

May 28, 2020

**XCG File No. 1-898-25-03**

Mr. Nate Doornekamp  
Siderius Developments Ltd.  
Odessa, Ontario K0H 2H0

**Sent via Email: [nate@doornekamp.ca](mailto:nate@doornekamp.ca)**

**Re: Addendum to the Phase Two Environmental Site Assessment (ESA) at 40 Sir John A. MacDonald Boulevard, Kingston, Ontario**

Dear Mr. Doornekamp:

### **1. INTRODUCTION**

XCG Consulting Limited (XCG) was retained by Siderius Developments Ltd. to conduct a Phase II Environmental Site Assessment (ESA) of the property at 40 Sir John A. MacDonald Boulevard in Kingston, Ontario. The Phase II ESA work was completed on November 25, 2019, and a report entitled “Phase II Environmental Site Assessment, 40 Sir John A. Macdonald Boulevard, Kingston, Ontario,” and dated January 17, 2020, documents the findings. The assessment and report followed the general requirements set out by Canadian Standards Association (CSA) Standard Z769-00 (R2018).

The Phase II ESA report concluded that relatively minor soil contamination exists on the Phase II Property, in several of the areas investigated. The purpose of this addendum is to supplement the findings of the Phase II ESA and further delineate the extent of contamination, where contamination was previously identified, and estimate the quantity of soil requiring remediation.

This Addendum to the Phase Two ESA report followed the general requirements set out by CSA Standard Z769-00 (R2018). The procedures and methodology followed in completing the supplementary investigations are as described in the Phase Two ESA report referenced above.

### **2. SUPPLEMENTARY PHASE TWO ESA ACTIVITIES**

The supplementary Phase Two ESA field activities were completed on January 30 and 31, 2020. The supplementary Phase Two ESA activities included the advancement of 34 additional test pits at the subject site. The methods used to advance the test pits were the same as the methods described in the Phase Two ESA report referenced above. Similar to the Phase Two ESA report referenced above, the Ministry of the Environment (MOE)<sup>1</sup> Table 3 Full Depth Generic Site Conditions Standards in a Non-Potable Ground Water Condition, and Table 7 Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, for residential/ parkland/ institutional land use, were used to evaluate soil quality.

The rationale for the locations of the new test pits as well as a summary of exceedances is provided in Table 1, attached.

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<sup>1</sup> Previously also known as the Ministry of the Environment (MOE), Ministry of the Environment and Energy (MOEE), and the Ministry of Environment and Climate Change (MOECC). Currently known as the Ministry of the Environment, Conservation and Parks (MECP).  
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Several exceedances of the applicable MOE Table 3 and 7 standards were observed in the new test pit locations. Test pit TP20E-3, located to the south of TP19-18, failed to meet the applicable MOE Table 3 and 7 standards for lead. Additional soil excavation will need to be conducted in this area in order to verify the southern extents of contamination. Exceedances for Electric conductivity (EC) were observed in test pits TP20F-1, and TP20F-4, which are located near MW19-6. These exceedances are likely due to historical applications of road salt along the pathway and do not reflect actual contamination on site. Further delineation for EC exceedances will not be required for remediation. Lead exceedances were also identified at TP20J-2, located near AEC1-EW SA8, and further soil excavation to the east will need to be conducted in order to verify the eastern extents of contamination. All other test pits, advanced for the purposes of this addendum, met the applicable site condition standards for soil. The estimated total volume of contaminated soil that will need to be removed from the site, for the purposes of remediation, is 900 cubic metres ( $m^3$ ) or 1,800 tonnes. Table 2, attached, shows the estimated volume of soil that will need to be removed from each of the delineated areas.

The analytical results for soil, for both the Phase Two ESA and the addendum, are provided in Tables 3 to 6 attached. The laboratory Certificates of analysis are provided in Appendix A.

### **3. CONCLUSIONS AND LIMITATIONS**

#### **3.1 Conclusions**

Based on the results of the supplemental investigations conducted on the Phase Two Property, additional delineation needs to be conducted near TP19-18 and AEC1-EW SA8 for lead. The extents of contamination identified on the Phase Two Property have been successfully delineated for the other historical exceedances. The estimated total volume of contaminated soil that will need to be removed from the site, for the purposes of remediation, is 900  $m^3$  or 1,800 tonnes.

The limitations of this letter report are the same as outlined in the Phase Two ESA report referenced above.

Yours very truly,

XCG CONSULTING LIMITED



Kamin Paul, B.A.Sc., EIT  
Project Specialist



Kevin Shipley, M.A.Sc., P.Eng., EP (CEA), EP, QPRA  
Partner

Attachments: Tables 1 - 6

Figures

Attachment A – Laboratory Certificates of Analysis



***ATTACHMENTS***

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***TABLES***

**Table 1 Test pit locations and Evaluations**

Test Pit Name	Location of Previously Identified Contamination	Description of Delineation	Summary of Exceedance
TP20A-1	BH04-3	Further delineation of Cobalt contamination in all directions	Meets applicable Standards
TP20A-2			
TP20A-3			
TP20A-4			
TP20B-1	BH04-2	Further delineation of xylene contamination to the north	Meets applicable Standards
TP20C-1	MW19-1	Further delineation of lead contamination in all directions	Meets applicable Standards
TP20C-2			
TP20C-3			
TP20C-4			
TP20D-1	TP19-1 and TP04-3	Further delineation of lead contamination in all directions	Meets applicable Standards
TP20D-2			
TP20D-3			
TP20D-4			
TP20E-1	TP19-18, MW19-2 and MW04-6	Further delineation of lead and mercury contamination to the north, east, and south	Meets applicable Standards
TP20E-2			Does not meet applicable standards for lead
TP20E-3			Does not meet applicable standards for EC
TP20F-1	MW19-6	Further delineation of electric conductivity (EC) in all directions	Meets applicable Standards
TP20F-2			
TP20F-3			
TP20F-4			
TP20G-1	AEC3-WW SA2	Further delineation of mercury contamination to the north, east and west	Meets applicable Standards
TP20G-2			
TP20G-3			
TP20H-1	AEC3-WW SA1	Further delineation of mercury contamination to the south, east and west	Meets applicable Standards
TP20H-2			
TP20H-3			
TP20I-1	AEC1-EW SA4	Further delineation of lead contamination in all directions	Meets applicable Standards
TP20I-2			
TP20I-3			
TP20I-4			
TP20J-1	AEC1-EW SA8 and MW04-4	Further delineation of lead contamination to the east of MW04-4, and to the east, west, and northwest	Meets applicable Standards
TP20J-2			Does not meet applicable standards for lead
TP20J-3			
TP20J-4			Meets applicable Standards

**Table 2 Estimated Volume of Soil to be Removed**

<b>Location</b>	<b>Volume (m<sup>3</sup>)</b>	<b>Soil description</b>	<b>Remediation Comments</b>
MW19-1	18	Dark brown moist earth	Extents verified
TP19-1	135	Dark brown moist earth with boulders and gravel	Extents verified
AEC3-WW-SA2	34	Dark brown earth, sand, gravel mix	Extents verified
AEC3-WW-SA1	20	Dark brown earth, sand, gravel mix	Extents verified
AEC3-SW SA6	95	Loose sand, gravel, cobbles and boulders	Approximate extents verified. Additional confirmatory sampling may be required.
AEC2-NW-SA2	28	Brown silty sand with clay	Extents verified
TP04-22	21	Brown silty sand with clay	Approximate extents verified. Additional confirmatory sampling may be required.
AEC2-WW SA1	26	Brown silty sand with clay	Approximate extents verified. Additional confirmatory sampling may be required.
MW19-2	291	Dark brown sand, gravel, and clay	Northern extents verified, excavation will need to remove material similar to contaminated material on the eastern and southern ends - volume removal is an estimate. Additional confirmatory sampling required.
AEC1-EW SA8	61	Clayey, gravelly sand with some boulders and cobbles	Western extents verified, excavation will need to remove material similar to contaminated material on the eastern end - volume removal is an estimate. Additional confirmatory sampling required.
MW04-4	65	Clayey, gravelly sand, some boulders and cobbles, some fill	Extents verified
AEC1-EW SA4	13	Dark brown sand, gravel, clay, and some boulders	Extents verified
BH04-10	30	Brown clayey silt with trace sand and gravel	Extents verified
TP04-9	30	Brown clayey sand	Extents verified
MW04-5	29	Brown silty sand, trace gravel	Extents verified
BH04-2	19	Dark brown earth	Extents verified
BH04-3	11	Dark brown earth	Extents verified
Total	923		

