intact ▲ Remould ◆ Remould</td><td>Lower Explosive Limit (LEL) W_P W W_I</td><td>T I I</td><td></td></al<>	E	ATO	△ Intact ◇ Intact ▲ Remould ◆ Remould	Lower Explosive Limit (LEL) W _P W W _I	T I I	
Lithology Plot		Sample Type	ampl	Recovery (%)	PT 'Y	ОЕРТН (m)	ELEVATION	* Undrained Shear Strength (kPa) 20 40 60 80	Plastic Liquid	ISTR	
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist	S	S	~	S	_	ш	20 40 60 80	20 40 60 80		
	to damp	RC	9	100	94	-					
	- Excellent Quality					-					
						- 					
						— 20 -					
						F					
						E					
						_					
		RC	10	100	90	- 21		0			
	- Excellent Quality	110	10	100	30	- -					
						-				:ˈ ::	
≣						F					
						E					
						_ 22					
						F					
\equiv		DC.	44	100	07	- -					
	- Excellent Quality	RC	11	100	97	-		C			
						F					
						— 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										

	ECORD ject Number:	OF BOREHOLE N	lo.	<u>BH/</u>	MW	<u>/115</u>	i	_ Drilling	g Location	ո։	See BH	Loca	ation Plar	1			Logged by:	B.LG. Consume Inc
	ject Client:	Distrikt Capital							g Method		Coring		llow Ster		ring + Ro	ck	Compiled b	-
	ject Name:	BIGC-ENV-349B	Araua	P4 0	alvilla	- ON		_ `	g Machine	e:			ted Drill F		od: 26 la	.n 24	Reviewed b	
FIU		217 & 227 Cross Ave. and 571					1	_ Date s	Started:		22 Jan 2			-	ed: 26 Ja	<u> </u>	Revision N	o.: <u>1, 1/2/21</u>
Plot	LIIH	OLOGY PROFILE DESCRIPTION			(%)	SPT 'N' Value/RQD%	(m)	(m) NOI		etrati	onTesting DCP1 Nilcon V	J r ane*	★ Rinse p 2 4 Soil V	6 8 apour Re er million (p 200 300	10 12 eading opm) 0 400	INSTRUMENTATION INSTALLATION	СОММ	ENTS
Lithology Plot	Geodetic Groun	d Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' V	ОЕРТН (ELEVATION	▲ Remo		Remo	ould (kPa)	W _P ■ Plastic	₩ 0 60	W _L Liquid	INSTRUN		
		0 mm asphalt concrete over 300					-		:	:					:			
***	FILL: clayey s staining, dark	silt, trace gravel, rootlets, organic 0.4 brown, moist, very stiff	SS	1	59	16	- - -		0:				o ¹⁵					
	CLAYEY SILT oxidized fissu	TILL: trace sand. trace gravel, 0.8 res, mottled, grey, moist, stiff to hard	SS	2	100	12	1_ - - 1 - - - -		0				13····					
			ss	3	84	32	- - - - - 2		() 			o ¹²					
17.	qaulity, occas	shale, highly weathered to excellen2.4 ional Limestone layers, grey, moist	ss	4	100	50/13	- - -			50 13) }		o ¹⁰					
	to damp		SS	5	100	50/5	- - - 3			50)		o ⁶					
							- - - -											
	- first water st	ike					- - 4 - - -											
			SS	6	60	50/5	- - - - - 5			50			o ⁵					
							- - - - -											
			ss	7	60	50/5	- - 6 - - -			50))		o ⁵					
							- - - - - - 7											
							- - - - -											
	- Poor Quality	ROCK CORE BEGINS	RC	1	83	30	- - - 8 -		С)								
	Fe ¹ - O		RC	2	98	74	_ - - -				0							
12-5	- Fair Quality G. Consulting Ir 500 Tomken Ro issauga, ON L4	i. = 140 liees	tanding	ground	water m	easured	in ope	en boreho	le on com	: pletio	: :	g.	∷ E Ca	e in der	th recorde	d on comple	etion of drilling:	Not Measured m.
Can T: 4		Borehole details from a qualified commisioned ar	Geotechi	nical Eng	ineer. Als	so, boreh	ole info	ormation sl	nding of all nould be rea	poten d in c	tial condition	ons pre with th	esent and red ne geotechni	quires inte	erpretative as	ssistance was		Scale: 1 : 47

Page: 1 of 3

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 # Rinse pH Values
2 4 6 8 10 12
Soil Vapour Reading
parts per million (ppm)
190 290 300 400

▲ Lower Explosive Limit (LEL)
W_p W W_t
Plastic Liquid
20 40 60 80 INSTRUMENTATION INSTALLATION PenetrationTesting 'N' Value/RQD% Ξ O SPT DCPT Sample Number **COMMENTS DESCRIPTION** ithology Plot Recovery (%) Sample Type ELEVATION MTO Vane* Nilcon Vane* Ξ △ Intact
 ◆ Remould
 ◆ Remould DEPTH * Undrained Shear Strength (kPa) SPT 20 40 60 **BEDROCK:** Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist to damp 10 RC 3 99 61 Ö - Fair Quality RC 4 99 77 O. - Good Quality 12 13 RC 5 100 98 - Excellent Quality 14 RC 6 98 87 0 15 - Good Quality 16 RC 100 95 - Excellent Quality 17 RC 8 100 92 0 18 - Excellent Quality 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 commissioned and the accompanying Notes to Record of Boreholes'.

Scale: 1:47 Page: 2 of 3

RECORD OF BOREHOLE No. BH/MW115



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

	LITHOLOGY PROFILE	SC	OIL SA	MPLI	NG			FIELD TESTING	LAB TESTING		
					%QC			PenetrationTesting	* Rinse pH Values 2 4 6 8 10 12	INSTRUMENTATION INSTALLATION	
ot	DESCRIPTION	e	Sample Number	(%	SPT 'N' Value/RQD%	_	E Z	O SPT • DCPT MTO Vane* Nilcon Vane*	Soil Vapour Reading Description (ppm) Description	NOT NOT	COMMENTS
gy PI		e Typ	e Nur	ery (5	r' <al< td=""><td>E</td><td>ATO</td><td>Δ Intact</td><td>Lower Explosive Limit (LEL) W_p W W_i</td><td>LLAT</td><td></td></al<>	E	ATO	Δ Intact	Lower Explosive Limit (LEL) W _p W W _i	LLAT	
Lithology Plot		Sample Type	ampl	Recovery (%)	F F	ОЕРТН (m)	ELEVATION	* Undrained Shear Strength (kPa) 20 40 60 80	Plastic Liquid	STR	
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist	S	S	Ľ.	S	-	ш	20 40 60 80	20 40 60 80		
	to damp	RC	9	100	91	-					
	- Excellent Quality					-					
						F 20					
						— 20 -					
						E					
						_					
						-					
	0 10 "	RC	10	96	89	- 21		0		目	
	- Good Quality					-					
						F					
						Ė					
						<u> </u>					
						— 22 -					
						<u>-</u>					
		RC	11	100	92	-					
	- Excellent Quality	1.0	''	100	02	Ē					
						_ — 23					
	Borehole terminated at 23.32 23.3					_					
	Notes: 1. Borehole open upon completion of drilling.										
	Groundwater level not measured upon completion of drilling due to introduced drilling										
	water										

Proj Proj Proj	pject Number: BIGC-ENV-349E pject Client: Distrikt Capital Phase Two ESA Update 217 & 227 Cross Ave, and 571				Ontario		Drilling Drilling	g Location: g Method: g Machine: Started:	See BH Loca 150 mm So Truck Moun 21 Aug 20	lid Stem Augers		g 20	Logged by: TVH Compiled by: TD Reviewed by: Revision No.: 0, 22	
	LITHOLOGY PROFILE	SC	OIL SA	MPLI	_				TESTING tionTesting	LAB TES ★ Rinse pH Values 2 4 6 8		N O		
Lithology Plot	DESCRIPTION Geodetic Ground Surface Elevation: 102.83 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT MTO Vane* Δ Intact ▲ Remould	● DCPT Nilcon Vane* ◇ Intact ◆ Remould ear Strength (kPa)	Soil Vapour R △ parts per million (100 200 30 ▲ Lower Explosive W _P W Plastic 20 40 60	eading ppm) 0 400 Limit (LEL) W _L Liquid	INSTRUMENTATION INSTALLATION	COMMENTS	
	ASPHALT PAVEMENT: 150 mm Asphalt oven2.68 150 mm granular FILL: Clayey silt, trace sand, trace gravel, brown, moist		1	59	13	- - - - -	- - - -	0						
		SS	2	17	50/3	- - - 1 -	102 -							
※	BEDROCK: Shale, highly weathered, grey, 1011/16 moist 1.7 End of Borehole			20	30/3	- - - -	101 -							
	Notes: 1. Borehole open upon completion of drilling.					<u> </u>	-							
											:			
	G Consulting Inc	•												

 $\frac{\textstyle \sum}{\textstyle =}$ No freestanding groundwater measured in open borehole on completion of drilling.

ct Client:	BIGC-ENV-349E											1 4 10
							Drilling	Location:	See BH Loca	ation Plan		Logged by: TVH
	Distrikt Capital						Drilling	Method:	150 mm So	lid Stem Augers		Compiled by: TD
ct Name:	Phase Two ESA Update						Drilling	Machine:	Truck Mount	ted Drill		Reviewed by:
ct Location:	217 & 227 Cross Ave, and 571 A	Argus	Rd, Oa	kville (Ontario	0	Date S	Started:	21 Aug 20	_ Date Completed: 2	1 Aug 20	Revision No.: 0, 22-4-5
LITHO	OLOGY PROFILE	SO	IL SA	MPLII	NG			FIELD	TESTING	LAB TESTING		
		ample Type	ample Number	ecovery (%)	SPT 'N' Value/RQD%	ЕРТН (m)	LEVATION (m)	O SPT MTO Vane* Δ Intact ▲ Remould * Undrained Sh	tionTesting ■ DCPT Nilcon Vane* ◇ Intact ◆ Remould ear Strength (kPa)	W _p W V ■ O U	STRUMENTATI	COMMENTS
ASPHALT: 150	d Surface Elevation: 102.83 m 0 mm Asphalt over 150 mm 102.68	Ø	Ø	œ	Ø	-	ш -	20 40	60 80	20 40 60 8		
Granular	ilt, trace sand, trace gravel,	SS	1	75	10	- - - -	-	0				
		SS	2	84	30	- - - 1 - -	102	0				
BEDROCK: SI	101.31					Ė	=					
moist	101.00	SS	3	81	50/4	<u> </u>	101 -					
Notes:						— 2 -						
1. Borehole op	en upon completion of drilling.											
F t Cr	eodetic Ground ASPHALT: 15 Granular FILL: Clayey s prown, moist CLAYEY SILT mottled grey-b BEDROCK: Si moist End of Boreho Notes:	FILL: Clayey silt, trace sand, trace gravel, rown, moist 102.07 CLAYEY SILT TILL: trace sand and gravel, 0.8 mottled grey-brown, moist 101.31 BEDROCK: Shale, highly weathered, grey, 1.5 moist 101.00 End of Borehole 1.8	BEDROCK: Shale, highly weathered, grey, moist BEDROCK: Shale, highly weathered, grey, moist	BEDROCK: Shale, highly weathered, grey, moist Bedodetic Ground Surface Elevation: 102.83 m SS 2 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ASPHALT: 150 mm Asphalt over 150 mm 102.68 Granular 102.68 Granular 102.68 Granular 102.07 SS 1 75 DT MILL: trace sand, trace gravel, orown, moist 102.07 CLAYEY SILT TILL: trace sand and gravel, 0.8 mottled grey-brown, moist SS 2 84 DT MILL: trace sand and gravel, 0.8 mottled grey-brown, moist SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 81 DT MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand and gravel, 0.8 SS 3 ST MILL: trace sand an	ASPHALT: 150 mm Asphalt over 150 mm 102.68 Granular FILL: Clayey silt, trace sand, trace gravel, orown, moist 102.07 CLAYEY SILT TILL: trace sand and gravel, o.8 mottled grey-brown, moist SS 2 84 30 101.31 BEDROCK: Shale, highly weathered, grey, 1.5 moist End of Borehole Notes:	ASPHALT: 150 mm Asphalt over 150 mm 102.68 Granular 0.1 Fill: Clayey silt, trace sand, trace gravel, prown, moist 102.07 CLAYEY SILT TILL: trace sand and gravel, 0.8 mottled grey-brown, moist SS 2 84 30 1 BEDROCK: Shale, highly weathered, grey, 1.5 moist 101.00 End of Borehole 1.8 Notes:	ASPHALT: 150 mm Asphalt over 150 mm 102.68 Granular FilL: Clayey silt, trace sand, trace gravel, orown, moist 102.07 CLAYEY SILT TILL: trace sand and gravel, 0.8 mottled grey-brown, moist SS 2 84 30 1 101.31 BEDROCK: Shale, highly weathered, grey, 1.5 moist 101.00 End of Borehole 1.8 Notes:	ASPHALT: 150 mm Asphalt over 150 mm 102.68 Granular 102.68 Granular 102.07 CLAYEY SILT TILL: trace sand and gravel, mottled grey-brown, moist SS 2 84 30 1 1 102 1	ASPHALT: 150 mm Asphalt over 150 mm 102.68 Granular 102.68 Granular 0.7 SS 1 75 10	ASPHALT: 150 mm Asphalt over 150 mm 102.68 Granular 0.2	ASPHALT: 150 mm Asphalt over 150 mm 102.68 Granular O.7 FILL: Clayey silt, trace sand, trace gravel, orown, moist 102.07 CLAYEY SILT TILL: trace sand and gravel, 0.8 mottled grey-brown, moist SS 2 84 30 1 00 101.31 BEDROCK: Shale, highly weathered, grey, 1.5 moist 101.00 End of Borehole 1.8 Notes:

	ECORD OF BOREHOLE N	Ο.	BH2	<u> 203</u>								B.I.G. GOMGATIVES
	pject Number: BIGC-ENV-349E						-	Location:	See BH Loca			Logged by: TVH
	oject Client: Distrikt Capital							Method:		lid Stem Augers		Compiled by: TD
	pject Name: Phase Two ESA Update						Drilling	Machine:	Truck Mount			Reviewed by:
Pro	oject Location: 217 & 227 Cross Ave, and 571	Argus	Rd, Oa	akville	Ontario	<u> </u>	Date 9	Started:	21 Aug 20	_ Date Completed: 21 A	ug 20	Revision No.: 0, 22-4-5
	LITHOLOGY PROFILE	sc	DIL SA	MPLI	NG			FIELD	TESTING	LAB TESTING		
					%ДХ			Penetra	tionTesting	★ Rinse pH Values 2 4 6 8 10 12	NO NO	
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	LEVATION (m)	O SPT MTO Vane* △ Intact ▲ Remould * Undrained Sh	● DCPT Nilcon Vane* ◇ Intact ◆ Remould ear Strength (kPa)	Soil Vapour Reading △ parts per million (ppm) 100 200 300 400 △ Lower Explosive Limit (LEL) W _p W Plastic Liquid	INSTRUMENTATION	COMMENTS
	Geodetic Ground Surface Elevation: 102.83 m ASPHALT: 150 mm Asphalt over 200 mm 102.68	ΐ	ιχ	Ř	<u> </u>		<u> </u>	20 40	60 80	20 40 60 80	22	
	granular 0.£FILL: Sandy silt, trace clay and gravel, rootlets, brown to red, moist to very moist	ss	1	33	7	- - - -	-	0				
₩		SS	2	16	50/5	E	102 -					
\gg	101.76 BEDROCK: Shale, highly weather, grey, moist 1.1	33		10	30/3	— 1 -	-				1	
\gg						Ē	-					
///	101.31 End of Borehole 1.5					F	-					
	Notes:					Ė	101 -					
	Borehole open upon completion of drilling.					<u> </u>	-				1	
								: :				
								: :				
								: :				
								: :				
								: :	: :			
								: :				

RI	ECORD OF BOREHOLE N	ο.	BH2	204								B.I.G. GOMMATHIC INC.
	oject Number: BIGC-ENV-349E						Drilling	Location:	See BH Loc	cation Plan		Logged by: TVH
Pro	oject Client: <u>Distrikt Capital</u>						Drilling	g Method:	150 mm So	olid Stem Augers		Compiled by: TD
Pro	oject Name: Phase Two ESA Update						Drilling	g Machine:	Truck Moun	nted Drill		Reviewed by:
Pro	oject Location: 217 & 227 Cross Ave, and 571	Argus	Rd, Oa	akville	Ontari	0	Date \$	Started:	21 Aug 20	Date Completed: 21 Aug	20	Revision No.: 0, 22-4-5
	LITHOLOGY PROFILE	SC	IL SA	MPLI	NG			FIELD :	TESTING	LAB TESTING		
					%D%				tionTesting	★ Rinse pH Values 2 4 6 8 10 12	NOIT	
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT MTO Vane* △ Intact ▲ Remould * Undrained Sh 20 40	DCPT Nilcon Vane* ◇ Intact ◆ Remould ear Strength (kPa) 60 80	W _P W W _L Plastic Liquid	INSTRUMENTATION INSTALLATION	COMMENTS
	Geodetic Ground Surface Elevation: 102.83 m ASPHALT: 150 mm Asphalt over 300 mm 102.68	0)	o)	IL.	0)	-	<u>ш</u>	2,0 4,0	60 80	20 40 60 80	==	
※	granular 0.17 FILL: Silty sand, trace gravle, brown, moist	SS	1	33	14	-		0				
₩	102.07 CLAYEY SILT TILL: Trace sand, trace gravel, 0.8					Ė	102 -					
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	mottled grey, moist	SS	2	59	18	<u> </u>		0				
1	BEDROCK: Shale, highly weathered, grey, 1.5					-						
\gg	moist 100.85	SS	3	22	50/4	-	101 -					
//	End of Borehole 2.0					— 2 -						
	Notes: 1. Borehole open upon completion of drilling.											
								: :				

 $\underline{\underline{\nabla}}$ 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: 150 mm Solid Stem Augers Oakville Argus Cross LP Drilling Method: 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** ★ Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading Δ parts per million (ppm) 100 200 300 400 NSTRUMENTATION NSTALLATION PenetrationTesting SPT 'N' Value/RQD Ξ O SPT DCPT Sample Number **COMMENTS** DESCRIPTION ithology Plot Sample Type Recovery (%) MTO Vane* ELEVATION Nilcon Vane* Ξ wer Explosive Limit (LEL) Δ Intact ▲ Remould ♦ Intact Remould Liquid 80 * Undrained Shear Strength (kPa) 20 40 60 80 Plastic 40 60 Geodetic Ground Surface Elevation: 102.76 m DIRECT DRILLED TO 6.1 m bgs 20 102 101 - 2 100 3 99 98 5 97 6 96.66

B.I.G. Consulting Inc. 12-5500 Tomken Rd. Mississauga, ON L4W 2Z4 Canada T: 416-214-4880 F: 416-551-2633

 $\stackrel{\textstyle
abla}{=}$ No freestanding groundwater measured in open borehole on completion of drilling.

RECORD OF BOREHOLE No. BH/MW1A Project Number: BIGC-GEO-490A Drilling Location: See Borehole Location Plan Logged by: Project Client: Oakville Argus Cross LP Drilling Method: 150 mm Mud Rotary/ HQ Core Compiled by: ΜV Project Name: Preliminary Geotechnical Investigation Drilling Machine: Truck Mounted Drill Reviewed by: SS Project Location: 581-587 Argus Road, Oakville Date Started: Date Completed: 8 Oct 21 Revision No.: 0, 25/10/21 8 Oct 21 LITHOLOGY PROFILE SOIL SAMPLING **FIELD TESTING LAB TESTING** Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading parts per million (ppm) 100 200 300 400 RUMENTATION 'ALLATION PenetrationTesting Value/RQD Ξ SPT DCPT Sample Number **COMMENTS** DESCRIPTION 둳 Sample Type ecovery (%) MTO Vane* Nilcon Vane Ξ ELEVATION wer Explosive Limit (LEL) ♦ Intact Remould -ithology [△ Intact ▲ Remould ż DEPTH NST VST, * Undrained Shear Strength (kPa) Plastic Liquid 80 ASPHALT PAVEMENT: 50mm Asphalt over104.38 40 60 20 40 60 20 100mm granular base SS 5 1 62 FILL: silty clay to clayey silt, possibly reworked, mottled brown, moist, firm 104 silty sand with clay, trace gravel, compact, 103.46 \possibly reworked below 0.76 m 1.1 SS 2 59 22 Ö SILTY CLAY TILL: trace sand, trace gravel, occasional Shale fragments, reddish brown, moist, very stiff to hard 103 SS 3 100 43 0 2 pale grey, hard below 1.83 m 50 15 SS 4 100 50/15 102 BEDROCK: Shale, highly weathered, occasiona2.6 limetone layers throughout, grey, moist to damp 50 C 8 50/8 101 50 5 - first water strike 99 50 5 6 98 97 50 96.86 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. B.I.G. Consulting Inc. $\overline{\underline{\lor}}$ Groundwater depth on completion of drilling: Dry m. 12-5500 Tomken Rd.

B.I.G. Consulting Inc. 12-5500 Tomken Rd. Mississauga, ON L4W 2Z4 Canada T: 416-214-4880 F: 416-551-2633

