



May 13, 2016

MBN-16-484

Ms. Kelley des Tombe
Fusion Homes
500 Hanlon Creek Blvd
Guelph, Ontario N1C 0A1

Re: Soil Stockpile Sampling Summary
Victoria Road (north of MacAlister Blvd), Guelph, ON (Site)

Dear Ms. des Tombe:

MBN Environmental Engineering Inc. (MBN) was retained by Fusion Homes (Fusion) to collect samples of stockpiled soil materials from the above-referenced Site. MBN understands that Fusion requires the stockpile soil sample analytical results to determine the soil characteristics for future transfer/disposal from the Site.

Ten soil samples were collected from ten test pits on May 4, 2016 using a backhoe operated by Royal Contracting, as coordinated by Fusion. The test pit locations, selected to be representative of the total Site area, were finalized following consultation with Fusion. The approximate test pit locations are shown on the attached Figure 1. Samples were collected from various depths at each test pit. Since the surface elevation varied between test pits, the actual sample elevations also varied. The respective approximate sample elevations (metres above mean sea level) are provided in Table 1.

There was no deleterious material (i.e., building debris, garbage etc.) observed in any of the test pits. A summary of the respective test pit observations is provided in Table 2.

The soil samples were submitted for analysis of petroleum hydrocarbons (PHCs) fractions one to four (F1-4); volatile organic compounds (VOCs); metals and inorganics; polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs) under chain of custody protocols to ALS Canada Ltd. (ALS) of Waterloo, Ontario. ALS is accredited with the Canadian Association for Laboratory Accreditation Inc.

The sample analytical results are summarized in the attached Table 1. The laboratory analytical certificate is included in Attachment A.

There were no exceedances of the Ministry of Environment and Climate Change (MOECC) Table 1 (Background) Site Condition Standards (SCS) for any of the parameters analyzed for residential/parkland/institutional/industrial/community/commercial property uses.

There were exceedances of the MOECC Table 1 SCS (agricultural property use) for cadmium (TP1) and lead (TP1, TP2, TP8 and TP9).

We trust this summary meets your requirements. Please do not hesitate to contact me if you have any questions or comments.

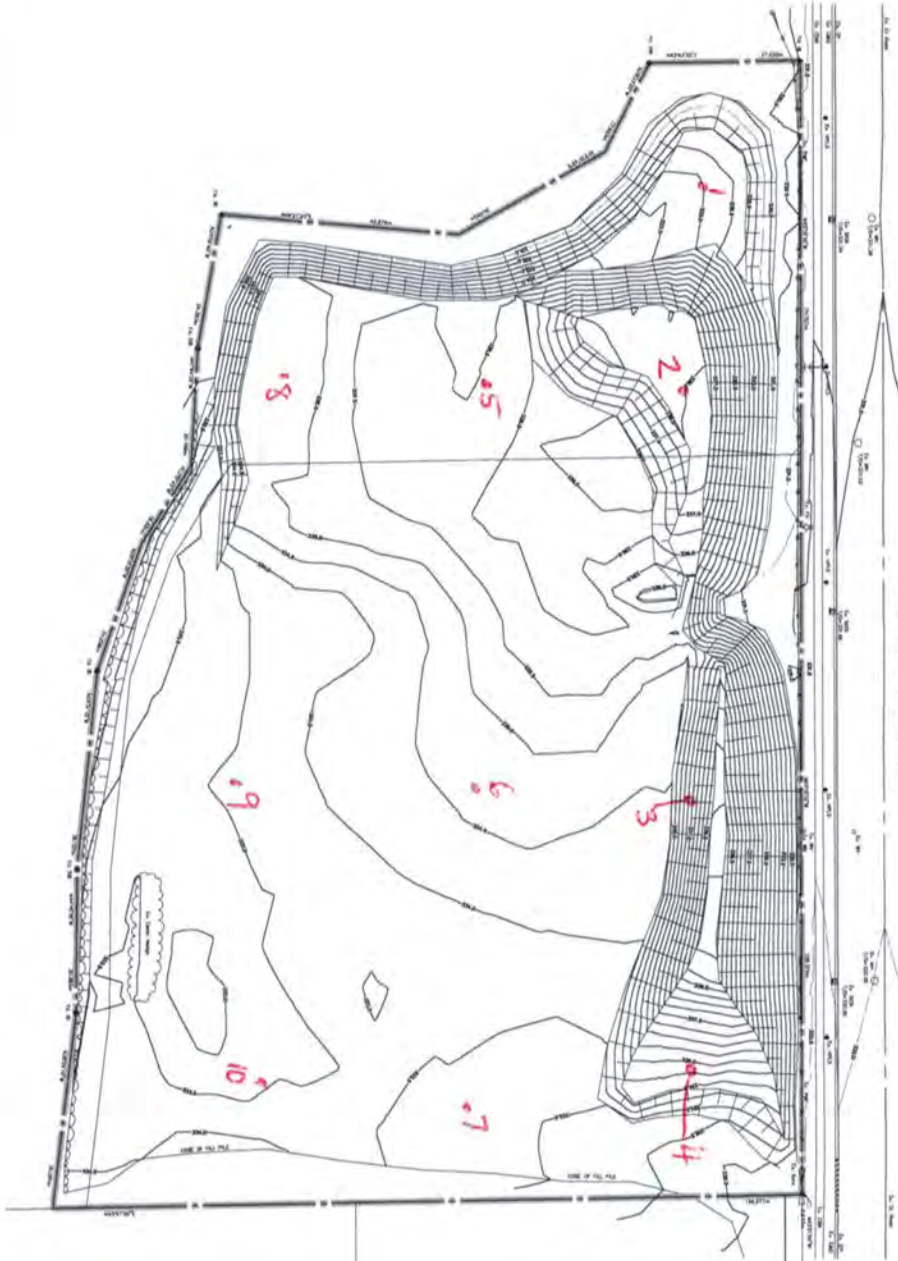


Fusion Homes
Soil Stockpile Sampling Summary
Victoria Road (north of MacAlister Blvd), Guelph, ON
May 13, 2016

Sincerely yours,
MBN Environmental Engineering Inc.

Drew Stoltz, P.Eng.
Principal

FIGURE



VICTORIA ROAD SOUTH



LEGEND OF EXISTING FEATURES

- Site Boundary
- Existing Contours
- Existing Boundary Stone
- Existing Wetlands
- Existing Storm Drain
- Existing Lane
- Drainage
- Existing Conditions



GEODETIC BM: BLV =

SITE BENCHMARK: BLV =

NOTE TO CONTRACTOR:

CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AND STRUCTURES SHOWN ON THIS PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

NO.	REVISION	BY	DATE
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MTE
 Engineers | Scientists | Surveyors
 1000 Parkside
 www.mte.com

FUSION HOMES

977-1023 VICTORIA ROAD SOUTH
 VICTORIA, BC

EXISTING CONDITIONS PLAN

Project No. 41385-100
 Drawn By: SWETITS
 Checked By: MTE
 Date: Apr 27/18

EC1.1

Sheet 1 of 1

TABLES

TABLE 2

**TEST PIT OBSERVATION SUMMARY
FUSION HOMES
VICTORIA ROAD STOCKPILE, GUELPH, ONTARIO**

LOCATION	OBSERVATIONS
TP1	Topsoil, brown. No debris or rocks.
TP2	Topsoil, brown. Some clayey gray material and rock (3-6" diameter)
TP3	Topsoil to 2.5 m bgs, the more clayey with rocks.
TP4	Topsoil, some clay, wet.
TP5	Fill, brown, silty clay. Lots of rocks, well compacted.
TP6	Fill, brown, mostly silt. Rocks (3-8" diameter).
TP7	Native, sandy silt, greater sand component at depth. Rock layer at 1.2 m bgs.
TP8	Topsoil to 2.0 m bgs, then more rock/clayey fill.
TP9	Fill, silty, lots of stone/rock.
TP10	Native, sandy silt, becoming silty sand. Dry. Stone layer at 1.2 m bgs.

ATTACHMENT A

LABORATORY CERTIFICATE OF ANALYSIS



MBN ENVIRONMENTAL ENGINEERING INC.
ATTN: DREW STOLTZ
29 St. Charles Street, East
Maryhill ON NOB 2B0

Date Received: 04-MAY-16
Report Date: 12-MAY-16 08:43 (MT)
Version: FINAL REV. 2

Client Phone: 519-804-7408

Certificate of Analysis

Lab Work Order #: L1763955
Project P.O. #: NOT SUBMITTED
Job Reference: MBN-16-484
C of C Numbers: 14-458487
Legal Site Desc:

Mary-Lynn Pires
Client Services Supervisor

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 60 Northland Road, Unit 1, Waterloo, ON N2V 2B8 Canada | Phone: +1 519 886 6910 | Fax: +1 519 886 9047
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-1	TP1							
Sampled By: D. STOLTZ on 04-MAY-16 @ 08:31								
Matrix: SOIL								
Physical Tests								
	Conductivity	0.141		0.0040	mS/cm	09-MAY-16	0.47	0.57
	% Moisture	20.8		0.10	%	05-MAY-16		
	pH	6.93		0.10	pH units	05-MAY-16		
Cyanides								
	Cyanide, Weak Acid Diss	<0.050		0.050	ug/g	05-MAY-16	0.051	0.051
Saturated Paste Extractables								
	SAR	<0.10		0.10	SAR	05-MAY-16	1	2.4
	Calcium (Ca)	13.1		1.0	mg/L	05-MAY-16		
	Magnesium (Mg)	6.4		1.0	mg/L	05-MAY-16		
	Sodium (Na)	1.3		1.0	mg/L	05-MAY-16		
Metals								
	Antimony (Sb)	<1.0		1.0	ug/g	05-MAY-16	1	1.3
	Arsenic (As)	5.0		1.0	ug/g	05-MAY-16	11	18
	Barium (Ba)	80.8		1.0	ug/g	05-MAY-16	210	220
	Beryllium (Be)	<0.50		0.50	ug/g	05-MAY-16	2.5	2.5
	Boron (B)	6.4		5.0	ug/g	05-MAY-16	36	36
	Boron (B), Hot Water Ext.	0.38		0.10	ug/g	05-MAY-16	36	36
	Cadmium (Cd)	1.14		0.50	ug/g	05-MAY-16	*1	1.2
	Chromium (Cr)	26.3		1.0	ug/g	05-MAY-16	67	70
	Cobalt (Co)	6.1		1.0	ug/g	05-MAY-16	19	21
	Copper (Cu)	19.6		1.0	ug/g	05-MAY-16	62	92
	Lead (Pb)	65.0		1.0	ug/g	05-MAY-16	*45	120
	Mercury (Hg)	0.0891		0.0050	ug/g	05-MAY-16	0.16	0.27
	Molybdenum (Mo)	<1.0		1.0	ug/g	05-MAY-16	2	2
	Nickel (Ni)	11.8		1.0	ug/g	05-MAY-16	37	82
	Selenium (Se)	<1.0		1.0	ug/g	05-MAY-16	1.2	1.5
	Silver (Ag)	<0.20		0.20	ug/g	05-MAY-16	0.5	0.5
	Thallium (Tl)	<0.50		0.50	ug/g	05-MAY-16	1	1
	Uranium (U)	<1.0		1.0	ug/g	05-MAY-16	1.9	2.5
	Vanadium (V)	32.4		1.0	ug/g	05-MAY-16	86	86
	Zinc (Zn)	253		5.0	ug/g	05-MAY-16	290	290
Speciated Metals								
	Chromium, Hexavalent	<0.20		0.20	ug/g	05-MAY-16	0.66	0.66
Volatile Organic Compounds								
	Acetone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Benzene	<0.0068		0.0068	ug/g	06-MAY-16	0.02	0.02
	Bromodichloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromoform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromomethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Carbon tetrachloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dibromochloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chloroform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dibromoethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-1 TP1								
Sampled By: D. STOLTZ on 04-MAY-16 @ 08:31								
Matrix: SOIL								
Volatile Organic Compounds								
	1,3-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,4-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dichlorodifluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	trans-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichloropropene (cis & trans)	<0.042		0.042	ug/g	06-MAY-16	0.05	0.05
	Methylene Chloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloropropane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	trans-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	Ethylbenzene	<0.018		0.018	ug/g	06-MAY-16	0.05	0.05
	n-Hexane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Methyl Ethyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Methyl Isobutyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	MTBE	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Styrene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,1,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Tetrachloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Toluene	<0.080		0.080	ug/g	06-MAY-16	0.2	0.2
	1,1,1-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Trichloroethylene	<0.010		0.010	ug/g	06-MAY-16	0.05	0.05
	Trichlorofluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.25
	Vinyl chloride	<0.020		0.020	ug/g	06-MAY-16	0.02	0.02
	o-Xylene	<0.020		0.020	ug/g	06-MAY-16		
	m+p-Xylenes	<0.030		0.030	ug/g	06-MAY-16		
	Xylenes (Total)	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Surrogate: 4-Bromofluorobenzene	99.9		70-130	%	06-MAY-16		
	Surrogate: 1,4-Difluorobenzene	101.4		70-130	%	06-MAY-16		
Hydrocarbons								
	F1 (C6-C10)	<5.0		5.0	ug/g	06-MAY-16	17	25
	F1-BTEX	<5.0		5.0	ug/g	09-MAY-16	17	25
	F2 (C10-C16)	<10		10	ug/g	05-MAY-16	10	10
	F2-Naphth	<10		10	ug/g	09-MAY-16		
	F3 (C16-C34)	<50		50	ug/g	05-MAY-16	240	240
	F3-PAH	<50		50	ug/g	09-MAY-16		
	F4 (C34-C50)	<50		50	ug/g	05-MAY-16	120	120
	Total Hydrocarbons (C6-C50)	<72		72	ug/g	09-MAY-16		
	Chrom. to baseline at nC50	YES			No Unit	05-MAY-16		
	Surrogate: 2-Bromobenzotrifluoride	80.8		60-140	%	05-MAY-16		
	Surrogate: 3,4-Dichlorotoluene	87.8		60-140	%	06-MAY-16		
Polycyclic Aromatic Hydrocarbons								

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-1 TP1								
Sampled By: D. STOLTZ on 04-MAY-16 @ 08:31								
Matrix: SOIL								
Polycyclic Aromatic Hydrocarbons								
	Acenaphthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.072
	Acenaphthylene	<0.050		0.050	ug/g	09-MAY-16	0.093	0.093
	Anthracene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.16
	Benzo(a)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.095	0.36
	Benzo(a)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.3
	Benzo(b)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.3	0.47
	Benzo(g,h,i)perylene	<0.050		0.050	ug/g	09-MAY-16	0.2	0.68
	Benzo(k)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.48
	Chrysene	<0.050		0.050	ug/g	09-MAY-16	0.18	2.8
	Dibenzo(ah)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.1	0.1
	Fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.24	0.56
	Fluorene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.12
	Indeno(1,2,3-cd)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.11	0.23
	1+2-Methylnaphthalenes	<0.042		0.042	ug/g	09-MAY-16	0.05	0.59
	1-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	2-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	Naphthalene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.09
	Phenanthrene	<0.050		0.050	ug/g	09-MAY-16	0.19	0.69
	Pyrene	<0.050		0.050	ug/g	09-MAY-16	0.19	1
	Surrogate: 2-Fluorobiphenyl	92.6		50-140	%	09-MAY-16		
	Surrogate: p-Terphenyl d14	91.0		50-140	%	09-MAY-16		
Polychlorinated Biphenyls								
	Aroclor 1242	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1248	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1254	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1260	<0.010		0.010	ug/g	10-MAY-16		
	Total PCBs	<0.020		0.020	ug/g	10-MAY-16	0.3	0.3
	Surrogate: d14-Terphenyl	103.3		60-140	%	10-MAY-16		
L1763955-2 TP2								
Sampled By: D. STOLTZ on 04-MAY-16 @ 08:41								
Matrix: SOIL								
Physical Tests								
	Conductivity	0.194		0.0040	mS/cm	09-MAY-16	0.47	0.57
	% Moisture	15.3		0.10	%	05-MAY-16		
	pH	7.00		0.10	pH units	05-MAY-16		
Cyanides								
	Cyanide, Weak Acid Diss	<0.050		0.050	ug/g	05-MAY-16	0.051	0.051
Saturated Paste Extractables								
	SAR	0.13		0.10	SAR	05-MAY-16	1	2.4
	Calcium (Ca)	16.1		1.0	mg/L	05-MAY-16		
	Magnesium (Mg)	7.3		1.0	mg/L	05-MAY-16		
	Sodium (Na)	2.4		1.0	mg/L	05-MAY-16		
Metals								
	Antimony (Sb)	<1.0		1.0	ug/g	05-MAY-16	1	1.3
	Arsenic (As)	5.6		1.0	ug/g	05-MAY-16	11	18

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-2 TP2								
Sampled By: D. STOLTZ on 04-MAY-16 @ 08:41								
Matrix: SOIL								
Metals								
	Barium (Ba)	81.3		1.0	ug/g	05-MAY-16	210	220
	Beryllium (Be)	0.53		0.50	ug/g	05-MAY-16	2.5	2.5
	Boron (B)	5.3		5.0	ug/g	05-MAY-16	36	36
	Boron (B), Hot Water Ext.	0.42		0.10	ug/g	05-MAY-16	36	36
	Cadmium (Cd)	0.67		0.50	ug/g	05-MAY-16	1	1.2
	Chromium (Cr)	19.3		1.0	ug/g	05-MAY-16	67	70
	Cobalt (Co)	6.9		1.0	ug/g	05-MAY-16	19	21
	Copper (Cu)	12.6		1.0	ug/g	05-MAY-16	62	92
	Lead (Pb)	54.9		1.0	ug/g	05-MAY-16	*45	120
	Mercury (Hg)	0.0427		0.0050	ug/g	05-MAY-16	0.16	0.27
	Molybdenum (Mo)	<1.0		1.0	ug/g	05-MAY-16	2	2
	Nickel (Ni)	13.8		1.0	ug/g	05-MAY-16	37	82
	Selenium (Se)	<1.0		1.0	ug/g	05-MAY-16	1.2	1.5
	Silver (Ag)	<0.20		0.20	ug/g	05-MAY-16	0.5	0.5
	Thallium (Tl)	<0.50		0.50	ug/g	05-MAY-16	1	1
	Uranium (U)	<1.0		1.0	ug/g	05-MAY-16	1.9	2.5
	Vanadium (V)	36.7		1.0	ug/g	05-MAY-16	86	86
	Zinc (Zn)	212		5.0	ug/g	05-MAY-16	290	290
Speciated Metals								
	Chromium, Hexavalent	<0.20		0.20	ug/g	05-MAY-16	0.66	0.66
Volatile Organic Compounds								
	Acetone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Benzene	<0.0068		0.0068	ug/g	06-MAY-16	0.02	0.02
	Bromodichloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromoform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromomethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Carbon tetrachloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dibromochloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chloroform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dibromoethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,4-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dichlorodifluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	trans-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichloropropene (cis & trans)	<0.042		0.042	ug/g	06-MAY-16	0.05	0.05
	Methylene Chloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloropropane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16	0.05	0.05
	trans-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16	0.05	0.05

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use



ANALYTICAL GUIDELINE REPORT

L1763955 CONTD....