**Table 3 Summary of Analytical Results for BTEX and PHCs in Soil**

Sample ID	Reg 153/04 (2011) - Table 3 Residential / Parkland / Institutional Property Use  (µg/g)	Reg 153/04 (2011) - Table 7 Residential / Parkland / Institutional Property Use  (µg/g)	Reportable Detection Limit  (µg/g)	BH04-1 SS-3	BH04-2		RPD	BH04-3 SS-3	BH04-4 SS-2	BH04-5 GS-1	BH04-8 GS-1	BH04-10 GS-1	MW04-1 SS-4	MW04-3 SS-5	MW04-4 SS-3	MW04-5 SS-1	MW04-6 SS-4	TP04-1 GS-3	
Location				BH04-1 SS-3	BH04-2 GS-1	DUP #1 (BH04-2)		BH04-3 SS-3	BH04-4 SS-2	BH04-5 GS-1	BH04-8 GS-1	BH04-10 GS-1	MW04-1 SS-4	MW04-3 SS-5	MW04-4 SS-3	MW04-5 SS-1	MW04-6 SS-4	TP04-1 GS-3	
Laboratory				Paracel	Paracel	Paracel		Paracel	Paracel	Paracel	Paracel	Paracel	PSC	PSC	PSC	PSC	PSC	PSC	
Laboratory ID				-	-	-		-	-	-	-	-	-	-	-	-	-	-	
Depth of Sample (m bgs)				1.52 - 2.13	0 - 0.76	0 - 0.76		1.52 - 2.13	0.76 - 1.37	0 - 0.76	0 - 0.76	0 - 0.76	1.8 - 2.2	2.6 - 2.9	1.4 - 1.8	0 - 0.6	1.8 - 2.4	3.0	
Sample Date				5-Feb-04	5-Feb-04	5-Feb-04		5-Feb-04	5-Feb-04	5-Feb-04	5-Feb-04	5-Feb-04	9-Aug-04	9-Aug-04	9-Aug-04	9-Aug-04	9-Aug-04	9-Aug-04	
Date of F1 Analysis				-	-	-		-	-	-	-	-	-	-	-	-	-	-	
Date of BTEX Analysis				-	-	-		-	-	-	-	-	-	-	-	-	-	-	
Date of F2/F3/F4 Analysis				-	-	-		-	-	-	-	-	-	-	-	-	-	-	
Date of F4G Analysis				-	-	-		-	-	-	-	-	-	-	-	-	-	-	
Analytical Report Reference				-	-	-		-	-	-	-	-	G244792	G244792	G244793	G244794	G244795	G244796	
Benzene	0.21	0.21	0.02	< 0.002	< 0.05	< 0.002	NC	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002		
Toluene	2.3	2.3	0.2	< 0.002	< 0.1	0.002	NC	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.002	< 0.002	< 0.002		
Ethylbenzene	2	2	0.05	< 0.002	0.45	0.006	195%	< 0.002	< 0.002	0.004	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002		
Xylenes, total	3.1	3.1	0.03	< 0.002	10.6	0.008	200%	< 0.002	< 0.002	0.022	< 0.002	< 0.002	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004		
TPH - gasoline/diesel (C5-C24)	F1 PHCs (C6-C10) F2 PHCs (C10-C16) F3 PHCs (C16-C34)	55 98 300	55 98 300	10 5 10	20	40	20	NC	20	20	30	<10	80	<10 <10.0 <10.0	<10 21.6 42.5	<10 16.8 132	<10 15.8 83.9	<10 <10.0 24.9	<10 <10.0 <10.0
TPH - heavy oils (C24-C50)	F4 PHCs (C34-C50) F4 PHC Gravimetric	2800	2800	10	50	<50	50	NC	50	150	150	<50	1700	<10.0 <10.0	11.0 481	53.4 481	16.2 53.4	<10.0 <10.0	
<b>Notes:</b>																			
Concentrations Reported in µg/g dry weight																			
Ltd PhII	Jacques Whitford, 2004, "Limited Phase II Environmental Site Assessment, 40 Sir John A. MacDonald, Kingston, Ontario," dated April 22, 2004, prepared for Canada Lands Company CLC Limited																		
SuppPhII	Jacques Whitford, 2004, "Supplemental Phase II Environmental Site Assessment, Kingston Prison for Women," dated September 9, 2004																		
Ph III	Jacques Whitford, 2005, "Phase III Delineation Environmental Site Assessment, Kingston Prison for Women," dated January 13, 2005																		
<	Below laboratory RDL (Reportable Detection Limit)																		
<b>Bold &amp; Highlighted</b>	Parameter concentration exceeds MOE Table 3 & 7 Standards																		
RPD	Relative Percent Difference calculated as the absolute difference between duplicate results divided by the average expressed in percent.																		
NC	Not Calculated																		
-	Not Analyzed/ Not applicable																		
MOE Table 3 Standards	Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (2011), Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, All Types of Property Use																		
MOE Table 7 Standards	Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (2011), Generic Site Condition Standards for Shallow Soils in a Non-Potable Groundwater Condition, All Types of Property Use																		
Investigations conducted as an addendum to the Phase Two ESA																			

**Table 3 Summary of Analytical Results for BTEX and PHCs in Soil**

Sample ID	Reg 153/04 (2011) - Table 3 Residential / Parkland / Institutional Property Use	Reg 153/04 (2011) - Table 7 Residential / Parkland / Institutional Property Use	Reportable Detection Limit	TP04-2 GS-3	TP04-3 GS-4	TP04-4 GS-3	TP04-5 GS-3	TP04-6 GS-1	TP04-9 GS-1	TP04-10 GS-1	Fill Composite #1 (BH04-13 & BH04-14)	Fill Composite #2 (BH04-15 & BH04-16)	Fill Composite #3 (BH04-17 & BH04-18)	TP04-15 Composite	TP04-16 Composite	TP04-17 Composite	TP04-18 Composite
Location				TP04-2 GS-3	TP04-3 GS-4	TP04-4 GS-3	TP04-5 GS-3	TP04-6 GS-1	TP04-9 GS-1	TP04-10 GS-1	BH04-13 & BH04-14	BH04-15 & BH04-16	BH04-17 & BH04-18	TP04-15 Composite	TP04-16 Composite	TP04-17 Composite	TP04-18 Composite
Laboratory				PSC	Paracel & PSC	Paracel & PSC	Paracel & PSC	Paracel & PSC	Paracel & PSC	Paracel & PSC	Paracel & PSC						
Laboratory ID				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Depth of Sample (m bgs)				3.4	2.8	2.2	2.4	1.0	0.75	1.0	-	-	-	0.04 - 1	0.04 - 1	0.04 - 1	0.04 - 1
Sample Date				9-Aug-04	5-Nov-04	5-Nov-04	5-Nov-04	26-Nov-04	26-Nov-04	26-Nov-04	26-Nov-04						
Date of F1 Analysis				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of BTEX Analysis				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of F2/F3/F4 Analysis				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Date of F4G Analysis				-	-	-	-	-	-	-	-	-	-	-	-	-	-
Analytical Report Reference				G244797	G244798	G244799	G244800	G244801	G244803	G244804	-	-	-	-	-	-	-
Benzene				0.21	0.21	0.02	< 0.002	< 0.002	< 0.002	< 0.002	0.002	< 0.002	-	-	-	-	-
Toluene				2.3	2.3	0.2	< 0.002	< 0.002	< 0.002	< 0.002	0.003	< 0.002	-	-	-	-	-
Ethylbenzene				2	2	0.05	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-	-	-	-	-
Xylenes, total				3.1	3.1	0.03	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-	-	-	-	-
TPH - gasoline/diesel (C5-C24)	F1 PHCs (C6-C10)			55	55	10	<10	<10	<10	<10	<10	<10	-	-	-	-	-
	F2 PHCs (C10-C16)			98	98	5	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10	<10	<10	<10	<10
	F3 PHCs (C16-C34)			300	300	10	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	232	<10	<10	<10	<10
TPH - heavy oils (C24-C50)	F4 PHCs (C34-C50)			2800	2800	10	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	726	<10	<10	<10	<10
	F4 PHC Gravimetric						-	-	-	-	-	-	-	-	-	-	-

**Notes:**

Concentrations Reported in µg/g dry weight

Ltd PhII Jacques Whitford, 2004, "Limited Phase II Environmental Site Assessment, 40 Sir John A. MacDonald, Kingston, Ontario," dated April 22, 2004, prepared for Canada Lands Company CLC Limited

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Ph III Jacques Whitford, 2005, "Phase III Delineation Environmental Site Assessment, Kingston Prison for Women," dated January 13, 2005

< Below laboratory RDL (Reportable Detection Limit)

**Bold & Highlighted** Parameter concentration exceeds MOE Table 3 & 7 Standards

RPD Relative Percent Difference calculated as the absolute difference between duplicate results divided by the average expressed in percent.

NC Not Calculated

- Not Analyzed/ Not applicable

MOE Table 3 Standards Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (2011), Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, All Types of Property Use

MOE Table 7 Standards Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (2011), Generic Site Condition Standards for Shallow Soils in a Non-Potable Groundwater Condition, All Types of Property Use

Investigations conducted as an addendum to the Phase Two ESA

**Table 3 Summary of Analytical Results for BTEX and PHCs in Soil**

Sample ID	Reg 153/04 (2011) - Table 3 Residential / Parkland / Institutional Property Use	Reg 153/04 (2011) - Table 7 Residential / Parkland / Institutional Property Use	Reportable Detection Limit	BH04-19 Composite "D"	MW19-1	MW19-2		MW19-3			MW19-4	MW19-5	MW19-6
Location				BH04-19 Composite	MW19-1 6"-2'	MW19-2 4'-6'9"	MW19-2 7'3"- 10'	MW19-3 9"-3'4"	MW19-3 6'6"-8'	MW19-3 20'-21'	MW19-4 2'-3'8"	MW19-5 9"-3'4"	MW19-6 0'-1'6"
Laboratory				Paracel & PSC	Caduceon	Caduceon	Caduceon	Caduceon	Caduceon	Caduceon	Caduceon	Caduceon	Caduceon
Laboratory ID				-	B19-18946-1	B19-18946-2	B19-20317-2	B19-18946-3	B19-20317-3	B19-18946-4	B19-18946-5	B19-19072-1	B19-19072-2
Depth of Sample (m bgs)				0.04 - 0.76	0.46 - 0.61	1.22 - 2.06	2.21 - 3.05	0.23 - 1.02	1.98 - 2.44	6.1 - 6.40	0.61 - 1.12	0.229 - 1.02	0 - 0.457
Sample Date				13-Dec-04	25-Jun-19	25-Jun-19	25-Jun-19	25-Jun-19	25-Jun-19	25-Jun-19	25-Jun-19	26-Jun-19	26-Jun-19
Date of F1 Analysis				-	27-Jun-19	27-Jun-19	10-Jul-19	27-Jun-19	-	27-Jun-19	27-Jun-19	28-Jun-19	28-Jun-19
Date of BTEX Analysis				-	27-Jun-19	27-Jun-19	-	27-Jun-19	10-Jul-19	-	27-Jun-19	-	-
Date of F2/F3/F4 Analysis				-	27-Jun-19	27-Jun-19	11-Jul-19	27-Jun-19	-	27-Jun-19	27-Jun-19	27-Jun-19	27-Jun-19
Date of F4G Analysis				-	27-Jun-19	27-Jun-19	11-Jul-19	27-Jun-19	-	27-Jun-19	27-Jun-19	2-Jul-19	2-Jul-19
Analytical Report Reference				-	B19-18946	B19-18946	B19-20317	B19-18946	B19-20317	B19-18946	B19-18946	B19-19072	B19-19072
Benzene	0.21	0.21	0.02	-	-	< 0.02	< 0.02	< 0.02	< 0.02	-	< 0.02	-	-
Toluene	2.3	2.3	0.2	-	-	< 0.2	< 0.2	< 0.2	< 0.2	-	< 0.2	-	-
Ethylbenzene	2	2	0.05	-	-	< 0.05	< 0.05	< 0.05	< 0.05	-	< 0.05	-	-
Xylenes, total	3.1	3.1	0.03	-	-	< 0.03	< 0.03	< 0.03	< 0.03	-	< 0.03	-	-
TPH - gasoline/diesel (C5-C24)	F1 PHCs (C6-C10) F2 PHCs (C10-C16) F3 PHCs (C16-C34)	55 98 300	10 5 10	- < 10 < 10	< 10 < 6 < 10	< 10 < 5 14	< 10 < 6 11	< 10 < 5 < 10	< 10 < 5 -	< 10 < 5 < 10	< 10 < 5 < 10	< 10 < 5 29	
TPH - heavy oils (C24-C50)	F4 PHCs (C34-C50) F4 PHC Gravimetric	2800	2800	10	< 10 -	< 10 -	< 10 -	< 10 -	< 10 -	< 10 -	< 10 -	34 580	
<b>Notes:</b>													
Concentrations Reported in µg/g dry weight													
Ltd PhII	Jacques Whitford, 2004, "Limited Phase II Environmental Site Assessment, 40 Sir John A. MacDonald, Kingston, Ontario," dated April 22, 2004, prepared for Canada Lands Company CLC Limited												
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<b>Bold &amp; Highlighted</b>	Parameter concentration exceeds MOE Table 3 & 7 Standards												
RPD	Relative Percent Difference calculated as the absolute difference between duplicate results divided by the average expressed in percent.												
NC	Not Calculated												
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Investigations conducted as an addendum to the Phase Two ESA													

