EXECUTIVE SUMMARY

LVM inc. (LVM) was retained by ODC Tooling & Molds, a division of Ontario Die Company Ltd. (ODC), to complete a Limited Subsurface Soil and Groundwater Investigation of the property described as 93, 97, 99, 103, 107, 109, 111, and 119 Roger Street in Waterloo, Ontario (hereinafter referred to as the "Site" or the "Property"). The location of the Site is shown on the attached Location Plan, Drawing 1 provided in Appendix 1. Compass directions described in this report are referenced to "Project North", which runs perpendicular to Roger Street, located to the north of the Site.

Trow Associates Inc. (Trow) completed a Phase I ESA of the Property in 2008. Based on the findings of the Trow Phase I ESA, several areas of potential environmental concerns (APECs) were identified arising from past or present activities at the Site (refer to Section 3.2.1.1 for details). The main objective of this Limited Subsurface Soil and Groundwater Investigation was to provide a preliminary assessment of the environmental quality of soil and groundwater in select areas of the Site. A detailed investigation of the APECs identified in the 2008 Phase I ESA report prepared by Trow was not part of this assignment.

LVM understands that future residential development of the Site has been considered. Given the current and historical industrial activities on the Site, i.e. 119 Roger Street, filing a Record of Site Condition (RSC) with the Ministry of the Environment (MOE) will be required. As noted above, the purpose of this Limited Subsurface Soil and Groundwater Investigation was to complete an initial evaluation of the soil and groundwater environmental quality in select areas, in light of the proposed residential development of the Site. In order to achieve the final goal of the project, i.e. filing a RSC with the MOE, conducting a Phase I Environmental Site Assessment (ESA) and a Phase II ESA will be required. Based on the results of the Phase II ESA, further investigations may be warranted.

Six boreholes were advanced at the Site as part of this Limited Subsurface Soil and Groundwater Investigation. Soil samples were collected from the borehole locations, identified as boreholes BH-01-13 through BH-03-13, and BH-101-13 through BH-103-13. Initially, Boreholes BH-01-13 through BH-03-13 were advanced and instrumented as monitoring wells. Groundwater was not encountered within monitoring wells BH-01-13 through BH-03-13, and therefore, three additional Boreholes, BH-101-13 to BH-103-13 were advanced in a close proximity of Boreholes BH-01-13 to BH-03-12, respectively, and instrumented with monitoring wells at deeper elevations. As part of the groundwater quality assessment, monitoring wells BH-101-13 through BH-103-13 were developed and groundwater samples were collected and submitted to the laboratory for chemical analysis.