		OF BOREHOL	_E No	o .	BM/	MW	2 A											1	B.L.G. COMPLETING
	ject Number:	BIGC-GEO-490A	_							g Location:		ee Boreho						_ Logged by:	MV
	ject Client:	Oakville Argus Cross L		4141-						g Method:		6 mm Muc		HQ Co	re			_ Compiled by:	
	ject Name:	Preliminary Geotechnic		tigatio	on					g Machine: Started:	_	ruck Moun		Complet	od: 7.0 a	4 24		_ Reviewed by	
PIC		581-587 Argus Road, O	akville						Date			Oct 21			ed: 7 O c	1		Revision No.	0, 25/10/21
Lithology Plot		DLOGY PROFILE DESCRIPTION		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEРТН (m)	ELEVATION (m)	Pene O SPT MTO Vana △ Intact ▲ Remoult * Undrained	tration e* N d Shear	Testing DCPT Ililcon Vane* Intact Remould Strength (kPa) 60 80	★ Rinse p 2 4 Soil V △ parts p 100	6 8 'apour R er million () 200 30 Explosive I W	10 12 eading ppm) 0 400 Limit (LEL) W Liquid	INSTRUMENTATION		СОММЕ	NTS
~~~	ASPHALT PA	I Surface Elevation: 104.24 m /EMENT: 70mm Asphalt ove ar base	er 103.97_	ss	1	70	16	<u>-</u>	104 -	0	:		:	+0 0¢					
	greenish black	to clayey silt, trace gravel, do damp, very stiff sh brown, stiff below 0.76 m	ark 0.3	SS	2	75	12	1											
₩			102.72						103 -						:				
	grey to reddish	TILL: trace sand, trace grav brown, damp, hard	el, 1.5	SS	3	79	34	2	102 -	0									
	BEDROCK: S	nale, highly weathered to exc	101.65 cellen <b>2</b> .6	ss	4	100	50/23				23		:		:				
	quality, occasion grey, moist to	onal limetone layers througho	out,	-\$\$	- 5	100	50/5	3	101 -		50								
								4	100 -										
			Ī	ss	6	100	50/8				50								
								5	99 -										
	- first water stri	ke	=	SS	7	100	50/5	6	98 -		50 5								
		CORE BEGINS at 7.32 m		RC	1	83	0	7	97 -										
	 - Very Poor Qu		-	110	'	00		8							;				
	- Fair Quality			RC	2	100	70		96 -			0							
			-					— 9 <u>1</u>	95 –										
	- Fair Quality - Good Quality			RC	3	99	72	10	94 -			0							
	soft zone from	12.06 to 12.2 m		RC	4	97	78	11	93 - 92 -			0							
	- Good Quality			RC	5	100	77	13	91 –			O.							
12-5	G. Consulting In	.   = '	Groundwa							asured m.		<u> </u>		·	·	1. 1			
Can T: 4	iissauga, ON L4\ ada 16-214-4880 16-551-2633	Boreho from a	Groundwa ole details a qualified G isioned and	s prese	nted, do	not const	titute a th	orough ole infor	understa mation s	nding of all po	05 m. otentia in con	l conditions projunction with the	esent and re ne geotechni	quires inte	erpretative a	assistand t was	ce		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 PROFILE	SC	IL SA	MPLI				FIELD TESTING	LAB TESTING	
DESCRIPTION  DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DЕРТН (m)	ELEVATION (m)	PenetrationTesting O SPT	100 200 300 400	INSTRUMENTATION INSTALLATION COMMENTS  COMMENTS  COMMENTS
BEDROCK: Shale, highly weathered to excellent quality, occasional limetone layers throughout, grey, moist to damp  - Good Quality some oxidised laminae at 13.87 m	RC	6	100	79	15	90 -	0		
soft zone from 14.38 to 14.54 m  - Excellent Quality	RC	7	100	90	16	89 - 88 -	0		
- Excellent Quality some oxidised laminae at 16.92 m	RC	8	97	95	17	87 - 86 -	0		
- Good Quality	RC	9	97	89	19	85 -	0		
- Excellent Quality	RC	10	100	100	20	84 -	φ		
- Excellent Quality	RC	11	100	99	22	82 -	0		
- Good Quality fracture zone with slickenside from 24.01 to 24.29 m	RC	12	97	79	23	81 -	O		
- Good Quality	RC	13	97	88	25 25 	79 –	0		
- Good Quality soft zones at 26.25 m and 27.02 to 27.07 m	RC	14	100	84	27	78 - 77 -	o		
End of Borehole 27.6  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.									
								ant and requires interpretative a	

#### RECORD OF BOREHOLE No. BM/MW3A Project Number: BIGC-GEO-490A Drilling Location: See Borehole Location Plan Logged by: 150 mm Solid Stem Augering Compiled by: Project Client: Oakville Argus Cross LP Drilling Method: ΜV Project Name: Preliminary Geotechnical Investigation Drilling Machine: Truck Mounted Drill Reviewed by: SS Project Location: 581-587 Argus Road, Oakville Date Started: Date Completed: 8 Oct 21 Revision No.: 0, 25/10/21 8 Oct 21 LITHOLOGY PROFILE **SOIL SAMPLING FIELD TESTING LAB TESTING** Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading parts per million (ppm) 100 200 300 400 RUMENTATION 'ALLATION PenetrationTesting Value/RQD Ξ SPT DCPT Sample Number **COMMENTS** DESCRIPTION 둳 Sample Type ecovery (%) MTO Vane* Nilcon Vane Ξ ELEVATION wer Explosive Limit (LEL) ♦ Intact Remould ithology I ▲ Remould ż NST VST, * Undrained Shear Strength (kPa) Plastic Liquid 80 Geodetic Ground Surface Elevation: 104.37 m ASPHALT PAVEMENT: 50mm Asphalt over104.17 40 60 20 40 60 20 150mm granular base SS 9 38 0 FILL: silty clay to clayey silt, possibly reworked, trace sand, trace gravel, mottled brown, moist, cliff to post cliff. 104 stiff to very stiff 103.30 silty sand with clay, trace gravel, mottled pale 1.1 grey, possibly reworked, compact below 0.76 m CLAYEY SILT TILL: trace sand, trace gravel, occasional Shale fragments, reddish brown to SS 2 70 18 Ö 103 grey, moist, very stiff to hard SS 3 100 39 Ó 101.93 50/8 102 SS 100 BEDROCK: Shale, highly weathered, occasiona2.4 limetone layers throughout, grey, moist to damp 50 5 50/5 101 100 50 5 $\nabla$ 99.49 first water strike End of Borehole on Auger Refusal Borehole open upon completion of drilling. Groundwater level at 4.72 m bgs upon completion of drilling. 3. Groundwater level reading at 4.24 m bgs on October 18, 2021. B.I.G. Consulting Inc. $\overline{\underline{\underline{}}}$ Groundwater depth on completion of drilling: $\underline{4.72 \text{ m}}$ .

B.I.G. Consulting Inc. 12-5500 Tomken Rd. Mississauga, ON L4W 2Z4 Canada T: 416-214-4880 F: 416-551-2633

#### RECORD OF BOREHOLE No. BM/MW4A Project Number: BIGC-GEO-490A Drilling Location: See Borehole Location Plan Logged by: 150 mm Solid Stem Augering Compiled by: Project Client: Oakville Argus Cross LP Drilling Method: ΜV Project Name: Preliminary Geotechnical Investigation Drilling Machine: Truck Mounted Drill Reviewed by: SS Project Location: 581-587 Argus Road, Oakville Date Started: Date Completed: 8 Oct 21 Revision No.: 0, 25/10/21 8 Oct 21 LITHOLOGY PROFILE SOIL SAMPLING **FIELD TESTING LAB TESTING** Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading parts per million (ppm) 100 200 300 400 NSTRUMENTATION NSTALLATION PenetrationTesting Value/RQD Ξ SPT DCPT Sample Number **COMMENTS** DESCRIPTION ithology Plot Sample Type ecovery (%) MTO Vane* Nilcon Vane Ξ ELEVATION wer Explosive Limit (LEL) ♦ Intact Remould ▲ Remould ż DEPTH Plastic Liquid 80 * Undrained Shear Strength (kPa) Geodetic Ground Surface Elevation: 103.61 m ASPHALT PAVEMENT: 50mm Asphalt over103.41 40 60 20 40 60 20 150mm granular base SS 14 1 75 $\circ$ FILL: sity clay to clayey silt, thale fragments, brown to grey, moist, stiff 103 CLAYEY SILT TILL: trace sand, trace gravel, 0.9 pale slightly mottled brown to grey, moist to damp, SS 2 31 Ö 51 stiff to hard 102 SS 3 14 0 82 75 23 SS 4 47 75/23 101.02 101 BEDROCK: Shale, highly weathered, occasiona2.6 limetone layers throughout, grey, moist to damp 50 C 8 3 50/8 100 50 C 99 lacksquare- first water strike 98 50 8 6 100 50/8 97 7 ⊻ 96.29 End of Borehole on Auger Refusal Borehole open upon completion of drilling. Solution of open upon completion of mining. Groundwater level at 7.01 m bgs upon completion of drilling. Groundwater level reading at 4.71 m bgs on October 18, 2021. B.I.G. Consulting Inc. $\overline{\underline{\underline{}}}$ Groundwater depth on completion of drilling: 7.01 m.

RI	ECORD	OF BORE	HOLE N	<b>o.</b>	BM/	MW	<u>′5</u> A																B.I.G. General he	No.
Proj	ect Number:	BIGC-GEO-490A							Drilling	g Loca	ation:	Se	е Во	rehol	e Loc	ation	Plan				Logged	by:	MV	_
	ect Client:	Oakville Argus C							Drilling						d Ste		gers				Compile	-	MV	_
-	ect Name:	Preliminary Geot		stigatio	on				Drilling						ted Di						Review	-		_
Pro		581-587 Argus R							Date				Oct 2					ed: <u>6 O</u>	ct 21		Revisio	n No.:	0, 25/10/2	<u>:1</u>
	LITH	OLOGY PROFIL	.E	SC	IL SA	MPLI					TELD				★ Ri	nse pH	TEST Values		z					
Lithology Plot		DESCRIPTION		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	EVATION (m)	O S MTO △ In ▲ R	) Vane	* Nil	DCP1	rane*	S pa 10 10 W	irts per i 0 20 wer Exp	our Remillion (p	eading pm) 400 imit (LEL) WL	INSTRUMENTATION	STALLATION	COM	MEN	тs	
Ë	ASPHALT PA	d Surface Elevation: 1 VEMENT: 70mm Aspl	halt over103.55_					<u> </u>	=		20 4	0 6	0 8	0	2	0 4 <u>0</u>	) 6 <u>0</u>	80	_   ≥	<b>Z</b>				_
	gravel, mottled	to clayey silt, trace sa I pale grey, damp, stif	ff to hard	SS	2	70	9 50/15		103 -	0		50 0 15						•	ı					
<b>***</b>	below 0.76 m	oble, mottled greenish	102.23					1 - - - - - -				15												
	gravel and pel	obles, pale grey, dam	p, hard 101.46	SS SS	3	62	32 50/8	2	102 -		0	50 8						;						
	grey, moist to	hale, highly weathered onal limetone layers the damp	hroughout,	ss	_		50/8	3	101 -			50 8												
				- 33		100	30/6		100 -			8						•	ı					
								4																
				SS	6	100	50/10	5	99 -			50 10												
				ss	7	100	50/8	6	98 -			50 O 8												
	- first water str	ike						- - - 7	97 –															
		 CORE BEGINS at 7		RC	1	87	0	Ė											ı					
	- Very Poor Qu		.32 111	1.0		01		8	96 -	Ĭ 								:						
		rom 8.16 to 8.72 m leratic layers through	out run	RC	2	100	61	9	95 –			(	D											
	- Fair Quality			RC	3	95	70	10	94 -				.0.											
	- Good Quality			RC	4	100	87	11	93 - 92 -					0										
	- Fair Quality some oxidised	laminae from 12.34 t	o 15.39 m	RC	5	98	72	12	91 –				0											
12-5 Miss Cana T: 41	5. Consulting In 500 Tomken Rd issauga, ON L4V ada 6-214-4880 6-551-2633		Groundw. Gro	ater dep	oth obse	rved on	18/10	)/2021 a	understa	th of:	19.	04 m. ential c	condition	ons pre	esent ar	nd requi	ires inte	rpretative for which	assistai it was	nce			Scale: 1 : 7	  4

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# RECORD OF BOREHOLE No. BM/MW5A

RC 8

RC

RC

RC

RC 12 100 99

RC 13

78.45

9

10 98

11

95 93

100



Project Number: BIGC-GEO-490A Drilling Location: See Borehole Location Plan Logged by: LITHOLOGY PROFILE SOIL SAMPLING LAB TESTING **FIELD TESTING** Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading parts per million (ppm) 100 200 300 400 NSTRUMENTATION NSTALLATION PenetrationTesting 'N' Value/RQD9 Ξ O SPT DCPT **COMMENTS** Sample Number 둳 **DESCRIPTION** % Sample Type MTO Vane* Nilcon Vane ELEVATION Ξ Lower Explosive Limit (LEL)
W_P W W_L

Plastic Liquid △ Intact
▲ Remould ♦ Intact
Remould ithology | Secovery DEPTH SPT * Undrained Shear Strength (kPa) 40 60 20 40 60 20 80 BEDROCK: Shale, highly weathered to excellent quality, occasional limetone layers throughout, grey, moist to damp RC 100 93 0 89 - Excellent Quality 15 88 16 RC 100 74 0 - Fair Quality sub vertical fracture from from 15.84 to 15.92 m

> 87 17

> > 86

85 19**V** 

84 20

83

82 22

81 23

80

79

24

25

21

18

92

90

70

95

100 88 0

0

0

0

0

- Excellent Quality

- Excellent Quality

- Excellent Quality

- Fair Quality

Excellent Quality fracture zone from 23.81 to 23.91 m

- Good Quality

End of Borehole

- 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.

R	ECORD	OF BOREHOI	LE No	o. <u>l</u>	BH1	04E	Α							111	B.I.G. CONSULTIVE INC.
	ject Number:	BIGC-ENV-490D							Drilling	Location:	See BH Loc	ation Plan		Logged by:	TD
Pro	ject Client:	Oakville Argus Cross L	LP						Drilling	Method:	150 mm So	olid Stem Augers		Compiled by:	TD
Pro	ject Name:	Remediation Report							Drilling	Machine:	Truck Moun	ted Drill		Reviewed by:	
Pro	ject Location:	581-587 Argus Road, C	Dakville, (	Ontari	0				Date 9	Started:	22 Mar 9	Date Completed: 22 Ma	nr 9	Revision No.:	0, 22-4-4
	LITH	OLOGY PROFILE		so	IL SA	MPLI	NG			FIELD	TESTING	LAB TESTING			
Lithology Plot	Geodetic Groun	DESCRIPTION  d Surface Elevation: 103.61 n	n	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT  MTO Vane*  Δ Intact  ▲ Remould	tionTesting  ■ DCPT  Nilcon Vane*  ◇ Intact  ◆ Remould  ear Strength (kPa)  60 80	★ Rinse pH Values	INSTRUMENTATION INSTALLATION	COMMEN	TS
_ ;;;	ASPHALT PA	VEMENT: 76 mm Asphalt ov	/er103 ₀ 53					-			: :				
		, some sand, some gravel,		SS	1	79	11	-  -  -  -  -	103 -	0					
	Cobble pieces		102.00	SS	2	51	38	- - 1 - - - -	-	0					
	CLAYE SILT	FILL: grey, moist	102.09	SS	3	100	40	- - - - - - 2	102 -	Ó					
17	End of Boreh	ole	101.48 2.1					-	-		: :				
	Notes: 1. Borehole of	en upon completion of drillin	ng.												

RI	ECORD	OF BOREH	OLE N	ο.	BH1	104N	ΙA							11	B.I.G. GONGLING
	ject Number:								Drilling	g Location:	See BH Loca	ation Plan		Logged by:	TD
Pro	ject Client:	Oakville Argus Cro	oss LP						Drilling	g Method:	_150 mm So	olid Stem Augers		Compiled by:	TD
Pro	ject Name:	Remediation Repo	ort						Drilling	g Machine:	Truck Moun	ted Drill		Reviewed by:	
Pro	ject Location:	581-587 Argus Roa	ad, Oakville,	Ontari	0				Date 9	Started:	22 Mar 9	Date Completed: 22 Ma	ar 9	Revision No.:	0, 22-4-4
	LITH	OLOGY PROFILE	<u> </u>	SC	IL SA	MPLI	NG			FIELD	TESTING	LAB TESTING			
							%ДХ			Penetra	ationTesting	★ Rinse pH Values 2 4 6 8 10 12	NO NO		
Lithology Plot	Geodetic Groun	DESCRIPTION  d Surface Elevation: 103 mm Asphalt over 280 n	<b>3.61 m</b> nm 103,53	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT  MTO Vane*  Δ Intact  A Remould  * Undrained SI 20 40	<ul> <li>♦ Intact</li> <li>♦ Remould</li> </ul> hear Strength (kPa)	Soil Vapour Reading  △ parts per million (ppm) 100 200 300 400  ▲ Lower Explosive Limit (LEL) Wp W WL  Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMEN	тѕ
<b>**</b>	\Granular	ilt, reddish brown, moist	0.7	SS	1	84	12	- - -	103 -	0					
				SS	2	75	4	- - - - - 1 - - - -	-	0					
				ss	3	41	13	- - - -	102 -	0					
▩	End of Boreh	ole	101.48 2.1					2 							
	Notes:														
	1. Borehole o	pen upon completion of	drilling.												
										: :	: :				
	Consulting In														_

 $\frac{\textstyle \sum}{\scriptstyle =}$  No freestanding groundwater measured in open borehole on completion of drilling.

ECORE	OF BOREHOLE N	ο.	<u>BH</u> ′	1045	<u>SA</u>							B.LG. GONGLETING INC
ject Number	BIGC-ENV-490D						Drilling	g Location:	See BH Loc	ation Plan		Logged by:
ject Client:	Oakville Argus Cross LP						Drilling	g Method:	150 mm Sc	olid Stem Augers		Compiled by: TD
ect Name:	Remediation Report						_	g Machine:	Truck Moun			Reviewed by:
ject Location	: 581-587 Argus Road, Oakville,	Ontari	io				Date \$	Started:	22 Mar 9	Date Completed: 22 M	ar 9	Revision No.: <b>0, 22-4-4</b>
LITI	HOLOGY PROFILE	SC	DIL SA	MPLI					TESTING	LAB TESTING		
Ocadatia Ocaz	DESCRIPTION  and Surface Elevation: 103.61 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DЕРТН (m)	ELEVATION (m)	O SPT  MTO Vane³  Δ Intact  ▲ Remould	<ul> <li>♦ Intact</li> <li>♦ Remould</li> </ul> hear Strength (kPa)	★ Rinse pH Values         9         10         12           2 4 6 8 10         12         30         40           Soil Vapour Reading         4 parts per million (ppm)         100         20         30         40           Lower Explosive Limit (LEL)         Wp.         W         W         L           Plastic         Liquid         Liquid         20         40         60         80	INSTRUMENTATION INSTALLATION	COMMENTS
ASPHALT: { granular	50 mm Asphalt over 200 mm 10366	SS	1	70	9	- - - -	<u> </u>	0				
trace gravel	I, oxidation, cobble pieces	SS	2	100	38	- - - - - 1	103 -	0				
CLAYEY SIL	102.00 T TILL: grey, moist 1.6	SS	3	75	50	-  -  -  -  -  -	102 -		0			
End of Bore	101.48 Phole 2.1					— 2 -						
Notes:	open upon completion of drilling.											

 $\frac{\nabla}{\overline{z}}$  No freestanding groundwater measured in open borehole on completion of drilling.

RI	ECORD	OF BOREHOLE N	<b>o.</b>	BH1	<u> 104V</u>	<u>VA</u>							B.I.G. Consultation
Proj	ject Number:	BIGC-ENV-490D						Drilling	Location:	See BH Loca	ation Plan		Logged by: TD
Proj	ject Client:	Oakville Argus Cross LP						Drilling	Method:	150 mm So	lid Stem Augers		Compiled by: TD
	ect Name:	Remediation Report						Drilling	Machine:	Truck Moun			Reviewed by:
Proj	ect Location:	581-587 Argus Road, Oakville,	Ontari	io				Date S	Started:	22 Mar 9	_ Date Completed: 22 M	ar 9	Revision No.: 0, 22-4-4
	LITH	OLOGY PROFILE	SC	IL SA	MPLI				FIELD.	TESTING	LAB TESTING		
ithology Plot		DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT MTO Vane* Δ Intact ▲ Remould	tionTesting  ■ DCPT  Nilcon Vane*  ◇ Intact  ■ Remould  ear Strength (kPa)  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	INSTRUMENTATION INSTALLATION	COMMENTS
≫	ASPHALT: 76	mm Asphalt over 254 mm 103.53	0)	0)	IL.	- O)	-	<u> </u>	20 40	60 80	20 40 60 80	==	
❈	FILL: Silty clay	- /	SS	1	51	15	- - -	103 —	0				
	Slag inclusion	is and cobble pieces	SS	2	84	25	- - - - 1 -	-	0				
<b>※</b> *	CLAYEY SILT	TILL: mottled grey, moist 1.5	SS	3	100	50	- - - - - - - 2	102 -		0			
1	End of Boreh	101.48 ole 2.1										-	
	Notes: 1. Borehole of	pen upon completion of drilling.											

 $\frac{\nabla}{\overline{z}}$  No freestanding groundwater measured in open borehole on completion of drilling.

		OF BOREHOLE NO	<b>o.</b>	BH1	104V	<u>VB</u>		Drilling	J Location:	See BH Loca	ation Plan		Logged by: TD
Project	Client:	Oakville Argus Cross LP						Drilling	Method:	150 mm So	lid Stem Augers		Compiled by: TD
Project	Name:	Remediation Report						Drilling	Machine:	Truck Mount	ted Drill		Reviewed by:
Project	Location:	581-587 Argus Road, Oakville,	Ontari	0				Date S	Started:	22 Mar 9	_ Date Completed: 22 N	lar 9	Revision No.: 0, 22-4-4
	LITH	OLOGY PROFILE	SO	IL SA	MPLI	NG			FIELD	TESTING	LAB TESTING	ПТ	
Lithology Plot		DESCRIPTION  d Surface Elevation: 103.61 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEРТН (m)	ELEVATION (m)	Penetra O SPT MTO Vane* △ Intact ▲ Remould	DCPT  Nilcon Vane*     Intact     Remould ear Strength (kPa)	# Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading Δ parts per million (ppm) 100 290 300 400  ■ Lower Explosive Limit (LEL) W _P W W _L ■ 0 ● Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
FI E	SPHALT: 76 canular LL: Silty clay and of Borehotes:	mm Asphalt over 254 mm 103 53 7, black staining, brown moist 103.00		1	87	10		103	20 490		20 40 80		

	OF BOREHOLE N	0.	BH1	<u> 105</u>								B.I.G. GONGLINGS
	BIGC-ENV-490D						_	Location:	See BH Loca			Logged by: TD
Project Client:	Oakville Argus Cross LP						_	Method:		olid Stem Augers		Compiled by: TD
Project Name:	Remediation Report	<b>.</b>	,				_	Machine:	Truck Mount			Reviewed by:
	581-587 Argus Road, Oakville,						Date S	Started:	22 Mar 9	_ Date Completed: 22 M	ar 9	Revision No.: <u>0, 22-4-4</u>
LITH	IOLOGY PROFILE	SC	IL SA	MPLI					TESTING	LAB TESTING  ★ Rinse pH Values		
told A A A A A A A A A A A A A A A A A A A	DESCRIPTION  and Surface Elevation: 104.37 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT  MTO Vane*  Δ Intact  ▲ Remould	■ DCPT  Nilcon Vane*     ♦ Intact     • Remould  ear Strength (kPa)     60 80	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: 1 granular  FILL: Silty cla brown, moisti  End of Borel  Notes:	14 mm Asphalt over 228 mm 104.26 0.1 ıy, cobble pieces, brown to reddish 103.76	SS SS	1	62	15		104 = =	O O				

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.

VAPOUR MONITOR: **RKI EAGLE II** 

BOREHOLE DIAMETER: 200 mm

WELL DIAMETER: 50 mm

TERRAPEX

PIPE SCHEDULE: 40

SCREEN SLOT #: 10

SCREEN LENGTH: 2.13 m

RISER LENGTH: 0.61 m SAND TYPE: SILICA SAND #2

SEALANT TYPE: BENTONITE

SUBSURFACE PROFILE										
Depth	Strataplot	Description	Elevation	Number	Туре	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Laboratory Testing	Piezometer or Monitoring Well Installation
3       1       2       3       4       4       5       6       8       9       10       11       12       13       14       15		Ground Surface SILT, SAND AND GRAVEL (FILL)	99.37							
1		BRÓWN, MOIST	98.61	1A	DP	80%	-	<5 ppm	METALS and INORGANICS, PAHs (DUPLICATES)	Steel Casing
3 1 1		SANDY SILT, TRACE GRAVEL (NATIVE) BROWN, MOIST	97.78	1B	DP	100%	-	<5 ppm		Str
6 2 7 2	#######################################	SILTY CLAY, TRACE GRAVEL AND SAND GREY, MOIST		2A	DP	100%	-	<5 ppm	VOCs, PHCs (F1-F4) (DUPLICATES)	
9 1 3		SHALE BEDROCK GREY, MOIST	96.47 96.32	2B	DP	100%	-	<5 ppm		Silica Sal
12 13 14		REFUSAL AT 3.05 m bg								
14 = 15 = 15										

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 BOREHOLE DIAMETER: 200 mm WELL DIAMETER: 50 mm

PIPE SCHEDULE: 40 SCREEN SLOT #: 10 SCREEN LENGTH: 1.52 m

RISER LENGTH: 0.61 m SAND TYPE: SILICA SAND #2 SEALANT TYPE: BENTONITE

SUBSURFACE PROFILE										
Depth	Strataplot	Description	Elevation	Number	Туре	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Laboratory Testing	Piezometer or Monitoring Well Installation
O	Str.	Ground Surface  ASPHALT  SAND AND GRAVEL (FILL)  BROWN, MOIST  SILTY SAND, TRACE COBBLES AND GRAVEL (NATIVE)  BROWN, MOIST  SILTY CLAY, TRACE GRAVEL AND SAND GREY, MOIST	98.98 98.86 98.22 97.46	1A 1B 2A	DP DP	10%		- - <5 ppm	METALS and INORGANICS, PAHs	Silica Sand Bentonite Concrete Bentonite Steel Casing
10 11 11 11 11 11 11 11 11 11 11 11 11 1		REFUSAL AT 2.59 m bg	96.39	28	DP	20%	-	<5 ppm		

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.

TERRAPEX

VAPOUR MONITOR: **RKI EAGLE II**BOREHOLE DIAMETER: **200 mm**WELL DIAMETER: 
PIPE SCHEDULE: 
SCREEN SLOT #: 
SCREEN LENGTH: -

RISER LENGTH: - SAND TYPE: - SEALANT TYPE: **BENTONITE** 

SUBSURFACE PROFILE										
Depth	Strataplot	Description	Elevation	Number	Туре	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Laboratory Testing	Piezometer or Monitoring Well Installation
ft m -2		Ground Surface  ASPHALT  SAND AND GRAVEL, TRACE COBBLES  (FILL)  BROWN, MOIST	<b>98.29</b> 98.20	1A	DP	30%		-	METALS and INORGANICS, PAHs, VOCs, PHCs (F1-F4)	
3 1 1		SANDY SILT (NATIVE) BROWN, WET	97.53	1B	DP	100%	-	-		
6 - 2		SILTY CLAY, TRACE GRAVEL AND SAND GREY, MOIST  SHALE BEDROCK	96.00	2A	DP	100%	-	<5 ppm		
9 10 3		GREY, MOIST  REFUSAL AT 3.05 m bg	95.24	2B	DP	100%	-	<5 ppm		
ft m -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1										

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 BOREHOLE DIAMETER: 200 mm WELL DIAMETER: 50 mm

PIPE SCHEDULE: 40 SCREEN SLOT #: 10 SCREEN LENGTH: 2.13 m

RISER LENGTH: 0.61 m SAND TYPE: SILICA SAND #2 SEALANT TYPE: BENTONITE

SUBSURFACE PROFILE										
Depth	Strataplot	Description	Elevation	Number	Туре	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Laboratory Testing	Piezometer or Monitoring Well Installation
ft m -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1		Ground Surface  ASPHALT	<b>97.76</b> 97.67							
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		SAND AND GRAVEL (FILL) BROWN, MOIST	97.00	1A	DP	40%	-	<5 ppm	METALS and INORGANICS	Concrete
3 1 1		<b>SANDY SILT (NATIVE)</b> RED, WET	96.24	1B	DP	100%	-	<5 ppm	SVOCs (DUPLICATE)	
		SILTY CLAY GREY, MOIST		2A	DP	100%	-	<5 ppm	VOCs, PHCs (F1-F4)	Silica Sand
8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	#1	SHALE BEDROCK	94.86	2B	DP	100%	-	<5 ppm		
10 1 3 11 11 11 11 11 11 11 11 11 11 11 11		GREY, MOIST  REFUSAL AT 3.05 m bg	94.71							
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 BOREHOLE DIAMETER: 200 mm WELL DIAMETER: 50 mm

PIPE SCHEDULE: 40 SCREEN SLOT #: 10 SCREEN LENGTH: 2.13 m

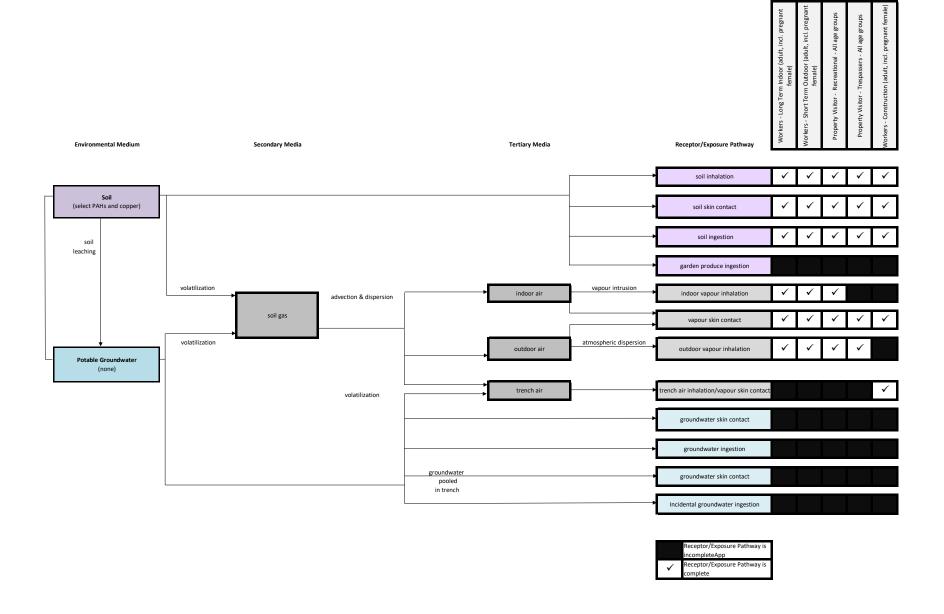
RISER LENGTH: 0.61 m SAND TYPE: SILICA SAND #2 SEALANT TYPE: BENTONITE

SUBSURFACE PROFILE										
Depth	Strataplot	Description	Elevation	Number	Туре	% Recovery	SPT (n)	SV (ppm or %LEL- if applicable)	Laboratory Testing	Piezometer or Monitoring Well Installation
ft m -2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1		Ground Surface ASPHALT	<b>97.68</b> 97.59							
1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1		<b>SAND AND GRAVEL (FILL)</b> GREY, MOIST	96.92	1A	DP	30%	-	-	METALS and INORGANICS, SVOCs	Concrete Bentonite
3 1 1		SANDY SILT (NATIVE) RED, WET	96.16	1B	DP	100%	-	<5 ppm		
6 2 7 1		SILTY CLAY, TRACE GRAVEL GREY, WET		2A	DP	100%	-	<5 ppm	VOCs, PHCs (F1-F4)	Silica Sand ☐  Silica Sand ☐  (19-Sep-18)
9 10 11 3	###	SHALE BEDROCK GREY, MOIST	94.78	2B	DP	100%	-	<5 ppm		
111 11 11 11 11 11 11 11 11 11 11 11 11		REFUSAL AT 3.05 m bg								
12 - 4										

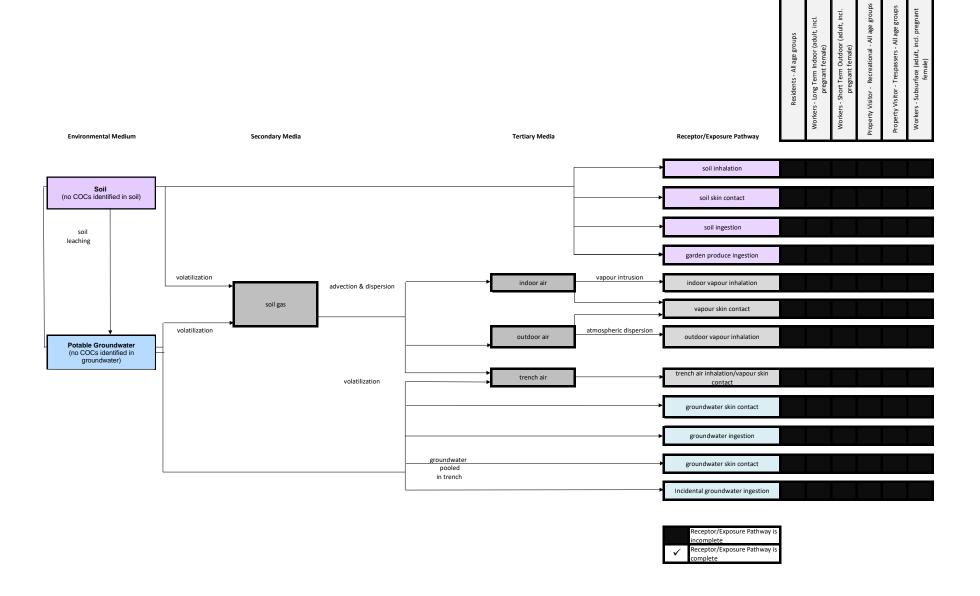
LOGGED BY: MS INPUT BY: SF CHECKED BY: SJS INPUT DATE: SEPTEMBER 25, 2018

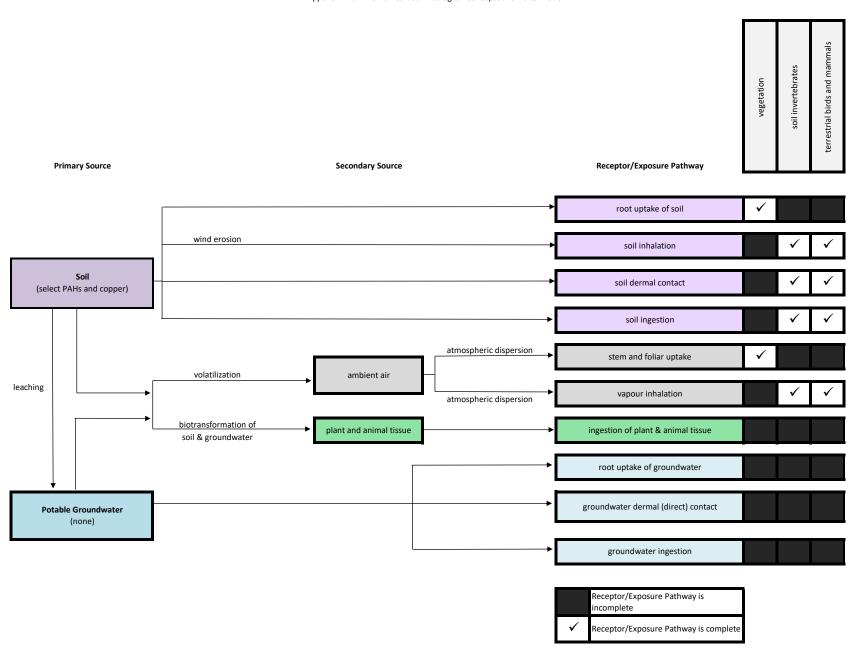
Appendix D – Conceptual Site Models

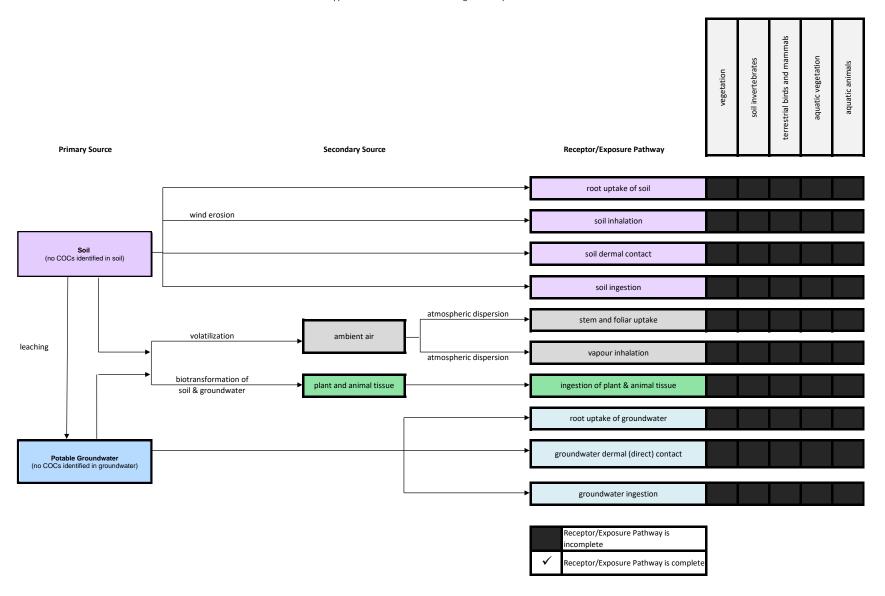




Appendix D.2 - Post Remediation Human Health Conceptual On-Site Model

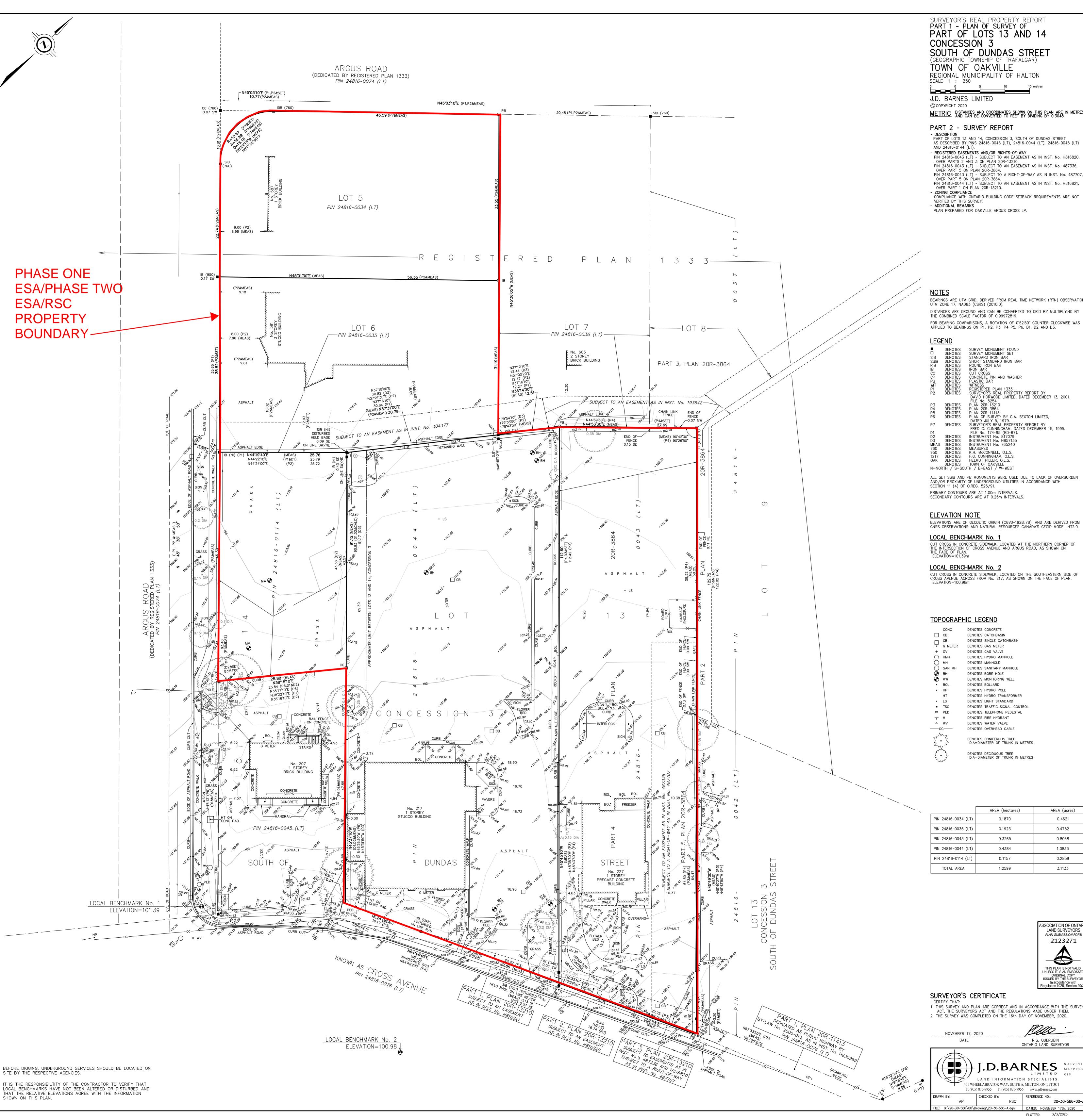






Appendix E - Survey Plan





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

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)

- 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. 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.

COMPLIANCE WITH ONTARIO BUILDING CODE SETBACK REQUIREMENTS ARE NOT VERIFIED BY THIS SURVEY.

PLAN PREPARED FOR OAKVILLE ARGUS CROSS LP.

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.

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.

PLAN 20R-3864 PLAN 20R-11413

DATED JULY 5, 1979.
SURVEYOR'S REAL PROPERTY REPORT BY
FRED G. CUNNINGHAM, DATED DECEMBER 15, 1995.
FILE No. 174-95 (BD-67). INSTRUMENT No. 817079 INSTRUMENT No. H857135 INSTRUMENT No. 765240 MEASURED K.H. McCONNELL, O.L.S. F.G. CUNNINGHAM, O.L.S. HELMUT PILLER, O.L.S. TOWN OF OAKVILLE

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.

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.

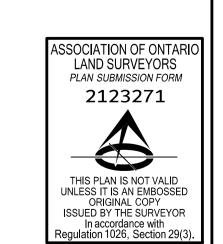
CUT CROSS IN CONCRETE SIDEWALK, LOCATED ON THE SOUTHEASTERN SIDE OF CROSS AVENUE ACROSS FROM No. 217, AS SHOWN ON THE FACE OF PLAN.

# TOPOGRAPHIC LEGEND

DENOTES CONCRETE DENOTES CATCHBASIN DENOTES SINGLE CATCHBASIN DENOTES GAS METER DENOTES GAS VALVE DENOTES HYDRO MANHOLE DENOTES MANHOLE DENOTES SANITARY MANHOLE DENOTES BORE HOLE DENOTES MONITORING WELL DENOTES BOLLARD DENOTES HYDRO POLE DENOTES HYDRO TRANSFORMER DENOTES LIGHT STANDARD DENOTES TRAFFIC SIGNAL CONTROL DENOTES TELEPHONE PEDESTAL DENOTES FIRE HYDRANT DENOTES WATER VALVE 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



1. THIS SURVEY AND PLAN ARE CORRECT AND IN ACCORDANCE WITH THE SURVEYS ACT, THE SURVEYORS ACT AND THE REGULATIONS MADE UNDER THEM.



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

RSQ 

R.S. QUERUBIN ONTARIO LAND SURVEYOR

20-30-586-00-A

**Appendix F - Laboratory Certificates of Analysis** 





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		
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#### 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 (V1)

Page 1 of 10

Member of: Association of Professional Engineers and Geoscientists of Alberta (APEGA)

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SAMPLING SITE:581-587 Argus Road, Oakville

Certificate of Analysis

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

ATTENTION TO: Rebecca Morrison

SAMPLED BY:MV

CANADA L4Z 1Y2 TEL (905)712-5100 FAX (905)712-5122 http://www.agatlabs.com

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO

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

			O. 110	g. 100(011 <i>)</i>	Wictars (III	icidaling my	dilucs) (ooi	1)	
DATE RECEIVED: 2021-11-10									DATE REPORTED: 2021-11-18
		SAMPLE DES	CRIPTION:	BH/MW1-SS2	BH/MW2-SS1	BH/MW3-SS1	BH/MW4-SS1	BH/MW5-SS1	
		SAMI	PLE TYPE:	Soil	Soil	Soil	Soil	Soil	
		DATES	DATE SAMPLED: 2		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	8.0	<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	
ead	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	
lickel	μg/g	100	1	20	21	31	13	16	
Selenium	μg/g	2.4	8.0	<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	
Fhallium	μg/g	1	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Jranium	μg/g	23	0.50	0.98	0.89	0.96	0.68	0.71	
/anadium	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 *)



Certificate of Analysis

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

ATTENTION TO: Rebecca Morrison

SAMPLED BY:MV

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

5835 COOPERS AVENUE

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

				0.110	9. 100(011)	0111 3 (00	"")		
DATE RECEIVED: 2021-11-10								I	DATE REPORTED: 2021-11-18
		SAMPLE DES	CRIPTION:	BH/MW1-SS2	BH/MW2-SS1	BH/MW3-SS1	BH/MW4-SS1	BH/MW5-SS1	
		SAMI	PLE TYPE:	Soil	Soil	Soil	Soil	Soil	
		DATES	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 *)

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

SAMPLING SITE:581-587 Argus Road, Oakville



SAMPLING SITE:581-587 Argus Road, Oakville

Certificate of Analysis

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

SAMPLED BY:MV

ATTENTION TO: Rebecca Morrison

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

				0.110	g. 155(511 <i>)</i>	- 1 Al 13 (00	111)		
DATE RECEIVED: 2021-11-10									DATE REPORTED: 2021-11-18
		SAMPLE DESC	CRIPTION:	BH/MW1-SS2	BH/MW2-SS1	BH/MW3-SS1	BH/MW4-SS1	BH/MW5-SS1	
		SAMI	PLE TYPE:	Soil	Soil	Soil	Soil	Soil	
		DATE S	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	Acceptab	le Limits						
Naphthalene-d8	%	50-1	40	105	78	124	112	106	
Acridine-d9	%	50-1	40	77	85	91	103	107	
Terphenyl-d14	%	50-1	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:

NPopukolof

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

http://www.agatlabs.com

TEL (905)712-5100 FAX (905)712-5122



#### **Exceedance Summary**

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

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.

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



### **Quality Assurance**

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

PROJECT: BIGC-ENV-490C

AGAT WORK ORDER: 21T828695
ATTENTION TO: Rebecca Morrison

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

	3 ,														
				Soi	l Ana	alysis	3								
RPT Date: Nov 18, 2021			Г	UPLICATI	E		REFERE	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SP	IKE
PARAMETER	Batch	Sample	M		Method Blank	Measured	Acceptable Limits		Recovery	Acce Lim		Recovery		eptable mits	
. ,		ld					Value	Lower Upper		, ,	Lower	Upper		Lower	Uppe
O. Reg. 153(511) - Metals (Inclu	ding Hydride	s) (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 Applin Duplicate NA: results are under 5X		will not be	calculated	l.											
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.

CHEMIST OF CHEMIST OF



### **Quality Assurance**

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

PROJECT: BIGC-ENV-490C SAMPLING SITE:581-587 Argus Road, Oakville AGAT WORK ORDER: 21T828695
ATTENTION TO: Rebecca Morrison

SAMPLED BY:MV

SAME ELIG OF E.SOT SOT AT GUS TOUR, OUR VIIIC																							
Trace Organics Analysis																							
RPT Date: Nov 18, 2021			С	UPLICAT	E		REFERE	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE								
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Limita						Limito		Recovery	1 1 1 1 1	ptable	Recovery		ptable
		lu lu					value	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).



## **Method Summary**

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

PROJECT: BIGC-ENV-490C

AGAT WORK ORDER: 21T828695 ATTENTION TO: Rebecca Morrison

SAMPLED BY:MV

SAMPLING SITE:581-587 Argus Road, Oakville

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis		I	
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 EP 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

## **Method Summary**

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

PROJECT: BIGC-ENV-490C

AGAT WORK ORDER: 21T828695 ATTENTION TO: Rebecca Morrison

SAMPLED BY:MV

SAMPLING SITE:581-587 Argus Road, Oakville

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE						
Trace Organics Analysis	710711 0.0.1	ETTERATIONE NET ENERGE	AUVELLIONE LEGININGSE						
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						



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905-712-5100 Fax: 905.712-5122 webearth.agattabs.com

Laboratory Use	Only		
Work Order #:	T82	8695	
Cooler Quantity:	2ler	nu	
Arrival Temperatures:	48	1521	5.5
Custody Seal Intact:	□Yes	DNO.	U 6 □N/A

Chain of Custody Record If this is a Drinking Water sample, please				se use Drin	use Drinking Water Chain of Custody Form (potable water consumed by humans)								Arri	val Ter	mpera	tures:	: (	28	1 1 6	52	16	3-5		
Report Inform	nation: BIG Consulting Inc				Reg	gulatory Requestie to a check all applicable boxe	uirements:								Cus	stody S tes:	ieal In			Yes		□No		□N/A
Contact:	Rebecca Morrison					egulation 153/04	Excess Soils R	406	Sev					I I							=			
Address:	12-5500 Tonken Road, Mis	ssissauga, Ontai	rio, L4W2Z4			2	Table		□S	anitar	у 🔲 :	Storm		Turnaround Tim					ne (T	e (TAT) Required:				
						Ind/Com	Table	9	-	Reg	eglon			Regular TAT					<b>V</b>	5 to 7	Busin	ess Day	/S	
Phone:	6476748087	Fax:				]Res/Park ]Agriculture	Regulation 55	8 [			ter Qua				Rus	h TA	(Rush	Surcha	rges App	oly)				
Reports to be sent to:	rmorrison@brownfieldigi.c	om			- 11	exture (check One)					es (PW	QO)				3	Busine	oce.		2 Bus	iness		Nevt	Business
1. Email:	-				- 1	]Coarse	ССМЕ	1	Oth	er						□ Da		533		Days	111033		Day	Dusiliess
2. Email:	mvaughan@brownfieldigi.c	com				]Fine				Indica	ate One		_	- []		01	R Date	Requ	uired (	(Rush S	urcharg	ges Ma	/ Apply!	p:
Project Inform	undian.				Is	s this submissi	on for a	Re	port	Gui	delin	on e												
_	BIGC-ENV-490A					cord of Site Co					of Ana									orior not				
Project: Site Location:	581-587 Argus Road, Oaky	rille				Yes [	No		Yes			No	)							weekend				
Sampled By:	MV					100	1110		100				-				me Da	y' an	alysis,	, please	) conta	ct you	AGAT	СРМ
AGAT Quote #:	***	PO:						20	0.	Reg	153				0. Reg 558		eg 406	5						(N)
AdAt Quote #.	Please note: If quotation number is		be billed full price for	analysis	Sar B	nple Matrix Le Biota	egend	CrvI, DOC			8				, &	ے	986							(A
Invoice Information Company: Contact: Address: Email:	nation:	E	Bill To Same: Ye	S   NO	GW O P S SD SW	Ground Water Oil Paint Soil Sediment Surface Water		Field Filtered - Metals, Hg.	& Inorganics	Metals - □ CrVI, □ Hg, ⊡ HWSB	BTEX, F1-F4 PHCs Analyze F4G if required □ Yes				Landfill Disposal Characterization TCLP: TCLP: □ M& □ VOCs □ ABNs □ Btan □ PCBs	Soils SPLP Rainwa	aracteriza	ph, ICPMS Metals, BTEX, F1-F4	C/SAR					Potenbally Hazardous or High Concentration (Y/N)
Samp	le Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix		nments/ Instructions	Y/N	Metals	Metals	BTEX, F1-F4 I Analyze F4G	PAHs	PCBs	Voc	Landfill Disp TO.P. DM&	Excess	Excess	PH, IC	Salt					Potentia
BH/MW1-SS2		21-10-8	9:00 AN	2	S					V		V												
BH/MW2-SS1		21-10-7	8:20 AN		S			77.17	((=0	V		$\square$												
BH/MW3-SS1		21-10-8		2	S					V		7					1							
BH/MW4-SS1		21-10-8		2	S					Ø		V												
BH/MW5-SS1		21-10-6	8:30 AN		S					7	T.													
D11/101003-331		P1 10 0	AA PN								11-1	F					1				75	- 11		ATT TO
		-	AN PA		-											1								
			AN PN					1 19														-		
								+	-						-	-	-	+		+				
			AN PN									_				-		-	-	-			$\vdash$	-0-11
			AA PA						7							-								
			AN PN	1		1									-				100		11			
Samples Relinquished By (Pri Matt Vaughan	int Narive and Sign)		21-T1-10	Time	6:50	Jelel .	h Var	4	2	_			2	IN	V	io d	4:4	3/2						
Samples Relenquished By (Pe	int National Signi	2	Dittel	Time		Samples Received By	Print Name Arth Sign)						Date		- 1	Tim				Pε	age	0	i	_
Samulas Relinguished by (Pri	int Name and Signi		Era++	Time		Samples Received By	(Print Name and Sign)						Date			Tim	e		N					
												_	1				_							

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

Core seak a starth fi 2011



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
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AGAT Laboratories (V1)

Page 1 of 5

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Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



SAMPLING SITE:581 Argus Road, Oakville, ON

Certificate of Analysis

AGAT WORK ORDER: 22T872058

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

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

O Dog 152/511\ DA Ha (\Mater)

				<u> </u>	ı. 153(511) - PA	(17413.)	
DATE RECEIVED: 2022-03-10							DATE REPORTED: 2022-03-1
	;	SAMPLE DES	CRIPTION:	BH/MW4	Dup40		
		SAM	PLE 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		
ndeno(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		
-and 1-methyl Naphthalene	μg/L	1800	0.20	<0.20	<0.20		
Sediment				NO	NO		
Surrogate	Unit	Acceptab	le Limits				
Naphthalene-d8	%	50-		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 *)





#### **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

SAMPLING SITE:581 Argus Road, Oakville, ON

AGAT WORK ORDER: 22T872058
ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

OAM ENO OTE:501 Algus I	touu, oun	vino, Ort						,, (1VII I		1.10					
			Trac	e Or	gani	cs Ar	nalysi	is							
RPT Date: Mar 15, 2022			С	UPLICAT	E		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable nits	Recovery	Lin	ptable nits	Recovery	منا ا	ptable nits
		la	·	·			value	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).

Jinkal Jata

## Method Summary

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T872058 ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

SAMPLING SITE:581 Argus Road, Oakville, ON

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			



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Chain of Custod	ly Record
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Report Inform Company:	<b>nation:</b> B.I.G. Consulting				R	Regulatory Requ	irements:			] Regu	ulation	558			Cust	ody Sea	I Intact	gea	yes 70	e	□No		□N/A
Contact:	Rebecca Morrison				_   [/	Regulation 153/04	Excess Soi	s R406		Sewe □Sar		Stor	m	I	Turn	arou	nd Ti	me (T	AT) R	egui	red:		
Address:	12-5500 Tomken Road					Table	Table	te One		4						ılar T/			/				
	Mississauga, ON L4W	2Z4			-1	□Ind/Com □Res/Park	Sample from			ССМЕ	Region			- 11				-		Busine	ess Days	<b>;</b>	
Phone:	905-782-0315	Fax:			-11	Agriculture	☐Yes	AT LO:			Water (			- 11	Rusr	IAI	Rush Surc	harges Ap	ply)				
Reports to be sent to:  1. Email:	rmorrison@brownfiel	digi.com			Sc	Oil Texture (Check One)	□No			Object Other	ctives (F	WQO)				3 Bu Days	siness		2 Bus Days	iness		Next B Day	Business
2. Email:						Fine	Stockpile	In-situ	-	- 1	ndicate Oi	18				OR	Date Re	quired	(Rush S	urcharg	ges May	Apply):	
Project Information Project: Site Location:	mation: BIGC-ENV-490D 581 Argus Road, Oak	ville, ON				Is this submission Record of Site Co			Cert		auide e of A		sls			*TAT	is exclu	sive of	weeken	ds and	n for rus	ry holida	
Sampled By:	TD					H			-	. Reg 1		_	1	s	-	r 'Samo	bay' a	inalysis	, piease	conta	ct your	AGAIC	
AGAT Quote #:		PO:PO:	the billed full price		В	Sample Matrix Le Biota Ground Water	gend	, crVI, DOC	EC/SAR		oN 🗆			aracterization TCLP: □ABNs □B(a)P □PCBs	each	ackage 4							ntration (Y/N
Company: Contact: Address: Email:	Brownfield Investment Came Dougher Same as Tell LDougherty@brownf	part info	s@brownfield	ligi.com		Paint		Field Filtered - Metals, Hg.	& Inorganics, inc.	9	. F1-F4 PHCs ze F4G if required □ Yes			Disposal Cha	Soils SPLP R	Excess Soils Characterization Package ph. ICPMS Metals, BTEX, F1-F4	Salt - EC/SAR						Potentially Hazardous or High Concentration (Y/N)
Samp	ole Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comme Special Inst		Y/N	Metals	Meta	BTEX, F1 Analyze F	PAHS	000	Landfill TCLP:	Exces	Exce.	Salt-						
BH/NW 4		marlula	9:00	2	GW												$\sqcup$				$\perp$		N
D4140			AN PN	2	Gu																		N
1			AN PN																				
			AN PN			V																	
			AN PN	1									3										
			AN PN	1																			
			AN PN	1																			
			AN PN	1									W.										
V -			AN PN																				
			AN PN																				
			AA															1					
Samples Relinquished By (P	Print Name and Sign) Def model (Gh	relf	Date McC		7:290	amples Pacelved By	(Print Name and Sign)	Rill	15	4	ten	To the	Da	te		Yime				1221	AR I	011	2:380
CIVICINA I	valvino an	10000	1.100	/- 1		1010	vy w	1 000	400			- 16	Da	to.		Time		-			1		
Samples Relinquished By (P	Print Name and Sign)		Date	T	ime (	Samples Recovered Rv	(Print Name and Sign)						Ua	ue .		1			P	age	of	_	_



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

<u>*Notes</u>
VERSION 3:V3 issued 2021-02-17. Supersedes version 2 reported 2021-02-12.

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- The test results reported herewith relate only to the samples as received by the laboratory.
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Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



SAMPLING SITE: 227-212 Cross

Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

SAMPLED BY:TVM/AB

ATTENTION TO: Fernando Contento

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

			0.110	9. 100(011)	17110 (TTA	.0.,		
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	
ndeno(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	
Terpnenyi-a14	%	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:



5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

http://www.agatlabs.com

TEL (905)712-5100 FAX (905)712-5122



% Recovery

60-140

Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

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.

SAMPLING SITE:227-212 Cross

Terphenyl

ATTENTION TO: Fernando Contento

SAMPLED BY:TVM/AB

		(	D. Reg. 153(5	11) - PHCs F	1 - F4 (-BTEX) (Water)
DATE RECEIVED: 2021-02-03					DATE REPORTED: 2021-02-17
	SA	AMPLE DESCRIPT	ON: BH/MW101	Trip Blank	
		SAMPLE TY	PE: Water	Water	
		DATE SAMPL	ED: 2021-02-03	2021-02-03	
Parameter	Unit	G/S RD	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 10	<100	<100	
F3 (C16 to C34)	μg/L	500 10	<100	<100	
F4 (C34 to C50)	μg/L	500 10	<100	<100	
Gravimetric Heavy Hydrocarbons	μg/L	50	) NA	NA	
Sediment			Trace	No	
Surrogate	Unit	Acceptable Lim	ts		
Toluene-d8	% Recovery	50-140	99	91	





#### Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

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.

SAMPLING SITE: 227-212 Cross

ATTENTION TO: Fernando Contento

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 *)



SAMPLING SITE: 227-212 Cross

### Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO

http://www.agatlabs.com

CANADA L4Z 1Y2

TEL (905)712-5100 FAX (905)712-5122

ATTENTION TO: Fernando Contento

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 2045871 2045899 2045928 Parameter Unit G/S **RDL** 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) <100 μg/L 150 100 <100 <100 <100 F2 (C10 to C16) minus Naphthalene μg/L 100 <100 <100 F3 (C16 to C34) 500 100 <100 <100 <100 μg/L F3 (C16 to C34) minus PAHs µg/L 100 <100 <100 <100 F4 (C34 to C50) μg/L 500 100 <100 <100 <100

NA

No

97

79

Comments:

Sediment

Toluene-d8

Terphenyl

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

NA

No

106

113

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.

Gravimetric Heavy Hydrocarbons

Surrogate

2045871-2045928 The C6-C10 fraction is calculated using toluene response factor.

μg/L

Unit

% Recovery

% Recovery

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

The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.

NA

No

93

77

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.

500

Acceptable Limits

50-140

60-140

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 *)





Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLED BY:TVM/AB

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.

SAMPLING SITE: 227-212 Cross

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

DATE RECEIVED: 2021-02-03								DATE REPORTED: 2021-02-17
		SAMPLE DESCRIPTION	ON: BH/MW101	BH/MW104	BH/MW112	DUP11201	Trip Blank	
		SAMPLE TY	PE: Water	Water	Water	Water	Water	
		DATE SAMPL	ED: 2021-02-03	2021-02-03	2021-02-03	2021-02-03	2021-02-03	
Parameter	Unit	G/S RDI	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	
rans- 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	
,1,1,2-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	
n & p-Xylene	μg/L	0.20	<0.20	<0.20	<0.20	<0.20	<0.20	





SAMPLING SITE: 227-212 Cross

Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLED BY:TVM/AB

O Pog 153/511) - \/OCc (\Mater)

				O. Reg	. 153(511) -	vocs (wat	er)		
DATE RECEIVED: 2021-02-03									DATE REPORTED: 2021-02-17
	S	SAMPLE DES	CRIPTION:	BH/MW101	BH/MW104	BH/MW112	DUP11201	Trip Blank	
		SAMI	PLE TYPE:	Water	Water	Water	Water	Water	
		DATES	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	Acceptab	le Limits						
Toluene-d8	% Recovery	50-1	140	101	125	103	102	117	
4-Bromofluorobenzene	% Recovery	50-1	140	87	88	84	88	88	

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 Comments: 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:

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

http://www.agatlabs.com

TEL (905)712-5100 FAX (905)712-5122



SAMPLING SITE: 227-212 Cross

### Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLED BY:TVM/AB

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

DATE RECEIVED: 2021-02-03								DATE REPORTED: 2021-02-17
		SAMPLE DESC	CRIPTION:	BH/MW101	BH/MW108	BH/MW112	DUP11201	
		SAMF	PLE TYPE:	Water	Water	Water	Water	
		DATE S	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:



5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

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### Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

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TEL (905)712-5100 FAX (905)712-5122

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 *)

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

SAMPLING SITE: 227-212 Cross



Certificate of Analysis

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLED BY:TVM/AB

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

DATE RECEIVED: 2021-02-03						DATE REPORTED: 2021-02-17						
		SAMPLE DESC	CRIPTION:	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 *)

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

SAMPLING SITE: 227-212 Cross

Certified By:

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

http://www.agatlabs.com

TEL (905)712-5100 FAX (905)712-5122



#### **Exceedance Summary**

AGAT WORK ORDER: 21T707091

PROJECT: BIGC-ENV-349B

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.

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



## **Quality Assurance**

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

PROJECT: BIGC-ENV-349B SAMPLING SITE:227-212 Cross AGAT WORK ORDER: 21T707091
ATTENTION TO: Fernando Contento

SAMPLED BY:TVM/AB

			Trac	e Or	gani	cs Ar	alys	is							
RPT Date: Feb 17, 2021	DUPLICATE		E		REFERENCE MATERIAL			METHOD BLANK SPIKE			MAT	TRIX SPIKE			
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured	Acceptable Limits		Recovery		ptable nits	Recovery		ptable nits
		ld	·	·			Value	Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (	-BTEX) (Wa	ter)													
F1 (C6 - C10)	2058819		<25	<25	NA	< 25	99%	60%	140%	92%	60%	140%	101%	60%	140%
F2 (C10 to C16)	2045847 2	2045847	< 100	< 100	NA	< 100	105%	60%	140%	106%	60%	140%	83%	60%	140%
F3 (C16 to C34)	2045847 2	2045847	< 100	< 100	NA	< 100	95%	60%	140%	105%	60%	140%	93%	60%	140%
F4 (C34 to C50)	2045847 2	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		<0.20	<0.20	NA	< 0.20	109%	50%	140%	82%	50%	140%	75%	50%	140%
Bromomethane	2061685		<0.17	<0.17	NA	< 0.17	115%	50%	140%	95%	50%	140%	123%	50%	140%
							114%		140%	89%	50%	140%	82%	50%	140%
Trichlorofluoromethane Acetone	2061685 2061685		<0.40 <1.0	<0.40 <1.0	NA NA	< 0.40 < 1.0	88%		140%	90%	50%	140%	96%	50%	140%
Acetone	2001000		<1.0	<1.0	NA	< 1.0	00%	30%	140%	90%	30%	140%	90%	30%	140 /6
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%		140%	86%	60%	130%	103%	50%	140%
Chloroform	2061685		<0.20	<0.20	NA	< 0.20	76%		140%	88%	60%	130%	107%	50%	140%
1,2-Dichloroethane	2061685		<0.20	<0.20	NA	< 0.20	85%		140%	94%	60%	130%	98%	50%	140%
1,1,1-Trichloroethane	2061685		<0.30	<0.30	NA	< 0.30	96%		140%	85%	60%	130%	86%	50%	140%
Carbon Tetrachloride	2004005		.0.00	.0.00	NIA	. 0. 00	770/	F00/	4.400/	000/	000/	4000/	000/	F00/	140%
	2061685		<0.20	<0.20	NA	< 0.20	77%	50%	140%	89%	60%	130%	82%	50%	
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 Bromodichloromethane	2061685		<0.20 <0.20	<0.20	NA NA	< 0.20	75% 111%	50% 50%	140% 140%	105% 97%	60% 60%	130%	102% 98%	50% 50%	140% 140%
biomodicinoromethane	2061685		<0.20	<0.20	NA	< 0.20	11176	50%	140%	91%	60%	130%	90%	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%		140%	111%		130%	90%		140%
Chlorobenzene	2061685		<0.10	<0.10	NA	< 0.10	83%		140%	98%		130%	91%	50%	140%
Ethylbenzene	2061685		<0.10	<0.10	NA	< 0.10	83%		140%	81%		130%	73%		140%
m & p-Xylene	2061685		<0.20	<0.20	NA	< 0.20	71%		140%	90%		130%	73%		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%		140%	81%		130%	83%		140%
1,1,2,2-Tetrachloroethane	2061685		<0.10	<0.10	NA	< 0.10	98%		140%	100%		130%	102%	50%	
o-Xylene	2061685		<0.10	<0.10	NA	< 0.10	96% 77%		140%	94%		130%	81%		140%
O-Mylerie	2001000		<0.10	<u.10< td=""><td>INA</td><td>&lt; 0.10</td><td>1170</td><td>JU 70</td><td>14070</td><td>J+70</td><td>0070</td><td>13070</td><td>0170</td><td>3070</td><td>14070</td></u.10<>	INA	< 0.10	1170	JU 70	14070	J+70	0070	13070	0170	3070	14070

AGAT QUALITY ASSURANCE REPORT (V3)

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



### **Quality Assurance**

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

PROJECT: BIGC-ENV-349B SAMPLING SITE:227-212 Cross AGAT WORK ORDER: 21T707091
ATTENTION TO: Fernando Contento

SAMPLED BY:TVM/AB

	Т	race	Orga	anics	Ana	lysis	(Cor	ntin	ued	)					
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		ptable nits
			· ·					Lower	Upper	,	Lower	Upper	recovery	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 - F	- -4 (with PAHs ar	nd VOC)	(Water)												
F1 (C6-C10)	2058819		<25	<25	NA	< 25	99%	60%	140%	92%	60%	140%	101%	60%	140%
D. Reg. 153(511) - PAHs (Wate	er)														
Naphthalene	2045871 20	45871	< 0.20	< 0.20	NA	< 0.20	102%	50%	140%	115%	50%	140%	88%	50%	140%
Acenaphthylene	2045871 20	45871	< 0.20	< 0.20	NA	< 0.20	115%	50%	140%	85%	50%	140%	87%	50%	140%
Acenaphthene	2045871 20	45871	< 0.20	< 0.20	NA	< 0.20	85%	50%	140%	74%	50%	140%	74%	50%	140%
Fluorene	2045871 20	45871	< 0.20	< 0.20	NA	< 0.20	74%	50%	140%	71%	50%	140%	71%	50%	140%
Phenanthrene	2045871 20	45871	< 0.10	< 0.10	NA	< 0.10	77%	50%	140%	75%	50%	140%	75%	50%	140%
Anthracene	2045871 20	45871	< 0.10	< 0.10	NA	< 0.10	71%	50%	140%	77%	50%	140%	81%	50%	140%
Fluoranthene	2045871 20	45871	< 0.20	< 0.20	NA	< 0.20	70%	50%	140%	74%	50%	140%	82%	50%	140%
Pyrene	2045871 20	45871	< 0.20	< 0.20	NA	< 0.20	79%	50%	140%	78%	50%	140%	80%	50%	140%
Benzo(a)anthracene	2045871 20	45871	< 0.20	< 0.20	NA	< 0.20	85%	50%	140%	85%	50%	140%	71%	50%	140%
Chrysene	2045871 20	45871	< 0.10	< 0.10	NA	< 0.10	81%	50%	140%	71%	50%	140%	74%	50%	140%
Benzo(b)fluoranthene	2045871 20	45871	< 0.10	< 0.10	NA	< 0.10	115%	50%	140%	70%	50%	140%	77%	50%	140%
Benzo(k)fluoranthene	2045871 20	45871	< 0.10	< 0.10	NA	< 0.10	114%	50%	140%	71%	50%	140%	75%	50%	140%
Benzo(a)pyrene	2045871 20	45871	< 0.01	< 0.01	NA	< 0.01	85%	50%	140%	79%	50%	140%	96%	50%	140%
ndeno(1,2,3-cd)pyrene	2045871 20	45871	< 0.20	< 0.20	NA	< 0.20	80%	50%	140%	85%	50%	140%	85%	50%	140%
Dibenz(a,h)anthracene	2045871 20	)45871	< 0.20	< 0.20	NA	< 0.20	71%	50%	140%	86%	50%	140%	80%	50%	140%
Benzo(g,h,i)perylene	2045871 20	45871	< 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).

Jinkal Jota



## **Quality Assurance**

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

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T707091
ATTENTION TO: Fernando Contento

SAMPLING SITE:227-212 Cross SAMPLED BY:TVM/AB

			Wate	er Ar	nalys	is								
RPT Date: Feb 17, 2021			DUPLICATE			REFERE	NCE MA	TERIAL	METHOD	BLAN	SPIKE	МАТ	RIX SPI	IKE
PARAMETER	Batch Sample	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable nits	Recovery	1 1 1	ptable nits	Recovery	Lir	eptable mits
	l ld	'				value	Lower	Upper		Lower	Upper		Lower	Uppe
O. Reg. 153(511) - Metals & In-	organics (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%						
рН	2050022	7.70	7.73	0.4%	NA	101%	90%	110%						
Comments: NA signifies Not App Duplicate NA: results are under 5		e calculated	d.											
O. Reg. 153(511) - Metals & In-	organics (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%	, .	00,0	070		. 0 , 0	
pH	2045929 2045929	7.83	7.87	0.5%	NA	101%		110%						

Comments: NA signifies Not Applicable.

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



# Method Summary

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

AGAT WORK ORDER: 21T707091 PROJECT: BIGC-ENV-349B ATTENTION TO: Fernando Contento SAMPLED BY:TVM/AB

SAMPLING SITE:227-212 Cross

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		III 14 EDA 0111 010 E00 E	
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

# Method Summary

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

AGAT WORK ORDER: 21T707091 PROJECT: BIGC-ENV-349B ATTENTION TO: Fernando Contento SAMPLED BY:TVM/AB

SAMPLING SITE: 227-212 Cross

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

# **Method Summary**

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

PROJECT: BIGC-ENV-349B

SAMPLING SITE: 227-212 Cross

AGAT WORK ORDER: 21T707091
ATTENTION TO: Fernando Contento

SAMPLED BY:TVM/AB

	SAMPLED BY:TV	/IVI/AB
AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
VOL-91-5001	modified from EPA 5030B & EPA 8260D	(P&T)GC/MS
	VOL-91-5001	VOL-91-5001         modified from EPA 5030B & EPA 8260D           VOL-91-5001         modified from EPA 5030B & EPA 8260D

# Method Summary

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

PROJECT: BIGC-ENV-349B SAMPLING SITE:227-212 Cross AGAT WORK ORDER: 21T707091 ATTENTION TO: Fernando Contento

SAMPLED BY:TVM/AB

	1					
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	² 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			
рН	INOR-93-6000	modified from SM 4500-H+ B	PC TITRATE			



5835 Coopers Avenue

**Laboratory Use Only** 

Cooler Quantity:

Work Order #: 217707091

Mississauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 webearth_agatlabs_com

Chain	of	Custody	Record

<b>Chain of Custody Recor</b>	d If this is a	Drinking Water	sample, plea	se use Drin	king Water Chain o	t Custody Form (potab	ole water	солѕип	ned by h	numans			А	rrival Tei	mperatu	ires.	8	5	12	3.1	1	7.7	
Report Information: Company: Contact: C	ing Inc			(Please	gulatory Requ e check all applicable boxes	s)								ustody S lotes:	Seal Inta	ct: FRE	₽m E	ės 7	Ct	DNO	)	□N/A	1
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Phone:  Reports to be sent to:  1. Email:  647 -966 - 686  FCon Place Discourse				Soil T	Thes/Park  Agriculture  exture (Check One)  Coarse	Regulation 558			ov. Wat jective	ter Qua				ısh TA	(Rush Sui	rcharges	<b>А</b> рріу)	Busi					ss
2. Email:	<u> </u>				Fine			<u></u>	Indica	te One		_			iys <b>R</b> Date I		_	Days Jsh Su	urchar				
Project Information: Project: 211-217 Cross Site Location:	5 Bloc	EUV-3	1913	Re	s this submission cord of Site Co		Ce	eport rtifica	ate o	f Ana				_	Please T is excl	provid Jusive o	le prio	r notif ekend:	ficatio 's and	on for r	rush T	AT olidays	
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Invoice Information: Company: Contact: Address: Lmail:  Please note: If quotation number  Solo Cong of A  Lane Vougner  Long Tomber  Loughest  Loughest  Loughest	is not provided, client will	W.T. O V-		В	nple Matrix Leg Biota Ground Water Oil Paint Soil Sediment Surface Water	gend	Field Filtered - Metals, Hg, CrVI, DOC	s & Inorganics	s - ⊐ CrVI, □ Hg, □ HWSB	BTEX, F1-F4 PHCs Analyze F4G if required □ Yes □ No		CBs □ Aroclor	Landfill Disposa: Characterization TCLP:	TCP: UM&I UVOX UABNS URa)PUPCBS Excess Soils SPLP Rainwater Leach SPLP: UMetals UVOS USVOCS	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	EC/SAR	5					Potentially Hazardous or High Concentration (Y/N)	ally nazaraous or men concernance (1)
Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix		ments/ nstructions	Y/N	Metais	Metals -	BTEX, Analy	PAHs	Total PCBs	Landfi	Exces SPLP:	Exces pH, IC	Salt -	2					Potenti	7000
BH/MW 101	Feb 3, 2021	AM PM	1號	(bh			Y	V		V		~											
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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: 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	

#### 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
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  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
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  contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories (V1)

Page 1 of 16

Member of: Association of Professional Engineers and Geoscientists of Alberta (APEGA)

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