**Table 3 Summary of Analytical Results for BTEX and PHCs in Soil**

Sample ID	Reg 153/04 (2011) - Table 3 Residential / Parkland / Institutional Property Use	Reg 153/04 (2011) - Table 7 Residential / Parkland / Institutional Property Use	Reportable Detection Limit	TP19-2		TP20B		RPD
				TP19-2 (0.8)	Soil Duplicate	TP20B-1	DUP-03	
Location				Caduceon	Caduceon	Caduceon	Caduceon	
Laboratory				B19-21395-4	B19-21395-4	B20-03039-5	B20-03039-38	
Laboratory ID				0.8	0.8	0.8	0.8	
Depth of Sample (m bgs)				15-Jul-19	15-Jul-19	31-Jan-20	31-Jan-20	
Sample Date				17-Jul-19	17-Jul-19	-	-	
Date of F1 Analysis				17-Jul-19	17-Jul-19	-	-	
Date of BTEX Analysis				18-Jul-19	18-Jul-19	-	-	
Date of F2/F3/F4 Analysis				-	-	-	-	
Date of F4G Analysis				B19-21395	B19-21395	B20-03039	B20-03039	
Analytical Report Reference								
Benzene	0.21	0.21	0.02	< 0.02	< 0.02	-	-	-
Toluene	2.3	2.3	0.2	< 0.2	< 0.2	-	-	-
Ethylbenzene	2	2	0.05	< 0.05	< 0.05	-	-	-
Xylenes, total	3.1	3.1	0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 3 x MDL
TPH - gasoline/diesel (C5-C24)	F1 PHCs (C6-C10) F2 PHCs (C10-C16) F3 PHCs (C16-C34)	55 98 300	10 5 10	< 10 < 5 < 10	< 10 < 5 < 10	- -	- -	-
TPH - heavy oils (C24-C50)	F4 PHCs (C34-C50) F4 PHC Gravimetric	2800	2800	10	< 10 -	< 10 -	- -	-
<b>Notes:</b>								
Concentrations Reported in µg/g dry weight								
Ltd PhII	Jacques Whitford, 2004, "Limited Phase II Environmental Site Assessment, 40 Sir John A. MacDonald, Kingston, Ontario," dated April 22, 2004, prepared for Canada Lands Company CLC Limited							
SuppPhII	Jacques Whitford, 2004, "Supplemental Phase II Environmental Site Assessment, Kingston Prison for Women," dated September 9, 2004							
Ph III	Jacques Whitford, 2005, "Phase III Delineation Environmental Site Assessment, Kingston Prison for Women," dated January 13, 2005							
<	Below laboratory RDL (Reportable Detection Limit)							
<b>Bold &amp; Highlighted</b>	Parameter concentration exceeds MOE Table 3 & 7 Standards							
RPD	Relative Percent Difference calculated as the absolute difference between duplicate results divided by the average expressed in percent.							
NC	Not Calculated							
-	Not Analyzed/ Not applicable							
MOE Table 3 Standards	Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (2011), Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, All Types of Property Use							
MOE Table 7 Standards	Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (2011), Generic Site Condition Standards for Shallow Soils in a Non-Potable Groundwater Condition, All Types of Property Use							
Investigations conducted as an addendum to the Phase Two ESA								

**Table 4 Summary of Analytical Results for Metals and Inorganics in Soil**

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Location				TP20D			TP20E			TP20F			TP20G			TP20H			TP20I			TP20J																	
Sample ID	Reg 153/04 (2011) - Table 3 Residential Parkland / Institutional Property Use	Reg 153/04 (2011) - Table 7 Residential / Parkland / Institutional Property Use	Reportable Detection Limit	TP20D-1	TP20D-2	TP20D-3	TP20D-4	TP20E-1	TP20E-2	TP20E-3	TP20F-1	TP20F-2	TP20F-3	DUP-02	TP20F-4	TP20G-1	TP20G-2	TP20G-3	TP20H-1	DUP-03	TP20H-2	TP20H-3	TP20I-1	TP20I-2	TP20I-3	TP20I-4	TP20J-1	DUP-05	TP20J-2	TP20J-3	TP20J-4								
Original Report				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
Laboratory				Caduceon	Caduceon	Caduceon	Caduceon	Caduceon	Caduceon	Caduceon	Caduceon	Caduceon	Caduceon	RPD	Caduceon																								
Laboratory ID			(µg/g)	B20-03039-11	B20-03039-12	B20-03039-13	B20-03039-14	B20-03039-15	B20-03039-16	B20-03039-17	B20-03039-18	B20-03039-19	B20-03039-20	B20-03039-21	B20-03039-22	B20-03039-23	B20-03039-24	B20-03039-25	B20-03039-26	B20-03039-27	B20-03039-28	B20-03039-29	B20-03039-30	B20-03039-31	B20-03039-32	B20-03039-33	B20-03039-34	B20-03039-35	B20-03039-36	B20-03039-37	B20-03039-38	B20-03039-39	B20-03039-40						
Depth of Sample (m bgs)				2.8	2.7	2.7	2.8	2.1	2.0	1.9	0.9	1.0	1.0		1.1	1.2	1.1	1.4	1.2	1.2	1.5	1.0	1.0	1.1	1.2	1.1	1.1	1.0	1.8	1.8	1.0	1.0							
Sample Date				30-Jan-20	30-Jan-20	30-Jan-20	30-Jan-20	30-Jan-20	30-Jan-20	30-Jan-20	30-Jan-20	30-Jan-20	30-Jan-20		31-Jan-20	30-Jan-20	30-Jan-20	30-Jan-20	30-Jan-20	30-Jan-20	30-Jan-20	31-Jan-20																	
Date of Metals Analysis				-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Analytical Report Reference No.				B20-03039	B20-03039	B20-03039	B20-03039	B20-03039	B20-03039	B20-03039	B20-03039	B20-03039	B20-03039		B20-03039																								
pH (unless)				Acceptable range: 6-9	Acceptable range: 6-9	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-							
Conductivity (mS/cm)				0.7	0.7	0.001	-	-	-	-	-	-	-		0.728	0.595	0.246	0.192	24.7%	0.742	-	-	-	-	-	-	-	-	-	-	-	-	-						
SAR (unless)				5	5	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Antimony				7.5	7.5	0.5	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Arsenic				18	18	0.5	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Boron				390	390	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Beryllium				4	4	0.2	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Boron (Hot Water Soluble)				1.5	1.5	0.02	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Boron (total)				120	120	0.5	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Chromium (VI)				8	8	0.2	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Cadmium				1.2	1.2	0.5	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Calcium				-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Chloride				NA	NA	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Chromium, total				160	160	1	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Cobalt				22	22	1	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Copper				140	140	1	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Cyanide, free				0.051	0.051	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Iron				-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
Lead				120	120	5	64	50	45	29	23	48	336		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	16	10	17	25	38	41.3%	136	65	38
Magnesium				-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Manganese				-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Mercury				0.27	0.27	0.005	-	-	-	-	-	-	-		0.048	0.110	0.192	-	-	0.152	0.107	0.115	0.063	0.070	10.53%	0.145	0.114	-	-	-	-	-	-	-	-	-	-		
Molybdenum				6.9	6.9	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Nickel				100	100	1	-	-	-	-</																													