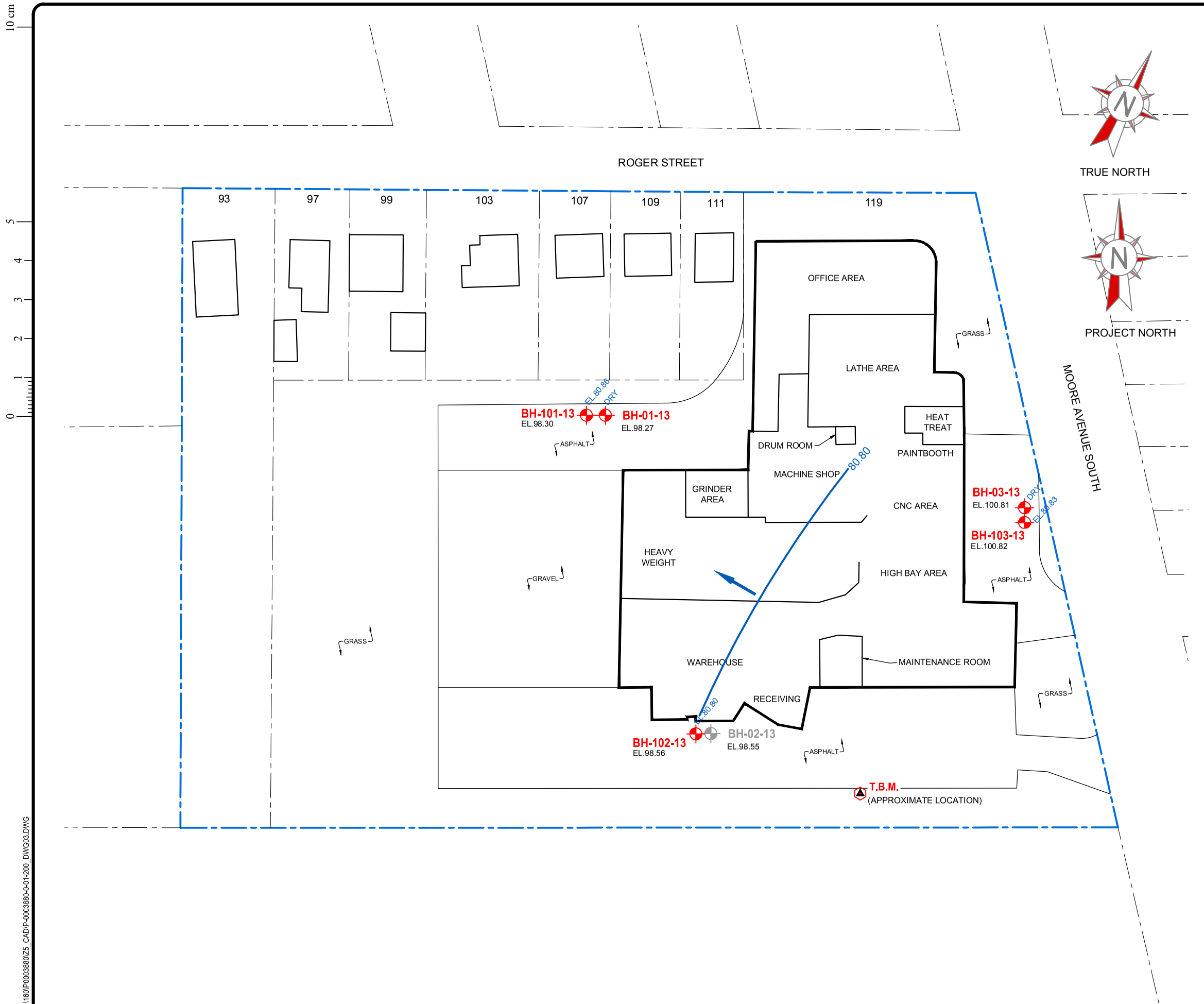
The soil analytical results were compared to the Generic Full Depth Site Condition Standards for coarse grained soils in a potable groundwater condition for Residential/ Parkland/Institutional Property Use Standards defined in Table 2 of the O.Reg. 153/04 Standards (MOE Table 2 Standards). The groundwater analytical results were compared to the All types of Property Use standards provided within the MOE Table 2 Standards.

Based on the results of this investigation, the following is provided:

1. In general, the soil stratigraphy, at the locations of the boreholes, consisted of surficial asphalt/topsoil overlying fill and native deposits of sandy silt, silty sand, sand, and/or gravel deposits.
2. Based on the groundwater measurements at the monitoring well locations, the shallow groundwater is located within the native sand and gravel deposits at depths between approximately 17.5 and 20.0 mbg at the Site.
3. From the groundwater level measurements collected on September 18, 2013, the inferred shallow groundwater flow direction at the Site appears to be generally towards the northwest.
4. Based on a review of the soil quality analytical data, the concentrations of petroleum hydrocarbon fractions (F1-F4) [PHC F1 - F4], volatile organic compounds (VOCs), benzene, toluene, ethylbenzene, and xylenes (BTEX), polycyclic aromatic hydrocarbons (PAHs), and Metals in the soil samples collected from the borehole locations and submitted for laboratory analysis were either non detectable (i.e. below the laboratory method detection limits) or were detected at concentrations below the MOE Table 2 Standards for both residential/ parkland/ institutional and industrial/ commercial/ institutional property uses for coarse textured soils.
5. Based on a review of the groundwater quality analytical data, the concentrations of PHC F1 – F4, VOCs (including BTEX), metals and PAHs in the groundwater samples collected from the monitoring well locations and submitted for laboratory analysis were either non detectable (i.e. below the laboratory method detection limits) or were detected at concentrations below the MOE Table 2 Standards for All types of property uses for coarse textured soils.
6. The results of the TCLP analysis indicate that the soil meets the O. Reg. 558/00 Schedule 4 criteria for the analyzed parameters, and is therefore, classified as non-hazardous.
7. It should be noted that the monitoring wells installed on the Site as part of this investigation will need to be decommissioned as per Ontario Regulation 903, as amended, following the completion of all necessary assessments.
8. The Statement of Limitations, as contained below, is an integral part of this report, and should be considered when reviewing the findings and conclusions of this report.