## Certificate of Analysis

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLED BY:

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

SAMPLING SITE:

			Ο.	Reg. 153(5	511) - Metal:	s & Inorgan	ics (Soil)		
DATE RECEIVED: 2021-01-18									DATE REPORTED: 2021-01-25
		SAMPLE DESC	CRIPTION:	BH101-SS1	BH102-SS1	BH103-SS1	BH104-SS1	BH105-SS1	
		SAM	PLE TYPE:	Soil	Soil	Soil	Soil	Soil	
		DATE S	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	
Jranium	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	





AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

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

5835 COOPERS AVENUE

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

SAMPLING SITE:

ATTENTION TO: Fernando Contento

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 *)



AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

http://www.agatlabs.com

TEL (905)712-5100 FAX (905)712-5122

ATTENTION TO: Fernando Contento

SAMPLED BY:

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

SAMPLING SITE:

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

DATE RECEIVED: 2021-01-18									DATE REPORTED: 2021-01-25
		SAMPLE DESCRIP	TION:	BH101-SS1	BH102-SS1	BH103-SS1	BH104-SS1	BH105-SS1	
		SAMPLE T	TYPE:	Soil	Soil	Soil	Soil	Soil	
		DATE SAMI	PLED:	2021-01-13	2021-01-13	2021-01-13	2021-01-13	2021-01-14	
				09:30	11:00	12:30	14:00	10:00	
Parameter	Unit		RDL	1966584	1966586	1966588	1966589	1966590	
Naphthalene	µg/g	0.6 0	0.05	<0.05	< 0.05	< 0.05	< 0.05	<0.05	
Acenaphthylene	µg/g	0.15 0	0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Acenaphthene	µg/g	7.9 0	0.05	<0.05	< 0.05	< 0.05	< 0.05	<0.05	
Fluorene	μg/g	62 0	0.05	< 0.05	<0.05	<0.05	<0.05	< 0.05	
Phenanthrene	μg/g	6.2 0	0.05	< 0.05	< 0.05	< 0.05	<0.05	< 0.05	
Anthracene	μg/g	0.67 0	0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Fluoranthene	μg/g	0.69 0	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Pyrene	μg/g	78 0	0.05	< 0.05	< 0.05	< 0.05	<0.05	< 0.05	
Benz(a)anthracene	μg/g	0.5 0	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Chrysene	μg/g	7 0	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Benzo(b)fluoranthene	μg/g	0.78 0	0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	
Benzo(k)fluoranthene	μg/g	0.78 0	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Benzo(a)pyrene	μg/g	0.3 0	0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	
ndeno(1,2,3-cd)pyrene	μg/g	0.38 0	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Dibenz(a,h)anthracene	μg/g	0.1 0	0.05	< 0.05	<0.05	< 0.05	<0.05	< 0.05	
Benzo(g,h,i)perylene	μg/g	6.6 0	0.05	< 0.05	< 0.05	< 0.05	<0.05	< 0.05	
1 and 2 Methlynaphthalene	μg/g	0.99 0	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 Lii	mits						
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:

NPoprukolof



AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

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

5835 COOPERS AVENUE

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

SAMPLED BY:

ATTENTION TO: Fernando Contento

SAMPLING SITE: O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Soil)

DATE RECEIVED: 2021-01-18							DATE REPORTED: 2021-01-25
		SAMPLE DESC	RIPTION:	BH101-SS2	BH102-SS2	BH105-SS3	
		SAMP	LE TYPE:	Soil	Soil	Soil	
		DATE S	AMPLED:	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	%	60-14	10	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

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 *)





AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

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.

SAMPLING SITE:

ATTENTION TO: Fernando Contento

SAMPLED BY:

				O. Re	g. 153(511)	- VOCs (Soil)	
DATE RECEIVED: 2021-01-18							DATE REPORTED: 2021-01-25
		SAMPLE DESCRI		BH101-SS2	BH102-SS2	BH105-SS3	
		SAMPLE		Soil	Soil	Soil	
		DATE SAM	MPLED:	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		0.05	< 0.05	<0.05	< 0.05	
Ethylbenzene	ug/g	1.1	0.05	< 0.05	<0.05	< 0.05	





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

SAMPLING SITE:

### Certificate of Analysis

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLED BY:

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

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

				O. ING	g. 133(311)	- 1003 (301	1)
DATE RECEIVED: 2021-01-18							DATE REPORTED: 2021-01-25
	S	SAMPLE DES	CRIPTION:	BH101-SS2	BH102-SS2	BH105-SS3	
		SAM	PLE TYPE:	Soil	Soil	Soil	
		DATE	DATE SAMPLED:		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	Acceptab	le 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 *)





#### **Exceedance Summary**

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

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.

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



### **Quality Assurance**

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

PROJECT: BIGC-ENV-349B

SAMPLING SITE:

AGAT WORK ORDER: 21T700748

ATTENTION TO: Fernando Contento

SAMPLED BY:

			Soi	l Ana	alysis	3								
RPT Date: Jan 25, 2021			DUPLICATI			REFEREN	NCE MA	TERIAL	METHOD	BLAN	SPIKE	MAT	RIX SP	IKE
PARAMETER	Batch Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		eptable mits	Recovery	Lir	ptable nits	Recovery		eptable mits
	Batch Id	''	'			Value	Lower	Upper	]	Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inor	rganics (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.





## **Quality Assurance**

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

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T700748

ATTENTION TO: Fernando Contento

SAMPLING SITE: SAMPLED BY:

			Trac	e Or	ganio	cs Ar	alys	is							
RPT Date: Jan 25, 2021			С	UPLICATI	E		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		ptable nits	Recovery		ptable nits	Recovery		ptable
TANAMETER	Buton	ld	Бар и г	Bup #2			Value	Lower	Upper		Lower	Upper	rtooovery	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		<0.05	<0.05	NA	< 0.05	111%	50%	140%	81%	50%	140%	89%	50%	140%
Fluorene	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) (Sc	oil)													
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		< 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%		140%	93%		130%	82%	50%	140%
Methyl tert-butyl Ether	1966591		< 0.05	<0.05	NA	< 0.05	78%		140%	80%		130%	76%		140%
1,1-Dichloroethane	1966591		<0.02	<0.02	NA	< 0.02	96%		140%	90%		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		<0.02	<0.02	NA	< 0.02	86%		140%	70%		130%	78%	50%	140%
Chloroform	1966591		<0.04	<0.04	NA	< 0.02	88%		140%	73%		130%	106%		140%
1,2-Dichloroethane	1966591		<0.03	<0.03	NA	< 0.03	92%		140%	92%		130%	84%		140%
1,1,1-Trichloroethane	1966591		<0.05	<0.05	NA	< 0.05	80%		140%	102%		130%	73%		140%
Carbon Tetrachloride	1966591		<0.05	<0.05	NA	< 0.05	72%	<b>500</b> /	140%	79%	000/	130%	83%	50%	

AGAT QUALITY ASSURANCE REPORT (V1)

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



#### **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	Orga	anics	Ana	lysis	(Cor	ntin	ued	)					
RPT Date: Jan 25, 2021			С	UPLICAT	E		REFERENCE MATE			METHOD	BLANK	SPIKE	MATRIX SPIKE		
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable	Recovery	Acceptable Limits		Recovery		ptable
		lu lu					Value	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).



# **Method Summary**

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

PROJECT: BIGC-ENV-349B

SAMPLING SITE:

AGAT WORK ORDER: 21T700748
ATTENTION TO: Fernando Contento

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

# Method Summary

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

PROJECT: BIGC-ENV-349B

SAMPLING SITE:

AGAT WORK ORDER: 21T700748
ATTENTION TO: Fernando Contento

SAMPLED BY:

OAWII EIIVO OITE.		O/ ((())) = E = D = 1 .	
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

# Method Summary

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

PROJECT: BIGC-ENV-349B

SAMPLING SITE:

AGAT WORK ORDER: 21T700748
ATTENTION TO: Fernando Contento

SAMPLED BY:

OAIMI EINO OITE.		O/ (WII ELD D1.	
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

# Method Summary

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

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T700748
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



5835 Coopers Avenue

Mississauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 **Laboratory Use Only** 

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Invoice Information:  Company: Contact: Addroes: Email:  Love Toughand	ing Trac hertyl Ld. Ogit 1 D brown field	Missis	es No D	GW O P S SD SW	Ground Water Oil Paint Soil Sediment Surface Water		Field Filtered - Metals, Hg, CrVI, DOC	s & Inorganics	Metals - □ CrVI, □ Hg, □ HWSB	F1-F4 PHCs te F4G if required □ Yes □		L Alociol	Landfill Disposal Characterization TCLP:	Soils SPLP	Soils Characteriza MS Metals, BTEX,	EC/S	100				ally Hazardous or High Concentration
Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix		ments/ Instructions	Y/N	Metals	Metal	BIEX, F1 Analyze I	Total DCRe	VOC	Landfi		Excess pH, ICP						Potent
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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: 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	

#### 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
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  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 (V1)

Page 1 of 19

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AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLED BY:

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.

SAMPLING SITE:

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

			Ο.	iteg. 155(	Jii) - Metai	s & illulyali	163 (3011)				
DATE RECEIVED: 2021-01-26								[	DATE REPORTE	ED: 2021-02-02	
			CRIPTION: PLE TYPE: SAMPLED:	BH106-SS2 Soil 2021-01-20 08:45	BH107-SS1 Soil 2021-01-20 10:10	BH108-SS1 Soil 2021-01-20 11:45	BH109-SS1 Soil 2021-01-21 13:30	BH110-SS1 Soil 2021-01-21 09:15	BH111-SS1 Soil 2021-01-21 11:00	BH112-SS1 Soil 2021-01-21 13:00	BH113-SS1 Soil 2021-01-21 15:00
Parameter	Unit	G/S	RDL	2011445	2011446	2011447	2011448	2011449	2011451	2011452	2011454
Antimony	μg/g	7.5	8.0	<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:

Yrus Verastegui



AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLED BY:

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.
SAMPLING SITE:

O Pog 153(511) - Motale & Inorganics (Soil)

DATE RECEIVED: 2021-01-26								DATE REPORTED: 2021-02-02
DATE RECEIVED. 2021 01 20								BATE REFORTED. 2021 02 02
		SAMPLE DESC		BH114-SS1	BH114-SS2	BH115-SS1	BH115-SS2	
		_	PLE TYPE:	Soil	Soil	Soil	Soil	
		DATE S	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	
Γhallium	μg/g	1	0.5	<0.5	<0.5	<0.5	<0.5	
Jranium	μg/g	23	0.50	0.86	0.77	0.80	0.59	
/anadium	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	
oH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	7.66	7.60	7.66	7.71	

Certified By:

Yris Verastegui



AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

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.

SAMPLING SITE:

NIGHT TING ING

SAMPLED BY:

ATTENTION TO: Fernando Contento

SAMPLED

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.

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

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 Verastegui



AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLED BY:

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.

SAMPLING SITE:

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

				O. INC	g. 133(311 <i>)</i>	- 1 Al 13 (30	11 <i>)</i>				
DATE RECEIVED: 2021-01-26								[	DATE REPORT	ED: 2021-02-02	
		SAMPLE DES	CRIPTION:	BH106-SS2	BH107-SS1	BH108-SS1	BH109-SS1	BH110-SS1	BH111-SS1	BH112-SS1	BH113-SS1
		SAMI	PLE TYPE:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE S	SAMPLED:	2021-01-20	2021-01-20	2021-01-20	2021-01-21	2021-01-21	2021-01-21	2021-01-21	2021-01-21
				08:45	10:10	11:45	13:30	09:15	11:00	13:00	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	Acceptab	le Limits								
Naphthalene-d8	%	50-1	140	91	80	77	86	85	81	92	85
Acenaphthene-d10	%	50-1	140	80	82	82	80	79	77	87	79
Chrysene-d12	%	50-1	140	110	98	100	100	119	110	116	110





AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

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.

SAMPLING SITE:

ATTENTION TO: Fernando Contento

SAMPLED BY:

				O. Re	g. 153(511)	- PAHs (So	il)	
DATE RECEIVED: 2021-01-26								DATE REPORTED: 2021-02-02
		SAMPLE DES	CRIPTION:	BH114-SS1	BH114-SS2	BH115-SS1	BH115-SS2	
		SAMI	PLE TYPE:	Soil	Soil	Soil	Soil	
		DATES	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	Acceptab	le Limits					
Naphthalene-d8	%	50-1	140	88	79	96	111	
Acenaphthene-d10	%	50-1	140	83	75	93	85	
Chrysene-d12	%	50-1	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 *)





AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

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

5835 COOPERS AVENUE

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

ATTENTION TO: Fernando Contento

SAMPLED BY:

O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Soil)											
DATE RECEIVED: 2021-01-26								DATE REPORTED: 2021-02-02			
		SAMPLE DESC	RIPTION:	BH106-SS1	BH110-SS2	BH112-SS2	BH113-SS2				
		SAMP	LE TYPE:	Soil	Soil	Soil	Soil				
		DATE S	AMPLED:	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	Acceptabl	e Limits								
Terphenyl	%	60-1	40	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.

SAMPLING SITE:

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

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 *)



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

SAMPLING SITE:

## Certificate of Analysis

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

http://www.agatlabs.com

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

TEL (905)712-5100 FAX (905)712-5122

ATTENTION TO: Fernando Contento

SAMPLED BY:

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

			<u>'</u>	<u> </u>			
							DATE REPORTED: 2021-02-02
	SAMPLE DESC	CRIPTION:	BH106-SS1	BH110-SS2	BH112-SS2	BH113-SS2	
	SAMI	PLE TYPE:	Soil	Soil	Soil	Soil	
	DATE S	SAMPLED:	2021-01-20	2021-01-21	2021-01-21	2021-01-21	
Lloit	C / S	DDI					
ug/g							
ug/g	0.084	0.05					
ug/g	0.75	0.05	< 0.05	< 0.05	< 0.05	<0.05	
ug/g	0.47	0.02	< 0.02	< 0.02	< 0.02	<0.02	
ug/g	16	0.50	< 0.50	< 0.50	< 0.50	< 0.50	
ug/g	1.9	0.02	< 0.02	<0.02	< 0.02	<0.02	
ug/g	0.05	0.04	< 0.04	< 0.04	< 0.04	<0.04	
ug/g	0.05	0.03	< 0.03	< 0.03	< 0.03	<0.03	
ug/g	0.38	0.05	< 0.05	< 0.05	< 0.05	<0.05	
ug/g	0.05	0.05	< 0.05	< 0.05	< 0.05	<0.05	
ug/g	0.21	0.02	<0.02	<0.02	< 0.02	<0.02	
	0.05	0.03	< 0.03	< 0.03	< 0.03	<0.03	
ug/g	0.061	0.03	< 0.03	< 0.03	< 0.03	<0.03	
	1.5	0.05	< 0.05	< 0.05	< 0.05	<0.05	
	1.7	0.50	<0.50	<0.50	<0.50	<0.50	
	0.05	0.04	<0.04	<0.04			
		0.05					
	ug/g ug/g ug/g ug/g ug/g ug/g	SAME DATE S  Unit G/S  µg/g 16  ug/g 0.02  ug/g 0.05  ug/g 4  ug/g 16  ug/g 0.05  ug/g 0.05  ug/g 0.1  ug/g 0.084  ug/g 0.75  ug/g 0.47  ug/g 0.47  ug/g 16  ug/g 0.55  ug/g 0.47  ug/g 1.9  ug/g 0.05  ug/g 0.21  ug/g 0.05  ug/g 0.28  ug/g 0.28  ug/g 0.28  ug/g 0.28  ug/g 0.058  ug/g 0.28	µg/g	SAMPLE DESCRIPTION: SAMPLE TYPE: DATE SAMPLED: DATE SAMPLED: DATE SAMPLED: DATE SAMPLED: DOS SOLUTION: SOLUTION: DATE SAMPLED: DATE SAMPLED: DOS SOLUTION: SOLUTION: DOS S	SAMPLE DESCRIPTION: Soil Soil DATE SAMPLED: 2021-01-20 09:30 Unit G/S RDL 2011444 2011450  µg/g 16 0.05 <0.05 <0.05  µg/g 0.02 0.02 <0.02 <0.02  µg/g 0.05 0.05 <0.05 <0.05  µg/g 0.1 0.50 <0.50 <0.50  µg/g 0.1 0.05 <0.05 <0.05  µg/g 0.84 0.05 <0.05 <0.05  µg/g 0.47 0.02 <0.02 <0.02  µg/g 0.47 0.02  µg/g 0.50 0.50 <0.05  µg/g 0.50 0.50 <0.05  µg/g 0.65 0.05 <0.05  µg/g 0.75 0.05  µg/g 0.75 0.05  µg/g 0.84 0.05 <0.05  µg/g 0.95 0.95 <0.05  µg/g 0.97 0.97 0.97  µg/g	SAMPLE DESCRIPTION: BH106-SS1 Soil Soil Soil DATE SAMPLED: 2021-01-20 2021-01-21 2021-01-21 08:30 09:30 13:15  Unit G/S RDL 2011444 2011450 2011453  µg/g 16 0.05 <0.05 <0.05 <0.05 <0.05 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <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 <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 <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 <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 <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 <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 <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 <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 <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 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<0.05 <0.05 <0.05	SAMPLE TYPE:   Soil   Soil   Soil   Soil   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21





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

SAMPLING SITE:

### Certificate of Analysis

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLED BY:

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

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

				0.110	g. 155(511)	VOO3 (00	'' <i>)</i>	
DATE RECEIVED: 2021-01-26								DATE REPORTED: 2021-02-02
	S	AMPLE DES	CRIPTION:	BH106-SS1	BH110-SS2	BH112-SS2	BH113-SS2	
		SAM	PLE 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	Acceptab	le 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 *)



#### **Exceedance Summary**

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

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.

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



## **Quality Assurance**

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

SAMPLING SITE:

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T703878
ATTENTION TO: Fernando Contento

SAMPLED BY:

Soil Analysis															
RPT Date: Feb 02, 2021			С	UPLICATE	<b>=</b>		REFERE	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER		mple ld	Dup #1	Dup #2	RPD	Method Blank	Measured		eptable mits	Recovery	Lir	eptable mits	Recovery		ptable nits
		ia	·				Value	Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inor	ganics (Soil)														
Antimony	2011458 2011	458	<0.8	<0.8	NA	< 0.8	97%	70%	130%	101%	80%	120%	88%	70%	130%
Arsenic	2011458 2011	458	7	8	13.3%	< 1	109%	70%	130%	99%	80%	120%	104%	70%	130%
Barium	2011458 2011	458	67.5	66.1	2.1%	< 2.0	100%	70%	130%	96%	80%	120%	106%	70%	130%
Beryllium	2011458 2011	458	<0.4	< 0.4	NA	< 0.4	95%	70%	130%	102%	80%	120%	81%	70%	130%
Boron	2011458 2011	458	10	10	NA	< 5	101%	70%	130%	97%	80%	120%	74%	70%	130%
Boron (Hot Water Soluble)	2011458 2011	458	0.54	0.58	7.1%	< 0.10	99%	60%	140%	102%	70%	130%	101%	60%	140%
Cadmium	2011458 2011	458	0.7	<0.5	NA	< 0.5	104%	70%	130%	98%	80%	120%	94%	70%	130%
Chromium	2011458 2011	458	10	10	NA	< 5	97%	70%	130%	98%	80%	120%	100%	70%	130%
Cobalt	2011458 2011	458	5.8	5.8	0.0%	< 0.5	95%	70%	130%	100%	80%	120%	100%	70%	130%
Copper	2011458 2011	458	37.2	36.8	1.1%	< 1.0	90%	70%	130%	105%	80%	120%	99%	70%	130%
Lead	2011458 2011	458	34	37	8.5%	< 1	105%	70%	130%	98%	80%	120%	94%	70%	130%
Molybdenum	2011458 2011	458	1.1	1.2	NA	< 0.5	100%	70%	130%	95%	80%	120%	104%	70%	130%
Nickel	2011458 2011	458	12	11	8.7%	< 1	95%	70%	130%	102%	80%	120%	93%	70%	130%
Selenium	2011458 2011	458	<0.8	<0.8	NA	< 0.8	113%	70%	130%	93%	80%	120%	102%	70%	130%
Silver	2011458 2011	458	<0.5	<0.5	NA	< 0.5	94%	70%	130%	106%	80%	120%	91%	70%	130%
Thallium	2011458 2011	458	<0.5	<0.5	NA	< 0.5	106%	70%	130%	97%	80%	120%	95%	70%	130%
Uranium	2011458 2011	458	0.80	0.85	NA	< 0.50	112%	70%	130%	100%	80%	120%	103%	70%	130%
Vanadium	2011458 2011	458	16.6	16.5	0.6%	< 0.4	94%	70%	130%	94%	80%	120%	106%	70%	130%
Zinc	2011458 2011	458	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 2011	445	<0.040	<0.040	NA	< 0.040	92%	70%	130%	92%	80%	120%	97%	70%	130%
Mercury	2011458 2011		<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 2011	458	0.332	0.358	7.5%	N/A	NA	22,0	,						
pH, 2:1 CaCl2 Extraction	2011445 2011	445	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.





## **Quality Assurance**

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

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T703878
ATTENTION TO: Fernando Contento

SAMPLING SITE: SAMPLED BY:

Dichibrodiffuromerhane   2011403   < 0.05   < 0.05   < 0.05   NA   < 0.05   < 0.05   < 0.05   NA   < 0.05   < 0.05   < 0.05   NA   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 0.05   < 0.05   < 0.05	Trace Organics Analysis															
PARAMETER    Batch   Sample   Dup #1   Dup #1   Dup #1   Park   Park   Mose   Dup #1   Value   Value   Value   Value   Value   Value   Dup #1   Dup #1   Dup #1   Value   Value   Value   Dup #1   Dup #	RPT Date: Feb 02, 2021				UPLICAT	E		REFERE	NCE MA	TERIAL	METHOD	BLANK	( SPIKE	MAT	TRIX SPIKE	
New Part   Depart	PARAMETER	Batch		Dup #1	Dup #2	RPD					Recovery	1 1 1 1 1		Recovery		
Dichibrodiffuromerhane   2011403   < 0.05   < 0.05   < 0.05   NA   < 0.05   < 0.05   < 0.05   NA   < 0.05   < 0.05   < 0.05   NA   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 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   < 0.05   < 0.05   < 0.05			la la	,	·			value		Upper		Lower	Upper		Lower	Upper
Vinyl Chlorided 2011403	O. Reg. 153(511) - VOCs (Soil)															
Bromomehane 2011403	Dichlorodifluoromethane	2011403		< 0.05	< 0.05	NA	< 0.05	76%	50%	140%	86%	50%	140%	71%	50%	140%
Trichlorofluoromethane	Vinyl Chloride	2011403		< 0.02	< 0.02	NA	< 0.02	98%	50%	140%	74%	50%	140%	76%	50%	140%
Acetone 2011403	Bromomethane	2011403		< 0.05	< 0.05	NA	< 0.05	104%	50%	140%	71%	50%	140%	80%	50%	140%
1.1-Dichloroethylene	Trichlorofluoromethane	2011403		< 0.05	< 0.05	NA	< 0.05	98%	50%	140%	83%	50%	140%	73%	50%	140%
Methylene Chioride	Acetone	2011403		<0.50	<0.50	NA	< 0.50	86%	50%	140%	97%	50%	140%	102%	50%	140%
Trans-1,2-Dichloroethylene	1,1-Dichloroethylene	2011403		<0.05	< 0.05	NA	< 0.05	95%	50%	140%	94%	60%	130%	73%	50%	140%
Trans- 1,2-Dichloroethylene	•									140%					50%	140%
Methyl tetr-buyl Ether   2011403	•															140%
1,1-Dichloroethane 2011403	•															
Cis- 1,2-Dichloroethylene	•															
Cis- 1,2-Dichloroethylene	Methyl Ethyl Ketone	2011403		<0.50	<0.50	NΙΛ	< 0.50	05%	50%	1/10%	00%	50%	1/10%	95%	50%	1/10%
Chloroform 2011403	•															
1,2-Dichloroethane 2011403	•															
.1,1,1-Trichloroethane 2011403																
Carbon Tetrachloride 2011403 < 0.05	<i>'</i>															
Benzene 2011403		2011.00		10.00	10.00		1 0.00	0.70	0070	070	0070	0070	.0070	0.70	0070	
1,2-Dichloropropane 2011403	Carbon Tetrachloride	2011403		<0.05	<0.05	NA	< 0.05	72%	50%	140%	74%	60%	130%	73%	50%	140%
Trichloroethylene 2011403	Benzene	2011403		< 0.02	< 0.02	NA	< 0.02	81%	50%	140%	80%	60%	130%	89%	50%	140%
Bromodichloromethane 2011403	1,2-Dichloropropane	2011403		< 0.03	< 0.03	NA	< 0.03	84%	50%	140%	84%	60%	130%	93%	50%	140%
Methyl Isobutyl Ketone 2011403	Trichloroethylene	2011403		< 0.03	< 0.03	NA	< 0.03	81%	50%	140%	77%	60%	130%	80%	50%	140%
1,1,2-Trichloroethane       2011403       <0.04	Bromodichloromethane	2011403		<0.05	<0.05	NA	< 0.05	70%	50%	140%	77%	60%	130%	77%	50%	140%
Toluene 2011403	Methyl Isobutyl Ketone	2011403		<0.50	<0.50	NA	< 0.50	88%	50%	140%	84%	50%	140%	96%	50%	140%
Dibromochloromethane 2011403	1,1,2-Trichloroethane	2011403		< 0.04	< 0.04	NA	< 0.04	89%	50%	140%	84%	60%	130%	100%	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 76% 50% 140% 73% 60% 130% 76% 50% 140% m & p-Xylene 2011403 <0.05 <0.05 NA <0.05 73% 50% 140% 73% 60% 130% 81% 50% 140% Styrene 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 88% 50% 140% 71% 60% 130% 78% 50% 140% 0-Xylene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 71% 60% 130% 78% 50% 140% 0-Xylene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 71% 60% 130% 78% 50% 140% 0-Xylene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 71% 60% 130% 78% 50% 140% 0-Xylene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 88% 60% 130% 78% 50% 140% 0-Xylene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 88% 60% 130% 78% 50% 140% 1,3-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 88% 60% 130% 78% 50% 140% 1,3-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 87% 60% 130% 78% 50% 140% 1,3-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 88% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403	Toluene	2011403		< 0.05	< 0.05	NA	< 0.05	80%	50%	140%	71%	60%	130%	75%	50%	140%
Tetrachloroethylene 2011403	Dibromochloromethane	2011403		< 0.05	< 0.05	NA	< 0.05	81%	50%	140%	74%	60%	130%	79%	50%	140%
1,1,1,2-Tetrachloroethane       2011403       <0.04	Ethylene Dibromide	2011403		<0.04	<0.04	NA	< 0.04	89%	50%	140%	82%	60%	130%	93%	50%	140%
1,1,1,2-Tetrachloroethane       2011403       <0.04	Tetrachloroethylene	2011403		<0.05	<0.05	NA	< 0.05	77%	50%	140%	70%	60%	130%	74%	50%	140%
Chlorobenzene 2011403	•															
Ethylbenzene 2011403																
m & p-Xylene 2011403																
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	m & p-Xylene															
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	. ,															
1,1,2,2-Tetrachloroethane       2011403       <0.05																
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% 1,2-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140%	•															
1,3-Dichlorobenzene       2011403       <0.05																
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%	•															
1,2-Dichlorobenzene 2011403 <0.05 <0.05 NA < 0.05 85% 50% 140% 72% 60% 130% 78% 50% 140%	וויטוע-3,וcnioropenzene	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%
n-Hexane 2011403 <0.05 <0.05 NA < 0.05 113% 50% 140% 103% 60% 130% 74% 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%

AGAT QUALITY ASSURANCE REPORT (V1)

Page 12 of 19



## **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			С	UPLICATI	E		REFERE	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable nits	Recovery	Lie	ptable	Recovery		ptable
		lu		•			value	Lower	Upper	,	Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (-	BTEX) (So	il)													
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 2	2011449	< 0.05	< 0.05	NA	< 0.05	109%	50%	140%	83%	50%	140%	78%	50%	140%
Acenaphthylene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	114%	50%	140%	79%	50%	140%	82%	50%	140%
Acenaphthene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	114%	50%	140%	82%	50%	140%	81%	50%	140%
Fluorene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	99%	50%	140%	81%	50%	140%	75%	50%	140%
Phenanthrene	2011449 2	2011449	<0.05	<0.05	NA	< 0.05	93%	50%	140%	71%	50%	140%	75%	50%	140%
Anthracene	2011449 2	2011449	<0.05	<0.05	NA	< 0.05	111%	50%	140%	81%	50%	140%	99%	50%	140%
Fluoranthene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	105%	50%	140%	82%	50%	140%	93%	50%	140%
Pyrene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	112%	50%	140%	77%	50%	140%	90%	50%	140%
Benz(a)anthracene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	111%	50%	140%	76%	50%	140%	106%	50%	140%
Chrysene	2011449 2	2011449	<0.05	< 0.05	NA	< 0.05	102%	50%	140%	99%	50%	140%	105%	50%	140%
Benzo(b)fluoranthene	2011449 2	2011449	<0.05	<0.05	NA	< 0.05	69%	50%	140%	79%	50%	140%	74%	50%	140%
Benzo(k)fluoranthene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	77%	50%	140%	85%	50%	140%	84%	50%	140%
Benzo(a)pyrene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	60%	50%	140%	76%	50%	140%	77%	50%	140%
Indeno(1,2,3-cd)pyrene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	67%	50%	140%	72%	50%	140%	93%	50%	140%
Dibenz(a,h)anthracene	2011449 2	2011449	<0.05	<0.05	NA	< 0.05	64%	50%	140%	80%	50%	140%	78%	50%	140%
Benzo(g,h,i)perylene	2011449 2	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:

**AGAT** QUALITY ASSURANCE REPORT (V1)

Page 13 of 19

# Method Summary

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

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T703878
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

# Method Summary

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

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T703878
ATTENTION TO: Fernando Contento

SAMPLING SITE: SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE					
	AGAT 5.0.F	LITERATURE REFERENCE	ANALTTICAL TECHNIQUE					
Trace Organics Analysis		modified from EDA 2570 and EDA						
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					

# Method Summary

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

PROJECT: BIGC-ENV-349B

SAMPLING SITE:

AGAT WORK ORDER: 21T703878
ATTENTION TO: Fernando Contento

SAMPLED BY:

	SAMPLED BY.	
AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
VOL-91-5002	modified from EPA 5035C and EPA 8260D	(P&T)GC/MS
	VOL-91-5002	AGAT S.O.P         LITERATURE REFERENCE           VOL-91-5002         modified from EPA 5035C and EPA 8260D           VOL-91-5002         modified from EPA 5035C and EPA 8260D

# **Method Summary**

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

AGAT WORK ORDER: 21T703878
ATTENTION TO: Fernando Contento

SAMPLING SITE:

PROJECT: BIGC-ENV-349B

SAMPLED BY:

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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		



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 webearth.agatlabs.com 
 Laboratory Use Only
 8 78

 Work Order #:
 21 7 7 0 3 3 4 8

Cooler Quantity:

Chain	of	Cust	ody	Rec	ord
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Report Infor						Regulatory Requirements:   No Regulatory Requirement								dy Sea	al Inta	ict:		Yes		□No		□N/A
Company:	B.I.G. Consulting Inc					(Please check all applicable boxes)						11	Notes		-	I	12	ee		1	F	2
Contact:	Fernando Contento					✓ Regulation 153/04 Sewer Use Regulation 558					I'E					_						
Address:	5500 Tomken Road,	Unit 12, Mississaug	a, ON		_	Table Indicate One Sanitar		itary CCME			Turnaround Time (TAT) Required:											
					-	Initial contraction		-				R	egul	ar T	AT.		<b>V</b>	5 to 7	Busine	ss Day	5	
Phone:	6479666894	Fax:			_	☑Res/Park □Storm		[	Prov	. Water Qua	ality	R	ush	TAT (	≀ush Sur	rcharg	arges Apply)					
Reports to be sent to 1. Email:	fcontento@brownfie	eldigi.com				Soil Texture (Check One) Region		Ιc	Obje Othe	ectives (PW0 er	ĮU)			3 Ru	siness	c	_	2 Bus	iness		Next B	icinecc
					-		atc One	1				Ш		Days		5		Days			Day	23111033
2. Email:					-	☐Fine ☐MISA		ļ	_	Indicate One	-			OR	Date R	Requi	red (R	ush Su	urcharg	es May	Apply):	
Project Infor	mation:					Is this submission for a	16-39	Repoi	rt Gul	Ideline o	n											
Project:	BIGC-ENV-349B					Record of Site Condition? Certificate of Analysis													fication			
Site Location:	Cros Avenue		☑ Yes □ No ☑ Yes □ No								*TAT is exclusive of weekends and statutory holidays											
Sampled By:	TVH					*							For	'Same	) Day'	апа	lysis, p	please	contac	ct your	AGAT C	PM
AGAT Quote #:		PO:				Sample Matrix Legend	_	0.	Reg 15	3								LPCBs				(N)
	Please note: If quotation n	umber is not provided, ellent v	vill be billed full price	for analysis.	_	B Biota	C. C.M	100	rides)				т									tion (
Invoice Infor	mation:		Bill To Same:	Yes □ No		GW Ground Water	Fiftered - Metals, Hg,	/drides}	H Hyd		2	HH						□ B(a)P			1	entra
Company:	B.I.G. Consulting In-	c.				O Oil	etals	(excl. Hydr	S (Fig	題	als				П	S		ş			4 1	Conc
Contact:	Laine Dougherty					P Paint	Σ-		Metal	3 🗖	Meta	NO3+NO				☐ Aroclors	Pesticides	□ ABNs			1 1	過
Address:				S Soil SD Sediment	terec	gani	153	1 E	E C			0		JArc	Pest	၂ ၁				us or		
Email:	ldougherty@brownfi	ieldigi.com			_	SW Surface Water	AF B	and Inorganics	Metals D	Scar	Cust		F4			<u>a</u>	rine	NOCs			1 1	zardo
							Fleid	and tals	e Met	ISAR Stals	tion/					] Iot	chlo	M&I Use				F Ha
Sam	ple Identification	Date Sampled	Time Sampled	# of Containers	Sampl Matri		Y/N	Metals and	□ Hydrid	Correction of the Correction o	Regulation/Custom Metals	ONO, ONO, ONO,+ÑO,	PHCs F1 -	ABNS	PAHS	PCBs: ☐ Total	Organochlorine	TCLP: LI M&I				Potentially
BH106-SS1		20 Jan 20	08:30	3	S				100			ē										
BH106-SS2		20 Jan 2021	08:45	2	S			V				100			Ø				13			
BH107-SS1		20 Jan 2021	10:10	2	S			V	18			1	T		Ø	3			67.5	10		
BH108-SS1		20 Jan 2021	11:45	2	S			7						E	Ø							
BH109-SS1		20 Jan 2021	13:30	2	S																	10
BH110-SS1		21 Jan 2021	09:15	2	S		-															0
BH110-SS2		21 Jan 2021	09:30	3	S							[		8							1	
BH111-SS1		21 Jan 2021	11:00	2	S			7							Ø							
BH112-SS1		21 Jan 2021	13:00	2	S	1						$\neg$						+				
BH112-SS2		21 Jan 2021	13:15	3	S			41											-	+	+	-
BH113-SS1		21 Jan 2021	15:00	2	S			7		THE P		-	-					-	10	1.10	N Oc	
	Film Nump and Sign):	-1 Juli 2021	Tuote	1 Trin	ne	Complex Received DV Diget Name and Tides	-	<u> </u>		700	Date	_	1	Time				201	1	I JH	MSH	Fil
PRINCIPLE REPRINCIPLE FOR THE STATE OF THE	San		26/Jan	/2021	14:2	25 NEAC	(-)		4	A	Date			Tante.								
Sai S	LA.					74	-/						_	Time			_		_		_	
	Print Name and Sign):		Date	Tim	ne	Samples Receited By (Print Name and Sien):					Date			Litribi				Pa	ge 1	of	2	

no out though the



5835 Coopers Avenue Micsissauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 webearth,agatlabs,com

O. Reg 153

□Ct □CN FOC □Hg

Laboratory Use	Only		
Work Order #:			
Cooler Quantity: Arrival Temperatures:	Se	e po	1
Custody Seal Intact:	Yes	□No	□N/A

#### **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:** B.I.G. Consulting Inc. Company: Fernando Contento Contact: 5500 Tomken Road, Unit 12, Mississauga, ON Address: 6479666894 Phone: - Fax: _ Reports to be sent to:

1. Email:	fcontento@brownfieldigi.com								
2. Email:	-								
Project Inform	nation:								
Project:	BIGC-ENV-349B								
Site Location:	Cros Avenue								
Sampled By:	TVII								
AGAT Quote #:		_ PO:							
	Please note: If quotation number is not pro	ovided, client will be billed full price for analysis							
Invoice Inform	mation:	Bill To Same: Yes ☐ No ☐							
Company:	B.I.G. Consulting Inc.								
Contact:	Laine Dougherty								

5500 Tomken Road, Unit 12, Mississauga, ON

Is this submission Record of Site Co		Report Guldeline on Certificate of Analysis
□Fine	MISA	Indicate One
Soil Texture (Check One)	Region	Other
☑Res/Park □Agriculture	□Storm	Prov. Water Quality Objectives (PWQO)
Table Indicate One	Sanitary	ССМЕ
Regulation 153/04	Sewer Use	Regulation 558

ed - Metals, Hg, CrVI

**Regulatory Requirements:** 

No Regulatory Requirement

5 to 7 Business Days  2 Business  Next E Days  Day  ush Surcharges May Apply)	usine
2 Business Next E	usine
Days Day	usine
<b>ior notification for rush TAT</b> eekends and statutory holid	ays
96	r notification for rush TAT ekends and statutory holida ease contact your AGAT C

□B(a)P

☐ ABNS

Email: Idougherty@brownf	fieldigi.com				Sediment Surface Water	Field Fitte	and Inorg		OEC OF	0 6	tion/cusit.	9	1 - F4		] Total	chlorine P	M&I □ VOC	Use				Potentially Hazardou
Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix		Y/N	Metafs	☐ All Metals ☐ Hydride Me	ORPS:	Full Metals	Nutrients: TT	Volatiles:	PHCs F	ABNS	PCBs:[	Organo		Sewer				Potential
BH113-SS2	21 Jan 20	15:15	3	S						- 10		V	V						30			
BH114-SS1	21 Jan 2021	16:00	2	S			Ø							G								3
BH114-SS2	21 Jan 2021	16:15	2	S			Ø			1										200	W	
BH115-SS1	22 Jan 2021	09:00	2	S			Ø			- 1		18						19				8/ - 2
BH115-SS2	22 Jan 2021	09:15	2	S			V							Į.								
		2																	8			
																			*21	. Ah	Total Control	2:5

Samples Received By (Print Name and Sign)

**Sample Matrix Legend** 

Ground Water

Sediment

14:25

26/Jan/2021

Biota

N: Det - Hon - 50 Pink Copy - Client | Yellow Copy - AGAT | White Copy- AGAT

THM

Samples Relinquished By (Print Name and Sign):

Address:

of 2

Page 2



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	

#### 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 (V1)

Page 1 of 16

Member of: Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

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.

SAMPLING SITE: Cros Avenue

ATTENTION TO: Fernando Contento

SAMPLING SITE: Cros Aven	ue				SAMPLED BY: I VH
			Ο.	Reg. 153(511	) - Metals & Inorganics (Soil)
DATE RECEIVED: 2021-01-28					DATE REPORTED: 2021-02-05
	S	AMPLE DES	CRIPTION:	DUP011402	
		SAM	PLE 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	

Certified By:



pH Units

5.0-9.0

7.37

pH, 2:1 CaCl2 Extraction



AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

CANADA L4Z 1Y2 TEL (905)712-5100

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

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO

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

SAMPLING SITE: Cros Avenue

2020967

ATTENTION TO: Fernando Contento

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.

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 *)



AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

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.

SAMPLING SITE: Cros Avenue

ATTENTION TO: Fernando Contento

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

				O. Neg.	100(011) - 1 Alia (0011)
DATE RECEIVED: 2021-01-28					DATE REPORTED: 2021-02-05
		SAMPLE DESC	RIPTION:	DUP011402	
		SAMP	LE TYPE:	Soil	
		DATE S	AMPLED:	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	e Limits		
Naphthalene-d8	%	50-14	10	92	
Acenaphthene-d10	%	50-14	10	87	
Chrysene-d12	%	50-14	10	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 *)





AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

http://www.agatlabs.com

TEL (905)712-5100 FAX (905)712-5122

ATTENTION TO: Fernando Contento

SAMPLED BY:TVH

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

SAMPLING SITE: Cros Avenue

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

DATE RECEIVED: 2021-01-28

DATE REPORTED: 2021-02-05

	S	SAMPLE DESC	RIPTION:	DUP011002	
		SAMPL	E TYPE:	Soil	
		DATE SA	MPLED:	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	%	60-14	0	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 *)





AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

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.

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 DESC	RIPTION:	DUP011002	
		SAMP	LE TYPE:	Soil	
		DATE S	AMPLED:	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	





AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

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.

SAMPLING SITE: Cros Avenue

ATTENTION TO: Fernando Contento SAMPLED BY:TVH

SAMPLING SITE.CIOS AVEIN	ue			SAMPLED BY.IVII
			O. Re	g. 153(511) - VOCs (Soil)
DATE RECEIVED: 2021-01-28				DATE REPORTED: 2021-02-05
	S	AMPLE DESCRIPT	TION: DUP011002	
		SAMPLE T	YPE: Soil	
		DATE SAMP	LED: 2021-01-21 09:30	
Parameter	Unit	G/S RI	DL 2020966	
m & p-Xylene	ug/g	0.0	05 <0.05	
Bromoform	ug/g	0.27 0.0	05 <0.05	
Styrene	ug/g	0.7 0.0	05 <0.05	
1,1,2,2-Tetrachloroethane	ug/g	0.05 0.0	05 <0.05	
o-Xylene	ug/g	0.0	05 <0.05	
1,3-Dichlorobenzene	ug/g	4.8 0.0	05 <0.05	
1,4-Dichlorobenzene	ug/g	0.083 0.0	05 <0.05	
1,2-Dichlorobenzene	ug/g	1.2 0.0	05 <0.05	
Xylenes (Total)	ug/g	3.1 0.0	05 <0.05	
1,3-Dichloropropene (Cis + Trans)	μg/g	0.05 0.0	04 <0.04	
n-Hexane	μg/g	2.8 0.0	05 <0.05	
Moisture Content	%	0	.1 12.3	
Surrogate	Unit	Acceptable Lin	nits	
Toluene-d8	% Recovery	50-140	104	
4-Bromofluorobenzene	% Recovery	50-140	85	

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 -Comments:

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 *)





## **Quality Assurance**

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

PROJECT: BIGC-ENV-349B SAMPLING SITE:Cros Avenue AGAT WORK ORDER: 21T705007
ATTENTION TO: Fernando Contento

SAMPLED BY:TVH

5/ titil 21115 5112:5155 / troil								,							
				Soi	l Ana	alysis	3								
RPT Date: Feb 05, 2021			С	UPLICATI	E		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	IKE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		eptable mits	Recovery	Lin	ptable nits	Recovery		eptable mits
		ld					Value	Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inor	ganics (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		8.0	8.0	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.





# **Quality Assurance**

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

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T705007 ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue SAMPLED BY:TVH

			Trac	e Or	gani	cs Ar	nalys	is							
RPT Date: Feb 05, 2021				UPLICAT	E		REFERE	NCE MA	TERIAL	METHOD	BLANK	( SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		ptable nits	Recovery	Lir	eptable mits	Recovery		ptable
		ld	·	·			Value	Lower	Upper		Lower	Upper	ĺ	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%		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%		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		<0.03	<0.03	NA	< 0.03	83%	50%	140%	73 <i>%</i> 78%	60%	130%	82%	50%	140%
1,2-Dichloropropane	2023833		<0.02					50%	140%	82%	60%	130%	86%	50%	140%
• •	2023833		<0.03	< 0.03	NA	< 0.03	85% 74%	50%	140%	02% 71%	60%		81%	50%	140%
Trichloroethylene Bromodichloromethane	2023833		<0.05	<0.03 <0.05	NA NA	< 0.03 < 0.05	74% 75%	50%	140%	71% 76%	60%	130% 130%	78%	50%	140%
Made de la about d'IZata a a			0.50	0.50		0.50	000/	<b>500</b> /	4.4007	0.50/	<b>500</b> /	4.4007	2001	<b>500</b> /	4.400/
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%		140%	85%		130%	73%		140%
1,1,2,2-Tetrachloroethane	2023833		<0.05	< 0.05	NA	< 0.05	88%		140%	108%		130%	104%		140%
o-Xylene	2023833		<0.05	<0.05	NA	< 0.05	77%	50%	140%	75%			80%	50%	
1,3-Dichlorobenzene	2023833		<0.05	<0.05	NA	< 0.05	81%	50%	140%	78%		130%	81%		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		< 0.05	81%	50%	140%	76%	60%		83%	50%	140%
					NA NA										
n-Hexane	2023833		<0.05	<0.05	NA	< 0.05	84%	50%	140%	77%	<b>0</b> U%	130%	117%	50%	140%

AGAT QUALITY ASSURANCE REPORT (V1)

Page 9 of 16

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



## **Quality Assurance**

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

PROJECT: BIGC-ENV-349B SAMPLING SITE:Cros Avenue AGAT WORK ORDER: 21T705007
ATTENTION TO: Fernando Contento

SAMPLED BY:TVH

OAMI EINO OITE.OIOS AVEIR	10							<i>)</i> / (IVII I		1.1 V11					
	Trace Organics Analysis (Continued)														
RPT Date: Feb 05, 2021				UPLICAT	E		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable nits	Recovery		ptable	Recovery		ptable
		lu lu					value	Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (	-BTEX) (So	il)													
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).





#### **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			REFEREN	ICE MAT	ERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Sample Id	Sample Description	Measured	Accep Limi	ite	Recovery	Lin	ptable nits	Recovery	Lin	ptable nits
. ,			Value	Lower		,		Upper	,		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.

# Method Summary

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

PROJECT: BIGC-ENV-349B SAMPLING SITE:Cros Avenue AGAT WORK ORDER: 21T705007 ATTENTION TO: Fernando Contento

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

# Method Summary

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

PROJECT: BIGC-ENV-349B SAMPLING SITE:Cros Avenue AGAT WORK ORDER: 21T705007 ATTENTION TO: Fernando Contento

OAMI LING GITE. GIGS AVCITAGE		OAIMI EED DT.TV	11
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

# **Method Summary**

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

PROJECT: BIGC-ENV-349B SAMPLING SITE:Cros Avenue AGAT WORK ORDER: 21T705007 ATTENTION TO: Fernando Contento

OAIMI EINO OITE.OIOS AVCITAC		OAIMI LLD D1.1VI	•
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

# Method Summary

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

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T705007 ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue		SAMPLED BY:T\	/H
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



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 webeartn_agatlans.com

**Laboratory Use Only** Work Order #: 21T 705007 Cooler Quantity:

Chain	of	Custody	Record
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Discourage of the College College

Chain of C	nain of Custody Record If this is a Drinking Water sample, please					use Drinking Water Chain of Custody Form (potable water consumed by humans)							_ /	Arrival	Temp	eratu	res:		- 5	>	1.6	11	حاره	-	
Report Inform	nation: B.I.G. Consulting Inc.					Regulatory Requir	rements:	□ No	Re	gulato	ry Req	uirer	nent		Custody Seal Intact: Yes No Notes:										
Contact:	Fernando Contento					Regulation 153/04	Sewe	rllco	1	□ _{Re}	gulation 5	558		-	Turnaround Time (TAT) Required:										
Address:	5500 Tomken Road, Uni	it 12, Mississauga	, ON			0.2	ПЗеме	1 036				,50		T	urna	rou	nd 1	lime	e (TA	AT) F	≀equ	red:			
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Phone:	6479666894	Fax:			_	☑Res/Park □Agriculture		Storm			v. Water			R	Rush TAT (Rush Surcharge					y)					
Reports to be sent to:  1, Email:	fcontento@brownfieldi	igi.com			_		Region	ate One	-	Oti	jectives ( ner	-wQO	)		3 Business 2 Business Days Next Business Day										
2. Email:						Fine	MISA		1	-	Indicate C	ne	-		OR Date Required (Rush Surcharges May Apply):										
Project Inform	nation: BIGC-ENV-349B					Is this submission for a Report Guideline on Record of Site Condition? Certificate of Analysis															on for r				
Project: Site Location:	Cros Avenue					☑ Yes □	No	-	171	Yes	П	No		Ш								d statute			
Sampled By:	TVH					<u>□</u> 103 □	110	4	L.	103		1.10		Ш	For	'Sam	e Day	' ana	lysis,	pleas	e cont	act you	r AGAT	CPM	
AGAT Quote #:	Please note: If quotation numb	PO: per is not provided, client w	vill be billed full price	for unalysis.		Sample Matrix Lege B Biota	end	Ig, CrVI		ides) (Sepi	hä			2						□ B(a)P □PCBs					tration (Y/Na
Invoice Inform			Bill To Same:	Yes 🔲 No		GW Ground Water		als, r			N.		NAT	ING +NO.						å	11/63	1 1			опсен
Company:	B.I.G. Consulting Inc.					O Oil P Paint		Meta		ls (	E Se		tals	20 2				ors	8	□ ABNS		4 I		300	High Co
Contact:	Laine Dougherty			-		S Soll		8	Si	3 Me	200		Me I	NO +NO				☐ Aroclors	Pesticides		400	4 1			I
Address:	5500 Tomken Road, Ur		ja, ON	-	-	SD Sediment		Itere	Inorganics	☐ 153 Metals stals ☐ 153 Me	S 20	ᇤ	ston	ع ا						VOCS		A II		18	dous
Email:	ldougherty@brownfield	ligi.com			-1	SW Surface Water		Field Fittered - Metals, Hg,		Is 🗆 19	DEC OF	als Sca	on/Cu	INO.	47			Total	hlorin		9				y Hazar
Sample	e Identification	Date Sampled	Time Sampled	# of Containers	Samp			Y/N	Metals a	☐ All Metals ☐ ☐ Hydride Me	ORPS: C	Fuli Metals Scan	Regulation/Custom Metals	Volatiles: EVOC	PHCs F1 - F4	ABNS	PAHs	PCBs: ☐ Total	Organochlorine	TCLP:   M&I   VOCs	Sewer Use				Potential
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Samples Relinquished By (Pri	notes Relinouished By (Print Name and Sign):  Date Time			Samples Received By (Print Name and Sign): Date					_		Time		-	N°	1	-									



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
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  contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories (V1)

Page 1 of 10

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AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

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.
SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

ATTENTION TO: Rebecca Morrison SAMPLED BY:Timothy Damdar

			Ο.	Reg. 153(511	) - Metals & Inorganics (Soil)
DATE RECEIVED: 2021-07-27					DATE REPORTED: 2021-08-05
	S		CRIPTION: PLE TYPE: SAMPLED:	BH116-AS1 Soil 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	





AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

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. SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

ATTENTION TO: Rebecca Morrison 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.

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.

2787591

Analysis performed at AGAT Toronto (unless marked by *)

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AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

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. SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

ATTENTION TO: Rebecca Morrison SAMPLED BY:Timothy Damdar

				O. Reg. 1	53(511) - PAHs (Soil)
DATE RECEIVED: 2021-07-27					DATE REPORTED: 2021-08-05
	5	SAMPLE DESC	CRIPTION:	BH116-AS1	
		SAME	PLE TYPE:	Soil	
		DATE S	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	Acceptab	e Limits		
Naphthalene-d8	%	50-1	40	78	
Acridine-d9	%	50-1	40	79	
Terphenyl-d14	%	50-1	40	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 *)





## **Quality Assurance**

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

PROJECT: BIGC-ENV-349D SAMPLING SITE:217-227 Cross Avenue, Oakville, ON AGAT WORK ORDER: 21T780215
ATTENTION TO: Rebecca Morrison
SAMPLED BY:Timothy Damdar

				Soi	l Ana	alysis	3								
RPT Date: Aug 05, 2021				UPLICAT	E		REFERE	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		ptable nits	Recovery		ptable nits	Recovery		ptable nits
		ld			=		Value	Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inor	ganics (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.





#### **Quality Assurance**

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

PROJECT: BIGC-ENV-349D

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

AGAT WORK ORDER: 21T780215
ATTENTION TO: Rebecca Morrison
SAMPLED BY:Timothy Damdar

	Trace Organics Analysis														
RPT Date: Aug 05, 2021				UPLICAT	E		REFERE	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable nits	Recovery		ptable nits	Recovery		ptable nits
		la la		·			value	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).

Jinkal Jotal



#### **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			REFEREN	ICE MAT	ΓERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Sample Id	Sample Description	Measured		cceptable		Recovery	Acceptable Limits			
	·		Value	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.

## Method Summary

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

AGAT WORK ORDER: 21T780215

ICP-MS

ICP-MS

ICP-MS

ICP-MS

ICP-MS

ICP-MS

ICP-MS

ICP-MS

SPECTROPHOTOMETER

TECHNICON AUTO ANALYZER

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 modified from EPA 3050B and EPA ICP-MS Antimony MET-93-6103 6020B and ON MOECC modified from EPA 3050B and EPA Arsenic MET-93-6103 ICP-MS 6020B and ON MOECC modified from EPA 3050B and EPA Barium ICP-MS MFT-93-6103 6020B and ON MOECC modified from EPA 3050B and EPA Beryllium MFT-93-6103 ICP-MS 6020B and ON MOECC modified from EPA 3050B and EPA ICP-MS Boron MET-93-6103 6020B and ON MOECC modified from EPA 6010D and MSA Boron (Hot Water Soluble) MET-93-6104 ICP/OES **PART 3, CH 21** modified from EPA 3050B and EPA ICP-MS Cadmium MFT-93-6103 6020B and ON MOECC modified from EPA 3050B and EPA Chromium MET-93-6103 ICP-MS 6020B and ON MOECC modified from EPA 3050B and EPA Cobalt ICP-MS MET-93-6103 6020B and ON MOECC modified from EPA 3050B and EPA ICP-MS Copper MET-93-6103 6020B and ON MOECC modified from EPA 3050B and EPA ICP-MS Lead MFT-93-6103 6020B and ON MOECC

MET-93-6103

MET-93-6103

MET-93-6103

MET-93-6103

MET-93-6103

MET-93-6103

MFT-93-6103

MET 93 -6103

INOR-93-6068

INOR-93-6052

modified from EPA 3050B and EPA

modified from EPA 3060 and EPA

modified from ON MOECC E3015, SM

6020B and ON MOECC

4500-CN-I, G-387

7196

Molybdenum

Nickel

Silver

Thallium

Uranium

Vanadium

Cyanide, Free

Chromium, Hexavalent

Zinc

Selenium

# Method Summary

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

PROJECT: BIGC-ENV-349D

AGAT WORK ORDER: 21T780215
ATTENTION TO: Rebecca Morrison
SAMPLED BY:Timothy Damdar

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

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



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905,712,5100 Fax: 905,712,5122 webearth agatlabs.com

**Laboratory Use Only** Cooler Quantity: Arrival Temperatures: □No □N/A Custody Seal Intact:

#### **Chain of Custody Record** If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans) **Regulatory Requirements:** Report Information: Regulation 558 B.I.G. Consulting Company: Excess Soils R406 Sewer Use Rebecca Morrison Contact: Regulation 153/04 ☐Sanitary ☐Storm **Turnaround Time (TAT) Required:** Table 2 Indicate One ☐ Ind/Com 12-5500 Tomken Road Address: **Regular TAT** Mississauga, ON L4W 2Z4 Region 5 to 7 Business Days CCME Res/Park Sample from APEC? 905-782-0315 Rush TAT (Rush Surcharges Apply) Fax: Prov. Water Quality Phone: Agriculture □Yes Reports to be sent to: Objectives (PWQO) rmorrison@brownfieldigi.com Soil Texture (Check One) 2 Business Next Business □No 3 Business 1. Email: Other Day **✓** Coarse Stockpile In-situ OR Date Required (Rush Surcharges May Apply): 2. Email: Fine Indicate One Is this submission for a Report Guldeline on **Project Information:** Please provide prior notification for rush TAT **Record of Site Condition? Certificate of Analysis** BIGC-ENV-349D *TAT is exclusive of weekends and statutory holidays Project: 217-227 Cross Avenue in Oakville, Ontario П No Yes ☐ No Yes Site Location: For 'Same Day' analysis, please contact your AGAT CPM Timothy Damdar Sampled By: O. Reg 153 Landfill Disposal Characterization TCLP: TCLP: ☐ M&I ☐ VoCs ☐ ABNs ☐ B(a)P ☐ PCBs D00 AGAT Quote #: PO: Sample Matrix Legend Metals - ICPMS, □ CrVI, □ Hg, □ HWSB Please note: If quotation number is not provided, client will be billed full price for analysis. CrVI, Biota Svocs GW Ground Water Β̈́ Invoice Information: Bill To Same: Yes ☑ No □ Oil 0 BIG Consulting Inc. Company: if required $\square$ Paint Laine Dougherty □ vocs Contact: s Soil 12-5500 Tomken Rd, Mississauga, ON L4W 2Z4 Address: SD Sediment LDougherty@brownfieldigi.com; NKepics@brownfieldigi.com Email: Surface Water PCBs Comments/ Date Time # of Sample 200 Sample Identification Containers Matrix Special Instructions Sampled Sampled 5 3:30 2 Ju127/21 AM PM AM PM AM PM AM PM AM AM PM AM PM AM PM July 27/21 Timothy Damdar Page 1

Samples Received By (Print Name and Sign)

Nº:

Samples Relinquished By IPrint Name and Sign



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:

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- 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 (V1)

Page 1 of 6

Member of: Association of Professional Engineers and Geoscientists of Alberta (APEGA)

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



AGAT WORK ORDER: 21T791121

PROJECT: BIGC-ENV-349E

ATTENTION TO: Rebecca Morrison

SAMPLED BY:TVH

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. SAMPLING SITE:217-277 Cross Avenue, Oakville, ON

O. Reg. 153(511) - All Metals (Soil)

				o	100(011) - 1		,	
DATE RECEIVED: 2021-08-20								DATE REPORTED: 2021-08-30
		SAMPLE DES	CRIPTION:	BH201-SS2	BH202-SS2	BH203-SS2	BH204-SS2	
		SAMI	PLE TYPE:	Soil	Soil	Soil	Soil	
		DATES	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	8.0	<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	8.0	<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 *)



## **Quality Assurance**

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

PROJECT: BIGC-ENV-349E SAMPLING SITE:217-277 Cross Avenue, Oakville, ON AGAT WORK ORDER: 21T791121
ATTENTION TO: Rebecca Morrison

SAMPLED BY:TVH

OAINI EINO OITE.EIT ETT C	7,000 7,001100	o, Oakvii	10, 011					, (IVII I		1.1 411					
				Soi	l Ana	alysis	3								
RPT Date: Aug 30, 2021				UPLICATI	Ī		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable nits	Recovery	1 1 1 1 1	ptable nits	Recovery	منا ا	eptable mits
		Iu	-				value	Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - All Metals (S	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 2	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.

mayor Bhelis AMANOTOMELA GHEMIST



#### **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			REFEREN	ICE MAT	ERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPII	KE
PARAMETER	Sample Id	Sample Description	Measured Value	Accep Limi			Acceptable Limits		Recovery	Acceptable Limits	
				Lower		7		Upper	7		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.

# **Method Summary**

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

PROJECT: BIGC-ENV-349E

AGAT WORK ORDER: 21T791121
ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-277 Cross Avenue, Oakville, ON

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			



LUBIK

5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 webearth.agatlabs.com **Laboratory Use Only** 

Cooler Quantity:

Work Order #: 21 T 79 1121

Chain o	of	Custody	Record
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Report Information Company:	nation: B.I.G. Consulting					Regulatory Requirements: (Please check all applicable boxes)			Regu	lation	558			Cus	tody Se	al Inta	2 -	]Yes	al E	- OVE		]N/A
Contact:	Rebecca Morrison					Regulation 153/04 Excess So	ls R406	TE	Sewer	Use				1400	901	-	1000	27	01	<del></del>		$\equiv$