Table 5 Summary of Analytical Results for PAHs in Soil

Location	Reg 153/04 (2011) - Table 3 Residential / Parkland / Institutional Property Use	(µg/g)	(µg/g)	BH04-1,2,3 COMP.	BH04-4,5,7 COMP.	BH04-8,9,10 COMP.	Fill Composite #1 (BH04-13 & BH04-14)	Fill Composite #2 (BH04-15 & BH04-16)	MW19-3		MW19-4	TP19-1		RPD	TP19-6	TP19-7	TP19-8	TP19-9
Sample ID				BH04-1,2,3 COMP.	BH04-4,5,7 COMP.	BH04-8,9,10 COMP.	Fill Composite #1 (BH04-13 & BH04-14)	Fill Composite #2 (BH04-15 & BH04-16)	MW19-3 9"-3'4"	MW19-3 20"-21'	MW19-4 2'-3'8"	TP19-1 (0-1m)	Duplicate-3		TP19-6 (2m)	TP19-7 (2m)	TP19-8 Centre	TP19-9 Centre
Original Report				Ltd PhII	Ltd PhII	Ltd PhII	Ph III	Ph III	-	-	-	-	-		-	-	-	
Laboratory				Paracel	Paracel	Paracel	Paracel & PSC	Paracel & PSC	Caduceon	Caduceon	Caduceon	Caduceon	Caduceon		Caduceon	Caduceon	Caduceon	Caduceon
Laboratory ID				-	-	-	-	-	B19-18946-3	B19-18946-4	B19-18946-5	B19-21395-14	B19-21395-19		B19-21395-2	B19-21395-3	B19-21653-9	B19-21653-4
Depth of Sample (mbgs)				5-Feb-04	5-Feb-04	5-Feb-04	5-Nov-04	5-Nov-04	25-Jun-19	25-Jun-19	25-Jun-19	15-Jul-19	15-Jul-19		2	2	1.5 - 1.7	1.5
Sample Date				-	-	-	-	-	27-Jun-19	27-Jun-19	27-Jun-19	22-Jul-19	22-Jul-19		15-Jul-19	15-Jul-19	16-Jul-19	16-Jul-19
Date of Analysis				-	-	-	-	-	B19-18946	B19-18946	B19-18946	B19-21395 (iii)	B19-21395 (iii)		22-Jul-19	22-Jul-19	22-Jul-19	24-Jul-19
Analytical Report Reference No.				-	-	-	-	-	B19-18946	B19-18946	B19-18946	B19-21395 (iii)	B19-21395 (iii)		B19-21395 (iii)	B19-21395 (iii)	B19-21653 (ii)	B19-21653 (ii)
Acenaphthene	7.9	7.9	0.05	< 0.020	0.06	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	<3 x MDL	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	0.15	0.15	0.05	< 0.020	< 0.020	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	<3 x MDL	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	0.67	0.67	0.05	< 0.020	0.06	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	<3 x MDL	< 0.05	< 0.05	< 0.05	< 0.05
Benzo[a]anthracene	0.5	0.5	0.05	< 0.020	0.10	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.1	0.13	26.1%	< 0.05	< 0.05
Benzo[a]pyrene	0.3	0.3	0.05	< 0.020	0.12	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.11	0.13	16.7%	< 0.05	< 0.05
Benzo[b]fluoranthene	0.78	0.78	0.05	< 0.020	0.10	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.16	0.17	6.1%	< 0.05	< 0.05
Benzo(b+k)fluoranthene	-	-	-	-	-	-	-	-	0.06	< 0.05	< 0.05	< 0.05	< 0.05	0.22	0.24	8.7%	< 0.05	< 0.05
Benzo(g,h,i)perylene	6.6	6.6	0.05	< 0.020	0.08	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.07	0.08	13.3%	< 0.05	< 0.05
Benzo[k]fluoranthene	0.78	0.78	0.05	< 0.020	0.04	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.06	0.07	15.4%	< 0.05	< 0.05
Biphenyl	0.31	0.31	-	< 0.020	0.02	< 0.040	-	-	-	-	-	-	-	-	-	-	-	-
Chrysene	7	7	0.05	< 0.020	0.16	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.12	0.15	22.2%	< 0.05	< 0.05
Dibenz[a,h]anthracene	0.1	0.1	0.05	< 0.020	0.02	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	0.69	0.69	0.05	< 0.020	0.20	< 0.040	<1.0	< 0.05	0.06	< 0.05	< 0.05	< 0.05	< 0.05	0.24	0.31	25.5%	< 0.05	< 0.05
Fluorene	62	62	0.05	< 0.020	0.02	< 0.040	<1.0	< 0.05	< 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	0.38	0.05	< 0.020	0.06	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.09	0.1	10.5%	< 0.05	< 0.05
1-Methylnaphthalene	0.99	0.99	0.05	< 0.020	0.42	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene	-	-	0.05	< 0.020	0.44	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methylnaphthalene (1&2)	0.99	0.99	0.05	-	-	-	-	-	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	0.6	0.6	0.05	< 0.020	0.3	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	6.2	6.2	0.05	< 0.020	0.30	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.09	0.11	20.0%	< 0.05	< 0.05
Pyrone	78	78	0.05	< 0.020	0.18	< 0.040	<1.0	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.21	0.26	21.3%	< 0.05	< 0.05

**Notes:**  
Concentrations Reported in µg/g dry weight

Ltd PhII Jacques Whitford, 2004, "Limited Phase II Environmental Site Assessment, 40 Sir John A. MacDonald, Kingston, Ontario," dated April 22, 2004, prepared for Canada Lands Company CLC Limited

SuppPhII Jacques Whitford, 2004, "Supplemental Phase II Environmental Site Assessment, Kingston Prison for Women," dated September 9, 2004

Ph III Jacques Whitford, 2005, "Phase III Delineation Environmental Site Assessment, Kingston Prison for Women," dated January 13, 2005

Remediation Jacques Whitford, 2008, "Final Report: Soil Remediation Below laboratory RDL (Reportable Detection Limit)"

**Bold & Highlighted** Parameter concentration  
Reportable Detection Limit exceeds MOE Table 3 and MOE Table 7 Standards

RPD Relative Percent Difference calculated as the absolute difference between duplicate results divided by the average expressed in percent.

NC Not Calculated

- Not Analyzed/ Not applicable

MOE Table 3 Standards Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (2011), Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, All Types of Property Use

MOE Table 7 Standards Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (2011), Generic Site Condition Standards for Shallow Soils in a Non-Potable Groundwater Condition, All Types of Property Use

Investigations conducted as an addendum to the Phase Two ESA

Table 5 Summary of Analytical Results for PAHs in Soil

Location	Reg 153/04 (2011) - Table 3 Residential / Parkland / Institutional Property Use	Reg 153/04 (2011) - Table 7 Residential / Parkland / Institutional Property Use	Reportable Detection Limit ( $\mu\text{g/g}$ )	TP19-10		TP19-11	TP19-12
				TP19-10-Centre	TP19-10-Bottom	TP19-11-Centre	TP19-12 Centre
Sample ID				-	-	-	-
Original Report				Caduceon	Caduceon	Caduceon	Caduceon
Laboratory				B19-21653-28	B19-21653-28	B19-21653-18	B19-21653-21
Laboratory ID				0.8	1.5	1.2	0.8
Depth of Sample (mbgs)				16-Jul-19	16-Jul-19	16-Jul-19	16-Jul-19
Sample Date				24-Jul-19	24-Jul-19	24-Jul-19	24-Jul-19
Date of Analysis				B19-21653 (ii)	B19-21653 (ii)	B19-21653 (ii)	B19-21653 (ii)
Analytical Report Reference No.							
Acenaphthene	7.9	7.9	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	0.15	0.15	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Anthracene	0.67	0.67	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo[a]anthracene	0.5	0.5	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo[a]pyrene	0.3	0.3	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo[b]fluoranthene	0.78	0.78	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(b+k)fluoranthene	-	-	-	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(g,h,i)perylene	6.6	6.6	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo[k]fluoranthene	0.78	0.78	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Biphenyl	0.31	0.31	-	-	-	-	-
Chrysene	7	7	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Dibenz[a,h]anthracene	0.1	0.1	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	0.69	0.69	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	62	62	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Indeno[1,2,3-cd]pyrene	0.38	0.38	0.05	< 0.05	< 0.05	< 0.05	< 0.05
1-Methylnaphthalene	0.99	0.99	0.05	< 0.05	< 0.05	< 0.05	< 0.05
2-Methylnaphthalene			0.05	< 0.05	< 0.05	< 0.05	< 0.05
Methylnaphthalene (1&2)	0.99	0.99	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Naphthalene	0.6	0.6	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	6.2	6.2	0.05	< 0.05	< 0.05	< 0.05	< 0.05
Pyrrene	78	78	0.05	< 0.05	< 0.05	< 0.05	< 0.05

**Notes:**  
Concentrations Reported in  $\mu\text{g/g}$  dry weight

Ltd PhII Jacques Whitford, 2004, "Limited Phase II Environmental Site Assessment, 40 Sir John A. MacDonald, Kingston, Ontario," dated April 22, 2004, prepared for Canada Lands Company CLC Limited

SuppPhII Jacques Whitford, 2004, "Supplemental Phase II Environmental Site Assessment, Kingston Prison for Women," dated September 9, 2004

Ph III Jacques Whitford, 2005, "Phase III Delineation Environmental Site Assessment, Kingston Prison for Women," dated January 13, 2005

Remediation Jacques Whitford, 2008, "Final Report: Soil Remediation Below laboratory RDL (Reportable Detection Limit)"

**Bold & Highlighted** Parameter concentration  
**<1.0** Reportable Detection Limit exceeds MOE Table 3 and MOE Table 7 Standards

RPD Relative Percent Difference calculated as the absolute difference between duplicate results divided by the average expressed in percent.

NC Not Calculated

- Not Analyzed/ Not applicable

MOE Table 3 Standards Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (2011), Full Depth Generic Site Condition Standards in a Non-Potable Groundwater Condition, All Types of Property Use

MOE Table 7 Standards Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (2011), Generic Site Condition Standards for Shallow Soils in a Non-Potable Groundwater Condition, All Types of Property Use

Investigations conducted as an addendum to the Phase Two ESA

**Table 6 Summary of Analytical Results for VOCs in Soil**

Sample Location	Reg 153/04 (2011) - Table 3	Reg 153/04 (2011) Table 7	Reportable Detection Limit	MW19-2	MW19-3		MW19-4	TP19-2		TP20B			
Sample ID		Residential / Parkland / Institutional Property Use		MW19-2 4'-6'9"	MW19-2 7'3"-10'	MW19-3 9"-3'4"	MW19-3 6'6"-8'	MW19-4 2'-3'8"	TP19-2 (0.8)	Soil Duplicate	TP20B-1	DUP-04	
Laboratory		Caduceon	Caduceon	B19-18946-2	B19-20317-2	Caduceon	Caduceon	Caduceon	Caduceon	Caduceon	Caduceon	Caduceon	
Laboratory ID				B19-20294-1	B19-20317-3	B19-18946-2	B19-21395-1	B19-21395-4			B20-03039-5	B20-03039-38	
Depth of Sample (mbgs)		1.22 - 2.06	2.21 - 3.05	0.23 - 1.02	1.98 - 2.44	0.61 - 1.12		0.8	0.8		0.8	0.8	
Sample Date		25-Jun-19	25-Jun-19	25-Jun-19	25-Jun-19	25-Jun-19		15-Jul-19	15-Jul-19		31-Jan-20	31-Jan-20	
Date of Analysis		27-Jun-19	10-Jul-19	27-Jun-19	10-Jul-19	27-Jun-19		17-Jul-19	17-Jul-19		-	-	
Analytical Report Reference No.	(µg/g)	(µg/g)	(µg/g)	B19-18946	B19-20317	B19-20294	B19-20317	B19-18946	B19-21395 (ii)	B19-21395 (ii)	B20-03039	B20-03039	
Acetone	16	16	0.5	< 0.5	< 0.5	2.7	< 0.5	< 0.5	< 0.5	< 0.5	< 3 x MDL	-	-
Benzene	0.21	0.21	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
Bromodichloromethane	13	13	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
Bromoform	0.27	0.27	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
Bromomethane	0.05	0.05	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 3 x MDL	-	-
Carbon Tetrachloride	0.05	0.05	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 3 x MDL	-	-
Chlorobenzene	2.4	2.4	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
Chloroform	0.05	0.05	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
Dibromochloromethane	9.4	9.4	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
Dichlorodifluoromethane	16	16	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 3 x MDL	-	-
1,2-Dichlorobenzene	3.4	3.4	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 3 x MDL	-	-
1,3-Dichlorobenzene	4.8	4.8	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 3 x MDL	-	-
1,4-Dichlorobenzene	0.083	0.083	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 3 x MDL	-	-
1,1-Dichloroethane	3.5	3.5	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
1,2-Dichloroethane	0.05	0.05	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
1,1-Dichloroethylene	0.05	0.05	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
cis-1,2-Dichloroethylene	3.4	3.4	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
trans-1,2-Dichloroethylene	0.084	0.084	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
1,2-Dichloropropane	0.05	0.05	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
cis-1,3-Dichloropropylene	-	-	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
trans-1,3-Dichloropropylene	-	-	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
1,3-Dichloropropene, total	0.05	0.05	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
Ethylbenzene	2	2	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 3 x MDL	-	-
Ethylene dibromide (dibromoethane, 1,2-)	0.05	0.05	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
Hexane	2.8	2.8	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
Methyl Ethyl Ketone (2-Butanone)	16	16	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 3 x MDL	-	-
Methyl Isobutyl Ketone	1.7	1.7	0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 3 x MDL	-	-
Methyl tert-butyl ether	0.75	0.75	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 3 x MDL	-	-
Methylene Chloride (Dichloromethane)	0.1	0.1	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 3 x MDL	-	-
Styrene	0.7	0.7	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 3 x MDL	-	-
1,1,1,2-Tetrachloroethane	0.058	0.058	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
1,1,2-Tetrachloroethane	0.05	0.05	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 3 x MDL	-	-
Tetrachloroethylene	0.28	0.28	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 3 x MDL	-	-
Toluene	2.3	2.3	0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 3 x MDL	-	-
1,1,1-Trichloroethane	0.38	0.38	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
1,1,2-Trichloroethane	0.05	0.05	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
Trichloroethylene	0.061	0.061	0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 3 x MDL	-	-
Trichlorofluoromethane	4	4	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
Vinyl Chloride	0.02	0.02	0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 3 x MDL	-	-
m/p-Xylene	-	-	0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 3 x MDL	< 0.03	< 0.03
o-Xylene	-	-	0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 3 x MDL	< 0.03	< 0.03
Xylenes, total	3.1	3.1	0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 3 x MDL	< 0.03	< 0.03