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12-MAY-16 08:43 (MT)

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-2	TP2							
Sampled By: D. STOLTZ on 04-MAY-16 @ 08:41								
Matrix: SOIL								
Volatile Organic Compounds								
	Ethylbenzene	<0.018		0.018	ug/g	06-MAY-16	0.05	0.05
	n-Hexane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Methyl Ethyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Methyl Isobutyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	MTBE	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Styrene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,1,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Tetrachloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Toluene	<0.080		0.080	ug/g	06-MAY-16	0.2	0.2
	1,1,1-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Trichloroethylene	<0.010		0.010	ug/g	06-MAY-16	0.05	0.05
	Trichlorofluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.25
	Vinyl chloride	<0.020		0.020	ug/g	06-MAY-16	0.02	0.02
	o-Xylene	<0.020		0.020	ug/g	06-MAY-16		
	m+p-Xylenes	<0.030		0.030	ug/g	06-MAY-16		
	Xylenes (Total)	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Surrogate: 4-Bromofluorobenzene	95.4		70-130	%	06-MAY-16		
	Surrogate: 1,4-Difluorobenzene	95.6		70-130	%	06-MAY-16		
Hydrocarbons								
	F1 (C6-C10)	<5.0		5.0	ug/g	06-MAY-16	17	25
	F1-BTEX	<5.0		5.0	ug/g	09-MAY-16	17	25
	F2 (C10-C16)	<10		10	ug/g	05-MAY-16	10	10
	F2-Naphth	<10		10	ug/g	09-MAY-16		
	F3 (C16-C34)	<50		50	ug/g	05-MAY-16	240	240
	F3-PAH	<50		50	ug/g	09-MAY-16		
	F4 (C34-C50)	<50		50	ug/g	05-MAY-16	120	120
	Total Hydrocarbons (C6-C50)	<72		72	ug/g	09-MAY-16		
	Chrom. to baseline at nC50	YES			No Unit	05-MAY-16		
	Surrogate: 2-Bromobenzotrifluoride	90.4		60-140	%	05-MAY-16		
	Surrogate: 3,4-Dichlorotoluene	80.5		60-140	%	06-MAY-16		
Polycyclic Aromatic Hydrocarbons								
	Acenaphthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.072
	Acenaphthylene	<0.050		0.050	ug/g	09-MAY-16	0.093	0.093
	Anthracene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.16
	Benzo(a)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.095	0.36
	Benzo(a)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.3
	Benzo(b)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.3	0.47
	Benzo(g,h,i)perylene	<0.050		0.050	ug/g	09-MAY-16	0.2	0.68
	Benzo(k)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.48
	Chrysene	<0.050		0.050	ug/g	09-MAY-16	0.18	2.8
	Dibenzo(ah)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.1	0.1
	Fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.24	0.56
	Fluorene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.12
	Indeno(1,2,3-cd)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.11	0.23

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details Grouping	Analyte	Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
L1763955-2	TP2							
Sampled By: D. STOLTZ on 04-MAY-16 @ 08:41							#1	#2
Matrix: SOIL								
Polycyclic Aromatic Hydrocarbons								
	1+2-Methylnaphthalenes	<0.042		0.042	ug/g	09-MAY-16	0.05	0.59
	1-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	2-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	Naphthalene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.09
	Phenanthrene	<0.050		0.050	ug/g	09-MAY-16	0.19	0.69
	Pyrene	<0.050		0.050	ug/g	09-MAY-16	0.19	1
	Surrogate: 2-Fluorobiphenyl	93.5		50-140	%	09-MAY-16		
	Surrogate: p-Terphenyl d14	86.7		50-140	%	09-MAY-16		
Polychlorinated Biphenyls								
	Aroclor 1242	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1248	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1254	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1260	<0.010		0.010	ug/g	10-MAY-16		
	Total PCBs	<0.020		0.020	ug/g	10-MAY-16	0.3	0.3
	Surrogate: d14-Terphenyl	102.0		60-140	%	10-MAY-16		
L1763955-3	TP3							
Sampled By: D. STOLTZ on 04-MAY-16 @ 09:01							#1	#2
Matrix: SOIL								
Physical Tests								
	Conductivity	0.183		0.0040	mS/cm	09-MAY-16	0.47	0.57
	% Moisture	12.3		0.10	%	05-MAY-16		
	pH	7.37		0.10	pH units	05-MAY-16		
Cyanides								
	Cyanide, Weak Acid Diss	<0.050		0.050	ug/g	05-MAY-16	0.051	0.051
Saturated Paste Extractables								
	SAR	0.12		0.10	SAR	05-MAY-16	1	2.4
	Calcium (Ca)	23.0		1.0	mg/L	05-MAY-16		
	Magnesium (Mg)	5.0		1.0	mg/L	05-MAY-16		
	Sodium (Na)	2.4		1.0	mg/L	05-MAY-16		
Metals								
	Antimony (Sb)	<1.0		1.0	ug/g	05-MAY-16	1	1.3
	Arsenic (As)	3.6		1.0	ug/g	05-MAY-16	11	18
	Barium (Ba)	45.7		1.0	ug/g	05-MAY-16	210	220
	Beryllium (Be)	<0.50		0.50	ug/g	05-MAY-16	2.5	2.5
	Boron (B)	6.3		5.0	ug/g	05-MAY-16	36	36
	Boron (B), Hot Water Ext.	0.10		0.10	ug/g	05-MAY-16	36	36
	Cadmium (Cd)	<0.50		0.50	ug/g	05-MAY-16	1	1.2
	Chromium (Cr)	14.6		1.0	ug/g	05-MAY-16	67	70
	Cobalt (Co)	5.2		1.0	ug/g	05-MAY-16	19	21
	Copper (Cu)	12.5		1.0	ug/g	05-MAY-16	62	92
	Lead (Pb)	30.6		1.0	ug/g	05-MAY-16	45	120
	Mercury (Hg)	0.0202		0.0050	ug/g	05-MAY-16	0.16	0.27
	Molybdenum (Mo)	<1.0		1.0	ug/g	05-MAY-16	2	2
	Nickel (Ni)	11.0		1.0	ug/g	05-MAY-16	37	82
	Selenium (Se)	<1.0		1.0	ug/g	05-MAY-16	1.2	1.5

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-3 TP3								
Sampled By: D. STOLTZ on 04-MAY-16 @ 09:00								
Matrix: SOIL								
Metals								
	Silver (Ag)	<0.20		0.20	ug/g	05-MAY-16	0.5	0.5
	Thallium (Tl)	<0.50		0.50	ug/g	05-MAY-16	1	1
	Uranium (U)	<1.0		1.0	ug/g	05-MAY-16	1.9	2.5
	Vanadium (V)	25.7		1.0	ug/g	05-MAY-16	86	86
	Zinc (Zn)	174		5.0	ug/g	05-MAY-16	290	290
Speciated Metals								
	Chromium, Hexavalent	<0.20		0.20	ug/g	05-MAY-16	0.66	0.66
Volatile Organic Compounds								
	Acetone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Benzene	<0.0068		0.0068	ug/g	06-MAY-16	0.02	0.02
	Bromodichloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromoform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromomethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Carbon tetrachloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dibromochloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chloroform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dibromoethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,4-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dichlorodifluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	trans-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichloropropene (cis & trans)	<0.042		0.042	ug/g	06-MAY-16	0.05	0.05
	Methylene Chloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloropropane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16	0.05	0.05
	trans-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16	0.05	0.05
	Ethylbenzene	<0.018		0.018	ug/g	06-MAY-16	0.05	0.05
	n-Hexane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Methyl Ethyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Methyl Isobutyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	MTBE	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Styrene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,1,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Tetrachloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Toluene	<0.080		0.080	ug/g	06-MAY-16	0.2	0.2
	1,1,1-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Trichloroethylene	<0.010		0.010	ug/g	06-MAY-16	0.05	0.05

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Comm Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-3 TP3								
Sampled By: D. STOLTZ on 04-MAY-16 @ 09:01								
Matrix: SOIL								
Volatile Organic Compounds								
	Trichlorofluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.25
	Vinyl chloride	<0.020		0.020	ug/g	06-MAY-16	0.02	0.02
	o-Xylene	<0.020		0.020	ug/g	06-MAY-16		
	m+p-Xylenes	<0.030		0.030	ug/g	06-MAY-16		
	Xylenes (Total)	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Surrogate: 4-Bromofluorobenzene	98.3		70-130	%	06-MAY-16		
	Surrogate: 1,4-Difluorobenzene	99.5		70-130	%	06-MAY-16		
Hydrocarbons								
	F1 (C6-C10)	<5.0		5.0	ug/g	06-MAY-16	17	25
	F1-BTEX	<5.0		5.0	ug/g	09-MAY-16	17	25
	F2 (C10-C16)	<10		10	ug/g	05-MAY-16	10	10
	F2-Naphth	<10		10	ug/g	09-MAY-16		
	F3 (C16-C34)	<50		50	ug/g	05-MAY-16	240	240
	F3-PAH	<50		50	ug/g	09-MAY-16		
	F4 (C34-C50)	<50		50	ug/g	05-MAY-16	120	120
	Total Hydrocarbons (C6-C50)	<72		72	ug/g	09-MAY-16		
	Chrom. to baseline at nC50	YES			No Unit	05-MAY-16		
	Surrogate: 2-Bromobenzotrifluoride	78.9		60-140	%	05-MAY-16		
	Surrogate: 3,4-Dichlorotoluene	89.3		60-140	%	06-MAY-16		
Polycyclic Aromatic Hydrocarbons								
	Acenaphthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.072
	Acenaphthylene	<0.050		0.050	ug/g	09-MAY-16	0.093	0.093
	Anthracene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.16
	Benzo(a)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.095	0.36
	Benzo(a)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.3
	Benzo(b)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.3	0.47
	Benzo(g,h,i)perylene	<0.050		0.050	ug/g	09-MAY-16	0.2	0.68
	Benzo(k)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.48
	Chrysene	<0.050		0.050	ug/g	09-MAY-16	0.18	2.8
	Dibenzo(ah)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.1	0.1
	Fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.24	0.56
	Fluorene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.12
	Indeno(1,2,3-cd)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.11	0.23
	1+2-Methylnaphthalenes	<0.042		0.042	ug/g	09-MAY-16	0.05	0.59
	1-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	2-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	Naphthalene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.09
	Phenanthrene	<0.050		0.050	ug/g	09-MAY-16	0.19	0.69
	Pyrene	<0.050		0.050	ug/g	09-MAY-16	0.19	1
	Surrogate: 2-Fluorobiphenyl	95.0		50-140	%	09-MAY-16		
	Surrogate: p-Terphenyl d14	90.7		50-140	%	09-MAY-16		
Polychlorinated Biphenyls								
	Aroclor 1242	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1248	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1254	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1260	<0.010		0.010	ug/g	10-MAY-16		

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use



ANALYTICAL GUIDELINE REPORT

L1763955 CONTD....

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12-MAY-16 08:43 (MT)

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-3	TP3							
Sampled By: D. STOLTZ on 04-MAY-16 @ 09:01								
Matrix: SOIL								
Polychlorinated Biphenyls								
Total PCBs		<0.020		0.020	ug/g	10-MAY-16	0.3	0.3
Surrogate: d14-Terphenyl		100.1		60-140	%	10-MAY-16		
L1763955-4	TP4							
Sampled By: D. STOLTZ on 04-MAY-16 @ 09:11								
Matrix: SOIL								
Physical Tests								
Conductivity		0.171		0.0040	mS/cm	09-MAY-16	0.47	0.57
% Moisture		16.8		0.10	%	05-MAY-16		
pH		7.39		0.10	pH units	05-MAY-16		
Cyanides								
Cyanide, Weak Acid Diss		<0.050		0.050	ug/g	05-MAY-16	0.051	0.051
Saturated Paste Extractables								
SAR		0.12		0.10	SAR	05-MAY-16	1	2.4
Calcium (Ca)		24.1		1.0	mg/L	05-MAY-16		
Magnesium (Mg)		6.6		1.0	mg/L	05-MAY-16		
Sodium (Na)		2.5		1.0	mg/L	05-MAY-16		
Metals								
Antimony (Sb)		<1.0		1.0	ug/g	05-MAY-16	1	1.3
Arsenic (As)		4.2		1.0	ug/g	05-MAY-16	11	18
Barium (Ba)		57.1		1.0	ug/g	05-MAY-16	210	220
Beryllium (Be)		<0.50		0.50	ug/g	05-MAY-16	2.5	2.5
Boron (B)		5.5		5.0	ug/g	05-MAY-16	36	36
Boron (B), Hot Water Ext.		0.35		0.10	ug/g	05-MAY-16	36	36
Cadmium (Cd)		0.56		0.50	ug/g	05-MAY-16	1	1.2
Chromium (Cr)		15.5		1.0	ug/g	05-MAY-16	67	70
Cobalt (Co)		5.6		1.0	ug/g	05-MAY-16	19	21
Copper (Cu)		10.4		1.0	ug/g	05-MAY-16	62	92
Lead (Pb)		38.9		1.0	ug/g	05-MAY-16	45	120
Mercury (Hg)		0.0417		0.0050	ug/g	05-MAY-16	0.16	0.27
Molybdenum (Mo)		<1.0		1.0	ug/g	05-MAY-16	2	2
Nickel (Ni)		10.7		1.0	ug/g	05-MAY-16	37	82
Selenium (Se)		<1.0		1.0	ug/g	05-MAY-16	1.2	1.5
Silver (Ag)		<0.20		0.20	ug/g	05-MAY-16	0.5	0.5
Thallium (Tl)		<0.50		0.50	ug/g	05-MAY-16	1	1
Uranium (U)		<1.0		1.0	ug/g	05-MAY-16	1.9	2.5
Vanadium (V)		27.4		1.0	ug/g	05-MAY-16	86	86
Zinc (Zn)		180		5.0	ug/g	05-MAY-16	290	290
Speciated Metals								
Chromium, Hexavalent		<0.20		0.20	ug/g	05-MAY-16	0.66	0.66
Volatile Organic Compounds								
Acetone		<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
Benzene		<0.0068		0.0068	ug/g	06-MAY-16	0.02	0.02
Bromodichloromethane		<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
Bromoform		<0.050		0.050	ug/g	06-MAY-16	0.05	0.05

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-4 TP4								
Sampled By: D. STOLTZ on 04-MAY-16 @ 09:11								
Matrix: SOIL								
Volatile Organic Compounds								
	Bromomethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Carbon tetrachloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dibromochloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chloroform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dibromoethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,4-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dichlorodifluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	trans-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichloropropene (cis & trans)	<0.042		0.042	ug/g	06-MAY-16	0.05	0.05
	Methylene Chloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloropropane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	trans-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	Ethylbenzene	<0.018		0.018	ug/g	06-MAY-16	0.05	0.05
	n-Hexane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Methyl Ethyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Methyl Isobutyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	MTBE	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Styrene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,1,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Tetrachloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Toluene	<0.080		0.080	ug/g	06-MAY-16	0.2	0.2
	1,1,1-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Trichloroethylene	<0.010		0.010	ug/g	06-MAY-16	0.05	0.05
	Trichlorofluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.25
	Vinyl chloride	<0.020		0.020	ug/g	06-MAY-16	0.02	0.02
	o-Xylene	<0.020		0.020	ug/g	06-MAY-16		
	m+p-Xylenes	<0.030		0.030	ug/g	06-MAY-16		
	Xylenes (Total)	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Surrogate: 4-Bromofluorobenzene	99.5		70-130	%	06-MAY-16		
	Surrogate: 1,4-Difluorobenzene	100.2		70-130	%	06-MAY-16		
Hydrocarbons								
	F1 (C6-C10)	<5.0		5.0	ug/g	06-MAY-16	17	25
	F1-BTEX	<5.0		5.0	ug/g	09-MAY-16	17	25
	F2 (C10-C16)	<10		10	ug/g	05-MAY-16	10	10
	F2-Naphth	<10		10	ug/g	09-MAY-16		
	F3 (C16-C34)	<50		50	ug/g	05-MAY-16	240	240

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Comm Property Use



ANALYTICAL GUIDELINE REPORT

L1763955 CONTD....

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MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits			
Grouping	Analyte						#1		#2	
L1763955-4 TP4										
Sampled By: D. STOLTZ on 04-MAY-16 @ 09:11										
Matrix: SOIL										
Hydrocarbons										
F3-PAH		<50		50	ug/g	09-MAY-16				
F4 (C34-C50)		<50		50	ug/g	05-MAY-16	120	120		
Total Hydrocarbons (C6-C50)		<72		72	ug/g	09-MAY-16				
Chrom. to baseline at nC50		YES			No Unit	05-MAY-16				
Surrogate: 2-Bromobenzotrifluoride		88.8		60-140	%	05-MAY-16				
Surrogate: 3,4-Dichlorotoluene		83.5		60-140	%	06-MAY-16				
Polycyclic Aromatic Hydrocarbons										
Acenaphthene		<0.050		0.050	ug/g	09-MAY-16	0.05	0.072		
Acenaphthylene		<0.050		0.050	ug/g	09-MAY-16	0.093	0.093		
Anthracene		<0.050		0.050	ug/g	09-MAY-16	0.05	0.16		
Benzo(a)anthracene		<0.050		0.050	ug/g	09-MAY-16	0.095	0.36		
Benzo(a)pyrene		<0.050		0.050	ug/g	09-MAY-16	0.05	0.3		
Benzo(b)fluoranthene		<0.050		0.050	ug/g	09-MAY-16	0.3	0.47		
Benzo(g,h,i)perylene		<0.050		0.050	ug/g	09-MAY-16	0.2	0.68		
Benzo(k)fluoranthene		<0.050		0.050	ug/g	09-MAY-16	0.05	0.48		
Chrysene		<0.050		0.050	ug/g	09-MAY-16	0.18	2.8		
Dibenzo(ah)anthracene		<0.050		0.050	ug/g	09-MAY-16	0.1	0.1		
Fluoranthene		<0.050		0.050	ug/g	09-MAY-16	0.24	0.56		
Fluorene		<0.050		0.050	ug/g	09-MAY-16	0.05	0.12		
Indeno(1,2,3-cd)pyrene		<0.050		0.050	ug/g	09-MAY-16	0.11	0.23		
1+2-Methylnaphthalenes		<0.042		0.042	ug/g	09-MAY-16	0.05	0.59		
1-Methylnaphthalene		<0.030		0.030	ug/g	09-MAY-16	0.05	0.59		
2-Methylnaphthalene		<0.030		0.030	ug/g	09-MAY-16	0.05	0.59		
Naphthalene		<0.050		0.050	ug/g	09-MAY-16	0.05	0.09		
Phenanthrene		<0.050		0.050	ug/g	09-MAY-16	0.19	0.69		
Pyrene		<0.050		0.050	ug/g	09-MAY-16	0.19	1		
Surrogate: 2-Fluorobiphenyl		96.0		50-140	%	09-MAY-16				
Surrogate: p-Terphenyl d14		95.1		50-140	%	09-MAY-16				
Polychlorinated Biphenyls										
Aroclor 1242		<0.010		0.010	ug/g	10-MAY-16				
Aroclor 1248		<0.010		0.010	ug/g	10-MAY-16				
Aroclor 1254		<0.010		0.010	ug/g	10-MAY-16				
Aroclor 1260		<0.010		0.010	ug/g	10-MAY-16				
Total PCBs		<0.020		0.020	ug/g	10-MAY-16	0.3	0.3		
Surrogate: d14-Terphenyl		101.1		60-140	%	10-MAY-16				
L1763955-5 TP5										
Sampled By: D. STOLTZ on 04-MAY-16 @ 09:31										
Matrix: SOIL										
Physical Tests										
Conductivity		0.175		0.0040	mS/cm	09-MAY-16	0.47	0.57		
% Moisture		12.0		0.10	%	05-MAY-16				
pH		7.21		0.10	pH units	05-MAY-16				
Cyanides										
Cyanide, Weak Acid Diss		<0.050		0.050	ug/g	05-MAY-16	0.051	0.051		
Saturated Paste Extractables										

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-5 TP5								
Sampled By: D. STOLTZ on 04-MAY-16 @ 09:31								
Matrix: SOIL								
Saturated Paste Extractables								
	SAR	<0.10		0.10	SAR	05-MAY-16	1	2.4
	Calcium (Ca)	33.9		1.0	mg/L	05-MAY-16		
	Magnesium (Mg)	3.7		1.0	mg/L	05-MAY-16		
	Sodium (Na)	1.5		1.0	mg/L	05-MAY-16		
Metals								
	Antimony (Sb)	<1.0		1.0	ug/g	05-MAY-16	1	1.3
	Arsenic (As)	3.8		1.0	ug/g	05-MAY-16	11	18
	Barium (Ba)	49.4		1.0	ug/g	05-MAY-16	210	220
	Beryllium (Be)	<0.50		0.50	ug/g	05-MAY-16	2.5	2.5
	Boron (B)	5.9		5.0	ug/g	05-MAY-16	36	36
	Boron (B), Hot Water Ext.	0.27		0.10	ug/g	05-MAY-16	36	36
	Cadmium (Cd)	<0.50		0.50	ug/g	05-MAY-16	1	1.2
	Chromium (Cr)	13.7		1.0	ug/g	05-MAY-16	67	70
	Cobalt (Co)	5.0		1.0	ug/g	05-MAY-16	19	21
	Copper (Cu)	12.0		1.0	ug/g	05-MAY-16	62	92
	Lead (Pb)	35.7		1.0	ug/g	05-MAY-16	45	120
	Mercury (Hg)	0.0299		0.0050	ug/g	05-MAY-16	0.16	0.27
	Molybdenum (Mo)	<1.0		1.0	ug/g	05-MAY-16	2	2
	Nickel (Ni)	10.3		1.0	ug/g	05-MAY-16	37	82
	Selenium (Se)	<1.0		1.0	ug/g	05-MAY-16	1.2	1.5
	Silver (Ag)	<0.20		0.20	ug/g	05-MAY-16	0.5	0.5
	Thallium (Tl)	<0.50		0.50	ug/g	05-MAY-16	1	1
	Uranium (U)	<1.0		1.0	ug/g	05-MAY-16	1.9	2.5
	Vanadium (V)	26.0		1.0	ug/g	05-MAY-16	86	86
	Zinc (Zn)	165		5.0	ug/g	05-MAY-16	290	290
Speciated Metals								
	Chromium, Hexavalent	<0.20		0.20	ug/g	05-MAY-16	0.66	0.66
Volatile Organic Compounds								
	Acetone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Benzene	<0.0068		0.0068	ug/g	06-MAY-16	0.02	0.02
	Bromodichloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromoform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromomethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Carbon tetrachloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dibromochloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chloroform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dibromoethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,4-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dichlorodifluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-5 TP5								
Sampled By: D. STOLTZ on 04-MAY-16 @ 09:31								
Matrix: SOIL								
Volatile Organic Compounds								
	cis-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	trans-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichloropropene (cis & trans)	<0.042		0.042	ug/g	06-MAY-16	0.05	0.05
	Methylene Chloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloropropane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	trans-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	Ethylbenzene	<0.018		0.018	ug/g	06-MAY-16	0.05	0.05
	n-Hexane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Methyl Ethyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Methyl Isobutyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	MTBE	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Styrene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,1,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Tetrachloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Toluene	<0.080		0.080	ug/g	06-MAY-16	0.2	0.2
	1,1,1-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Trichloroethylene	<0.010		0.010	ug/g	06-MAY-16	0.05	0.05
	Trichlorofluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.25
	Vinyl chloride	<0.020		0.020	ug/g	06-MAY-16	0.02	0.02
	o-Xylene	<0.020		0.020	ug/g	06-MAY-16		
	m+p-Xylenes	<0.030		0.030	ug/g	06-MAY-16		
	Xylenes (Total)	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Surrogate: 4-Bromofluorobenzene	99.3		70-130	%	06-MAY-16		
	Surrogate: 1,4-Difluorobenzene	100.6		70-130	%	06-MAY-16		
Hydrocarbons								
	F1 (C6-C10)	<5.0		5.0	ug/g	06-MAY-16	17	25
	F1-BTEX	<5.0		5.0	ug/g	11-MAY-16	17	25
	F2 (C10-C16)	<10		10	ug/g	11-MAY-16	10	10
	F2-Naphth	<10		10	ug/g	11-MAY-16		
	F3 (C16-C34)	<50		50	ug/g	11-MAY-16	240	240
	F3-PAH	<50		50	ug/g	11-MAY-16		
	F4 (C34-C50)	<50		50	ug/g	11-MAY-16	120	120
	Total Hydrocarbons (C6-C50)	<72		72	ug/g	11-MAY-16		
	Chrom. to baseline at nC50	YES			No Unit	11-MAY-16		
	Surrogate: 2-Bromobenzotrifluoride	94.3		60-140	%	11-MAY-16		
	Surrogate: 3,4-Dichlorotoluene	78.8		60-140	%	06-MAY-16		
Polycyclic Aromatic Hydrocarbons								
	Acenaphthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.072
	Acenaphthylene	<0.050		0.050	ug/g	09-MAY-16	0.093	0.093
	Anthracene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.16
	Benzo(a)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.095	0.36
	Benzo(a)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.3
	Benzo(b)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.3	0.47