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Phone: Reports to be sent to:						☐ Agriculture ☐ Yes			Prov. V Object					itasi		(11.0011.00						
1. Email:	rmorrison@brownfie	ldigi.com				Soil Texture (Check One) □No □Coarse			Other	LIVES	· woo	'			] 3B	usines:	s $\square$	2 Busin Days	ness		ext Bus ay	iness
2. Email:	-					Stockpile [	In-situ	_	In	dicate (	)ne		_		,		Required (		rcharges			
Project Inform	mation:					Is this submission for a	1	Rep	oort G	uide	line	on										
Project:	BIGC-ENV-349E					Record of Site Condition?		Cert	Ificate	e of	Analy	sis					provide p					
Site Location:	217-227 Cross Avenu	ıe, Oakville, ON				☑ Yes ☐ No		<b>V</b>	Yes			Vo	- 1				lusive of w			-	-	
Sampled By:	TVH							_					, .	Fo	r 'Sam	e Day'	analysis,	please c	contact	your AG	AT CP	M
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Email:	LDougherty@brownf	fieldigi.com; NKep	cs@brownfield	ligi.com		SD Sediment SW Surface Water	Filte	Inorganics,	MS, M	ii Fe			osal	SPL	Cha	ر بر ا				11		ardo
						Our our rater	Field	⊗ l	5 - ICPN F1-F4	F4G			Disp	Soils	ess Soils Chara	EC/SAR				1 1		F Ha
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BH201-SS2		20-08-21	11:05 AN	1	Soil				V													= 0
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				1		Samples Received By (Print Name and Sign):							te		Time						_	



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:

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- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may
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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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CLIENT NAME: B.I.G. CONSULTING INC.

SAMPLING SITE:

## Certificate of Analysis

AGAT WORK ORDER: 21T796236

PROJECT: BIGC-ENV-349E

ATTENTION TO: Rebecca Morrison

SAMPLED BY:

O. Reg. 153(511) - All Metals (Soil)

DATE RECEIVED: 2021-09-01					DATE REPORTED: 2021-09-03
	S	AMPLE DES	CRIPTION:	BH201-SS1	
		SAM	PLE TYPE:	Soil	
		DATE	SAMPLED:	2021-08-20	
Parameter	Unit	G/S	RDL	2918865	
Antimony	μg/g	7.5	8.0	<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	8.0	<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:



5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

http://www.agatlabs.com

TEL (905)712-5100 FAX (905)712-5122



### **Quality Assurance**

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

PROJECT: BIGC-ENV-349E

AGAT WORK ORDER: 21T796236
ATTENTION TO: Rebecca Morrison

SAMPLING SITE: SAMPLED BY:

				Soi	l Ana	alysis	3								
RPT Date: Sep 03, 2021				UPLICATI	E		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value		eptable mits	Recovery	1 :-	ptable	Recovery	1 :-	ptable
		iu	-	-			value	Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - All Metals (Soi	l)														
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		8.0	8.0	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 2	918865	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.

CHARTERED CHARGON ZHU

## **Method Summary**

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

PROJECT: BIGC-ENV-349E

AGAT WORK ORDER: 21T796236 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



Samples Relinguished By (Print Name and Sign):

Samples Relinquished By (Print Name and Sign):

Messesauga, Ontero 142 172 Ph 905 717 9100 Fms 805 71, 8117 wobsactn agaillabs.com **Laboratory Use Only** Cooler Quantity: □Yes □No □N/A ne (TAT) Required: 5 to 7 Business Days

Chain of C	ustody Reco	ord If this is	a Drinking Wate	er sample, p	lease use D	Drinking Water Chaln of Custody Form	ı (potable w	ater co	nsume	ed by hu	mans)				Arriv	al Temp	eratures	2.9	\$ 12	19	
Report Inform Company:	mation: B.I.G. Consulting					Regulatory Requirements: Please check all applicable boxes)	i		Re	gulatio	n 558				Cust		Intact:	□Yes		□No	
Contact:	Rebecca Morrison					Regulation 153/04 Excess So	ils R406	1/1		er Use				-	3000						
Address:	12-5500 Tomken Road					2		$\mathbf{m}$	□Sa	anitary	□Sto	rm		113	Turn	narou	nd Tin	ne (TAT)	Requir	ed:	
	Mississauga, ON L4W 2	2Z4				Table	cate One		4	Region				F	Regi	ular T	ΑT	□ 5 t	o 7 Busine	ss Davs	
Phone: Reports to be sent to:	905-782-0315	Fax:					APEC?			. Wate				F	Rush	1 TAT	Rush Surcha	arges Apply)			
1, Email:	rmorrison@brownfield	ligi.com			_ Sc	Soil Texture (check One) ☐ No  ☐ Coarse ☐ Stockpile ☐	□ln-situ		Obje Othe	ectives er	(PWQC	)				J Days		□ Da	•	<b>☑</b> Da	,
2. Email:	-				=	Fine Stockpile				Indicate	One			П		OR	Date Req	juired (Rush	1 Surcharg	es May App	ply):
Project Information Project: Site Location:	mation: BIGC-ENV-349E 217-227 Cross Avenue	, Oakville, ON				Is this submission for a Record of Site Condition?  Yes No		Cert		Guldente of		/sls				*TAT	is exclus	ovide prior i	ends and	statutory h	olidays
Sampled By:							1			-					Fo	r 'Sam	Day' ar	alysis, plea	ase conta	et your AG	AT CPM
AGAT Quote #:	Please note: If quotation num	PO: ber is not provided, client v	will be billed full price	for analysis		Sample Matrix Legend	/I, DOC	0	Reg :				TCLP:	D PCBs	۔	986					
Invoice Information Company: Contact: Address:	mation:		Bill To Same:	Yes 🗹 No	_ 0 P s	GW Ground Water O Oil P Paint S Soil	ed - Metals, Hg, CrVI,	ilcs, inc. EC/SAR	KI CrVI, KI Hg, KI HWSB	PHCs If required □ Yes □ No			Characterization	CS □ ABNS □ B(a)P □ PCBS	SPLP Rainwater Leach Is □ vocs □ svocs	sterl					
Email:	LDougherty@brownfie	eldigi com; NKepi	cs@brownfield	ligi.com	7.11	SD Sediment SW Surface Water	Field Filtered	& Inorganics,	- ICPMS,	F1-F4 PHCs e F4G if requ			voc Landfill Disposal	M&I	Soils	Soils MS M	EC/SAR				
Samp	le Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix		Y/N	Metals	Metals	BTEX, F1-F4 Analyze F4G	PAHs	PCBS	Landfill	TCLP: [	Excess (	Excess Soil pH, ICPMS	Salt - E				
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Time

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Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Y/N	Metals	Metals	BTEX, F Analyze	PAHs	PCBs	Landfill	Excess Sc	Excess	pH, ICPM: Salt - FC/							Potentia
BH201-SS1	20-08-21	AM PM	1	Soil	-14			V								MO						1.1
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Samples Received By (Print Name and Sign):

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

of 1

Page 1

NE

Next Business



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	

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Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



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

SAMPLING SITE:

## Certificate of Analysis

AGAT WORK ORDER: 21T796238

PROJECT: BIGC-ENV-349E

ATTENTION TO: Rebecca Morrison

SAMPLED BY:

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

O. Reg. 153(511) - All Metals (Soil)

SAMPLE TYPE: Soil	RTED: 2021-09-03
SAMPLE TYPE:   SOI     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   120   5   15     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	
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         140         1.0         34.4           Lead         µg/g         120         1         26           Molybdenum         µg/g         6.9         0.5         0.9	
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	
Antimony	
Arsenic	
Barium       μg/g       390       2.0       57.2         Beryllium       μg/g       4       0.4       <0.4	
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	
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	
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	
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	
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	
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	
Copper       μg/g       140       1.0       34.4         Lead       μg/g       120       1       26         Molybdenum       μg/g       6.9       0.5       0.9	
Lead μg/g 120 1 26 Molybdenum μg/g 6.9 0.5 0.9	
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	
Γhallium μg/g 1 0.5 <0.5	
Jranium μg/g 23 0.50 <0.50	
/anadium 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 *)





### **Quality Assurance**

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

PROJECT: BIGC-ENV-349E

SAMPLING SITE:

AGAT WORK ORDER: 21T796238
ATTENTION TO: Rebecca Morrison

SAMPLED BY:

				Soi	l Ana	alysis	3								
RPT Date: Sep 03, 2021			С	UPLICATI	E		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		eptable mits	Recovery	Lie	ptable nits	Recovery	1 1 1 1 1	ptable nits
		ld					Value	Lower	Upper	,	Lower	Upper	]	Lower	Upper
O. Reg. 153(511) - All Metals (Soi	l)					,									
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.

PROJECT: BIGC-ENV-349E

SAMPLING SITE:

AGAT WORK ORDER: 21T796238
ATTENTION TO: Rebecca Morrison

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



5505 Zeopens Artinu. Mikawaysa Orlani KE 192

Work Order #: 2	Only	196	234
Cooler Quantity:  Arrival Temperatures:	2.8	1291	
Custody Seal Intact:	□Yes ( C )	□No	□N/A

maiii oi c	ustody Record	lf this is:	a Drinking Wate	er sample, pl	ease use	Drinking Water Chain of Custody Form	otable w	ater co	nsume	d by hun	nans)			Arri	val Tem	peratur	es.	2	10	2.			-
Report Information Company:	nation: B.I.G. Consulting					Regulatory Requirements: (Please check all applicable boxes)			Reg	ulation	558			6 00	tody Se	al Intac		□Yes   ()			lo		N/A
Contact: Address:	Rebecca Morrison 12-5500 Tomken Road				_	Regulation 153/04 Table 3 Table Indicate One				er Use nitary	□Ste	orm					ime (	(TAT) Required:					
Phone: Reports to be sent to: 1. Email: 2. Email:	Mississauga, ON L4W 2Z4 905-782-0315 rmorrison@brownfieldigi.				_	Ind/Com   Region   Region   CCME     Res/Park   Sample from APEC?   Prov. Water Quality     Objectives (PWQO)   Other     Fine   Stockpile   In-situ   Indicate One					Regular TAT 5 to 7 Business Days  Rush TAT (Rush Surcharges Apply)  3 Business 2 Business Days Days Days  OR Date Required (Rush Surcharges May Apply):					ness							
Project Information Project: Site Location: Sampled By:	mation: BIGC-ENV-349E 217-227 Cross Avenue, Oa	akville, ON				Is this submission for a Record of Site Condition?  Yes No		Cert		Guide te of		ysis		F	*TAT	Is exclu	usive of	prior no f weeker ls, pleas	nds ar	d stat	utory	holidays	
AGAT Quote #:  Invoice Information Company: Contact:	Please note: If quotation number is		Bill To Same:			Sample Matrix Legend B Biota GW Ground Water O Oil P Paint	Metals, Hg. CrVI, DOC	inc. EC/SAR	Crvi, M Hg, M HWSB	□ Yes □ No			Characterization TCLP:	ach ach	Characterization Package								Potentially Hazardous or High Concentration (Y/N)
Address: Email:	LDougherty@brownfieldig			1		S Soil SD Sediment SW Surface Water	Field Filtered	als & Inorganics,		BTEX, F1-F4 PHCs Analyze F4G If required	10	S	fill Disposal	Soils SPLP	Soils	Selt - EC/SAR							ntially Hazardous or
Samp	le Identification	Date Sampled	Time Sampled	# of Containers	Sample		Y/N	Metals	-	BTE	PAHS	PCBs	Landfill	Excess	Excess OH ICP	Selt							Pote
BH204-SS1		20-08-21	AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM AM PM AM PM AM PM AM PM AM AM PM AM AM AM AM AM AM AM AM AM AM AM AM AM		Soil															1.1	Chr		
			AN PN											1			Mi.						
			AN PN AN PN								-			-					+				-
Samples Relinquished by (Pi TRAVIS VAN HO Samples Relinquished By (Pi	OLST Khadendra	· Kande	Date	Tim	5.00	Samples Received By (Print Name and Sign)  Secretar Received By (Print Name and Sign)	2						Date		Time			F	Page _	1	of 1		



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:

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- 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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- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories (V1)

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AGAT WORK ORDER: 21T780214

PROJECT: BIGC-ENV-349D

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. SAMPLING SITE:217-227 Cross Ave, Oakville, ON

ATTENTION TO: Rebecca Morrison SAMPLED BY:Timothy Damdar

				O. Reg. 153(	511) - PHCs F1 - F4 (Water)
DATE RECEIVED: 2021-07-27					DATE REPORTED: 2021-08-04
	Si	AMPLE DES	CRIPTION:	BH/MW103	
		SAM	PLE 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	Acceptab	le Limits		
Toluene-d8	% Recovery	60-	140	83.2	
Terphenyl	% Recovery	60-	140	71	





AGAT WORK ORDER: 21T780214

PROJECT: BIGC-ENV-349D

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. SAMPLING SITE:217-227 Cross Ave, Oakville, ON

ATTENTION TO: Rebecca Morrison 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:

NPopukolof



AGAT WORK ORDER: 21T780214

PROJECT: BIGC-ENV-349D

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. SAMPLING SITE: 217-227 Cross Ave, Oakville, ON ATTENTION TO: Rebecca Morrison SAMPLED BY: Timothy Damdar

					,
			O. Reg.	. 153(511) -	Metals (Including Hydrides) (Water)
DATE RECEIVED: 2021-07-27					DATE REPORTED: 2021-08-04
		SAMPLE DESC	CRIPTION:	BH/MW106	
		SAME	PLE TYPE:	Water	
		DATE S	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 *)



### **Quality Assurance**

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

PROJECT: BIGC-ENV-349D
SAMPLING SITE-217-227 Cross Ave. Oakville, ON

AGAT WORK ORDER: 21T780214
ATTENTION TO: Rebecca Morrison
SAMPLED BY:Timothy Damdar

SAMPLING SITE:217-227	AMPLING SITE:217-227 Cross Ave, Oakville, ON								LED R	Y: Hmot	ny Da	maar			
			Trac	e Or	gani	cs Ar	nalys	is							
RPT Date: Aug 04, 2021			DUPLICATE				REFERE	NCE MA	TERIAL	METHOD	BLANK	SPIKE	МАТ	RIX SPI	IKE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank M		Acceptable Limits		Recovery	Acceptable Limits		Recovery	1 1 1 1 1	eptable mits
		ld	·	·			Value	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:

NPoprukolof



## **Quality Assurance**

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

PROJECT: BIGC-ENV-349D SAMPLING SITE:217-227 Cross Ave, Oakville, ON AGAT WORK ORDER: 21T780214
ATTENTION TO: Rebecca Morrison
SAMPLED BY:Timothy Damdar

		,									,				
				Wate	er Ar	nalys	is								
RPT Date: Aug 04, 2021			С	UPLICAT	E		REFERE	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		ptable nits	Recovery	1	ptable nits	Recovery		ptable nits
		ld	·	·			Value	Lower	Upper	,		Upper	ĺ	Lower	Upper
O. Reg. 153(511) - Metals (Inclu	ding Hydride	s) (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.

CHARTERED CHARTE

# 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

SAMPLING SITE. 217-227 Closs Ave, C		SAMPLED BY. II	
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



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 webcarth.agatlabs.com **Laboratory Use Only** 

Cooler Quantity:

Report Inform Company:	nation: B.I.G. Consulting				F	Regulatory Requ	irements:			Regulat	ion 55	58		Н	Custo	ody Sea	al Inta	ct:	□Yes		□No	I	□N/A
Contact:	Rebecca Morrison					Regulation 153/04	Excess Soils	R406	1	Sewer U	se			L									
Address:	12-5500 Tomken Road					Table 2 Indicate One			-	□Sanitar	у 🗆	Storm			Turnaround Time (TAT) Required:								
, 100, 000	Mississauga, ON L4W 22	Z4				Indicate One	Table	One		Reg	ion				Regu	lar T	AT	i	<b>7</b> 1 5 t∉	7 Busii	ness Days		
	905-782-0315	Fave				☑ Res/Park	Sample from Al	PEC?	1-	CCME				- 11	Rush	TAT	Rush Su	rcharges.	Apply)				
Phone: Reports to be sent to: 1. Email:	rmorrison@brownfieldig	gi.com		□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □					Rush TAT (Rush Surcharges Apply)  3 Business						usiness								
2. Email:						Fine	Stockpile	In-situ	-	Indic	te One	-				OR	Date F	Require	d (Rust	Surcha	rges May A	Apply):	
Project Inform						Is this submission for a Report Guldeline on Record of Site Condition? Certificate of Analysis								Please provide prior notification for rush TAT									
Project:	BIGC-ENV-349D 217-227 Cross Avenue i	n Oalavilla Onta	rio		- 11	☑ Yes □	No			Yes		, N [				*TAT	is exc	lusive o	of week	ends an	d statutory	r holida	ys
Site Location: Sampled By:	Timothy Damdar	ii Oakville, Olita.	110			M tes	INO		V	162		] 14			For	'Sam	e Day'	analys	ds, ple	se cont	act your A	IGAT C	PM
AGAT Quote #:	Please note: If quotation number	PO: er is not provided, client w	ill be billed full price I	or analysis		Sample Matrix Leg B Biota	gend	VI, DOC	0.	Reg 153	ON I			TCLP: P□PCBs	5	Package F4							Concentration (Y/N)
Company: Contact: Address: Email:	BIG Consulting Inc. Laine Dougherty  12-5500 Tomken Rd, M  LDougherty@brownfield			igi.com		O Oil P Paint S Soil SD Sediment SW Surface Water		Field Filtered - Metals, Hg, CrVI, DOC	, & Inorganics, inc. EC/SAR	ICPMS -F4 PF	e F4G if required Lyes			II Disposal Characterization TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ P	Excess Soils SPLP Rainwater Leach SPLP: □ Metals □ vocs □ Svocs	Excess Soils Characterization oh, ICPMS Metals, BTEX, F1-F	S/SAR						Potentially Hazardous or High Co
Sampl	le Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix			Y/N	Metals	Metals BTEX,	Analyze	PCBs	VOC	Landfill I	Excess SPLP:	Excess :							Potent
341MW103		31127Pd	12:30 AM	5	GW					V													N
SH/mw10G		1	3:00 AM	1	Gu		. (	Y															N
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	rint Name and Sign):		Date	Tin		Samples Received By (F	unt Name and Sidn):						Date	,		Time			No:	_			



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:

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- 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.
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- The test results reported herewith relate only to the samples as received by the laboratory.
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  contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories (V1)

Page 1 of 7

Member of: Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

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

SAMPLING SITE:581 Argus Rd, Oakville, ON

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

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

DATE RECEIVED: 2022-03-09							I	DATE REPORTED	D: 2022-03-16
		SAMPLE DESCRIPT	ION: BH104NA-SS1	BH104NA-SS3	BH104WA-SS1	DUPW4A030	BH104EA-SS1	BH104SA-SS1	
		SAMPLE T	YPE: Soil	Soil	Soil	Soil	Soil	Soil	
		DATE SAMP		2022-03-09	2022-03-09	2022-03-09	2022-03-09	2022-03-09	
_			09:30	09:35	09:51		10:07	10:21	
Parameter	Unit	G/S RI		3604501	3604502	3604504	3604505	3604507	
Naphthalene	μg/g	0.6 0.0		<0.05	<0.05	<0.05	<0.05	<0.05	
Acenaphthylene	μg/g	0.15 0.0		<0.05	< 0.05	< 0.05	<0.05	<0.05	
Acenaphthene	μg/g	7.9 0.0	05 < 0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Fluorene	μg/g	62 0.0		<0.05	< 0.05	<0.05	<0.05	< 0.05	
Phenanthrene	μg/g	6.2 0.0	0.28	<0.05	0.78	<0.05	<0.05	<0.05	
Anthracene	μg/g	0.67 0.0	0.10	<0.05	0.12	<0.05	< 0.05	< 0.05	
Fluoranthene	μg/g	0.69 0.0	0.34	0.05	1.12	< 0.05	0.07	0.06	
Pyrene	μg/g	78 0.0	0.27	< 0.05	0.94	< 0.05	0.06	< 0.05	
Benz(a)anthracene	μg/g	0.5 0.0	0.14	< 0.05	0.51	< 0.05	< 0.05	< 0.05	
Chrysene	μg/g	7 0.0	0.15	< 0.05	0.62	< 0.05	< 0.05	< 0.05	
Benzo(b)fluoranthene	μg/g	0.78 0.0	0.17	< 0.05	0.78	< 0.05	< 0.05	< 0.05	
Benzo(k)fluoranthene	μg/g	0.78 0.0	0.06	< 0.05	0.23	< 0.05	< 0.05	< 0.05	
Benzo(a)pyrene	μg/g	0.3 0.0	0.11	< 0.05	0.40	< 0.05	< 0.05	< 0.05	
ndeno(1,2,3-cd)pyrene	μg/g	0.38 0.0	0.05	< 0.05	0.21	< 0.05	< 0.05	<0.05	
Dibenz(a,h)anthracene	μg/g	0.1 0.0	05 < 0.05	< 0.05	< 0.05	<0.05	< 0.05	<0.05	
Benzo(g,h,i)perylene	μg/g	6.6 0.0	0.05	< 0.05	0.25	< 0.05	< 0.05	<0.05	
1 and 2 Methlynaphthalene	μg/g	0.99 0.0	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 Lim	its						
laphthalene-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:

NPopukolof



AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

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. SAMPLING SITE:581 Argus Rd, Oakville, ON

				O. Re	g. 153(511) -	PCBs (Soil)
DATE RECEIVED: 2022-03-09						DATE REPORTED: 2022-03-16
	S	SAMPLE DES	CRIPTION:	BH105-SS1	DUP010501	
		SAM	PLE 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	Acceptab	le 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 *)





### **Exceedance Summary**

AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

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.

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



## **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T871686
ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON SAMPLED BY:TD

Trace Organics Analysis															
RPT Date: Mar 16, 2022			С	UPLICAT	E		REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Lin	eptable imits	Recovery		ptable nits
		Id	·	·			value	Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	110%	50%	140%	68%	50%	140%	70%	50%	140%
Acenaphthylene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	89%	50%	140%	73%	50%	140%	75%	50%	140%
Acenaphthene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	97%	50%	140%	77%	50%	140%	87%	50%	140%
Fluorene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	116%	50%	140%	91%	50%	140%	103%	50%	140%
Phenanthrene	3604505 3	3604505	<0.05	<0.05	NA	< 0.05	119%	50%	140%	92%	50%	140%	105%	50%	140%
Anthracene	3604505 3	3604505	<0.05	< 0.05	NA	< 0.05	113%	50%	140%	92%	50%	140%	107%	50%	140%
Fluoranthene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	122%	50%	140%	101%	50%	140%	116%	50%	140%
Pyrene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	115%	50%	140%	99%	50%	140%	112%	50%	140%
Benz(a)anthracene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	112%	50%	140%	88%	50%	140%	98%	50%	140%
Chrysene	3604505 3	3604505	<0.05	<0.05	NA	< 0.05	109%	50%	140%	87%	50%	140%	86%	50%	140%
Benzo(b)fluoranthene	3604505 3	3604505	<0.05	<0.05	NA	< 0.05	80%	50%	140%	83%	50%	140%	78%	50%	140%
Benzo(k)fluoranthene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	108%	50%	140%	76%	50%	140%	63%	50%	140%
Benzo(a)pyrene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	121%	50%	140%	78%	50%	140%	99%	50%	140%
Indeno(1,2,3-cd)pyrene	3604505 3	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).



## **Method Summary**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T871686 ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

SAMPLING SITE:581 Argus Rd, Oakville, ON

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



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

5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905.712 5100 Fax: 905.712 5122 webearth.agatlabs.com

Laboratory	Use Only	
	22 T8 7168	3

Cooler Quantity:	1	Lasge	
Arrival Temperature	es:	20.3   20.0	18.2

Report Information: Company: B-T.6. (	ansulting Inc			(Please	Regulatory Requirements:								stody S tes:			Tice	□No	□N/A	4
Address: 2-5500	224	Mississa	mga,	Tab	gulation 153/04 Excess Soils la Excess Soils l			ver Use anitary Region	Sto	rm			naro gular		Time	(TAT) Req			
Phone: Reports to be sent to: 1. Email: Company Son  2. Email:	to be sent to:			Soil Te	Regulation 558    Soil Texture (Check One)			Prov. Water Quality Objectives (PWQO) Other Indicate One					Rush TAT (Rush Surcharges Apply)  3 Business 2 Business Next Business Days Days Day  OR Date Required (Rush Surcharges May Apply):					SS	
Project Information:  Project:  BIGG-ENV-490D  Site Location: 581 Argus Ro, Oakulle, ON				Rec	this submission for a cord of Site Condition?  Yes	Cer	Report Guideline on Certificate of Analysis  Yes No					Please provide prior notification for rush TAT *TAT is exclusive of weekends and statutory holidays For 'Same Day' analysis, please contact your AGAT CPM							
Sampled By: AGAT Quote #:	PO:			Som	ple Matrix Legend	200	0. Reg 153					0. Reg 558	0. R	eg 406					(N/X
Contact: Laine D	s reporting			GW O P S SD SW	Biota Ground Water Oil Paint Soil Sediment Surface Water	Field Filtered - Metals, Hg, CrVI, DOC	s & Inorganics	Metals - □ CrVI, □ Hg, □ HWSB	Analyze F4G if required   Yes			Landfill Disposal Characterization TCLP: TCLP: ☐M& ☐VOCs ☐ABNs ☐B(a)P☐F	Soils SPLP Rainwater Lea	Soils Characteriza	ph, ICPMS Metals, BTEX, F1-F4 Salt - EC/SAR				ially Hazardous or High Concentra
Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Y/N	Metal	Metals	Analy	PCBs	VOC	Landfi TC.P.	Excess SPLP:	Excess	Salt -				Potent
BH104NA-551	Mar 9/22			S					V										ν
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BH1045A-553		10:29 部	1	5					-										V
BH105-551		10: 70 PN		5						1									V
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Samples Relinquished By (Print Name and Sign):	10 mg/	Date Mar 9/	777 Time	13pm	Samples Received By (Print James and Sign): At majeral Rivas	5 7	70.00	ork	6	Dat	te		Time			12	ZMAR I	9, 2:34	A
Timothy Damdar Samples Relinquished By Print Name and Sign):	8	Date	Time	1	Samples Received By (Print Name and Sign):	1.				Dat	te		Time			Page	of _	20 TO	
Samples Relinquished By (Print Name and Sign):		Date	Time		Samples Received By (Print Name and Sign):					Dat	te		Time			Nº: <b>T</b> 1	2592	25	
cument ID-DIV 78 1511 021								Р	nk Cop	y - Clie	nt I Y	Yellow (	Copy - A	GAT	White	e Copy- AGAT	Page	7 of 7	23



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:

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- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may
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  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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AGAT WORK ORDER: 22T871693

PROJECT: BIGC-ENV-490D

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. SAMPLING SITE:581 Argus Rd, Oakville, ON

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Ro	d, Oakville	, ON			SAMPLED BY: ID
				O. Reg	. 153(511) - PAHs (Soil)
DATE RECEIVED: 2022-03-09					DATE REPORTED: 2022-03-17
	;	SAMPLE DES	CRIPTION:	BH104WB-SS1	
		SAM	PLE 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	Acceptab	le Limits		
Naphthalene-d8	%	50-	140	85	
Acridine-d9	%	50-1	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 *)





## **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T871693
ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON SAMPLED BY:TD

Critic Circ.co.rrague	OAWI EINO OTTE.SOT ATGUS NO, OURVING, ON														
Trace Organics Analysis															
RPT Date: Mar 17, 2022			С	UPLICAT	E		REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable nits	Recovery	Acce covery Lin		Recovery	منا ا	ptable nits
		lu lu					value	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).



# **Method Summary**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T871693
ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

SAMPLING SITE:581 Argus Rd, Oakville, ON

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



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122

**Laboratory Use Only** Work Order #: 2278 71693 webearth.agatlabs.com

	1	1
Cooler Quantity:	Licae	cooles
Arrival Temperatures:	70.C 19	1.5 118.7

ilvar temperatures.	ساء د	1	[
ustody Seal Intact: otes: Bagg	ed :	□No I Ce	□N/A
rnaround Tim	e (TAT) Re	quired:	
gular TAT	5 to 7 E	Business Days	
Sh TAT (Rush Surchar	ges Apply)		

Report Information: Company:	14ing Inc	4		(Please of	llatory Require							N	otes:	Bac	13E	Yes	Tice	JNo		/A 
Contact: Rebecca Maria.  Address: 12-5506 Tombe.  LYW 2ZY	son Rd, M		GON	Table	tulation 153/04	Excess Soils R406  Table Indicate One		Sewe	er Use nitary [	Storm		Re	gular	TAT	[	5 to 7	Require			
Phone: Reports to be sent to:  1. Email:  2. Email:	- Carti	igi com	<u></u>	Soil Tex	griculture kture (Check One) oarse	Regulation 558		Object Othe	Water Quetives (PV			Ru	☐ 3 ☐ Da	<b>(</b> Rush <b>s</b> u Busines ays <b>R</b> Date F	s	2 Bus	siness Surcharges	□ Da	,	iess
Project Information: Project: Site Location: Sampled By:	90D Oakville, C	o,N		Rec	this submission ford of Site Cond	Itlon?	Cert		auidelli e of Ar		s		For 'Sa	AT is exc	lusive o	of weeken	otification f ands and state e contact	atutory h	nolidays	1
AGAT Quote #:  Please note: If quotation number  Invoice Information:  Company:  Contact:  Address:  Email:	ert into	ill To Same: Yes [	□ No □	B GW O P S	ple Matrix Leger Biota Ground Water Oil Paint Soil Sediment Surface Water	nd	Field Filtered - Metals, Hg, CrVI, DOC		Metals - □ CrVI, □ Hg, □ HWSB  BTEX, F1-F4 PHCs			sal Characteriz	SPLP Rainwater Leach	Soils Ch MS Meta	EC/SAR					ially Hazardous or High Concentration (Y/N)
Sample Identification Date Time # of Sampled Containers				nments/ Instructions		Metals	Metals BTEX,	PAHs	PCBs	VOC Landfill Dispo	Excess Excess	SPLP: Excess	Salt - I					Potent		
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surrulat (D. Div. 78 1511 02)						Garani Anno			Pink	Сору -	Client	I Yellov	Сору -	AGAT I	White	Copy- AG/	AT .	Date Issued Page	March 9 3 <b>5 of 5</b>	2021



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	

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  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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Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



AGAT WORK ORDER: 22T872055

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

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. SAMPLING SITE:581 Argus Road, Oakville, ON

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 2022-03-09 2022-03-09 2022-03-09 2022-03-09 09:53 10:07 10:29 10:47 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 7.9 0.05 < 0.05 < 0.05 Acenaphthene < 0.05 < 0.05 < 0.05 μg/g 62 Fluorene < 0.05 < 0.05 < 0.05 < 0.05 μg/g 0.05 < 0.05 6.2 0.05 < 0.05 < 0.05 Phenanthrene μg/g < 0.05 < 0.05 < 0.05 Anthracene 0.67 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 μg/g Fluoranthene μg/g 0.69 0.05 0.07 < 0.05 < 0.05 < 0.05 < 0.05 Pvrene 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 7 µg/g 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 < 0.05 µg/g 0.78 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 μg/g 0.38 0.05 < 0.05 < 0.05 < 0.05 < 0.05 Indeno(1,2,3-cd)pyrene µg/g < 0.05 Dibenz(a,h)anthracene μg/g 0.1 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 6.6 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 Benzo(g,h,i)perylene µg/g 1 and 2 Methlynaphthalene 0.99 0.05 < 0.05 < 0.05 < 0.05 < 0.05 μg/g < 0.05 Moisture Content 0.1 12.3 15.0 % 15.0 15.0 11.7 Surrogate Unit Acceptable Limits

Comments:

Acridine-d9

Naphthalene-d8

Terphenyl-d14

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 -

71

79

64

Residential/Parkland/Institutional Property Use - Coarse Textured Soils

50-140

50-140

50-140

%

%

%

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.

68

85

60

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

63

84

74

67

79

110

61

96

62





## **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T872055
ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLING SITE:581 Argus	SAMPLED BY: TD															
			Trac	e Or	gani	cs Ar	nalys	is								
RPT Date: Mar 17, 2022				UPLICAT	E		REFERENCE MATERIAL			METHOD	BLANK	SPIKE	MATRIX SPIKE			
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	1 :	ptable nits	Recovery	1 1:00	ptable	
		lu					value	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).

Jinkal Jata

## Method Summary

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

SAMPLING SITE:581 Argus Road, Oakville, ON

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T872055 ATTENTION TO: Rebecca Morrison

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



5835 Coopers Avenue Mississauga, Ontorio L4Z 1Y2 Ph: 905 712.5100 Fax: 905.712.5122 webearth.agatlabs.com **Laboratory Use Only** 

Cooler Quantity:

Report Inform	ation: B.I.G. Consulting Inc.				Regi	Regulatory Requirements: (Please check all applicable boxes)								dy Seal	act	ged Sed	ICA	□No	□N/A
Company: Contact:	Rebecca Morrison				₩ Res	Regulation 153/04   Excess Soils R406   Sewer Use													
	12-5500 Tomken Road, Mississauga, ON L4W 2Z4					Sanitary Storm					II								
					Di	Ind/Com	One		Region				_				to 7 Busin	iess Days	
Phone:	416-214-4880	Fax:					558						Rush	TAT (R	ush Surcl	harges Apply)			
Reports to be sent to:	rmorrison@brownfiedig	ri.com			11	PYTHIP (( back One)		_ `		1100,								□ ¹	Vext Busines
1. Email:						Coarse							"	Days			•		
2. Email:						Fine								UK U	ate Ne	equired (110	311 0010110	Boo may 7	(P. P. 177)
Project Inform	nation:													PI	lease p	provide pric	or notificati	on for rush	TAT
Project:	BIGC-ENV-490D																		
Site Location:	581 Argus Road, Oakvil	lle, ON				Yes LINO	TV.	1 163	,						_	analysis, p	lease cont	act your A	GAT CPM
Sampled By:	TD						8	0	Reg 153			7	100		_				
AGAT Quote #:	Please note: If quotation numb	PO: her is not provided_client will	be tillted full price fo	r analysis	-11	•	, i			2			4. E	5 I	kage				
Company: Contact: Address: Email:	Same as report info Laine Dougherty Same as report info Idougherty@brownfield	digi.com			P S SD SW	Paint Soil Sediment Surface Water	Field Filtered - Met	Is & Inorganics		ze F4G If required			sposal Chi	ss Soils SPLP Rainv	ss Solls Characteriz ICPMS Metals, BTEX	-EC/SAR			
Samp	ole Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Y/N	Meta	Meta		_	700	TG TG	SPL	A F	Salt			
BH104NA-SS2		Mar 9/22	Lanca Control	1 1	S			-			_	-							
BH104SA-SS2		Mar 9/22		M 1	S			-	-			-							-
BH104EA-SS2		Mar 9/22		1 1	S			-	++			+							
BH104WA-SS2		Mar 9/22		SM 1	S			1		_	-	-							
DUPWA020		Mar 9/22		1	S			+		- 1	A.1	-							
				AM PM			100	-	++			+							
				AM PM				-				1							
				AM PM				-	++			+							
				AM PM	-		-	-	1		+	-							
				AM PM		Sample Matrix Legend B Biota GW Ground Water O O Oil P P Paint S Soil													
				AM		To and Business Building and Signi	-	-			Do	ter		Time			9,75	OMATH	តែការ ។ បានប
Timothy Damdar			Mar 10	/22 12	29 pm	Armando Zio	235	10	well	160	6	75		Time					
Samples Relingulated By II	Print Name and Signs 2	-	(Sale	Time	1	Samples Received the (Print Stame and Sirro)					134						Page .	of	
			Date	Time		Exemples Decreased Half-port Japans and State					Di	ite		Territo		No			



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

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	<b>Laboratory Method</b>	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.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

 $Reference\ Method\ suffix\ "m"\ indicates\ test\ methods\ incorporate\ validated\ modifications\ from\ specific\ reference\ methods\ to\ improve\ performance.$ 

* 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.



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		2022/06/03			2022/06/03		
Sampling Date			14:00		14:05			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 (TI)	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
Grey
Black

No Exceedance

Exceeds 1 criteria policy/level 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



Client Project #: BIGC-ENV-349F

Site Location: Cross Ave/Argus Road

Sampler Initials: KML

#### **GENERAL COMMENTS**

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

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.



#### **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		RPI	)
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 (TI)	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).



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:



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.



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.



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

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	<b>Laboratory Method</b>	<b>Analytical Method</b>
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.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

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

______

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 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.



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	2023/02/13			2023/02/13		
Sampling Date			15:45	15:45			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		l.				L.	•		
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 (TI)	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 Grey

Black

No Exceedance

Exceeds 1 criteria policy/level

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



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		
Samulina Data			2023/02/13	2023/02/13			2023/02/13		
Sampling Date			15:45	15:45			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
Grey
Black

No Exceedance

Exceeds 1 criteria policy/level

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



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	2023/02/13			2023/02/13		
Sampling Date			15:45	15:45			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 Grey Black

No Exceedance

Exceeds 1 criteria policy/level

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



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
	0.4		110	117		8501712			
D4-1,2-Dichloroethane	%	-	119	117		0301/12			

No Fill

Grey

Black

No Exceedance

Exceeds 1 criteria policy/level 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



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 Grey

Black

No Exceedance

Exceeds 1 criteria policy/level

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.



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

Black Exceeds

Exceeds 1 criteria policy/level 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.



Client Project #: BIGC-ENV-349G

Site Location: 227 Cross Avenue in Oakville

Sampler Initials: KML

#### **GENERAL COMMENTS**

Each to	emperature is the a	verage of up to t	hree cooler temperatures taken at receipt
	Package 1	10.0°C	
Result	s relate only to the	items tested.	



#### **QUALITY ASSURANCE REPORT**

B.I.G Consulting Inc.

Client Project #: BIGC-ENV-349G

Site Location: 227 Cross Avenue in Oakville

			Matrix	Spike	SPIKED BLANK		NK Method Blan		k 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



#### QUALITY ASSURANCE REPORT(CONT'D)

B.I.G Consulting Inc.

Client Project #: BIGC-ENV-349G

Site Location: 227 Cross Avenue in Oakville

			Matrix	Spike	SPIKED	BLANK	NK Method Blan		RP	D
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



Bureau Veritas Job #: C342679 Report Date: 2023/02/17

#### QUALITY ASSURANCE REPORT(CONT'D)

B.I.G Consulting Inc.

Client Project #: BIGC-ENV-349G

Site Location: 227 Cross Avenue in Oakville

			Matrix	Spike	SPIKED	BLANK	Method B	lank	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 (CI-)	2023/02/15	NC	80 - 120	105	80 - 120	ND, RDL=1.0	mg/L	0.32	20



#### QUALITY ASSURANCE REPORT(CONT'D)

B.I.G Consulting Inc.

Client Project #: BIGC-ENV-349G

Site Location: 227 Cross Avenue in Oakville

			Matrix	Spike	SPIKED BLANK		Method Blank		RPI	)
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 (TI)	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



QUALITY ASSURANCE REPORT(CONT'D)

B.I.G Consulting Inc.

Client Project #: BIGC-ENV-349G

Site Location: 227 Cross Avenue in Oakville

Sampler Initials: KML

		Matrix Spike		SPIKED BLANK		Method Blank		RPD			
Ī	QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
I	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).



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.



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.

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:**

B.I.G. Consulting Inc. 5500 Tomken Road, Unit 12 Mississauga, ON, L4W 2Z4 T: 416.214.4880 www.bigconsultinginc.com

#### **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 m³ 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 m³ 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 m³ 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 7	Two Environmental Site Assessment
Objective	Investigate soil and groundwater quality at the Site
Program	<ul> <li>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.</li> <li>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;</li> <li>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;</li> <li>Groundwater samples submitted for the analysis of PHCs, BTEX, VOCs, PAHs, metals and inorganics.</li> </ul>
Site Condition	MECP (2011a) Table 2 Full depth SCS for residential/parkland/institutional
Standards	land use with potable groundwater coarse textured soil.
Soil	<ul> <li>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.</li> </ul>
Groundwater	<ul> <li>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).</li> </ul>
Soil Conditions	<ul> <li>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.</li> <li>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.</li> <li>Fluoranthene was detected at BH4-SS1 from 0.0 - 0.61 m bgs (0.93 μg/g) and at BH104WA from 0.0 – 0.61 m bgs (1.12 μg/g) above the applicable MECP Table 2 SCS of 0.69 μg/g.</li> <li>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.</li> </ul>
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	F001	March 22, 2022	1.0	PAHs	Yes
Floor	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 m³ 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
	Ex1-E001	March 21, 2022	0.50	Metals	Yes
	Ex1-S001	March 21, 2022	0.50	Metals	Yes
South Wall	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 m³ 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

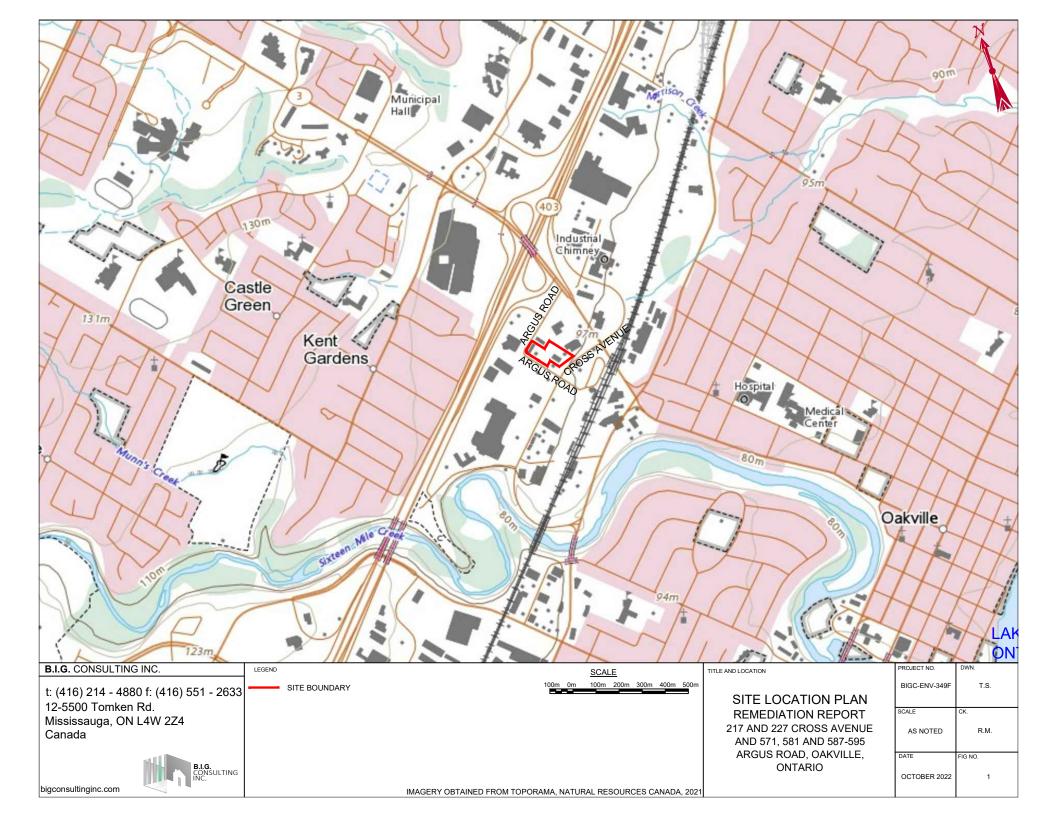
BIG (2022) Phase Two Environmental Site Assessment, 217 & 227 Cross Avenue and 571 – 595 Argus Road, Oakville, Ontario. B.I.G. Consulting Inc. October 31, 2022.

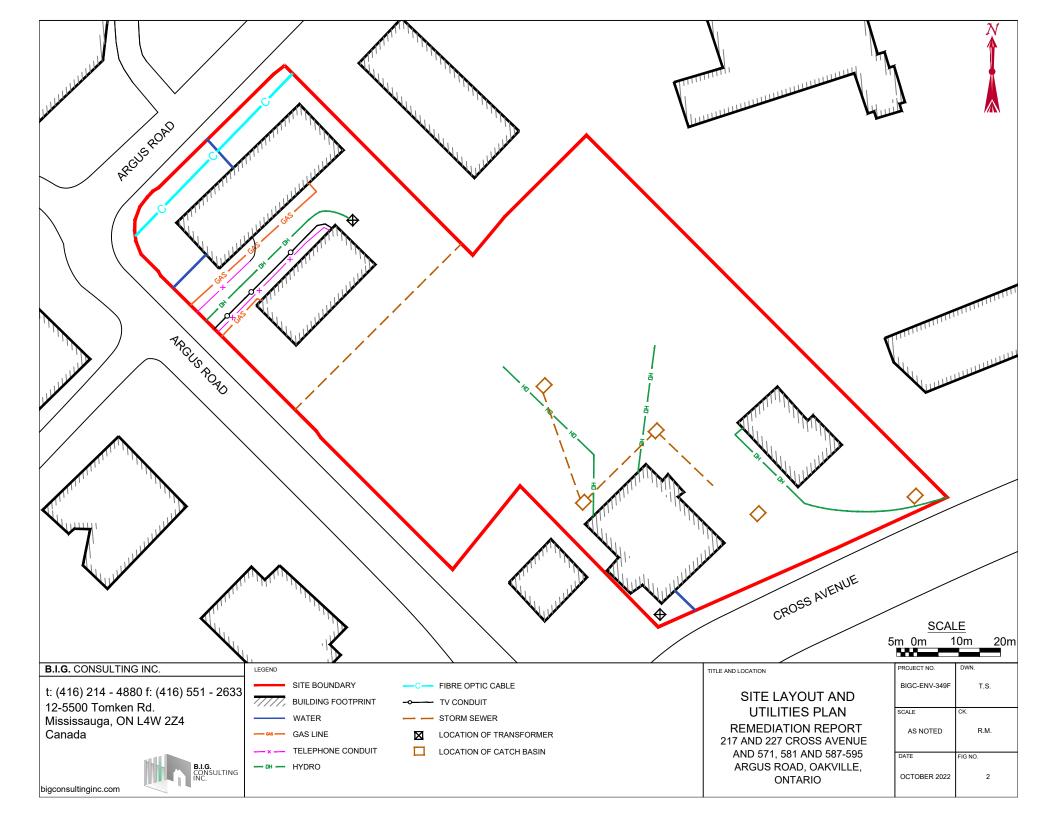
MECP (2011a) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the *Environmental Protection Act*".

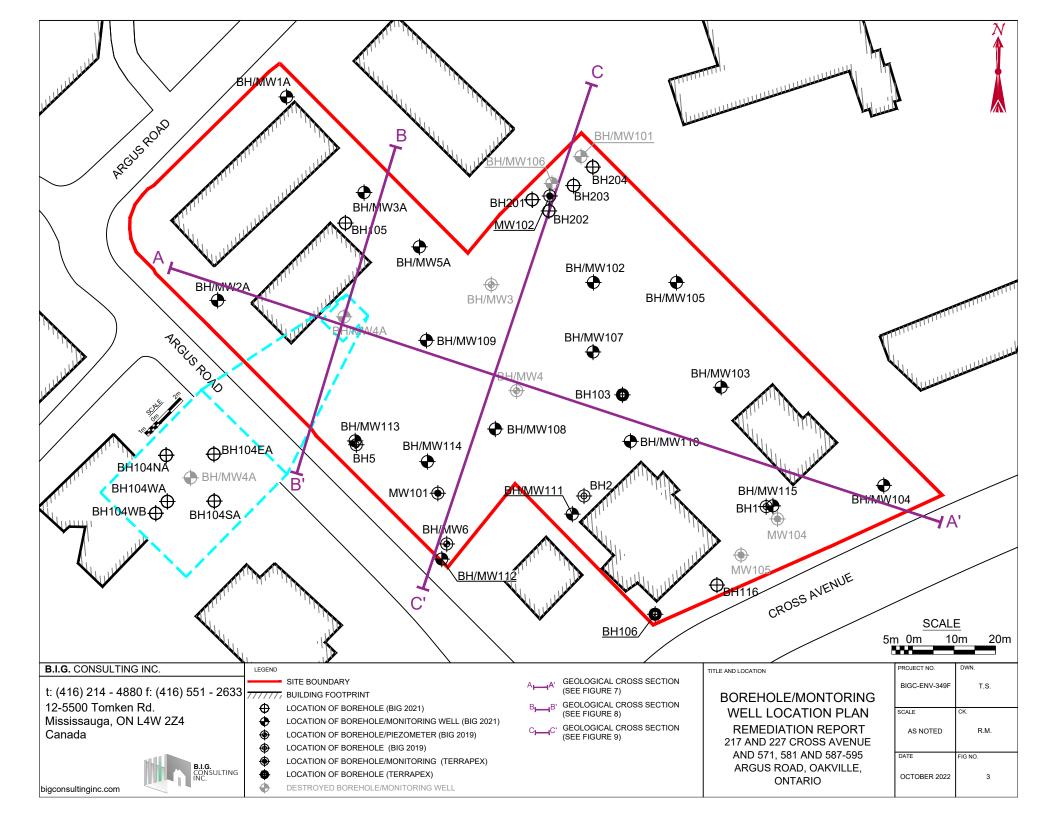


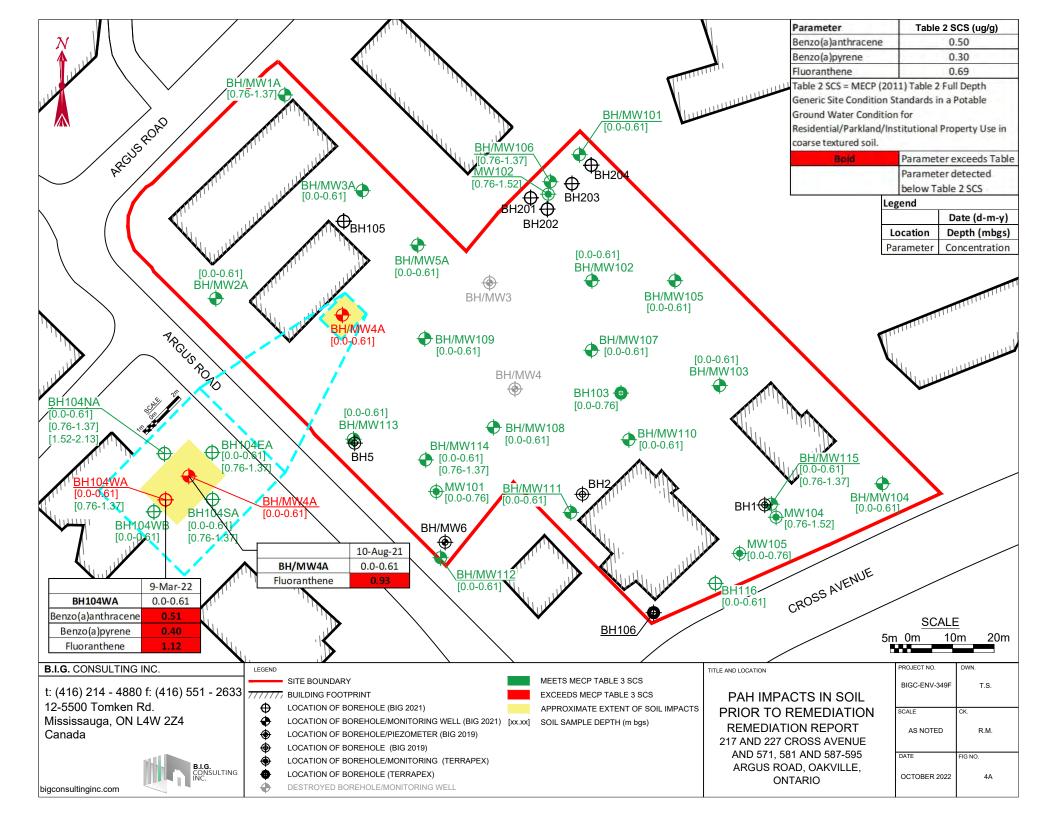
# **Figures**

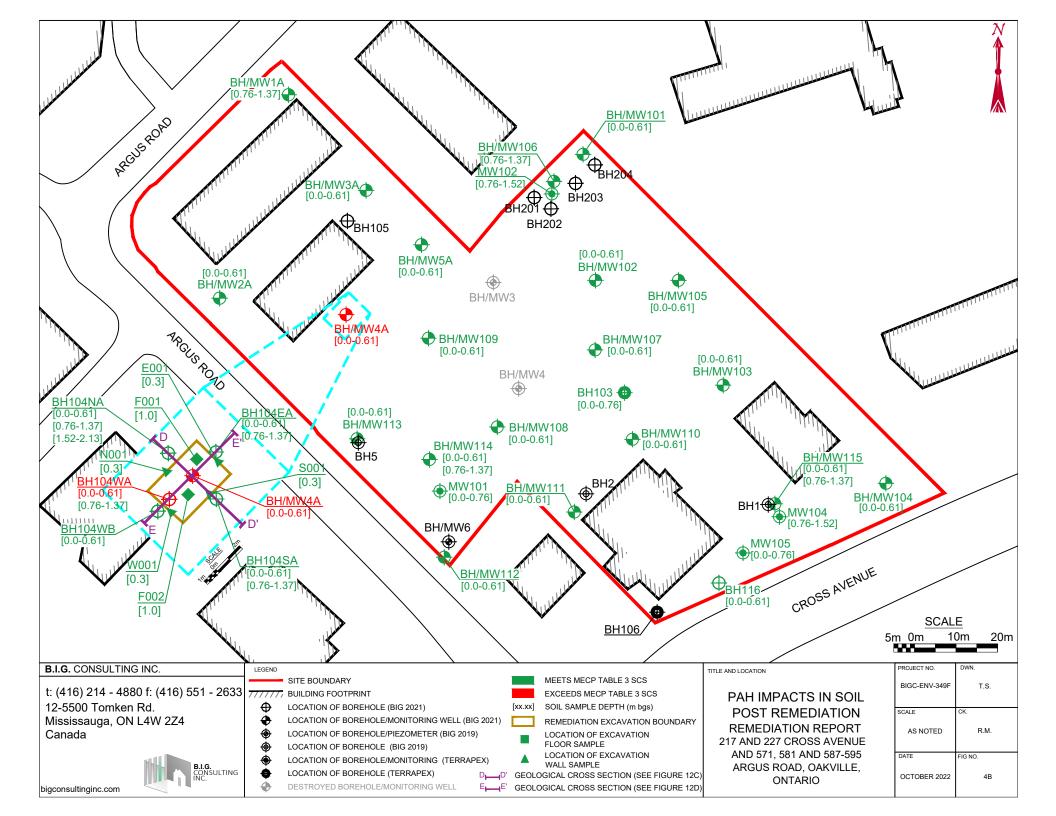


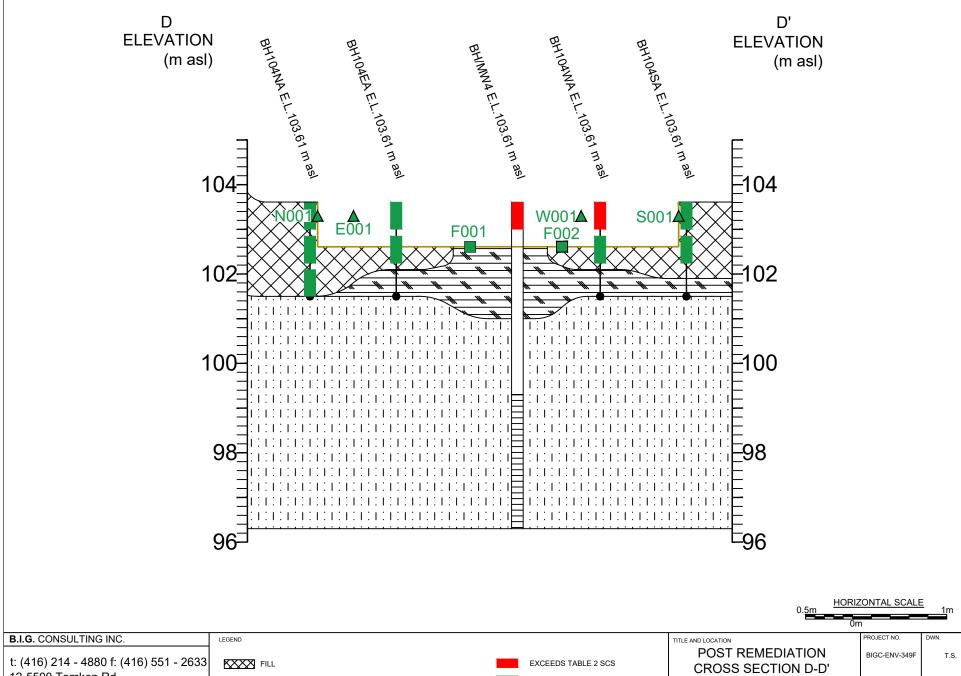




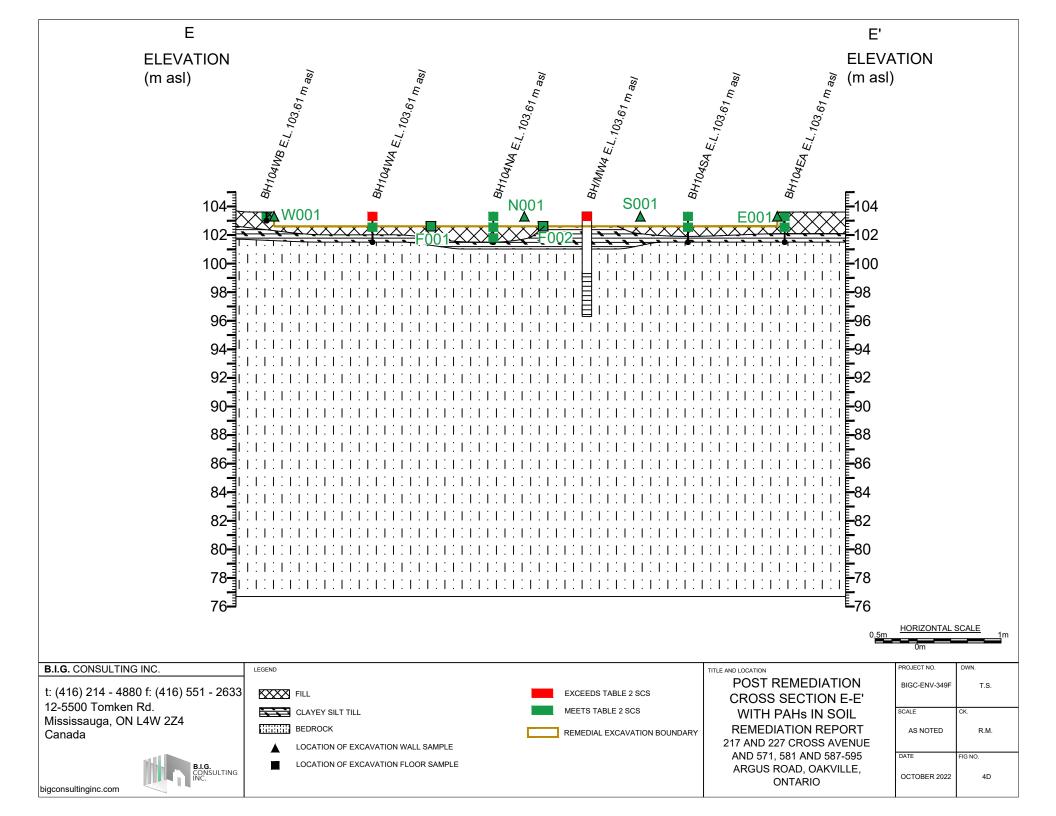


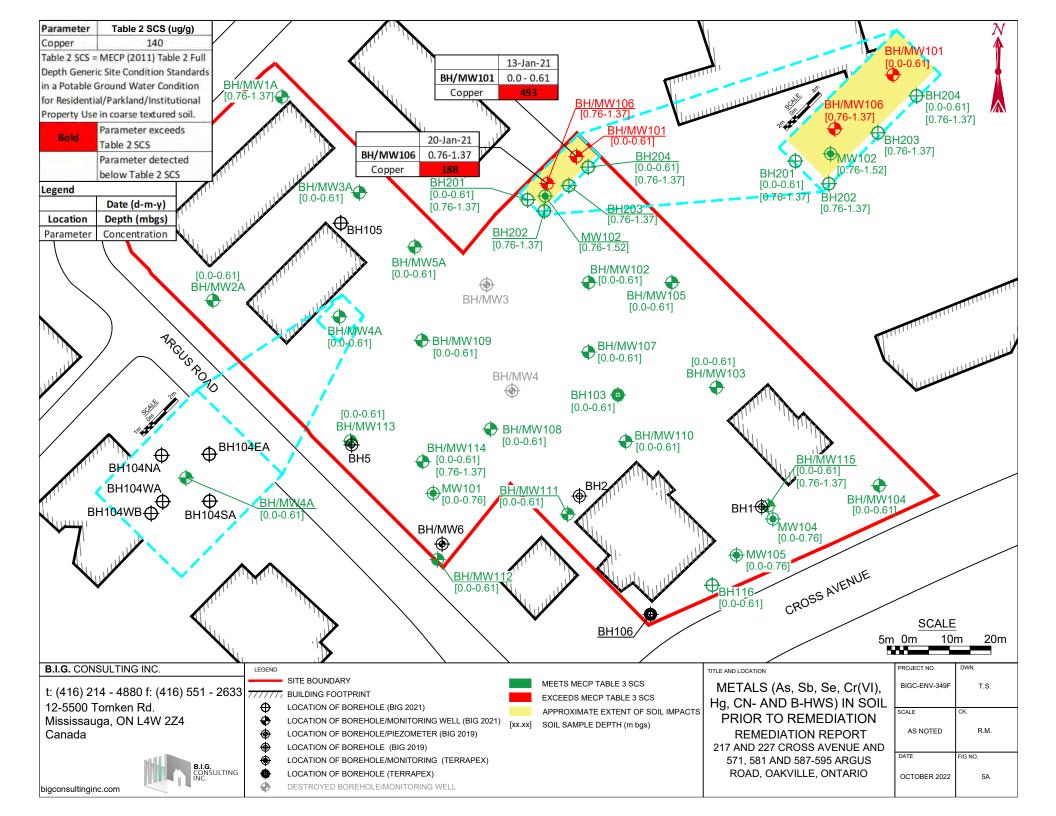


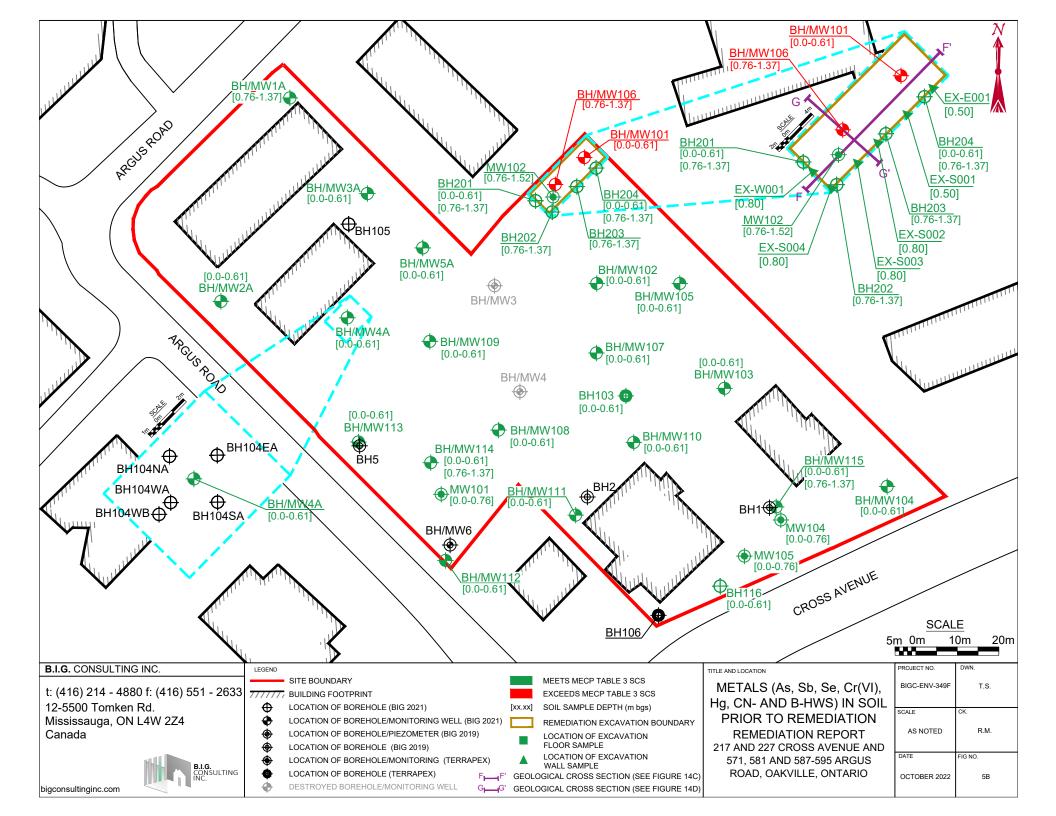


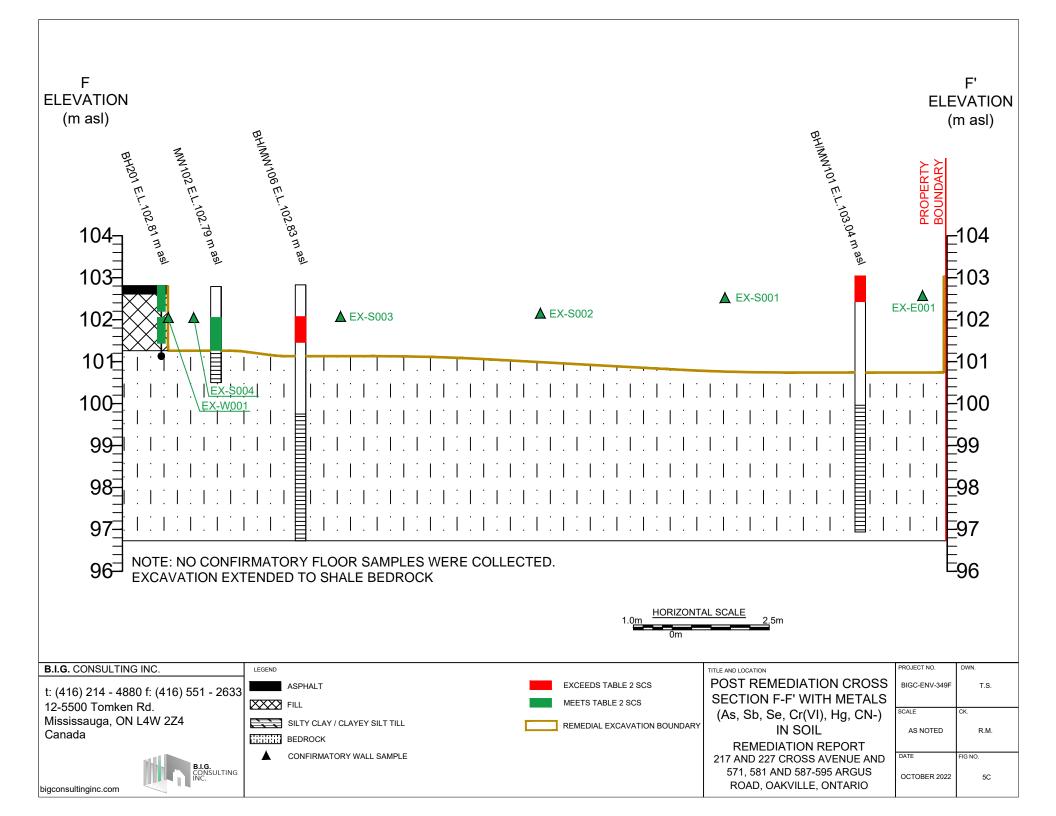


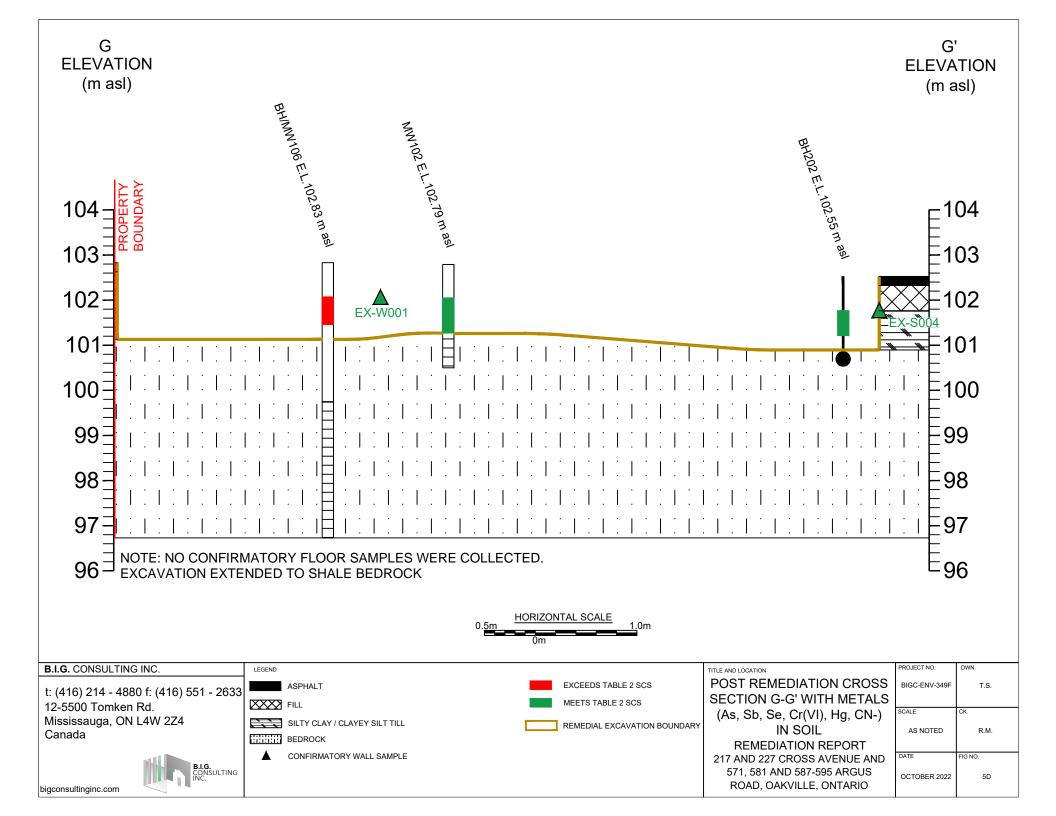
12-5500 Tomken Rd. CLAYEY SILT TILL MEETS TABLE 2 SCS SCALE WITH PAHs IN SOIL Mississauga, ON L4W 2Z4 REMEDIATION REPORT AS NOTED R.M. REMEDIAL EXCAVATION BOUNDARY Canada 217 AND 227 CROSS AVENUE LOCATION OF EXCAVATION WALL SAMPLE AND 571, 581 AND 587-595 DATE FIG NO. LOCATION OF EXCAVATION FLOOR SAMPLE ARGUS ROAD, OAKVILLE, OCTOBER 2022 4C **ONTARIO** bigconsultinginc.com











Appendix A – Analytical Data Tables



Sample ID	MOECC (2011) Table 2: Full Depth Generic	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	SCS in a Potable Groundwater Condition Residential/Parkland/Institutional Land Use	1837443-01	1837443-02	1837443-05	1837443-08	1837443-09	1837443-10	1837443-12	1966584	1966586	1966588
Sampling Date	(coarse textured soil)	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)	(coarse textured son)	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.



Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition	BH104-SS1	BH105-SS1	BH106-SS2	BH107-SS1	BH108-SS1	BH109-SS1	BH110-SS1	BH111-SS1	BH112-SS1	BH113-SS1
Lab ID	Residential/Parkland/Institutional Land Use	1966589	1966590	2011445	2011446	2011447	2011448	2011449	2011451	2011452	2011454
Sampling Date	(coarse textured soil)	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									
Laboratory		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.



November 2022

Sample ID	MOECC (2011) Table 2: Full Depth Generic	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	SCS in a Potable Groundwater Condition	2011456	2011457	2020967	2011458	2011459	2787591	3196779	3196864	3196865	3196866
Sampling Date	esidential/Parkland/Institutional Land Use (coarse textured soil)	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.



Sample ID	MOECC (2011) Table 2: Full Depth Generic	BH/MW5A- SS1	BH104NA-SS1	BH104NA-SS2	DUPWA020 (Dup of BH104NA-SS2)	BH104NA-SS3	DUPW4A030 (Dup of BH104NA-SS3)		BH104WA-SS2	BH104WB-SS1	BH104EA-SS1
Lab ID	SCS in a Potable Groundwater Condition	3196867	3604499	3607391	3607395	3604501	3604504	3604502	3607394	3603000	3604505
Sampling Date	esidential/Parkland/Institutional Land Use (coarse textured soil)	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.



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 Use	3607393	3604507	3607392	3648391	3647953	3648077	3648783	3648420	3648225
Sampling Date	(coarse textured soil)	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 son)	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.



November 2022

Sample ID	MOECC (2011) Table 2: Full Depth Generic SCS in a Potable Groundwater Condition	MW101-1a	MW9101-1a (Dup of MW101-1a)	MW102-1b	BH103-1a	MW104-1a	MW105-1a	BH101-SS1	BH102-SS1	BH103-SS1
Lab ID	Residential/Parkland/Institutional Land	1837443-01	1837443-02	1837443-05	1837443-08	1837443-08	1837443-12	1966584	1966586	1966588
Sampling Date	Use	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)	(coarse textured soil)	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	(coarse textured son)	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 concentratio  '<' = Parameter below de  'NV'= No value  Bold Concentration exce										



Sample ID	MOECC (2011) Table 2: Full Depth Generic	BH104-SS1	BH105-SS1	BH106-SS2	BH107-SS1	BH108-SS1	BH109-SS1	BH110-SS1	BH111-SS1	BH112-SS1
Lab ID	SCS in a Potable Groundwater Condition	1966589	1966590	2011445	2011446	2011447	2011448	2011449	2011451	2011452
Sampling Date	Residential/Parkland/Institutional Land	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)	Use	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	(coarse textured soil)	BIG								
Laboratory		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	3.4	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	<0.10	0.5	<0.10	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
	1	<0.2	<0.2	<0.5		<0.5	<0.5		<0.5	<0.5
Thallium	23	0.6			<0.5			<0.5		
Uranium	23 86	10	<0.5	0.8 30	0.7	0.8	0.7	0.5	0.8 25	1.1
Vanadium	340		11	66	33 68	29 74	33 75	15 77	25 84	32 74
Zinc	0.7	169	106					0.648		0.267
Electrical Conductivity (mS/cm)		0.269	0.488	0.402	0.386	0.331	0.362		0.444	
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)	(pH units) 5-9 (surface soil); 5-11 (subsurface soil)		7.91	7.93	7.80	7.70	7.76	7.99	7.70	7.67
All soil concentratio  '<' = Parameter below de  'NV'= No value  Bold Concentration exce										



Sample ID	MOECC (2011) Table 2: Full Depth Generic	BH113-SS1	BH114-SS1	BH114-SS2	DUP011402 (DUP of BH114-	BH115-SS1	BH115-SS2	BH116-AS1	BH201-SS1
	SCS in a Potable Groundwater Condition				SS2)				
Lab ID	Residential/Parkland/Institutional Land	2011454	2011456	2011457	2020967	2011458	2011459	2787591	2918865
Sampling Date	Use	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)	(coarse textured soil)	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	(000.00 00.00.,	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	_
,	F. O. (aumface acil), F. 11 (aubeumface acil)								
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 concentration  '<' = Parameter below de  'NV'= No value  Bold  Concentration exce									



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Sample ID	MOECC (2011) Table 2: Full Depth Generic	BH201-SS2	BH202-SS2	BH203-SS2	BH204-SS1	BH204-SS2	BH/MW1A- SS2	BH/MW2A- SS1	BH/MW3A- SS1
Lab ID	SCS in a Potable Groundwater Condition	2878405	2878406	2878407	2918895	2878408	3196779	3196864	3196865
Sampling Date	Residential/Parkland/Institutional Land	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)	Use	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	(coarse textured soil)	BIG	8IG	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
	4	0.7			<0.4	0.7			
Beryllium			0.9	0.6			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	_	_	_	_	_	_	_	_
Tree cyaniae									
pH (pH units)	5-9 (surface soil); 5-11 (subsurface soil)	-	-	-	-	-	-	-	-
'NV'= No value  Bold Concentration exco	ns reported in µg/g. etection limit, as indicated eeds MECP (2011) SCS. tection limit exceeds the MECP (2011) SCS.								



Sample ID	MOECC (2011) Table 2: Full Depth Generic	BH/MW4A- SS1	BH/MW5A- SS1	EX-W001	EX-E001	EX-S001	EX-S002	EX-S003	EX-S004
Lab ID	SCS in a Potable Groundwater Condition	3196866	3196867	3644519	3644109	3644521	3644513	3644416	3644410
Sampling Date	Residential/Parkland/Institutional Land	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)	- Use	0.00-0.61	0.00-0.61	0.8	0.5	0.5	0.8	0.8	0.8
Consultant	(coarse textured soil)	BIG	BIG	BIG	BIG	BIG	BIG	BIG	BIG
Laboratory	1	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)	-	-	-	-	-	-	-	-
'<' = Parameter below de 'NV'= No value  Bold Concentration exc. Non-detect but de	ens reported in µg/g. etection limit, as indicated eeds MECP (2011) SCS. tection limit exceeds the MECP (2011) SCS. the acceptable MECP range								



**Appendix B – Laboratory Certificates of Analysis** 





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	

### 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 (V1)

Page 1 of 10

Member of: Association of Professional Engineers and Geoscientists of Alberta (APEGA)

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

SAMPLING SITE:581-587 Argus Road, Oakville

Certificate of Analysis

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

SAMPLED BY:MV

ATTENTION TO: Rebecca Morrison

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

DATE RECEIVED: 2021-11-10									DATE REPORTED: 2021-11-18
		SAMPLE DES	CRIPTION:	BH/MW1-SS2	BH/MW2-SS1	BH/MW3-SS1	BH/MW4-SS1	BH/MW5-SS1	
		SAMI	PLE TYPE:	Soil	Soil	Soil	Soil	Soil	
			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	8.0	<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:

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

http://www.agatlabs.com

TEL (905)712-5100 FAX (905)712-5122



Certificate of Analysis

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

SAMPLED BY:MV

ATTENTION TO: Rebecca Morrison

O Pog 153(511) - OPPs (Soil)

O. Reg. 133(311) - ORFS (3011)												
DATE RECEIVED: 2021-11-10								С	DATE REPORTED: 2021-11-18			
		SAMPLE DESC	CRIPTION:	BH/MW1-SS2	BH/MW2-SS1	BH/MW3-SS1	BH/MW4-SS1	BH/MW5-SS1				
		SAMI	PLE TYPE:	Soil	Soil	Soil	Soil	Soil				
		DATE S	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 *)

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

SAMPLING SITE:581-587 Argus Road, Oakville

Certified By:

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

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TEL (905)712-5100 FAX (905)712-5122



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

SAMPLING SITE:581-587 Argus Road, Oakville

Certificate of Analysis

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

ATTENTION TO: Rebecca Morrison

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 2021-10-07 2021-10-08 2021-10-08 2021-10-06 08:30 09:00 08:20 11:30 14:50 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 < 0.05 Acenaphthylene μg/g 0.15 0.05 < 0.05 < 0.05 < 0.05 < 0.05 7.9 0.05 < 0.05 < 0.05 Acenaphthene < 0.05 < 0.05 < 0.05 μg/g 62 Fluorene < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 μg/g 0.05 6.2 0.05 < 0.05 < 0.05 0.25 Phenanthrene μg/g < 0.05 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 Pvrene 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 7 µg/g 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 0.3 0.05 < 0.05 < 0.05 < 0.05 0.26 0.07 μg/g 0.38 0.05 < 0.05 < 0.05 < 0.05 0.11 < 0.05 Indeno(1,2,3-cd)pyrene µg/g Dibenz(a.h)anthracene μg/g 0.1 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 6.6 0.05 < 0.05 < 0.05 < 0.05 0.16 < 0.05 Benzo(g,h,i)perylene µg/g 1 and 2 Methlynaphthalene 0.99 0.05 < 0.05 < 0.05 < 0.05 < 0.05 μg/g < 0.05 Moisture Content 0.1 10.0 % 17.1 14.2 15.1 15.2 Surrogate Unit Acceptable Limits % 105 78 124 112 106 Naphthalene-d8 50-140 % Acridine-d9 50-140 77 85 91 107 103 % 50-140 85 117 105 63 Terphenyl-d14

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)&i)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:

NPoprukolet

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO

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# **Exceedance Summary**

AGAT WORK ORDER: 21T828695

PROJECT: BIGC-ENV-490C

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.

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



# **Quality Assurance**

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

PROJECT: BIGC-ENV-490C

AGAT WORK ORDER: 21T828695
ATTENTION TO: Rebecca Morrison

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

SAMPLING SITE.301-307 AT	gus Mau,	Carville						ו אואורע		1 . IVI V					
				Soi	l Ana	alysis	3								
RPT Date: Nov 18, 2021			DUPLICATE				REFERENCE MATERIAL			METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable	Recovery	Lie	ptable	Recovery		ptable
		lu lu	-				value	Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals (Include	ding Hydride	s) (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 Applic Duplicate NA: results are under 5X		will not be	calculated	l.											
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.

CHEMIST OF CHEMIST OF

Certified By:



# **Quality Assurance**

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

PROJECT: BIGC-ENV-490C

AGAT WORK ORDER: 21T828695 ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581-587 Arg	gus Road,			5	SAMPI	LED B	Y:MV								
			Trac	e Or	gani	cs Ar	nalys	is							
RPT Date: Nov 18, 2021			С	UPLICAT	E		REFEREN	NCE MATERIAL		METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable	Recovery	منا ا	ptable nits	Recovery	1 :	eptable nits
		lu					value	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:



# Method Summary

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

SAMPLING SITE:581-587 Argus Road, Oakville

PROJECT: BIGC-ENV-490C

AGAT WORK ORDER: 21T828695 ATTENTION TO: Rebecca Morrison

SAMPLED BY:MV

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis	1		
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

# **Method Summary**

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

PROJECT: BIGC-ENV-490C

AGAT WORK ORDER: 21T828695 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



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905-712-5100 Fax: 905.712-5122 webearth.agattabs.com

Laboratory Use	Only		
Work Order #:	T829	3695	
Cooler Quantity:	2ler	nu	
Arrival Temperatures:	48	521	5.5
Custody Seal Intact:	3-7 □Yes	1 4-2	U.G.

Chain of C	ustody Recor	(C) If this is a	Drinking Water s	ample, plea	se use Drink	ing Water Chain o	f Custody Form (p	otable wate	consum	ed by	humans)			٦			peratu		3.	71	4-2	14	6
Report Inform Company:	ation: BIG Consulting Inc					ulatory Requ									Custo	-	al Inta	ot:	☐Yes		□No	[	□N/A
company.	Rebecca Morrison				-	gulation 153/04	Excess Soils	s R406	Sev					1=									
Address:	12-5500 Tonken Road, M	lississauga, Ontar	rio, L4W2Z4		Tal	2	Table			anita	y 🗆 S	itorm		11	Turnaround Time (TAT) Required:								
						Ind/Com	Table	One	1	Reg	lon			111	Regu	lar T	AT		<b>√</b> 5 to	7 Busir	ess Days	3	
Phone:	6476748087	Fax:				Res/Park Agriculture	Regulation	558			ter Qua			11	Rush	TAT	(Rush Sur	charges	Apply)				
Reports to be sent to:	rmorrison@brownfieldigi	.com			- 11	exture (check One)					es (PWC	(O)			_	. 3 Bi	usiness		2B	usiness	_	Next Bu	ısıness
1. Email:	mvaughan@brownfieldigi				- 11	Coarse	CCME		Oth	er									Day				
2. Email:	mvaugnaneurowinieidigi					Fine		4	1	Indic	ate One			OR Date Required (Rush Surcharges Ma				ges May	Apply):				
Project Inform	ation:				Is	this submission	on for a	F	eport	Gul	deline	on								_			
Project:	BIGC-ENV-490A				Red	ord of Site Co	ondition?	Ce	ertifica	rte (	of Ana	lysis	\$	Please provide prior notification for *TAT is exclusive of weekends and statu						vs			
Site Location:	581-587 Argus Road, Oak	cville				Yes [	No	G	Yes	3		No		Н	F						act your		
Sampled By:	MV				0. Reg 153					10				anaiy	sis, piea	se cont	act your	AGAT CI					
AGAT Quote #:		P0:			Sam	ple Matrix Le	gend	8		. Reg				Ĭ	Reg 558	U. He	g 406	1					(Y/N)
	Please note: If quotation number	is not provided, client will	be billed full price for a	analysis	В	Biota	50114	Crvl, DOC			% 			٥	□ B(a)P □ PCBs	r G	Characterization Package letals, BTEX, F1-F4	1 1					atlon
Invoice Inform	ation:	E	Bill To Same: Ye	s 🗆 No 🗆	GW	Ground Water		<u>₩</u>		SS SS				5	Jaje K	ater Leach Svocs	Pac F4						Sent
Company:					0	Oil		ig is		¥	□ Yes			Ř		Rainwater ocs □svo	ation Pa	1 1					L Co
Contact:					P	Paint		<u>₹</u>		<u>∞</u>	red		/ //	2	□ ABNS	ainv Cs [	cteriza BTEX,						i.i.
Address:					S SD	Soil Sediment		ared	i i	直	PHCs if required			8	5 8	SPLP Rair	arac als, E						o sno
Email:					sw	Surface Water		Field Filtered - Metals, Hg.	& Inorganics	CrV	1-F4 PH F4G if o			leader	N D NOCS		Soils Ch	EC/SAR					Hazərd
		Date	Time	# of	Sample	Com	iments/	E	5	Metals - □ CrVI, □ Hg, ⊡ HWSB	BTEX, F1-F4 Analyze F4G	<u>\$</u>	3S	VOC	TOP. DM&	Excess Soils SF SPLP: ☐ Metals	Excess Soils Chara pH, ICPMS Metals,	Salt - EC/	W				Potenbally Hazardous or High Concentration (Y/N)