## Notes

Concentrations Reported in  $\mu\text{g/g}$  dry weight

\wedge

### Below laboratory RDL

Parameter concentration exceeds MOE Table 3 & 7 Standards

BORG & H

1

Relative Percent Difference calculated as the absolute difference between duplicate results divided by the average expressed in percent.

NC

Not Analyzed/ Not applica

Ontario Ministry of the Environment

MOE Table 7 Standards

Ontario Ministry of the Environment

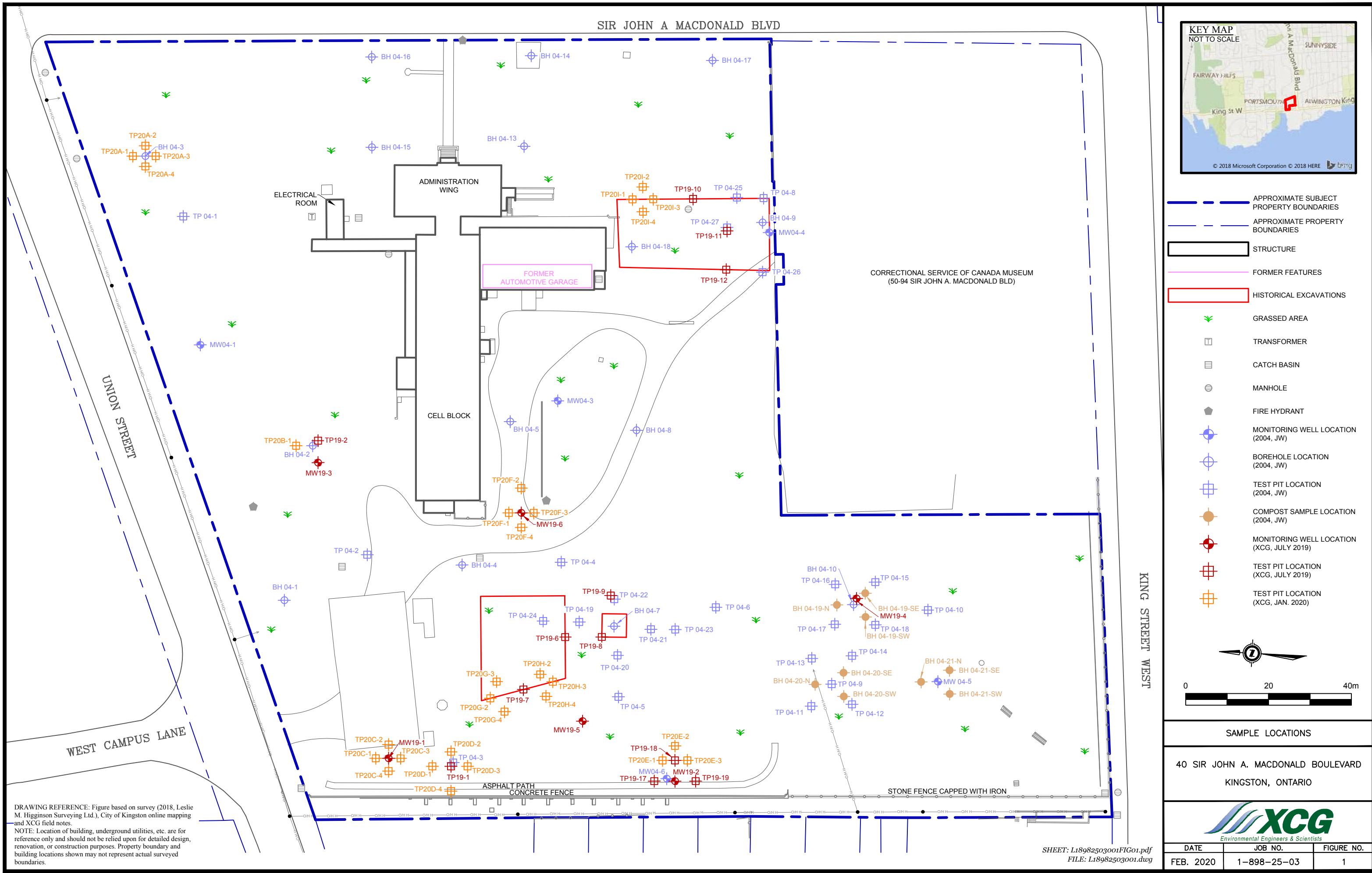
Ontario Ministry of the Environment's (MOE) Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act (2011), Generic Site Condition Standards for Shallow Soils in a Non-Potable Groundwater Condition, All Types of Property Use

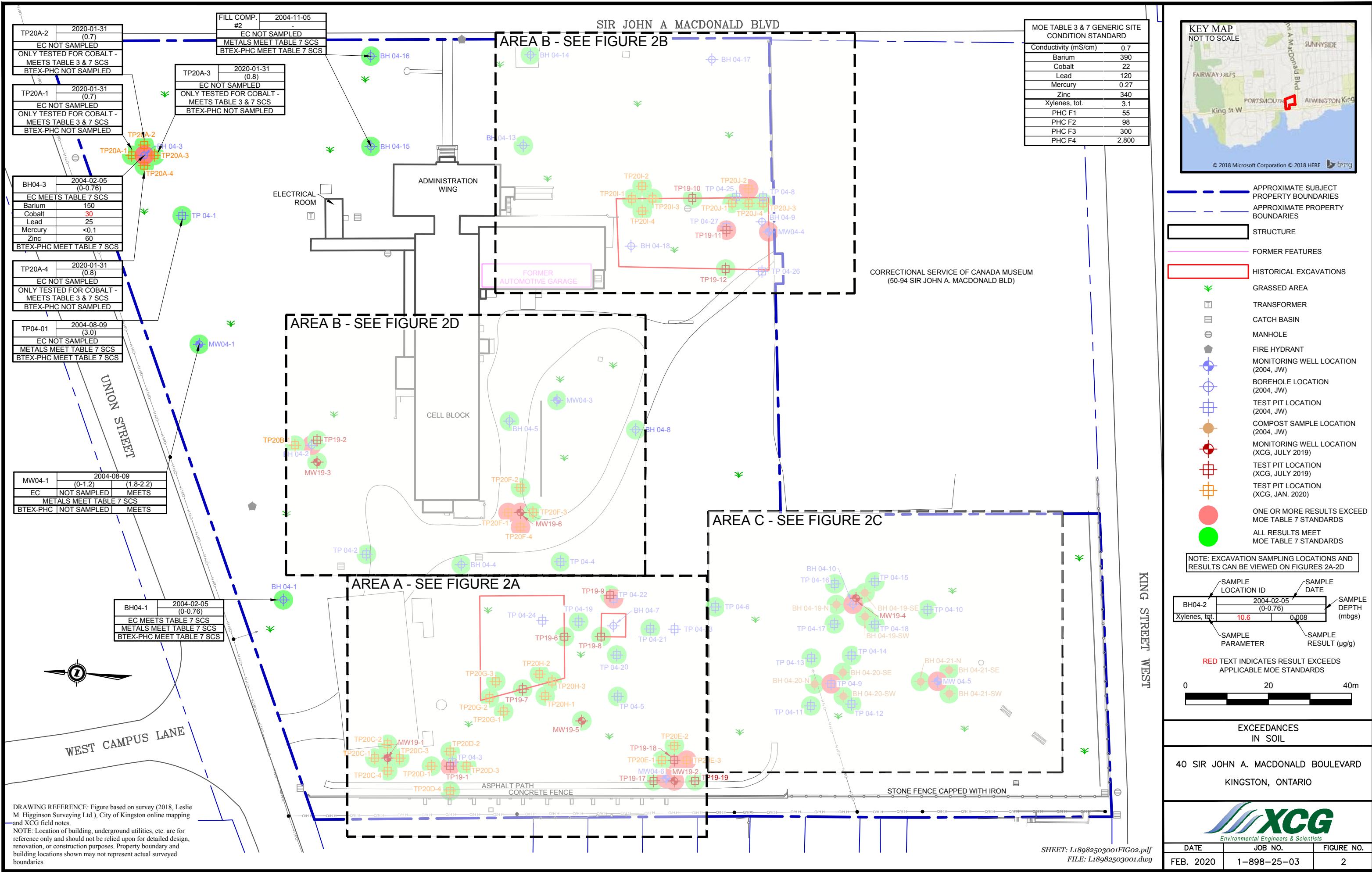
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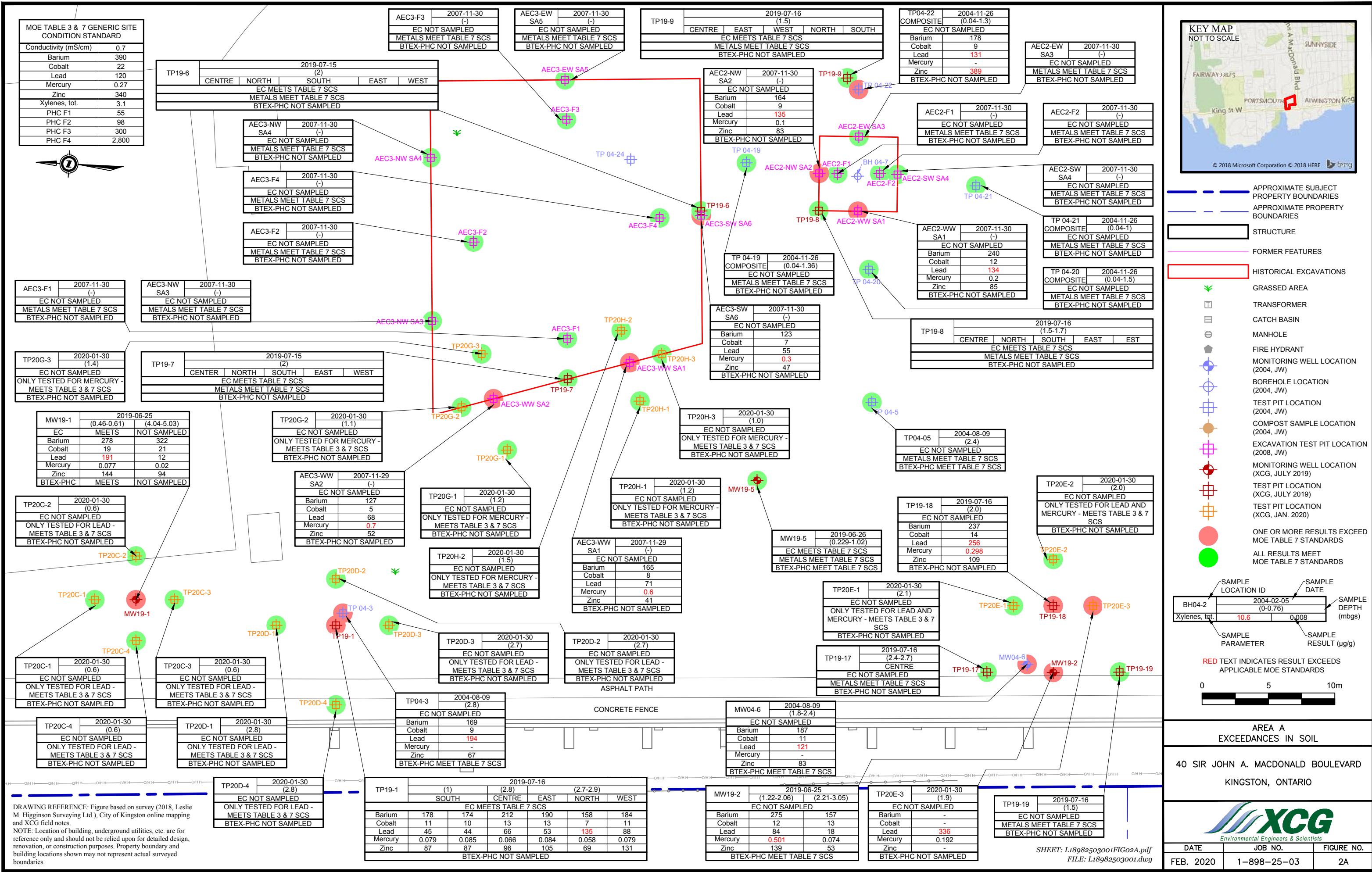
### Investigations conducted a