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-5 TP5								
Sampled By: D. STOLTZ on 04-MAY-16 @ 09:31								
Matrix: SOIL								
Polycyclic Aromatic Hydrocarbons								
	Benzo(g,h,i)perylene	<0.050		0.050	ug/g	09-MAY-16	0.2	0.68
	Benzo(k)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.48
	Chrysene	<0.050		0.050	ug/g	09-MAY-16	0.18	2.8
	Dibenzo(ah)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.1	0.1
	Fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.24	0.56
	Fluorene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.12
	Indeno(1,2,3-cd)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.11	0.23
	1+2-Methylnaphthalenes	<0.042		0.042	ug/g	09-MAY-16	0.05	0.59
	1-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	2-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	Naphthalene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.09
	Phenanthrene	<0.050		0.050	ug/g	09-MAY-16	0.19	0.69
	Pyrene	<0.050		0.050	ug/g	09-MAY-16	0.19	1
	Surrogate: 2-Fluorobiphenyl	93.3		50-140	%	09-MAY-16		
	Surrogate: p-Terphenyl d14	91.9		50-140	%	09-MAY-16		
Polychlorinated Biphenyls								
	Aroclor 1242	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1248	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1254	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1260	0.010		0.010	ug/g	10-MAY-16		
	Total PCBs	<0.020		0.020	ug/g	10-MAY-16	0.3	0.3
	Surrogate: d14-Terphenyl	104.0		60-140	%	10-MAY-16		
L1763955-6 TP6								
Sampled By: D. STOLTZ on 04-MAY-16 @ 09:41								
Matrix: SOIL								
Physical Tests								
	Conductivity	0.0871		0.0040	mS/cm	09-MAY-16	0.47	0.57
	% Moisture	8.10		0.10	%	05-MAY-16		
	pH	7.77		0.10	pH units	05-MAY-16		
Cyanides								
	Cyanide, Weak Acid Diss	<0.050		0.050	ug/g	05-MAY-16	0.051	0.051
Saturated Paste Extractables								
	SAR	0.12	SAR:Q	0.10	SAR	05-MAY-16	1	2.4
	Calcium (Ca)	3.7		1.0	mg/L	05-MAY-16		
	Magnesium (Mg)	1.1		1.0	mg/L	05-MAY-16		
	Sodium (Na)	<1.0		1.0	mg/L	05-MAY-16		
Metals								
	Antimony (Sb)	<1.0		1.0	ug/g	05-MAY-16	1	1.3
	Arsenic (As)	2.6		1.0	ug/g	05-MAY-16	11	18
	Barium (Ba)	29.5		1.0	ug/g	05-MAY-16	210	220
	Beryllium (Be)	<0.50		0.50	ug/g	05-MAY-16	2.5	2.5
	Boron (B)	6.1		5.0	ug/g	05-MAY-16	36	36
	Boron (B), Hot Water Ext.	<0.10		0.10	ug/g	05-MAY-16	36	36
	Cadmium (Cd)	0.60		0.50	ug/g	05-MAY-16	1	1.2
	Chromium (Cr)	10.6		1.0	ug/g	05-MAY-16	67	70

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-6	TP6							
Sampled By: D. STOLTZ on 04-MAY-16 @ 09:41								
Matrix: SOIL								
Metals								
	Cobalt (Co)	3.6		1.0	ug/g	05-MAY-16	19	21
	Copper (Cu)	12.0		1.0	ug/g	05-MAY-16	62	92
	Lead (Pb)	35.3		1.0	ug/g	05-MAY-16	45	120
	Mercury (Hg)	0.0093		0.0050	ug/g	05-MAY-16	0.16	0.27
	Molybdenum (Mo)	<1.0		1.0	ug/g	05-MAY-16	2	2
	Nickel (Ni)	8.9		1.0	ug/g	05-MAY-16	37	82
	Selenium (Se)	<1.0		1.0	ug/g	05-MAY-16	1.2	1.5
	Silver (Ag)	<0.20		0.20	ug/g	05-MAY-16	0.5	0.5
	Thallium (Tl)	<0.50		0.50	ug/g	05-MAY-16	1	1
	Uranium (U)	<1.0		1.0	ug/g	05-MAY-16	1.9	2.5
	Vanadium (V)	17.8		1.0	ug/g	05-MAY-16	86	86
	Zinc (Zn)	270		5.0	ug/g	05-MAY-16	290	290
Speciated Metals								
	Chromium, Hexavalent	<0.20		0.20	ug/g	05-MAY-16	0.66	0.66
Volatile Organic Compounds								
	Acetone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Benzene	<0.0068		0.0068	ug/g	06-MAY-16	0.02	0.02
	Bromodichloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromoform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromomethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Carbon tetrachloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dibromochloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chloroform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dibromoethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,4-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dichlorodifluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	trans-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichloropropene (cis & trans)	<0.042		0.042	ug/g	06-MAY-16	0.05	0.05
	Methylene Chloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloropropane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	trans-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	Ethylbenzene	<0.018		0.018	ug/g	06-MAY-16	0.05	0.05
	n-Hexane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Methyl Ethyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Methyl Isobutyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	MTBE	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Styrene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05

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Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-6	TP6							
Sampled By: D. STOLTZ on 04-MAY-16 @ 09:41								
Matrix: SOIL								
Volatile Organic Compounds								
	1,1,1,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Tetrachloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Toluene	<0.080		0.080	ug/g	06-MAY-16	0.2	0.2
	1,1,1-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Trichloroethylene	<0.010		0.010	ug/g	06-MAY-16	0.05	0.05
	Trichlorofluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.25
	Vinyl chloride	<0.020		0.020	ug/g	06-MAY-16	0.02	0.02
	o-Xylene	<0.020		0.020	ug/g	06-MAY-16		
	m+p-Xylenes	<0.030		0.030	ug/g	06-MAY-16		
	Xylenes (Total)	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Surrogate: 4-Bromofluorobenzene	103.8		70-130	%	06-MAY-16		
	Surrogate: 1,4-Difluorobenzene	107.0		70-130	%	06-MAY-16		
Hydrocarbons								
	F1 (C6-C10)	<5.0		5.0	ug/g	06-MAY-16	17	25
	F1-BTEX	<5.0		5.0	ug/g	11-MAY-16	17	25
	F2 (C10-C16)	<10		10	ug/g	11-MAY-16	10	10
	F2-Naphth	<10		10	ug/g	11-MAY-16		
	F3 (C16-C34)	<50		50	ug/g	11-MAY-16	240	240
	F3-PAH	<50		50	ug/g	11-MAY-16		
	F4 (C34-C50)	<50		50	ug/g	11-MAY-16	120	120
	Total Hydrocarbons (C6-C50)	<72		72	ug/g	11-MAY-16		
	Chrom. to baseline at nC50	YES			No Unit	11-MAY-16		
	Surrogate: 2-Bromobenzotrifluoride	89.2		60-140	%	11-MAY-16		
	Surrogate: 3,4-Dichlorotoluene	87.1		60-140	%	06-MAY-16		
Polycyclic Aromatic Hydrocarbons								
	Acenaphthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.072
	Acenaphthylene	<0.050		0.050	ug/g	09-MAY-16	0.093	0.093
	Anthracene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.16
	Benzo(a)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.095	0.36
	Benzo(a)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.3
	Benzo(b)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.3	0.47
	Benzo(g,h,i)perylene	<0.050		0.050	ug/g	09-MAY-16	0.2	0.68
	Benzo(k)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.48
	Chrysene	<0.050		0.050	ug/g	09-MAY-16	0.18	2.8
	Dibenzo(ah)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.1	0.1
	Fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.24	0.56
	Fluorene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.12
	Indeno(1,2,3-cd)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.11	0.23
	1+2-Methylnaphthalenes	<0.042		0.042	ug/g	09-MAY-16	0.05	0.59
	1-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	2-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	Naphthalene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.09
	Phenanthrene	<0.050		0.050	ug/g	09-MAY-16	0.19	0.69
	Pyrene	<0.050		0.050	ug/g	09-MAY-16	0.19	1

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#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use



ANALYTICAL GUIDELINE REPORT

L1763955 CONTD....

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MBN-16-484

Sample Details Grouping	Analyte	Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
L1763955-6	TP6							
Sampled By: D. STOLTZ on 04-MAY-16 @ 09:41							#1	#2
Matrix: SOIL								
Polycyclic Aromatic Hydrocarbons								
Surrogate: 2-Fluorobiphenyl		86.1		50-140	%	09-MAY-16		
Surrogate: p-Terphenyl d14		79.4		50-140	%	09-MAY-16		
Polychlorinated Biphenyls								
Aroclor 1242		<0.010		0.010	ug/g	10-MAY-16		
Aroclor 1248		<0.010		0.010	ug/g	10-MAY-16		
Aroclor 1254		<0.010		0.010	ug/g	10-MAY-16		
Aroclor 1260		<0.010		0.010	ug/g	10-MAY-16		
Total PCBs		<0.020		0.020	ug/g	10-MAY-16	0.3	0.3
Surrogate: d14-Terphenyl		95.7		60-140	%	10-MAY-16		
L1763955-7	TP7							
Sampled By: D. STOLTZ on 04-MAY-16 @ 10:01							#1	#2
Matrix: SOIL								
Physical Tests								
Conductivity		0.137		0.0040	mS/cm	09-MAY-16	0.47	0.57
% Moisture		9.50		0.10	%	05-MAY-16		
pH		7.64		0.10	pH units	05-MAY-16		
Cyanides								
Cyanide, Weak Acid Diss		<0.050		0.050	ug/g	05-MAY-16	0.051	0.051
Saturated Paste Extractables								
SAR		0.25		0.10	SAR	05-MAY-16	1	2.4
Calcium (Ca)		15.8		1.0	mg/L	05-MAY-16		
Magnesium (Mg)		3.2		1.0	mg/L	05-MAY-16		
Sodium (Na)		4.2		1.0	mg/L	05-MAY-16		
Metals								
Antimony (Sb)		<1.0		1.0	ug/g	05-MAY-16	1	1.3
Arsenic (As)		2.9		1.0	ug/g	05-MAY-16	11	18
Barium (Ba)		33.0		1.0	ug/g	05-MAY-16	210	220
Beryllium (Be)		<0.50		0.50	ug/g	05-MAY-16	2.5	2.5
Boron (B)		5.8		5.0	ug/g	05-MAY-16	36	36
Boron (B), Hot Water Ext.		<0.10		0.10	ug/g	05-MAY-16	36	36
Cadmium (Cd)		<0.50		0.50	ug/g	05-MAY-16	1	1.2
Chromium (Cr)		10.7		1.0	ug/g	05-MAY-16	67	70
Cobalt (Co)		3.7		1.0	ug/g	05-MAY-16	19	21
Copper (Cu)		10.3		1.0	ug/g	05-MAY-16	62	92
Lead (Pb)		32.1		1.0	ug/g	05-MAY-16	45	120
Mercury (Hg)		0.0145		0.0050	ug/g	05-MAY-16	0.16	0.27
Molybdenum (Mo)		<1.0		1.0	ug/g	05-MAY-16	2	2
Nickel (Ni)		8.1		1.0	ug/g	05-MAY-16	37	82
Selenium (Se)		<1.0		1.0	ug/g	05-MAY-16	1.2	1.5
Silver (Ag)		<0.20		0.20	ug/g	05-MAY-16	0.5	0.5
Thallium (Tl)		<0.50		0.50	ug/g	05-MAY-16	1	1
Uranium (U)		<1.0		1.0	ug/g	05-MAY-16	1.9	2.5
Vanadium (V)		20.2		1.0	ug/g	05-MAY-16	86	86
Zinc (Zn)		210		5.0	ug/g	05-MAY-16	290	290
Speciated Metals								

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

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Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-7 TP7								
Sampled By: D. STOLTZ on 04-MAY-16 @ 10:00								
Matrix: SOIL								
Speciated Metals								
	Chromium, Hexavalent	<0.20		0.20	ug/g	05-MAY-16	0.66	0.66
Volatile Organic Compounds								
	Acetone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Benzene	<0.0068		0.0068	ug/g	06-MAY-16	0.02	0.02
	Bromodichloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromoform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromomethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Carbon tetrachloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dibromochloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chloroform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dibromoethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,4-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dichlorodifluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	trans-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichloropropene (cis & trans)	<0.042		0.042	ug/g	06-MAY-16	0.05	0.05
	Methylene Chloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloropropane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	trans-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	Ethylbenzene	<0.018		0.018	ug/g	06-MAY-16	0.05	0.05
	n-Hexane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Methyl Ethyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Methyl Isobutyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	MTBE	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Styrene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,1,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Tetrachloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Toluene	<0.080		0.080	ug/g	06-MAY-16	0.2	0.2
	1,1,1-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Trichloroethylene	<0.010		0.010	ug/g	06-MAY-16	0.05	0.05
	Trichlorofluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.25
	Vinyl chloride	<0.020		0.020	ug/g	06-MAY-16	0.02	0.02
	o-Xylene	<0.020		0.020	ug/g	06-MAY-16		
	m+p-Xylenes	<0.030		0.030	ug/g	06-MAY-16		
	Xylenes (Total)	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Surrogate: 4-Bromofluorobenzene	96.8		70-130	%	06-MAY-16		
	Surrogate: 1,4-Difluorobenzene	99.7		70-130	%	06-MAY-16		

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-7 TP7								
Sampled By: D. STOLTZ on 04-MAY-16 @ 10:00								
Matrix: SOIL								
Hydrocarbons								
F1 (C6-C10)		<5.0		5.0	ug/g	06-MAY-16	17	25
F1-BTEX		<5.0		5.0	ug/g	11-MAY-16	17	25
F2 (C10-C16)		<10		10	ug/g	11-MAY-16	10	10
F2-Naphth		<10		10	ug/g	11-MAY-16		
F3 (C16-C34)		<50		50	ug/g	11-MAY-16	240	240
F3-PAH		<50		50	ug/g	11-MAY-16		
F4 (C34-C50)		<50		50	ug/g	11-MAY-16	120	120
Total Hydrocarbons (C6-C50)		<72		72	ug/g	11-MAY-16		
Chrom. to baseline at nC50		YES			No Unit	11-MAY-16		
Surrogate: 2-Bromobenzotrifluoride		92.1		60-140	%	11-MAY-16		
Surrogate: 3,4-Dichlorotoluene		86.2		60-140	%	06-MAY-16		
Polycyclic Aromatic Hydrocarbons								
Acenaphthene		<0.050		0.050	ug/g	09-MAY-16	0.05	0.072
Acenaphthylene		<0.050		0.050	ug/g	09-MAY-16	0.093	0.093
Anthracene		<0.050		0.050	ug/g	09-MAY-16	0.05	0.16
Benzo(a)anthracene		<0.050		0.050	ug/g	09-MAY-16	0.095	0.36
Benzo(a)pyrene		<0.050		0.050	ug/g	09-MAY-16	0.05	0.3
Benzo(b)fluoranthene		<0.050		0.050	ug/g	09-MAY-16	0.3	0.47
Benzo(g,h,i)perylene		<0.050		0.050	ug/g	09-MAY-16	0.2	0.68
Benzo(k)fluoranthene		<0.050		0.050	ug/g	09-MAY-16	0.05	0.48
Chrysene		<0.050		0.050	ug/g	09-MAY-16	0.18	2.8
Dibenzo(ah)anthracene		<0.050		0.050	ug/g	09-MAY-16	0.1	0.1
Fluoranthene		<0.050		0.050	ug/g	09-MAY-16	0.24	0.56
Fluorene		<0.050		0.050	ug/g	09-MAY-16	0.05	0.12
Indeno(1,2,3-cd)pyrene		<0.050		0.050	ug/g	09-MAY-16	0.11	0.23
1+2-Methylnaphthalenes		<0.042		0.042	ug/g	09-MAY-16	0.05	0.59
1-Methylnaphthalene		<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
2-Methylnaphthalene		<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
Naphthalene		<0.050		0.050	ug/g	09-MAY-16	0.05	0.09
Phenanthrene		<0.050		0.050	ug/g	09-MAY-16	0.19	0.69
Pyrene		<0.050		0.050	ug/g	09-MAY-16	0.19	1
Surrogate: 2-Fluorobiphenyl		93.5		50-140	%	09-MAY-16		
Surrogate: p-Terphenyl d14		88.8		50-140	%	09-MAY-16		
Polychlorinated Biphenyls								
Aroclor 1242		<0.010		0.010	ug/g	10-MAY-16		
Aroclor 1248		<0.010		0.010	ug/g	10-MAY-16		
Aroclor 1254		<0.010		0.010	ug/g	10-MAY-16		
Aroclor 1260		<0.010		0.010	ug/g	10-MAY-16		
Total PCBs		<0.020		0.020	ug/g	10-MAY-16	0.3	0.3
Surrogate: d14-Terphenyl		102.2		60-140	%	10-MAY-16		
L1763955-8 TP8								
Sampled By: D. STOLTZ on 04-MAY-16 @ 10:11								
Matrix: SOIL								
Physical Tests								
Conductivity		0.145		0.0040	mS/cm	09-MAY-16	0.47	0.57