Sample	eldentification	Sampled	Sampled	Containers	Matrix		Instructions	1718	₩ W	₩	BTI	PAHs	PCBs	Noc T	ğ ğ	SPI	ヌ포	Sal					Pot
BH/MW1-SS2		21-10-8	9:00 AM		S			121		V	11	V											
BH/MW2-SS1		21-10-7	8:20 AM		S			101		V		✓				1							
BH/MW3-SS1		21-10-8	11:30 AM		S					V		<b>7</b>											
BH/MW4-SS1		21-10-8	14:50 AM	2	S					☑		✓					Jul 1						
BH/MW5-SS1		21-10-6	8:30 AM	2	S					Ø		V											
			AM PM														1						
			AM PM																				
			AM																				1
			AM																1				
			AM																				7
			AM PN			-			V														
Samples Relinquished By (Pair	Name and Sides		Date	Trun-		Samula Received Red	Hint Name and Safe			1			Clate		-	Time		_					1
Matt Vaughan	Hanke ago skilot		21-11-10	1	6:50	Jerel 1	hovo	ms	2				21	Ne	Vii	16	1:58	5					
Samples Reanquished By (Per	Name and Signi	2	Date	Time		Samples Received By (	Print Name And Sign)	1	0				Date		1	Time				Page _	of		
Samules Relinquished by (Pric	Kare and Sign)		Days	Time		Samples Received By (	Print Name and Sign)						Date			Time			N:				
																1							



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.
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AGAT Laboratories (V1)

Page 1 of 7

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Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



Certificate of Analysis

AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

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

SAMPLING SITE:581 Argus Rd, Oakville, ON

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

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

DATE RECEIVED: 2022-03-09							I	DATE REPORTED	D: 2022-03-16
		SAMPLE DESCRIPT	ION: BH104NA-SS1	BH104NA-SS3	BH104WA-SS1	DUPW4A030	BH104EA-SS1	BH104SA-SS1	
		SAMPLE T	YPE: Soil	Soil	Soil	Soil	Soil	Soil	
		DATE SAMP		2022-03-09	2022-03-09	2022-03-09	2022-03-09	2022-03-09	
_			09:30	09:35	09:51		10:07	10:21	
Parameter	Unit	G/S RI		3604501	3604502	3604504	3604505	3604507	
Naphthalene	μg/g	0.6 0.0		<0.05	<0.05	<0.05	<0.05	<0.05	
Acenaphthylene	μg/g	0.15 0.0		<0.05	< 0.05	< 0.05	<0.05	<0.05	
Acenaphthene	μg/g	7.9 0.0	05 < 0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Fluorene	μg/g	62 0.0		<0.05	< 0.05	<0.05	<0.05	< 0.05	
Phenanthrene	μg/g	6.2 0.0	0.28	<0.05	0.78	<0.05	<0.05	<0.05	
Anthracene	μg/g	0.67 0.0	0.10	<0.05	0.12	<0.05	< 0.05	<0.05	
Fluoranthene	μg/g	0.69 0.0	0.34	0.05	1.12	< 0.05	0.07	0.06	
Pyrene	μg/g	78 0.0	0.27	< 0.05	0.94	< 0.05	0.06	< 0.05	
Benz(a)anthracene	μg/g	0.5 0.0	0.14	< 0.05	0.51	< 0.05	< 0.05	< 0.05	
Chrysene	μg/g	7 0.0	0.15	< 0.05	0.62	< 0.05	< 0.05	< 0.05	
Benzo(b)fluoranthene	μg/g	0.78 0.0	0.17	< 0.05	0.78	< 0.05	< 0.05	< 0.05	
Benzo(k)fluoranthene	μg/g	0.78 0.0	0.06	< 0.05	0.23	< 0.05	< 0.05	< 0.05	
Benzo(a)pyrene	μg/g	0.3 0.0	0.11	< 0.05	0.40	< 0.05	< 0.05	< 0.05	
ndeno(1,2,3-cd)pyrene	μg/g	0.38 0.0	0.05	< 0.05	0.21	< 0.05	< 0.05	<0.05	
Dibenz(a,h)anthracene	μg/g	0.1 0.0	05 < 0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.05	
Benzo(g,h,i)perylene	μg/g	6.6 0.0	0.05	< 0.05	0.25	< 0.05	< 0.05	<0.05	
1 and 2 Methlynaphthalene	μg/g	0.99 0.0	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 Lim	its						
laphthalene-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:

NPopukolof



Certificate of Analysis

AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

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. SAMPLING SITE:581 Argus Rd, Oakville, ON

	O. Reg. 153(511) - PCBs (Soil)												
DATE RECEIVED: 2022-03-09						DATE REPORTED: 2022-03-16							
	S	SAMPLE DES	CRIPTION:	BH105-SS1	DUP010501								
		SAM	PLE 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	Acceptab	le 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:





# **Guideline Violation**

AGAT WORK ORDER: 22T871686

PROJECT: BIGC-ENV-490D

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.

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



# **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T871686
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 3	3604505	<0.05	< 0.05	NA	< 0.05	110%	50%	140%	68%	50%	140%	70%	50%	140%
Acenaphthylene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	89%	50%	140%	73%	50%	140%	75%	50%	140%
Acenaphthene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	97%	50%	140%	77%	50%	140%	87%	50%	140%
Fluorene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	116%	50%	140%	91%	50%	140%	103%	50%	140%
Phenanthrene	3604505 3	3604505	<0.05	<0.05	NA	< 0.05	119%	50%	140%	92%	50%	140%	105%	50%	140%
Anthracene	3604505 3	3604505	<0.05	< 0.05	NA	< 0.05	113%	50%	140%	92%	50%	140%	107%	50%	140%
Fluoranthene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	122%	50%	140%	101%	50%	140%	116%	50%	140%
Pyrene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	115%	50%	140%	99%	50%	140%	112%	50%	140%
Benz(a)anthracene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	112%	50%	140%	88%	50%	140%	98%	50%	140%
Chrysene	3604505 3	3604505	<0.05	<0.05	NA	< 0.05	109%	50%	140%	87%	50%	140%	86%	50%	140%
Benzo(b)fluoranthene	3604505 3	3604505	<0.05	<0.05	NA	< 0.05	80%	50%	140%	83%	50%	140%	78%	50%	140%
Benzo(k)fluoranthene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	108%	50%	140%	76%	50%	140%	63%	50%	140%
Benzo(a)pyrene	3604505 3	3604505	< 0.05	< 0.05	NA	< 0.05	121%	50%	140%	78%	50%	140%	99%	50%	140%
Indeno(1,2,3-cd)pyrene	3604505 3	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:



### Method Summary

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T871686 ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

SAMPLING SITE:581 Argus Rd, Oakville, ON

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



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

5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905.712 5100 Fax: 905.712 5122 webearth.agatlabs.com

Laboratory	Use Only	
	22 T8 7168	3

Cooler Quantity:	1	Lasge	
Arrival Temperature	es:	20.3   20.0	18.2

Report Information: Company: B-T.6. (	ansulting Inc			(Please	ulatory Requirements:								stody S tes:			Tice	□No	□N/A	4
Address: 2-5500	224	Mississa	mga,	Tab	gulation 153/04 Excess Soils la Excess Soils l			ver Use anitary Region	Sto	rm			naro gular		Time	(TAT) Req			
Phone: Reports to be sent to: 1. Email: Company Son  2. Email:	ebounfield	igi.com	6 -	Soil Te	Regulation 5:  Agriculture  Coarse  CCME			v. Water ectives er Indicate (	PWQO)			Rus	Da	Busine ys	SS	2 Busines Days  Days  Days		Next Busines Day Apply):	SS
Project Information: Project: Site Location:  Project Information:  8166-81	N-490D Ro, Oakaille,	ON		Rec	this submission for a cord of Site Condition?  Yes	Cer		Guide ate of		sis		F		T is ex	clusive	de prior notifica of weekends a ysls, please co	and statutory	holidays	
Sampled By: AGAT Quote #:	PO:			Som	ple Matrix Legend	200	0.	Reg 153				0. Reg 558	0. R	eg 406					(N/X
Contact: Laine D	s reporting			GW O P S SD SW	Biota Ground Water Oil Paint Soil Sediment Surface Water	Field Filtered - Metals, Hg, CrVI, DOC	s & Inorganics	Metals - □ CrVI, □ Hg, □ HWSB	Analyze F4G if required   Yes			Landfill Disposal Characterization TCLP: TCLP: ☐M& ☐VOCs ☐ABNs ☐B(a)P☐F	Soils SPLP Rainwater Lea	Soils Characteriza	ph, ICPMS Metals, BTEX, F1-F4 Salt - EC/SAR				ially Hazardous or High Concentra
Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Y/N	Metal	Metals	Analy	PCBs	VOC	Landfi TC.P.	Excess SPLP:	Excess	Salt -				Potent
BH104NA-551	Mar 9/22			S					V										ν
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BH1045A-553		10:29 部	1	5					-										V
BH105-551		10: 70 PN		5						1									V
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Samples Relinquished By (Print Name and Sign):	10 mg/	Date Mar 9/	777 Time	13pm	Samples Received By (Print James and Sign): At majeral Rivas	5 7	70.00	ork	6	Dat	te		Time			12	ZMAR I	9, 2:34	A
Timothy Damdar Samples Relinquished By Print Name and Sign):	8	Date	Time	1	Samples Received By (Print Name and Sign):	1.				Dat	te		Time			Page	of _	20.00	
Samples Relinquished By (Print Name and Sign):		Date	Time		Samples Received By (Print Name and Sign):					Dat	te		Time			Nº: <b>T</b> 1	2592	25	
cument ID-DIV 78 1511 021								Р	nk Cop	y - Clie	nt I Y	Yellow (	Copy - A	GAT	White	e Copy- AGAT	Page	7 of 7	23



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
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- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories (V1)

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Certificate of Analysis

AGAT WORK ORDER: 22T871693

PROJECT: BIGC-ENV-490D

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. SAMPLING SITE:581 Argus Rd, Oakville, ON

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Ro	d, Oakville	, ON			SAMPLED BY: ID
				O. Reg	. 153(511) - PAHs (Soil)
DATE RECEIVED: 2022-03-09					DATE REPORTED: 2022-03-17
	;	SAMPLE DES	CRIPTION:	BH104WB-SS1	
		SAM	PLE 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	Acceptab	le Limits		
Naphthalene-d8	%	50-	140	85	
Acridine-d9	%	50-1	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 *)





#### **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T871693
ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Rd, Oakville, ON SAMPLED BY:TD

OAMI EINO OHE.SOT AIGUS I	ta, Caltvill	0, 011					`	, (IVII I		1						
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	Measured Value	asured Lim	Acceptable Limits		منا ا	ptable nits	Recovery	منا ا	ptable nits
		lu lu					value	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).



## **Method Summary**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T871693
ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

SAMPLING SITE:581 Argus Rd, Oakville, ON

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



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 webearth.agatlabs.com

**Laboratory Use Only** 

Cooler Quantity: Arrival Temperatures:	400	e cool	17.7
Custody Seal Intact:	□Yes ed	TCE	□N/A
furnaround Time Regular TAT	/	Required: 7 Business Days	

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		Fo	r 'Sam	e Day'	analy	/sis, pl	ease	con	tact y	our /	AGAT	СРМ	
		O. Reg 558	O. Re	g 406									(X
PCBs	VOC	Landfill Disposal Characterization TCLP: 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)
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Report Information: Company: Contact:  Rebecca Marrison  12-5506 Tomken Rd, Mississunga on  (4w 224  Phone: Reports to be sent to: 1. Email:  2. Email:				ble Indicate One Indicate One Indicate One Indicate Indic	One	Pro Obj	Regi v. Wa ective	y □ Si on ter Quali es (PWQ	ty		Turi Reg Rusi	narouular Th TAT	ING T AT (Rush Sur usiness	ime (T	5 to 7 ply)  2 Busi Days	equire Busines iness	ed: s Days Nex Day	,
Downle, a	0,N		ls Red	this submission for a cord of Site Condition?	Ce	rtifica	Gui	deline of Anai	ysls		Fe	*TA1	is excl	usive of	weekend	is and st	atutory ho	olidays
Sampled By:  AGAT Quote #:  Please note: If quotation number is not provided, client will be billed full price for analysis  Invoice Information:  Company:  Contact:  Address:  Email:		B GW O P S	O Oil P Paint S Soil SD Sediment		Metals, Hg, CrVI, DOC		.F4 PHCs F4G if required □ Yes □ No			92			EC/SAR				NAME OF THE OWNER OW	
Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Y/N	Metals	Metals	BTEX, Analyz	PAHS	NOC 200	Landfill TCLP: [	Excess SPLP:	Excess pH, ICI	Salt - I				
-			5	Place on hold.					1									1
	10:19			Place on hold					1									1
V	1		5	Place on hold														1
	AM PM AM PM AM PM AM PM AM PM																	
	Fax:  Fax:  Fax:  Policy le la	PO: not provided, client will be billed full price for a sampled  Date Sampled  Mar 9/22 10:00 PN  10:35 PN  AM PN	Fax:  Fax:	Fax:  Fax:  Soil To Same: Yes No Physics Sampled Sampled Sampled Containers Matrix  Date Sampled Sampled Containers Matrix  Magazz 10:00 Physics Sampled Matrix  Magazz 10:00 Physics Sampled	Regulation 153/04	Regulation 153/04   Excess Soils R406   Table Indicate One   Ind	Regulation 153/04   Excess Soils R406   Set     Red	Regulation 153/04 Table	Regulation 153/04   Excess Soils R406   Sewer Use   Sanitary   State   Table   Indicate One   Sample Matrix Legend   Regulation 558   Sample Matrix Legend   Soil Sp. Sediment   Sw. Surface Water   Sp.	Regulation 153/04	Regulation 153/04   Excess Soils R406   Sewer Use   Sanitary   Storm   Table   Implementation   Implementa	Regulation 153/04	Regulation 153/04   Excess Soils R406   Sewer Use   Sanitary   Storm   Regular Turnarot R	Regulation 153/04 Table	Regulation 158/04   Sample   Sample	Regulation 133/04 Table	Regulation 153/04   Excess Solis R406   Sewer Use   Storm   Regular TAT   Story Regu	Regulation 153/04   Decrease Soils R406   Table   Decrease Soils

Samples Received By (Print Name and Sign):

Date

Time

Samples Relinquished By (Print Name and Sign):



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	

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Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



Certificate of Analysis

AGAT WORK ORDER: 22T872055

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

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. SAMPLING SITE:581 Argus Road, Oakville, ON

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 2022-03-09 2022-03-09 2022-03-09 2022-03-09 09:53 10:07 10:29 10:47 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 7.9 0.05 < 0.05 < 0.05 Acenaphthene < 0.05 < 0.05 < 0.05 μg/g 62 Fluorene < 0.05 < 0.05 < 0.05 < 0.05 μg/g 0.05 < 0.05 6.2 0.05 < 0.05 < 0.05 Phenanthrene μg/g < 0.05 < 0.05 < 0.05 Anthracene 0.67 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 μg/g Fluoranthene µg/g 0.69 0.05 0.07 < 0.05 < 0.05 < 0.05 < 0.05 Pvrene 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 7 µg/g 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 < 0.05 µg/g 0.78 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 μg/g 0.38 0.05 < 0.05 < 0.05 < 0.05 < 0.05 Indeno(1,2,3-cd)pyrene µg/g < 0.05 Dibenz(a,h)anthracene μg/g 0.1 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 6.6 0.05 < 0.05 < 0.05 < 0.05 < 0.05 < 0.05 Benzo(g,h,i)perylene µg/g 1 and 2 Methlynaphthalene 0.99 0.05 < 0.05 < 0.05 < 0.05 < 0.05 μg/g < 0.05 Moisture Content 0.1 12.3 15.0 % 15.0 15.0 11.7 Surrogate Unit Acceptable Limits

Comments:

Acridine-d9

Naphthalene-d8

Terphenyl-d14

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 -

71

79

64

Residential/Parkland/Institutional Property Use - Coarse Textured Soils

50-140

50-140

50-140

%

%

%

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.

68

85

60

Analysis performed at AGAT Toronto (unless marked by *)

Certified By:

63

84

74

67

79

110

61

96

62





#### **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T872055
ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLING SITE:581 Argus	SAMPLING SITE:581 Argus Road, Oakville, ON									Y:TD					
			Trac	e Or	gani	cs Ar	nalys	is							
RPT Date: Mar 17, 2022				DUPLICATE			REFERENCE MATERIAL			METHOD	BLANK	SPIKE	MAT	KE	
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable nits	Recovery	1 :	ptable nits	Recovery	1 1:00	ptable
		lu					value	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).

Jinkal Jata

### Method Summary

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

SAMPLING SITE:581 Argus Road, Oakville, ON

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T872055 ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE			
Trace Organics Analysis	<u> </u>					
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			



5835 Coopers Avenue Mississauga, Ontorio L4Z 1Y2 Ph: 905 712.5100 Fax: 905.712.5122 webearth.agatlabs.com **Laboratory Use Only** 

Cooler Quantity:

Report Inform	ation: B.I.G. Consulting Inc.				Regi	ulatory Requirements: chock all applicable bosos)							Cust Note	ody Se s:	al Intact	sea	ZC	□No —	□N/A
Company: Contact:	Rebecca Morrison				₩ Res	gulation 153/04   Excess Soils	R406		er Use				7		und Ti	mo (T/	AT) Requ	ired:	
	12-5500 Tomken Road, N	Mississauga, ON L4	W 2Z4			Table Indicate One		□26	anitary	□ 200	rtti								
					Di	Ind/Com	1		Region				_	ılar T -			5 to 7 Busi	ness Days	
Phone:	416-214-4880	Fax:				Res/Park Agriculture Regulation	558		v. Water ectives			- 1	Rusi	1 TAT	(Rush Sure	harges Appl	ly)		
Reports to be sent to:	rmorrison@brownfiedig	ri.com			11	exture (( back One)	1	Oth		11100	′				usiness		2 Business	· 🗆 [	Next Busine
1. Email:						Coarse							-	Duy			Days Rush Surcha		
2. Email:						Fine	1:		Indicate (					UK	Date N	equileu (i	reasii Saroii	11B05 (11a) 7	- P-177
Project Inforn	nation:					this submission for a cord of Site Condition?			Gulde te of						Please	provide p	rior notifica	ion for rush	h TAT
Project:	BIGC-ENV-490D					Yes □ No		Yes				1					veekends ar		
Site Location:	581 Argus Road, Oakvil	IIe, ON			N A	i tes 🗀 140							-	_		analysis,	please cor	tact your A	
Sampled By:	TD	DO:					9	0	. Reg 15:	3			0. Reg 558		g 406				
AGAT Quote #:	Please note: If quotation numb	PO: her is not provided_client will	be tillled full price fo	r analysis	Sam	nple Matrix Legend  Biota	\frac{\frac{1}{2}}{0}			S C			4 6	Leach	Package				
Company: Contact: Address: Email:	Same as report info Laine Dougherty Same as report info Idougherty@brownfield	digi.com			P S SD SW	Paint Soil Sediment Surface Water	Field Filtered - Metals, Hg, CrVI, DOC	Metals & Inorganics	Metals - □ CrVI, □ Hg, □ HWSB	ze F4G			Landfill Disposal Characterization TCLP: TCLP: CIM&L CIVOCs CIABNS CIB(a)PCIP	Excess Soils SPLP Rainwater L SPLP: ☐ Metals ☐ VOCs ☐ SVOC	olls Characteri: IS Metals, BTE	Salt - EC/SAR			
Samp	le Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Y/N	Meta	Meta		] PAHs	8 8	Jan 5	Exce	Excess pH. ICP	Salt			
BH104NA-SS2		Mar 9/22	A STATE OF THE PARTY OF THE PAR	1 1	S			-	-	-		-		-			1		
BH104SA-SS2		Mar 9/22		M 1	S			-	-			+							
BH104EA-SS2		Mar 9/22		1 1	S			-	1			+		-					
BH104WA-SS2		Mar 9/22		3M 1	S			-	-			+		-					
DUPWA020		Mar 9/22		1	S			-	+		V	+		-			-		
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Samples Relingulated By (F	rint Name and Signs		Date	Turue	1	Amature, recommend to term manus and series											Page	01	
	rint Name and Sines		Date	Time		Samples Rice yed By (Frint Frame and Sign):						Date		Ten	ii.	I.	10-		



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.
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  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 (V1)

Page 1 of 5

Member of: Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



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

SAMPLING SITE: 217-227 Cross Avenue, Oakville, ON

Certificate of Analysis

AGAT WORK ORDER: 22T875643

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

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

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

DATE RECEIVED: 2022-03-21					DATE REPORTED: 2022-03-22
	5	SAMPLE DES	CRIPTION:	Ex1-W001	
		SAM	PLE TYPE:	Soil	
		DATE	SAMPLED:	2022-03-21 12:15	
Parameter	Unit	G/S	RDL	3644519	
Antimony	μg/g	7.5	8.0	<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	
_ead	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	8.0	<0.8	
Silver	μg/g	20	0.5	<0.5	
Гhallium	μg/g	1	0.5	<0.5	
Jranium	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 *)





### **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T875643
ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

				Soi	l Ana	alysis	3								
RPT Date: Mar 22, 2022			DUPLICATE				REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SP	IKE
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value		eptable mits	Recovery	1 :-	ptable	Recovery	l i:.	eptable mits
		ia	·				value	Lower	Upper		Lower	Upper	•	Lower	Upper
O. Reg. 153(511) - Metals (Inclu	ıding Hydride	s) (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.

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### **Method Summary**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T875643

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



5835 Coopers Avenue Mississauga, Ontario 1,47 1Y2 Ph: 905.712.5100 Fax: 905.712.5127

Labor	atory Use Only	
Work Or	der# <u>227875</u>	,43
Cooler (	uantity: 1 Smal	
	Sgal Intact:	□No □N//

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Report Infor	mation: B.I.G Consulting Inc.				Reg	ulatory Requences all applicable box	urements:									al Inta		DE Yes	ce -	No E	]N/A
Contact:	Rebecca Morrison				-	gulation 153/04	I Excess Soils	R406	Se	wer U	se			1100		1					
Address:	12-5500 Tomken Road, Miss	issauga, ON L	4W 2Z4			ble 3				Sanitar	y 🔲 St	orm		Turr	naroi	und T	ime	(TAT) F	Require	d:	
						Ind/Com	Table Indicate	ne ne	-	Reg	ion			Reg	ular 1	TAT		☐ 5 to	7 Business	Days	
Phone:	416-214-4880	Fax:				Res/Park Agriculture	Regulation 5	58			ter Quali es (PWQ		1	Rusi	h TAT	(Rush Su	rcharge	s Apply)			
Reports to be sent to 1. Email:	rmorrison@brownfieldigi.co	m			- 11	exture (Chack One)	ССМЕ		Oth			,		_		usines	5	☐ 2 Bu	siness	Next Bus	iness
2. Email:	tdamdar@brownfieldigi.com				- 11	Coarse Fine	COMP.				ite One		-		Day OR		Requir	Days الـا ed (Rush 9		May Apply):	
Project Info	rmation:				ls	this submissi	on for a	R	eport	Gul	deline	on	114								
Project:	BIGC-ENV-490D				Red	ord of Site Co	ondition?	Ce	rtifica	ate d	of Anal	ysis	50						otification fo	or rush TAT Itutory holiday	c
Site Location:	217-227 Cross Avenue, Oaks	ville, ON				Yes [	l No	V	] Yes	5		No	1	_							
Sampled By:	TD				2.0	N. 13-0			10.5	MA.	2018						analy	ysis, pleas	e contact	your AGAT CP	VI
AGAT Quote #:	Please riole: if quotation number is no	PO:	or hilled tuli price for i	malysis	Sam	ple Matrix Le	gend	CrVI, DOC	C	Reg :	153 8			O. Reg 558 8DA 🗆 A		Package 824					ion (Y/N)
Invoice Info Company: Contact: Address: Email:	rmation: B.I.G Consulting Inc. Laine Dougherty 12-5500 Tomken Rd, Mississ Idougherty@brownfieldigi.co	sauga, ON om	ill To Same: Ye	s LI No L	O P S SD SW	Ground Water Oil Paint Soil Sediment Surface Water		Field Fittered - Metals, Hg,	ls & Inorganics	Metals - □ CrVI, □ Hg, □ HWSB	"F1-F4 PHCs rze F4G if required □ Yes			Characterization Cs □ABNs □B(a)	Excess Soils SPLP Rainwater Leach SPLP: 🗆 Metals 🗖 VOCs 🗖 SVOCs	aracterization ils, BTEX, F1-F	Salt - EC/SAR	ICPMS Metals			tially Hazardous or High Concen
Sam	nple Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix		nments/ Instructions	Y/N	Metals	Meta	BTEX, F1 Analyze	PAHS	VOC V	Landf TCLP:	Exces	Excess pH, ICP	Salt -	CE			Potent
EX1- WOO	1	Mar 21/22	12:15 微	1	S	Opecial	instructions		1								"	7			Del
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			I.			



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	

#### Disclaimer:

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- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may
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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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Page 1 of 5

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

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

#### Certificate of Analysis

AGAT WORK ORDER: 22T875644

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

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

DATE RECEIVED: 2022-03-21					DATE REPORTED: 2022-03-22
	5	SAMPLE DES	CRIPTION:	Ex1-S001	
		SAMI	PLE TYPE:	Soil	
		DATES	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	
∟ead	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	
Гhallium	μg/g	1	0.5	<0.5	
Jranium	μg/g	23	0.50	1.81	
/anadium	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:



5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

http://www.agatlabs.com

TEL (905)712-5100 FAX (905)712-5122



#### **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T875644
ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON SAMPLED BY:TD

SAMPLING SITE.ZTT-ZZT CIUSS	Avenue	, Oakvii	ie, Oiv					NIVIE I		1.10					
				Soi	l Ana	alysis	6								
RPT Date: Mar 22, 2022			D	UPLICATI	E		REFERENCE MATERIAL			METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		ptable nits	Recovery	Acce Lin	ptable nits	Recovery	1 :	ptable nits
		ld		,			Value	Lower	Upper	,	Lower	Upper	,	Lower	Upper
O. Reg. 153(511) - Metals (Including	Hydrides	s) (Soil)													
Antimony 3	622029		<0.8	<0.8	NA	< 0.8	102%	70%	130%	100%	80%	120%	78%	70%	130%
Arsenic 3	622029		10	9	10.5%	< 1	117%	70%	130%	100%	80%	120%	96%	70%	130%
Barium 3	622029		89.6	89.8	0.2%	< 2.0	108%	70%	130%	110%	80%	120%	112%	70%	130%
Beryllium 3	622029		0.5	0.5	NA	< 0.4	103%	70%	130%	105%	80%	120%	92%	70%	130%
Boron 36	622029		8	8	NA	< 5	73%	70%	130%	101%	80%	120%	85%	70%	130%
Cadmium 3	622029		<0.5	<0.5	NA	< 0.5	108%	70%	130%	106%	80%	120%	92%	70%	130%
Chromium 3	622029		36	33	8.7%	< 5	91%	70%	130%	106%	80%	120%	102%	70%	130%
Cobalt 3	622029		6.2	6.1	1.6%	< 0.5	95%	70%	130%	95%	80%	120%	94%	70%	130%
Copper 3	622029		12.7	12.6	0.8%	< 1.0	92%	70%	130%	101%	80%	120%	91%	70%	130%
Lead 3	622029		17	15	12.5%	< 1	102%	70%	130%	102%	80%	120%	92%	70%	130%
Molybdenum 3	622029		<0.5	0.5	NA	< 0.5	113%	70%	130%	112%	80%	120%	113%	70%	130%
Nickel 3	622029		11	11	0.0%	< 1	98%	70%	130%	98%	80%	120%	93%	70%	130%
Selenium 3	622029		<0.8	<0.8	NA	< 0.8	130%	70%	130%	106%	80%	120%	106%	70%	130%
Silver 3	622029		<0.5	<0.5	NA	< 0.5	104%	70%	130%	104%	80%	120%	95%	70%	130%
Thallium 3	622029		<0.5	<0.5	NA	< 0.5	105%	70%	130%	101%	80%	120%	98%	70%	130%
Uranium 3	622029		0.58	0.60	NA	< 0.50	100%	70%	130%	96%	80%	120%	97%	70%	130%
Vanadium 3	622029		26.8	26.2	2.3%	< 0.4	99%	70%	130%	95%	80%	120%	97%	70%	130%
Zinc 3	622029		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.

S CHARTERED S CHEMIST OF CHEMIST OF STATE OF STA

### 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

<u> </u>		
AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
•		
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
MET-93-6103	modified from EPA 3050B and EPA 6020B and ON MOECC	ICP-MS
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5835 Coopers Avenue Mississauga, Ontario 1,4Z 1Y2 Ph 905.712.5100 Fax: 905.712.5123

Laboratory Use Only	- A . 156	
Work Order #: 27 76	0644	
Cooler Quantity: 4 5mv  Arrival Temperatures: 14-8	ell 1	
Custody Seal Intact:	∐No	□N//

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Report Infor	B.I.G Consulting Inc.				Reg (Please	gulatory Requ	irements:									al Inta		-Elver	ce		lo	□N/A
Contact: Address:	Rebecca Morrison 12-5500 Tomken Road, Miss	sissauga, ON L	4W 2Z4			egulation 153/04 able 1 Indicate One   Indicate One	Table Indicate On	- 1	Sew Sa		☐ Ste	nın		Turn			ime	•	•	quired		
Phone: Reports to be sent to 1. Email:	416-214-4880 rmorrison@brownfieldigi.co	Fax:				]Res/Park ]Agriculture [exture (chesk One)	Regulation 55		Obje	, Wat	er Qualit s (PWQC			Rush	<b>TAT</b>	(Rush Sur USİNESS		s Apply)	Busin	000	New	. Business
2. Email:	tdamdar@brownfieldigi.con	າ			111	]Coarse ]Fine	CCME	-	Oth	er Indicat	e Drie	STEP IN THE			Day		Requir		ays h Surc		Day May Apply	/):
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Sampled By: AGAT Quote #:	Please note: If quotation number is a				San B GW	nple Matrlx Leg Biota Ground Water	gend	g, crvi, doc	0.	Reg 1	8 0			zation TCLP.		ackage 406			11			ntration (Y/N)
Invoice Info	B.L.G Consulting Inc. Laine Dougherty 12-5500 Tomken Rd, Missis		Bill To Same: Ye	S [] 140 []	0 P S	Oil Paint Soil		Field Filtered - Metals, Hg,	iics	□ Hg. □ HWSB	ICs required □ Yes			aracteri;	PLP Rainwater Leach ☐ vocs ☐ svocs	Characterization Package letals, BTEX, F1-F4		etals				is or High Conce
Email:	ldougherty@brownfieldigi.c				SD SW	Sediment Surface Water		Field Filter	& Inorganics	Cr/II.	-F4 Pt	) L		fill Disposal Cha	Excess Soils SPLP   SPLP:	ess Soils Chara ICPMS Metals,	Salt - EC/SAR	ICPMS Metals				a ly Hazardo:
Company of the Contract of the	nple Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix		ments/ nstructions	Y/N	Metals	Metals -	BTEX, F1 Analyze	PAHS	VOC	Landfill TCLP:	Excess SPLP:	Excess Soils pH, ICPMS N	Salt - E	ICP	/			Potent
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Summle Saliona short By	Grad Name, and Solin		E==1	Tupe		Samples Received by (P	mit Name and Signi		_			Die	le:		Time	-		Ne				



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	

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#### Certificate of Analysis

AGAT WORK ORDER: 22T875646

PROJECT: BIGC-ENV-490D

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

5835 COOPERS AVENUE

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

SAMPLING SITE: 217-227 Cross Avenue, Oakville, ON

ATTENTION TO: Rebecca Morrison SAMPLED BY:TD

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

DATE RECEIVED: 2022-03-2	1				DATE REPORTED: 2022-03-22
	5	SAMPLE DES	CRIPTION:	Ex1-S002	
		SAM	PLE TYPE:	Soil	
		DATE	SAMPLED:	2022-03-21 12:50	
Parameter	Unit	G/S	RDL	3644513	
Antimony	μg/g	7.5	8.0	<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	
∟ead	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	8.0	<0.8	
Silver	μg/g	20	0.5	<0.5	
Γhallium	μg/g	1	0.5	<0.5	
Jranium	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 *)





### **Quality Assurance**

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

PROJECT: BIGC-ENV-490D SAMPLING SITE:217-227 Cross Avenue, Oakville, ON AGAT WORK ORDER: 22T875646 ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

SAMI LING SITE.217-227	Cioss Aveilue	s, Oakvi	iie, Oiv					ו וועורקע		1.10					
				Soi	l Ana	alysis	3								
RPT Date: Mar 22, 2022				UPLICAT	E		REFERENCE MATERIAL			METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		ptable nits	Recovery	1 1 1 1 1 1	ptable nits	Recovery	منا ا	ptable nits
		ld	·	,			Value	Lower	Upper	ĺ	Lower	Upper	,	Lower	Upper
O. Reg. 153(511) - Metals (Inc	luding Hydrides	s) (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.

S CHARTERED S CHEMIST OF STATE 
### Method Summary

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T875646

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON SAMPLED BY:TD

SAMI LING SITE.ZTT-ZZT CIUSS A	vondo, odkvino, orv	O/MINI EED D1.12	<b>,</b>
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



Samples Religioushed B. (Pont Name and Sign)

5839 Coopers Avenue Mississinga, Ontario 147 172 Ph 905.712.5100 Fax 905.712.5123 websarth.agallabs.com

Laboratory Use O	nly		
Work Order # 227	275	646	
Cooler Quantity: 4	14-8	ll	
Custody Seal Intact:	Ves	ПИО	

#### **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: **Regulatory Requirements:** B.I.G Consulting Inc. (Please check ult applicable bekes) Company: Rebecca Morrison Contact: Regulation 153/04 Excess Soils R406 Sanitary Storm Turnaround Time (TAT) Required: 12-5500 Tomken Road, Mississauga, ON L4W 2Z4 Table Indicate One Address: Table Indicate One ☐Ind/Com Regular TAT 5 to 7 Business Days Rcs/Park 416-214-4880 Prov. Water Quality Rush TAT (Rush Surcharges Apply) Regulation 558 Phone: Agriculture Objectives (PWQO) Reports to be sent to: rmorrison@brownfieldigi.com Soil Texture (Check One) 2 Business 3 Business Next Business 1. Email: Days ☐ CCME Other Days ✓ Coarse tdamdar@brownfieldigi.com 2. Email: Eine OR Date Required (Rush Surcharges May Apply): Indicate Oce Is this submission for a **Report Guldeline on Project Information:** Please provide prior notification for rush TAT **Record of Site Condition? Certificate of Analysis** BIGC-ENV-490D Project: *TAT is exclusive of weekends and statutory holidays 217-227 Cross Avenue, Oakville, ON ☑ Yes ☐ No Site Location: ✓ Yes □ No For 'Same Day' analysis, please contact your AGAT CPM TD Sampled Py: O. Reg 153 O. Reg 406 DOC AGAT Quote #1 PO: Sample Matrix Legend Landfill Disposal Characterization TCLP. TCLP: □M&! □VOCs □ABNs □B(a)P□PCBs SPLP: U Metals C vocs C Svocs Excess Soils Characterization Package ph, ICPMS Metals, BTEX, F1-F4 Please note: If quotation number is not provided, client will be billed tall price for analysis ON D CrVI. Biota **Invoice Information:** GW Ground Water Bill To Same: Yes \( \bar{\pi} \) No \( \bar{\pi} \) □HWSB F4G if required \to Yes Oil B.I.G Consulting Inc. Company: Paint Laine Dougherty CPMS Metals Contact: Metals - □ CrVI. □ Hg. s Soil 12-5500 Tomken Rd, Mississauga, ON Address: SD Sediment ldougherty@brownfieldigi.com Email: Surface Water Comments/ Date Time # of Sample Y/N Sample Identification Sampled Sampled Containers Matrix Special Instructions 12:50 Mar 21/22 Ex1-5002 AM PM AM PM AM PM Mar 21/22 Timothy Damdar Page 1

Samples Records By (Print Name and Sitte

No:



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
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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 (V1)

Page 1 of 5

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Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



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

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

Certificate of Analysis

AGAT WORK ORDER: 22T875648

PROJECT: BIGC-ENV-490D

SAMPLED BY:TD

ATTENTION TO: Rebecca Morrison

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

DATE RECEIVED: 2022-03-21					DATE REPORTED: 2022-03-2
		SAMPLE DES	CRIPTION:	EX1-S003	
		SAM	PLE TYPE:	Soil	
		DATE	SAMPLED:	2022-03-21 13:13	
Parameter	Unit	G/S	RDL	3644416	
Antimony	μg/g	7.5	8.0	<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	8.0	<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:



5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

http://www.agatlabs.com

TEL (905)712-5100 FAX (905)712-5122



#### **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T875648
ATTENTION TO: Rebecca Morrison

SAMPLING SITE: 217-227 Cross Avenue, Oakville, ON

SAMPLED BY:TD

S Avenue	e, Oakvii	ie, Oiv					JAIVIE L	LDD	1.10					
			Soi	l Ana	alysis	3								
		С	UPLICATI	E		REFERENCE MATERIAL			METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured			Recovery			Recovery		ptable nits
	Ia	•				value	Lower	Upper	,	Lower	Upper	,	Lower	Upper
g Hydride:	s) (Soil)													
3622029		<0.8	<0.8	NA	< 0.8	102%	70%	130%	100%	80%	120%	78%	70%	130%
3622029		10	9	10.5%	< 1	117%	70%	130%	100%	80%	120%	96%	70%	130%
3622029		89.6	89.8	0.2%	< 2.0	108%	70%	130%	110%	80%	120%	112%	70%	130%
3622029		0.5	0.5	NA	< 0.4	103%	70%	130%	105%	80%	120%	92%	70%	130%
3622029		8	8	NA	< 5	73%	70%	130%	101%	80%	120%	85%	70%	130%
3622029		<0.5	<0.5	NA	< 0.5	108%	70%	130%	106%	80%	120%	92%	70%	130%
3622029		36	33	8.7%	< 5	91%	70%	130%	106%	80%	120%	102%	70%	130%
3622029		6.2	6.1	1.6%	< 0.5	95%	70%	130%	95%	80%	120%	94%	70%	130%
3622029		12.7	12.6	0.8%	< 1.0	92%	70%	130%	101%	80%	120%	91%	70%	130%
3622029		17	15	12.5%	< 1	102%	70%	130%	102%	80%	120%	92%	70%	130%
3622029		<0.5	0.5	NA	< 0.5	113%	70%	130%	112%	80%	120%	113%	70%	130%
3622029		11	11	0.0%	< 1	98%	70%	130%	98%	80%	120%	93%	70%	130%
3622029		<0.8	<0.8	NA	< 0.8	130%	70%	130%	106%	80%	120%	106%	70%	130%
3622029		<0.5	<0.5	NA	< 0.5	104%	70%	130%	104%	80%	120%	95%	70%	130%
3622029		<0.5	<0.5	NA	< 0.5	105%	70%	130%	101%	80%	120%	98%	70%	130%
3622029		0.58	0.60	NA	< 0.50	100%	70%	130%	96%	80%	120%	97%	70%	130%
3622029		26.8	26.2	2.3%	< 0.4	99%	70%	130%	95%	80%	120%	97%	70%	130%
3622029		45	44	2.2%	< 5	98%	70%	130%	99%	80%	120%	88%	70%	130%
	Batch  g Hydrides 3622029 3622029 3622029 3622029 3622029 3622029 3622029 3622029 3622029 3622029 3622029 3622029 3622029 3622029 3622029 3622029	Batch Sample Id Id Sample Id Id Sample Id Id Sample Id Id Sample Id Id Sample Id Sample Id Id Id Sample Id	Batch Sample Id Dup #1  g Hydrides) (Soil)  3622029 <0.8  3622029 10  3622029 89.6  3622029 0.5  3622029 36  3622029 36  3622029 36  3622029 12.7  3622029 17  3622029 17  3622029 11  3622029 11  3622029 <0.5  3622029 <0.5  3622029 <0.5  3622029 <0.5  3622029 <0.5  3622029 <0.5  3622029 <0.5  3622029 <0.5	Soi    DUPLICATION	Soil Ana           DUPLICATE           Batch         Sample Id         Dup #1         Dup #2         RPD           g Hydrides) (Soil)         3622029         <0.8	DUPLICATE	DUPLICATE	DUPLICATE	DUPLICATE	DUPLICATE	DUPLICATE	DUPLICATE	Soil Analysis   DUPLICATE   Batch   Sample Id   Dup #1   Dup #2   RPD   Method Blank   Measured Value   Lower   Upper   Limits   Lower   Upper   Limits   Lower   Upper   Limits   Lower   Upper   Recovery   R	Soil Analysis   Sample   Dup #1   Dup #2   RPD   Method   Measured   Limits   Lower   Upper   Lower   Upper   Lower   Upper   Lower   Upper   Units   Units

Comments: NA Signifies Not Applicable.

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

S CHARTERED S CHEMIST OF CHEMIST OF STATES

# **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

SAMPLING SITE: 217-227 Cross Av	renue, Oakville, ON	SAMPLED BY: TU							
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						



5855 Coopers Avenue Mississaugh, Ontario 147, 172 Phi 905,712,5100 Fb, 905,712,5122 web farth agatlabs.com

Laboratory	use only
Work Order #: _	2217875640
Cooler Quantity:	1 small
Arrival Temperat	ures: 4.8

Chain of C	ustody Record	If this is a	Drinking Water	sample, pleas	se use Drinl	king Water Chain of Custody Form (petabl	e water c	consumed	by human	5)		Arriv	al Temp	erature	s:	-81		
Report Information:  Company: B.I.G Consulting Inc.  Contact: Rebecca Morrison  Address: 12-5500 Tomken Road, Mississauga, ON L4W 2Z4					(Please	Regulatory Requirements:  (Flease check all applicable boxes)  ✓ Regulation 153/04						Custody Seal Intact: Yes No Notes: Bogged Ce  Turnaround Time (TAT) Required:						
Phone: Reports to be sent to:  1. Email:  2. Email:  Project Information: Project: BIGC-ENV-490D Site Location: Sampled By:  12-5300 Tolliken Road, Mississauga, ON L4W 2Z4  416-214-4880 Fax: rmorrison@brownfieldigi.com  rmorrison@brownfieldigi.com  tdamdar@brownfieldigi.com  TD  Fax:  rmorrison@brownfieldigi.com			Soil To	☐ Is this submission for a Record of Site Condition? Ce							Regular TAT 5 to 7 Business Days  Rush TAT (Rush Surcharges Apphy)  3 Business Days Days  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							
			ls Rea															
AGAT Quote #:  Invoice Inform Company: Contact: Address: Email:	Please note it quotation number is not	B sauga, ON	he bitted full price for		Sam B GW O P S SD SW	nple Matrix Legend  Biota Ground Water Oil Paint Soil Sediment Surface Water	held Filtered - Metals, Hg, CrVI, DOC	Inorganics	Metals - CrVI, LI Hg, LI HWSB BTEX, F1-F4 PHCs Analyze F4G if required Difes In No			88		nis Characterization Package S Metals, BTEX, F1-F4	/SAR			Hazardous or High Concentration (V.)
Samp Ex 1 - 5003	le Identification	Date Sampled Mar 21/22	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Y/N	Metals 6	Metals - □ C BTEX, F1-F4 Analyze F4G	PAHS	200	Landfill D	Excess 9	ph, ICPN	Salt - EC/SAF			Portentially
			AM PM AM PW AM PW AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM AM PM AM AM PM AM AM PM AM AM AM AM AM AM AM AM AM AM AM AM AM															
Samples Relinquished By (Pri Timothy Damdar Samples Relinquished By (Pri Samples Refinquished B= (Pri	int Name and Bigns		Mar 21/22	2 Time	Sopon	Samples Received By (Print Name and Sign)  AMUSON  Branches Received By (Print Name and Sign)  Samples Received By (Print Name and Sign)	(	Das	elie	D	ate 21/2 ate	2	Time	40	Nn	Page 1	of <u>1</u>	



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	

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*****

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

SAMPLING SITE: 217-227 Cross Avenue, Oakville, ON

Certificate of Analysis

AGAT WORK ORDER: 22T875650

PROJECT: BIGC-ENV-490D

SAMPLED BY:TD

ATTENTION TO: Rebecca Morrison

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

				<i>y</i> (- <i>)</i>	
DATE RECEIVED: 2022-03-21	1				DATE REPORTED: 2022-03-22
	S	AMPLE DES	CRIPTION:	EX1-S004	
		SAMI	PLE TYPE:	Soil	
		DATES	SAMPLED:	2022-03-21 13:40	
Parameter	Unit	G/S	RDL	3644410	
Antimony	μg/g	7.5	8.0	<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	
_ead	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	
Jranium	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:



5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

http://www.agatlabs.com

TEL (905)712-5100 FAX (905)712-5122



### **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T875650

ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON						SAMPLED BY:TD									
Soil Analysis															
RPT Date: Mar 22, 2022			С	UPLICAT	E		REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	1 :-	eptable nits
		lu					value	Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals (Include	ding Hydride	s) (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.

### **Method Summary**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T875650

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	AGAT 3.0.F	LITERATORE REFERENCE	ANALTHCAL TECHNIQUE
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



**Chain of Custody Record** 

Report Information:

Company: B.I.G Consulting Inc.

Company:

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

**Regulatory Requirements:** 

5835 Coopers Avenue Mississauga, Ontario L4Z 172 Ph 905 712 5100 Pay 905 712 5122 webearth.agatlabs.com

**Laboratory Use Only** 

/ork Order #: 🏒	4805650	
ooler Quantity:	1 small	
rrival Temperature	es: 14-8	1

Turnaround	Time	(TAT)	Required:

25:500 Tomken Road Mississage, ON LAW 2ZA	Contact:	Rebecca Morrison				Re	gulation 153/04	Excess Soils R	406		ver Use						ti							=
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Procedure   Proc							ind/ com	lable Indicate On	c	-	Region	_			Reg	ular '	TAT			5 to 7 Bu	isiness f	Days		
Sample Matrix Legend    Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend   Sample Matrix Legend	Phone:	416-214-4880	Fax:					Regulation 55	8 [						Rus	h TAT	(Rush Su	rcharge	s Apply)					
Compart   Comp	Reports to be sent to:  1. Email:	rmorrison@brownfieldigi.c	om					COME		-		(FWQC	,					s	$\Box$	2 Busine	SS			255
Record of Site Condition?    Site Control   Standard Record   Stan	2. Email:	tdamdar@brownfieldigi.cor	n			111		COME				One		_	l bays bays									
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Sample Identification   Date   Sampled   Sam	Sampled By:	TD					No. of Livery	STREET, THE	7	0	Dog 15		GAMI					anai	ysis, p	lease co	ntact y	Jul AGA	1	_
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Mar 21/22 / 9 M I S  AM PM	Email:	ldougherty@brownfieldigi.	com						ield Filter	k Inorgar	CrVI.	F4G if re			Disposal C	1 on 12	soils Cha	/SAR						y Hazardo
PAM	Samp	ole Identification							-	Metals	Metals	Analyze	PCBs	VOC	Landfill I		Excess PH. ICP	Salt - E(	ICPN					Petential
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Page 1 of 1 Page	Timothy Damdar	10/004///			2 25	Topm	Anthony	Danitra	- P	160	ulv				3		45							
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				1															-					



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.
- 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 (V1)

Page 1 of 5

Member of: Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



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

SAMPLING SITE: 217-227 Cross Avenue, Oakville, ON

Certificate of Analysis

AGAT WORK ORDER: 22T875652

PROJECT: BIGC-ENV-490D

SAMPLED BY:TD

ATTENTION TO: Rebecca Morrison

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

DATE RECEIVED: 2022-03-2	21				DATE REPORTED: 2022-03-2
	S	AMPLE DES	CRIPTION:	EX1-E001	
		SAM	PLE 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	8.0	<0.8	
Silver	μg/g	20	0.5	<0.5	
Γhallium	μg/g	1	0.5	<0.5	
Jranium	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:



5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

http://www.agatlabs.com

TEL (905)712-5100 FAX (905)712-5122



# **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T875652 ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON SAMPLED BY:TD

SAMPLING SITE.ZTT-ZZT CIUSS				NIVIE I		1.10									
				Soi	l Ana	alysis	6								
RPT Date: Mar 22, 2022			D	UPLICATI	E		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		ptable nits	Recovery	Acce Lin	ptable nits	Recovery	1 :	ptable nits
		ld		,			Value	Lower	Upper	,	Lower Upper		,	Lower	Upper
O. Reg. 153(511) - Metals (Including	Hydrides	s) (Soil)													
Antimony 3	622029		<0.8	<0.8	NA	< 0.8	102%	70%	130%	100%	80%	120%	78%	70%	130%
Arsenic 3	622029		10	9	10.5%	< 1	117%	70%	130%	100%	80%	120%	96%	70%	130%
Barium 3	622029		89.6	89.8	0.2%	< 2.0	108%	70%	130%	110%	80%	120%	112%	70%	130%
Beryllium 3	622029		0.5	0.5	NA	< 0.4	103%	70%	130%	105%	80%	120%	92%	70%	130%
Boron 36	622029		8	8	NA	< 5	73%	70%	130%	101%	80%	120%	85%	70%	130%
Cadmium 3	622029		<0.5	<0.5	NA	< 0.5	108%	70%	130%	106%	80%	120%	92%	70%	130%
Chromium 3	622029		36	33	8.7%	< 5	91%	70%	130%	106%	80%	120%	102%	70%	130%
Cobalt 3	622029		6.2	6.1	1.6%	< 0.5	95%	70%	130%	95%	80%	120%	94%	70%	130%
Copper 3	622029		12.7	12.6	0.8%	< 1.0	92%	70%	130%	101%	80%	120%	91%	70%	130%
Lead 3	622029		17	15	12.5%	< 1	102%	70%	130%	102%	80%	120%	92%	70%	130%
Molybdenum 3	622029		<0.5	0.5	NA	< 0.5	113%	70%	130%	112%	80%	120%	113%	70%	130%
Nickel 3	622029		11	11	0.0%	< 1	98%	70%	130%	98%	80%	120%	93%	70%	130%
Selenium 3	622029		<0.8	<0.8	NA	< 0.8	130%	70%	130%	106%	80%	120%	106%	70%	130%
Silver 3	622029		<0.5	<0.5	NA	< 0.5	104%	70%	130%	104%	80%	120%	95%	70%	130%
Thallium 3	622029		<0.5	<0.5	NA	< 0.5	105%	70%	130%	101%	80%	120%	98%	70%	130%
Uranium 3	622029		0.58	0.60	NA	< 0.50	100%	70%	130%	96%	80%	120%	97%	70%	130%
Vanadium 3	622029		26.8	26.2	2.3%	< 0.4	99%	70%	130%	95%	80%	120%	97%	70%	130%
Zinc 3	622029		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.

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# Method Summary

CLIENT NAME: B.I.G. CONSULTING INC.
PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T875652 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



5835 Coopers Avenue Mississouga, Ontario L4Z 1Y2 Ph 905.712.5100 Fax 905,712.5122 webearth.agattabs.com

Laboratory Use Only		
Work Order #: 277	756E	52
Cooler Quantity: 1,5	nall	
Arrival Temporatures:	81	
_/		1
Custody Spal Intact:	□No	□ N//
Notes: Daggod 10	2e_	

Chain of C	ustody Record	If this is a	e use Drink	nking Water Chain of Custody Form (pot	able water	consume	ed by h	iumans)			ALL	vai ieii	peratu	165.		1		I			
Report Inform	nation: B.I.G Consulting Inc.				Reg (Pleaso	gulatory Requirements:									al Inta		Neg	ce	□No	(	□N/A
Contact: Address:	Rebecca Morrison 12-5500 Tomken Road, Miss	sissauga, ON L	.4W 2Z4		Tal	Regulation 153/04   Excess Soils R406   Sewer Use   Sanitary   Storm					Turnaround Time (TAT) Required:										
Phone: Reports to be sent to: 1. Email:	416-214-4880 rmorrison@brownfieldigi.co	Fax:			Soil Ti	☐ Ind/Com ☐ Regulation 5: ☐ Regulation 5: ☐ Texture (Check One) ☐ CCME		Prov Obje	ective				Rus		(Rush Sur	chargos	s Apply)	o 7 Busin Business		Next Bu Day	ısiness
2. Email	tdamdar@brownfieldigi.com	n			11 -	]Fine		_	Indical	te One		_				equire		•	ges May /	-	
Project Information:  Project: BIGC-ENV-490D Site Location: 217-227 Cross Avenue, Oakville, ON Sampled By: TD  AGAT Quote #: P0:  Please note: It quotation number is not provided, effect, self up to thice full price for analysis.				Red Z San	Is this submission for a Record of Site Condition?  Yes  No  Sample Matrix Legend			Report Guldeline on Certificate of Analysis    Yes No  O. Reg 153					Please provide prior notification for rush TAT  *TAT is exclusive of weekends and statutory holidays  For 'Same Day' analysis, please contact your AGAT CPM  O. Reg 558 0. Reg 406								
Invoice Inform Company: Contact: Address: Email:	nation: B.I.G Consulting Inc. Laine Dougherty 12-5500 Tomken Rd, Missidougherty@brownfieldigi.	ssauga, ON com	Bill To Same: Y	/es □ No □	B GW O P S SD SW	Biota Ground Water Oil Paint Soil Sediment Surface Water	Field Fittered - Metals, Hg, CrVI, DOC	Metals & Inorganics	Is - □ CrVI. □ Hg, □ HWSB	BTEX, F1-F4 PHCs Analyze F4G if required ☐ Yes ☐ No			Landfill Disposal Characterization TCLP. TCLP: □ M&I □ VOCS □ ABNS □ B(a)P □ PCBS	Soils SPLP	Soils Characterions MS Metals, BTE	EC/SAR	ICPMS Metals				tiefly Hazardous or High Concentrat
Samp	le Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Y/N	Meta	Metals - [	BTEX Analy	PAHS	700	Land TCLP:	Excess S	Exces pH, IC	Salt -	ICE				Potentially
Ex 1- E00.	1	Mar 21/22	A P A P A P A P A P A P A P A P A P A P	M M M M M M M M M M M M M M M M M M M	S				(												N
Samples Relinquished By (Pri	nt Name 272 Flank		Date	M Time		Samples Represent By Print Name and Spot //	1		/1		10	ite		Time							
Timothy Damdar Samples Relinguished By (Pro	19an//		Mar 21/2	22 Z Time	Stom	Sandra Encouragio sprins tourna according	2	Lba	1h	VC.	D.	HELL Y THE	2)	Time	-4/5	Phy		Page <u>1</u>	of 1	l	
Samples Relinaus/red By (Pri	ot Kame und Signi		- Birth	Time		Samples Recoved By (Pant Name and Supp					D	)\$ri		Time			N°:				



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

- 1
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Page 1 of 5

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Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



Certificate of Analysis

AGAT WORK ORDER: 22T876098

PROJECT: BIGC-ENV-490D

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. SAMPLING SITE:581 Argus Road, Oakville, ON

ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

				O. Reg.	. 153(511) - PAHs (Soil)
DATE RECEIVED: 2022-03-22					DATE REPORTED: 2022-03-23
	;	SAMPLE DESC	CRIPTION:	W001	
		SAMF	PLE TYPE:	Soil	
		DATE S	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	Acceptabl	e Limits		
Naphthalene-d8	%	50-1	40	79	
Acridine-d9	%	50-1	40	85	
Terphenyl-d14	%	50-1	40	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 *)



## **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T876098
ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON SAMPLED BY:TD

SAMPLING SITE.301 Algus I	toau, Oak	ville, Oiv						)/\IVII I		1.10					
			Trac	e Or	gani	cs Ar	nalysi	is							
RPT Date: Mar 23, 2022			С	UPLICAT	E		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MATRIX SPIKE		
PARAMETER	PARAMETER Batch Sample Dup #1 Dup #2 RPD Blan		Method Blank	Measured Value		ptable nits	Recovery	منا ا	ptable nits	Recovery	1 :	ptable nits			
		ld	·				value	Lower	Upper	·	Lower	Upper	7	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).



# Method Summary

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

SAMPLING SITE:581 Argus Road, Oakville, ON

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T876098 ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

DADAMETED		LITEDATURE REFERENCE	ANIAL VIICAL TECLINICHE		
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		



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 webearth agatlabs.com

_aboratory	Use (	Only	
Work Order #:	22	78=	1609

Cooler Quantity: 1	La	190	
Arrival Temperatures:	9.1	19.3	19.9

hain of C	custody Record	If this is a	Drinking Wate	r sample, plea	se use Drini	ding Water Chain o	f Custody Form (pota	able water	consume	ed by hu	mans)			Arri	vai iem	iperatu	ires:		1 1	)		-
Report Inform	nation: B.I.G. Consulting Inc.					Sulatory Requences all applicable boxe									tody Se			AUNEY	e	□No		N/A
Contact:	Rebecca Morrison				☑ Re	egulation 153/04	Excess Soils R	8406	Sew					-		-1	t					
Address:	12-5500 Tomken Rd., Miss	sissauga, ON, L4	W 2Z4			9			□S:	anitary	St	חוזכ	- 1	Tur	naroı	und T	ſime	(TAT)	Requi	red:		
						ble Indicate One	Table	ne	_	Region	_		- 1	Reg	ular 1	TAT		□ 5 to	7 Busine	ess Davs		
	416-214-4880					Res/Park	Regulation 55		☐ Prov			hu			h TAT			_	1 Dusine	.33 Day3		
Phone: Reports to be sent to:		Fax:			*	Agriculture	Regulation 55	,,,			(PWQ			Rus	II IAI	(Kusn Su	rcnarges	. Арріу)				
1. Email:	rmorrison@brownfieldigi.c	om			Soil To	exture (Check One)	CCME		Oth	۰.				-		usines	S		usiness		Next Bus	iness
	tdamdar@brownfieldigi.com	m				Coarse	CCIVIE			er				'	ل Day	/S		□ Day	S	¥	Day	
2. Email:						Fine	1	1		Indicate	One		_		OR	Date F	Require	ed (Rush	Surcharg	ges May /	Apply):	
Project Inform	mation:				Is	this submissi	on for a	R	eport	Guid	ellne	on										
-	BIGC-ENV-490D				Red	cord of Site Co	ondition?		rtifica									de prior n				
Project:	581 Argus Road, Oakville,	ON			-	I Voc	No		Yes						*TAT	is exc	lusive	of weeke	nds and	statutory	holidays	
Site Location:	TD	ON			-	Yes [	1110	4	1 165	,	ш	NO		F	or 'San	ne Day	analy	sis, plea:	se conta	ct your /	GAT CP	А
Sampled By:	ID				-			7 0	0.	Reg 15	3		T	0, Reg 558	0. Re	g 406						7
AGAT Quote #:	Please note: If guotation number is	PO:	he hilled full mice fo	or Analysis	San	ıple Matrix Le	gend	DOC					١.	1.0		0	1 1					3
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Invoice Infori	mation:	В	ill To Same: `	Yes □ No □	GW	Ground Water		± 0		SB				Characterization TCLP:	Rainwater Leach	Pa F4				1000		centr
Company:	B.I.G. Consulting				0	Oil		<u>8</u>		□HWSB	□Yes			izati	water Le	cterization Pe BTEX, F1-F4			10.00	1200	18	ő
Contact:	Laine Dougherty				P	Paint		Met			I pa			aracteriz	ain S	P Z				100.9	0.	E E
Address:	12-5500 Tomken Road, Mi	ssissauga, ON			S	Soil		å l	5	Ħ,	required			thans	LP Rair	s, B			( v)			ls or
Email:	ldougherty@brownfieldigi.	com			SD	Sediment		<u>≣</u>	rgar	, Y	t <u>-</u>			क ⊻	SPL Is	Chal	~				N.	ardoL
					- sw	Surface Water		Field Filtered - Metals, Hg, CrVI,	& Inorganics	□ CrVI, □ Hg,	e F4G			ispos	Soils	S S	EC/SAR		1			, Hazi
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Samp	ole Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	E	nments/ Instructions	Y/N	Metals	Metals	Analyze	PAHS	VOC VOC	Landfill Dispor	Excess Soils SPLP I	Excess Solls Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt -					Poter
W001		Mar 22/22	1:10 4	M 1	S							<b>V</b>										N
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Samples Reliaculished By (Print Name and Sign) Timothy Damdar	Mar 22/22	2-26pm	Sample Received by Anni Name and Sylini Basilise Basilise	Date	Time	122 MAR 22 24339
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	AM					
	AM PM					
	PM					



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	

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

Certificate of Analysis

AGAT WORK ORDER: 22T876100

PROJECT: BIGC-ENV-490D

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

5835 COOPERS AVENUE

ROJECT. BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

SAMPLING SITE:581 Argus Road, Oakville, ON	
	O Pog 153(511) - DAHe (Soil)

				O. Reg.	153(511) - PAHs (Soil)
DATE RECEIVED: 2022-03-22					DATE REPORTED: 2022-03-23
		SAMPLE DES	CRIPTION:	E001	
		SAM	PLE 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	Acceptab	le 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:

NPopukolof



## **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T876100 ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON

SAMPLED BY:TD

			Trac	e Or	gani	cs Ar	nalys	is							
RPT Date: Mar 23, 2022				UPLICAT	E		REFERENCE MATERIAL			METHOD	BLANK	SPIKE	MATRIX SPIKE		
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		eptable mits	Recovery	1 1 1 1 1	ptable nits	Recovery	1:-	ptable nits
		ld	'				Value	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).



# Method Summary

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

SAMPLING SITE:581 Argus Road, Oakville, ON

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T876100 ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

SAMI EINO SITE:SOT AIGUS ROAU,		JAMI LED B1.11	T
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



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 webearth.agatlabs.com

	Laboratory Use Only
1	Work Order #: 221876100

	Order #:			6100	)
Coo	er Quantity: al Temperatu	1	Large 9.14	9.3	9.9
	tody <mark>Seal</mark> Inta	ct:	Yes lee	□No	□N/A
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	<b>OR</b> Date	Required (	Rush Surc	harges May A	oply):
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F	or 'Same Day	' analysis	, please co	ontact your A	GAT CPM
O. Reg 558	0. Reg 406				2
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Report Inform	nation: B.I.G. Consulting Inc.	111)=				gulatory Requirements:									tody s				Yes,	e	□No		□N/A
Contact:	Rebecca Morrison				. IZI Re	egulation 153/04   Excess Soils R	R406  [	Sew					1				71						
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Project Inform	mation:				1	s this submission for a		port						ľ	_			140		Mantin	n for a	ob TAT	_
Project:	BIGC-ENV-490D				Red	cord of Site Condition?	Cer	rtifica	rte c						*T			provide pusive of v					ays
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Contact:	Laine Dougherty				Р	Paint	Met			25				aracteriz	air,	Cs L	BTEX,						or High
Address:	12-5500 Tomken Road, M	ississauga, ON			S	Soil	- pa	Si Si	H	ICs required				G dar	10 1		als, B		4				