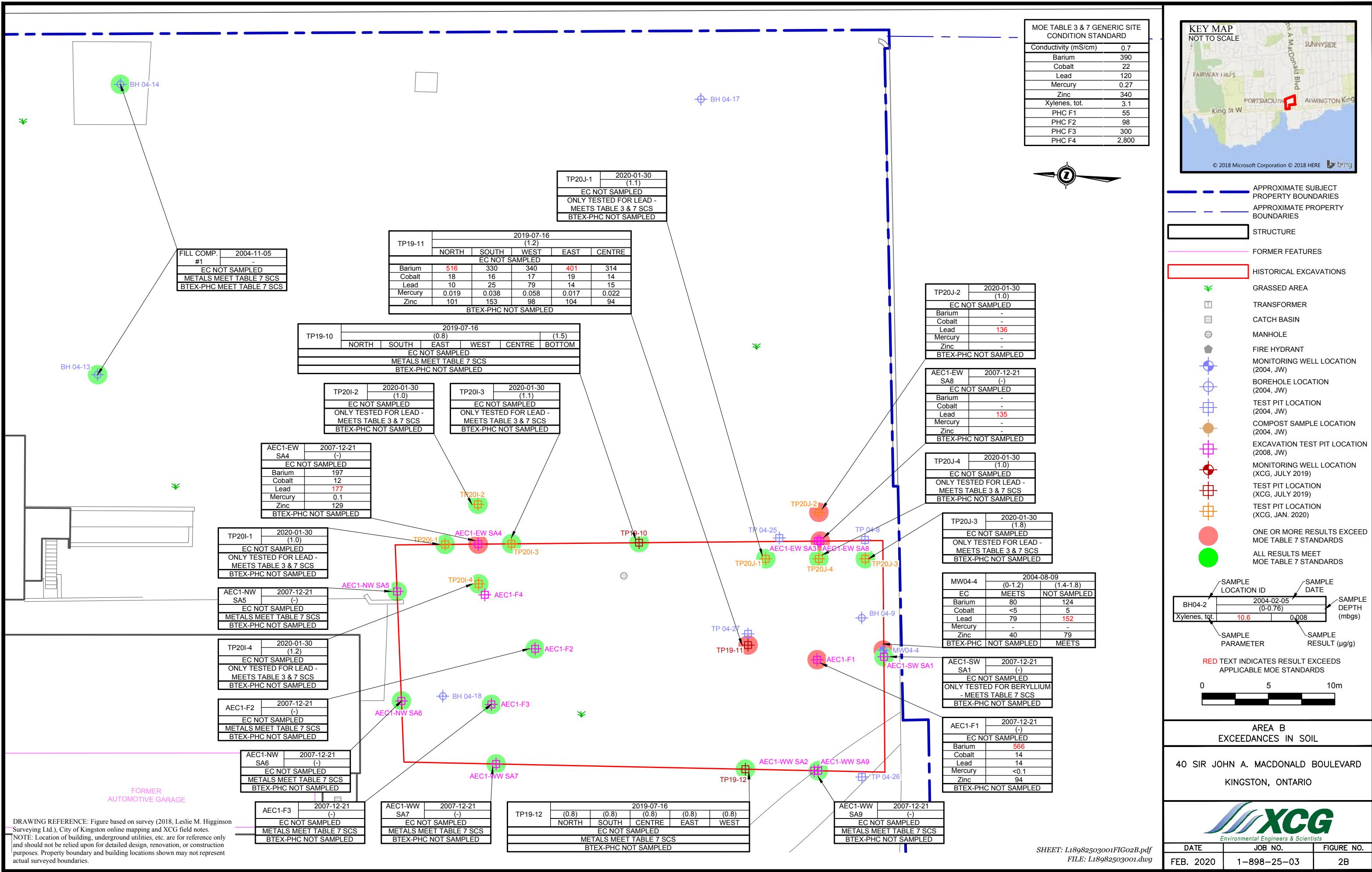
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**FIGURES**











MW19-4	2019-06-25 (0.61-1.12)
EC MEETS TABLE 7 SCS	
METALS MEET TABLE 7 SCS	
BTEX-PHC MEET TABLE 7 SCS	

BH04-10	2004-02-05 (0-0.76)
EC MEETS TABLE 7 SCS	
METALS MEET TABLE 7 SCS	
Xylenes, tot.	
Xylenes, tot.	<0.002
PHC F1	80
PHC F2	
PHC F3	1,700
PHC F4	

TP04-15	2004-11-26 COMPOSITE (0.04-1)
EC NOT SAMPLED	
METALS NOT SAMPLED	
BTEX-PHC MEET TABLE 7 SCS	

TP04-6	2004-08-09 (1.0)
EC NOT SAMPLED	
METALS MEET TABLE 7 SCS	
BTEX-PHC MEET TABLE 7 SCS	

TP04-16	2004-11-26 COMPOSITE (0.04-1)
EC NOT SAMPLED	
METALS NOT SAMPLED	
BTEX-PHC MEET TABLE 7 SCS	

TP04-10	2004-08-09 (1.0)
EC MEETS TABLE 7 SCS	
METALS MEET TABLE 7 SCS	
BTEX-PHC MEET TABLE 7 SCS	

BH 04-19	2004-12-13 COMPOSITE (0.04-0.76)
EC MEETS TABLE 7 SCS	
METALS NOT SAMPLED	
BTEX-PHC MEET TABLE 7 SCS	

TP04-17	2004-11-26 COMPOSITE (0.04-1)
EC NOT SAMPLED	
METALS NOT SAMPLED	
BTEX-PHC MEET TABLE 7 SCS	

TP 04-13	2004-11-30 COMPOSITE (0.04-1)
EC MEETS TABLE 7 SCS	
METALS NOT SAMPLED	
BTEX-PHC NOT SAMPLED	

TP 04-14	2004-11-30 COMPOSITE (0.04-0.85)
EC MEETS TABLE 7 SCS	
METALS NOT SAMPLED	
BTEX-PHC NOT SAMPLED	

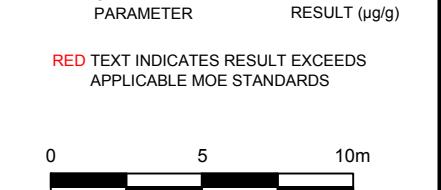
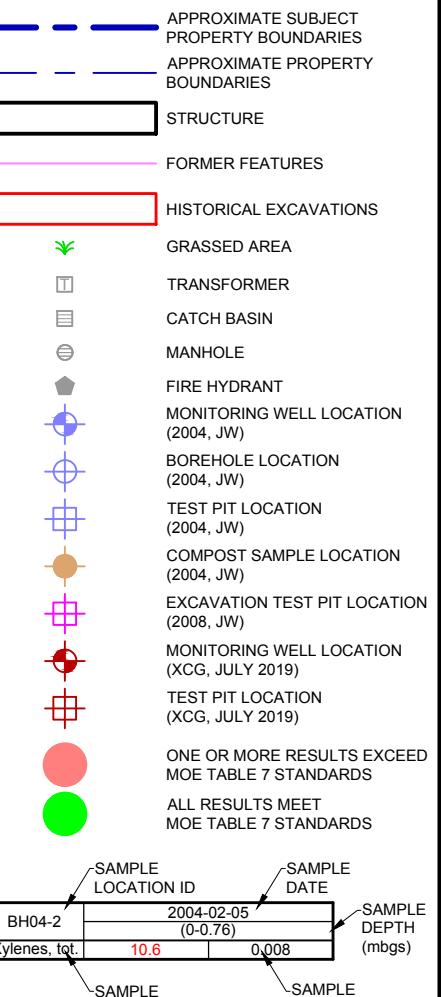
MW04-5	2004-08-09 (0-0.6)
EC NOT SAMPLED	
Barium	162
Cobalt	8
Lead	132
Mercury	-
Zinc	119