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-8	TP8							
Sampled By: D. STOLTZ on 04-MAY-16 @ 10:11								
Matrix: SOIL								
Physical Tests								
	% Moisture	16.6		0.10	%	05-MAY-16		
	pH	7.37		0.10	pH units	05-MAY-16		
Cyanides								
	Cyanide, Weak Acid Diss	<0.050		0.050	ug/g	05-MAY-16	0.051	0.051
Saturated Paste Extractables								
	SAR	0.24		0.10	SAR	05-MAY-16	1	2.4
	Calcium (Ca)	15.2		1.0	mg/L	05-MAY-16		
	Magnesium (Mg)	3.1		1.0	mg/L	05-MAY-16		
	Sodium (Na)	3.9		1.0	mg/L	05-MAY-16		
Metals								
	Antimony (Sb)	<1.0		1.0	ug/g	05-MAY-16	1	1.3
	Arsenic (As)	4.6		1.0	ug/g	05-MAY-16	11	18
	Barium (Ba)	66.7		1.0	ug/g	05-MAY-16	210	220
	Beryllium (Be)	<0.50		0.50	ug/g	05-MAY-16	2.5	2.5
	Boron (B)	5.8		5.0	ug/g	05-MAY-16	36	36
	Boron (B), Hot Water Ext.	0.22		0.10	ug/g	05-MAY-16	36	36
	Cadmium (Cd)	0.57		0.50	ug/g	05-MAY-16	1	1.2
	Chromium (Cr)	16.2		1.0	ug/g	05-MAY-16	67	70
	Cobalt (Co)	6.1		1.0	ug/g	05-MAY-16	19	21
	Copper (Cu)	13.4		1.0	ug/g	05-MAY-16	62	92
	Lead (Pb)	46.8		1.0	ug/g	05-MAY-16	*45	120
	Mercury (Hg)	0.0380		0.0050	ug/g	05-MAY-16	0.16	0.27
	Molybdenum (Mo)	<1.0		1.0	ug/g	05-MAY-16	2	2
	Nickel (Ni)	12.4		1.0	ug/g	05-MAY-16	37	82
	Selenium (Se)	<1.0		1.0	ug/g	05-MAY-16	1.2	1.5
	Silver (Ag)	<0.20		0.20	ug/g	05-MAY-16	0.5	0.5
	Thallium (Tl)	<0.50		0.50	ug/g	05-MAY-16	1	1
	Uranium (U)	<1.0		1.0	ug/g	05-MAY-16	1.9	2.5
	Vanadium (V)	30.8		1.0	ug/g	05-MAY-16	86	86
	Zinc (Zn)	204		5.0	ug/g	05-MAY-16	290	290
Speciated Metals								
	Chromium, Hexavalent	<0.20		0.20	ug/g	05-MAY-16	0.66	0.66
Volatile Organic Compounds								
	Acetone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Benzene	<0.0068		0.0068	ug/g	06-MAY-16	0.02	0.02
	Bromodichloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromoform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromomethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Carbon tetrachloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dibromochloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chloroform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dibromoethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-8 TP8								
Sampled By: D. STOLTZ on 04-MAY-16 @ 10:11								
Matrix: SOIL								
Volatile Organic Compounds								
	1,4-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dichlorodifluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	trans-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichloropropene (cis & trans)	<0.042		0.042	ug/g	06-MAY-16	0.05	0.05
	Methylene Chloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloropropane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	trans-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	Ethylbenzene	<0.018		0.018	ug/g	06-MAY-16	0.05	0.05
	n-Hexane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Methyl Ethyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Methyl Isobutyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	MTBE	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Styrene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,1,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Tetrachloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Toluene	<0.080		0.080	ug/g	06-MAY-16	0.2	0.2
	1,1,1-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Trichloroethylene	<0.010		0.010	ug/g	06-MAY-16	0.05	0.05
	Trichlorofluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.25
	Vinyl chloride	<0.020		0.020	ug/g	06-MAY-16	0.02	0.02
	o-Xylene	<0.020		0.020	ug/g	06-MAY-16		
	m+p-Xylenes	<0.030		0.030	ug/g	06-MAY-16		
	Xylenes (Total)	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Surrogate: 4-Bromofluorobenzene	99.8		70-130	%	06-MAY-16		
	Surrogate: 1,4-Difluorobenzene	103.7		70-130	%	06-MAY-16		
Hydrocarbons								
	F1 (C6-C10)	<5.0		5.0	ug/g	06-MAY-16	17	25
	F1-BTEX	<5.0		5.0	ug/g	11-MAY-16	17	25
	F2 (C10-C16)	<10		10	ug/g	11-MAY-16	10	10
	F2-Naphth	<10		10	ug/g	11-MAY-16		
	F3 (C16-C34)	<50		50	ug/g	11-MAY-16	240	240
	F3-PAH	<50		50	ug/g	11-MAY-16		
	F4 (C34-C50)	<50		50	ug/g	11-MAY-16	120	120
	Total Hydrocarbons (C6-C50)	<72		72	ug/g	11-MAY-16		
	Chrom. to baseline at nC50	YES			No Unit	11-MAY-16		
	Surrogate: 2-Bromobenzotrifluoride	91.8		60-140	%	11-MAY-16		
	Surrogate: 3,4-Dichlorotoluene	84.5		60-140	%	06-MAY-16		
Polycyclic Aromatic Hydrocarbons								
	Acenaphthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.072

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-8	TP8							
Sampled By: D. STOLTZ on 04-MAY-16 @ 10:11								
Matrix: SOIL								
Polycyclic Aromatic Hydrocarbons								
	Acenaphthylene	<0.050		0.050	ug/g	09-MAY-16	0.093	0.093
	Anthracene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.16
	Benzo(a)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.095	0.36
	Benzo(a)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.3
	Benzo(b)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.3	0.47
	Benzo(g,h,i)perylene	<0.050		0.050	ug/g	09-MAY-16	0.2	0.68
	Benzo(k)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.48
	Chrysene	<0.050		0.050	ug/g	09-MAY-16	0.18	2.8
	Dibenzo(ah)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.1	0.1
	Fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.24	0.56
	Fluorene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.12
	Indeno(1,2,3-cd)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.11	0.23
	1+2-Methylnaphthalenes	<0.042		0.042	ug/g	09-MAY-16	0.05	0.59
	1-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	2-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	Naphthalene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.09
	Phenanthrene	<0.050		0.050	ug/g	09-MAY-16	0.19	0.69
	Pyrene	<0.050		0.050	ug/g	09-MAY-16	0.19	1
	Surrogate: 2-Fluorobiphenyl	93.1		50-140	%	09-MAY-16		
	Surrogate: p-Terphenyl d14	90.9		50-140	%	09-MAY-16		
Polychlorinated Biphenyls								
	Aroclor 1242	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1248	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1254	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1260	<0.010		0.010	ug/g	10-MAY-16		
	Total PCBs	<0.020		0.020	ug/g	10-MAY-16	0.3	0.3
	Surrogate: d14-Terphenyl	102.8		60-140	%	10-MAY-16		
L1763955-9	TP9							
Sampled By: D. STOLTZ on 04-MAY-16 @ 10:31								
Matrix: SOIL								
Physical Tests								
	Conductivity	0.124		0.0040	mS/cm	09-MAY-16	0.47	0.57
	% Moisture	8.49		0.10	%	05-MAY-16		
	pH	7.50		0.10	pH units	05-MAY-16		
Cyanides								
	Cyanide, Weak Acid Diss	<0.050		0.050	ug/g	05-MAY-16	0.051	0.051
Saturated Paste Extractables								
	SAR	0.10		0.10	SAR	05-MAY-16	1	2.4
	Calcium (Ca)	14.0		1.0	mg/L	05-MAY-16		
	Magnesium (Mg)	3.7		1.0	mg/L	05-MAY-16		
	Sodium (Na)	1.7		1.0	mg/L	05-MAY-16		
Metals								
	Antimony (Sb)	<1.0		1.0	ug/g	05-MAY-16	1	1.3
	Arsenic (As)	3.1		1.0	ug/g	05-MAY-16	11	18
	Barium (Ba)	35.4		1.0	ug/g	05-MAY-16	210	220

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-9	TP9							
Sampled By: D. STOLTZ on 04-MAY-16 @ 10:31								
Matrix: SOIL								
Metals								
	Beryllium (Be)	<0.50		0.50	ug/g	05-MAY-16	2.5	2.5
	Boron (B)	5.5		5.0	ug/g	05-MAY-16	36	36
	Boron (B), Hot Water Ext.	<0.10		0.10	ug/g	05-MAY-16	36	36
	Cadmium (Cd)	0.62		0.50	ug/g	05-MAY-16	1	1.2
	Chromium (Cr)	11.2		1.0	ug/g	05-MAY-16	67	70
	Cobalt (Co)	3.8		1.0	ug/g	05-MAY-16	19	21
	Copper (Cu)	11.8		1.0	ug/g	05-MAY-16	62	92
	Lead (Pb)	46.6		1.0	ug/g	05-MAY-16	*45	120
	Mercury (Hg)	0.0164		0.0050	ug/g	05-MAY-16	0.16	0.27
	Molybdenum (Mo)	<1.0		1.0	ug/g	05-MAY-16	2	2
	Nickel (Ni)	8.4		1.0	ug/g	05-MAY-16	37	82
	Selenium (Se)	<1.0		1.0	ug/g	05-MAY-16	1.2	1.5
	Silver (Ag)	<0.20		0.20	ug/g	05-MAY-16	0.5	0.5
	Thallium (Tl)	<0.50		0.50	ug/g	05-MAY-16	1	1
	Uranium (U)	<1.0		1.0	ug/g	05-MAY-16	1.9	2.5
	Vanadium (V)	20.2		1.0	ug/g	05-MAY-16	86	86
	Zinc (Zn)	288		5.0	ug/g	05-MAY-16	290	290
Speciated Metals								
	Chromium, Hexavalent	<0.20		0.20	ug/g	05-MAY-16	0.66	0.66
Volatile Organic Compounds								
	Acetone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Benzene	<0.0068		0.0068	ug/g	06-MAY-16	0.02	0.02
	Bromodichloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromoform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromomethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Carbon tetrachloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dibromochloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chloroform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dibromoethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,4-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dichlorodifluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	trans-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichloropropene (cis & trans)	<0.042		0.042	ug/g	06-MAY-16	0.05	0.05
	Methylene Chloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloropropane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	trans-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	Ethylbenzene	<0.018		0.018	ug/g	06-MAY-16	0.05	0.05

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-9 TP9								
Sampled By: D. STOLTZ on 04-MAY-16 @ 10:31								
Matrix: SOIL								
Volatile Organic Compounds								
	n-Hexane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Methyl Ethyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Methyl Isobutyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	MTBE	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Styrene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,1,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Tetrachloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Toluene	<0.080		0.080	ug/g	06-MAY-16	0.2	0.2
	1,1,1-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Trichloroethylene	<0.010		0.010	ug/g	06-MAY-16	0.05	0.05
	Trichlorofluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.25
	Vinyl chloride	<0.020		0.020	ug/g	06-MAY-16	0.02	0.02
	o-Xylene	<0.020		0.020	ug/g	06-MAY-16		
	m+p-Xylenes	<0.030		0.030	ug/g	06-MAY-16		
	Xylenes (Total)	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Surrogate: 4-Bromofluorobenzene	99.5		70-130	%	06-MAY-16		
	Surrogate: 1,4-Difluorobenzene	103.1		70-130	%	06-MAY-16		
Hydrocarbons								
	F1 (C6-C10)	<5.0		5.0	ug/g	06-MAY-16	17	25
	F1-BTEX	<5.0		5.0	ug/g	11-MAY-16	17	25
	F2 (C10-C16)	<10		10	ug/g	11-MAY-16	10	10
	F2-Naphth	<10		10	ug/g	11-MAY-16		
	F3 (C16-C34)	<50		50	ug/g	11-MAY-16	240	240
	F3-PAH	<50		50	ug/g	11-MAY-16		
	F4 (C34-C50)	<50		50	ug/g	11-MAY-16	120	120
	Total Hydrocarbons (C6-C50)	<72		72	ug/g	11-MAY-16		
	Chrom. to baseline at nC50	YES			No Unit	11-MAY-16		
	Surrogate: 2-Bromobenzotrifluoride	92.3		60-140	%	11-MAY-16		
	Surrogate: 3,4-Dichlorotoluene	86.1		60-140	%	06-MAY-16		
Polycyclic Aromatic Hydrocarbons								
	Acenaphthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.072
	Acenaphthylene	<0.050		0.050	ug/g	09-MAY-16	0.093	0.093
	Anthracene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.16
	Benzo(a)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.095	0.36
	Benzo(a)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.3
	Benzo(b)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.3	0.47
	Benzo(g,h,i)perylene	<0.050		0.050	ug/g	09-MAY-16	0.2	0.68
	Benzo(k)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.48
	Chrysene	<0.050		0.050	ug/g	09-MAY-16	0.18	2.8
	Dibenzo(ah)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.1	0.1
	Fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.24	0.56
	Fluorene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.12
	Indeno(1,2,3-cd)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.11	0.23
	1+2-Methylnaphthalenes	<0.042		0.042	ug/g	09-MAY-16	0.05	0.59

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details Grouping	Analyte	Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
L1763955-9	TP9							
Sampled By: D. STOLTZ on 04-MAY-16 @ 10:31							#1	#2
Matrix: SOIL								
Polycyclic Aromatic Hydrocarbons								
	1-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	2-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	Naphthalene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.09
	Phenanthrene	<0.050		0.050	ug/g	09-MAY-16	0.19	0.69
	Pyrene	<0.050		0.050	ug/g	09-MAY-16	0.19	1
	Surrogate: 2-Fluorobiphenyl	90.5		50-140	%	09-MAY-16		
	Surrogate: p-Terphenyl d14	85.9		50-140	%	09-MAY-16		
Polychlorinated Biphenyls								
	Aroclor 1242	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1248	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1254	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1260	<0.010		0.010	ug/g	10-MAY-16		
	Total PCBs	<0.020		0.020	ug/g	10-MAY-16	0.3	0.3
	Surrogate: d14-Terphenyl	96.7		60-140	%	10-MAY-16		
L1763955-10	TP10							
Sampled By: D. STOLTZ on 04-MAY-16 @ 10:41							#1	#2
Matrix: SOIL								
Physical Tests								
	Conductivity	0.0861		0.0040	mS/cm	09-MAY-16	0.47	0.57
	% Moisture	12.3		0.10	%	05-MAY-16		
	pH	7.75		0.10	pH units	05-MAY-16		
Cyanides								
	Cyanide, Weak Acid Diss	<0.050		0.050	ug/g	05-MAY-16	0.051	0.051
Saturated Paste Extractables								
	SAR	<0.10	SAR:Q	0.10	SAR	05-MAY-16	1	2.4
	Calcium (Ca)	14.3		1.0	mg/L	05-MAY-16		
	Magnesium (Mg)	2.3		1.0	mg/L	05-MAY-16		
	Sodium (Na)	<1.0		1.0	mg/L	05-MAY-16		
Metals								
	Antimony (Sb)	<1.0		1.0	ug/g	05-MAY-16	1	1.3
	Arsenic (As)	1.7		1.0	ug/g	05-MAY-16	11	18
	Barium (Ba)	10.4		1.0	ug/g	05-MAY-16	210	220
	Beryllium (Be)	<0.50		0.50	ug/g	05-MAY-16	2.5	2.5
	Boron (B)	<5.0		5.0	ug/g	05-MAY-16	36	36
	Boron (B), Hot Water Ext.	<0.10		0.10	ug/g	05-MAY-16	36	36
	Cadmium (Cd)	<0.50		0.50	ug/g	05-MAY-16	1	1.2
	Chromium (Cr)	5.4		1.0	ug/g	05-MAY-16	67	70
	Cobalt (Co)	1.7		1.0	ug/g	05-MAY-16	19	21
	Copper (Cu)	5.4		1.0	ug/g	05-MAY-16	62	92
	Lead (Pb)	26.9		1.0	ug/g	05-MAY-16	45	120
	Mercury (Hg)	<0.0050		0.0050	ug/g	05-MAY-16	0.16	0.27
	Molybdenum (Mo)	<1.0		1.0	ug/g	05-MAY-16	2	2
	Nickel (Ni)	3.8		1.0	ug/g	05-MAY-16	37	82
	Selenium (Se)	<1.0		1.0	ug/g	05-MAY-16	1.2	1.5
	Silver (Ag)	<0.20		0.20	ug/g	05-MAY-16	0.5	0.5

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Comm Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-10 TP10								
Sampled By: D. STOLTZ on 04-MAY-16 @ 10:41								
Matrix: SOIL								
Metals								
	Thallium (Tl)	<0.50		0.50	ug/g	05-MAY-16	1	1
	Uranium (U)	<1.0		1.0	ug/g	05-MAY-16	1.9	2.5
	Vanadium (V)	13.3		1.0	ug/g	05-MAY-16	86	86
	Zinc (Zn)	177		5.0	ug/g	05-MAY-16	290	290
Speciated Metals								
	Chromium, Hexavalent	<0.20		0.20	ug/g	05-MAY-16	0.66	0.66
Volatile Organic Compounds								
	Acetone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Benzene	<0.0068		0.0068	ug/g	06-MAY-16	0.02	0.02
	Bromodichloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromoform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Bromomethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Carbon tetrachloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dibromochloromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Chloroform	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dibromoethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,4-Dichlorobenzene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Dichlorodifluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	trans-1,2-Dichloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,3-Dichloropropene (cis & trans)	<0.042		0.042	ug/g	06-MAY-16	0.05	0.05
	Methylene Chloride	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,2-Dichloropropane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	cis-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	trans-1,3-Dichloropropene	<0.030		0.030	ug/g	06-MAY-16		
	Ethylbenzene	<0.018		0.018	ug/g	06-MAY-16	0.05	0.05
	n-Hexane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Methyl Ethyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	Methyl Isobutyl Ketone	<0.50		0.50	ug/g	06-MAY-16	0.5	0.5
	MTBE	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Styrene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,1,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2,2-Tetrachloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Tetrachloroethylene	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Toluene	<0.080		0.080	ug/g	06-MAY-16	0.2	0.2
	1,1,1-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	1,1,2-Trichloroethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Trichloroethylene	<0.010		0.010	ug/g	06-MAY-16	0.05	0.05
	Trichlorofluoromethane	<0.050		0.050	ug/g	06-MAY-16	0.05	0.25

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use



ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details		Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits	
Grouping	Analyte						#1	#2
L1763955-10	TP10							
Sampled By: D. STOLTZ on 04-MAY-16 @ 10:41								
Matrix: SOIL								
Volatile Organic Compounds								
	Vinyl chloride	<0.020		0.020	ug/g	06-MAY-16	0.02	0.02
	o-Xylene	<0.020		0.020	ug/g	06-MAY-16		
	m+p-Xylenes	<0.030		0.030	ug/g	06-MAY-16		
	Xylenes (Total)	<0.050		0.050	ug/g	06-MAY-16	0.05	0.05
	Surrogate: 4-Bromofluorobenzene	91.5		70-130	%	06-MAY-16		
	Surrogate: 1,4-Difluorobenzene	94.8		70-130	%	06-MAY-16		
Hydrocarbons								
	F1 (C6-C10)	<5.0		5.0	ug/g	06-MAY-16	17	25
	F1-BTEX	<5.0		5.0	ug/g	11-MAY-16	17	25
	F2 (C10-C16)	<10		10	ug/g	11-MAY-16	10	10
	F2-Naphth	<10		10	ug/g	11-MAY-16		
	F3 (C16-C34)	<50		50	ug/g	11-MAY-16	240	240
	F3-PAH	<50		50	ug/g	11-MAY-16		
	F4 (C34-C50)	<50		50	ug/g	11-MAY-16	120	120
	Total Hydrocarbons (C6-C50)	<72		72	ug/g	11-MAY-16		
	Chrom. to baseline at nC50	YES			No Unit	11-MAY-16		
	Surrogate: 2-Bromobenzotrifluoride	89.4		60-140	%	11-MAY-16		
	Surrogate: 3,4-Dichlorotoluene	78.8		60-140	%	06-MAY-16		
Polycyclic Aromatic Hydrocarbons								
	Acenaphthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.072
	Acenaphthylene	<0.050		0.050	ug/g	09-MAY-16	0.093	0.093
	Anthracene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.16
	Benzo(a)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.095	0.36
	Benzo(a)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.3
	Benzo(b)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.3	0.47
	Benzo(g,h,i)perylene	<0.050		0.050	ug/g	09-MAY-16	0.2	0.68
	Benzo(k)fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.48
	Chrysene	<0.050		0.050	ug/g	09-MAY-16	0.18	2.8
	Dibenzo(ah)anthracene	<0.050		0.050	ug/g	09-MAY-16	0.1	0.1
	Fluoranthene	<0.050		0.050	ug/g	09-MAY-16	0.24	0.56
	Fluorene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.12
	Indeno(1,2,3-cd)pyrene	<0.050		0.050	ug/g	09-MAY-16	0.11	0.23
	1+2-Methylnaphthalenes	<0.042		0.042	ug/g	09-MAY-16	0.05	0.59
	1-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	2-Methylnaphthalene	<0.030		0.030	ug/g	09-MAY-16	0.05	0.59
	Naphthalene	<0.050		0.050	ug/g	09-MAY-16	0.05	0.09
	Phenanthrene	<0.050		0.050	ug/g	09-MAY-16	0.19	0.69
	Pyrene	<0.050		0.050	ug/g	09-MAY-16	0.19	1
	Surrogate: 2-Fluorobiphenyl	95.0		50-140	%	09-MAY-16		
	Surrogate: p-Terphenyl d14	91.6		50-140	%	09-MAY-16		
Polychlorinated Biphenyls								
	Aroclor 1242	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1248	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1254	<0.010		0.010	ug/g	10-MAY-16		
	Aroclor 1260	<0.010		0.010	ug/g	10-MAY-16		
	Total PCBs	<0.020		0.020	ug/g	10-MAY-16	0.3	0.3

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

ANALYTICAL GUIDELINE REPORT

MBN-16-484

Sample Details	Analyte	Result	Qualifier	D.L.	Units	Analyzed	Guideline Limits					
Grouping							#1	#2				
L1763955-10	TP10											
Sampled By: D. STOLTZ on 04-MAY-16 @ 10:41												
Matrix: SOIL												
Polychlorinated Biphenyls												
Surrogate: d14-Terphenyl		99.0		60-140	%	10-MAY-16						

** Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.

* Analytical result for this parameter exceeds Guideline Limit listed on this report. Guideline Limits applied:

Ontario Regulation 153/04 - April 15, 2011 Standards = [Suite] - ON-511-T1-SOIL-AG/RPIICC

#1: T1-Soil-Agricultural or Other Property Use

#2: T1-Soil-Res/Park/Inst/Ind/Com/Commu Property Use

Reference Information

Sample Parameter Qualifier key listed:

Qualifier	Description
SAR:Q	Qualified SAR value: actual SAR is lower but is incalculable due to Na, Ca or Mg below detection limit.