Email:	ldougherty@brownfieldigi	.com			SD SW	Sediment Surface Water	#E	Inorganics	ž	는 노				osal O	S .	ials Chi	Mets	¥					zard
					J.,	Odriddo Mater	 Field Filtered - Metals, Hg, CrVI, DOC	కం	Ö	1-F4				fill Disp	Soil	Solls	ICPMS Metals,	/S/			1		F H ₂
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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

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### 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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AGAT Laboratories (V1)

Page 1 of 5

Member of: Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



Certificate of Analysis

AGAT WORK ORDER: 22T876102

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

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. SAMPLING SITE:581 Argus Road, Oakville, ON

				O. Reg	g. 153(511) - PAHs (Soil)
DATE RECEIVED: 2022-03-22					DATE REPORTED: 2022-03-23
	S		CRIPTION: PLE TYPE: SAMPLED:	F002 Soil 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	Acceptab	le Limits		
Naphthalene-d8	%	50-1	40	89	
Acridine-d9	%	50-1	40	85	
Terphenyl-d14	%	50-1	40	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 *)





## **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T876102
ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON SAMPLED BY:TD

SAMPLING SITE. 301 Algus			ו וועורקע	LLDB	1.10												
			Trac	e Or	gani	cs Ar	nalys	is									
RPT Date: Mar 23, 2022			С	DUPLICATE			REFERENCE MATERIAL			METHOD	BLANK	SPIKE	MAT	RIX SPI	KE		
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		ptable nits	Recovery	Recovery	Recovery	Lie	ptable nits	Recovery	منا ا	ptable nits
		ld					Value	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).



# Method Summary

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T876102 ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakville, ON SAMPLED BY:TD

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE						
	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						



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph; 905,712,5100 Fax; 905,712,5122 webearth.agatlabs.com

Laboratory Use 0	only
Work Order #:	27876102
Cooler Quantity:	Large
Arrival Temperatures:	9.1 19.3 19.9

Chain	of	Custody	Record
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nation:				Reg (Please o	ulatory Requ	irements:							1.1		21		Yes	10	□No		□N/A
Rebecca Morrison	issanga ON L4	W 27.4		☑ Re	gulation 153/04	Excess Soils R40	6 [				Storm		-		- 1	t	(TAT)				
416-214-4880 rmorrison@brownfieldigi.c	Fax:			Soil Te	Res/Park Agriculture exture (check One)	Table Indicate One Regulation 558 CCME		Obje	. Wate	er Qua			11	ish TA	<b>AT</b> (Rush su 3 Busines: Days	rcharges	Apply)  2 B  Day	usiness /s	s 🗸	Next E	Business
-				Is	this submission			port	Guld	iellne				-							
BIGC-ENV-490D 581 Argus Road, Oakville, TD	PO:	h. hill-stidt price			Yes 🗆	No	DOC	Yes		53			1	For 'S	TAT is exc ame Day Reg 406	lusive (	of week	ends an	d statut	ory holid	СРМ
nation: B.I.G. Consulting Laine Dougherty 12-5500 Tomken Road, Mi	B ississauga, ON		71-00		Biota Ground Water Oil Paint Soil Sediment Surface Water		Fi≥ld Filtered - Metals, Hg, CrV	s & Inorganics	s - □ CrVI, □ Hg, □ HWSB	uired 🗆 Yes			Il Disposal Characterization TCLF	S □ABNs P Rainwe	☐ Metals ☐ VOCs ☐ SVOCs s Solls Characterization Packs PMS Metals, BTEX, F1-F4						Potentially Hazardous or High Concentration (Y/N)
ole Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix			Y/N	Metal	Metal	BTEX.	PAHS	PCBs	Land	Exces	SPLP Exces	Salt -					Paten
	Mar 22/22	AAA AAA AAA AAA AAA AAA AAA AAA AAAA AAAA		S																	
		1	W .		The state of the s	Trial Maline and Close A		h	-	1		Date		IT	ime						
111111			2 2	26pm	Antho	y Dazely	2	Sto	326	lve		Date			El tall			Page .	MAR	22 1 of 1	2433pt
	B.I.G. Consulting Inc.  Rebecca Morrison  12-5500 Tomken Rd., Miss  416-214-4880  rmorrison@brownfieldigi.co  tdamdar@brownfieldigi.co  mation:  BIGC-ENV-490D  581 Argus Road, Oakville, TD  Please note: If quadration number is  mation:  B.I.G. Consulting  Laine Dougherty  12-5500 Tomken Road, Mildougherty@brownfieldigi.	B.I.G. Consulting Inc.  Rebecca Morrison  12-5500 Tomken Rd., Mississauga, ON, L4  416-214-4880  Fax:  rmorrison@brownfieldigi.com  tdamdar@brownfieldigi.com  BIGC-ENV-490D  581 Argus Road, Oakville, ON  TD  PO:  Please note: If quotation number is not provided. client will  mation:  B.I.G. Consulting  Laine Dougherty  12-5500 Tomken Road, Mississauga, ON  Idougherty@brownfieldigi.com  Date Sampled  Mar 22/22	B.I.G. Consulting Inc.  Rebecca Morrison  12-5500 Tomken Rd., Mississauga, ON, L4W 2Z4  416-214-4880 Fax: rmorrison@brownfieldigi.com  tdamdar@brownfieldigi.com  mation:  BIGC-ENV-490D 581 Argus Road, Oakville, ON  TD  PO: Please note: If quotation number is not provided, client will be billed full price for provided and price for mation:  B.I.G. Consulting  Laine Dougherty  12-5500 Tomken Road, Mississauga, ON  Idougherty@brownfieldigi.com  Date Sampled  Mar 22/22  12-53  And And And And And And And And And An	B.I.G. Consulting Inc.  Rebecca Morrison  12-5500 Tomken Rd., Mississauga, ON, L4W 2Z4  416-214-4880 Fax:  rmorrison@brownfieldigi.com  tdamdar@brownfieldigi.com  BIGC-ENV-490D  581 Argus Road, Oakville, ON  TD  PO:  Please note: if quichitien number is not provided, client will bit billed full price for analysis.  mation:  B.I.G. Consulting  Laine Dougherty  12-5500 Tomken Road, Mississauga, ON  Idougherty@brownfieldigi.com  Date  Sampled  Sampled  Sampled  Sampled  Sampled  AM  PM  AM  A	B.I.G. Consulting Inc.  Rebecca Morrison  12-5500 Tomken Rd., Mississauga, ON, L4W 2Z4  416-214-4880 Fax:  Immorrison@brownfieldigi.com  tdamdar@brownfieldigi.com  BIGC-ENV-490D  581 Argus Road, Oakville, ON  TD  PO:  Please note: If quotation number is not provided. client will be billed full price for analysis.  BII.G. Consulting  Laine Dougherty  12-5500 Tomken Road, Mississauga, ON  Idougherty@brownfieldigi.com  Date  Sampled  Am  Am  Am  Am  Am  Am  Am  Am  Am  A	B.I.G. Consulting Inc.  Rebecca Morrison  12-5500 Tomken Rd., Mississauga, ON, L4W 2Z4  416-214-4880 Fax:	Regulatory Requirements:   B.I.G. Consulting Inc.   Rebecta Morrison   I2-5500 Tomken Rd., Mississauga, ON, L4W 2Z4   I3-5500 Tomken Road, Mississauga, ON   I3-5500 Tomken	B.I.G. Consulting Inc.  Rebecca Morrison 12-5500 Tomken Rd., Mississauga, ON, L4W 2Z4  416-214-4880 Fax: Immorrison@brownfieldigi.com  Idamdar@brownfieldigi.com  Fax:  Soil Texture (Pinck One)   Commonstation:   St this submission for a Record of Site Condition?   Yes	Reference Morrison	Consulting Inc.	Regulatory Requirements:  B.I.G. Consulting Inc.  Rebecca Morrison  12-5500 Tomken Rd., Mississauga, ON, L4W 2Z4  416-214-4880 Fax:    memorison@brownfieldigl.com	Pieces create at deprotection to created	Table   Service   Consulting   Consulting	B.I.G. Consulting Inc.  Rebect Morrison  12-5500 Tomken Rd., Mississauga, ON, L4W 2Z4    Table	BLG. Consulting Inc.  Rebect Morrison  12-5500 Tomken Rd. Mississauga, ON, L4W 2ZA    12-5500 Tomken Rd. Mississauga, O	### Consulting Inc.  Rebecca Morrison  12-5500 Tomken Rd. Mississauga. ON, L4W 2Z4    12-5500 Tomken Rd. Mississauga. ON	### Suppose Consisting Inc.    Press Consisting Inc.   Press Core at applicable review   Press Soils R406   Sanutaxy   Sorre   Press Soils R406   Sorre   Press Soils R40	Regulatory Requirements:    Regulatory Requirements:	BLC. Consulting  Black Consulting Inc.    Replaction Mortison   Prov.   Prov.	BLC. Consulting Inc.    Regulation 153/06	RLC. Consulting Inc.  Replaced Morrison  12-5500 Tomken Rd. Misstssauga. ON, LAW 2ZA  416-214-4880  Fax:    Improve Control and Explaint on 153/O4



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:

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- All work conducted herein has been done using accepted standard protocols, and generally accepted practices and methods. AGAT test methods may
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CLIENT NAME: B.I.G. CONSULTING INC.

SAMPLING SITE:

## Certificate of Analysis

AGAT WORK ORDER: 22T876109

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLED BY:

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

$\circ$	D ~ ~	4E0/E44\	DALIG /	) ~ : I\
U.	Rea.	153(511) -	PARS	5011)

				oog	(311) 171118 (3311)
DATE RECEIVED: 2022-03-22					DATE REPORTED: 2022-03-23
	5	SAMPLE DES	CRIPTION:	F001	
		SAMI	PLE TYPE:	Soil	
		DATES	SAMPLED:	2022-03-22	
		0.40		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	Acceptab			
Naphthalene-d8	%	50-1		64	
Acridine-d9	%	50-1		81	
Terphenyl-d14	%	50-1		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 *)





AGAT WORK ORDER: 22T876109

## **Quality Assurance**

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

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

SAMPLING SITE: SAMPLED BY:

SAMPLING SITE.								)/\IVIF I	LLDB	1.					
			Trac	e Or	gani	cs Ar	nalys	is							
RPT Date: Mar 23, 2022			DUPLICATE				REFEREN	NCE MATERIAL		METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch Sample		Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Accep Lim		Recovery		ptable nits
		lu					value	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).



# Method Summary

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

PROJECT: BIGC-ENV-490D

SAMPLING SITE:

AGAT WORK ORDER: 22T876109
ATTENTION TO: Rebecca Morrison

SAMPLED BY:

		SAMI LLD D1.	
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



5835 Coopers Avenue

Mississauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 webearth agatlabs com

### **Laboratory Use Only** Cooler Quantity: Arrival Temperatures: □N/A Custody Seal Intact: ΠNo Baga Turnaround Time (TAT) Required: Regular TAT 5 to 7 Business Days Rush TAT (Rush Surcharges Apply) 2 Business Next Business Day 3 Business Days 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 0. Reg 406 □ SVOCs BTEX, F

#### **Chain of Custody Record** If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans) **Regulatory Requirements: Report Information:** (Please check all applicable boxes) B.I.G. Consulting Inc. Company: Sewer Use Rebecca Morrison Regulation 153/04 | Excess Soils R406 Contact: Sanitary 12-5500 Tomken Rd., Mississauga, ON, L4W 2Z4 Address: Table Indicate One ☐Ind/Com Res/Park Prov. Water Quality 416-214-4880 Regulation 558 Agriculture Phone: Objectives (PWQO) Reports to be sent to. rmorrison@brownfieldigi.com Soil Texture (Check One) Other 1. Email: Пссме √ Coarse tdamdar@brownfieldigi.com 2. Email: Fine Is this submission for a Report Guideline on **Project Information: Certificate of Analysis Record of Site Condition?** BIGC-ENV-490D Project: ☐ No Yes ☐ No 581 Argus Road, Oakville, ON Yes Site Location: TD Sampled By: 0. Reg 153 000 AGAT Quote #: PO: Sample Matrix Legend TCLP: ☐M3i ☐VOCs ☐ABNs ☐B(a)P☐PCBs Excess Soils Characterization Package Please note: If quotation number is not provided, client will be billed full price for analysis **%**□ Cryl, Biota Excess Soils SPLP Rainwater Leach □HWSB GW Ground Water 滿 Invoice Information: Bill To Same: Yes ☐ No ☐ Analyze F4G if required ☐ Yes Oil Field Filtered - Metals, B.I.G. Consulting Company: Paint Laine Dougherty Contact: SPLP: Metals VOCs Metals - □ CrVI, □ Hg, Soil 12-5500 Tomken Road, Mississauga, ON BTEX, F1-F4 PHCs pH, ICPMS Metals, Address: SD Sediment ldougherty@brownfieldigi.com Email: Surface Water PAHS PCBs Comments/ Time Sample Date Y/N Sample Identification Containers Sampled Sampled Matrix Special Instructions $\square$ 2:48 FOOL Mar 22/22 S AM PM Samples Relinquished By (Print N 2:26pm Mar 22/22 Timothy Damdar Date Time Samples Relinguished By (Print Name and Sign Page 1 Date Samples Relinguished By (Print Name and Sign) Nº:



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: 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	

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Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



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

SAMPLING SITE:

## Certificate of Analysis

AGAT WORK ORDER: 22T876112

PROJECT: BIGC-ENV-490D

ATTENTION TO: Rebecca Morrison

SAMPLED BY:

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

O Re	g. 153(511)	- PAHs	(Soil)
O. 110	u. 1001011	<i>i</i> - i /\iii	COIII

DATE RECEIVED: 2022-03-22					DATE REPORTED: 2022-03-23
		SAMPLE DESC	CRIPTION:	N001	
		SAME	PLE TYPE:	Soil	
		DATE S	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	Acceptab	le Limits		
Naphthalene-d8	%	50-1	40	85	
Acridine-d9	%	50-1	40	79	
Terphenyl-d14	%	50-1	40	85	

Comments: RDL

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 *)





## **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:

			Trac	e Or	gani	cs Ar	nalys	is							
RPT Date: Mar 23, 2022				UPLICAT	E		REFERE	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MATRIX SPIKE		
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	1 1 1 1 1	ptable nits	Recovery	-: ۱	ptable nits
		ld	'				value	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).



# Method Summary

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

PROJECT: BIGC-ENV-490D

SAMPLING SITE:

AGAT WORK ORDER: 22T876112 ATTENTION TO: Rebecca Morrison

SAMPLED BY:

		SAMI LLD D1.	
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



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph; 905.712.5100 Fax: 905.712.5122 webearth agatlabs.com

Work Order #:	22 T	87611	2
Cooler Quantity: Arrival Temperature	1 L	19.3 1	9-9
Custody Seal Intact Notes:	19 eels	(ce)	□N/A
Turnaround Ti	ne (TAT)	Required:	
Regular TAT	☐ 5 to	7 Business Days	

**Laboratory Use Only** 

Report Inform Company: Contact:	teport Information:					e use Drinking Water Chain of Custody Form (potable water consumed by humans)  Regulatory Requirements:							11 0.	and a place Par	trad banks	Carrier .	male t	174	□¬ • · · -		1 / A	
	B.I.G. Consulting Inc.				(Please	ulatory Requ check all applicable boxes	irements:								istody S otes:	Ba		Wigs	10	□No		/A
CUITAGE.	Rebecca Morrison					gulation 153/04	Excess Soils R4	06 ]	Sew					Turnaround Time (TAT) Required:								
Address:	12-5500 Tomken Rd., Miss	sissauga, ON, L4	IW 2Z4			0			∏Sa	anitary	□s	torın		Tu	rnaro	und T	ime	(TAT) I	Requi	red:		
						ole Indicate One	Table Indicate One		-	Regio	ın	-		Re	gular	TAT		☐ 5 to	7 Busin	ess Days		
Discourse	416-214-4880	Fax:				Res/Park	Regulation 558		Prov	. Wat	er Qua	lity		Ru	sh TA1	(Rush Su	charges	Apply)				
Phone: Reports to be sent to:	rmorrison@brownfieldigi.c				11	Agriculture			Obje	ective	s (PWQ	(O)		11				0.0.			Nort Desir	
1. Email:	rmorrison@brownneidigi.c	:0111				exture (Check One) Coarse	ССМЕ		Othe	er				11	□ Da	Busines: vs	5	Days	usiness s	<b>⊿</b> [	Next Busir Day	ress
2. Email:	tdamdar@brownfieldigi.co	m				Fine		1-	_	Indical	e One	_	_	11	OF	P Date F	Require	ed (Rush	Surchar	ges May A	pply):	
Project Inform	mation:					this submission			port						_						747	
Project:	BIGC-ENV-490D				Red	cord of Site Co	ndition?	Cei	rtifica	te o	f Ana	lysis	3	11	*TA					n for rush statutory		
Site Location:	581 Argus Road, Oakville,	ON				Yes 🗆	No	<b>V</b>	Yes			No									GAT CPM	
Sampled By:	TD					-				D d		-	-				analys	SIS, PIEZ	Se Conta	ict your A	GAI OI IV	
AGAT Quote #:		PO:			Sam	ple Matrix Le	gend	200	0.	Reg 1	53			0. Re 558	(n	eg 406	1	0.0			100	(V/N)
	Please note: If quotation number is	not provided, client will	be billed full price fo	r analysis.	B	Biota	Benu	CrvI, DOC			2			4 6	<b>4</b> 5	Package						ation
Invoice Inform	mation:	E	Bill To Same: Y	'es □ No □		Ground Water		- 00 - 00		8	o o			osal Characterization TCLP.	Rainwater Leach	Pac F4	1 1	11)		14 9	100	centra
Company:	B.I.G. Consulting				0	Oil		50		□HWSB	red 🗆 Yes			izati	NS LIB(a)	Characterization Peters, BTEX, F1-F4					100	Con
Contact:	Laine Dougherty				P	Paint		Met		ا ا	lpa			acter	a air	cteriza BTEX,						High
Address:	12-5500 Tomken Road, Mi	ississauga, ON			S	Soil		red.	<u> </u>	H	HCs requir			l ai	CS LAB	aract Is, B						IO SIN
Email:	ldougherty@brownfieldigi.	.com			SD	Sediment Surface Water		Filte	orga	ĭ,	PHG		11	<u>8</u>	SPLP	Cha	ا پو ا					zardo
					0.,	Gariage video		Field Filtered - Metals, Hg,	& Inorganics	Ö	1-F4		1	gig	Soil	ss Suils Chara ICPMS Metals,	/s/					lly Ha
Same	ole Identification	Date	Time	# of	Sample		ments/	Y/N	Metals	Metals - □ CrVI, □ Hg,	BTEX, F1-F4 PHCs Analyze F4G if req	PAHs	PCBs	VOC Landfill Disposal Characterization TCLP.	Excess Soils SF	Excess pH, ICP	Salt - EC/SAR		87			Potentially Hazardous or High Concentration (Y/N)
	ole identification	Sampled	Sampled	Containers	Matrix	Special	Instructions		Σ	Σ	₽ 4		ā.	2 2	≥ m v		. vi					
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Samples Relinquished By IP	10/10/11/11		Mar 22/2	7 Time	Zhom	Samples Received B+0	Print Name and Sign)	0	\$	8/	1/	100	Date		Time	2			7221	HREE	Z*12	JFII
Timothy Damdar Samples Relinquished By (Pr			Date Coll	Tens	Jum	Samuel Remained By C	Print 13 no mai Sooni	una	t	2	Land	VE -	Date		Time			1	Page 1	of 1		
Samples Relinauished By (P	rint Name and Sign):		Date	Time		Samples Received By (	Print Name and Sign):	-				-	Date		Time	9		Nº:				
						D.												11.3				



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.

AGAT Laboratories (V1)

Page 1 of 5

Member of: Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



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

Certificate of Analysis

AGAT WORK ORDER: 22T876115

PROJECT: BIGC-ENV-490D

CANADA L4Z 1Y2 TEL (905)712-5100 FAX (905)712-5122 http://www.agatlabs.com

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO

ATTENTION TO: Rebecca Morrison

SAMPLED BY:TD

SAMPLING SITE:581 Argus Road, Oakvillle ON

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

				O. Reg.	53(511) - PAHs (Soil)
DATE RECEIVED: 2022-03-22					DATE REPORTED: 2022-03-23
	;	SAMPLE DESC	CRIPTION:	S001	
		SAME	PLE TYPE:	Soil	
		DATE S	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	Acceptab	le Limits		
Naphthalene-d8	%	50-1	40	79	
Acridine-d9	%	50-1	40	74	
Terphenyl-d14	%	50-1	40	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 *)



## **Quality Assurance**

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T876115 ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus F	Road, Oak	villle ON		SAMPLED BY:TD											
			Trac	e Or	gani	cs Ar	nalys	is							
RPT Date: Mar 23, 2022			С	UPLICAT		REFEREN	NCE MATERIAL		METHOD BLANK SPIR			MAT	RIX SPI	KE	
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable nits	Recovery	منا ا	ptable nits	Recovery	-: ۱	ptable
		lu					value	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).



# Method Summary

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

PROJECT: BIGC-ENV-490D

AGAT WORK ORDER: 22T876115 ATTENTION TO: Rebecca Morrison

SAMPLING SITE:581 Argus Road, Oakvillle ON SAMPLED BY:TD

DADAMETED		LITEDATURE REFERENCE	1					
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 3 8270E		GC/MS					
Benzo(b)fluoranthene	ORG-91-5106 modified from EPA 3570 and EF 8270E		GC/MS					
Benzo(k)fluoranthene	ORG-91-5106 modified from EPA 3570 ar 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	ORG-91-5106 modified from EPA 3570 and EPA 8270E						
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 38 8270E		GC/MS					
Terphenyl-d14	-d14 ORG-91-5106 modi 8270		GC/MS					
Moisture Content	VOL-91-5009	modified from CCME Tier 1 Method	BALANCE					



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905 712 5100 Fax: 905 712 5122 webearth.agatlabs.com

Lat	orat	ory U	se	Only				
Worl	k Order	#: 2	2	T8	76	110	5	
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Turr	narou	ınd Ti	me	(TAT) F	Requi	ired:		
Reg	ular T	AT		☐ 5 to	7 Busir	ess Day	/S	
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0. Reg 558	O. Re	g 406						(N)
fill Disposal Characterization TCLP: □ M&I □ VoCs □ A&Ns □ B(a)P□ PCBs	ss Soils SPLP Rainwater Leach :: □ metals □ vocs □ svocs	ss Soils Characterization Package CPMS Metals, BTEX, F1-F4	æ					ntially Hazardous or High Concentration (Y/N)

Report Information:  Company: B.I.G. Consulting Inc.				Regulatory Requirements: (Please check all applicable hoves)										al Inta		Yes 10	e 1	□No	□N/A			
Contact: Rebecca Morrison				. I I Re	Regulation 153/04   Excess Soils R406   Sewer Use																	
Address:	12-5500 Tomken Rd., Missis	ssauga, ON, L4	W 2Z4			San □San					Sanitary Storm				Turnaround Time (TAT) Required:  Regular TAT							
						Table 3 Table 1 Table 1 Indicate One 1 Indicate On				Region												
	416-214-4880	_				Res/Park	Regulation 55	R I	Prov	. Wate	er Qualit	v		Rus	h TAT	(Rush Sur	charges Ap	•		•		
Phone: Reports to be sent to:	-	Fax:			-    -	Agriculture					(PWQC			Itao		<b>,</b>	-/					
1. Email:	rmorrison@brownfieldigi.co	m			- 11	exture (Check One)	ССМЕ		Othe	er				Г		Business	· [	] 2 Busi Days	ness	☑ N	ext Business	
	tdamdar@brownfieldigi.com	1			11 -	Coarse							_	-	∟ Da	•		Dujo	roborde			
2. Email:					=   -	Fine	J.	1.		Indicate	One				ÜH	г рате н	equirea	(Rush St	ircharge	es May A	ρiy).	
Project Inform	nation:				11111111	this submissi			port (													
Project:	BIGC-ENV-490D				Red	ord of Site Co	ondition?	Cei	rtifica	te o	Anal	/sis			*TA					for rush		
Site Location:	581 Argus Road, Oakville, C	N				☑ Yes ☐ No ☑ Yes ☐ No						No	*TAT is exclusive of weekends and statutory holidays  For 'Same Day' analysis, please contact your AGAT CPM									
Sampled By:	TD				144 - 17														ils, please contact your AGAI CPM			
AGAT Quote #:		P0:							0.	Reg 1	53			0. Reg 558	_	eg 406					(N)	
Adai Quote #.	Please note: If quotation number is n		be billed full price for	analysis.		ple Matrix Le	gend	CrVI, DOC			9			7 8	ے	age		4 1			0.00	
1					GW GW	Biota Ground Water		5		_	20			필밀	eac	ack 1		1			ntrat	
Invoice Inform		В	ill To Same: Ye	s   No L	O	Oil		S, H		□HWSB	ICs required □ Yes			ation D	water Le	cterization Pa BTEX, F1-F4					ouce	
Company:	B.I.G. Consulting				-   P	Paint		letal		H	밓			teriz 3Ns [	wa □	izati					- Fig	
Contact:	Laine Dougherty 12-5500 Tomken Road, Mississauga, ON				-   s	S Soil			93	Ä,	ei e			osal Characterization TCLP: □vocs □ABNs □B(a)P□PCBs	Rai	BTR				( p)	P. H.	
Address:					SD	Sediment		tere	ganic	밀	25 Pe			දු දි		hara tals,					snop.	
Email:	ldougherty@brownfieldigi.c	OIII			- sw	Surface Water		Field Filtered - Metals, Hg,	& Inorganics	5	1-F4 Pr F4G If			SS C	ils S	ils C	EC/SAR				Hazaı	
								ig e	જ જ	S-L	S F F F			E CE	S S	S SO	EC.				ially	
Samp	ele Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix		ments/ Instructions	Y/N	Metals	Metals - □ CrVI,	BTEX, F1-F4 PHCs Analyze F4G if req	PAHS	VOC	Landfill Disposal Characterization TCLP: TCLP: □M&I □VOCS □ABNS □R(a)P□P	Excess Soils SPLP Rainwater Leach SPLP:   SPLP:   Metals   Vocs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	Salt - I				Potentially Hazardous or High Concentration (Y/N)	
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Samples Relinquished By (Print Name and Sien) Time			Samples Received By (Print Name and Sign):						D	ate	Time				N°:							



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	

#### 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 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 (V1)

Page 1 of 16

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

## Certificate of Analysis

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLED BY:

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

SAMPLING SITE:

			Ο.	Reg. 153(5	511) - Metal:	s & Inorgan	ics (Soil)		
DATE RECEIVED: 2021-01-18									DATE REPORTED: 2021-01-25
		SAMPLE DESC	CRIPTION:	BH101-SS1	BH102-SS1	BH103-SS1	BH104-SS1	BH105-SS1	
		SAM	PLE TYPE:	Soil	Soil	Soil	Soil	Soil	
		DATE S	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	
Jranium	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	





AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

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

5835 COOPERS AVENUE

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

SAMPLING SITE:

ATTENTION TO: Fernando Contento

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 *)



AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

http://www.agatlabs.com

TEL (905)712-5100 FAX (905)712-5122

ATTENTION TO: Fernando Contento

SAMPLED BY:

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

SAMPLING SITE:

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

DATE RECEIVED: 2021-01-18									DATE REPORTED: 2021-01-25
		SAMPLE DESCRIP	TION:	BH101-SS1	BH102-SS1	BH103-SS1	BH104-SS1	BH105-SS1	
		SAMPLE T	TYPE:	Soil	Soil	Soil	Soil	Soil	
		DATE SAMI	PLED:	2021-01-13	2021-01-13	2021-01-13	2021-01-13	2021-01-14	
				09:30	11:00	12:30	14:00	10:00	
Parameter	Unit		RDL	1966584	1966586	1966588	1966589	1966590	
Naphthalene	µg/g	0.6 0	0.05	<0.05	<0.05	< 0.05	<0.05	<0.05	
Acenaphthylene	µg/g	0.15 0	0.05	<0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Acenaphthene	µg/g	7.9 0	0.05	<0.05	< 0.05	< 0.05	< 0.05	<0.05	
Fluorene	μg/g	62 0	0.05	< 0.05	<0.05	<0.05	<0.05	< 0.05	
Phenanthrene	μg/g	6.2 0	0.05	< 0.05	< 0.05	< 0.05	<0.05	< 0.05	
Anthracene	μg/g	0.67 0	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Fluoranthene	μg/g	0.69 0	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Pyrene	μg/g	78 0	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Benz(a)anthracene	μg/g	0.5 0	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Chrysene	μg/g	7 0	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Benzo(b)fluoranthene	μg/g	0.78 0	0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	
Benzo(k)fluoranthene	μg/g	0.78 0	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Benzo(a)pyrene	μg/g	0.3 0	0.05	< 0.05	<0.05	< 0.05	< 0.05	< 0.05	
ndeno(1,2,3-cd)pyrene	μg/g	0.38 0	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
Dibenz(a,h)anthracene	μg/g	0.1 0	0.05	< 0.05	<0.05	< 0.05	<0.05	< 0.05	
Benzo(g,h,i)perylene	μg/g	6.6 0	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	
1 and 2 Methlynaphthalene	μg/g	0.99 0	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 Lii	mits						
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:

NPoprukolof



AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

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

5835 COOPERS AVENUE

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

SAMPLED BY:

ATTENTION TO: Fernando Contento

SAMPLING SITE: O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Soil)

DATE RECEIVED: 2021-01-18							DATE REPORTED: 2021-01-25
		SAMPLE DESC	RIPTION:	BH101-SS2	BH102-SS2	BH105-SS3	
		SAMP	LE TYPE:	Soil	Soil	Soil	
		DATE S	AMPLED:	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	%	60-14	10	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

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 *)





AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

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.

SAMPLING SITE:

ATTENTION TO: Fernando Contento

SAMPLED BY:

O. Reg. 153(511) - VOCs (Soil)									
DATE RECEIVED: 2021-01-18							DATE REPORTED: 2021-01-25		
		SAMPLE DESCRI		BH101-SS2	BH102-SS2	BH105-SS3			
		SAMPLE		Soil	Soil	Soil			
		DATE SAM	MPLED:	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		0.05	< 0.05	<0.05	< 0.05			
Ethylbenzene	ug/g	1.1	0.05	< 0.05	<0.05	< 0.05			





AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

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.

SAMPLING SITE:

ATTENTION TO: Fernando Contento

SAMPLED BY:

Or tivil Elito Off E.							6/ Will 225 5 1 .
				O. Re	g. 153(511)	- VOCs (Soi	1)
DATE RECEIVED: 2021-01-18							DATE REPORTED: 2021-01-25
	S	AMPLE DES	CRIPTION:	BH101-SS2	BH102-SS2	BH105-SS3	
		SAMI	PLE TYPE:	Soil	Soil	Soil	
		DATES	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	Acceptab	le Limits				
Toluene-d8	% Recovery	50-1	140	110	108	103	
4-Bromofluorobenzene	% Recovery	50-1	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 *)





#### **Exceedance Summary**

AGAT WORK ORDER: 21T700748

PROJECT: BIGC-ENV-349B

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.

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



#### **Quality Assurance**

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

PROJECT: BIGC-ENV-349B

SAMPLING SITE:

AGAT WORK ORDER: 21T700748

ATTENTION TO: Fernando Contento

SAMPLED BY:

Soil Analysis															
RPT Date: Jan 25, 2021			DUPLICATE			REFEREN	NCE MA	TERIAL	METHOD	BLAN	SPIKE	MAT	MATRIX SPIKE		
PARAMETER	Batch Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		eptable mits	Recovery	Lir	ptable nits	Recovery		eptable mits	
	Batch Id	''	'			Value	Lower	Upper	]	Lower	Upper		Lower	Upper	
O. Reg. 153(511) - Metals & Inor	rganics (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.





#### **Quality Assurance**

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

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T700748

ATTENTION TO: Fernando Contento

SAMPLING SITE: SAMPLED BY:

			Trac	e Or	gani	cs Ar	nalysi	is							
RPT Date: Jan 25, 2021				UPLICAT	E		REFEREN	NCE MA	TERIAL	METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value		eptable mits	Recovery	Lie	ptable	Recovery		ptable nits
							74.40	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		<0.05	< 0.05	NA	< 0.05	99%	50%	140%	111%	50%	140%	97%	50%	140%
Benzo(a)pyrene	1966588		<0.05	< 0.05	NA	< 0.05	71%	50%	140%	73%	50%	140%	82%	50%	140%
Indeno(1,2,3-cd)pyrene	1966588		<0.05	< 0.05	NA	< 0.05	65%	50%	140%	82%	50%	140%	79%	50%	140%
Dibenz(a,h)anthracene	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) (Sc	oil)													
F1 (C6 to C10)	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		<0.02	<0.02	NA	< 0.02	96%	50%	140%	77%	50%	140%	87%	50%	140%
Bromomethane	1966591		<0.05	< 0.05	NA	< 0.05	105%	50%	140%	107%	50%	140%	73%	50%	140%
Trichlorofluoromethane	1966591		<0.05	< 0.05	NA	< 0.05	102%	50%	140%	71%	50%	140%	74%	50%	140%
Acetone	1966591		<0.50	<0.50	NA	< 0.50	81%	50%	140%	97%	50%	140%	100%	50%	140%
1,1-Dichloroethylene	1966591	1066501	<0.05	<0.05	NA	< 0.05	77%	50%	140%	109%	60%	130%	97%	50%	140%
Methylene Chloride	1966591		<0.05	< 0.05	NA	< 0.05	99%	50%	140%	81%	60%	130%	82%	50%	140%
Trans- 1,2-Dichloroethylene	1966591		<0.05	<0.05	NA	< 0.05	88%		140%	93%		130%	82%		140%
Methyl tert-butyl Ether	1966591		<0.05	< 0.05	NA	< 0.05	78%	50%		80%	60%	130%	76%		140%
1,1-Dichloroethane	1966591		<0.03	<0.03	NA	< 0.02	96%	50%		90%		130%	83%		140%
Mothyl Ethyl Kotono	1066504	1066501	√0.50	-0 F0	NΙΛ	- 0 E0	Q <b>7</b> 0/	500/	1/100/	Q00/	50%	1/00/	860/	500/	1/100/
Methyl Ethyl Ketone	1966591		<0.50	<0.50	NA NA	< 0.50	87% 86%	50%		80% 70%		140%	86% 78%		140% 140%
Cis- 1,2-Dichloroethylene Chloroform	1966591		<0.02	<0.02	NA NA	< 0.02	86%	50%		70%	60%	130%	78% 106%		140%
1,2-Dichloroethane	1966591		<0.04	< 0.04	NA NA	< 0.04	88%	50%		73%		130%	106%		
1,2-Dichloroethane	1966591		<0.03	< 0.03	NA NA	< 0.03	92% 80%	50%		92%		130%	84% 73%		140%
i,i,i-indilorderlane	1966591	1 800081	<0.05	<0.05	NA	< 0.05	80%	50%	140%	102%	00%	130%	73%	50%	140%
Carbon Tetrachloride	1966591	1966591	<0.05	< 0.05	NA	< 0.05	72%	50%	140%	79%	60%	130%	83%	50%	140%

AGAT QUALITY ASSURANCE REPORT (V1)

Page 10 of 16

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



#### **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			DUPLICATE				REFERENCE MATERIAL		METHOD BLANK SPIKE			MATRIX SPIKE		KE	
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable	Recovery	1 :	ptable	Recovery		ptable
		lu lu					Value	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).



# **Method Summary**

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

PROJECT: BIGC-ENV-349B

SAMPLING SITE:

AGAT WORK ORDER: 21T700748
ATTENTION TO: Fernando Contento

		• · · · · · · · · · · · · · · · · · · ·	
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

# Method Summary

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

PROJECT: BIGC-ENV-349B

SAMPLING SITE:

AGAT WORK ORDER: 21T700748
ATTENTION TO: Fernando Contento

OAWII EIIVO OITE.		O/ ((())) = E = D = 1 .	
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

# Method Summary

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

PROJECT: BIGC-ENV-349B

SAMPLING SITE:

AGAT WORK ORDER: 21T700748
ATTENTION TO: Fernando Contento

OAIMI EINO OITE.		O/ (WII ELD D1.	
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

# Method Summary

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

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T700748
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



5835 Coopers Avenue

Mississauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 **Laboratory Use Only** 

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Chain of Custody Reco						f Custody Form (pot	able water c	onsume	ed by hi	ımans)		_		oler Qua	antity: nperatui	res:	2.	3 12	2-4	2	.6
Report Information: Company:	Inc			(Picase	ulatory Requirements all applicable boxes	s)	2400 11	Sew	or Ho					stody Setes:	eal Intac		Pres of		□No		□N/A
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		4	).		lnd/Com	Table	ne	_	Regio	7			Reg	gular 1	TAT (Mo	st Analys	ils)	5 to	o 7 Busine	ess Days	5
Phone: 647 966-689	14 Fax:				Mes/Park Agriculture	Regulation 55	58			er Qualit			Rus	sh TAT	(Rush Sur	charges	Apply)				
Reports to be sent to:  1. Email:  FCantenna (A)	nown fielding	gicom			exture (Check One) Coarse	ССМЕ		Obje		(PWQC	)		1	□ 3 B	Business ys	• [	2 Bu	usiness /s	, 🗆	Next Bo	ısiness
2. Email:					Fine	1	l-		Indicate	One				OF	R Date F	Require	d (Rush	1 Surch	arges May	( Apply):	
Project Information:  Project: Blue - ENV - Site Location: 221 Clubs	349B			Red	this submissi cord of Site Co Yes		Cer		te of	eline Analy	/sis		F	*TA	T is excl	usive o	f weeke	ends an	ion for rus od statutor tact your	ry holida	
Sampled By: TVH AGAT ID #:	PO:				ple Matrix Le	-	ာပ္	0,	Reg 19	53		7	O. Reg 558	O Re	eg 406						(K/N)
Invoice Information:  Company: Contact: Addroes: Email:  Love Toughand	ing Trac hertyl Ld. Ogit 1 D brown field	Missis	es No D	GW O P S SD SW	Ground Water Oil Paint Soil Sediment Surface Water		Field Filtered - Metals, Hg, CrVI, DOC	s & Inorganics	Metals - □ CrVI, □ Hg, □ HWSB	F1-F4 PHCs te F4G if required □ Yes □		L Alociol	Landfill Disposal Characterization TCLP:	Soils SPLP	Soils Characteriza MS Metals, BTEX,	EC/S	100				ally Hazardous or High Concentration
Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix		ments/ Instructions	Y/N	Metals	Metal	BIEX, F1 Analyze I	Total DCRe	VOC	Landfi		Excess pH, ICP						Potent
BH101-551	Jan 13, 2021	9:30		5				V		•		4									
BH101-952		9:35	3	1				-		~	,	V				Н					
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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: 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	

#### 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.
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- The test results reported herewith relate only to the samples as received by the laboratory.
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  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 (V1)

Page 1 of 19

Member of: Association of Professional Engineers and Geoscientists of Alberta (APEGA)

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AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLED BY:

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.

SAMPLING SITE:

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

			Ο.	iteg. 155(	Jii) - Metai	s & illulyali	103 (3011)				
DATE RECEIVED: 2021-01-26								[	DATE REPORTE	ED: 2021-02-02	
			CRIPTION: PLE TYPE: SAMPLED:	BH106-SS2 Soil 2021-01-20 08:45	BH107-SS1 Soil 2021-01-20 10:10	BH108-SS1 Soil 2021-01-20 11:45	BH109-SS1 Soil 2021-01-21 13:30	BH110-SS1 Soil 2021-01-21 09:15	BH111-SS1 Soil 2021-01-21 11:00	BH112-SS1 Soil 2021-01-21 13:00	BH113-SS1 Soil 2021-01-21 15:00
Parameter	Unit	G/S	RDL	2011445	2011446	2011447	2011448	2011449	2011451	2011452	2011454
Antimony	μg/g	7.5	8.0	<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:

Yrus Verastegui



AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLED BY:

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.
SAMPLING SITE:

O Pog 153(511) - Motale & Inorganics (Soil)

DATE RECEIVED: 2021-01-26								DATE REPORTED: 2021-02-02
DATE RECEIVED. 2021 01 20								BATE REPORTED. 2021 02 02
		SAMPLE DESC		BH114-SS1	BH114-SS2	BH115-SS1	BH115-SS2	
		_	PLE TYPE:	Soil	Soil	Soil	Soil	
		DATE S	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	
Γhallium	μg/g	1	0.5	<0.5	<0.5	<0.5	<0.5	
Jranium	μg/g	23	0.50	0.86	0.77	0.80	0.59	
/anadium	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	
oH, 2:1 CaCl2 Extraction	pH Units	5.0-9.0	NA	7.66	7.60	7.66	7.71	

Certified By:

Yris Verastegui



AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

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.

SAMPLING SITE:

NIGHT TING ING

SAMPLED BY:

ATTENTION TO: Fernando Contento

SAMPLED

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.

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

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 Verastegui



AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLED BY:

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.

SAMPLING SITE:

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

				O. INC	g. 133(311 <i>)</i>	- 1 Al 13 (30	11 <i>)</i>				
DATE RECEIVED: 2021-01-26								[	DATE REPORT	ED: 2021-02-02	
		SAMPLE DES	CRIPTION:	BH106-SS2	BH107-SS1	BH108-SS1	BH109-SS1	BH110-SS1	BH111-SS1	BH112-SS1	BH113-SS1
		SAMI	PLE TYPE:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		DATE S	SAMPLED:	2021-01-20	2021-01-20	2021-01-20	2021-01-21	2021-01-21	2021-01-21	2021-01-21	2021-01-21
				08:45	10:10	11:45	13:30	09:15	11:00	13:00	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	Acceptab	le Limits								
Naphthalene-d8	%	50-1	140	91	80	77	86	85	81	92	85
Acenaphthene-d10	%	50-1	140	80	82	82	80	79	77	87	79
Chrysene-d12	%	50-1	140	110	98	100	100	119	110	116	110





AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

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.

SAMPLING SITE:

ATTENTION TO: Fernando Contento

SAMPLED BY:

				O. Re	g. 153(511)	- PAHs (So	il)	
DATE RECEIVED: 2021-01-26								DATE REPORTED: 2021-02-02
		SAMPLE DES	CRIPTION:	BH114-SS1	BH114-SS2	BH115-SS1	BH115-SS2	
		SAMI	PLE TYPE:	Soil	Soil	Soil	Soil	
		DATES	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	Acceptab	le Limits					
Naphthalene-d8	%	50-1	140	88	79	96	111	
Acenaphthene-d10	%	50-1	140	83	75	93	85	
Chrysene-d12	%	50-1	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 *)





AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

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

5835 COOPERS AVENUE

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

ATTENTION TO: Fernando Contento

SAMPLED BY:

	O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Soil)													
DATE RECEIVED: 2021-01-26								DATE REPORTED: 2021-02-02						
		SAMPLE DESC	RIPTION:	BH106-SS1	BH110-SS2	BH112-SS2	BH113-SS2							
		SAMP	LE TYPE:	Soil	Soil	Soil	Soil							
		DATE S	AMPLED:	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	e Limits											
Terphenyl	%	60-14	40	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.

SAMPLING SITE:

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

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 *)



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

SAMPLING SITE:

## Certificate of Analysis

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

http://www.agatlabs.com

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

TEL (905)712-5100 FAX (905)712-5122

ATTENTION TO: Fernando Contento

SAMPLED BY:

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

			<u>'</u>	· ,			
							DATE REPORTED: 2021-02-02
	SAMPLE DESC	CRIPTION:	BH106-SS1	BH110-SS2	BH112-SS2	BH113-SS2	
	SAMI	PLE TYPE:	Soil	Soil	Soil	Soil	
	DATE S	SAMPLED:	2021-01-20	2021-01-21	2021-01-21	2021-01-21	
Unit	C / S	DDI					
ug/g							
ug/g	0.084	0.05					
ug/g	0.75	0.05	< 0.05	< 0.05	< 0.05	<0.05	
ug/g	0.47	0.02	< 0.02	< 0.02	< 0.02	<0.02	
ug/g	16	0.50	< 0.50	< 0.50	< 0.50	< 0.50	
ug/g	1.9	0.02	< 0.02	< 0.02	< 0.02	<0.02	
ug/g	0.05	0.04	< 0.04	< 0.04	< 0.04	<0.04	
ug/g	0.05	0.03	< 0.03	< 0.03	< 0.03	<0.03	
ug/g	0.38	0.05	< 0.05	< 0.05	< 0.05	<0.05	
ug/g	0.05	0.05	< 0.05	< 0.05	< 0.05	<0.05	
ug/g	0.21	0.02	< 0.02	< 0.02	< 0.02	<0.02	
	0.05	0.03	< 0.03	< 0.03	< 0.03	<0.03	
ug/g	0.061	0.03	< 0.03	< 0.03	< 0.03	<0.03	
	1.5	0.05	< 0.05	< 0.05	< 0.05	<0.05	
	1.7	0.50	<0.50	<0.50	<0.50	<0.50	
	0.05	0.04	<0.04	< 0.04	<0.04	<0.04	
	Unit  µg/g  ug/g   SAMI DATE S  Unit G/S  µg/g 16  ug/g 0.02  ug/g 0.05  ug/g 4  ug/g 16  ug/g 0.05  ug/g 0.1  ug/g 0.5  ug/g 0.1  ug/g 0.75  ug/g 0.47  ug/g 0.47  ug/g 16  ug/g 0.50  ug/g 0.47  ug/g 1.9  ug/g 0.05  ug/g 0.28  ug/g 0.058  ug/g 0.058	µg/g 16 0.05 ug/g 0.02 0.02 ug/g 0.05 0.05 ug/g 4 0.05 ug/g 16 0.50 ug/g 0.1 0.05 ug/g 0.1 0.05 ug/g 0.75 0.05 ug/g 0.47 0.02 ug/g 0.47 0.02 ug/g 16 0.50 ug/g 1.9 0.05 ug/g 1.9 0.05 ug/g 1.9 0.05 ug/g 0.05 0.04 ug/g 0.05 0.03 ug/g 0.38 0.05 ug/g 0.38 0.05 ug/g 0.50 0.03 ug/g 0.50 0.05 ug/g 0.50 0.04 ug/g 0.50 0.04 ug/g 0.28 0.05 ug/g 0.50 0.04 ug/g 0.28 0.05 ug/g 0.058 0.04 ug/g 0.28 0.05	SAMPLE DESCRIPTION: SAMPLE TYPE: Soil DATE SAMPLED: 2021-01-20 08:30  Unit G/S RDL 2011444   µg/g 16 0.05 0.05 0.05 0.05 0.05 0.05 0.05 0.0	SAMPLE DESCRIPTION: BH106-SS1 Soil Soil DATE SAMPLED: 2021-01-20 2021-01-21 08:30 09:30 Unit G / S RDL 2011444 2011450  µg/g 16 0.05 <0.05 <0.05 <0.05  µg/g 0.02 0.02 <0.02 <0.02 <0.02  µg/g 0.05 0.05 <0.05 <0.05  µg/g 16 0.50 <0.05 <0.05  µg/g 16 0.50 <0.05 <0.05  µg/g 0.05 0.05 <0.05  µg/g 0.05 0.05 <0.05  µg/g 16 0.50 <0.50 <0.50  µg/g 0.05 0.05 <0.05  µg/g 0.05 0.05 <0.05  µg/g 0.05 0.05 <0.05  µg/g 0.05 0.05 <0.05  µg/g 0.1 0.05 <0.05 <0.05  µg/g 0.75 0.05 <0.05  µg/g 0.47 0.02 <0.02 <0.02  µg/g 0.47 0.02 <0.02  µg/g 0.50 0.04 <0.04 <0.04  µg/g 0.38 0.05 <0.05  µg/g 0.38 0.05 <0.05  µg/g 0.38 0.05 <0.05  µg/g 0.39 0.05 0.03 <0.03  µg/g 0.39 0.05 0.03 <0.03  µg/g 0.30 0.05 0.03  µg/g 0.30 0.05 0.03  µg/g 0.30 0.05 0.05  µg/g 0.05 0.03 <0.05  µg/g 0.05 0.05  µg/g 0.05 0.05 <0.05  µg/g 0.05 0.05  µg/g 0.05 0.05 <0.05  µg/g 0.05 0.05 <0.05  µg/g 0.05 0.05 <0.05  µg/g 0.05 0.05 <0.05  µg/g 0.05 0.03 <0.03 <0.03  µg/g 0.05 0.03 <0.03 <0.03  µg/g 0.05 0.05 <0.05  µg/g 0.05 0.05 <0.05  µg/g 0.05 0.03 <0.03 <0.03  µg/g 0.061 0.03 <0.03 <0.03  µg/g 0.061 0.03 <0.03 <0.03  µg/g 0.061 0.03 <0.05  µg/g 0.05 0.04 <0.04 <0.04  µg/g 0.05 0.04 <0.04 <0.05  µg/g 0.05 0.04 <0.05  µg/g 0.05 0.04 <0.05  µg/g 0.05 0.04 <0.05  µg/g 0.05 0.04 <0.05  µg/g 0.05 0.05 <0.05  µg/g 0.05 0.04 <0.05  µg/g 0.05 0.04 <0.05  µg/g 0.05 0.04 <0.05  µg/g 0.05 0.04 <0.05  µg/g 0.05 0.05 <0.05  µg/g 0.05 0.04 <0.05  µg/g 0.05 0.04 <0.04 <0.04  µg/g 0.28 0.05 <0.05  µg/g 0.05 <0.05  µg/g 0.05 0.04 <0.04  µg/g 0.28 0.05 <0.05  µg/g 0.05 <0.05  µg/g 0.058 0.04 <0.04  µg/g 0.050 <0.05	SAMPLE DESCRIPTION: BH106-SS1 BH110-SS2 BH112-SS2 SAMPLE TYPE: Soil Soil Soil Soil O9:30 13:15  Unit G / S RDL 2011444 2011450 2011453  µg/g 16 0.05 <0.05 <0.05 <0.05 <0.02 <0.02 <0.02 <0.02 <0.02 <0.02 <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 <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 <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 <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 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 <0.05 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2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   2021-01-21   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CLIENT NAME: B.I.G. CONSULTING INC.

SAMPLING SITE:

#### Certificate of Analysis

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

ATTENTION TO: Fernando Contento

SAMPLED BY:

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

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

				0.110	g. 155(511)	VOO3 (00	'' <i>)</i>	
DATE RECEIVED: 2021-01-26								DATE REPORTED: 2021-02-02
	S	AMPLE DES	CRIPTION:	BH106-SS1	BH110-SS2	BH112-SS2	BH113-SS2	
		SAM	PLE 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	Acceptab	le 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 *)



#### **Exceedance Summary**

AGAT WORK ORDER: 21T703878

PROJECT: BIGC-ENV-349B

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.

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



## **Quality Assurance**

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

SAMPLING SITE:

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T703878
ATTENTION TO: Fernando Contento

SAMPLED BY:

				Soi	l Ana	alysis	3								
RPT Date: Feb 02, 2021			D	UPLICATE	<b>=</b>		REFERE	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER		nple	Dup #1	Dup #2	RPD	Method Blank	Measured		eptable mits	Recovery	Lin	eptable mits	Recovery		ptable nits
		d	·	.			Value	Lower	Upper	ĺ	Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inor	ganics (Soil)														
Antimony	2011458 2011	458	<0.8	<0.8	NA	< 0.8	97%	70%	130%	101%	80%	120%	88%	70%	130%
Arsenic	2011458 2011	458	7	8	13.3%	< 1	109%	70%	130%	99%	80%	120%	104%	70%	130%
Barium	2011458 2011	458	67.5	66.1	2.1%	< 2.0	100%	70%	130%	96%	80%	120%	106%	70%	130%
Beryllium	2011458 2011	458	< 0.4	<0.4	NA	< 0.4	95%	70%	130%	102%	80%	120%	81%	70%	130%
Boron	2011458 2011	458	10	10	NA	< 5	101%	70%	130%	97%	80%	120%	74%	70%	130%
Boron (Hot Water Soluble)	2011458 2011	458	0.54	0.58	7.1%	< 0.10	99%	60%	140%	102%	70%	130%	101%	60%	140%
Cadmium	2011458 2011	458	0.7	<0.5	NA	< 0.5	104%	70%	130%	98%	80%	120%	94%	70%	130%
Chromium	2011458 2011	458	10	10	NA	< 5	97%	70%	130%	98%	80%	120%	100%	70%	130%
Cobalt	2011458 2011	458	5.8	5.8	0.0%	< 0.5	95%	70%	130%	100%	80%	120%	100%	70%	130%
Copper	2011458 2011	458	37.2	36.8	1.1%	< 1.0	90%	70%	130%	105%	80%	120%	99%	70%	130%
Lead	2011458 2011	458	34	37	8.5%	< 1	105%	70%	130%	98%	80%	120%	94%	70%	130%
Molybdenum	2011458 2011	458	1.1	1.2	NA	< 0.5	100%	70%	130%	95%	80%	120%	104%	70%	130%
Nickel	2011458 2011	458	12	11	8.7%	< 1	95%	70%	130%	102%	80%	120%	93%	70%	130%
Selenium	2011458 2011	458	<0.8	<0.8	NA	< 0.8	113%	70%	130%	93%	80%	120%	102%	70%	130%
Silver	2011458 2011	458	<0.5	<0.5	NA	< 0.5	94%	70%	130%	106%	80%	120%	91%	70%	130%
Thallium	2011458 2011	458	<0.5	<0.5	NA	< 0.5	106%	70%	130%	97%	80%	120%	95%	70%	130%
Uranium	2011458 2011	458	0.80	0.85	NA	< 0.50	112%	70%	130%	100%	80%	120%	103%	70%	130%
Vanadium	2011458 2011	458	16.6	16.5	0.6%	< 0.4	94%	70%	130%	94%	80%	120%	106%	70%	130%
Zinc	2011458 2011	458	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 2011	145 <	<0.040	<0.040	NA	< 0.040	92%	70%	130%	92%	80%	120%	97%	70%	130%
Mercury	2011458 2011	458	<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 2011		0.332	0.358	7.5%	N/A	NA	22,0	,						
pH, 2:1 CaCl2 Extraction	2011445 2011	145	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.





## **Quality Assurance**

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

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T703878
ATTENTION TO: Fernando Contento

SAMPLING SITE: SAMPLED BY:

0. Rog. 153(511) - VOCs (Soill) Dichlorodifluoromethane 2011403				Trac	e Or	gani	cs Ar	nalys	is							
PARAMETER   Batch   Semple   Ough	RPT Date: Feb 02, 2021				UPLICAT	E		REFERE	NCE MA	TERIAL	METHOD	BLANK	( SPIKE	MAT	RIX SPI	KE
New   Usper	PARAMETER	Batch		Dup #1	Dup #2	RPD					Recovery	1 1 1 1 1		Recovery		
Dichloridifuroremethane			la la	'	·			value	Lower	Upper		Lower	Upper		Lower	Upper
Vinyl Chlorided 2011403	O. Reg. 153(511) - VOCs (Soil)															
Bromomethane 2011403 < 0.05	Dichlorodifluoromethane	2011403		< 0.05	< 0.05	NA	< 0.05	76%	50%	140%	86%	50%	140%	71%	50%	140%
Tichlorlofluormethane   2011403   <0.05   <0.05   NA   <0.05   0.59   89%   50%   140%   87%   50%   140%   73%   50%   140%   40%   60%   130%   73%   50%   140%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%   40%	Vinyl Chloride	2011403		< 0.02	< 0.02	NA	< 0.02	98%	50%	140%	74%	50%	140%	76%	50%	140%
Acetone 2011403	Bromomethane	2011403		< 0.05	< 0.05	NA	< 0.05	104%	50%	140%	71%	50%	140%	80%	50%	140%
1.1-Dichloroethylene	Trichlorofluoromethane	2011403		< 0.05	< 0.05	NA	< 0.05	98%	50%	140%	83%	50%	140%	73%	50%	140%
Methylene Chloride	Acetone	2011403		<0.50	<0.50	NA	< 0.50	86%	50%	140%	97%	50%	140%	102%	50%	140%
Trans-1,2-Dichloroethylene	1,1-Dichloroethylene	2011403		<0.05	< 0.05	NA	< 0.05	95%	50%	140%	94%	60%	130%	73%	50%	140%
Trans-1,2-Dichloroethylene	•									140%					50%	140%
Methyl teth-butyl Ether   2011403	•															140%
1,1-Dichloroethane 2011403	•															140%
Cis- 1,2-Dichloroethylene	1,1-Dichloroethane															140%
Cis- 1,2-Dichloroethylene	Methyl Ethyl Ketone	2011403		<0.50	<0.50	NΙΛ	- 0.50	05%	50%	1/10%	00%	50%	1/10%	95%	50%	1/10%
Chloroform 2011403	• •															
1,2-Dichloroethane 2011403	•															
1,1,1-Trichloroethane 2011403																
Carbon Tetrachloride 2011403 <0.05 <0.05 NA <0.05 72% 50% 140% 74% 60% 130% 73% 50% 140% 140% 120% 140% 120% 140% 140% 140% 140% 140% 140% 140% 14	,															140%
Benzene 2011403		2011.00		10.00	10.00		1 0.00	0.70	0070	. 1070	0070	0070	.0070	0.70	0070	
1,2-Dichloropropane 2011403	Carbon Tetrachloride	2011403		<0.05	<0.05	NA	< 0.05	72%	50%	140%	74%	60%	130%	73%	50%	140%
Trichloroethylene 2011403	Benzene	2011403		< 0.02	< 0.02	NA	< 0.02	81%	50%	140%	80%	60%	130%	89%	50%	140%
Bromodichloromethane 2011403	1,2-Dichloropropane	2011403		< 0.03	< 0.03	NA	< 0.03	84%	50%	140%	84%	60%	130%	93%	50%	140%
Methyl Isobutyl Ketone 2011403	Trichloroethylene	2011403		< 0.03	< 0.03	NA	< 0.03	81%	50%	140%	77%	60%	130%	80%	50%	140%
1,1,2-Trichloroethane 2011403	Bromodichloromethane	2011403		<0.05	<0.05	NA	< 0.05	70%	50%	140%	77%	60%	130%	77%	50%	140%
Toluene 2011403	Methyl Isobutyl Ketone	2011403		<0.50	<0.50	NA	< 0.50	88%	50%	140%	84%	50%	140%	96%	50%	140%
Dibromochloromethane 2011403	1,1,2-Trichloroethane	2011403		< 0.04	< 0.04	NA	< 0.04	89%	50%	140%	84%	60%	130%	100%	50%	140%
Ethylene Dibromide 2011403 <0.04 <0.04 NA <0.04 89% 50% 140% 82% 60% 130% 93% 50% 140% 70% 60% 130% 93% 50% 140% 70% 60% 130% 93% 50% 140% 70% 60% 130% 74% 50% 140% 70% 60% 130% 74% 50% 140% 70% 60% 130% 76% 50% 140% 70% 60% 130% 76% 50% 140% 70% 60% 130% 76% 50% 140% 70% 60% 130% 76% 50% 140% 70% 60% 130% 76% 50% 140% 70% 60% 130% 76% 50% 140% 70% 60% 130% 76% 50% 140% 70% 60% 130% 76% 50% 140% 70% 60% 130% 76% 50% 140% 70% 60% 130% 76% 50% 140% 70% 60% 130% 76% 50% 140% 70% 60% 130% 76% 50% 140% 70% 60% 130% 81% 50% 140% 70% 60% 130% 81% 50% 140% 70% 60% 130% 81% 50% 140% 70% 60% 130% 81% 50% 140% 70% 60% 130% 81% 50% 140% 70% 60% 130% 81% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 130% 78% 50% 140% 70% 60% 1	Toluene	2011403		< 0.05	< 0.05	NA	< 0.05	80%	50%	140%	71%	60%	130%	75%	50%	140%
Tetrachloroethylene 2011403	Dibromochloromethane	2011403		< 0.05	< 0.05	NA	< 0.05	81%	50%	140%	74%	60%	130%	79%	50%	140%
1,1,1,2-Tetrachloroethane       2011403       <0.04	Ethylene Dibromide	2011403		<0.04	<0.04	NA	< 0.04	89%	50%	140%	82%	60%	130%	93%	50%	140%
1,1,1,2-Tetrachloroethane       2011403       <0.04	Tetrachloroethylene	2011403		<0.05	<0.05	NA	< 0.05	77%	50%	140%	70%	60%	130%	74%	50%	140%
Chlorobenzene 2011403	•															
Ethylbenzene 2011403																
m & p-Xylene 2011403 <0.05 <0.05 NA <0.05 73% 50% 140% 101% 60% 130% 96% 50% 140% Styrene 2011403 <0.05 <0.05 NA <0.05 89% 50% 140% 71% 60% 130% 81% 50% 140% 1,1,2,2-Tetrachloroethane 2011403 <0.05 <0.05 NA <0.05 NA <0.05 89% 50% 140% 71% 60% 130% 78% 50% 140% 0-Xylene 2011403 <0.05 <0.05 NA <0.05 NA <0.05 103% 50% 140% 88% 60% 130% 106% 50% 140% 0-Xylene 2011403 <0.05 <0.05 NA <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% 1,3-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 80% 50% 140% 87% 60% 130% 78% 50% 140% 1,2-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% 1,2-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 85% 50% 140% 72% 60% 130% 78% 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	m & p-Xylene															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		004::55						0.557	=601	4.455	700	0.557	1055	0.454	=60.	4.422
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% 1,2-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 85% 50% 140% 72% 60% 130% 78% 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% 1,2-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 <0.05 NA <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 72% 60% 130% 78% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 1,2-Dichlorobenzene 2011403 <0.05 85% 50% 140% 1	•															
1,3-Dichlorobenzene       2011403       <0.05																
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%	•															
1,2-Dichlorobenzene 2011403 <0.05 <0.05 NA < 0.05 85% 50% 140% 72% 60% 130% 78% 50% 140%	וויטוטוכווסוטenzene	2011403		<0.05	<0.05	NA	< 0.05	80%	50%	140%	8/%	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%
n-Hexane 2011403 <0.05 <0.05 NA < 0.05 113% 50% 140% 103% 60% 130% 74% 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%

AGAT QUALITY ASSURANCE REPORT (V1)

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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:

	7	Гrасе	Orga	anics	Ana	alysis	(Cor	ntin	ued	)					
RPT Date: Feb 02, 2021				UPLICATI	E		REFERE	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable nits	Recovery	Lie	ptable	Recovery		ptable
		lu		•			value	Lower	Upper	,	Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (-	BTEX) (So	il)													
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 2	2011449	< 0.05	< 0.05	NA	< 0.05	109%	50%	140%	83%	50%	140%	78%	50%	140%
Acenaphthylene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	114%	50%	140%	79%	50%	140%	82%	50%	140%
Acenaphthene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	114%	50%	140%	82%	50%	140%	81%	50%	140%
Fluorene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	99%	50%	140%	81%	50%	140%	75%	50%	140%
Phenanthrene	2011449 2	2011449	<0.05	<0.05	NA	< 0.05	93%	50%	140%	71%	50%	140%	75%	50%	140%
Anthracene	2011449 2	2011449	<0.05	<0.05	NA	< 0.05	111%	50%	140%	81%	50%	140%	99%	50%	140%
Fluoranthene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	105%	50%	140%	82%	50%	140%	93%	50%	140%
Pyrene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	112%	50%	140%	77%	50%	140%	90%	50%	140%
Benz(a)anthracene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	111%	50%	140%	76%	50%	140%	106%	50%	140%
Chrysene	2011449 2	2011449	<0.05	<0.05	NA	< 0.05	102%	50%	140%	99%	50%	140%	105%	50%	140%
Benzo(b)fluoranthene	2011449 2	2011449	<0.05	<0.05	NA	< 0.05	69%	50%	140%	79%	50%	140%	74%	50%	140%
Benzo(k)fluoranthene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	77%	50%	140%	85%	50%	140%	84%	50%	140%
Benzo(a)pyrene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	60%	50%	140%	76%	50%	140%	77%	50%	140%
Indeno(1,2,3-cd)pyrene	2011449 2	2011449	< 0.05	< 0.05	NA	< 0.05	67%	50%	140%	72%	50%	140%	93%	50%	140%
Dibenz(a,h)anthracene	2011449 2	2011449	<0.05	<0.05	NA	< 0.05	64%	50%	140%	80%	50%	140%	78%	50%	140%
Benzo(g,h,i)perylene	2011449 2	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:

**AGAT** QUALITY ASSURANCE REPORT (V1)

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# Method Summary

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

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T703878
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

# **Method Summary**

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

PROJECT: BIGC-ENV-349B

SAMPLING SITE:

AGAT WORK ORDER: 21T703878
ATTENTION TO: Fernando Contento

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

# Method Summary

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

PROJECT: BIGC-ENV-349B

SAMPLING SITE:

AGAT WORK ORDER: 21T703878
ATTENTION TO: Fernando Contento

OAIMI EINO OITE.		O/ (WII ELD D1.	
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

# **Method Summary**

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

AGAT WORK ORDER: 21T703878
ATTENTION TO: Fernando Contento

SAMPLING SITE:

PROJECT: BIGC-ENV-349B

Or tivil Elito Off E.		O, 222 2	
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



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 webearth.agatlabs.com 
 Laboratory Use Only
 8 78

 Work Order #:
 21 7 7 0 3 3 4 8

Cooler Quantity:

Report Infor						<b>Regulatory Requirements:</b>	□ No	Regu	ulator	y Requir	ement		Custo	dy Sea	al Inta	ict:		Yes		□No		□N/A
Company:	B.I.G. Consulting Inc					(Please check all applicable boxes)		_				11	Notes		-	I	18	ee		1	F	2
Contact:	Fernando Contento					Regulation 153/04 Sewe	r Use	1 0	Regu	ulation 558		I'E					_					
Address:	5500 Tomken Road,	Unit 12, Mississaug	a, ON		_	Table Indicate One Sar	.Nam.	1 -	ССМ	1F		П	urna	arou	nd T	ſime	e (TA	IT) R	equir	ed:		