BH 04-20	2004-11-30 COMPOSITE (0.04-1.0)
EC MEETS TABLE 7 SCS	
METALS MEET TABLE 7 SCS	
BTEX-PHC NOT SAMPLED	

TP 04-11	2004-11-30 COMPOSITE (0.04-0.80)
EC MEETS TABLE 7 SCS	
METALS NOT SAMPLED	
BTEX-PHC NOT SAMPLED	

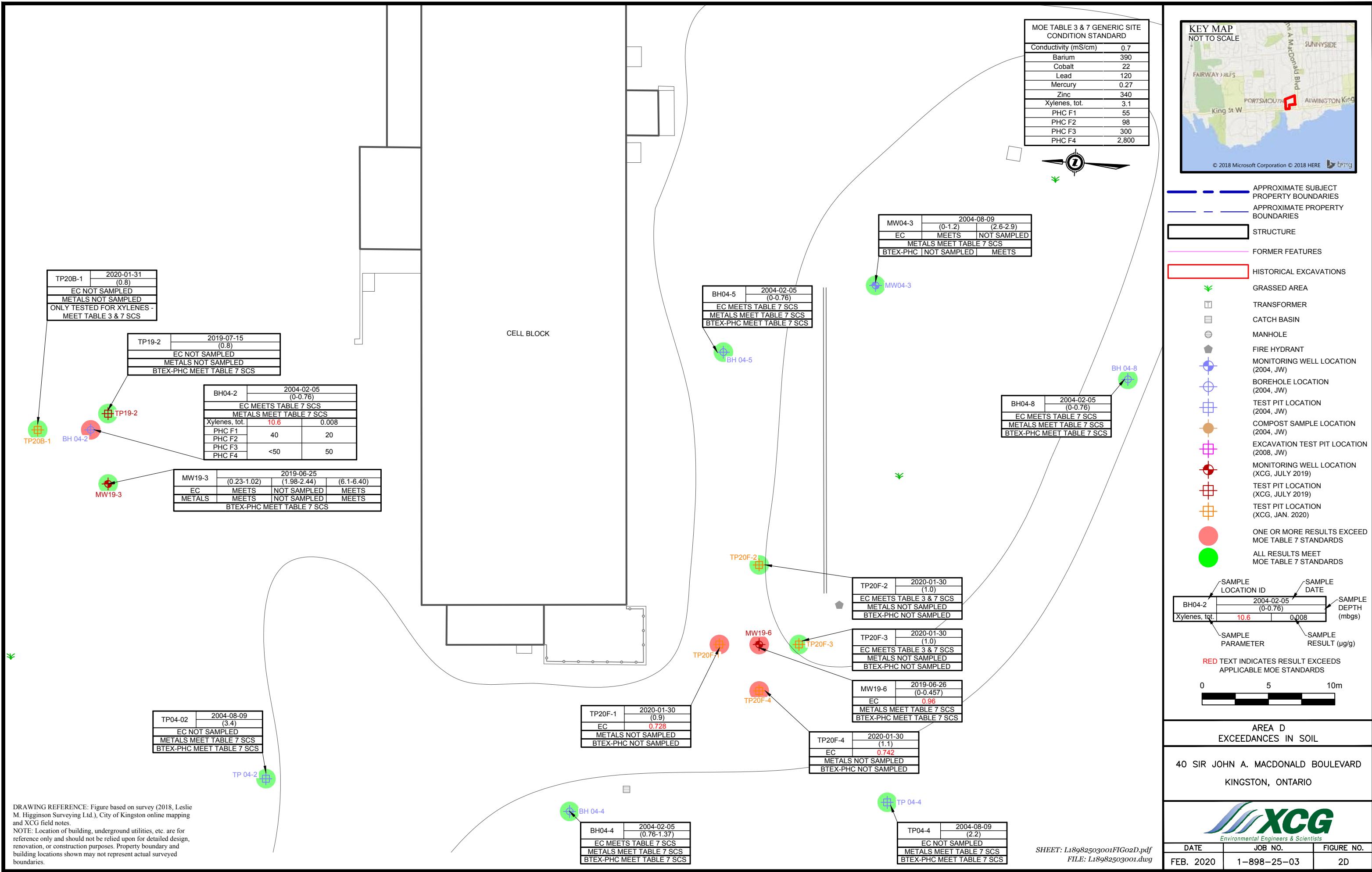
TP 04-12	2004-11-30 COMPOSITE (0.04-0.45)
EC MEETS TABLE 7 SCS	
METALS NOT SAMPLED	
BTEX-PHC NOT SAMPLED	

MOE TABLE 3 & 7 GENERIC SITE CONDITION STANDARD	
Conductivity (mS/cm)	0.7
Barium	390
Cobalt	22
Lead	120
Mercury	0.27
Zinc	340
Xylenes, tot.	3.1
PHC F1	55
PHC F2	98
PHC F3	300
PHC F4	2,800



40 SIR JOHN A. MACDONALD BOULEVARD  
KINGSTON, ONTARIO

**XCG**  
Environmental Engineers & Scientists



**ATTACHMENT A**  
**LABORATORY CERTIFICATES OF ANALYSIS**

**C.O.C.: G52753**

**REPORT No. B20-03039**

**Report To:**

**XCG Consulting Limited**

4 Cataraqui St, Suite 100, Woolen Mill, East Wing  
Kingston ON K7K 1Z7 Canada

**Attention:** Kamin Paul

DATE RECEIVED: 31-Jan-20

**Caduceon Environmental Laboratories**

285 Dalton Ave  
Kingston Ontario K7K 6Z1  
Tel: 613-544-2001  
Fax: 613-544-2770

JOB/PROJECT NO.: 1-898-25-03

DATE REPORTED: 10-Feb-20

P.O. NUMBER:

SAMPLE MATRIX: Soil

WATERWORKS NO.

Parameter	Qty	Site Analyzed	Analyst Initials	Date Analyzed	Lab Method	Reference Method
% Moisture	2	Kingston	KPR	07-Feb-20	A-% moisture K	
Conductivity	5	Holly Lane	ROD	05-Feb-20	A-COND-01 (o)	SM 2510B
VOC's	2	Richmond Hill	FAL	05-Feb-20	C-VOC-02 (rh)	EPA 8260
Mercury	10	Holly Lane	PBK	06-Feb-20	D-HG-01 (o)	EPA 7471A
Metals - ICP-OES	4	Holly Lane	AHM	05-Feb-20	D-ICP-02 (o)	EPA 6010

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

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

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

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

F4 C34-C50 hydrocarbons in µg/g

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

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

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

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

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

Linearity is within 15%:

All results expressed on a dry weight basis.

Unless otherwise noted all chromatograms returned to baseline by the retention time of nC50.

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

O. Reg. 153 - Soil, Ground Water and Sediment Standards  
Tbl. 3 - ICC Soil - Table 3 - Ind./Commercial/Community Soil Std  
Tbl. 7 - ICC Soil - Table 7 - Ind./Commercial/Community Soil Std



R.L. = Reporting Limit

Test methods may be modified from specified reference method unless indicated by an \*

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

Michelle Dubien

Lab Manager

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Kingston Ontario K7K 6Z1

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Fax: 613-544-2770

JOB/PROJECT NO.: 1-898-25-03

P.O. NUMBER:

WATERWORKS NO.

	Client I.D. Sample I.D. Date Collected	TP20A-1 B20-03039-1 31-Jan-20	TP20A-2 B20-03039-2 31-Jan-20	TP20A-3 B20-03039-3 31-Jan-20	TP20A-4 B20-03039-4 31-Jan-20	O. Reg. 153 Tbl. 3 - ICC Soil Tbl. 7 - ICC Soil
Parameter	Units	R.L.				
Conductivity @25°C	mS/cm	0.001				1.4      1.4
Cobalt	µg/g	1	14	12	15	80      80
Lead	µg/g	5				120      120
Mercury	µg/g	0.005				3.9      3.9
Xylene, m,p-	µg/g	0.03				
Xylene, o-	µg/g	0.03				
Xylene, m,p,o-	µg/g	0.03				26      26
% moisture	%					

O. Reg. 153 - Soil, Ground Water and Sediment Standards  
Tbl. 3 - ICC Soil - Table 3 - Ind./Commercial/Community Soil Std  
Tbl. 7 - ICC Soil - Table 7 - Ind./Commercial/Community Soil Std

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Lab Manager

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WATERWORKS NO.

	Client I.D. Sample I.D. Date Collected	TP20B-1 B20-03039-5 31-Jan-20	TP20C-1 B20-03039-6 30-Jan-20	TP20C-2 B20-03039-7 30-Jan-20	TP20C-3 B20-03039-8 30-Jan-20	O. Reg. 153 Tbl. 3 - ICC Soil	O. Reg. 153 Tbl. 7 - ICC Soil
Parameter	Units	R.L.					
Conductivity @25°C	mS/cm	0.001				1.4	1.4
Cobalt	µg/g	1				80	80
Lead	µg/g	5	27	66	29	120	120
Mercury	µg/g	0.005				3.9	3.9
Xylene, m,p-	µg/g	0.03	< 0.03				
Xylene, o-	µg/g	0.03	< 0.03				
Xylene, m,p,o-	µg/g	0.03	< 0.03			26	26
% moisture	%	15.9					

O. Reg. 153 - Soil, Ground Water and Sediment Standards  
Tbl. 3 - ICC Soil - Table 3 - Ind./Commercial/Community Soil Std  
Tbl. 7 - ICC Soil - Table 7 - Ind./Commercial/Community Soil Std

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Lab Manager

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SAMPLE MATRIX: Soil

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JOB/PROJECT NO.: 1-898-25-03

P.O. NUMBER:

WATERWORKS NO.