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference***
B-HWS-R511-WT	Soil	Boron-HWE-O.Reg 153/04 (July 2011)	HW EXTR, EPA 6010B

A dried solid sample is extracted with calcium chloride, the sample undergoes a heating process. After cooling the sample is filtered and analyzed by ICP/OES.

Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).

CN-WAD-R511-WT	Soil	Cyanide (WAD)-O.Reg 153/04 (July 2011)	MOE 3015/APHA 4500CN I-WAD
----------------	------	--	----------------------------

The sample is extracted with a strong base for 16 hours, and then filtered. The filtrate is then distilled where the cyanide is converted to cyanogen chloride by reacting with chloramine-T, the cyanogen chloride then reacts with a combination of barbituric acid and isonicotinic acid to form a highly colored complex.

Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).

CR-CR6-IC-WT	Soil	Hexavalent Chromium in Soil	SW846 3060A/7199
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This analysis is carried out using procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846, Method 7199, published by the United States Environmental Protection Agency (EPA). The procedure involves analysis for chromium (VI) by ion chromatography using diphenylcarbazide in a sulphuric acid solution.

Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).

EC-R511-WT	Soil	Conductivity-O.Reg 153/04 (July 2011)	MOEE E3138
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A representative subsample is tumbled with de-ionized (DI) water. The ratio of water to soil is 2:1 v/w. After tumbling the sample is then analyzed by a conductivity meter.

Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).

F1-F4-511-CALC-WT	Soil	F1-F4 Hydrocarbon Calculated Parameters	CCME CWS-PHC, Pub #1310, Dec 2001-S
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Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

Hydrocarbon results are expressed on a dry weight basis.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.

In samples where BTEX and F1 were analyzed, F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:

1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:

1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

F1-HS-511-WT	Soil	F1-O.Reg 153/04 (July 2011)	E3398/CCME TIER 1-HS
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Fraction F1 is determined by extracting a soil or sediment sample as received with methanol, then analyzing by headspace-GC/FID.

Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

Reference Information

F2-F4-511-WT Soil F2-F4-O.Reg 153/04 (July 2011) MOE DECPH-E3398/CCME TIER 1

Fractions F2, F3 and F4 are determined by extracting a soil sample with a solvent mix. The solvent recovered from the extracted soil sample is dried and treated to remove polar material. The extract is analyzed by GC/FID.

Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

HG-200.2-CVAA-WT Soil Mercury in Soil by CVAAS EPA 200.2/1631E (mod)

Soil samples are digested with nitric and hydrochloric acids, followed by analysis by CVAAS.

Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).

MET-200.2-CCMS-WT Soil Metals in Soil by CRC ICPMS EPA 200.2/6020A (mod)

Soil samples are digested with nitric and hydrochloric acids, followed by analysis by CRC ICPMS.

Method Limitation: This method is not a total digestion technique. It is a very strong acid digestion that is intended to dissolve those metals that may be environmentally available. This method does not dissolve all silicate materials and may result in a partial extraction, depending on the sample matrix, for some metals, including, but not limited to Al, Ba, Be, Cr, Sr, Ti, Tl, and V.

Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

METHYLNAPS-CALC-WT Soil ABN-Calculated Parameters SW846 8270

MOISTURE-WT Soil % Moisture Gravimetric: Oven Dried

PAH-511-WT Soil PAH-O.Reg 153/04 (July 2011) SW846 3510/8270

A representative sub-sample of soil is fortified with deuterium-labelled surrogates and a mechanical shaking technique is used to extract the sample with a mixture of methanol and toluene. The extracts are concentrated and analyzed by GC/MS. Depending on the analytical GC/MS column used benzo(j)fluoranthene may chromatographically co-elute with benzo(b)fluoranthene or benzo(k)fluoranthene.

Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

PCB-511-WT Soil PCB-O.Reg 153/04 (July 2011) SW846 3510/8082

An aliquot of a solid sample is extracted with a solvent, extract is cleaned up and analyzed on the GC/MS.

Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).

PH-R511-WT Soil pH-O.Reg 153/04 (July 2011) MOEE E3137A

A minimum 10g portion of the sample is extracted with 20mL of 0.01M calcium chloride solution by shaking for at least 30 minutes. The aqueous layer is separated from the soil and then analyzed using a pH meter and electrode.

Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).

SAR-R511-WT Soil SAR-O.Reg 153/04 (July 2011) SW846 6010C

A dried, disaggregated solid sample is extracted with deionized water, the aqueous extract is separated from the solid, acidified and then analyzed using a ICP/OES. The concentrations of Na, Ca and Mg are reported as per CALA requirements for calculated parameters. These individual parameters are not for comparison to any guideline.

Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011).

VOC-1,3-DCP-CALC-WT Soil Regulation 153 VOCs SW8260B/SW8270C

VOC-511-HS-WT Soil VOC-O.Reg 153/04 (July 2011) SW846 8260 (511)

Soil and sediment samples are extracted in methanol and analyzed by headspace-GC/MS.

Analysis conducted in accordance with the Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act (July 1, 2011), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

XYLENES-SUM-CALC-WT Soil Sum of Xylene Isomer Concentrations CALCULATION

Total xylenes represents the sum of o-xylene and m&p-xylene.

Reference Information

*** ALS test methods may incorporate modifications from specified reference methods to improve performance.

Chain of Custody numbers:

14-458487

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA		

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight

mg/L - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information.



Quality Control Report

Workorder: L1763955

Report Date: 12-MAY-16

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Client: MBN ENVIRONMENTAL ENGINEERING INC.
 29 St. Charles Street, East
 Maryhill ON N0B 2B0

Contact: DREW STOLTZ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
B-HWS-R511-WT								
	Soil							
Batch	R3451653							
WG2302597-4	DUP	L1763955-2						
Boron (B), Hot Water Ext.		0.42	0.45		ug/g	6.0	30	05-MAY-16
WG2302597-2	IRM	HOTB-SAL_SOIL5						
Boron (B), Hot Water Ext.			110.3		%		70-130	05-MAY-16
WG2302597-3	LCS							
Boron (B), Hot Water Ext.			97.8		%		70-130	05-MAY-16
WG2302597-1	MB							
Boron (B), Hot Water Ext.			<0.10		ug/g		0.1	05-MAY-16
CN-WAD-R511-WT								
	Soil							
Batch	R3452775							
WG2301834-3	DUP	L1763518-1						
Cyanide, Weak Acid Diss		<0.050	<0.050	RPD-NA	ug/g	N/A	35	05-MAY-16
WG2301834-2	LCS							
Cyanide, Weak Acid Diss			93.3		%		80-120	05-MAY-16
WG2301834-1	MB							
Cyanide, Weak Acid Diss			<0.050		ug/g		0.05	05-MAY-16
WG2301834-4	MS	L1763518-1						
Cyanide, Weak Acid Diss			95.0		%		70-130	05-MAY-16
CR-CR6-IC-WT								
	Soil							
Batch	R3451568							
WG2301835-4	CRM	WT-SQC012						
Chromium, Hexavalent			107.4		%		70-130	05-MAY-16
WG2301835-3	DUP	L1763554-1						
Chromium, Hexavalent		<0.20	<0.20	RPD-NA	ug/g	N/A	35	05-MAY-16
WG2301835-2	LCS							
Chromium, Hexavalent			95.2		%		80-120	05-MAY-16
WG2301835-1	MB							
Chromium, Hexavalent			<0.20		ug/g		0.2	05-MAY-16
EC-R511-WT								
	Soil							
Batch	R3453465							
WG2302598-4	DUP	WG2302598-3						
Conductivity		0.183	0.216		mS/cm	17	20	09-MAY-16
WG2303173-1	LCS							
Conductivity			96.0		%		90-110	09-MAY-16
WG2302598-1	MB							
Conductivity			<0.0040		mS/cm		0.044	09-MAY-16
F1-HS-511-WT								
	Soil							



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Client: MBN ENVIRONMENTAL ENGINEERING INC.
 29 St. Charles Street, East
 Maryhill ON N0B 2B0

Contact: DREW STOLTZ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F1-HS-511-WT		Soil						
Batch	R3452061							
WG2302592-4	DUP	WG2302592-3						
F1 (C6-C10)		<5.0	<5.0	RPD-NA	ug/g	N/A	50	06-MAY-16
WG2302592-2	LCS							
F1 (C6-C10)			95.6		%		80-120	06-MAY-16
WG2302592-1	MB							
F1 (C6-C10)			<5.0		ug/g		5	06-MAY-16
Surrogate: 3,4-Dichlorotoluene			89.9		%		60-140	06-MAY-16
WG2302592-7	MS	WG2302592-6						
F1 (C6-C10)			84.3		%		60-140	06-MAY-16
F2-F4-511-WT		Soil						
Batch	R3453166							
WG2301836-3	CRM	ALS PHC2 IRM						
F2 (C10-C16)			99.4		%		70-130	05-MAY-16
F3 (C16-C34)			115.6		%		70-130	05-MAY-16
F4 (C34-C50)			120.8		%		70-130	05-MAY-16
WG2301836-5	DUP	WG2301836-4						
F2 (C10-C16)		<10	<10	RPD-NA	ug/g	N/A	40	05-MAY-16
F3 (C16-C34)		<50	<50	RPD-NA	ug/g	N/A	40	05-MAY-16
F4 (C34-C50)		91	<50	RPD-NA	ug/g	N/A	40	05-MAY-16
WG2301836-2	LCS							
F2 (C10-C16)			115.7		%		80-120	05-MAY-16
F3 (C16-C34)			117.8		%		80-120	05-MAY-16
F4 (C34-C50)			103.5		%		80-120	05-MAY-16
WG2301836-1	MB							
F2 (C10-C16)			<10		ug/g		10	05-MAY-16
F3 (C16-C34)			<50		ug/g		50	05-MAY-16
F4 (C34-C50)			<50		ug/g		50	05-MAY-16
Surrogate: 2-Bromobenzotrifluoride			57.3	MBS	%		60-140	05-MAY-16
Batch	R3455582							
WG2305492-3	CRM	ALS PHC2 IRM						
F2 (C10-C16)			94.6		%		70-130	11-MAY-16
F3 (C16-C34)			103.9		%		70-130	11-MAY-16
F4 (C34-C50)			109.3		%		70-130	11-MAY-16
WG2305492-5	DUP	WG2305492-4						
F2 (C10-C16)		11	<10	RPD-NA	ug/g	N/A	40	11-MAY-16
F3 (C16-C34)		107	99		ug/g	7.9	40	11-MAY-16



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Client: MBN ENVIRONMENTAL ENGINEERING INC.
 29 St. Charles Street, East
 Maryhill ON N0B 2B0

Contact: DREW STOLTZ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F2-F4-511-WT		Soil						
Batch	R3455582							
WG2305492-5	DUP	WG2305492-4						
F4 (C34-C50)		89	84		ug/g	5.8	40	11-MAY-16
WG2305492-2	LCS							
F2 (C10-C16)			95.6		%		80-120	11-MAY-16
F3 (C16-C34)			106.3		%		80-120	11-MAY-16
F4 (C34-C50)			111.9		%		80-120	11-MAY-16
WG2305492-1	MB							
F2 (C10-C16)			<10		ug/g		10	11-MAY-16
F3 (C16-C34)			<50		ug/g		50	11-MAY-16
F4 (C34-C50)			<50		ug/g		50	11-MAY-16
Surrogate: 2-Bromobenzotrifluoride			95.1		%		60-140	11-MAY-16
HG-200.2-CVAA-WT		Soil						
Batch	R3451567							
WG2302588-8	CRM	WT-CANMET-TILL1						
Mercury (Hg)			94.0		%		70-130	05-MAY-16
WG2302588-12	DUP	WG2302588-11						
Mercury (Hg)		0.0891	0.0900		ug/g	1.0	40	05-MAY-16
WG2302588-9	LCS							
Mercury (Hg)			103.5		%		80-120	05-MAY-16
WG2302588-7	MB							
Mercury (Hg)			<0.0050		mg/kg		0.005	05-MAY-16
MET-200.2-CCMS-WT		Soil						
Batch	R3452414							
WG2302588-8	CRM	WT-CANMET-TILL1						
Antimony (Sb)			95.9		%		70-130	05-MAY-16
Arsenic (As)			113.1		%		70-130	05-MAY-16
Barium (Ba)			118.1		%		70-130	05-MAY-16
Beryllium (Be)			93.6		%		70-130	05-MAY-16
Cadmium (Cd)			103.6		%		70-130	05-MAY-16
Chromium (Cr)			110.4		%		70-130	05-MAY-16
Cobalt (Co)			107.4		%		70-130	05-MAY-16
Copper (Cu)			104.7		%		70-130	05-MAY-16
Lead (Pb)			90.2		%		70-130	05-MAY-16
Molybdenum (Mo)			97.7		%		70-130	05-MAY-16
Nickel (Ni)			107.0		%		70-130	05-MAY-16
Selenium (Se)			110.2		%		70-130	05-MAY-16



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Client: MBN ENVIRONMENTAL ENGINEERING INC.
 29 St. Charles Street, East
 Maryhill ON N0B 2B0

Contact: DREW STOLTZ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-WT								
Soil								
Batch R3452414								
WG2302588-8 CRM		WT-CANMET-TILL1						
Silver (Ag)			96.9		%		70-130	05-MAY-16
Thallium (Tl)			95.7		%		70-130	05-MAY-16
Uranium (U)			100.4		%		70-130	05-MAY-16
Vanadium (V)			110.6		%		70-130	05-MAY-16
Zinc (Zn)			101.3		%		70-130	05-MAY-16
WG2302588-12 DUP		WG2302588-11						
Antimony (Sb)		<1.0	0.31		ug/g	1.2	30	05-MAY-16
Arsenic (As)		5.0	5.28		ug/g	4.8	30	05-MAY-16
Barium (Ba)		80.8	85.5		ug/g	5.7	40	05-MAY-16
Beryllium (Be)		<0.50	0.54		ug/g	13	30	05-MAY-16
Boron (B)		6.4	5.5		ug/g	15	30	05-MAY-16
Cadmium (Cd)		1.14	1.18		ug/g	2.9	30	05-MAY-16
Chromium (Cr)		26.3	27.9		ug/g	5.9	30	05-MAY-16
Cobalt (Co)		6.1	6.27		ug/g	2.7	30	05-MAY-16
Copper (Cu)		19.6	20.6		ug/g	5.1	30	05-MAY-16
Lead (Pb)		65.0	67.2		ug/g	3.3	40	05-MAY-16
Molybdenum (Mo)		<1.0	0.76		ug/g	11	40	05-MAY-16
Nickel (Ni)		11.8	12.2		ug/g	3.4	30	05-MAY-16
Selenium (Se)		<1.0	0.29		ug/g	9.3	30	05-MAY-16
Silver (Ag)		<0.20	0.18		ug/g	0.2	40	05-MAY-16
Thallium (Tl)		<0.50	0.126		ug/g	3.7	30	05-MAY-16
Uranium (U)		<1.0	0.545		ug/g	5.0	30	05-MAY-16
Vanadium (V)		32.4	33.9		ug/g	4.4	30	05-MAY-16
Zinc (Zn)		253	269		ug/g	5.9	30	05-MAY-16
WG2302588-10 LCS								
Antimony (Sb)			104.3		%		80-120	05-MAY-16
Arsenic (As)			106.0		%		80-120	05-MAY-16
Barium (Ba)			107.0		%		80-120	05-MAY-16
Beryllium (Be)			98.3		%		80-120	05-MAY-16
Boron (B)			97.2		%		80-120	05-MAY-16
Cadmium (Cd)			107.1		%		80-120	05-MAY-16
Chromium (Cr)			103.9		%		80-120	05-MAY-16
Cobalt (Co)			104.3		%		80-120	05-MAY-16



Quality Control Report

Workorder: L1763955

Report Date: 12-MAY-16

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Client: MBN ENVIRONMENTAL ENGINEERING INC.
 29 St. Charles Street, East
 Maryhill ON N0B 2B0

Contact: DREW STOLTZ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-WT								
	Soil							
Batch	R3452414							
WG2302588-10	LCS							
Copper (Cu)			102.2		%		80-120	05-MAY-16
Lead (Pb)			109.6		%		80-120	05-MAY-16
Molybdenum (Mo)			104.5		%		80-120	05-MAY-16
Nickel (Ni)			103.4		%		80-120	05-MAY-16
Selenium (Se)			104.5		%		80-120	05-MAY-16
Silver (Ag)			94.9		%		80-120	05-MAY-16
Thallium (Tl)			106.5		%		80-120	05-MAY-16
Uranium (U)			97.8		%		80-120	05-MAY-16
Vanadium (V)			106.3		%		80-120	05-MAY-16
Zinc (Zn)			97.8		%		80-120	05-MAY-16
WG2302588-7	MB							
Antimony (Sb)			<0.10		mg/kg		0.1	05-MAY-16
Arsenic (As)			<0.10		mg/kg		0.1	05-MAY-16
Barium (Ba)			<0.50		mg/kg		0.5	05-MAY-16
Beryllium (Be)			<0.10		mg/kg		0.1	05-MAY-16
Boron (B)			<5.0		mg/kg		5	05-MAY-16
Cadmium (Cd)			<0.020		mg/kg		0.02	05-MAY-16
Chromium (Cr)			<0.50		mg/kg		0.5	05-MAY-16
Cobalt (Co)			<0.10		mg/kg		0.1	05-MAY-16
Copper (Cu)			<0.50		mg/kg		0.5	05-MAY-16
Lead (Pb)			<0.50		mg/kg		0.5	05-MAY-16
Molybdenum (Mo)			<0.10		mg/kg		0.1	05-MAY-16
Nickel (Ni)			<0.50		mg/kg		0.5	05-MAY-16
Selenium (Se)			<0.20		mg/kg		0.2	05-MAY-16
Silver (Ag)			<0.10		mg/kg		0.1	05-MAY-16
Thallium (Tl)			<0.050		mg/kg		0.05	05-MAY-16
Uranium (U)			<0.050		mg/kg		0.05	05-MAY-16
Vanadium (V)			<0.20		mg/kg		0.2	05-MAY-16
Zinc (Zn)			<2.0		mg/kg		2	05-MAY-16
MOISTURE-WT								
	Soil							
Batch	R3451278							
WG2301899-3	DUP	L1763471-7						
% Moisture		13.7	13.1		%	4.5	20	05-MAY-16
WG2301899-2	LCS							



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Client: MBN ENVIRONMENTAL ENGINEERING INC.
 29 St. Charles Street, East
 Maryhill ON N0B 2B0

Contact: DREW STOLTZ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MOISTURE-WT		Soil						
Batch	R3451278							
WG2301899-2	LCS							
% Moisture			95.4		%		90-110	05-MAY-16
WG2301899-1	MB							
% Moisture			<0.10		%		0.1	05-MAY-16
PAH-511-WT		Soil						
Batch	R3453763							
WG2302123-5	DUP	WG2302123-4						
1-Methylnaphthalene		<0.030	<0.030	RPD-NA	ug/g	N/A	40	09-MAY-16
2-Methylnaphthalene		<0.030	<0.030	RPD-NA	ug/g	N/A	40	09-MAY-16
Acenaphthene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
Acenaphthylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
Anthracene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
Benzo(a)anthracene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
Benzo(a)pyrene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
Benzo(b)fluoranthene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
Benzo(g,h,i)perylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
Benzo(k)fluoranthene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
Chrysene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
Dibenzo(ah)anthracene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
Fluoranthene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
Fluorene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
Indeno(1,2,3-cd)pyrene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
Naphthalene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
Phenanthrene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
Pyrene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	09-MAY-16
WG2302123-3	IRM	ALS PAH1 RM						
1-Methylnaphthalene			93.5		%		50-140	09-MAY-16
2-Methylnaphthalene			97.3		%		50-140	09-MAY-16
Acenaphthene			75.6		%		50-140	09-MAY-16
Acenaphthylene			98.7		%		50-140	09-MAY-16
Anthracene			55.6		%		50-140	09-MAY-16
Benzo(a)anthracene			105.8		%		50-140	09-MAY-16
Benzo(a)pyrene			80.0		%		50-140	09-MAY-16
Benzo(b)fluoranthene			89.1		%		50-140	09-MAY-16
Benzo(g,h,i)perylene			93.4				50-140	



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Client: MBN ENVIRONMENTAL ENGINEERING INC.
 29 St. Charles Street, East
 Maryhill ON N0B 2B0