					-	Initial contraction		-				R	egul	ar T	AT.		<b>V</b>	5 to 7	Busine	ss Day	5	
Phone:	6479666894	Fax:			_	☑Res/Park ☐Sto	rm	[	Prov	. Water Qua	ality	R	ush	TAT (	Rush Sur	rcharg	es Apply	)				
Reports to be sent to 1. Email:	fcontento@brownfie	eldigi.com				Soil Texture (Check One) Region		Ιc	Obje Othe	ectives (PW0 er	ĮU)			3 Ru	siness	c	_	2 Bus	iness		Next Bo	icinecc
					-		atc One	1				Ш		Days		5		Days			Day	23111033
2. Email:					-	☐Fine ☐MISA		ļ	_	Indicate One	-			OR	Date R	Requi	red (R	ush Su	urcharg	es May	Apply):	
Project Infor	mation:					Is this submission for a	16-39	Repoi	rt Gul	Ideline o	n											
Project:	BIGC-ENV-349B					Record of Site Condition?	C	ertific	cate	of Analys	sis								fication			
Site Location:	Cros Avenue					☑ Yes ☐ No	-	☑ Ye	es		lo										y holida	
Sampled By:	TVH					*							For	'Same	) Day'	апа	lysis, p	please	contac	ct your	AGAT C	PM
AGAT Quote #:		PO:				Sample Matrix Legend	_	0.	Reg 15	3								LPCBs				(N)
	Please note: If quotation n	umber is not provided, ellent v	vill be billed full price	for analysis.	_	B Biota	C. C.M	100	rides)				т									tion (
Invoice Infor	mation:		Bill To Same:	Yes □ No		GW Ground Water	Fiftered - Metals, Hg,	/drides}	H Hyd		2	HH						□ B(a)P			1	entra
Company:	B.I.G. Consulting In-	c.				O Oil	etals	(excl. Hydr	S (Fig	題	als				П	S		ş			4 1	Conc
Contact:	Laine Dougherty					P Paint	Σ-		Metal	3 🗖	Meta	NO3+NO				□ Aroclors	Pesticides	□ ABNs			1 1	過
Address:	5500 Tomken Road,		ja, ON			S Soil SD Sediment	terec	gani	153	1 E	E C			0		JArc	Pest	၂ ၁				us or
Email:	ldougherty@brownfi	ieldigi.com			_	SW Surface Water	AF B	and Inorganics	Metals D	Scar	Cust		F4			<u>a</u>	rine	NOCs			1 1	zardo
							Fleid	and tals	e Met	ISAR Stals	tion/					] Iot	chlo	M&I Use				F Ha
Sam	ple Identification	Date Sampled	Time Sampled	# of Containers	Sampl Matri		Y/N	Metals and	□ Hydrid	Correction of the Correction o	Regulation/Custom Metals	ONO, ONO, ONO,+ÑO,	PHCs F1 -	ABNS	PAHS	PCBs: ☐ Total	Organochlorine	TCLP: LI M&I				Potentially
BH106-SS1		20 Jan 20	08:30	3	S				100			Ū										
BH106-SS2		20 Jan 2021	08:45	2	S			V				100			Ø				13			
BH107-SS1		20 Jan 2021	10:10	2	S			V	18			1	T		Ø	3			67.5	10		
BH108-SS1		20 Jan 2021	11:45	2	S			7						E	Ø							
BH109-SS1		20 Jan 2021	13:30	2	S																	10
BH110-SS1		21 Jan 2021	09:15	2	S		-															0
BH110-SS2		21 Jan 2021	09:30	3	S							[		8							1	
BH111-SS1		21 Jan 2021	11:00	2	S			7							Ø							
BH112-SS1		21 Jan 2021	13:00	2	S	1						$\neg$						+				
BH112-SS2		21 Jan 2021	13:15	3	S			41											-	+	+	-
BH113-SS1		21 Jan 2021	15:00	2	S			7				-	-					-	10	1.10	N Oc	
	Film Nump and Sign):	-1 Juli 2021	Tuote	1 Trin	ne	Complex Received DV Diget Name and Tides	-	<u> </u>		700	Date	_	1	Time				201	1	I JH	MSH	Fil
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Sai S	LA.					74	-/						_	Time			_		_		_	
	Print Name and Sign):		Date	Tim	ne	Samples Receited By (Print Name and Sien):					Date			Litribi				Pa	ge 1	of	2	

no out thought the



5835 Coopers Avenue Micsissauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 webearth,agatlabs,com

O. Reg 153

□Ct □CN FOC □Hg

Laboratory Use	Only		
Work Order #:			
Cooler Quantity: Arrival Temperatures:	Se	e po	1
Custody Seal Intact:	Yes	□No	□N/A

#### **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: B.I.G. Consulting Inc. Company: Fernando Contento Contact: 5500 Tomken Road, Unit 12, Mississauga, ON Address: 6479666894 Phone: - Fax: _ Reports to be sent to:

1. Email:	fcontento@brownfieldigi.com	
2. Email:	-	
Project Inform	nation:	
Project:	BIGC-ENV-349B	
Site Location:	Cros Avenue	
Sampled By:	TVII	
AGAT Quote #:		_ PO:
	Please note: If quotation number is not pro	ovided, client will be billed full price for analysis
Invoice Inform	mation:	Bill To Same: Yes ☐ No ☐
Company:	B.I.G. Consulting Inc.	
Contact:	Laine Dougherty	

5500 Tomken Road, Unit 12, Mississauga, ON

Is this submission Record of Site Co		Report Guldeline on Certificate of Analysis
□Fine	MISA	Indicate One
Soil Texture (Check One)	Region	Other
☑Res/Park □Agriculture	Storm	Prov. Water Quality Objectives (PWQO)
Table Indicate One	Sanitary	ССМЕ
Regulation 153/04	Sewer Use	Regulation 558

ed - Metals, Hg, CrVI

**Regulatory Requirements:** 

No Regulatory Requirement

5 to 7 Business Days  2 Business  Next E Days  Day  ush Surcharges May Apply)	usine
2 Business Next E	usine
Days Day	usine
ior notification for rush TAT eekends and statutory holid	ays
96	r notification for rush TAT ekends and statutory holida ease contact your AGAT C

□B(a)P

☐ ABNS

Email: Idougherty@brownfieldigi.com					SD Sediment SW Surface Water	Field Fitte	and Inorg		de Metals 🖸 🗂 🖸 🗎 🗂 🖸 Ec 🔠 F	O !	20 1	s: 1 voc	1-F4		] Total	chlorine P	M&I DVOC	Use				Potentially Hazardou
Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix		Y/N	Metals	☐ All Metals ☐ Hydride Me	ORPS:	Full Metals	Regulation/Cu	Volatiles:	PHCs F	ABNS	PCBs:[	Organo		Sewer				Potential
BH113-SS2	21 Jan 20	15:15	3	S		la la				- 1		V	V						-0			
BH114-SS1	21 Jan 2021	16:00	2	S			Ø							G							0	
BH114-SS2	21 Jan 2021	16:15	2	S			Ø														10	
BH115-SS1	22 Jan 2021	09:00	2	S			Ø					100						19				1
BH115-SS2	22 Jan 2021	09:15	2	S			V															
		2																				
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Samples Received By (Print Name and Sign)

**Sample Matrix Legend** 

Ground Water

Sediment

14:25

26/Jan/2021

Biota

N: Det - Hon - 50 Pink Copy - Client | Yellow Copy - AGAT | White Copy- AGAT

THM

Samples Relinquished By (Print Name and Sign):

Address:

of 2

Page 2



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	

#### 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 (V1)

Page 1 of 16

Member of: Association of Professional Engineers and Geoscientists of Alberta (APEGA)

Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

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.

SAMPLING SITE: Cros Avenue

ATTENTION TO: Fernando Contento

SAMPLING SITE: Cros Aven	ue				SAMPLED BY: I VH
			Ο.	Reg. 153(511	) - Metals & Inorganics (Soil)
DATE RECEIVED: 2021-01-28					DATE REPORTED: 2021-02-05
	S	AMPLE DES	CRIPTION:	DUP011402	
		SAM	PLE 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	

Certified By:



pH Units

5.0-9.0

7.37

pH, 2:1 CaCl2 Extraction



AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

CANADA L4Z 1Y2 TEL (905)712-5100

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

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO

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

SAMPLING SITE: Cros Avenue

2020967

ATTENTION TO: Fernando Contento

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.

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 *)



AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

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.

SAMPLING SITE: Cros Avenue

ATTENTION TO: Fernando Contento

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

				O. Neg.	100(011) - 1 Alia (0011)
DATE RECEIVED: 2021-01-28					DATE REPORTED: 2021-02-05
		SAMPLE DESC	RIPTION:	DUP011402	
		SAMP	LE TYPE:	Soil	
		DATE S	AMPLED:	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	e Limits		
Naphthalene-d8	%	50-14	10	92	
Acenaphthene-d10	%	50-14	10	87	
Chrysene-d12	%	50-14	10	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 *)





AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

http://www.agatlabs.com

TEL (905)712-5100 FAX (905)712-5122

ATTENTION TO: Fernando Contento

SAMPLED BY:TVH

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

SAMPLING SITE: Cros Avenue

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

DATE RECEIVED: 2021-01-28

DATE REPORTED: 2021-02-05

	S	SAMPLE DESC	RIPTION:	DUP011002	
		SAMPL	E TYPE:	Soil	
		DATE SA	MPLED:	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	%	60-14	0	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 *)





AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

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.

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 DESC	RIPTION:	DUP011002	
		SAMP	LE TYPE:	Soil	
		DATE S	AMPLED:	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	





AGAT WORK ORDER: 21T705007

PROJECT: BIGC-ENV-349B

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.

SAMPLING SITE: Cros Avenue

ATTENTION TO: Fernando Contento SAMPLED BY:TVH

SAMPLING SITE.CIOS AVEIN	ue			SAMPLED BY.IVII
			O. Re	g. 153(511) - VOCs (Soil)
DATE RECEIVED: 2021-01-28				DATE REPORTED: 2021-02-05
	S	AMPLE DESCRIPT	TION: DUP011002	
		SAMPLE T	YPE: Soil	
		DATE SAMP	LED: 2021-01-21 09:30	
Parameter	Unit	G/S RI	DL 2020966	
m & p-Xylene	ug/g	0.0	05 <0.05	
Bromoform	ug/g	0.27 0.0	05 <0.05	
Styrene	ug/g	0.7 0.0	05 <0.05	
1,1,2,2-Tetrachloroethane	ug/g	0.05 0.0	05 <0.05	
o-Xylene	ug/g	0.0	05 <0.05	
1,3-Dichlorobenzene	ug/g	4.8 0.0	05 <0.05	
1,4-Dichlorobenzene	ug/g	0.083 0.0	05 <0.05	
1,2-Dichlorobenzene	ug/g	1.2 0.0	05 <0.05	
Xylenes (Total)	ug/g	3.1 0.0	05 <0.05	
1,3-Dichloropropene (Cis + Trans)	μg/g	0.05 0.0	04 <0.04	
n-Hexane	μg/g	2.8 0.0	05 <0.05	
Moisture Content	%	0	.1 12.3	
Surrogate	Unit	Acceptable Lin	nits	
Toluene-d8	% Recovery	50-140	104	
4-Bromofluorobenzene	% Recovery	50-140	85	

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 -Comments:

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 *)





#### **Quality Assurance**

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

PROJECT: BIGC-ENV-349B SAMPLING SITE:Cros Avenue AGAT WORK ORDER: 21T705007
ATTENTION TO: Fernando Contento

SAMPLED BY:TVH

5/ titil 21115 5112:5155 / troil							`	,							
				Soi	l Ana	alysis	3								
RPT Date: Feb 05, 2021			С	UPLICATI	E		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	IKE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		eptable mits	Recovery	Lin	ptable nits	Recovery		eptable mits
		ld					Value	Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inor	ganics (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		8.0	8.0	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.





## **Quality Assurance**

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

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T705007 ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue SAMPLED BY:TVH

	Trace Organics Analysis														
RPT Date: Feb 05, 2021				UPLICAT	E		REFERE	NCE MA	TERIAL	METHOD	BLANK	( SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		ptable nits	Recovery	Lir	eptable mits	Recovery		ptable
		ld	·	·			Value	Lower	Upper		Lower	Upper	ĺ	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%		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%		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		<0.03	<0.03	NA	< 0.03	83%	50%	140%	73 <i>%</i> 78%	60%	130%	82%	50%	140%
1,2-Dichloropropane	2023833		<0.02					50%	140%	82%	60%	130%	86%	50%	140%
• •	2023833		<0.03	< 0.03	NA	< 0.03	85% 74%	50%	140%	02% 71%	60%		81%	50%	140%
Trichloroethylene Bromodichloromethane	2023833		<0.05	<0.03 <0.05	NA NA	< 0.03 < 0.05	74% 75%	50%	140%	71% 76%	60%	130% 130%	78%	50%	140%
Made de la about d'IZata a a			0.50	0.50		0.50	000/	<b>500</b> /	4.4007	0.50/	<b>500</b> /	4.4007	2001	<b>500</b> /	4.400/
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%		140%	85%		130%	73%		140%
1,1,2,2-Tetrachloroethane	2023833		<0.05	< 0.05	NA	< 0.05	88%		140%	108%		130%	104%		140%
o-Xylene	2023833		<0.05	<0.05	NA	< 0.05	77%	50%	140%	75%			80%	50%	
1,3-Dichlorobenzene	2023833		<0.05	<0.05	NA	< 0.05	81%	50%	140%	78%		130%	81%		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		< 0.05	81%	50%	140%	76%	60%		83%	50%	140%
					NA NA										
n-Hexane	2023833		<0.05	<0.05	NA	< 0.05	84%	JU%	140%	77%	<b>0</b> U%	130%	117%	50%	140%

AGAT QUALITY ASSURANCE REPORT (V1)

Page 9 of 16

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



#### **Quality Assurance**

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

PROJECT: BIGC-ENV-349B SAMPLING SITE:Cros Avenue AGAT WORK ORDER: 21T705007
ATTENTION TO: Fernando Contento

SAMPLED BY:TVH

OAMI EINO OITE.OIOS AVEIR	10							<i>)</i> / (IVII I		1.1 V11					
	٦	Ггасе	Org	anics	Ana	alysis	(Cor	ntin	ued	)					
RPT Date: Feb 05, 2021				UPLICAT	E		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable nits	Recovery		ptable	Recovery		ptable
		lu lu					value	Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - PHCs F1 - F4 (	-BTEX) (So	il)													
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).





#### **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			REFEREN	ICE MATI	ERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Sample Id	Sample Description	Measured	Accept Limi	te	Recovery	Lin	ptable nits	Recovery	Lin	ptable nits
			Value	Lower	Upper	,		Upper	,		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.

## **Method Summary**

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

PROJECT: BIGC-ENV-349B SAMPLING SITE:Cros Avenue AGAT WORK ORDER: 21T705007 ATTENTION TO: Fernando Contento

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

# Method Summary

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

PROJECT: BIGC-ENV-349B SAMPLING SITE:Cros Avenue AGAT WORK ORDER: 21T705007 ATTENTION TO: Fernando Contento

SAMPLING SITE. Cros Avenue		SAMPLED BY. IV	
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

# **Method Summary**

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

PROJECT: BIGC-ENV-349B SAMPLING SITE:Cros Avenue AGAT WORK ORDER: 21T705007 ATTENTION TO: Fernando Contento

OAIMI EINO OITE.OIOS AVCITAC		OAIMI LLD D1.1VI	•
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

## Method Summary

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

PROJECT: BIGC-ENV-349B

AGAT WORK ORDER: 21T705007 ATTENTION TO: Fernando Contento

SAMPLING SITE:Cros Avenue		SAMPLED BY:T\	/H
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



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 webeartn_agatlans.com

**Laboratory Use Only** Work Order #: 21T 705007 Cooler Quantity:

Chain	of	Custody	Record
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Chain of C	ain of Custody Record If this is a Drinking Water sample, pleas					use Drinking Water Chain of Custody Form (potable water consumed by humans)						_ /	Arrival	Temp	eratu	res:		- 5	>	1.6	11	حاره	-		
Report Inform	nation: B.I.G. Consulting Inc.					Regulatory Requir	rements:	□ No	Re	gulato	ry Req	uirer	nent		Custoo Notes:	-	al Inta	ct		Yes	2	□No	F.	□N,	/A
Contact:	Fernando Contento					Regulation 153/04	Sewe	rllco	1	□ _{Re}	gulation 5	558		-											
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Project Inform	nation: BIGC-ENV-349B					Is this submission Record of Site Con					uldelin											on for r			
Project:	te Location: Cros Avenue			☑ Yes □	No	-	171	Yes	П	No		Ш								d statute					
Sampled By:	TVH					<u>□</u> 103 □	110	4	L.	103		1.10		Ш	For	'Sam	e Day	' ana	lysis,	pleas	e cont	act you	r AGAT	CPM	
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Contact: Laine Dougherty			S Soll		8	Si	3 Me	200		Me I	NO +NO				☐ Aroclors	Pesticides		400	4 1			I			
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Email:	ldougherty@brownfield	ligi.com			-1	SW Surface Water		Field Fittered - Metals, Hg,		Is 🗆 19	DEC OF	als Sca	on/Cu	INO.	47			Total	hlorin		9				y Hazar
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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
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  services.
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- The test results reported herewith relate only to the samples as received by the laboratory.
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  contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories (V1)

Page 1 of 10

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AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

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.
SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

ATTENTION TO: Rebecca Morrison SAMPLED BY:Timothy Damdar

			Ο.	Reg. 153(511	) - Metals & Inorganics (Soil)
DATE RECEIVED: 2021-07-27					DATE REPORTED: 2021-08-05
	S		CRIPTION: PLE TYPE: SAMPLED:	BH116-AS1 Soil 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	





AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

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. SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

ATTENTION TO: Rebecca Morrison 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.

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.

2787591

Analysis performed at AGAT Toronto (unless marked by *)

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AGAT WORK ORDER: 21T780215

PROJECT: BIGC-ENV-349D

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. SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

ATTENTION TO: Rebecca Morrison SAMPLED BY:Timothy Damdar

				O. Reg. 1	53(511) - PAHs (Soil)
DATE RECEIVED: 2021-07-27					DATE REPORTED: 2021-08-05
	5	SAMPLE DESC	CRIPTION:	BH116-AS1	
		SAME	PLE TYPE:	Soil	
		DATE S	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	Acceptab	e Limits		
Naphthalene-d8	%	50-1	40	78	
Acridine-d9	%	50-1	40	79	
Terphenyl-d14	%	50-1	40	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 *)





#### **Quality Assurance**

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

PROJECT: BIGC-ENV-349D SAMPLING SITE:217-227 Cross Avenue, Oakville, ON AGAT WORK ORDER: 21T780215
ATTENTION TO: Rebecca Morrison
SAMPLED BY:Timothy Damdar

				Soi	l Ana	alysis	3								
RPT Date: Aug 05, 2021			DUPLICATE				REFERE	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured	Acceptable Limits		Recovery		ptable nits	Recovery		ptable nits
		ld			=		Value	Lower Upper			Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inor	ganics (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.





#### **Quality Assurance**

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

PROJECT: BIGC-ENV-349D

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

AGAT WORK ORDER: 21T780215
ATTENTION TO: Rebecca Morrison
SAMPLED BY:Timothy Damdar

			Trac	e Or	gani	cs Ar	nalys	is										
RPT Date: Aug 05, 2021			DUPLICATE				REFERE	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MATRIX SPIKE					
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value					ptable nits	Recovery		ptable nits	Recovery		ptable nits
		la la		·			value	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).

Jinkal Jotal



#### **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			REFEREN	ICE MAT	ΓERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Sample Id	Sample Description	Measured	Accep Lim	ite	Recovery	Lin	ptable nits	Recovery		eptable nits
	·		Value	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.

### Method Summary

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

AGAT WORK ORDER: 21T780215

ICP-MS

ICP-MS

ICP-MS

ICP-MS

ICP-MS

ICP-MS

ICP-MS

ICP-MS

SPECTROPHOTOMETER

TECHNICON AUTO ANALYZER

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 modified from EPA 3050B and EPA ICP-MS Antimony MET-93-6103 6020B and ON MOECC modified from EPA 3050B and EPA Arsenic MET-93-6103 ICP-MS 6020B and ON MOECC modified from EPA 3050B and EPA Barium ICP-MS MFT-93-6103 6020B and ON MOECC modified from EPA 3050B and EPA Beryllium MFT-93-6103 ICP-MS 6020B and ON MOECC modified from EPA 3050B and EPA ICP-MS Boron MET-93-6103 6020B and ON MOECC modified from EPA 6010D and MSA Boron (Hot Water Soluble) MET-93-6104 ICP/OES **PART 3, CH 21** modified from EPA 3050B and EPA ICP-MS Cadmium MFT-93-6103 6020B and ON MOECC modified from EPA 3050B and EPA Chromium MET-93-6103 ICP-MS 6020B and ON MOECC modified from EPA 3050B and EPA Cobalt ICP-MS MET-93-6103 6020B and ON MOECC modified from EPA 3050B and EPA ICP-MS Copper MET-93-6103 6020B and ON MOECC modified from EPA 3050B and EPA ICP-MS Lead MFT-93-6103 6020B and ON MOECC

MET-93-6103

MET-93-6103

MET-93-6103

MET-93-6103

MET-93-6103

MET-93-6103

MFT-93-6103

MET 93 -6103

INOR-93-6068

INOR-93-6052

modified from EPA 3050B and EPA

modified from EPA 3060 and EPA

modified from ON MOECC E3015, SM

6020B and ON MOECC

4500-CN-I, G-387

7196

Molybdenum

Nickel

Silver

Thallium

Uranium

Vanadium

Cyanide, Free

Chromium, Hexavalent

Zinc

Selenium

## Method Summary

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

PROJECT: BIGC-ENV-349D

AGAT WORK ORDER: 21T780215
ATTENTION TO: Rebecca Morrison
SAMPLED BY:Timothy Damdar

SAMPLING SITE:217-227 Cross Avenue, Oakville, ON

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



5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905,712,5100 Fax: 905,712,5122 webearth agatlabs.com

**Laboratory Use Only** Cooler Quantity: Arrival Temperatures: □No □N/A Custody Seal Intact:

#### **Chain of Custody Record** If this is a Drinking Water sample, please use Drinking Water Chain of Custody Form (potable water consumed by humans) **Regulatory Requirements:** Report Information: Regulation 558 B.I.G. Consulting Company: Excess Soils R406 Sewer Use Rebecca Morrison Contact: Regulation 153/04 ☐Sanitary ☐Storm **Turnaround Time (TAT) Required:** Table 2 Indicate One ☐ Ind/Com 12-5500 Tomken Road Address: **Regular TAT** Mississauga, ON L4W 2Z4 Region 5 to 7 Business Days CCME ∇ Res/Park Sample from APEC? 905-782-0315 Rush TAT (Rush Surcharges Apply) Fax: Prov. Water Quality Phone: Agriculture □Yes Reports to be sent to: Objectives (PWQO) rmorrison@brownfieldigi.com Soil Texture (Check One) 2 Business Next Business □No 3 Business 1. Email: Other Day **✓** Coarse Stockpile In-situ OR Date Required (Rush Surcharges May Apply): 2. Email: Fine Indicate One Is this submission for a Report Guldeline on **Project Information:** Please provide prior notification for rush TAT **Record of Site Condition? Certificate of Analysis** BIGC-ENV-349D *TAT is exclusive of weekends and statutory holidays Project: 217-227 Cross Avenue in Oakville, Ontario П No Yes ☐ No Yes Site Location: For 'Same Day' analysis, please contact your AGAT CPM Timothy Damdar Sampled By: O. Reg 153 Landfill Disposal Characterization TCLP: TCLP: ☐ M&I ☐ VoCs ☐ ABNs ☐ B(a)P ☐ PCBs D00 AGAT Quote #: PO: Sample Matrix Legend Metals - ICPMS, □ CrVI, □ Hg, □ HWSB Please note: If quotation number is not provided, client will be billed full price for analysis. CrVI, Biota Svocs GW Ground Water Β̈́ Invoice Information: Bill To Same: Yes ☑ No □ Oil 0 BIG Consulting Inc. Company: if required $\square$ Paint Laine Dougherty □ vocs Contact: s Soil 12-5500 Tomken Rd, Mississauga, ON L4W 2Z4 Address: SD Sediment LDougherty@brownfieldigi.com; NKepics@brownfieldigi.com Email: Surface Water PCBs Comments/ Date Time # of Sample 200 Sample Identification Containers Matrix Special Instructions Sampled Sampled 5 3:30 2 Ju127/21 AM PM AM PM AM PM AM PM AM AM PM AM PM AM PM July 27/21 Timothy Damdar Page 1

Samples Received By (Print Name and Sign)

Nº:

Samples Relinquished By IPrint Name and Sign



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 (V1)

Page 1 of 6

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AGAT WORK ORDER: 21T791121

PROJECT: BIGC-ENV-349E

ATTENTION TO: Rebecca Morrison

SAMPLED BY:TVH

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. SAMPLING SITE:217-277 Cross Avenue, Oakville, ON

O. Reg. 153(511) - All Metals (Soil)

				o	100(011) - 1		,	
DATE RECEIVED: 2021-08-20								DATE REPORTED: 2021-08-30
		SAMPLE DES	CRIPTION:	BH201-SS2	BH202-SS2	BH203-SS2	BH204-SS2	
		SAMI	PLE TYPE:	Soil	Soil	Soil	Soil	
		DATES	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	8.0	<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	8.0	<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 *)



#### **Quality Assurance**

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

PROJECT: BIGC-ENV-349E SAMPLING SITE:217-277 Cross Avenue, Oakville, ON AGAT WORK ORDER: 21T791121
ATTENTION TO: Rebecca Morrison

SAMPLED BY:TVH

OAIMI LING GITL.ZIT ZIT C	71000 71001101	o, Caltvii	10, 011					, (IVII I		1.1 411					
				Soi	l Ana	alysis	3								
RPT Date: Aug 30, 2021				UPLICATI	Ī		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value		ptable nits	Recovery	1 1 1 1 1	ptable nits	Recovery	منا ا	eptable mits
		iu	-				value	Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - All Metals (S	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 2	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.

mayor Bhelis AMANOTOMELA GHEMIST



#### **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			REFEREN	ICE MAT	ERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPII	KE
PARAMETER	Sample Id	Sample Description	Measured	Accep Limi	ite	Recovery	Lin	ptable nits	Recovery	Lin	ptable nits
. ,			Value	Lower		,		Upper	,		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.

# **Method Summary**

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

PROJECT: BIGC-ENV-349E

AGAT WORK ORDER: 21T791121
ATTENTION TO: Rebecca Morrison

SAMPLING SITE:217-277 Cross Avenue, Oakville, ON

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



1 Ch BIK

5835 Coopers Avenue Mississauga, Ontario L4Z 1Y2 Ph: 905.712.5100 Fax: 905.712.5122 webearth.agatlabs.com **Laboratory Use Only** 

Cooler Quantity:

Work Order #: 21 T 79 1121

Chain o	of	Custody	Record
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Report Inforn	nation: B.I.G. Consulting					Regulatory Requ	irements:			Regulati	on 558					Intact	, □Y	'es	1 ENG	)	□N/A
Company: Contact:	Rebecca Morrison					<b>150/04</b>	Excess Soils	2406		Sewer Us	ρ.		I L	Note	s:	_10	00	GRE	4 10	e	
Address:	12-5500 Tomken Road				-1	Regulation 153/04				Sanitary		ırm	- 11	Turn	arour	nd Tin	ne (TA	T) Requ	uired:	4	
-da1633.	Mississauga, ON L4W					Table 3/Indicate One □Ind/Com	Table	One		Regi	en			Regu	lar TA	т		5 to 7 Bus	inees D		
	905-782-0315				-	☑Res/Park	Sample from AP	EC?		CME			- 11	_			rges Apply)		mess Di	1yS	
Phone: Reports to be sent to: 1. Email:	rmorrison@brownfield	ligi.com				☐Agriculture  Soil Texture (Check One)  ☐Coarse	□Yes □No			Prov. Wat Objective Other				Rusii	3 Bus Days			2 Busines Days	s [	□ Next I	Business
2. Email:	-					Fine	Stockpile I	n-situ	-	Indica	e One		-		OR D	ate Req	uired (Ru	ish Surch	arges M	ay Apply'	:
Project Inform Project: Site Location:	BIGC-ENV-349E 217-227 Cross Avenue	e, Oakville, ON			=	Is this submission Record of Site Co				ort Guid Icate d 'es		ysis		For	*TAT is	exclusi	ve of we	or notifica ekends ar lease cor	nd statu	tory holic	
Sampled By:	TVH				- 1				O. R	eg 153	Т		8						11		
AGAT Quote #:	Please note: If quotation num	PO: nber is not provided, client	will be billed full price	for analysis		Sample Matrix Leg	gend	CrVI, DOC		M HWSB			n TCLP:	ıch	ckage						Concentration (Y/N)
nvoice Information (Company: Contact: Address: Email:	LDougherty@brownfie	eldigi.com; NKep	Bill To Same:			GW Ground Water O Oil P Paint S Soil SD Sediment SW Surface Water		Field Filtered - Metals, Hg,	& Inorganics, inc. EC/	ICPMS, IXI CrVI, IXI Hg.			Landfill Disposal Characterization TCLP: TCLP: ☐ M&I ☐ VOCs ☐ ABNs ☐ B(a)P ☐ PCBs	s Soils SPLP Rainwater Leach □ Metals □ vocs □ Svocs	Excess Soils Characterization Package pH, ICPMS Metals, BTEX, F1-F4	EC/SAR					Hazardous or High
Sampl	e Identification	Date Sampled	Time Sampled	# of Containers	Samp			Y/N	Metals	Metals - BTEX, F1	PAHS	VOC VOC	Landfill TCLP: [	Excess \$	Excess pH, ICP	Salt - E					Potentially
H201-SS2		20-08-21	11:05 AM	1	Soil					<b>V</b>											
H202-SS2		20-08-21	10:35 AM	1	Soil					<b>2</b>											
H203-SS2		20-08-21	10:05 AM		Soil				-	<b>7</b>											
H204-SS2		20-08-21	9:10 AM		Soil					<b>V</b>											
			AM																		
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mples Relinquished By (Pri	int Name and Sign):	// /	Date	Tim	. o-	Samples Received by (F	Print Name and Sign):			1	7	Da	e		Time		+		21A	UG 20	77:
RAVIS VAN HO	DLST Truin In P	Cechel	Airy 2	1 621 Tim	3.0	Samnles Renelved Rv (F	Print Name and Signt:	_		1	5	Dai	e	-	Time		-	Page _		of 1	
mpies keiinquisned by (Pri																		rage _		" —	-



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	

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  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.
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  services.
- This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
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  contained in this document.
- All reportable information as specified by ISO/IEC 17025:2017 is available from AGAT Laboratories upon request.

AGAT Laboratories (V1)

Page 1 of 5

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Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



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

SAMPLING SITE:

### Certificate of Analysis

AGAT WORK ORDER: 21T796236

PROJECT: BIGC-ENV-349E

ATTENTION TO: Rebecca Morrison

SAMPLED BY:

O. Reg. 153(511) - All Metals (Soil)

DATE RECEIVED: 2021-09-01					DATE REPORTED: 2021-09-03
	S	AMPLE DES	CRIPTION:	BH201-SS1	
		SAM	PLE 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	8.0	<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:



5835 COOPERS AVENUE

MISSISSAUGA, ONTARIO CANADA L4Z 1Y2

http://www.agatlabs.com

TEL (905)712-5100 FAX (905)712-5122



#### **Quality Assurance**

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

PROJECT: BIGC-ENV-349E

AGAT WORK ORDER: 21T796236
ATTENTION TO: Rebecca Morrison

SAMPLING SITE: SAMPLED BY:

			Soi	l Ana	alysis	3									
RPT Date: Sep 03, 2021				UPLICATI	E		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value		eptable mits	Recovery	1 :-	ptable	Recovery	-: ۱	ptable
		iu	-	-			value	Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - All Metals (Soi	l)														
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		8.0	8.0	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 2	918865	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.

CHARTERED CHARGON ZHU

## **Method Summary**

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

PROJECT: BIGC-ENV-349E

AGAT WORK ORDER: 21T796236 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



Samples Relinguished By (Print Name and Sign):

Samples Relinquished By (Print Name and Sign):

Messesauga, Ontero 142 172 Ph 905 717 9100 Fms 805 71, 8117 wobsactn agaillabs.com **Laboratory Use Only** Cooler Quantity: □Yes □No □N/A ne (TAT) Required: 5 to 7 Business Days

Chain of C	ustody Reco	ord If this is	lease use D	Drinking Water Chaln of Custody Form	ı (potable w	ater co	nsume	ed by hu	mans)				Arriv	al Temp	peratures	2.	8 12	29			
Report Inform Company:	mation: B.I.G. Consulting					Regulatory Requirements: Please check all applicable boxes)	i		Re	gulatio	n 558				Cust		al Intact:	Yes		□No	
Contact:	Rebecca Morrison					Regulation 153/04 Excess So	ils R406	1/1		er Use				-	3000						
Address:	12-5500 Tomken Road					2		$\mathbf{m}$	□Sa	anitary	□Sto	rm		113	Turr	narou	nd Tin	ne (TAT)	Requir	red:	
	Mississauga, ON L4W 2	2Z4				Table	cate One		4	Region				F	Regi	ular T	AΤ	□ 51	to 7 Busine	ess Davs	
Phone: Reports to be sent to:	905-782-0315	Fax:					APEC?			. Wate				F	Rusi	1 TAT	Rush Surcha	arges Apply)			
1, Email:	rmorrison@brownfield	ligi.com			_ Sc	Soil Texture (check One) ☐ No  ☐ Coarse ☐ Stockpile ☐	□ln-situ		Obje Othe	ectives er	(PWQC	)				J Days		□ Da	,	<b>∠</b> Day	,
2. Email:						Fine Stockpile				Indicate	One			П		OR	Date Req	uired (Rus	n Surcharg	ges May App	oly):
Project Information:  Project: Site Location:						Is this submission for a Record of Site Condition?  Yes No		Cert		Guldente of		/sls				*TAT	is exclus	ive of week	kends and	n for rush T/ statutory ho	olidays
Sampled By:							1			-					Fo	r 'Sam	e Day' ar	alysis, pie	ase conta	ct your AGA	AT CPM
AGAT Quote #:	Please note: If quotation num	PO: ber is not provided, client v	will be billed full price	for analysis		Sample Matrix Legend	/I, DOC	0	Reg :				TCLP:	D PCBs	۔	986					
Invoice Information Company: Contact: Address:	mation:		Bill To Same:	Yes 🗹 No	_ 0 P s	GW Ground Water O Oil P Paint S Soil	ed - Metals, Hg, CrVI,	ilcs, inc. EC/SAR	KI CrVI, KI Hg, KI HWSB	PHCs If required □ Yes □ No			Characterization	CS □ ABNS □ B(a)P □ PCBS	SPLP Rainwater Leach	sterl					
Email:	LDougherty@brownfie	eldigi com; NKepi	cs@brownfield	ligi.com	7.11	SSW Sediment Surface Water	Field Filtered	& Inorganics,	- ICPMS,	F1-F4 PHCs e F4G if requ			voc Landfill Disposal	M&I	Soils	Soils MS M	EC/SAR				
Samp	Sample Identification Sampled Sampled Containers Mai			Sample Matrix		Y/N	Metals	Metals	BTEX, F1-F4 Analyze F4G	PAHS	PCBS	Landfill	TCLP: [	Excess 8	Excess Soil pH, ICPMS	Salt - E					
BH201-SS1		20-08-21	AM PM	1	Soil				V												
			AM									3									(3)

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Sample Identification	Date Sampled	Time Sampled	# of Containers	Sample Matrix	Comments/ Special Instructions	Y/N	Metals	Metals	BTEX, F Analyze	PAHs	PCBs	Landfill	Excess Sc	Excess	pH, ICPM: Salt - FC/							Potentia
BH201-SS1	20-08-21	AM PM	1	Soil	- 14			V														
		AM PM											0									
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Samples Received By (Print Name and Sign):

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

of 1

Page 1

NE

Next Business



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: 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
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  be exempt, please contact your Client Project Manager for details.
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AGAT Laboratories (V1)

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Western Enviro-Agricultural Laboratory Association (WEALA) Environmental Services Association of Alberta (ESAA)



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

SAMPLING SITE:

# Certificate of Analysis

AGAT WORK ORDER: 21T796238

PROJECT: BIGC-ENV-349E

ATTENTION TO: Rebecca Morrison

SAMPLED BY:

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

O. Reg. 153(511) - All Metals (Soil)

SAMPLE TYPE: Soil	RTED: 2021-09-03
SAMPLE TYPE:   SOI     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   120   5   15     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	
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         140         1.0         34.4           Lead         µg/g         120         1         26           Molybdenum         µg/g         6.9         0.5         0.9	
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         6.9         0.5         0.9	
Antimony	
Arsenic	
Barium       μg/g       390       2.0       57.2         Beryllium       μg/g       4       0.4       <0.4	
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	
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	
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	
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	
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	
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	
Copper       μg/g       140       1.0       34.4         Lead       μg/g       120       1       26         Molybdenum       μg/g       6.9       0.5       0.9	
Lead μg/g 120 1 26 Molybdenum μg/g 6.9 0.5 0.9	
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	
Γhallium μg/g 1 0.5 <0.5	
Jranium μg/g 23 0.50 <0.50	
/anadium 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:





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.

PROJECT: BIGC-ENV-349E

SAMPLING SITE:

AGAT WORK ORDER: 21T796238
ATTENTION TO: Rebecca Morrison

SAMPLED BY:

				Soi	l Ana	alysis	3								
RPT Date: Sep 03, 2021			С	UPLICATI	E		REFEREN	NCE MA	TERIAL	METHOD	BLANK	SPIKE	MAT	RIX SPI	KE
PARAMETER	Batch	Sample	Dup #1	Dup #2	RPD	Method Blank	Measured		eptable mits	Recovery	Lie	ptable nits	Recovery	1 1 1 1 1	ptable nits
		ld					Value	Lower	Upper	,	Lower	Upper	]	Lower	Upper
O. Reg. 153(511) - All Metals (Soi	l)					,									
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.

mayor Bhels AMMSOT BHELD CHARTERED CHARTERED CHARTERED CHARTER TO SHEET STORY

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.

PROJECT: BIGC-ENV-349E

SAMPLING SITE:

AGAT WORK ORDER: 21T796238
ATTENTION TO: Rebecca Morrison

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



5505 Zeopens Artinu. Mikawaysa Orlani KE 192

Work Order #: 2	Only	196	234
Cooler Quantity:  Arrival Temperatures:	2.8	1291	
Custody Seal Intact:	□Yes ( C )	□No	□N/A

maiii oi c	ustody Record	lf this is:	a Drinking Wate	er sample, pl	ease use	Drinking Water Chain of Custody Form	otable w	ater co	nsume	d by hun	nans)			Arri	val Tem	peratur	es.	2	10	2.			-
Report Information Company:	nation: B.I.G. Consulting					Regulatory Requirements: (Please check all applicable boxes)			Reg	ulation	558			6 00	tody Se	al Intac		□Yes   ()			lo		N/A
Contact: Address:	Rebecca Morrison 12-5500 Tomken Road				_	Regulation 153/04  Table 3  Table Indicate One Indicate O				er Use nitary	□Ste	orm					ime (	TAT) F	Requ	iired	:		-
Phone: Reports to be sent to: 1. Email: 2. Email:	Mississauga, ON L4W 2Z4 905-782-0315 rmorrison@brownfieldigi.	Fax:				☐ Ind/Com  ☐ Res/Park ☐ Agriculture  Soil Texture (Check One) ☐ Coarse ☐ Fine  Indication  Sample from A ☐ Yes ☐ No ☐ No ☐ Stockpile ☐	PEC?		Obje Othe	Water ctives (	PWQC			"	니 Day	Rush Sure Usiness S	charges A		isines:	5	☑ N		ness
Project Information Project: Site Location: Sampled By:	mation: BIGC-ENV-349E 217-227 Cross Avenue, Oa	akville, ON				Is this submission for a Record of Site Condition?  Yes No		Cert		Guide te of		ysis		F	*TAT	Is exclu	usive of	prior no f weeker ls, pleas	nds ar	d stat	utory	holidays	
AGAT Quote #:  Invoice Information Company: Contact:	Please note: If quotation number is		Bill To Same:			Sample Matrix Legend B Biota GW Ground Water O Oil P Paint	Metals, Hg. CrVI, DOC	inc. EC/SAR	Crvi, M Hg, M HWSB	□ Yes □ No			Characterization TCLP:	ach ach	Characterization Package								Potentially Hazardous or High Concentration (Y/N)
Address: Email:	LDougherty@brownfieldig			1		S Soil SD Sediment SW Surface Water	Field Filtered	als & Inorganics,		BTEX, F1-F4 PHCs Analyze F4G If required	10	S	fill Disposal	Soils SPLP	Soils	Selt - EC/SAR							ntially Hazardous or
Samp	le Identification	Date Sampled	Time Sampled	# of Containers	Sample		Y/N	Metals	-	BTE	PAHS	PCBs	Landfill	Excess	Excess OH ICP	Selt							Pote
BH204-SS1		20-08-21	AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM PM AM AM AM AM AM AM AM AM AM AM AM AM AM		Soil															1.1	Chr		
			AN PN											1			M.						
			AN PN AN PN								-			-					+				-
Samples Relinquished By (Pr TRAVIS VAN HO Samples Relinquished By (Pr	OLST Khadendra	· Kande	Date	Tim	5.00	Samples Received By (Print Name and Sign)  Secretar Received By (Print Name and Sign)	2						Date		Time			F	Page _	1	of 1		

Appendix C – Disposal Documentation



YORK1 TRILLIUM TRANSFER LTD. Phone: 416-743-2230 (Bethridge) MOE: 2340-BGMNDY 195 Bethridge Road SITE TICKET # WEIGHMASTER Toronto, ON M9W 1N4 02 101070 MARIE IN OUT TRUCK CUSTOMER: 001208 - YORK1 DEMOLITION CORP CONT. LICENCE 3/22/22 3/22/22 125 VILLARBOIT CRES YORK DEMO 7:26 am 7:26 am VAUGHAN, ON L4K 4K2 INVOICE CONTRACT: 227 Cross Ave REFERENCE ORIGIN INBOUND ROGERS TRUCKING 2 LIC#AN96756 **GROSS** 38620 kg Manual In TARE 14000 kg Manual Out COMMENTS: NET 24620 kg BOL: QTY UNIT DESCRIPTION 24.62 RATE SUBTOTAL MT TAX Dirt TOTAL

H.S.T #

YORK1 TRILLIUM TRANSFER LTD. Phone: 416-743-2230 (Bethridge) MOE: 2340-BGMNDY 195 Bethridge Road SITE TICKET # WEIGHMASTER Toronto, ON M9W 1N4 02 101071 MARIE IN OUT CUSTOMER: 001208 - YORK1 DEMOLITION CORP TRUCK CONT. LICENCE 3/22/22 3/22/22 125 VILLARBOIT CRES YORK DEMO 7:33 am 7:33 am VAUGHAN, ON L4K 4K2 INVOICE CONTRACT: 227 Cross Ave REFERENCE ORIGIN INBOUND 1191669 Ont Inc 500 LIC# BL36040 GROSS 36790 kg Manual In TARE 13500 kg Manual Out COMMENTS: NET 23290 kg BOL: QTY UNIT DESCRIPTION 23.29 RATE SUBTOTAL MT Dirt TAX TOTAL H.S.T #

YORK1 TRILLIUM TRANSFER LTD. (Bethridge) Phone: 416-743-2230 195 Bethridge Road MOE: 2340-BGMNDY SITE Toronto, ON M9W 1N4 TICKET # WEIGHMASTER 02 101072 MARIE CUSTOMER: 001208 - YORK1 DEMOLITION CORP IN OUT TRUCK CONT. LICENCE 3/22/22 125 VILLARBOIT CRES 3/22/22 YORK DEMO VAUGHAN, ON L4K 4K2 8:01 am | 8:01 am CONTRACT: 227 Cross Ave INVOICE REFERENCE INBOUND 9931872Ccanada Inc 740 LIC# BB39555 GROSS 34720 kg Manual In TARE 14200 kg Manual Out COMMENTS: NET 20520 kg QTY BOL: UNIT DESCRIPTION 20.52 MT Dirt RATE SUBTOTAL TAX TOTAL

(Bethridge 195 Bethri Toronto, O	dge Road N M9W 1N	4	Phone: 416-743-2230 MOE: 2340-BGMNDY	SITE	TIC	KET #	WEIGH	MASTER
				02	101	1073	KDa	aniel
CUSTOMER:	TSO ATTITUTE	ORK1 DEMOLITION RBOIT CRES ON L4K 4K2	CORP	IN 3/22/22 8:27 am	OUT 3/22/22 8:27 am	TRUCK YORK DEMO	CONT.	LICENCI
CONTRACT:	227 Cross A	ve	INVOICE		REFERE	NCE		
	GRO	error or	INBOUND  9 Manual In	12967	01 CAN INC	01 LIC#BK54705		
QTY	TAI NE UNIT	13500 kg	Manual Out	СОММЕ	ENTS: BOL:			
27.05	MT	Dirt	DESCRIPTION		RATE	SUBTOTAL	TAX	TOTAL

YORK1 TRILLIUM TRANSFER LTD. Phone: 416-743-2230 (Bethridge) MOE: 2340-BGMNDY 195 Bethridge Road SITE TICKET # WEIGHMASTER Toronto, ON M9W 1N4 02 101074 **KDaniel** IN OUT CUSTOMER: 001208 - YORK1 DEMOLITION CORP TRUCK CONT. LICENCE 3/22/22 3/22/22 125 VILLARBOIT CRES YORK DEMO 8:43 am 8:43 am VAUGHAN, ON L4K 4K2 INVOICE CONTRACT: 227 Cross Ave REFERENCE INBOUND ROGERS TRUCKING 2 LIC#AN96756 **GROSS** 37610 kg Manual In TARE 14000 kg Manual Out COMMENTS: NET 23610 kg BOL: QTY UNIT DESCRIPTION 23.61 RATE SUBTOTAL MT Dirt TAX TOTAL

1	001208 - YOR 125 VILLARBO /AUGHAN, ON	37660	N CORP  INVOICE INBOUND  kg Manual In	IN 3/22/22 8:50 am	OUT 3/22/22	TRUCK YORK DEMO	KDa	niel LICENCE
ONTRACT: 22	VAUGHAN, ON 27 Cross Ave GROSS TARE	OIT CRES I L4K 4K2 37660	INVOICE INBOUND	3/22/22 8:50 am	3/22/22 8:50 am	YORK DEMO		LICENCE
ONTRACT: 2	27 Cross Ave GROSS TARE	37660	INBOUND	11916	REFERE			
	GROSS TARE	37660		11916				
QTY	TARE	37000	KO Manual In		69 ONT INC 50	00 LIC# BL36040		
QIY		24160	kg Manual Out	СОММ	A STATE OF THE STA			
24.16	UNIT		DESCRIPTION		RATE	SUBTOTAL	TAX	- Assert
		Dirt						TOTAL

YORK1 TRILLIUM TRANSFER LTD. Phone: 416-743-2230 (Bethridge) MOE: 2340-BGMNDY SITE 195 Bethridge Road TICKET # WEIGHMASTER Toronto, ON M9W 1N4 02 101076 **KDaniel** IN OUT TRUCK CONT. LICENCE CUSTOMER: 001208 - YORK1 DEMOLITION CORP 3/22/22 3/22/22 YORK DEMO 125 VILLARBOIT CRES 9:12 am 9:12 am VAUGHAN, ON L4K 4K2 INVOICE REFERENCE CONTRACT: 227 Cross Ave INBOUND 9931872 CANADA INC 740 LIC# BB39555 GROSS 38500 kg Manual In TARE 14200 kg Manual Out COMMENTS: NET 24300 kg BOL: QTY UNIT DESCRIPTION RATE SUBTOTAL TAX 24.30 TOTAL MT Dirt

(Bethridge)	)	NSFER LTD.	Phone: 416-743-2230 MOE: 2340-BGMNDY	SITE	TICK	KET #	WEIGHN	MASTER
roronto, or	M9W IN4			02	101	.077	KDa	niel
CUSTOMER:	001208 - YC 125 VILLARI VAUGHAN, (	ORK1 DEMOLITION BOIT CRES	CORP	IN 3/22/22 9:40 am	OUT 3/22/22 9:40 am	TRUCK YORK DEMO	CONT.	LICENCE
CONTRACT:	227 Cross Av		INVOICE		REFERE	NCE		
	GROS		INBOUND	1296		01 LIC#BK54705		
	TAR NE	E 13500 k	g Manual In g Manual Out g	СОММ				
QTY	UNIT		DESCRIPTION		RATE			
26.29	MT	Dirt			INTE	SUBTOTAL	TAX	TOTAL

Phone: 416-743-2230 (Bethridge) MOE: 2340-BGMNDY SITE TICKET # WEIGHMASTER 195 Bethridge Road Toronto, ON M9W 1N4 02 101078 **KDaniel** IN OUT CONT. TRUCK LICENCE 3/22/22 CUSTOMER: 001208 - YORK1 DEMOLITION CORP 3/22/22 YORK DEMO 125 VILLARBOIT CRES 9:51 am 9:51 am VAUGHAN, ON L4K 4K2 INVOICE REFERENCE CONTRACT: 227 Cross Ave INBOUND ROGERS TRUCKING 2 LIC#AN96756 **GROSS** 36800 kg Manual In COMMENTS: 14000 kg Manual Out 22800 kg TARE NET BOL: QTY UNIT DESCRIPTION RATE SUBTOTAL TAX TOTAL 22.80 MT Dirt

YORK1 TRILLIUM TRANSFER LTD.

YORK1 TRILLIUM TRANSFER LTD. Phone: 416-743-2230 (Bethridge) MOE: 2340-BGMNDY 195 Bethridge Road SITE TICKET # WEIGHMASTER Toronto, ON M9W 1N4 02 101079 **KDaniel** IN OUT CUSTOMER: 001208 - YORK1 DEMOLITION CORP TRUCK CONT. LICENCE 3/22/22 3/22/22 125 VILLARBOIT CRES YORK DEMO 10:20 am 10:20 am VAUGHAN, ON L4K 4K2 INVOICE CONTRACT: 227 Cross Ave REFERENCE INBOUND 9931872CANADA INC 740 LIC# BB39555 **GROSS** 35220 kg Manual In TARE 14200 kg Manual Out COMMENTS: NET 21020 kg BOL: QTY UNIT DESCRIPTION 21.02 RATE SUBTOTAL MT Dirt TAX TOTAL

H.S.T #

YORK1 TRILLIUM TRANSFER LTD. (Bethridge) 195 Bethridge Road Toronto, ON M9W 1N4

Phone: 416-743-2230 MOE: 2340-BGMNDY

WEIGHMASTER SITE TICKET # **KDaniel** 02 101080 TRUCK CONT. LICENCE OUT IN 3/22/22 3/22/22 YORK DEMO 10:29 am 10:29 am REFERENCE 1191669 ONT INC 500 LIC# BL36040

CUSTOMER: 001208 - YORK1 DEMOLITION CORP

125 VILLARBOIT CRES VAUGHAN, ON L4K 4K2

INVOICE INBOUND

CONTRACT: 227 Cross Ave

	GROSS	36770 kg M	anual In	COMMENT	S:	
	TARE	13500 kg M 23270 kg	anual Out	BOL	.:	
,	LINIT	2027.0.113	DESCRIPTION		RATE	SU

QTY	UNIT	DESCRIPTION	RATE	SUBTOTAL	TAX	TOTAL
23.27	MT	Dirt				

02 <b>101081</b> KDaniel	(Bethridge) 195 Bethrid Toronto, Of	lge Road	NSFER LTD	Phone: 416-743-2230 MOE: 2340-BGMNDY	SITE	TICH	KET #	WEIGHN	MASTER
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  DESCRIPTION  RATE SUBTOTAL TAY TOTAL  TAY T	100000000000000000000000000000000000000				02	101	.081	KDa	niel
CONTRACT: 227 Cross Ave INVOICE REFERENCE  1296701 CAN INC 01 LIC#BK54705  GROSS 39580 kg Manual In 13500 kg Manual Out COMMENTS: NET 26080 kg BOL:  QTY UNIT DESCRIPTION RATE SUBTOTAL TAX TOTAL	CUSTOMER:	125 VILLAR	BOIT CRES		3/22/22	3/22/22			LICENCE
GROSS 39580 kg Manual In TARE 13500 kg Manual Out  COMMENTS:  NET 26080 kg BOL:  QTY UNIT  DESCRIPTION  RATE SUBTOTAL TAX TOTAL	CONTRACT:			INVOICE	1200				
DESCRIPTION RATE SUBTOTAL TAX TOTAL		TAF	RE 1	3500 kg Manual Out	СОММ	ENTS:	JI LIC#BK54/05		
		UNIT		DESCRIPTION		DATE	CURTOTAL		And and
	20.00	MI	Dirt						IOIAL

WEIGHMASTER TICKET # (Bethridge) SITE MOE: 2340-BGMNDY 195 Bethridge Road Toronto, ON M9W 1N4 02 101082 **KDaniel** OUT TRUCK CONT. LICENCE IN 3/22/22 3/22/22 YORK DEMO CUSTOMER: 001208 - YORK1 DEMOLITION CORP 11:03 am 11:03 am 125 VILLARBOIT CRES VAUGHAN, ON L4K 4K2 REFERENCE INVOICE CONTRACT: 227 Cross Ave INBOUND ROGERS TRUCKING 2 LIC#AN96756 GROSS 37750 kg Manual In COMMENTS: 14000 kg Manual Out TARE BOL: NET 23750 kg QTY UNIT DESCRIPTION RATE SUBTOTAL TAX TOTAL 23.75 MT Dirt

Phone: 416-743-2230

YORK1 TRILLIUM TRANSFER LTD.

	ORK1 TRILLIUM TRANSFER LTD. Bethridge) 95 Bethridge Road oronto, ON M9W 1N4			SITE	TICH	KET #	WEIGH	MASTER				
	A INDAA TIME			02	101	.083	KDaniel					
CUSTOMER:	125 VILLAR	ORK1 DEMOLITION BOIT CRES ON L4K 4K2	ON CORP	IN 3/22/22 11:25 am	OUT 3/22/22 11:25 am	TRUCK YORK DEMO	CONT.	LICENCE				
ONTRACT:	227 Cross A	ve	INVOICE		REFERE							
	GROS		INBOUND	9931872	CANADA INC	740 LIC# BB3955	5					
OTP	TAF NE	RE 1420	0 kg Manual In 0 kg Manual Out 0 kg	COMM	ENTS: BOL:							
QTY UNIT 23.94 MT Dirt		2.3	DESCRIPTION	DESCRIPTION RATE SUBTOTAL T.								

YORK1 TRILLIUM TRANSFER LTD. (Bethridge) 195 Bethridge Road Toronto, ON M9W 1N4

Phone: 416-743-2230 MOE: 2340-BGMNDY

WEIGHMASTER TICKET # SITE **KDaniel** 02 101084 CONT. LICENCE OUT TRUCK IN 3/22/22 3/22/22 YORK DEMO

CUSTOMER: 001208 - YORK1 DEMOLITION CORP

125 VILLARBOIT CRES

**GROSS** 

TARE

VAUGHAN, ON L4K 4K2

INVOICE INBOUND

REFERENCE 1191669 ONT INC 500 LIC# BL36040

11:39 am 11:39 am

CONTRACT: 227 Cross Ave

37050 kg Manual In 13500 kg Manual Out

COMMENTS: BOL .

	NE	T 23550 kg		T			
QTY	UNIT	DESC	RIPTION	RATE	SUBTOTAL	TAX	TOTAL
23.55	MT	Dirt					

H.S.T #

Toronto, ON M9W 1N4  CUSTOMER: 001208 - YORK1 DEMOLITION CORP 125 VILLARBOIT CRES VAUGHAN, ON L4K 4K2  CONTRACT: 227 Cross Ave INBOUND  GROSS 40770 kg Manual In 13500 kg Manual Out NET 27270 kg BOL:  OTY UNIT DESCRIPTION  DESCRIPTION  02 101085  IN OUT TRUCK YORK DEMO 12:13 pm 12:1	WEIGHMASTER				
CUSTOMER: 001208 - YORK1 DEMOLITION CORP 125 VILLARBOIT CRES VAUGHAN, ON L4K 4K2  CONTRACT: 227 Cross Ave  INVOICE INBOUND  GROSS TARE 13500 kg Manual In TARE 13500 kg Manual Out NET 27270 kg  DESCRIPTION  RATE SUBTOTAL TAX	KDaniel				
CONTRACT: 227 Cross Ave INVOICE REFERENCE  1296701 CAN INC 01 LIC#BK54705  GROSS A0770 kg Manual In 13500 kg Manual Out COMMENTS:  NET 27270 kg BOL:  OTY UNIT DESCRIPTION RATE SUBTOTAL TAX	CONT. LICENCE				
GROSS 40770 kg Manual In 13500 kg Manual Out COMMENTS: NET 27270 kg BOL:  QTY UNIT DESCRIPTION RATE SUBTOTAL TAX					
TARE					
DESCRIPTION RATE SUBTOTAL TAX					
	AX TOTAL				

WEIGHMASTER TICKET # (Bethridge) SITE MOE: 2340-BGMNDY 195 Bethridge Road Toronto, ON M9W 1N4 02 **KDaniel** 101086 IN OUT TRUCK CONT. LICENCE 3/22/22 3/22/22 YORK DEMO CUSTOMER: 001208 - YORK1 DEMOLITION CORP 1:22 pm | 1:22 pm 125 VILLARBOIT CRES VAUGHAN, ON L4K 4K2 REFERENCE INVOICE CONTRACT: 227 Cross Ave INBOUND ROGERS TRUCKING 2 LIC#AN96756 GROSS 40590 kg Manual In COMMENTS: 14000 kg Manual Out TARE BOL: 26590 kg NET SUBTOTAL QTY UNIT DESCRIPTION RATE TAX TOTAL 26.59 MT Dirt

Phone: 416-743-2230

YORK1 TRILLIUM TRANSFER LTD.

YORK1 TRILLIUM TRANSFER LTD. Phone: 416-743-2230 (Bethridge) MOE: 2340-BGMNDY 195 Bethridge Road SITE TICKET # WEIGHMASTER Toronto, ON M9W 1N4 02 101087 **KDaniel** IN OUT CUSTOMER: 001208 - YORK1 DEMOLITION CORP TRUCK CONT. LICENCE 3/22/22 3/22/22 125 VILLARBOIT CRES YORK DEMO 1:36 pm VAUGHAN, ON L4K 4K2 1:36 pm INVOICE CONTRACT: 227 Cross Ave REFERENCE INBOUND 9931872CANADA INC 740 LIC# BB39555 **GROSS** 38480 kg Manual In TARE 14200 kg Manual Out COMMENTS: NET 24280 kg BOL: QTY UNIT DESCRIPTION 24.28 RATE SUBTOTAL TAX MT TOTAL Dirt H.S.T #

YORK1 TRILLIUM TRANSFER LTD. Phone: 416-743-2230 (Bethridge) SITE TICKET # MOE: 2340-BGMNDY WEIGHMASTER 195 Bethridge Road Toronto, ON M9W 1N4 02 101088 **KDaniel** IN OUT TRUCK CONT. LICENCE 3/22/22 CUSTOMER: 001208 - YORK1 DEMOLITION CORP 3/22/22 YORK DEMO 125 VILLARBOIT CRES 1:40 pm 1:40 pm VAUGHAN, ON L4K 4K2 INVOICE REFERENCE CONTRACT: 227 Cross Ave INBOUND 1191669 ONT INC 500 LIC# BL36040 **GROSS** 38660 kg Manual In COMMENTS: TARE 13500 kg Manual Out 25160 kg NET BOL: QTY UNIT DESCRIPTION RATE SUBTOTAL TAX TOTAL 25.16 MT Dirt

H.S.T #

YORK1 TRILLIUM TRANSFER LTD. Phone: 416-743-2230 (Bethridge) MOE: 2340-BGMNDY 195 Bethridge Road SITE TICKET # WEIGHMASTER Toronto, ON M9W 1N4 02 101091 **KDaniel** IN OUT CUSTOMER: 001208 - YORK1 DEMOLITION CORP TRUCK CONT. LICENCE 3/22/22 3/22/22 125 VILLARBOIT CRES YORK DEMO 2:46 pm 2:46 pm VAUGHAN, ON L4K 4K2 INVOICE CONTRACT: 227 Cross Ave REFERENCE INBOUND 1191669 ONT INC 500 LIC# BL36040 GROSS 37810 kg Manual In TARE 13500 kg Manual Out COMMENTS: NET 24310 kg BOL: QTY UNIT DESCRIPTION RATE 24.31 SUBTOTAL MT TAX Dirt TOTAL H.S.T #

YORK1 TRILLIUM TRANSFER LTD. (Bethridge) 195 Bethridge Road Phone: 416-743-2230 MOE: 2340-BGMNDY SITE Toronto, ON M9W 1N4 TICKET # WEIGHMASTER 02 101107 **KDaniel** CUSTOMER: 001208 - YORK1 DEMOLITION CORP IN OUT TRUCK CONT. 125 VILLARBOIT CRES 3/25/22 LICENCE 3/25/22 YORK DEMO VAUGHAN, ON L4K 4K2 8:38 am 8:38 am CONTRACT: 227 Cross Ave INVOICE REFERENCE INBOUND ORIGIN 12196701 CAN INC #1 LIC#BK54705 GROSS 47050 kg Manual In TARE 12500 kg Manual Out COMMENTS: NET 34550 kg QTY BOL: UNIT DESCRIPTION 34.55 MT Dirt RATE SUBTOTAL TAX TOTAL 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: Project Client: Oakville Argus Cross LP Drilling Method: 150 mm Mud Rotary/ HQ Core Compiled by: ΜV Project Name: Preliminary Geotechnical Investigation Drilling Machine: Truck Mounted Drill Reviewed by: SS Project Location: 581-587 Argus Road, Oakville Date Started: Date Completed: 8 Oct 21 Revision No.: 0, 25/10/21 8 Oct 21 LITHOLOGY PROFILE SOIL SAMPLING **FIELD TESTING LAB TESTING** Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading parts per million (ppm) 100 200 300 400 RUMENTATION 'ALLATION PenetrationTesting Value/RQD9 Ξ SPT DCPT Sample Number **COMMENTS** DESCRIPTION 둳 Sample Type ecovery (%) MTO Vane* Nilcon Vane Ξ ELEVATION wer Explosive Limit (LEL) ♦ Intact Remould -ithology [ △ Intact ▲ Remould ż DEPTH NST VST, * Undrained Shear Strength (kPa) Plastic Liquid 80 ASPHALT PAVEMENT: 50mm Asphalt over104.38 40 60 20 40 60 20 100mm granular base SS 5 1 62 FILL: silty clay to clayey silt, possibly reworked, mottled brown, moist, firm 104 silty sand with clay, trace gravel, compact, 103.46 \possibly reworked below 0.76 m 1.1 SS 2 59 22 Ö SILTY CLAY TILL: trace sand, trace gravel, occasional Shale fragments, reddish brown, moist, very stiff to hard 103 SS 3 100 43 0 2 pale grey, hard below 1.83 m 50 15 SS 4 100 50/15 102 BEDROCK: Shale, highly weathered, occasiona2.6 limetone layers throughout, grey, moist to damp 50 C 8 50/8 101 50 5 - first water strike 99 50 5 6 98 97 50 96.86 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. B.I.G. Consulting Inc. $\overline{\underline{\lor}}$ Groundwater depth on completion of drilling: Dry m. 12-5500 Tomken Rd.

**B.I.G. Consulting Inc.** 12-5500 Tomken Rd. Mississauga, ON L4W 2Z4 Canada T: 416-214-4880 F: 416-551-2633

Pro Pro	ject Number: ject Client: ject Name:	OF BOREHOLE No BIGC-GEO-490A Oakville Argus Cross LP Preliminary Geotechnical Invest 581-587 Argus Road, Oakville			MW	<u>12</u>		_ Drilling Location: _ Drilling Method: _ Drilling Machine: _ Date Started:			See Borehole Location Plan  96 mm Mud Rotary/ HQ Core  Truck Mounted Drill  7 Oct 21 Date Completed: 7 Oct 21						Logged by: Compiled by: Reviewed by: Revision No.:	
	LITH	OLOGY PROFILE	SC	IL SA	MPLI				FIELD TESTING LAB TESTING  * Rinse pH Values Z									
Lithology Plot	Geodetic Groun	DESCRIPTION d Surface Elevation: 104.24 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT  MTO Vai  Δ Intact  ▲ Remo	ne*	onTesting  ■ DCPT  Nilcon Vane*  ◆ Intact  ◆ Remould  r Strength (kPa)  60 80	Soil \	6 8 Vapour Repermillion (p 200 300 Explosive L W	imit (LEL)  W _L Liquid	INSTRUMENTATION		COMMEN	TS
<b>***</b>	FILL: silty clay	to clayey silt, trace gravel, dark	SS	1	70	16		104 -	0			:						
<b>***</b>		k, damp, very stiff	SS	2	75	12	1	103 -	0									
***		TILL: trace sand, trace gravel, 1.5 h brown, damp, hard	SS	3	79	34	- 2		(	0				;				
	BEDDOCK: S	101.65 hale, highly weathered to excellen 2.6	SS	4	100	50/23	Ē	102 -		50 23	<b>)</b>							
	quality, occasi grey, moist to	onal limetone layers throughout,	<del>\$\$</del>	-5-	100	50/5	3	101		50 5								
							4	100 -										
			SS	6	100	50/8	5			50 8	)							
							6	99 -		50								
	- first water str	ike	<del>-\$\$</del> -	7	100	50/5		98 -		50 5	)							
	POC	CORE BEGINS at 7.32 m	RC	1	83	0	- 7 - 1	97 –										
	- Very Poor Q			·			E 8											
	- Fair Quality		RC	2	100	70	- - - - - - - -	96 -			0			:				
							9 \	95 -										
	- Fair Quality		RC	3	99	72	10	94 –			0				٠			
	- Good Quality soft zone from	/ 112.06 to 12.2 m					11	93 -										
			RC	4	97	78	12	-			O							
								92 -										
	- Good Quality	,	RC	5	100	77	13	91 -			0							
=		I					F 14			:	: :		: :	:	Ē			
12-5	6. Consulting In 500 Tomken Ro issauga, ON L4	l.							asured m.	0.05								
Can T: 4		W 2Z4	as prese	nted, do	not cons	titute a th	orough	understa	nding of all	9.05 m potenti	al conditions p	resent and re	equires inte	rpretative a	ssistan was	ce		Scale: 1 : 74

commissioned and the accompanying Notes to Record of Boreholes'.

## RECORD OF BOREHOLE No. BM/MW2



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

	LITHOLOGY PROFILE	SC	IL SA	MPLI	NG			FIELD TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	рертн (m)	ELEVATION (m)	PenetrationTesting O SPT	Lower Explosive Limit (LEL)  W _P W W _L	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent quality, occasional limetone layers throughout, grey, moist to damp  - Good Quality some oxidised laminae at 13.87 m soft zone from 14.38 to 14.54 m	RC	6	100	79	15	90 -	0			
	- Excellent Quality	RC	7	100	90	- - - - - - - - - - - - - - - - - - -	88 —	0			
	- Excellent Quality some oxidised laminae at 16.92 m	RC	8	97	95	17	87		)		
	- Good Quality	RC	9	97	89	19	85 —	0			
	- Excellent Quality	RC	10	100	100	20	84		Φ		
	- Excellent Quality	RC	11	100	99	22	82 —		0		
	- Good Quality fracture zone with slickenside from 24.01 to 24.29 m	RC	12	97	79	23 	81 -	O			
	- Good Quality	RC	13	97	88	25	79 -	0			
	- Good Quality soft zones at 26.25 m and 27.02 to 27.07 m	RC	14	100	84	27	78	0			
	End of Borehole 27.6  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.										