	Client I.D. Sample I.D. Date Collected	DUP-01 B20-03039-9 30-Jan-20	TP20-C-4 B20-03039-10 30-Jan-20	TP20D-1 B20-03039-11 30-Jan-20	TP20D-2 B20-03039-12 30-Jan-20	O. Reg. 153 Tbl. 3 - ICC Soil	O. Reg. 153 Tbl. 7 - ICC Soil
Parameter	Units	R.L.					
Conductivity @25°C	mS/cm	0.001				1.4	1.4
Cobalt	µg/g	1				80	80
Lead	µg/g	5	30	80	64	50	120
Mercury	µg/g	0.005				3.9	3.9
Xylene, m,p-	µg/g	0.03					
Xylene, o-	µg/g	0.03					
Xylene, m,p,o-	µg/g	0.03				26	26
% moisture	%						

O. Reg. 153 - Soil, Ground Water and Sediment Standards  
Tbl. 3 - ICC Soil - Table 3 - Ind./Commercial/Community Soil Std  
Tbl. 7 - ICC Soil - Table 7 - Ind./Commercial/Community Soil Std



R.L. = Reporting Limit

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

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Michelle Dubien  
Lab Manager

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**Attention:** Kamin Paul

DATE RECEIVED: 31-Jan-20

DATE REPORTED: 10-Feb-20

SAMPLE MATRIX: Soil

**Caduceon Environmental Laboratories**

285 Dalton Ave

Kingston Ontario K7K 6Z1

Tel: 613-544-2001

Fax: 613-544-2770

JOB/PROJECT NO.: 1-898-25-03

P.O. NUMBER:

WATERWORKS NO.

	<b>Client I.D.</b>		<b>TP20D-3</b>	<b>TP20D-4</b>	<b>TP20E-1</b>	<b>TP20E-2</b>	<b>O. Reg. 153</b>
	<b>Sample I.D.</b>		B20-03039-13	B20-03039-14	B20-03039-15	B20-03039-16	<b>Tbl. 3 - ICC Tbl. 7 - ICC</b>
	<b>Date Collected</b>		30-Jan-20	30-Jan-20	30-Jan-20	30-Jan-20	<b>Soil Soil</b>
<b>Parameter</b>	<b>Units</b>	<b>R.L.</b>					
Conductivity @25°C	mS/cm	0.001					1.4 1.4
Cobalt	µg/g	1					80 80
Lead	µg/g	5	45	29	23	48	120 120
Mercury	µg/g	0.005			0.048	0.110	3.9 3.9
Xylene, m,p-	µg/g	0.03					
Xylene, o-	µg/g	0.03					
Xylene, m,p,o-	µg/g	0.03					26 26
% moisture	%						

O. Reg. 153 - Soil, Ground Water and Sediment Standards  
 Tbl. 3 - ICC Soil - Table 3 - Ind./Commercial/Community Soil Std  
 Tbl. 7 - ICC Soil - Table 7 - Ind./Commercial/Community Soil Std



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Michelle Dubien  
 Lab Manager

C.O.C.: G52753

REPORT No. B20-03039

**Report To:**

**XCG Consulting Limited**

4 Cataraqui St, Suite 100, Woolen Mill, East Wing

Kingston ON K7K 1Z7 Canada

**Attention:** Kamin Paul

DATE RECEIVED: 31-Jan-20

DATE REPORTED: 10-Feb-20

SAMPLE MATRIX: Soil

**Caduceon Environmental Laboratories**

285 Dalton Ave

Kingston Ontario K7K 6Z1

Tel: 613-544-2001

Fax: 613-544-2770

JOB/PROJECT NO.: 1-898-25-03

P.O. NUMBER:

WATERWORKS NO.

	Client I.D.		TP20E-3	TP20F-1	TP20F-2	TP20F-3	O. Reg. 153
	Sample I.D.		B20-03039-17	B20-03039-18	B20-03039-19	B20-03039-20	Tbl. 3 - ICC Tbl. 7 - ICC
	Date Collected		30-Jan-20	30-Jan-20	31-Jan-20	30-Jan-20	Soil Soil
Parameter	Units	R.L.					
Conductivity @25°C	mS/cm	0.001		0.728	0.595	0.246	1.4 1.4
Cobalt	µg/g	1					80 80
Lead	µg/g	5	336				120 120
Mercury	µg/g	0.005	0.192				3.9 3.9
Xylene, m,p-	µg/g	0.03					
Xylene, o-	µg/g	0.03					
Xylene, m,p,o-	µg/g	0.03					26 26
% moisture	%						

O. Reg. 153 - Soil, Ground Water and Sediment Standards  
 Tbl. 3 - ICC Soil - Table 3 - Ind./Commercial/Community Soil Std  
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JOB/PROJECT NO.: 1-898-25-03

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WATERWORKS NO.

	Client I.D. Sample I.D. Date Collected		DUP-02 B20-03039-21 30-Jan-20	TP20F-4 B20-03039-22 31-Jan-20	TP20G-1 B20-03039-23 30-Jan-20	TP20G-2 B20-03039-24 30-Jan-20	O. Reg. 153 Tbl. 3 - ICC Soil Tbl. 7 - ICC Soil
Parameter	Units	R.L.					
Conductivity @25°C	mS/cm	0.001	0.192	0.742			1.4      1.4
Cobalt	µg/g	1					80      80
Lead	µg/g	5					120      120
Mercury	µg/g	0.005			0.152	0.107	3.9      3.9
Xylene, m,p-	µg/g	0.03					
Xylene, o-	µg/g	0.03					
Xylene, m,p,o-	µg/g	0.03					26      26
% moisture	%						

O. Reg. 153 - Soil, Ground Water and Sediment Standards  
Tbl. 3 - ICC Soil - Table 3 - Ind./Commercial/Community Soil Std  
Tbl. 7 - ICC Soil - Table 7 - Ind./Commercial/Community Soil Std



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WATERWORKS NO.

	Client I.D.		TP20G-3	TP20H-1	TP20H-2	TP20H-3	O. Reg. 153
	Sample I.D.		B20-03039-25	B20-03039-26	B20-03039-27	B20-03039-28	Tbl. 3 - ICC Tbl. 7 - ICC
	Date Collected		30-Jan-20	30-Jan-20	30-Jan-20	30-Jan-20	Soil Soil
Parameter	Units	R.L.					
Conductivity @25°C	mS/cm	0.001					1.4 1.4
Cobalt	µg/g	1					80 80
Lead	µg/g	5					120 120
Mercury	µg/g	0.005	0.115	0.063	0.143	0.114	3.9 3.9
Xylene, m,p-	µg/g	0.03					
Xylene, o-	µg/g	0.03					
Xylene, m,p,o-	µg/g	0.03					26 26
% moisture	%						

O. Reg. 153 - Soil, Ground Water and Sediment Standards  
 Tbl. 3 - ICC Soil - Table 3 - Ind./Commercial/Community Soil Std  
 Tbl. 7 - ICC Soil - Table 7 - Ind./Commercial/Community Soil Std



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	<b>Client I.D.</b>	<b>Sample I.D.</b>	<b>TP20I-1</b> B20-03039-29	<b>TP20I-2</b> B20-03039-30	<b>TP20I-3</b> B20-03039-31	<b>TP20I-4</b> B20-03039-32	<b>O. Reg. 153</b> <b>Tbl. 3 - ICC Tbl. 7 - ICC</b>
<b>Parameter</b>	<b>Units</b>	<b>R.L.</b>					<b>Soil</b>
Conductivity @25°C	mS/cm	0.001					1.4      1.4
Cobalt	µg/g	1					80      80
Lead	µg/g	5	17	16	10	17	120      120
Mercury	µg/g	0.005					3.9      3.9
Xylene, m,p-	µg/g	0.03					
Xylene, o-	µg/g	0.03					
Xylene, m,p,o-	µg/g	0.03					26      26
% moisture	%						

O. Reg. 153 - Soil, Ground Water and Sediment Standards  
 Tbl. 3 - ICC Soil - Table 3 - Ind./Commercial/Community Soil Std  
 Tbl. 7 - ICC Soil - Table 7 - Ind./Commercial/Community Soil Std



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P.O. NUMBER:

WATERWORKS NO.

	Client I.D.		TP20J-1 B20-03039-33	Dup-05 B20-03039-34	TP20J-2 B20-03039-35	TP20J-3 B20-03039-36	O. Reg. 153 Tbl. 3 - ICC Soil	O. Reg. 153 Tbl. 7 - ICC Soil
Parameter	Units	R.L.						
Conductivity @25°C	mS/cm	0.001					1.4	1.4
Cobalt	µg/g	1					80	80
Lead	µg/g	5	25	38	136	65	120	120
Mercury	µg/g	0.005					3.9	3.9
Xylene, m,p-	µg/g	0.03						
Xylene, o-	µg/g	0.03						
Xylene, m,p,o-	µg/g	0.03					26	26
% moisture	%							

O. Reg. 153 - Soil, Ground Water and Sediment Standards  
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WATERWORKS NO.

	Client I.D.		TP20J-4	DUP-04	DUP-03		O. Reg. 153
	Sample I.D.		B20-03039-37	B20-03039-38	B20-03039-39		Tbl. 3 - ICC Tbl. 7 - ICC
	Date Collected		31-Jan-20	31-Jan-20	30-Jan-20		Soil Soil
Parameter	Units	R.L.					
Conductivity @25°C	mS/cm	0.001				1.4	1.4
Cobalt	µg/g	1				80	80
Lead	µg/g	5	38			120	120
Mercury	µg/g	0.005			0.070	3.9	3.9
Xylene, m,p-	µg/g	0.03		< 0.03			
Xylene, o-	µg/g	0.03		< 0.03			
Xylene, m,p,o-	µg/g	0.03		< 0.03		26	26
% moisture	%			12.6			

O. Reg. 153 - Soil, Ground Water and Sediment Standards  
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WATERWORKS NO.

**Summary of Exceedances**

**Table 3 - Ind./Commercial/Community Soil Std**

TP20E-3	Found Value	Limit
Lead (µg/g)	336	120
TP20J-2	Found Value	Limit
Lead (µg/g)	136	120

**Table 7 - Ind./Commercial/Community Soil Std**

TP20E-3	Found Value	Limit
Lead (µg/g)	336	120
TP20J-2	Found Value	Limit
Lead (µg/g)	136	120

O. Reg. 153 - Soil, Ground Water and Sediment Standards  
 Tbl. 3 - ICC Soil - Table 3 - Ind./Commercial/Community Soil Std  
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