Contact: DREW STOLTZ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-511-WT	Soil							
Batch	R3453763							
WG2302123-3 IRM		ALS PAH1 RM						
Benzo(g,h,i)perylene			93.4		%		50-140	09-MAY-16
Benzo(k)fluoranthene			103.6		%		50-140	09-MAY-16
Chrysene			107.8		%		50-140	09-MAY-16
Dibenzo(ah)anthracene			105.3		%		50-140	09-MAY-16
Fluoranthene			99.1		%		50-140	09-MAY-16
Fluorene			63.4		%		50-140	09-MAY-16
Indeno(1,2,3-cd)pyrene			90.0		%		50-140	09-MAY-16
Naphthalene			93.8		%		50-140	09-MAY-16
Phenanthrene			102.7		%		50-140	09-MAY-16
Pyrene			97.0		%		50-140	09-MAY-16
WG2302123-2 LCS								
1-Methylnaphthalene			88.9		%		50-140	09-MAY-16
2-Methylnaphthalene			89.6		%		50-140	09-MAY-16
Acenaphthene			88.2		%		50-140	09-MAY-16
Acenaphthylene			88.8		%		50-140	09-MAY-16
Anthracene			85.6		%		50-140	09-MAY-16
Benzo(a)anthracene			88.0		%		50-140	09-MAY-16
Benzo(a)pyrene			86.2		%		50-140	09-MAY-16
Benzo(b)fluoranthene			73.4		%		50-140	09-MAY-16
Benzo(g,h,i)perylene			89.4		%		50-140	09-MAY-16
Benzo(k)fluoranthene			79.1		%		50-140	09-MAY-16
Chrysene			91.6		%		50-140	09-MAY-16
Dibenzo(ah)anthracene			87.0		%		50-140	09-MAY-16
Fluoranthene			81.9		%		50-140	09-MAY-16
Fluorene			87.7		%		50-140	09-MAY-16
Indeno(1,2,3-cd)pyrene			90.9		%		50-140	09-MAY-16
Naphthalene			92.7		%		50-140	09-MAY-16
Phenanthrene			88.3		%		50-140	09-MAY-16
Pyrene			87.8		%		50-140	09-MAY-16
WG2302123-1 MB								
1-Methylnaphthalene			<0.030		ug/g		0.03	09-MAY-16
2-Methylnaphthalene			<0.030		ug/g		0.03	09-MAY-16
Acenaphthene			<0.050		ug/g		0.05	09-MAY-16
Acenaphthylene			<0.050		ug/g		0.05	09-MAY-16



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Client: MBN ENVIRONMENTAL ENGINEERING INC.
 29 St. Charles Street, East
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Contact: DREW STOLTZ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-511-WT		Soil						
Batch R3453763								
WG2302123-1 MB								
Anthracene			<0.050		ug/g		0.05	09-MAY-16
Benzo(a)anthracene			<0.050		ug/g		0.05	09-MAY-16
Benzo(a)pyrene			<0.050		ug/g		0.05	09-MAY-16
Benzo(b)fluoranthene			<0.050		ug/g		0.05	09-MAY-16
Benzo(g,h,i)perylene			<0.050		ug/g		0.05	09-MAY-16
Benzo(k)fluoranthene			<0.050		ug/g		0.05	09-MAY-16
Chrysene			<0.050		ug/g		0.05	09-MAY-16
Dibenzo(ah)anthracene			<0.050		ug/g		0.05	09-MAY-16
Fluoranthene			<0.050		ug/g		0.05	09-MAY-16
Fluorene			<0.050		ug/g		0.05	09-MAY-16
Indeno(1,2,3-cd)pyrene			<0.050		ug/g		0.05	09-MAY-16
Naphthalene			<0.050		ug/g		0.05	09-MAY-16
Phenanthrene			<0.050		ug/g		0.05	09-MAY-16
Pyrene			<0.050		ug/g		0.05	09-MAY-16
Surrogate: 2-Fluorobiphenyl			96.0		%		50-140	09-MAY-16
Surrogate: p-Terphenyl d14			85.0		%		50-140	09-MAY-16
PCB-511-WT		Soil						
Batch R3454967								
WG2302123-5 DUP								
		WG2302123-4						
Aroclor 1242		<0.010	<0.010	RPD-NA	ug/g	N/A	40	10-MAY-16
Aroclor 1248		<0.010	<0.010	RPD-NA	ug/g	N/A	40	10-MAY-16
Aroclor 1254		<0.010	<0.010	RPD-NA	ug/g	N/A	40	10-MAY-16
Aroclor 1260		<0.010	<0.010	RPD-NA	ug/g	N/A	40	10-MAY-16
WG2302123-2 LCS								
Aroclor 1242			90.6		%		60-140	10-MAY-16
Aroclor 1248			79.7		%		60-140	10-MAY-16
Aroclor 1254			99.4		%		60-140	10-MAY-16
Aroclor 1260			99.97		%		60-140	10-MAY-16
WG2302123-1 MB								
Aroclor 1242			<0.010		ug/g		0.01	10-MAY-16
Aroclor 1248			<0.010		ug/g		0.01	10-MAY-16
Aroclor 1254			<0.010		ug/g		0.01	10-MAY-16
Aroclor 1260			<0.010		ug/g		0.01	10-MAY-16
Surrogate: d14-Terphenyl			94.2		%		60-140	10-MAY-16



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Contact: DREW STOLTZ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PCB-511-WT		Soil						
Batch	R3454967							
WG2302123-6	MS	WG2302123-4						
Aroclor 1242			86.5		%		60-140	10-MAY-16
Aroclor 1254			94.6		%		60-140	10-MAY-16
Aroclor 1260			99.6		%		60-140	10-MAY-16
PH-R511-WT		Soil						
Batch	R3451168							
WG2301833-1	DUP	L1763518-1						
pH		8.98	9.13	J	pH units	0.15	0.3	04-MAY-16
WG2301945-1	LCS							
pH			6.97		pH units		6.7-7.3	04-MAY-16
SAR-R511-WT		Soil						
Batch	R3452415							
WG2302598-4	DUP	WG2302598-3						
Calcium (Ca)		26.2	23.0		mg/L	13	30	05-MAY-16
Sodium (Na)		2.5	2.4		mg/L	6.2	30	05-MAY-16
Magnesium (Mg)		5.4	5.0		mg/L	7.4	30	05-MAY-16
WG2302598-2	IRM	WT SAR1						
Calcium (Ca)			109.2		%		70-130	05-MAY-16
Sodium (Na)			109.0		%		70-130	05-MAY-16
Magnesium (Mg)			105.0		%		70-130	05-MAY-16
WG2302598-1	MB							
Calcium (Ca)			<1.0		mg/L		1	05-MAY-16
Sodium (Na)			<1.0		mg/L		1	05-MAY-16
Magnesium (Mg)			<1.0		mg/L		1	05-MAY-16
VOC-511-HS-WT		Soil						
Batch	R3452061							
WG2302592-4	DUP	WG2302592-3						
1,1,1,2-Tetrachloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
1,1,2,2-Tetrachloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
1,1,1-Trichloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
1,1,2-Trichloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
1,1-Dichloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
1,1-Dichloroethylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
1,2-Dibromoethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
1,2-Dichlorobenzene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16



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Client: MBN ENVIRONMENTAL ENGINEERING INC.
 29 St. Charles Street, East
 Maryhill ON N0B 2B0

Contact: DREW STOLTZ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT		Soil						
Batch	R3452061							
WG2302592-4	DUP	WG2302592-3						
1,2-Dichloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
1,2-Dichloropropane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
1,3-Dichlorobenzene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
1,4-Dichlorobenzene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
Acetone		<0.50	<0.50	RPD-NA	ug/g	N/A	40	06-MAY-16
Benzene		<0.0068	<0.0068	RPD-NA	ug/g	N/A	40	06-MAY-16
Bromodichloromethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
Bromoform		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
Bromomethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
Carbon tetrachloride		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
Chlorobenzene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
Chloroform		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
cis-1,2-Dichloroethylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
cis-1,3-Dichloropropene		<0.030	<0.030	RPD-NA	ug/g	N/A	40	06-MAY-16
Dibromochloromethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
Dichlorodifluoromethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
Ethylbenzene		<0.018	<0.018	RPD-NA	ug/g	N/A	40	06-MAY-16
n-Hexane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
Methylene Chloride		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
MTBE		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
m+p-Xylenes		<0.030	<0.030	RPD-NA	ug/g	N/A	40	06-MAY-16
Methyl Ethyl Ketone		<0.50	<0.50	RPD-NA	ug/g	N/A	40	06-MAY-16
Methyl Isobutyl Ketone		<0.50	<0.50	RPD-NA	ug/g	N/A	40	06-MAY-16
o-Xylene		<0.020	<0.020	RPD-NA	ug/g	N/A	40	06-MAY-16
Styrene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
Tetrachloroethylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
Toluene		<0.080	<0.080	RPD-NA	ug/g	N/A	40	06-MAY-16
trans-1,2-Dichloroethylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
trans-1,3-Dichloropropene		<0.030	<0.030	RPD-NA	ug/g	N/A	40	06-MAY-16
Trichloroethylene		<0.010	<0.010	RPD-NA	ug/g	N/A	40	06-MAY-16
Trichlorofluoromethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	06-MAY-16
Vinyl chloride		<0.020	<0.020	RPD-NA	ug/g	N/A	40	06-MAY-16
WG2302592-2	LCS							



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Client: MBN ENVIRONMENTAL ENGINEERING INC.
 29 St. Charles Street, East
 Maryhill ON N0B 2B0

Contact: DREW STOLTZ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT		Soil						
Batch	R3452061							
WG2302592-2	LCS							
1,1,1,2-Tetrachloroethane			88.5		%		60-130	06-MAY-16
1,1,2,2-Tetrachloroethane			89.2		%		60-130	06-MAY-16
1,1,1-Trichloroethane			90.9		%		60-130	06-MAY-16
1,1,2-Trichloroethane			90.2		%		60-130	06-MAY-16
1,1-Dichloroethane			88.2		%		60-130	06-MAY-16
1,1-Dichloroethylene			85.2		%		60-130	06-MAY-16
1,2-Dibromoethane			87.7		%		70-130	06-MAY-16
1,2-Dichlorobenzene			91.5		%		70-130	06-MAY-16
1,2-Dichloroethane			89.2		%		60-130	06-MAY-16
1,2-Dichloropropane			87.9		%		70-130	06-MAY-16
1,3-Dichlorobenzene			89.5		%		70-130	06-MAY-16
1,4-Dichlorobenzene			91.9		%		70-130	06-MAY-16
Acetone			96.7		%		60-140	06-MAY-16
Benzene			89.4		%		70-130	06-MAY-16
Bromodichloromethane			87.7		%		50-140	06-MAY-16
Bromoform			88.8		%		70-130	06-MAY-16
Bromomethane			87.5		%		50-140	06-MAY-16
Carbon tetrachloride			88.4		%		70-130	06-MAY-16
Chlorobenzene			90.9		%		70-130	06-MAY-16
Chloroform			90.7		%		70-130	06-MAY-16
cis-1,2-Dichloroethylene			87.9		%		70-130	06-MAY-16
cis-1,3-Dichloropropene			91.6		%		70-130	06-MAY-16
Dibromochloromethane			94.0		%		60-130	06-MAY-16
Dichlorodifluoromethane			59.3		%		50-140	06-MAY-16
Ethylbenzene			87.9		%		70-130	06-MAY-16
n-Hexane			92.3		%		70-130	06-MAY-16
Methylene Chloride			93.0		%		70-130	06-MAY-16
MTBE			83.7		%		70-130	06-MAY-16
m+p-Xylenes			90.9		%		70-130	06-MAY-16
Methyl Ethyl Ketone			88.0		%		60-140	06-MAY-16
Methyl Isobutyl Ketone			94.6		%		60-140	06-MAY-16
o-Xylene			89.4		%		70-130	06-MAY-16
Styrene			89.6		%		70-130	06-MAY-16



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Client: MBN ENVIRONMENTAL ENGINEERING INC.
 29 St. Charles Street, East
 Maryhill ON N0B 2B0

Contact: DREW STOLTZ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT		Soil						
Batch	R3452061							
WG2302592-2	LCS							
Tetrachloroethylene			88.9		%		60-130	06-MAY-16
Toluene			82.9		%		70-130	06-MAY-16
trans-1,2-Dichloroethylene			90.8		%		60-130	06-MAY-16
trans-1,3-Dichloropropene			89.8		%		70-130	06-MAY-16
Trichloroethylene			87.0		%		60-130	06-MAY-16
Trichlorofluoromethane			90.7		%		50-140	06-MAY-16
Vinyl chloride			84.1		%		60-140	06-MAY-16
WG2302592-1	MB							
1,1,1,2-Tetrachloroethane			<0.050		ug/g		0.05	06-MAY-16
1,1,2,2-Tetrachloroethane			<0.050		ug/g		0.05	06-MAY-16
1,1,1-Trichloroethane			<0.050		ug/g		0.05	06-MAY-16
1,1,2-Trichloroethane			<0.050		ug/g		0.05	06-MAY-16
1,1-Dichloroethane			<0.050		ug/g		0.05	06-MAY-16
1,1-Dichloroethylene			<0.050		ug/g		0.05	06-MAY-16
1,2-Dibromoethane			<0.050		ug/g		0.05	06-MAY-16
1,2-Dichlorobenzene			<0.050		ug/g		0.05	06-MAY-16
1,2-Dichloroethane			<0.050		ug/g		0.05	06-MAY-16
1,2-Dichloropropane			<0.050		ug/g		0.05	06-MAY-16
1,3-Dichlorobenzene			<0.050		ug/g		0.05	06-MAY-16
1,4-Dichlorobenzene			<0.050		ug/g		0.05	06-MAY-16
Acetone			<0.50		ug/g		0.5	06-MAY-16
Benzene			<0.0068		ug/g		0.0068	06-MAY-16
Bromodichloromethane			<0.050		ug/g		0.05	06-MAY-16
Bromoform			<0.050		ug/g		0.05	06-MAY-16
Bromomethane			<0.050		ug/g		0.05	06-MAY-16
Carbon tetrachloride			<0.050		ug/g		0.05	06-MAY-16
Chlorobenzene			<0.050		ug/g		0.05	06-MAY-16
Chloroform			<0.050		ug/g		0.05	06-MAY-16
cis-1,2-Dichloroethylene			<0.050		ug/g		0.05	06-MAY-16
cis-1,3-Dichloropropene			<0.030		ug/g		0.03	06-MAY-16
Dibromochloromethane			<0.050		ug/g		0.05	06-MAY-16
Dichlorodifluoromethane			<0.050		ug/g		0.05	06-MAY-16
Ethylbenzene			<0.018		ug/g		0.018	06-MAY-16
n-Hexane			<0.050		ug/g		0.05	06-MAY-16



Quality Control Report

Workorder: L1763955

Report Date: 12-MAY-16

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Client: MBN ENVIRONMENTAL ENGINEERING INC.
 29 St. Charles Street, East
 Maryhill ON N0B 2B0

Contact: DREW STOLTZ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT		Soil						
Batch	R3452061							
WG2302592-1	MB							
Methylene Chloride			<0.050		ug/g		0.05	06-MAY-16
MTBE			<0.050		ug/g		0.05	06-MAY-16
m+p-Xylenes			<0.030		ug/g		0.03	06-MAY-16
Methyl Ethyl Ketone			<0.50		ug/g		0.5	06-MAY-16
Methyl Isobutyl Ketone			<0.50		ug/g		0.5	06-MAY-16
o-Xylene			<0.020		ug/g		0.02	06-MAY-16
Styrene			<0.050		ug/g		0.05	06-MAY-16
Tetrachloroethylene			<0.050		ug/g		0.05	06-MAY-16
Toluene			<0.080		ug/g		0.08	06-MAY-16
trans-1,2-Dichloroethylene			<0.050		ug/g		0.05	06-MAY-16
trans-1,3-Dichloropropene			<0.030		ug/g		0.03	06-MAY-16
Trichloroethylene			<0.010		ug/g		0.01	06-MAY-16
Trichlorofluoromethane			<0.050		ug/g		0.05	06-MAY-16
Vinyl chloride			<0.020		ug/g		0.02	06-MAY-16
Surrogate: 1,4-Difluorobenzene			107.8		%		70-130	06-MAY-16
Surrogate: 4-Bromofluorobenzene			106.9		%		70-130	06-MAY-16
WG2302592-5	MS		WG2302592-3					
1,1,1,2-Tetrachloroethane			87.5		%		50-140	06-MAY-16
1,1,1,2,2-Tetrachloroethane			84.4		%		50-140	06-MAY-16
1,1,1-Trichloroethane			91.8		%		50-140	06-MAY-16
1,1,2-Trichloroethane			87.1		%		50-140	06-MAY-16
1,1-Dichloroethane			88.3		%		50-140	06-MAY-16
1,1-Dichloroethylene			86.9		%		50-140	06-MAY-16
1,2-Dibromoethane			84.2		%		50-140	06-MAY-16
1,2-Dichlorobenzene			90.5		%		50-140	06-MAY-16
1,2-Dichloroethane			85.9		%		50-140	06-MAY-16
1,2-Dichloropropane			85.7		%		50-140	06-MAY-16
1,3-Dichlorobenzene			89.6		%		50-140	06-MAY-16
1,4-Dichlorobenzene			93.3		%		50-140	06-MAY-16
Acetone			97.2		%		50-140	06-MAY-16
Benzene			89.0		%		50-140	06-MAY-16
Bromodichloromethane			85.8		%		50-140	06-MAY-16
Bromoform			85.3		%		50-140	06-MAY-16
Bromomethane			87.2		%		50-140	06-MAY-16



Quality Control Report

Workorder: L1763955

Report Date: 12-MAY-16

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Client: MBN ENVIRONMENTAL ENGINEERING INC.
 29 St. Charles Street, East
 Maryhill ON N0B 2B0

Contact: DREW STOLTZ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT	Soil							
Batch	R3452061							
WG2302592-5 MS		WG2302592-3						
Carbon tetrachloride			89.6		%		50-140	06-MAY-16
Chlorobenzene			90.1		%		50-140	06-MAY-16
Chloroform			89.9		%		50-140	06-MAY-16
cis-1,2-Dichloroethylene			86.5		%		50-140	06-MAY-16
cis-1,3-Dichloropropene			86.1		%		50-140	06-MAY-16
Dibromochloromethane			91.2		%		50-140	06-MAY-16
Dichlorodifluoromethane			66.0		%		50-140	06-MAY-16
Ethylbenzene			86.6		%		50-140	06-MAY-16
n-Hexane			95.9		%		50-140	06-MAY-16
Methylene Chloride			92.7		%		50-140	06-MAY-16
MTBE			82.2		%		50-140	06-MAY-16
m+p-Xylenes			90.4		%		50-140	06-MAY-16
Methyl Ethyl Ketone			85.1		%		50-140	06-MAY-16
Methyl Isobutyl Ketone			86.7		%		50-140	06-MAY-16
o-Xylene			87.5		%		50-140	06-MAY-16
Styrene			86.7		%		50-140	06-MAY-16
Tetrachloroethylene			89.6		%		50-140	06-MAY-16
Toluene			82.5		%		50-140	06-MAY-16
trans-1,2-Dichloroethylene			91.8		%		50-140	06-MAY-16
trans-1,3-Dichloropropene			83.8		%		50-140	06-MAY-16
Trichloroethylene			86.7		%		50-140	06-MAY-16
Trichlorofluoromethane			93.7		%		50-140	06-MAY-16
Vinyl chloride			86.9		%		50-140	06-MAY-16

Quality Control Report

Workorder: L1763955

Report Date: 12-MAY-16

Client: MBN ENVIRONMENTAL ENGINEERING INC.
29 St. Charles Street, East
Maryhill ON N0B 2B0
Contact: DREW STOLTZ

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Legend:

Limit ALS Control Limit (Data Quality Objectives)
DUP Duplicate
RPD Relative Percent Difference
N/A Not Available
LCS Laboratory Control Sample
SRM Standard Reference Material
MS Matrix Spike
MSD Matrix Spike Duplicate
ADE Average Desorption Efficiency
MB Method Blank
IRM Internal Reference Material
CRM Certified Reference Material
CCV Continuing Calibration Verification
CVS Calibration Verification Standard
LCSD Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
J	Duplicate results and limits are expressed in terms of absolute difference.
MBS	Surrogate recovery in Method Blank was outside ALS DQO. Moderately low-biased results in the MB do not significantly affect its purpose.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