#### RECORD OF BOREHOLE No. BM/MW3 Project Number: BIGC-GEO-490A Drilling Location: See Borehole Location Plan Logged by: 150 mm Solid Stem Augering Compiled by: Project Client: Oakville Argus Cross LP Drilling Method: ΜV Project Name: Preliminary Geotechnical Investigation Drilling Machine: Truck Mounted Drill Reviewed by: SS Project Location: 581-587 Argus Road, Oakville Date Started: Date Completed: 8 Oct 21 Revision No.: 0, 25/10/21 8 Oct 21 LITHOLOGY PROFILE SOIL SAMPLING **FIELD TESTING LAB TESTING** Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading parts per million (ppm) 100 200 300 400 RUMENTATION 'ALLATION PenetrationTesting Value/RQD Ξ SPT DCPT Sample Number **COMMENTS** DESCRIPTION 둳 Sample Type ecovery (%) MTO Vane* Nilcon Vane Ξ ELEVATION wer Explosive Limit (LEL) ♦ Intact Remould ithology I ▲ Remould ż NST VST, * Undrained Shear Strength (kPa) Plastic Liquid 80 Geodetic Ground Surface Elevation: 104.37 m ASPHALT PAVEMENT: 50mm Asphalt over104.17 40 60 20 40 60 20 150mm granular base SS 9 38 0 FILL: silty clay to clayey silt, possibly reworked, trace sand, trace gravel, mottled brown, moist, stiff to your stiff. 104 stiff to very stiff 103.30 silty sand with clay, trace gravel, mottled pale 1.1 grey, possibly reworked, compact below 0.76 m CLAYEY SILT TILL: trace sand, trace gravel, occasional Shale fragments, reddish brown to SS 2 70 18 Ö 103 grey, moist, very stiff to hard SS 3 100 39 Ó 101.93 50/8 102 SS 100 BEDROCK: Shale, highly weathered, occasiona2.4 limetone layers throughout, grey, moist to damp 50 5 50/5 101 100 50 5 $\nabla$ 99.49 first water strike End of Borehole on Auger Refusal Borehole open upon completion of drilling. Groundwater level at 4.72 m bgs upon completion of drilling. 3. Groundwater level reading at 4.24 m bgs on October 18, 2021. B.I.G. Consulting Inc. $\overline{\underline{\underline{}}}$ Groundwater depth on completion of drilling: $\underline{4.72 \text{ m}}$ .

B.I.G. Consulting Inc. 12-5500 Tomken Rd. Mississauga, ON L4W 2Z4 Canada T: 416-214-4880 F: 416-551-2633

#### RECORD OF BOREHOLE No. BM/MW4 Project Number: BIGC-GEO-490A Drilling Location: See Borehole Location Plan Logged by: 150 mm Solid Stem Augering Compiled by: Project Client: Oakville Argus Cross LP Drilling Method: ΜV Project Name: Preliminary Geotechnical Investigation Drilling Machine: Truck Mounted Drill Reviewed by: SS Project Location: 581-587 Argus Road, Oakville Date Started: Date Completed: 8 Oct 21 Revision No.: 0, 25/10/21 8 Oct 21 LITHOLOGY PROFILE SOIL SAMPLING **FIELD TESTING LAB TESTING** Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading parts per million (ppm) 100 200 300 400 NSTRUMENTATION NSTALLATION PenetrationTesting Value/RQD9 Ξ SPT DCPT Sample Number **COMMENTS** DESCRIPTION ithology Plot Sample Type ecovery (%) MTO Vane* Nilcon Vane Ξ ELEVATION wer Explosive Limit (LEL) ♦ Intact Remould ▲ Remould ż DEPTH Plastic Liquid 80 * Undrained Shear Strength (kPa) Geodetic Ground Surface Elevation: 103.61 m ASPHALT PAVEMENT: 50mm Asphalt over103.41 40 60 20 40 60 20 150mm granular base SS 14 1 75 $\circ$ FILL: sity clay to clayey silt, thale fragments, brown to grey, moist, stiff 103 CLAYEY SILT TILL: trace sand, trace gravel, 0.9 pale slightly mottled brown to grey, moist to damp, SS 2 31 0 51 stiff to hard 102 SS 3 14 0 82 75 23 SS 4 47 75/23 101.02 101 BEDROCK: Shale, highly weathered, occasiona2.6 limetone layers throughout, grey, moist to damp 50 C 8 3 50/8 100 50 C 50/8 99 lacksquare- first water strike 98 50 8 6 100 50/8 97 7 ⊻ 96.29 End of Borehole on Auger Refusal Borehole open upon completion of drilling. Solution of open upon completion of mining. Groundwater level at 7.01 m bgs upon completion of drilling. Groundwater level reading at 4.71 m bgs on October 18, 2021. B.I.G. Consulting Inc. $\overline{\underline{\underline{}}}$ Groundwater depth on completion of drilling: 7.01 m.

RI	RECORD OF BOREHOLE No. BM/MW5																					B.I.G. CONSULTRICE INC.	
Pro	ject Number:	BIGC-GEO-490A							Drilling Location: See Borehole Location Plan								Logged by	ΜV	<u> </u>				
Pro	ject Client:	Oakville Argus C	ross LP						_ Drilling Method:		96	96 mm Solid Stem Augers							Compiled by: MV				
Pro	ject Name:	Preliminary Geot	technical Inves	stigatio	on				Drilling	g Mac	hine:	Tru	ıck M	lount	ted Dril	I				Reviewed	oy: <u>SS</u>		
Pro	ject Location:	581-587 Argus R	oad, Oakville			_ Date Started:			<u>6 C</u>	Oct 21	1	Date Completed: 6 Oct 21					Revision N	o.: <u>0, 2</u>	25/10/21				
	LITH	OLOGY PROFIL	E_	SC		F	IELD	TES	TIN	G	LAB TESTING												
Lithology Plot		DESCRIPTION		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEРТН (m)	ELEVATION (m)	O S MTO Δ In ▲ R * Undi	Vane tact emould rained S	● Nil ◇ ◆ hear St	DCPT con Va Intact Remo	ane* ould (kPa)	Soil  A parts 100  A Low W _P Plas	Vapour s per millio 200 er Explosi W	Reading on (ppm) 300 400 ve Limit (LE W	EL) /L d	INSTRUMENTATION INSTALLATION	СОММ	ENTS		
 ‱	ASPHALT PA  \[ \begin{align*} \begin{align*} \begin{align*} \text{130mm granu} \end{align*}	d Surface Elevation: 1 VEMENT: 70mm Asp lar base	halt over103.55 0.2	SS	1	70	9	-	<u> </u>	0	0 4	O 6	0 8 <u>.</u>		20	40	60 80	'					
<b>***</b>	FILL: silty clay gravel, mottled	to clayey silt, trace sad pale grey, damp, stif	and, trace ff to hard	SS	2	48	50/15	- - - - - - - - - - - - - - - - - - -	103			50 15											
<b>***</b>	below 0.76 m	bble, mottled greenish  TO CLAYEY SILT TIL	102.23					'  -  -	-			15											
	gravel and pel	bbles, pale grey, dam	p, hard 101.46	SS	3	62	32 50/8	2	102 -		0	50 8							Н				
	quality, occasi grey, moist to	hale, highly weathere onal limetone layers to damp	d to excellent.3 hroughout,		7			<u>-</u> - - - 3	101 -										Н				
				SS	5	100	50/8		-			50 8											
								E 4	100 -														
				SS	6	100	50/10	5	99 -			50 10				;							
									98 -														
				ss	7	100	50/8	6	90			50 8											
	- first water str	ike						7	97 -														
		K CORE BEGINS at 7	7.32 m	RC	1	87	0	Ė E	96 -														
				D0		400	04	- 8 -	-			: : : : : : :											
		from 8.16 to 8.72 m neratic layers through	out run	RC	2	100	61	9	95 -														
								10	94 -														
	- Fair Quality			RC	3	95	70		-				0										
								11	93 -														
	- Good Quality	,		RC	4	100	87	12	92					0									
				D.	_	0.5		13	91														
	- Fair Quality some oxidised	l laminae from 12.34 t	to 15.39 m	RC	5	98	72		90 -				0										
BIG	6. Consulting In	ıc.	∇					<u>† ₁₄</u> 		<u> </u>	: :	:	:		:	:	: :						
12-5	500 Tomken Rd issauga, ON L4	l.	⊈ Groundwa ⊈ Groundwa						Not mea			<u>04 m</u> .											
Cana T: 41			Borehole details from a qualified (	as prese	nted, do ical Engi	not const	titute a th	orough	understa	nding of	f all pot	ential c	ondition	ons pre with th	esent and ne geotecl	requires nnical rep	interpreta	tive ass	sistance vas			e: 1 : 74	

## RECORD OF BOREHOLE No. BM/MW5



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

-	ect Nulliber. BIGC-GEO-490A	-					J	Location. See Boreno	1	, ,	Logged by. MV
	LITHOLOGY PROFILE	SC	IL SA	MPLI				FIELD TESTING	<b>LAB TESTING</b> ★ Rinse pH Values 2 4 6 8 10 12	z	
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DЕРТН (m)	ELEVATION (m)	PenetrationTesting O SPT	2 4 6 8 10 12 Soil Vapour Reading parts per million (ppm) 100 200 300 400  ▲ Lower Explosive Limit (LEL) W _o W Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
	BEDROCK: Shale, highly weathered to excellent quality, occasional limetone layers throughout, grey, moist to damp  - Excellent Quality	RC	6	100	93	15	89 -	O			
	- Fair Quality sub vertical fracture from from 15.84 to 15.92 m	RC	7	100	74	16	88 -	О			
	- Excellent Quality	RC	8	95	93	17	86 -	0			
	- Excellent Quality	RC	9	100	92	19 <u>V</u>	85 – 84 –	0			
	- Excellent Quality	RC	10	98	90	— 20 - - - - - - - 21	83 -	О			
	- Fair Quality	RC	11	95	70	22	82 <del>-</del>	0			
	- Excellent Quality fracture zone from 23.81 to 23.91 m	RC	12	100	99	— 23	80 -	(	•		
	- Good Quality 78.45	RC	13	100	88	25	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.										

		OF BOREHOLE N	<b>o.</b> .	BH/	MW	<u>101</u>		_										10	B.I.G. CONSULTED INC	5
	ject Number:	BIGC-ENV-349B							Location:			cation P						_ Logged by:	TVH	-
	ject Client:	Distrikt Capital						_	Method:				solid Stem Augering					_ Compiled by:		-
	ject Name:	BIGC-ENV-349B	_					_ Drilling Machine: Truck Moun									Reviewed by:		-	
Pro	ject Location:	217 & 227 Cross Ave. and 571	Argus	Rd., O	akville	, ON		Date S	tarted:	13	Jan 21	Date	Date Completed: 13 Jan 21					Revision No.:	1, 1/2/21	_
	LITH	OLOGY PROFILE	SOIL SAMPLING						STING			ESTIN	IG	_						
Lithology Plot	Geodetic Groun	DESCRIPTION  d Surface Elevation: 0 mm asphalt concrete over 200	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT  MTO Vane  Δ Intact  ▲ Remould  * Undrained S	* Ni  A Ni  A Ni  Bhear S	DCPT Icon Vane Intact Remould trength (kPa	▲ Low W _P	I Vapo s per mi 200 er Explo	ur Read Ilion (ppm 300 osive Limit V	ling 1) 400	INSTRUMENTATION INSTALLATION		COMMEN	ітѕ	
	mm granular b	ase		1	41	22	-		:0	· · ·			:	:	:					
<b>***</b>	FILL: clayey s mottled, grey,	ilt, trace sand, trace gravel, 0.3 moist, very stiff to hard	SS	1	41	22	- - -		0			o	23 :							
<b>**</b>	CLAYEY SILT fragments of S	TILL: trace sand, trace gravel, 1.1 hale, grey, moist, hard	SS	2	100	60	- - 1 - -			(	D	o ²	22							
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			SS	3	93	71	- - - - - - 2				0	o ¹⁰				٠				
11	BEDROCK: S limestone sea	hale, highly weathered, occasiona2.3 ns, grey, damp, hard	SS	4	53	50/15	- - - -			50 15		o ¹⁸	3							
			SS	5	63	50/8	- - - 3 -			50 8		06								
	-first water stri	ке					- - - - - - - 4													
			<del>-\$\$-</del>	6	100	50/3	- - - - - - - - -	_		50		o ⁴								
							- <u>-</u> - - -	<u>Z</u>												
	End of Boreh	ple 6.1	- 33	7	100	50/3	— 6 —			50		o ⁴			;					
	Notes: 1. Borehole or	en upon completion of drilling. er level at 5.18 m bgs measured																		
	6. Consulting In 500 Tomken Rd		ater dep	oth on c	ompletio	on of drill	ing:	<u>5.18 m</u> .		•				•	•					_

B.I.G. Consulting Inc. 12-5500 Tomken Rd. Mississauga, ON L4W 2Z4 Canada T: 416-214-4880 F: 416-551-2633

Pro	ject Number:	OF BOREHOLE N	0.	<u>BH/</u>	<u>'MW</u>	102			J Locatio			BH Loc							Logged by:	B.LG. CONSULTED TVH	
	ject Client: ject Name:	Distrikt Capital BIGC-ENV-349B							Method Machin			mm So « Moun				9			Compiled by:  Reviewed by:	TVH	_
		217 & 227 Cross Ave. and 571	Δταιις	Rd O	akville	ON			started:		13 Ja					d: <b>13 J</b> a	an 21		Revision No.:	-	_
110							ı	. Date C									I	_	itevision ito	1, 1/2/21	_
Lithology Plot	LIIH	sandy silt, some clay, mottled, brown/grey,0.3 loist, compact  EY SILT TILL: trace sand, trace sand, 0.8 gravel, fragments of Shale, grey, moist, very hard seam, 100 mm thick  SS 2 46 24 1  SS 3 90 50/15 50 013  SS 4 100 50/13 50  OCK: Shale, highly weathered, occasiona@6																			
holog			ample	ample	Scove	Ż.	FPTH	EVA		ed Shea			∎-	stic	•	Liquid	STRU	SI AL			
Ë	ASPHALT:10	mm asphalt concrete over 200						<u> </u>	20	40	60		20	40	6 <u>0</u>	80		<u> </u>			_
•***	mm granular l		SS	1	90	50/15	-			15	) : :	:	o ¹	9 :	:	:					
	very moist, co	mpact					-  -  -			:	:										
	trace gravel, f stiff to hard	ragments of Shale, grey, moist, very	SS	2	46	24	- - 1 - - - -		0				016	\$····							
#		gravel, fragments of Shale, grey, moist, very hard   SS   2   46   24   1																			
1							- - - 2			15											
11					100	50/42	-			50			7								
17.	BEDROCK: S	hale, highly weathered, occasiona2.6	- 33	4	100	50/13	-		:	13	; ;	:		:	:	:					
		SS 2 46 24 1 0 16 State, motited, brown/grey/).3 oolst, compact																			
			-88	5	100	50/3	3  -  -  -  -			50 : 3			06								
							- - -														
							4 - - -														
	-first water stri	ke	SS	6	63	50/8	-			.50 .8	)		o ⁶								
							- - 5 - <u>Ş</u>	Z								;					
								-		:	:										
							F .														
	End of Boreh	ole 6.2	ss	7	60	50/5	— 6 —			50 5			₀ 6			:		]			
	Notes: 1. Borehole o 2. Groundwat upon complet	pen upon completion of drilling. er level at 5.18 m bgs measured																			
																*					
										:	:										
										:	:										
										:	:			:	:	:					
	G. Consulting In 500 Tomken Ro		ater dep	pth on c	completion	on of dril	ling:	<u>5.18 m</u> .													

	ECORD	OF BOREHOLE NO	0.	BH/	MW	<u>103</u>		Drilling	Location:	Se	e BH Lo	cation Pla	n			Logged by: TVH
Pro	ject Client:	Distrikt Capital						Drilling	Method:	_1	50 mm S	olid Stem	Augerin	g		Compiled by: TVH
Pro	ject Name:	BIGC-ENV-349B						Drilling	Machine:	Tr	uck Mou	nted Drill I	Rig			Reviewed by: SS
Pro	ject Location:	217 & 227 Cross Ave. and 571	Argus	Rd., O	akville	, ON		Date S	Started:	<u>13</u>	Jan 21	Date C	Complete	ed: <b>13 J</b> a	an 21	Revision No.: 1, 1/2/21
	LITH	OLOGY PROFILE	SC	OIL SA	MPLI	NG			FIELD	TE	STING		3 TEST	ING		
Lithology Plot		DESCRIPTION  ad Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	Penetr O SPT MTO Vane △ Intact ▲ Remould * Undrained S 20 4	Ni On Ni	DCPT Icon Vane ³ Intact Remould strength (kPa	▲ Lower W _P	'apour Re er million (p 200 300 Explosive Li W	ading pm) 400 imit (LEL) W _L Liquid 80	INSTRUMENTATION INSTALLATION	COMMENTS
	mm granular	0 mm asphalt concrete over 300 bases	SS	1	E1	12	_							:		
	CLAYEY SIL	nd gravel, brown, moist, compact 0.9- T TILL: some sand, trace gravel, 0.5 Shale, reddish brown, moist, very		1	51	13	- - - -		0			o ¹³				
			SS	2	84	26	— 1 - - - -		0			015				
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			SS	3	93	70	- - - - 2				0	o ¹¹				988
1 <i>X</i> ·	BEDROCK: S limestone frag	Shale, highly weathered, occasiona£.3 ments, grey, damp, hard	SS	4	87	50/15	- - - -			50 15		06				
			ss	5	100	50/5	- 3 - - - - -			50 · · 5		_p 2·····				
			<del>- \$\$</del>	6	60	50/5	- 4 <u>-</u> - <u>-</u> - <u>-</u>	Z =		50 5		o ⁴				
	Borehole teri	minated at 5.49 m due to auger 5.5 nferred Limestone bedrock					- 5 - - -									9 9 1 1
	Notes: 1. Borehole o 2. Groundwat upon complet	pen upon completion of drilling. er level at 4.57 m bgs measured ion of drilling.														
B.I.G	6. Consulting Ir	nc. ∑ Groundwa	ater der	oth on o	ompletic	on of drilli	ina:	4.57 m.						:		

Project Number: Project Client: Project Name:	BIGC-ENV-349B Distrikt Capital BIGC-ENV-349B	O. ,	<u>BH/</u>	MW	<u>104</u>		Drilling	J Location: J Method: J Machine:	See BH L	Solid	Stem A		1			Logged by: Compiled by: Reviewed by:	B.I.G. COMMUNICATION TVH TVH SS
-	: 217 & 227 Cross Ave. and 571	Argus	Rd., O	akville	, ON		_	Started:	13 Jan 21			ompleted	l: <u>13 Ja</u>	n 21		Revision No.:	
LITI	HOLOGY PROFILE	sc	OIL SA	MPLI	NG			FIELD	TESTING	i T	LAB	TESTII	NG		$\top$		
Ceodetic Grou	DESCRIPTION  nd Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DЕРТН (m)	ELEVATION (m)	Penetra O SPT  MTO Vane* Δ Intact ▲ Remould	■ DCPT     Nilcon Var     ◇ Intact     ◆ Remoul	<b>★</b> Δ Δ d	Rinse pH 2 4 Soil Va parts per 100 20 Lower Ex Wp Plastic	Pour Rea pour Rea million (ppr 00 300 plosive Lim W	0 12 ding n) 400	INSTRUMENTATION		COMMEN	ITS
mm granular	00 mm asphalt concrete over 200 bases and gravel, brown, moist, compact 0.3	SS	1	62	23	- - - - -		0		04							
sandy silt, so	ome clay, trace gravel	ss	2	62	13	- - - 1 - 1		0		c	12						
cLAYEY SIL fragments of	.T TILL: some sand, trace gravel, 1.4 Shale, brown, moist, hard	SS	3	95	42			C	)		o ¹³						
BEDROCK:	Shale, highly weathered, occasiona2.3	SS	4	63	50/8	- 2 - - -			50								
End of Bore Notes: 1. Borehole 2. Groundwa	agments, grey, moist, hard		5	100	50/3	- 3 - 3 4 5 5 	7		8 50 3 3 50 50 5	o ⁷							

	ECORD	OF BOREHOLE N	lo.	<u>BH/</u>	MW	<u>105</u>		_ Drilling	Location	:	See Bl	H Loca	ation	Plan					Logged by	B.i.G. Consulted TVH
Pro	ject Client:	Distrikt Capital						_ Drilling	Method:		150 m		llow	Stem	Auge	ering ·	+ Roo	k	Compiled I	y: <b>TVH</b>
	ect Name:	BIGC-ENV-349B						- '	Machine	:	Truck	Moun							Reviewed	
Pro		217 & 227 Cross Ave. and 571						_ Date S	Started:		14 Jan		_ Da	ate Co	omple	ted: <u>1</u>	5 Jar	1 21	Revision N	o.: <u>1, 1/2/21</u>
	LITH	OLOGY PROFILE	SC	OIL SA	MPLI						ESTIN		<b>★</b> F	Rinse pH	TES [*] Values		$\neg$	z		
Lithology Plot	Geodetic Groun	DESCRIPTION d Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT  MTO Van  Δ Intact  ▲ Remou  * Undrained	e*	♦ Intage Ren Ren Strengt	Vane*	2 △ p 1	Soil Valuets per 00 2 ower Ex	pour R million ( 00 30 xplosive W	10 Reading (ppm) 00 40 Limit (Li V Liqui	g 0 EL) /L	INSTRUMENTATION INSTALLATION	СОММ	ENTS
	ASPHALT:10 mm granular b	0 mm asphalt concrete over 200		1	62	37	-	<b>'</b>		0			o ⁶							
	CLAYEY SIL1 fragments of S	TTILL: trace sand, trace gravel, 1.1 Shale, grey, moist, very stiff to hard	- ss	2	70	23	- - 1 - - - -		0				0	14						
			ss	3	84	55	- - - - - 2 -				0		o ⁹							
		ihale, highly weathered to excellen2.3 ional Limestone layers, grey, moist	35	4	100	50/8	- - - - - -			50	:		7							
			SS	5	100	50/5	- - - - - - - - - - - -			50			07							
	-first water stri	ike	SS	6	100	50/5	- - - - - 5 - - - -			50(5				18						
			ss	7	100	50/5	- - - - - - - - - - -			50			c	16						
		ROCK CORE BEGINS	-SS RC	1	78	50/5			0	50(5			0	16						
	5. Consulting In		standing	groundv	water me	easured	- - - - - 9	en boreho	le on comp	letio	n of drilli			Cave	e in de	pth rec	cordec	on comple	etion of drilling:	Not Measured m.
Miss Can T: 4	issauga, ON L4	i.   -	s as prese	ented, do	not cons	titute a th	orough	understa	nding of all p	otent	ial condit	tions pre	esent a	nd requ	uires int al repor	erpreta t for wh	tive as	sistance vas		Scale: 1 : 47 Page: 1 of 3



Project Number: BIGC-ENV-349B Drilling Location: See BH Location Plan Logged by: TVH LITHOLOGY PROFILE SOIL SAMPLING FIELD TESTING LAB TESTING # Rinse pH Values
2 4 6 8 10 12
Soil Vapour Reading
parts per million (ppm)
190 290 300 400

▲ Lower Explosive Limit (LEL)
W_p W W_t
Plastic Liquid
20 40 60 80 INSTRUMENTATION INSTALLATION PenetrationTesting 'N' Value/RQD% Ξ O SPT DCPT Sample Number **COMMENTS DESCRIPTION** ithology Plot Recovery (%) Sample Type ELEVATION MTO Vane* Nilcon Vane* Ξ △ Intact
 ◆ Remould
 ◆ Remould DEPTH * Undrained Shear Strength (kPa) SPT 20 40 60 - Good Quality **BEDROCK**: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist 10 RC 3 99 82 Ö - Good Quality 11 12 RC 4 99 91 .O - Excellent Quality 13 RC 97 5 99 - Excellent Quality 14 15 RC 6 99 96 - Excellent Quality 16 RC 95 99 - Excellent Quality 17 18 RC 8 98 - Excellent Quality 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 commissioned and the accompanying Notes to Record of Boreholes'.

Scale: 1:47



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

_	LITHOLOGY PROFILE	SC	IL SA	MPLI	NG		1	FIELD TESTING	LAB TESTING	1	Logged by:
	EITHOLOGY FRONEL	- 30		UVII LI				PenetrationTesting	★ Rinse pH Values 2 4 6 8 10 12	N N	
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DЕРТН (m)	ELEVATION (m)	O SPT	Soil Vapour Reading  parts per million (ppm) 100 200 300 400  ▲ Lower Explosive Limit (LEL) W _P W W _L	INSTRUMENTATION INSTALLATION	COMMENTS
Lith		San	San	Rec	SPI		l li	* Undrained Shear Strength (kPa) 20 40 60 80	Plastic Liquid 20 40 60 80	NN NN NN	
	<b>BEDROCK:</b> Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist					-					
		RC	9	98	83	-					
	- Good Quality	RC	9	96	0.5	-					
						_ 20					
						E					
						F					
						-					
						F					
		RC	10	99	93	— 21 -		0			
	- Excellent Quality	110	"			E					
						-					
						<u> </u>				::  :::	
						_ 22					
						E					
						-					
	- Excellent Quality	RC	11	99	92	-					
	Executer Quality					F					
						— 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										

		OF BOREH	IOLE N	<b>o.</b>	BH/	MW	<u>106</u>												10	B.I.G. GONGLING INC
Pro Pro	ject Number: ject Client: ject Name:	Distrikt Capital BIGC-ENV-349B							Drilling Drilling	Location:   Method:   Machine:	1	150 mm	Soli	id Stem A	g				Logged by: Compiled by: Reviewed by:	
Pro		217 & 227 Cross A							Date S	Started:		0 Jan 21		-		ed: <b>20 J</b> a	an 21	_	Revision No.:	1, 1/2/21
Lithology Plot	Geodetic Groun	DESCRIPTION  d Surface Elevation:		Sample Type	Samble Number	Recovery (%)	SPT 'N' Value/RQD%	DЕРТН (m)	ELEVATION (m)	Penei O SPT MTO Vane Δ Intact ▲ Remoule * Undrained	tratio	Testing  DCPT  Nilcon Vand Intact Remould  Strength (kP	ıe* _	LAB  Rinse pH 2 4  Soil Va  A parts per 100 2l  Lower Ex WP Plastic 20 4	Values 6 8 pour Remillion (p 00 300 colosive L W	10 12 eading ppm) 0 400 imit (LEL) W Liquid	INSTRUMENTATION	INSTALLATION	COMMEN	TS
	mm granular l	mm asphalt concrete o pase silt, trace sand, trace gra ed, brown, moist, stiff to	avel, 0.2	SS	1	92	12	- - - - -		0				o ¹⁴						
	CLAYEY SILT fragments of S	TTILL: trace sand, trace Shale, brown, moist, har	e gravel, 1.1 . d	SS	2	95	63/23	- - 1 - - - -				63 O 23		014						
1 <i>*</i>	BEDROCK: S Limestone fra	Shale, highly weathered, gments, grey, damp, ha	occasionall.7 rd	SS	3	93	50/15	- - - - - 2 - -			50 15 50 5			o ¹⁵			I			
	-first water str	ike		SS	5		50/5	- - - - - 3 - - - - - - - - - - - - - -	Z =		5 5 5 5			06						
				\$\$	6	100		- - - - - - - - - - - - - - - - - - -			500			2						
	End of Boreh Notes: 1. Borehole o 2. Groundwat upon complet	pen upon completion of er level at 4.88 m bgs m	6.1 drilling. leasured	33	7	100	50/3				3							1.		
	G. Consulting Ir		⊈ Groundwa	ater dep	oth on co	ompletic	on of drill	ing:	<u>3.96 m</u> .	<u> </u>	:			:	: :	•	<u> </u>			

Pro	ECORD  ject Number:	OF BOREHOLE No	0.	BH/	MW	107		_	Location:	•	See BH Lo			unars				Logged by: Compiled b	<u>T\</u> /: T\	
	ject Name:	BIGC-ENV-349B						_	Machine:		Truck Mou							Reviewed b		
Pro	ject Location:	217 & 227 Cross Ave. and 571	Argus	Rd., O	akville	, ON		Date S	started:		20 Jan 21		Date Co	omplete	ed: <b>20 Ja</b>	ın 21		Revision No	.: <u>1,</u>	1/2/21
	LITH	OLOGY PROFILE	SC	OIL SA	MPLI	NG			FIELD	) T	ESTING	T	LAB	TEST	ING		Т			
Lithology Plot		DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEРТН (m)	ELEVATION (m)	O SPT  MTO Vane  Δ Intact  ▲ Remould  * Undrained	e* d	DCPT Nilcon Vane	e* A	Lower Ex W _P	pour Remillion (p	imit (LEL)  W _L Liquid	INSTRUMENTATION	NSI ALLATION	СОММЕ	NTS	
		d Surface Elevation: 0 mm asphalt concrete over 170 base	0)	0)		0)	<u> </u>	<u> </u>	<u> </u>	÷.0	: :	T	:							
		silt, trace gravel, rootlets, mottled, 0.3	SS	1	59	12	- - - -		0				o ¹⁶							
	CLAYEY SILT oxidized fissu very stiff to ha	FTILL: trace sand, trace gravel, 0.8 res, mottled, brownish grey, moist, rd	SS	2	92	28	- - - 1 - - -		O				· 012· · · ·							
11	BEDROCK: S Limestone fra	Shale, highly weathered, occasionall.8 gments, grey, damp to moist, hard	SS	3	70	51	- - - - 2				!!		o ¹¹			I				
			SS	4	100	50/5	- - - - -			50		•	₀ 8							
	-first water str	ike	<del>-ss</del> -	5	60	50/5	- 3	Z =		50 5		c	6							
			SS	6	100	50/5	- - - - - - - 5			50 5			₀ 23							
	End of Boreh	iole 6.1	<del>-\$\$</del> -	7	100	50/3	- - - - - - - 6			:50 3			23							
	Notes: 1. Borehole o 2. Groundwat upon complet	pen upon completion of drilling. er level at 3.66 m bgs measured ion of drilling.																		
	G. Consulting Ir		ater dep	oth on c	ompletic	on of drillin	ng:	3.66 m.		:			:		•					

	ECORD	OF BOREHOLE N	No.	BH/	MW	<u> 108</u>		Drilling	Location:		oo BH I	Loca	ation Plan					Logged by:	B.I.G. Consume TVH
	ject Number.	Distrikt Capital							Method:	_			lid Stem A		s				TVH
Pro	ject Name:	BIGC-ENV-349B						Drilling	Machine:	Ī	ruck Mo	ount	ted Drill R	lig				Reviewed by:	SS
Pro	ject Location:	217 & 227 Cross Ave. and 57	1 Argus	Rd., C	Dakville	, ON		Date S	Started:	2	0 Jan 2	1	_ Date C	omple	ted: <b>20 J</b>	an 21		Revision No.:	1, 1/2/21
	LITH	OLOGY PROFILE	S	OIL S/	MPLI	NG			FIEL	) TE	STING	3			TING				
Lithology Plot	Goodatic Groun	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT MTO Vane Δ Intact ▲ Remoule * Undrained	e* N	DCPT Nilcon Va Intact Remou	ine* uld kPa)	▲ Lower E W _P ■ Plastic	apour F r million 200 30	Reading (ppm) 00 400 Limit (LEL) W _L Liquid	INSTRUMENTATION	NSTALLATION	COMMEN	TS
	ASPHALT:15 mm granular l	SS 1 75 9 O O O O O O O O O O O O O O O O O O																	
	FILL: clayey s staining, mottl	silt, trace gravel, rootlets, organic 0.ed, brown, moist, stiff	4	1	75	9	- - - -		0				o ¹⁵						
	CLAYEY SILT oxidized fissu to hard	FTILL: trace sand, trace gravel, 0.3 res, mottled, brown, moist, very stiff		2	100	25	- - 1 - 1 - -		0				012····						
				3	100	65	- - - - - 2			: : : :	0		o ¹¹						
	BEDROCK: S Limestone fra	Shale, highly weathered, occasiona2. gments, grey, moist	1 SS	4	100	50/5				: :50 : 5			o ⁸						
			<u>ss</u>	5	100	50/5	- - - - - 3 - - - - -			5005			· o ⁶						
	-first water str	ike	<del>\$\$</del> -	6	100	50/3	- - - - - - - - -	Z =		5003			o ⁵						
							- - - 5 - - - -												
							- - - 6												
	End of Boreh Notes: 1. Borehole o 2. Groundwat upon complet	pen upon completion of drilling. er level at 3.96 m bgs measured	1 98	7	100	50/3				3			021				<u> </u>		
	G. Consulting Ir		water de	pth on c	completion	on of drill	ing:	3.96 m.					:						

	ECORD		<b>o.</b>	BH/	MW	109		_ Drilling	Locati	on:									Logged b	y:	1 Gos	G.
	Distrikt Capital  Distrikt Mounted Drill Rig  Date Completed: 20 Jan 21  Date Completed: 20 Jan 21  Revision No.: 1,1/2/21  Revision No.: 1,1/2/21  Date Completed: 20 Jan 21  Revision No.: 1,1/2/21  Date Completed: 20 Jan 21  Revision No.: 1,1/2/21  Distrikt Mounted Drill Rig  Date Completed: 20 Jan 21  Revision No.: 1,1/2/21  Date Completed: 20 Jan																					
	-							-											_	-		
Pro	Drilling Method: 150 mm Solid Stem Augers Compiled by: TVH  BIGC-ENV-349B Drilling Machine: Truck Mounted Drill Rig Reviewed by: SS  ect 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 PROFILE SOIL SAMPLING  DESCRIPTION  DESCRIPT		21																			
	LITH	OLOGY PROFILE	SC	DIL SA	MPLI				FIE	ELD .	TES	TING	<b>i</b>			ING	_					
Lithology Plot	Geodetic Grour		Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEРТН (m)		O SPT MTO V Δ Intac ▲ Ren * Undrain	/ane* ct nould ned Sh	Nil     Nil	DCPT con Var Intact Remoul	ld	Soil Va  A parts per 100 2  ▲ Lower Ex  W _P Plastic	pour Remillion (pod 300 kplosive L	eading ppm) 400 imit (LEL) W L Liquid	INSTRUMENTATION	INOLALE ALL ALL ALL ALL ALL ALL ALL ALL ALL	COMI	WEN7	rs	
	ASPHALT:14	0 mm asphalt concrete over 160					-		:	:	:	:		:	: :	:						
<b>※</b>	brown, moist, CLAYEY SILT fragments of	stiff  T TILL: trace sand, trace gravel, Shale, oxidized fissures, mottled,	SS	1	92	13	- - - -		0					014								
	Siewnish grej	, mod, raid	SS	2	100	33	- - 1 - -			0				··· ₀ 11····								
1			SS	3	83	76/20	-			:	:	76		o ¹⁰		:						
51 <i>1:</i>	BEDROCK: S Limestone fra	Shale, highly weathered, occasionall.8 gments, grey, moist to damp, hard					- - - 2 -					20										
			ss	4	100	50/5	-			.5	5			o ⁸ :		:						
			<del>-\$\$</del> -	5	100	50/3	- - 3 - - - -			5	0 3			o ⁶								
							- - - - 4 															
			SS	6	100	50/5	-			5	005			o ⁴								
	-first water str	ike						<u>Z</u>														
							-															
=	End of Boreh	nole 6.1	SS	7	100	50/3	— 6 -			: 5	3			₀ 30	)		ŀ∵⊟					
	Notes: 1. Borehole o 2. Groundwat upon complet	pen upon completion of drilling. er level at 5.18 m bgs measured ion of drilling.																				
	G. Consulting In		ater dep	oth on c	ompletic	on of drill	ing:	<u>5.18 m</u> .		•				:		*						

Project Number Project Client: Project Name:	DISTRICT OF BOREHOLE N  BIGC-ENV-349B  Distrikt Capital  BIGC-ENV-349B  217 & 227 Cross Ave. and 571						Drilling	Location:  Method:  Machine:	150 mm \$	ocation Plan Solid Stem Augers unted Drill Rig  Date Completed	: 21 Jan 21	Logged by: Compiled by: Reviewed by: Revision No.:	
	HOLOGY PROFILE		DIL SA						TESTING	LAB TESTIN			<u>.,</u>
To look of the control of the contro	DESCRIPTION und Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEРТН (m)	ELEVATION (m)	Penetra O SPT  MTO Vane* Δ Intact ▲ Remould	■ DCPT  Nilcon Vane     ♦ Intact     • Remould	* Rinse pH Values 2 4 6 8 1 Soil Vapour Rear △ parts per million (ppn 100 200 300  Lower Explosive Lim W _P W	0 12 VOIL V V VOIL V V V V V V V V V V V V V V V V V V V	COMMEN	TS
mm granula  FILL: sandy	20 mm asphalt concrete over 300 r base silt, some gravel, occasional glass 0.4 ootlets, brown, moist, compact	SS	1	79	21	- - - - -		0		o ¹²			
CLAYEY Sli fragments o brownish gr	LT TILL: trace sand, trace gravel, 1.1 f Shale, oxidized fissures, mottled, ey, moist, stiff to hard	- SS	2	95	12	_ — 1 - - - -		0		012			
*		ss	3	100	37	- - - - - 2 -		O	50	o ¹⁰			
BEDROCK: Limestone f	Shale, highly weathered, occasiona2.3 agments, grey, damp, hard	ss	4	100	50/5				50	07			
		SS	5	100	50/5	- 3 - - - - - - - - - - - - - - - - - -	Z =		5	03			
-first water s	trike	SS	6	60	50/5	- - - - - - 5 - - -			50 O 5	٥٠			
<ol><li>Groundw</li></ol>	ophole 6.1  open upon completion of drilling. ater level at 3.96 m bgs measured etion of drilling.	<del>\$\$</del>	7	100	50/3	- - - - 6 -			3	o ¹⁷			
apon compi	Country.												

Pro	ject Number: ject Client:	BIGC-ENV-349B Distrikt Capital						Drilling	Location Method	:	150	BH Loo	olid S	tem A	Augers	3				Logged by: Compiled by:	TVH TVH
	ject Name:	BIGC-ENV-349B	A	D4 0	مالة مالاء	ON.			Machin			k Mou				10 d. 2	4 1	. 24		Reviewed by:	
-10		217 & 227 Cross Ave. and 571						Date	Started:			an 21				ted: 2		1 2 1	_	Revision No.:	1, 1/2/2
Lithology Plot	ЦІТН	OLOGY PROFILE  DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DЕРТН (m)	EVATION (m)		netration	onTes  Nilco	OCPT on Vane* ntact Remould	<b>★</b> F 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Rinse pl 4 Soil Va arts pe 00 2	H Values 6 8 apour F r million 200 30	10 Ceading (ppm) 10 400 Limit (LE	12 J ) EL)	INSTRUMENTATION	STALLATION	COMMEN	ITS
		d Surface Elevation: mm asphalt concrete over 250	Š	Š	8	R	ä	ᆸ	20	40 :	60	80	+		40 6	0,80		ΖZ	=		
	mm granular t		ss	1	95	15	- - - -		0				o	3							
**************************************	clayey silt, firn	1	SS	2	100	8	- 1 - - - -		0				C	15							
<u> </u>	fragments of S grey, moist, ha		SS	3	100	34	- - - - - 2 -			50			o ⁵	:  3 							
		shale, highly weathered, occasiona2.3 gments, grey, moist	SS	4	63	50/8				50	) :   		0						1.1		
	-first water stri	ike	SS	5	100	50/5	- 3 - 3 	Z =		50(5			.7				•				
			SS	6	60	50/5	5			500			o ⁸								
	End of Boreh Notes: 1. Borehole oj 2. Groundwati upon complet	pen upon completion of drilling. er level at 3.96 m bgs measured	33	7	100	50/3				. 3			o'								

Pro Pro	ject Number: ject Client:	OF BOREHOLE No BIGC-ENV-349B Distrikt Capital	0.	BH/	<u>MW</u>	<u>/112</u>		Drilling	Location:  Method:	_1	50 mm So	cation Plar	Augers				Logged by: Compiled by:	B.I.G. Coccurries TVH TVH
	ject Name:	BIGC-ENV-349B	<b>A</b>	D-1 -0	N = 1 = = = 111 =	ON		_	Machine:			nted Drill F		-1. 04. 1-	04		_ Reviewed by:	
Pro		217 & 227 Cross Ave. and 571						Date S	Started:		Jan 21		•	d: <b>21 Ja</b>	ın 21		Revision No.:	1, 1/2/21
Lithology Plot	Geodetic Groun	OLOGY PROFILE  DESCRIPTION  d Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEРТН (m)	ELEVATION (m)	Penetr O SPT  MTO Vane Δ Intact A Remould	ation  * N  hear:	STING Testing DCPT illcon Vane* Intact Remould Strength (kPa)	★ Rinse p 2 4 Soil Va beta parts pe 100 Lower E Wp Plastic	6 8 apour Re er million (pp 200 300	10 12 ading om) 400	INSTRUMENTATION	INSTALLATION	COMMEN	TS
	FILL: clayey s moist, stiff	omm iit, trace gravel, rootlets, brown, 0.2	SS	1	59	9	- - - - -		0			o ¹³						
	grey  CLAYEY SIL1 fragments of S grey, moist, ve	TTILL: trace sand, trace gravel, 1.1 Shale, oxidized fissures, mottled, ery stiffto hard	SS	2	100	21	- - - 1 - - -		O			····∂15···						
			SS	3	95	44	- - - - - 2 -			0		o ¹³						
1	BEDROCK: S Limestone fra	shale, highly weathered, occasiona2.6 gments, grey, moist, hard	SS	4	100	75/25	- - - -				75 25	o ⁵						
	-first water stri	ke	_ss_	6		50/5	3	<u>Z</u>		50°05		08						
	End of Boreh Notes: 1. Borehole of 2. Groundwat upon complet	pen upon completion of drilling. er level at 5.18 m bgs measured	=33	7	100	50/3	- - - - - 6			3		07						
	6. Consulting In		ater dep	oth on c	completion	on of drill	ing:	<u>5.18 m</u> .				:	<u> </u>	:				

Pro Pro Pro	ject Number: ject Client: ject Name:	OF BOREHOLE No BIGC-ENV-349B Distrikt Capital BIGC-ENV-349B 217 & 227 Cross Ave. and 571						_ Drilling _ Drilling	y Locatio y Method y Machin Started:	d: ie:	150 Truc	BH Lo mm S k Mou an 21	olid :	Stem	Auger Rig		21 Ja	n 21		Logged I Compiled Reviewe	d by: d by:		GAT#/C
	LITH	OLOGY PROFILE	SC	OIL SA	MPLI	_				LD T		TING sting		Rinse p	6 8	s 3 10	12	NOI					
Lithology Plot		DESCRIPTION d Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEРТН (m)	ELEVATION (m)	O SPT MTO Va Δ Intact ▲ Remo * Undraine 20	t ould	♦ I	on Vane ntact Remould	^	Soil V parts per 100 : Lower E W _p Plastic 20	Explosive W O	Limit (L	.EL) V∟ • iid	INSTRUMENTATION	INSTALLATION	СОМ	MEN	rs	
	GRAVEL:50 r FILL: clayey s staining, brow	nm	SS	1	100	19	- - - -		0					o ¹⁴									
<b>₩</b>	CLAYEY SILT fragments of S grey, moist, st	TILL: trace sand, trace gravel, 1.1 Shale, oxidized fissures, mottled, iff to hard	SS	2	100	13	- - 1 - - - -		0					12									
			SS	3	100	44	- - - - 2 -			0				11 513									
1	BEDROCK: S Limestone fra	shale, highly weathered, occasiona£.6 gments, grey, moist	SS	4	100	90	- - - - - - -			50		0	- 1										
			SS	5	100	50/5	- - - - - - - - - 4 - -			50(													
	-first water stri	ike			.00	33,3	- - - - - - - -	<u>Z</u>															
	End of Boreh Notes: 1. Borehole of 2. Groundwate upon complet	pen upon completion of drilling. er level at 5.48 m bgs measured	- \$3	7	100	50/5	6			50				21									
	<b>5. Consulting Ir</b> 500 Tomken Ro		ater dei	pth on c	completic	on of drill	ing:	5.48 m.															

Proj		OF BOREHOLE N BIGC-ENV-349B Distrikt Capital	lo.	BH/	MW	114		- '	Location:  Method:	See BH Loc			g + Ro	ck	_ Logged by: _ Compiled by:	BLG. CORRECTIVE TVH
Proj	ect Name:	BIGC-ENV-349B						Drilling	Machine:	Truck Moun	ted Drill F	Rig			_ Reviewed by:	<u>ss</u>
Proj	ect Location:	217 & 227 Cross Ave. and 571	Argus	Rd., C	akville	, ON		Date S	Started:	21 Jan 21	_ Date C	completed:	<u>27 Ja</u>	n 21	Revision No.:	1, 1/2/21
	LITH	OLOGY PROFILE	SC	DIL SA	MPLI				FIELD	TESTING	LAE ★ Rinse p	H Values	G	7		
Lithology Plot		DESCRIPTION  d Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT  MTO Vane³  Δ Intact  ▲ Remould	<ul> <li>♦ Intact</li> <li>♦ Remould</li> </ul> hear Strength (kPa)	Soil V  Soil V  parts po 100  Lower I  W _P Plastic	6 8 10 apour Readi er million (ppm) 200 300 4 Explosive Limit W O	400	INSTRUMENTATION INSTALLATION	COMMEN	тѕ
	FILL: clayey s moist, very sti	ilt, trace gravel, mottled, grey, 0.2	ss	1	100	20	- - - -		0		o ¹¹					
			SS	2	100	8	- - - 1 - -		0		019					
	CLAYEY SIL1 frgments of SI moist, hard	TILL: trace sand, trace gravel, 1.7 nalr, oxidized fissures, mottled, grey,	SS	3	100	37	- - - - - 2		0		o ¹¹					
	BEDROCK: S	hale, highly weathered to excellen <b>2</b> .6	SS	4	100	57	- - - -			0	o ¹¹					
	qaulity, occasi to damp	onal Limestone layers, grey, moist	SS	5	100	50/5	- 3 - -			50	9					
							- - - - 4 - -									
	- first water str	iike	SS	6	60	50/5	- - - - - 5 - -			50 O 5	o ⁷					
			ss	7	60	50/5	- - - - - 6			50 5	o ¹⁹					
							- - - - - - - 7									
	 - Poor Quality	ROCK CORE BEGINS	RC	1	98	35	-		0							
							— 8 - - - - -									
	- Poor Quality	ı	RC	2	69	28	- - 9		0	: :	:	: :	:			
12-5 Miss	i. Consulting In 500 Tomken Ro issauga, ON L4	l. = No liees	standing	ground	water me	asured i	in opei	n boreho	le on comple	tion of drilling.	<b>⊞</b> Car	ve in depth r	ecorde	d on completion	on of drilling: <u>Not</u>	Measured m.
Cana T: 41		Borehole detail	Geotechi	nical Eng	ineer. Als	o, boreho	le infor	rmation sl	nding of all pot nould be read in	ential conditions pr n conjunction with t	esent and red he geotechni	quires interpre	etative as	ssistance was		Scale: 1 : 47 age: 1 of 3



Project Number: BIGC-ENV-349B Drilling Location: See BH Location Plan Logged by: TVH LITHOLOGY PROFILE SOIL SAMPLING FIELD TESTING LAB TESTING # Rinse pH Values
2 4 6 8 10 12
Soil Vapour Reading
parts per million (ppm)
190 290 300 400

▲ Lower Explosive Limit (LEL)
W_p W W_t
Plastic Liquid
20 40 60 80 INSTRUMENTATION INSTALLATION PenetrationTesting 'N' Value/RQD% Ξ O SPT DCPT Sample Number **COMMENTS DESCRIPTION** ithology Plot Recovery (%) Sample Type ELEVATION MTO Vane* Nilcon Vane* Ξ △ Intact
 ◆ Remould
 ◆ Remould DEPTH * Undrained Shear Strength (kPa) SPT 20 40 60 **BEDROCK:** Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist to damp 10 RC 3 98 62 Ö - Fair Quality 0 RC 4 100 87 - Good Quality 12 13 RC 5 100 76 0 - Good Quality 14 RC 6 100 83 0 - Good Quality 15 16 RC 100 98 - Excellent Quality 17 0 RC 8 97 89 18 - Good Quality - 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 commissioned and the accompanying Notes to Record of Boreholes'.

Scale: 1:47 Page: 2 of 3



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

	LITHOLOGY PROFILE	SC	OIL SA	MPLI	NG			FIELD TESTING	LAB TESTING		
					%QC			PenetrationTesting	* Rinse pH Values 2 4 6 8 10 12	INSTRUMENTATION INSTALLATION	
ot	DESCRIPTION	e	Sample Number	(%	SPT 'N' Value/RQD%	_	E Z	O SPT • DCPT  MTO Vane* Nilcon Vane*	Soil Vapour Reading  Description (ppm)  Description	NOT	COMMENTS
gy PI		e Typ	e Nur	ery (5	r' <al< td=""><td>E</td><td>ATO</td><td>Δ Intact</td><td>Lower Explosive Limit (LEL)  W_P W W_I</td><td>T I I</td><td></td></al<>	E	ATO	Δ Intact	Lower Explosive Limit (LEL)  W _P W W _I	T I I	
Lithology Plot		Sample Type	ampl	Recovery (%)	PT 'Y	ОЕРТН (m)	ELEVATION	* Undrained Shear Strength (kPa) 20 40 60 80	Plastic Liquid	ISTR	
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist	S	S	~	S	_	ш	20 40 60 80	20 40 60 80		
	to damp	RC	9	100	94	-					
	- Excellent Quality					-					
						— 20 -					
						F					
						E					
						_					
		RC	10	100	90	- 21		0			
	- Excellent Quality	110	10	100	30	-  -					
						-				:ˈ <b> </b>  ::	
≣						F					
						E					
						_ 22					
						F					
$\equiv$		DC.	44	100	07	-  -					
	- Excellent Quality	RC	11	100	97	<b>-</b>		C			
						F					
						— 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										

	ECORD ject Number:	OF BOREHOLE N	lo.	<u>BH/</u>	MW	<u>/115</u>	i	_ Drilling	g Location	ո։	See BH	Loca	ation Plar	1			Logged by:	B.LG. Consume Inc
	ject Client:	Distrikt Capital							g Method		Coring		llow Ster		ring + Ro	ck	Compiled b	-
	ject Name:	BIGC-ENV-349B	Araua	P4 0	alvilla	- ON		_ `	g Machine	e:			ted Drill F		od: <b>26 la</b>	.n 24	Reviewed b	
FIU		217 & 227 Cross Ave. and 571					1	_ Date s	Started:		22 Jan 2			-	ed: 26 Ja	<u> </u>	Revision N	o.: <u>1, 1/2/21</u>
Plot	LIIH	OLOGY PROFILE  DESCRIPTION			(%)	SPT 'N' Value/RQD%	(m)	(m) NOI		etrati	onTesting  DCP1  Nilcon V	J r ane*	★ Rinse p 2 4 Soil V	6 8 apour Re er million (p 200 300	10 12 eading opm) 0 400	INSTRUMENTATION INSTALLATION	СОММ	ENTS
Lithology Plot	Geodetic Groun	d Surface Elevation:	Sample Type	Sample Number	Recovery (%)	SPT 'N' V	ОЕРТН (	ELEVATION	▲ Remo		Remo	ould (kPa)	W _P ■ Plastic	₩ 0 60	W _L Liquid	INSTRUN		
		0 mm asphalt concrete over 300					-		:	:					:			
<b>***</b>	FILL: clayey s staining, dark	silt, trace gravel, rootlets, organic 0.4 brown, moist, very stiff	SS	1	59	16	- - -		0:				o ¹⁵					
	CLAYEY SILT oxidized fissu	TILL: trace sand. trace gravel, 0.8 res, mottled, grey, moist, stiff to hard	SS	2	100	12	1_ - - 1 - - - -		0				13····					
			ss	3	84	32	- - - - - 2		(	) 			o ¹²					
17.	qaulity, occas	shale, highly weathered to excellen2.4 ional Limestone layers, grey, moist	ss	4	100	50/13	- - -			50 13	) }		o ¹⁰					
	to damp		SS	5	100	50/5	- - - 3			50	)		o ⁶					
							- - - -											
	- first water st	ike					- - 4 - - -											
			SS	6	60	50/5	- - - - - 5			50			o ⁵					
							- - - - -											
			_ss_	7	60	50/5	- - 6 - - -			50	) )		o ⁵					
							- - - - - - 7											
							- - - - -											
	- Poor Quality	ROCK CORE BEGINS	RC	1	83	30	- - - 8 -		С	)								
	Fe ¹ - O		RC	2	98	74	_ - - -				0							
12-5	- Fair Quality  G. Consulting Ir  500 Tomken Ro  issauga, ON L4	i. = 140 liees	tanding	ground	water m	easured	in ope	en boreho	le on com	: pletio	: :	g.	∷ E Ca	e in der	th recorde	d on comple	etion of drilling:	Not Measured m.
Can T: 4		Borehole details from a qualified commisioned ar	Geotechi	nical Eng	ineer. Als	so, boreh	ole info	ormation sl	nding of all   nould be rea	poten d in c	tial condition	ons pre with th	esent and red ne geotechni	quires inte	erpretative as	ssistance was		Scale: 1 : 47

Page: 1 of 3



Project Number: BIGC-ENV-349B Drilling Location: See BH Location Plan Logged by: TVH LITHOLOGY PROFILE SOIL SAMPLING FIELD TESTING LAB TESTING # Rinse pH Values
2 4 6 8 10 12
Soil Vapour Reading
parts per million (ppm)
190 290 300 400

▲ Lower Explosive Limit (LEL)
W_p W W_t
Plastic Liquid
20 40 60 80 INSTRUMENTATION INSTALLATION PenetrationTesting 'N' Value/RQD% Ξ O SPT DCPT Sample Number **COMMENTS DESCRIPTION** ithology Plot Recovery (%) Sample Type ELEVATION MTO Vane* Nilcon Vane* Ξ △ Intact
 ◆ Remould
 ◆ Remould DEPTH * Undrained Shear Strength (kPa) SPT 20 40 60 **BEDROCK:** Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist to damp 10 RC 3 99 61 Ö - Fair Quality RC 4 99 77 O. - Good Quality 12 13 RC 5 100 98 - Excellent Quality 14 RC 6 98 87 0 15 - Good Quality 16 RC 100 95 - Excellent Quality 17 RC 8 100 92 0 18 - Excellent Quality 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 commissioned and the accompanying Notes to Record of Boreholes'.

Scale: 1:47 Page: 2 of 3



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

	LITHOLOGY PROFILE	SC	OIL SA	MPLI	NG			FIELD TESTING	LAB TESTING		
					%QC			PenetrationTesting	* Rinse pH Values 2 4 6 8 10 12	INSTRUMENTATION INSTALLATION	
ot	DESCRIPTION	e	Sample Number	(%	SPT 'N' Value/RQD%	_	E Z	O SPT • DCPT  MTO Vane* Nilcon Vane*	Soil Vapour Reading  Description (ppm)  Description	NOT NOT	COMMENTS
gy PI		e Typ	e Nur	ery (5	r' <al< td=""><td>E</td><td>ATO</td><td>Δ Intact</td><td>Lower Explosive Limit (LEL)  W_p W W_i</td><td>LLAT</td><td></td></al<>	E	ATO	Δ Intact	Lower Explosive Limit (LEL)  W _p W W _i	LLAT	
Lithology Plot		Sample Type	ampl	Recovery (%)	F F	ОЕРТН (m)	ELEVATION	* Undrained Shear Strength (kPa) 20 40 60 80	Plastic Liquid	STR	
	BEDROCK: Shale, highly weathered to excellent qaulity, occasional Limestone layers, grey, moist	S	S	Ľ.	S S	-	ш	20 40 60 80	20 40 60 80		
	to damp	RC	9	100	91	-					
	- Excellent Quality					-					
						F 20					
						— 20 -					
						E					
						_					
						-					
	0 10 "	RC	10	96	89	- 21		0		目	
	- Good Quality					<b>-</b> -					
						F					
						Ė					
						<u> </u>					
						— 22 -					
						<u>-</u>					
		RC	11	100	92	-					
	- Excellent Quality	1.0	''	100	02	Ē					
						_ — 23					
	Borehole terminated at 23.32 23.3					_					
	Notes: 1. Borehole open upon completion of drilling.										
	Groundwater level not measured upon completion of drilling due to introduced drilling										
	water										

R	ECORD	OF BOREHOI	LE No	o. <u>l</u>	BH1	04E	Α							111	B.I.G. GONSLING
	ject Number:	BIGC-ENV-490D							Drilling	Location:	See BH Loc	ation Plan		Logged by:	TD
Pro	ject Client:	Oakville Argus Cross L	LP						Drilling	Method:	150 mm So	olid Stem Augers		Compiled by:	TD
Pro	ject Name:	Remediation Report							Drilling	Machine:	Truck Moun	ted Drill		Reviewed by:	
Pro	ject Location:	581-587 Argus Road, C	Dakville, (	Ontari	0				Date 9	Started:	22 Mar 9	Date Completed: 22 Ma	nr 9	Revision No.:	0, 22-4-4
	LITH	OLOGY PROFILE		so	IL SA	MPLI	NG			FIELD	TESTING	LAB TESTING			
Lithology Plot	Geodetic Groun	DESCRIPTION  d Surface Elevation: 103.61 n	n	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT  MTO Vane*  Δ Intact  ▲ Remould	tionTesting  ■ DCPT  Nilcon Vane*  ◇ Intact  ◆ Remould  ear Strength (kPa)  60 80	★ Rinse pH Values   2 4 6 8 10 12	INSTRUMENTATION INSTALLATION	COMMEN	TS
_ ;;;	ASPHALT PA	VEMENT: 76 mm Asphalt ov	/er103 ₀ 53					-			: :				
		, some sand, some gravel,		SS	1	79	11	-  -  -  -  -	103 -	0					
	Cobble pieces		102.00	SS	2	51	38	- - 1 - - - -	-	0					
	CLAYE SILT	FILL: grey, moist	102.09	SS	3	100	40	- - - - - - 2	102 -	Ó					
17	End of Boreh	ole	101.48 2.1					-	-		: :				
	Notes: 1. Borehole of	en upon completion of drillin	ng.												

RI	ECORD	OF BOREH	OLE N	ο.	BH1	104N	ΙA							11	B.I.G. GONGLING
	ject Number:								Drilling	g Location:	See BH Loca	ation Plan		Logged by:	TD
Pro	ject Client:	Oakville Argus Cro	oss LP						Drilling	g Method:	_150 mm So	olid Stem Augers		Compiled by:	TD
Pro	ject Name:	Remediation Repo	ort						Drilling	g Machine:	Truck Moun	ted Drill		Reviewed by:	
Pro	ject Location:	581-587 Argus Roa	ad, Oakville,	Ontari	0				Date 9	Started:	22 Mar 9	Date Completed: 22 Ma	ar 9	Revision No.:	0, 22-4-4
	LITH	OLOGY PROFILE	<u> </u>	SC	IL SA	MPLI	NG			FIELD	TESTING	LAB TESTING			
							%ДХ			Penetra	ationTesting	★ Rinse pH Values 2 4 6 8 10 12	NO NO		
Lithology Plot	Geodetic Groun	DESCRIPTION  d Surface Elevation: 103 mm Asphalt over 280 n	<b>3.61 m</b> nm 103,53	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT  MTO Vane*  Δ Intact  ♣ Remould  * Undrained SI 20 40	<ul> <li>♦ Intact</li> <li>♦ Remould</li> </ul> hear Strength (kPa)	Soil Vapour Reading  △ parts per million (ppm) 100 200 300 400  ▲ Lower Explosive Limit (LEL) Wp W WL  Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMEN	тѕ
<b>**</b>	\Granular	ilt, reddish brown, moist	0.7	SS	1	84	12	- - -	103 —	0					
				SS	2	75	4	- - - - - 1 - - - -	-	0					
				ss	3	41	13	- - - -	102 -	0					
▩	End of Boreh	ole	101.48 2.1					2 							
	Notes:														
	1. Borehole o	pen upon completion of	drilling.												
										: :	: :				
	Consulting In														_

 $\frac{\textstyle \sum}{\scriptstyle =}$  No freestanding groundwater measured in open borehole on completion of drilling.

ECORE	OF BOREHOLE N	ο.	<u>BH</u> ′	1045	<u>SA</u>							B.LG. GONGLETING INC
ject Number	BIGC-ENV-490D						Drilling	g Location:	See BH Loc	ation Plan		Logged by:
ject Client:	Oakville Argus Cross LP						Drilling	g Method:	150 mm Sc	olid Stem Augers		Compiled by: TD
ect Name:	Remediation Report						_	g Machine:	Truck Moun			Reviewed by:
ject Location	: 581-587 Argus Road, Oakville,	Ontari	io				Date \$	Started:	22 Mar 9	Date Completed: 22 M	ar 9	Revision No.: <b>0, 22-4-4</b>
LITI	HOLOGY PROFILE	SC	DIL SA	MPLI					TESTING	LAB TESTING		
Ocadatia Ocaz	DESCRIPTION  and Surface Elevation: 103.61 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DЕРТН (m)	ELEVATION (m)	O SPT  MTO Vane³  Δ Intact  ▲ Remould	<ul> <li>♦ Intact</li> <li>♦ Remould</li> </ul> hear Strength (kPa)	★ Rinse pH Values         9         10         12           2 4 6 8 10         12         30         40           Soil Vapour Reading         4 parts per million (ppm)         100         20         30         40           Lower Explosive Limit (LEL)         Wp.         W         W         L           Plastic         Liquid         Liquid         20         40         60         80	INSTRUMENTATION INSTALLATION	COMMENTS
ASPHALT: { granular	50 mm Asphalt over 200 mm 10366	SS	1	70	9	- - - -	<u> </u>	0				
trace gravel	I, oxidation, cobble pieces	SS	2	100	38	- - - - - 1	103 -	0				
CLAYEY SIL	102.00 T TILL: grey, moist 1.6	SS	3	75	50	- - - - -	102 -		0			
End of Bore	101.48 Phole 2.1					— 2 -						
Notes:	open upon completion of drilling.											

 $\frac{\nabla}{\overline{z}}$  No freestanding groundwater measured in open borehole on completion of drilling.

RI	ECORD	OF BOREHOLE N	<b>o.</b>	BH1	<u> 104V</u>	<u>VA</u>							B.I.G. Consultation
Proj	ject Number:	BIGC-ENV-490D						Drilling	Location:	See BH Loca	ation Plan		Logged by: TD
Proj	ject Client:	Oakville Argus Cross LP						Drilling	Method:	150 mm So	lid Stem Augers		Compiled by: TD
	ect Name:	Remediation Report						Drilling	Machine:	Truck Moun			Reviewed by:
Proj	ect Location:	581-587 Argus Road, Oakville,	Ontari	io				Date S	Started:	22 Mar 9	_ Date Completed: 22 M	ar 9	Revision No.: 0, 22-4-4
	LITH	OLOGY PROFILE	SC	IL SA	MPLI				FIELD.	TESTING	LAB TESTING		
ithology Plot		DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT MTO Vane* Δ Intact ▲ Remould	tionTesting  ■ DCPT  Nilcon Vane*  ◇ Intact  ■ Remould  ear Strength (kPa)  60 80	# Rinse pH Values  2 4 6 9 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	INSTRUMENTATION INSTALLATION	COMMENTS
≫	ASPHALT: 76	mm Asphalt over 254 mm 103.53	0)	0)	IL.	O)	-	<u> </u>	20 40	60 80	20 40 60 80	==	
❈	FILL: Silty clay	- /	SS	1	51	15	- - -	103 —	0				
	Slag inclusion	is and cobble pieces	SS	2	84	25	- - - - 1 -	-	0				
<b>※</b> *	CLAYEY SILT	TILL: mottled grey, moist 1.5	SS	3	100	50	- - - - - - - 2	102 -		0			
1	End of Boreh	101.48 ole 2.1										-	
	Notes: 1. Borehole of	pen upon completion of drilling.											

 $\frac{\nabla}{\overline{z}}$  No freestanding groundwater measured in open borehole on completion of drilling.

		OF BOREHOLE NO	<b>o.</b>	BH1	104V	<u>VB</u>		Drilling	J Location:	See BH Loca	ation Plan		Logged by: TD
Project	Client:	Oakville Argus Cross LP						Drilling	Method:	150 mm So	lid Stem Augers		Compiled by: TD
Project	Name:	Remediation Report						Drilling	Machine:	Truck Mount	ted Drill		Reviewed by:
Project	Location:	581-587 Argus Road, Oakville,	Ontari	0				Date S	Started:	22 Mar 9	_ Date Completed: 22 N	lar 9	Revision No.: 0, 22-4-4
	LITH	OLOGY PROFILE	SO	IL SA	MPLI	NG			FIELD	TESTING	LAB TESTING	ПТ	
Lithology Plot		DESCRIPTION  d Surface Elevation: 103.61 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEРТН (m)	ELEVATION (m)	Penetra O SPT MTO Vane* △ Intact ▲ Remould	DCPT  Nilcon Vane*     Intact     Remould ear Strength (kPa)	# Rinse pH Values 2 4 6 8 10 12 Soil Vapour Reading Δ parts per million (ppm) 100 290 300 400  ■ Lower Explosive Limit (LEL) W _P W W _L Plastic Liquid 20 40 60 80	INSTRUMENTATION INSTALLATION	COMMENTS
FI E	SPHALT: 76 canular LL: Silty clay and of Borehotes:	mm Asphalt over 254 mm 103 53 7, black staining, brown moist 103.00		1	87	10		103	20 490		20 40 80		

	OF BOREHOLE N	0.	BH1	<u> 105</u>								B.I.G. GONGLINGS
	BIGC-ENV-490D						_	Location:	See BH Loca			Logged by: TD
Project Client:	Oakville Argus Cross LP						_	Method:		olid Stem Augers		Compiled by: TD
Project Name:	Remediation Report	<b>.</b>	,				_	Machine:	Truck Mount			Reviewed by:
	581-587 Argus Road, Oakville,						Date S	Started:	22 Mar 9	_ Date Completed: 22 M	ar 9	Revision No.: <u>0, 22-4-4</u>
LITH	IOLOGY PROFILE	SC	IL SA	MPLI					TESTING	LAB TESTING  ★ Rinse pH Values		
told A A A A A A A A A A A A A A A A A A A	DESCRIPTION  and Surface Elevation: 104.37 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT  MTO Vane*  Δ Intact  ▲ Remould	■ DCPT  Nilcon Vane*     ♦ Intact     • Remould  ear Strength (kPa)     60 80	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: 1 granular  FILL: Silty cla brown, moisti  End of Borel  Notes:	14 mm Asphalt over 228 mm 104.26 0.1 ıy, cobble pieces, brown to reddish 103.76	SS SS	1	62	15		104 = =	O O				

Proj Proj Proj	pject Number:  BIGC-ENV-349E  pject Client:  Distrikt Capital  Phase Two ESA Update  217 & 227 Cross Ave, and 571				Ontario		Drilling Drilling	g Location: g Method: g Machine: Started:	See BH Loca 150 mm So Truck Moun 21 Aug 20	lid Stem Augers		g 20	Logged by: TVH Compiled by: TD Reviewed by: Revision No.: 0, 22	
	LITHOLOGY PROFILE	SC	OIL SA	MPLI	_				TESTING tionTesting	LAB TES  ★ Rinse pH Values 2 4 6 8		N O		
Lithology Plot	DESCRIPTION  Geodetic Ground Surface Elevation: 102.83 m	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT  MTO Vane*  Δ Intact  ▲ Remould	● DCPT  Nilcon Vane*  ◇ Intact ◆ Remould  ear Strength (kPa)	Soil Vapour R  △ parts per million ( 100 200 30  ▲ Lower Explosive   W _P W  Plastic 20 40 60	eading ppm) 0 400 Limit (LEL) W _L Liquid	INSTRUMENTATION INSTALLATION	COMMENTS	
	ASPHALT PAVEMENT: 150 mm Asphalt oven2.68 150 mm granular FILL: Clayey silt, trace sand, trace gravel, brown, moist		1	59	13	- - - - -	- - - -	0						
		SS	2	17	50/3	- - - 1 -	102 -							
<b>※</b>	BEDROCK: Shale, highly weathered, grey, 1011/16 moist 1.7 End of Borehole			20	30/3	- - - -	101 -							
	Notes: 1. Borehole open upon completion of drilling.					<u> </u>	-							
											:			
	G Consulting Inc	•												

 $\frac{\textstyle \sum}{\textstyle =}$  No freestanding groundwater measured in open borehole on completion of drilling.

RI	ECORD	OF BOREHOLE N	o.	<u>BH2</u>	202								B.I.G. Consultivision
Project Number: BIGC-ENV-349E  Project Client: Distrikt Capital  Project Name: Phase Two ESA Update  Project Location: 217 & 227 Cross Ave, and 571		BIGC-ENV-349E							Location:	See BH Loca	ation Plan	Logged by: TVH	
		Distrikt Capital	Distrikt Capital							150 mm So	olid Stem Augers	Compiled by: TD	
		Phase Two ESA Update						Drilling	Machine:	Truck Moun	ted Drill		Reviewed by:
		Argus	Rd, Oa	akville	Ontari	0	Date Started:		21 Aug 20	Date Completed: 21 A	ug 20	Revision No.: <u>0, 22-4-5</u>	
LITHOLOGY PROFILE			SC	SOIL SAMPLING					FIELD TESTING		LAB TESTING		
Lithology Plot		DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DЕРТН (m)	ELEVATION (m)	O SPT  MTO Vane*  Δ Intact  ▲ Remould  * Undrained Sh	tionTesting  ■ DCPT  Nilcon Vane*  ◇ Intact  ● Remould  ear Strength (kPa)	★ Rinse pH Values         2         4         6         8         10         12           Soil Vapour Reading         2         parts per million (ppm)         100         200         300         400           Lower Explosive Limit (LEL)         W _P W _L W _L Plastic         Liquid	INSTRUMENTATION INSTALLATION	COMMENTS
	ASPHALT: 15	d Surface Elevation: 102.83 m 0 mm Asphalt over 150 mm 102.68	ΐ	ű	Ř	<u>i</u>	-	<u> </u>	20 40	60 80	20 40 60 80	22	
<b>**</b>	∖Granular	silt, trace sand, trace gravel,	SS	1	75	10	-  -  -  -  -	-	0				
7/1	CLAYEY SILT mottled grey-b	TILL: trace sand and gravel, 0.8 rown, moist	SS	2	84	30	- - - - 1 - -	102 -	Ó				
1	BEDROCK: S	101.31 hale, highly weathered, grey, 1.5					<u> </u>	-					
X	moist End of Boreh	101.00	SS	3	81	50/4	Ė	101 -					
	Notes:						<del>-</del> 2	-					
	1. Borehole of	nen upon completion of drilling.											

	ECORD OF BOREHOLE N	ο.	BH2	<u> 203</u>								B.I.G. GOMGATIVES
Project Number: BIGC-ENV-349E							Drilling Method:		See BH Loca		Logged by: TVH	
	Project Client: Distrikt Capital									lid Stem Augers	Compiled by: TD	
Project Name: Phase Two ESA Update							_	Machine:	Truck Mount			Reviewed by:
Project Location: 217 & 227 Cross Ave, and 571 A			rgus Rd, Oakville Ontario					Started:	21 Aug 20	_ Date Completed: 21 A	ug 20	Revision No.: <b>0, 22-4-5</b>
LITHOLOGY PROFILE			SOIL SAMPLING					FIELD	TESTING	LAB TESTING		
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	EVATION (m)	O SPT  MTO Vane*  Δ Intact  ▲ Remould  * Undrained Sh	tionTesting  DCPT  Nilcon Vane*  Intact Remould  Rear Strength (kPa)	★     Rinse pH Values     2     4     6     8     10     12       Soil Vapour Reading       △     parts per million (ppm)       100     200     300     400       ▲     Lower Explosive Limit (LEL)       Wp     Wp       ■     —     —       Plastic     Liquid	INSTRUMENTATION	COMMENTS
=	Geodetic Ground Surface Elevation: 102.83 m  ASPHALT: 150 mm Asphalt over 200 mm 102.68	ιχ	ιχ	ř	ß		<u> </u>	20 40	60 80	20 40 60 80	22	
	∖granular 0.£ FILL: Sandy silt, trace clay and gravel, rootlets, brown to red, moist to very moist	ss	1	33	7	- - - -	- - -	0				
₩		SS	2	16	50/5	-	102 -					
$\overset{\infty}{?}$	BEDROCK: Shale, highly weather, grey, moist 1.1		_			<u></u> 1 − 1	-				1	
$\gg$	101.31					-						
	End of Borehole 1.5						-					
	Notes: 1. Borehole open upon completion of drilling.					<b>F</b> _	101 -					
						2 	-				1	
									: :			
								: :	: :			
								: :	: :			

RI	ECORD OF BOREHOLE N	ο.	BH2	204								B.I.G. GOMMATHIC INC.
Project Number: BIGC-ENV-349E							Drilling Location:		See BH Loc	cation Plan	Logged by: TVH	
Project Client: <u>Distrikt Capital</u>							Drilling Method: Drilling Machine:		150 mm So	olid Stem Augers	Compiled by: TD	
Project Name: Phase Two ESA Update									Truck Moun	nted Drill		Reviewed by:
Pro	oject Location: 217 & 227 Cross Ave, and 571	Argus	argus Rd, Oakville Ontario					Started:	21 Aug 20	Date Completed: 21 Aug	20	Revision No.: <b>0, 22-4-5</b>
	LITHOLOGY PROFILE	SC	SOIL SAMPLING					FIELD :	TESTING	LAB TESTING		
					%ДС				tionTesting	★ Rinse pH Values 2 4 6 8 10 12	NOIT	
Lithology Plot	DESCRIPTION	Sample Type	Sample Number	Recovery (%)	SPT 'N' Value/RQD%	DEPTH (m)	ELEVATION (m)	O SPT  MTO Vane*  △ Intact  ▲ Remould  * Undrained Sh 20 40	DCPT  Nilcon Vane*  ◇ Intact  ◆ Remould  ear Strength (kPa)  60 80	W _P W W _L Plastic Liquid	INSTRUMENTATION INSTALLATION	COMMENTS
	Geodetic Ground Surface Elevation: 102.83 m  ASPHALT: 150 mm Asphalt over 300 mm 102.68	0)	o)	IL.	0)	-	<u>ш</u>	2,0 4,0	60 80	20 40 60 80	==	
<b>※</b>	granular 0.17  FILL: Silty sand, trace gravle, brown, moist	SS	1	33	14	-		0				
₩	102.07 CLAYEY SILT TILL: Trace sand, trace gravel, 0.8					Ė	102 -					
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	mottled grey, moist	SS	2	59	18	<u> </u>		0				
1	BEDROCK: Shale, highly weathered, grey, 1.5					-						
$\gg$	moist 100.85	SS	3	22	50/4	-	101 -					
//	End of Borehole 2.0					— 2 -						
	Notes:  1. Borehole open upon completion of drilling.											
								: :				

 $\underline{\underline{\nabla}}$  No freestanding groundwater measured in open borehole on completion of drilling.