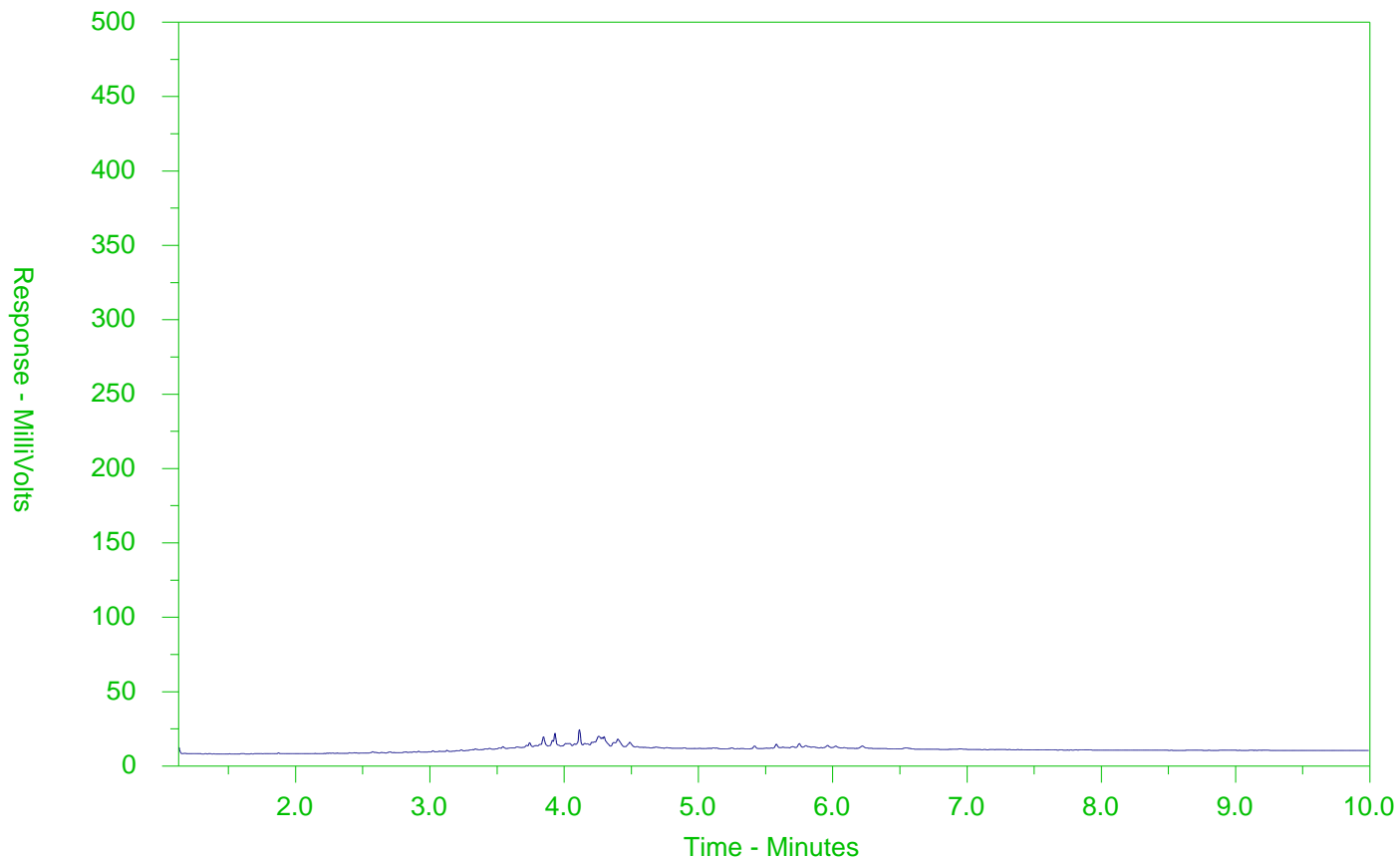
The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L1763955-1
 Client Sample ID: TP1



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50	Ship	Ctrl+N
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
← Gasoline →			← Motor Oils/ Lube Oils/ Grease →		
← Diesel/ Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

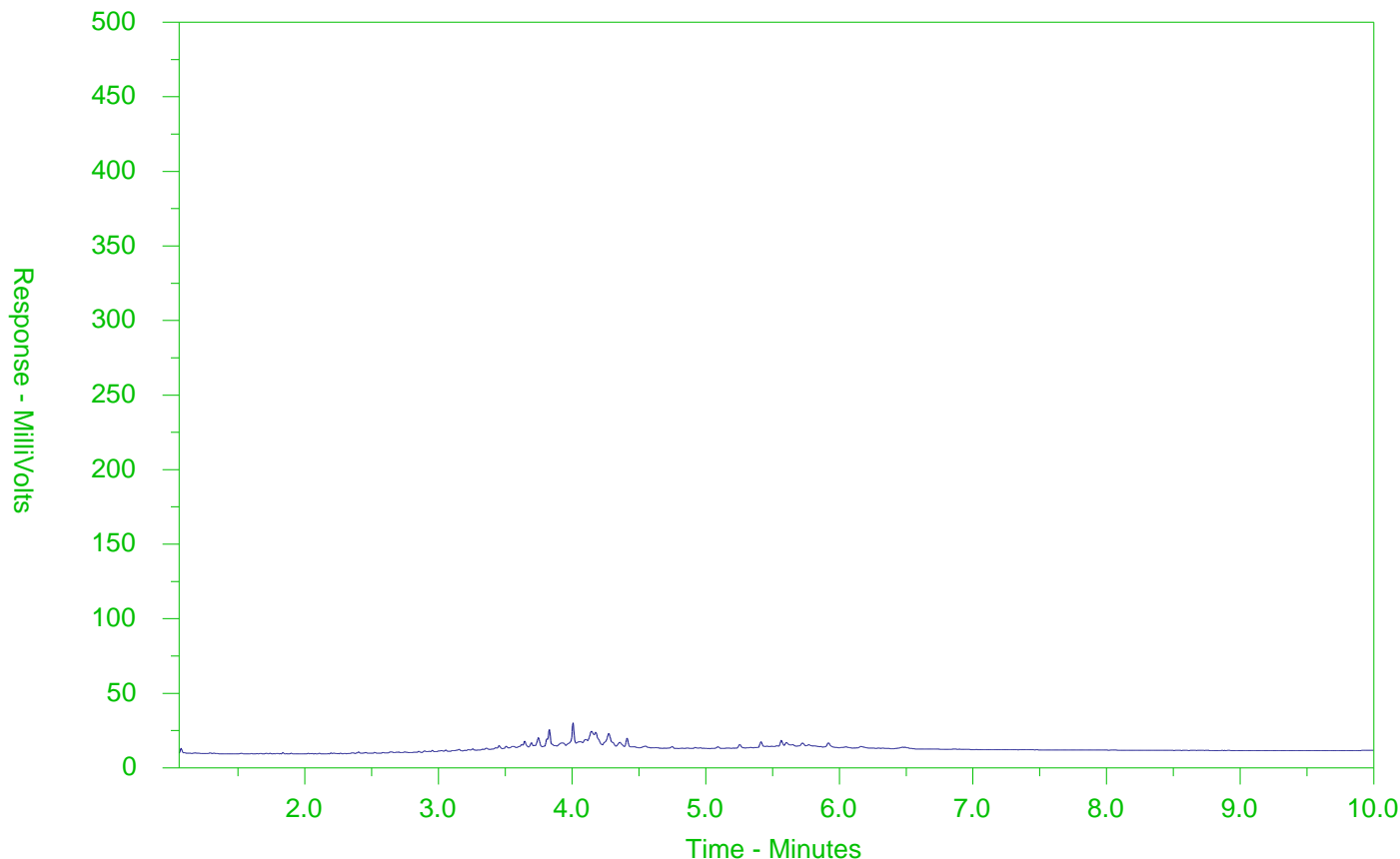
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L1763955-2
 Client Sample ID: TP2



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50	Ship	Ctrl+N
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
← Gasoline →			← Motor Oils/ Lube Oils/ Grease →		
← Diesel/ Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

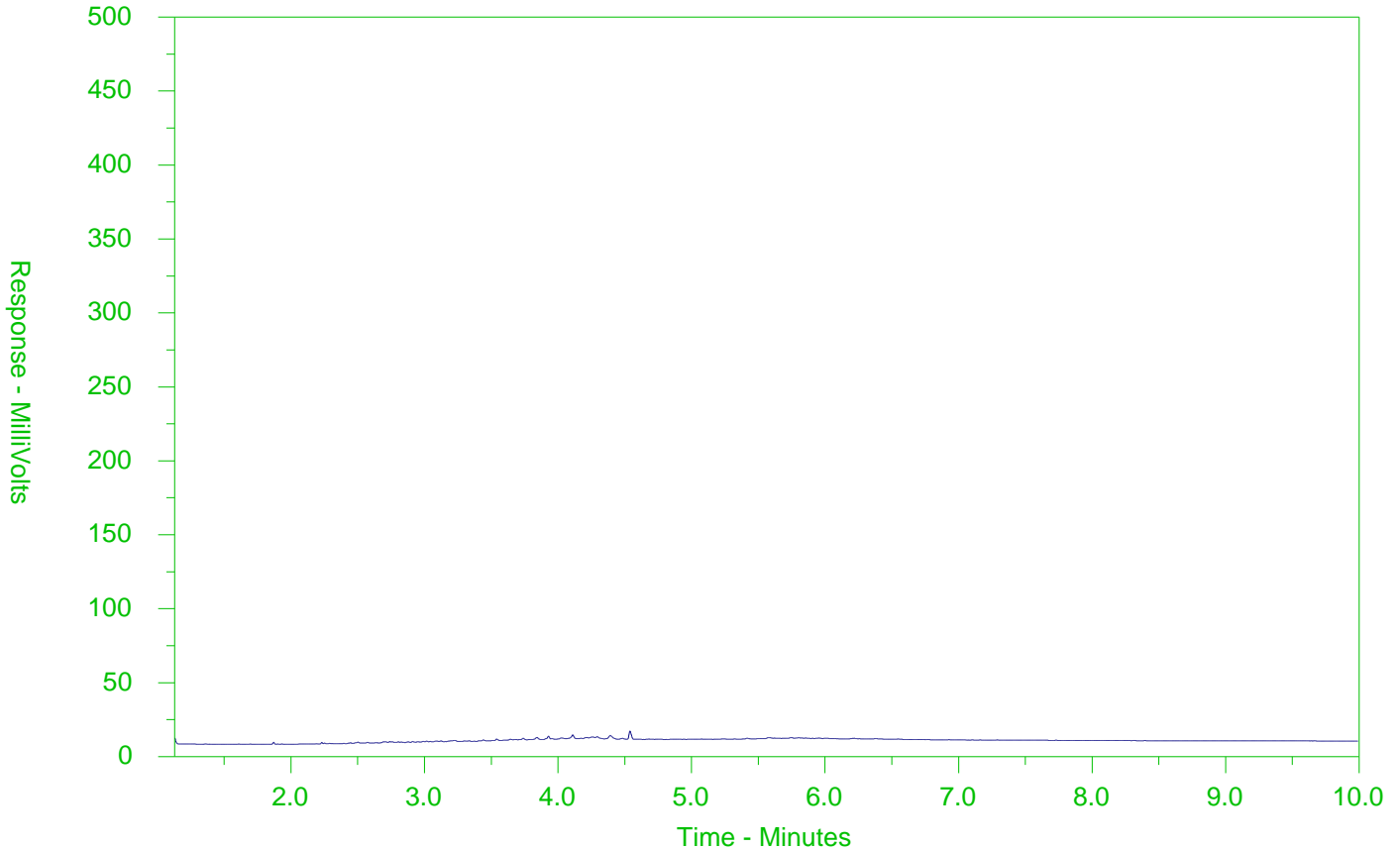
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L1763955-3
 Client Sample ID: TP3



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50	Ship	Ctrl+N
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
← Gasoline →			← Motor Oils/ Lube Oils/ Grease →		
← Diesel/ Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

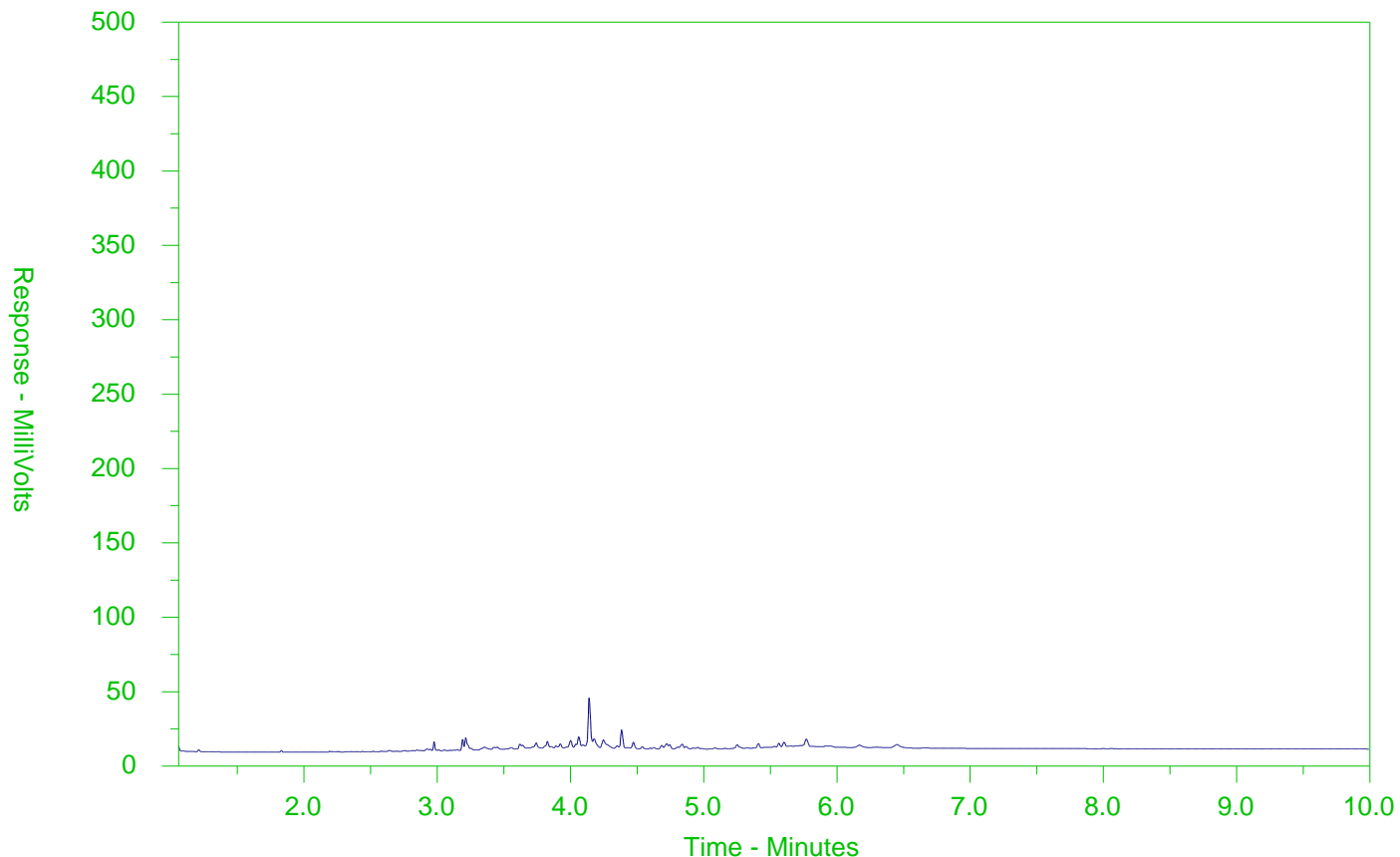
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L1763955-4
 Client Sample ID: TP4



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50	Ship	Ctrl+N
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
← Gasoline →			← Motor Oils/ Lube Oils/ Grease →		
← Diesel/ Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

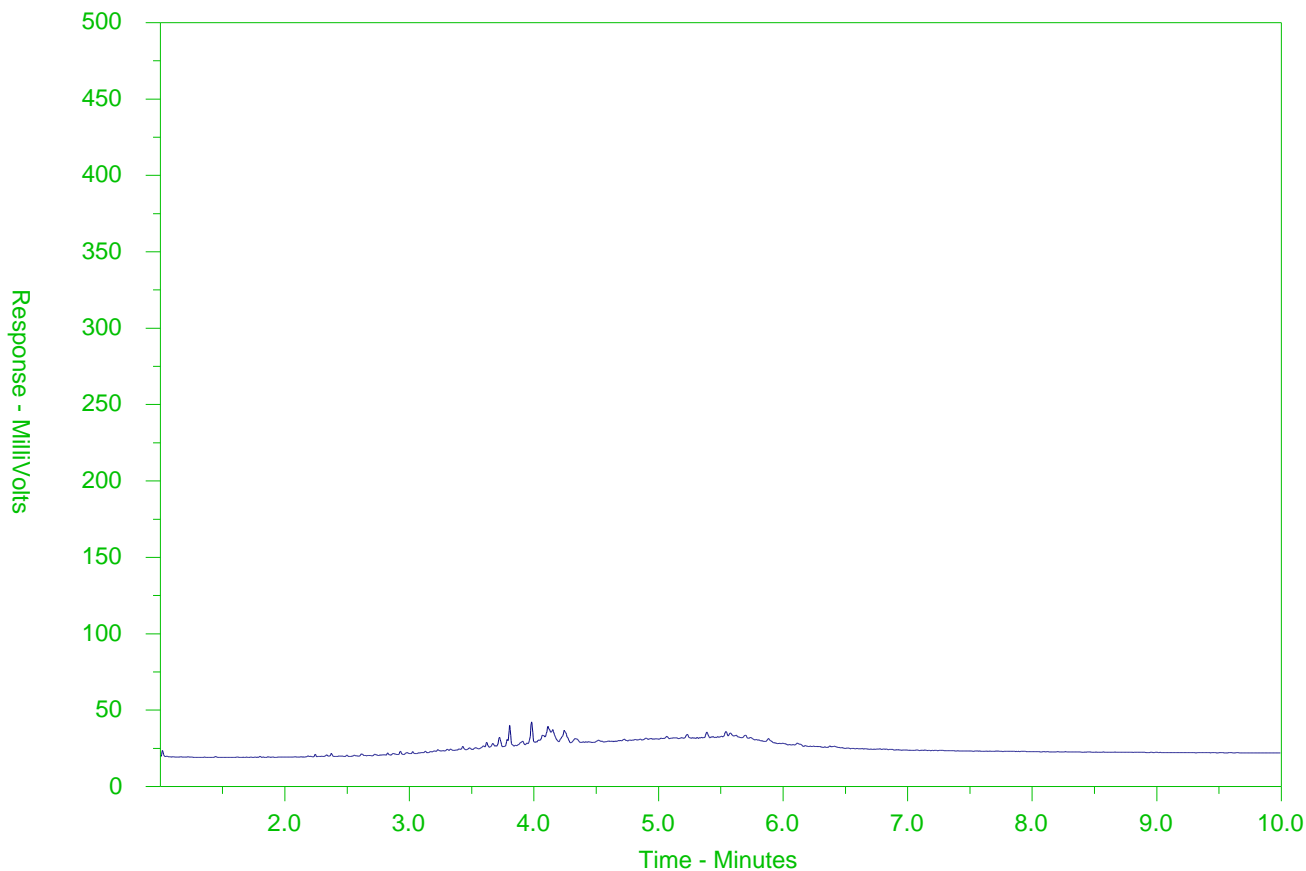
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L1763955-5
 Client Sample ID: TP5



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50	Ship Ctrl+N	
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
← Gasoline →			← Motor Oils/ Lube Oils/ Grease →		
← Diesel/ Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

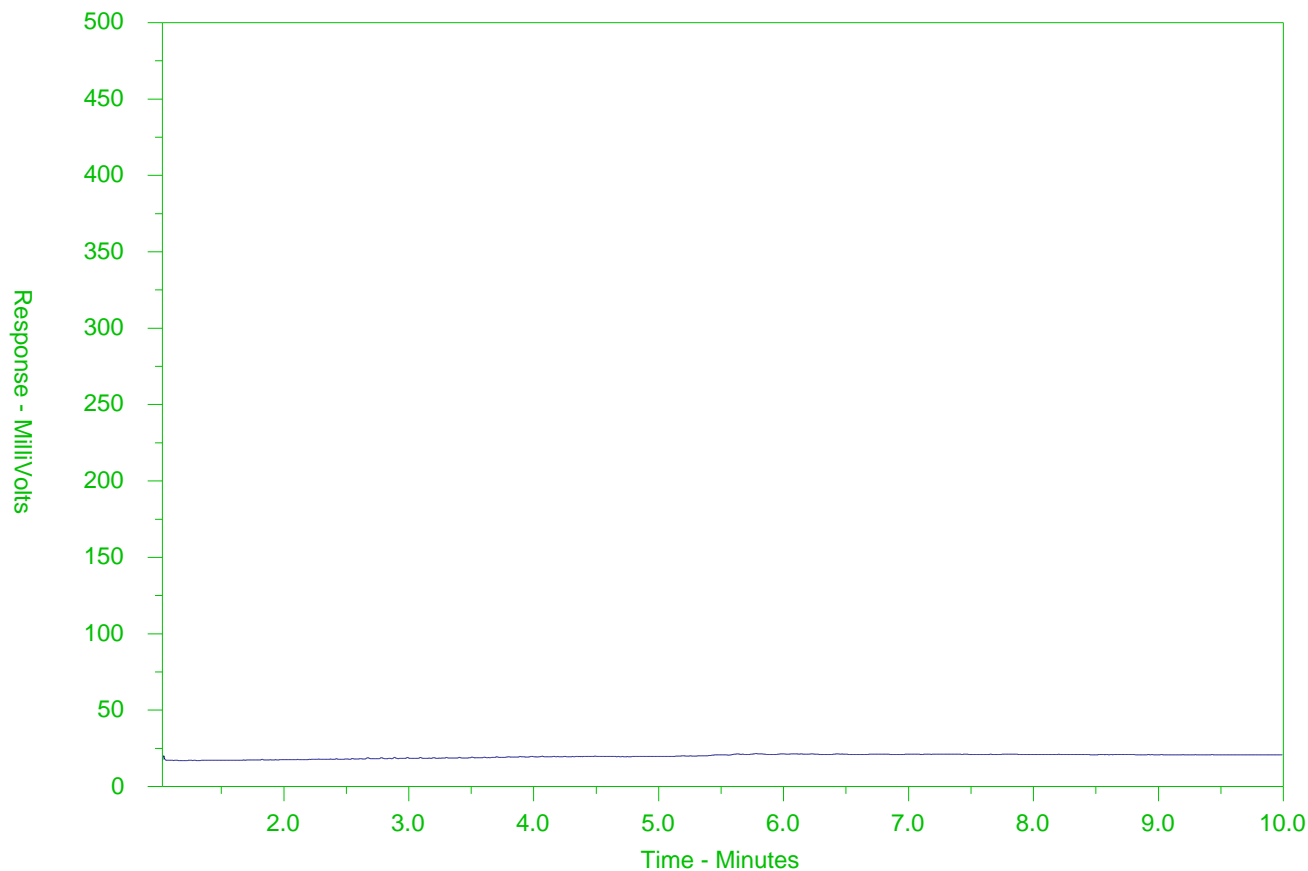
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L1763955-6
 Client Sample ID: TP6



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50	Ship	Ctrl+N
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
← Gasoline →			← Motor Oils/ Lube Oils/ Grease →		
← Diesel/ Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

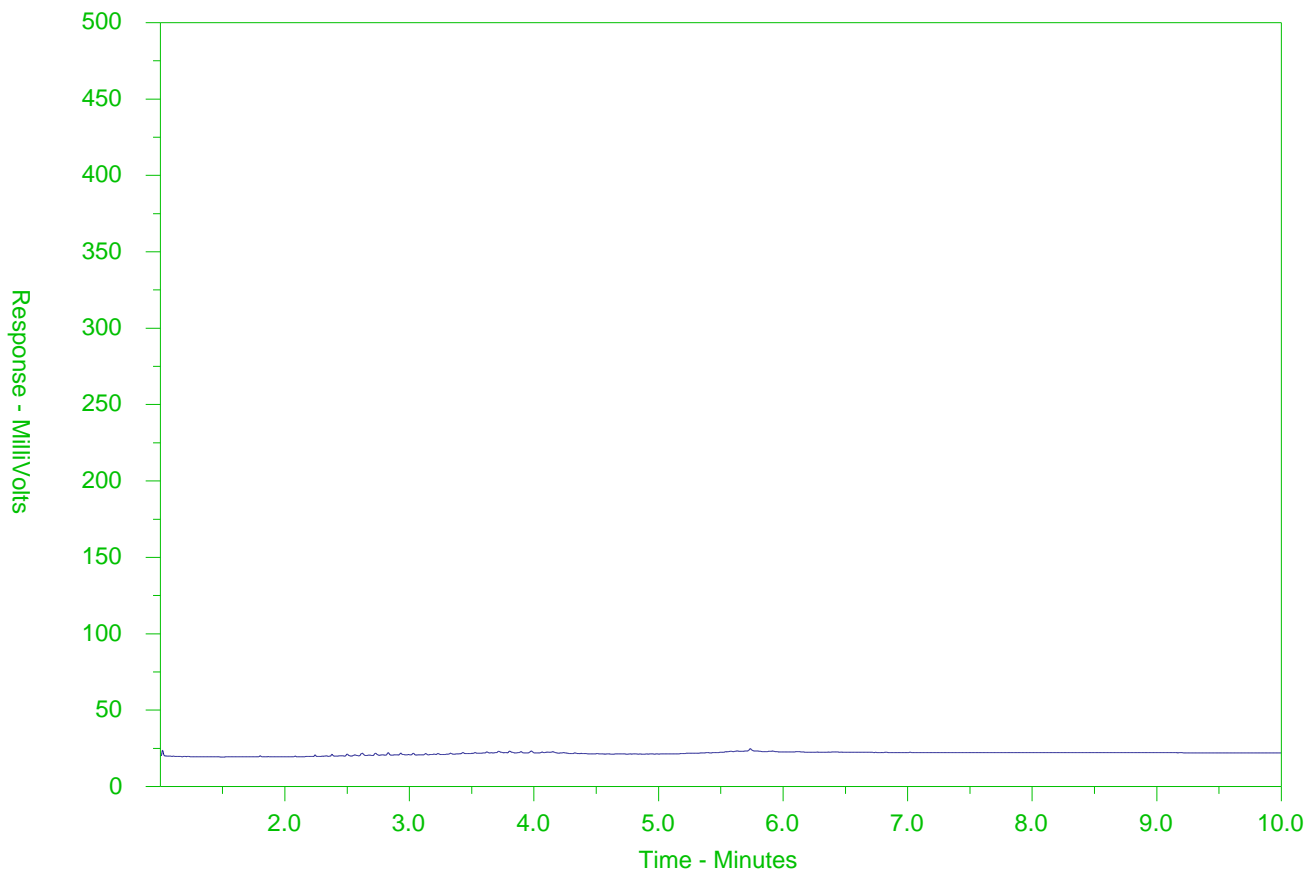
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L1763955-7
 Client Sample ID: TP7



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50	Ship	Ctrl+N
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
← Gasoline →			← Motor Oils/ Lube Oils/ Grease →		
← Diesel/ Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

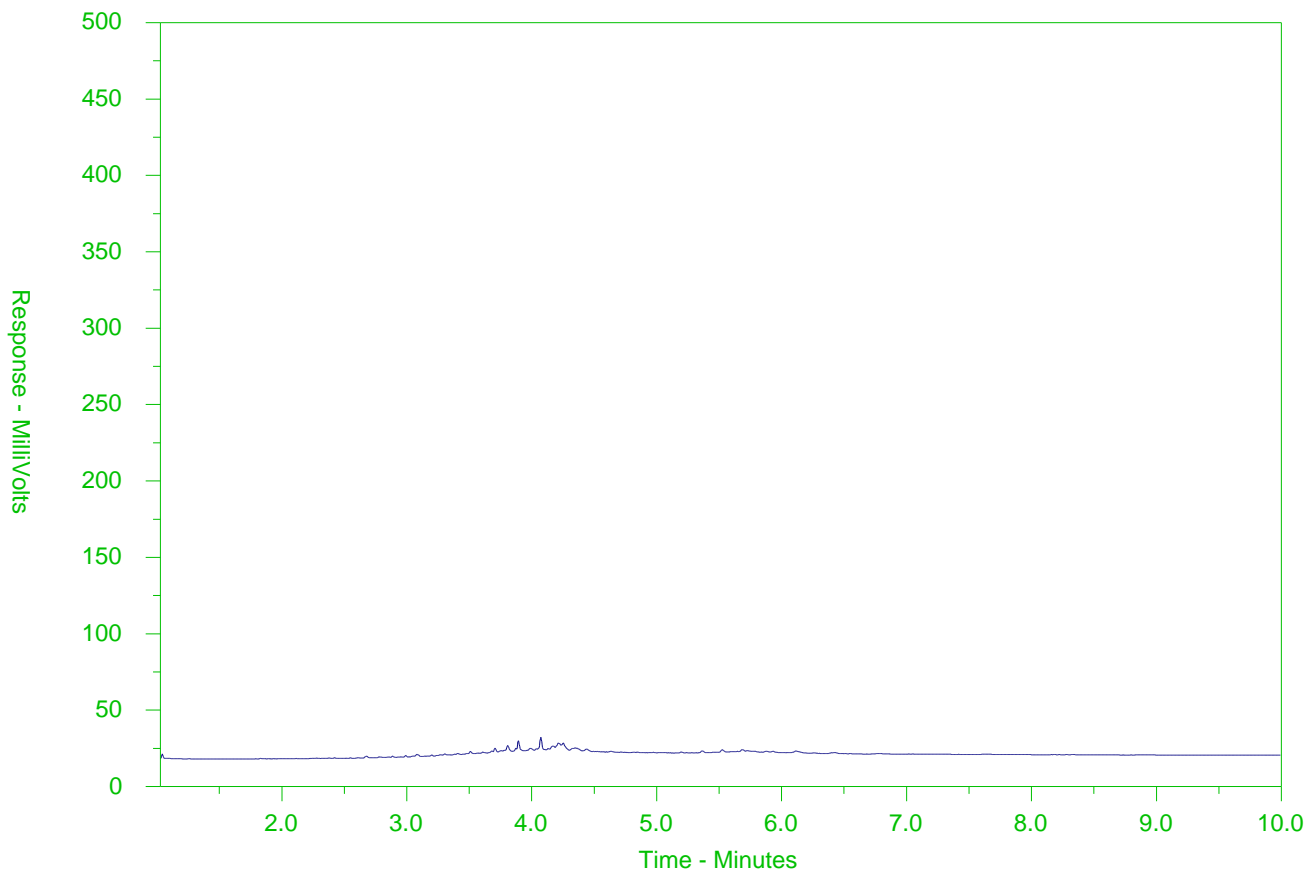
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L1763955-8
 Client Sample ID: TP8



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50	Ship	Ctrl+N
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
← Gasoline →			← Motor Oils/ Lube Oils/ Grease →		
← Diesel/ Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

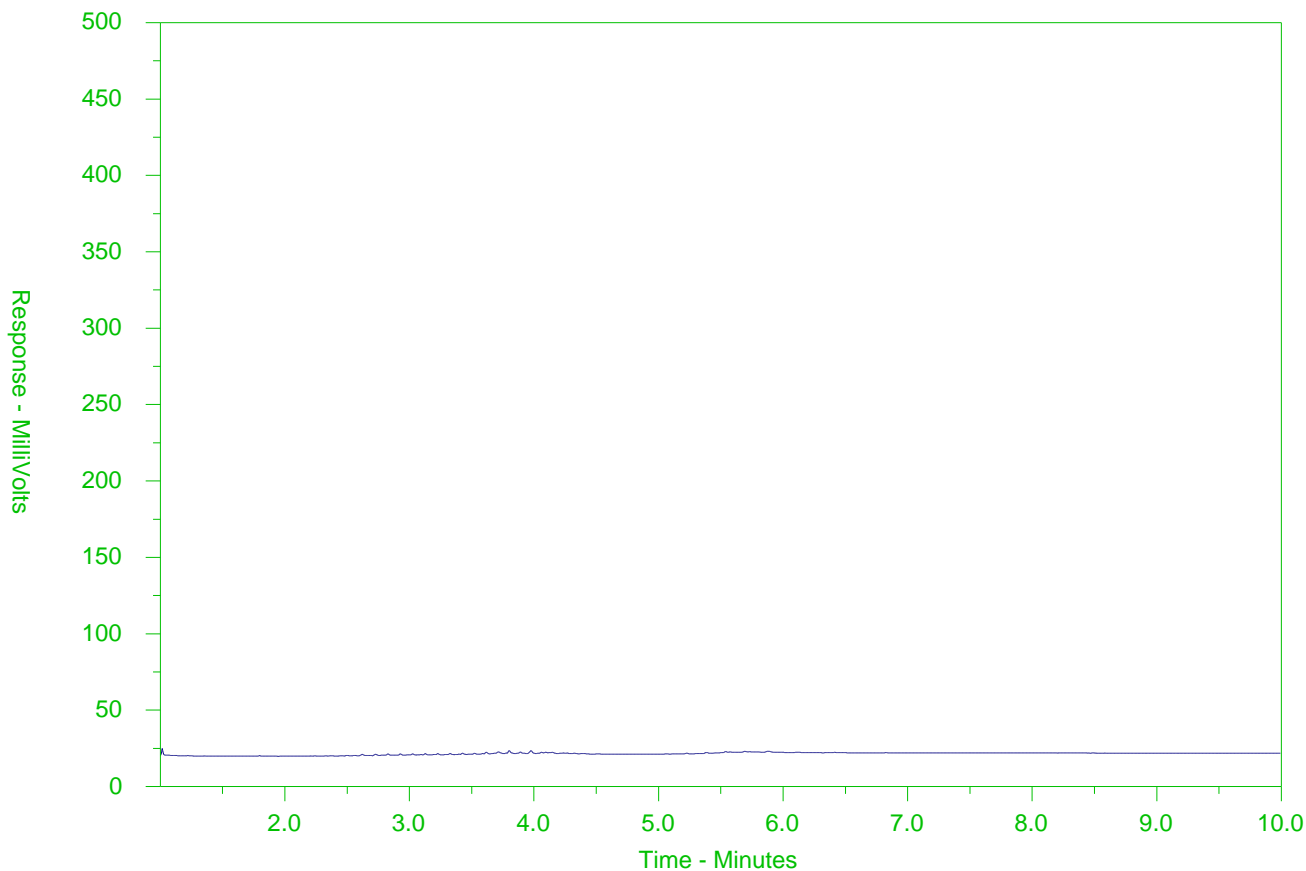
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L1763955-9
 Client Sample ID: TP9



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50	Ship	Ctrl+N
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
← Gasoline →			← Motor Oils/ Lube Oils/ Grease →		
← Diesel/ Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

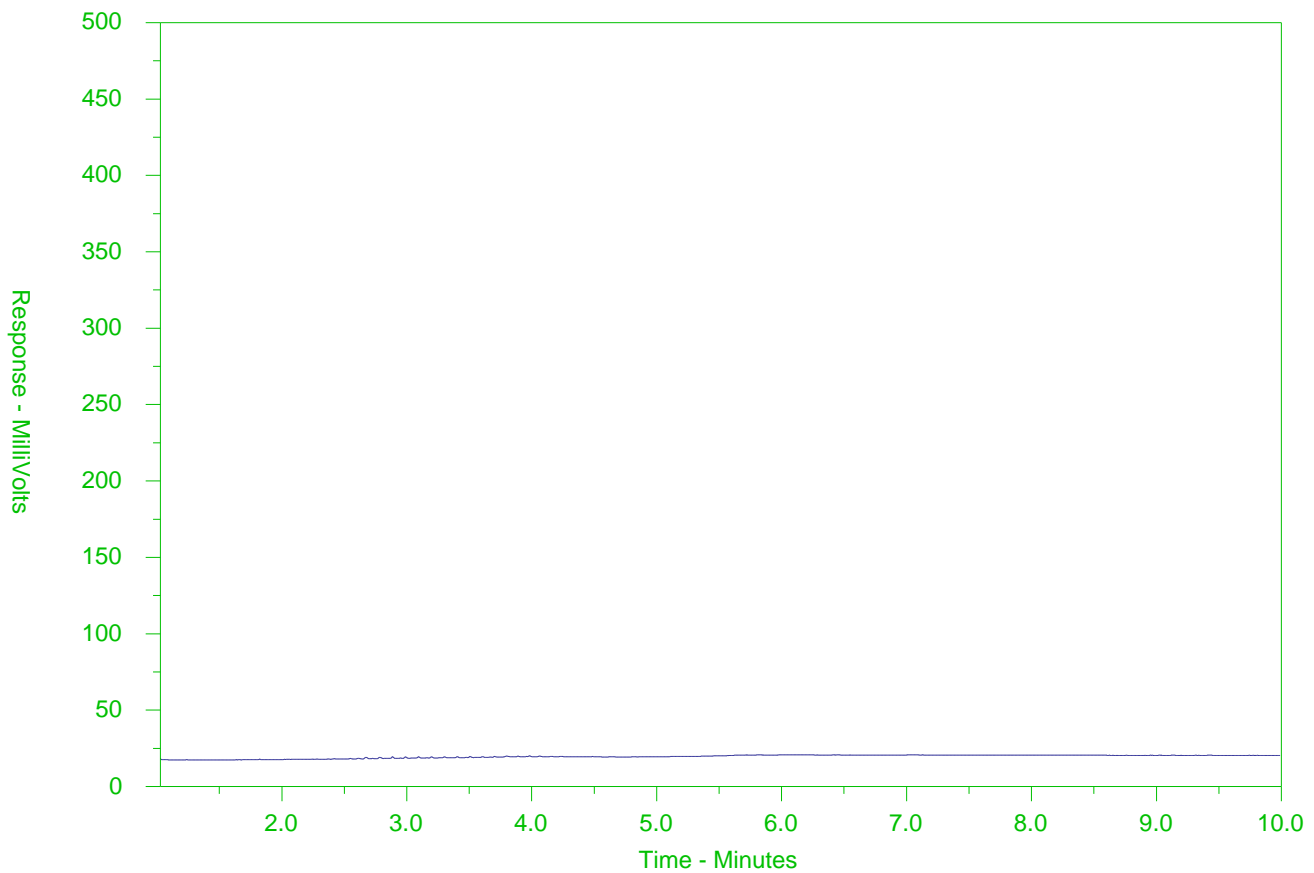
Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.

CCME F2-F4 HYDROCARBON DISTRIBUTION REPORT



ALS Sample ID: L1763955-10
 Client Sample ID: TP10



← F2 →		← F3 →		← F4 →	
nC10	nC16	nC34	nC50	Ship	Ctrl+N
174°C	287°C	481°C	575°C		
346°F	549°F	898°F	1067°F		
← Gasoline →			← Motor Oils/ Lube Oils/ Grease →		
← Diesel/ Jet Fuels →					

The CCME F2-F4 Hydrocarbon Distribution Report (HDR) is intended to assist you in characterizing hydrocarbon products that may be present in your sample.

The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

Peak heights in this report are a function of the sample concentration, the sample amount extracted, the sample dilution factor and the scale at the left.

Note: This chromatogram was produced using GC conditions that are specific to ALS Canada CCME F2-F4 method. Refer to the ALS Canada CCME F2-F4 Hydrocarbon Library for a collection of chromatograms from common reference samples (fuels, oils, etc.). The HDR Library can be found at www.alsglobal.com.



L1763955-COFC

Report To: DREW STOLTZ		Report Format / Distribution		Select Service Level Below (Rush Turnaround Time (TAT) is not available for all tests)											
Company: MBN ENVIRONMENTAL		Select Report Format: <input checked="" type="checkbox"/> PDF <input type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL)		R <input checked="" type="checkbox"/> Regular (Standard TAT if received by 3pm)											
Contact:		Quality Control (QC) Report with Report <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		P <input type="checkbox"/> Priority (2-4 business days if received by 3pm)											
Address: 29 ST. CHARLES ST. E., MARYHILL, ON		<input checked="" type="checkbox"/> Criteria on Report - provide details below if box checked		E <input type="checkbox"/> Emergency (1-2 business days if received by 3pm)											
Phone: 519-804-7408		Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX		E2 <input type="checkbox"/> Same day or weekend emergency if received by 10am - contact ALS for surcharge.											
		Email 1 or Fax: dstoltz@mbnenvironmental.com		Specify Date Required for E2, E or P:											
		Email 2:		Analysis Request											
Invoice To: Same as Report To <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Invoice Distribution		Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below											
Copy of Invoice with Report <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Select Invoice Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX													
Company: AS ABOVE		Email 1 or Fax: AS ABOVE													
Contact:		Email 2:													
Project Information		Oil and Gas Required Fields (client use)		<div style="display: flex; justify-content: space-around;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">VOC</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">PHL (F1) (BODEN)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">PAH</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">PCB</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">METALS / NO RGANICS</div> </div>											
ALS Quote #: Q56286		Approver ID:								Cost Center:					
Job #: MBN-16-484		GL Account:								Routing Code:					
PO / AFE:		Activity Code:													
LSD:		Location:													
ALS Lab Work Order # (lab use only): L1763955		ALS Contact: M.L. PIRES		Sampler: D. STOLTZ											
ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	PHL (F1) (BODEN)	PHL (F2-4)	PAH	PCB	METALS / NO RGANICS	Number of Containers					
1	TP1	04/05/16	0830	SOIL	✓	✓	✓	✓	✓	5					
3	TP2		0845		✓	✓	✓	✓	✓	5					
4	TP3		09-		✓	✓	✓	✓	✓	5					
5	TP4		0915		✓	✓	✓	✓	✓	5					
6	TP5		0930		✓	✓	✓	✓	✓	5					
7	TP6		0945		✓	✓	✓	✓	✓	5					
8	TP7		1000		✓	✓	✓	✓	✓	5					
9	TP8		1015		✓	✓	✓	✓	✓	5					
10	TP9		1030		✓	✓	✓	✓	✓	5					
	TP10		1045		✓	✓	✓	✓	✓	5					
Drinking Water (DW) Samples ¹ (client use)		Special Instructions / Specify Criteria to add on report (client Use)		SAMPLE CONDITION AS RECEIVED (lab use only)											
Are samples taken from a Regulated DW System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		V T1 AGR		Frozen <input type="checkbox"/>		SIF Observations Yes <input type="checkbox"/> No <input type="checkbox"/>									
Are samples for human drinking water use? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				Ice packs Yes <input type="checkbox"/> No <input type="checkbox"/>		Custody seal intact Yes <input type="checkbox"/> No <input type="checkbox"/>									
				Cooling Initiated <input type="checkbox"/>											
				INITIAL COOLER TEMPERATURES °C		FINAL COOLER TEMPERATURES °C									
				6.0											
SHIPMENT RELEASE (client use)		INITIAL SHIPMENT RECEPTION (lab use only)		FINAL SHIPMENT RECEPTION (lab use only)											
Released by: D. Stoltz		Date: 5/4/16		Time: 1410		Received by: [Signature]		Date: 5/4/16		Time: 1415					

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

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ALS Form 1001 v03 From 03 October 2013

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.