Table 1 Areas of Potential Environmental Concerns – Phase I ESA (Trow, 2008)

APEC	LOCATION OF APEC	POTENTIALLY CONTAMINATING ACTIVITY	LOCATION OF PCA (ON-SITE OR OFF-SITE)	MEDIA POTENTIALLY IMPACTED
APEC 1	119 Roger Street building (ODC facility)	Significant black staining was reportedly observed around several pieces of machinery, including the waste oil and coolant holding tank, and quenching oil holding tank within the plant building. The Site is a hazardous waste generator. There are large quantities of chemical storage in drum room and the heavy weight area. Many of the drums were leaking.	On-Site	Soil and Groundwater
APEC 2	South central portion of the 119 Roger Street portion of the Site.	Significant orange staining was reportedly observed on asphalt / concrete apron surrounding the metal dust collector and metal scrap bins (i.e. outdoor storage area).	On-Site	Soil and Groundwater
APEC 3	119 Roger Street portion of the Property.	Trow was informed that fill material was brought onto the Site for grading purposes throughout as additions were added to the facility.	On-Site	Soil (i.e. fill)
APEC 4	93, 97, 99, 103, 107, 109, and 111 Roger Street.	Trow inferred that oil heating was used on these properties which would have been stored in above or underground storage tanks. Reportedly an aboveground heating oil tank was removed from the basement of the 99 Roger Street building.	On-Site	Soil and Groundwater



LEGEND :

- SITE BOUNDARY LINE
- BOREHOLE/MONITORING WELL LOCATION
- BOREHOLE/MONITORING WELL LOCATION (Decommissioned)
- EL. 98.27 — GROUND SURFACE ELEVATION (m)
- TEMPORARY BENCHMARK
- GROUNDWATER CONTOUR ELEVATION (m)
- INFERRED GROUNDWATER FLOW DIRECTION
- EL.80.83 — GROUNDWATER ELEVATION (m) September 18, 2013

0 10 20 30 m

SCALE 1:750

NOTES :

1-The Site is irregular in shape and is approximately 5.05 acres in size. The Site is comprised of eight parcels of land (93, 97, 99, 103, 107, 109, 111 and 119 Roger Street). The 119 Roger Street portion of the Property occupies a majority of the Site, and is utilized by Ontario Die Company.

2-Static groundwater was encountered at depths between approximately 17.51 and 19.99 m below grade at the Site.

3-The inferred shallow groundwater flow direction at the Site appears to be generally towards the northwest. The regional groundwater flow in the area of the Site is expected to be to the north/northwest towards Laurel Creek which is located approximately 900 m northwest of the Site.

4-REFERENCES: GRAND RIVER CONSERVATION AUTHORITY, 2010 Aerial Photograph.

5-TEMPORARY BENCHMARK: Top nut of fire hydrant located at south side of existing building, Elevation 100.00 m (assumed local datum).

6-Drawing scale may be distorted due to file conversion and/or copying. Measurements taken from the drawing must be verified in the field.

Project

Limited Subsurface Soil and Groundwater Investigation

93, 97, 99, 103, 107, 109, 111 and 119 Roger Street, Waterloo, Ontario

Title

DETAILED SITE PLAN

LVM inc.
353, Bridge Street East
Kitchener (Ontario) N2K 2Y5
Telephone : 519.741.1313
Fax : 519.741.5422

Prepared	A.Higgins	Discipline	ENVIRONMENTAL
Drawn	A.Higgins	Scale	1 : 750
Checked	A.Dunbrack	Date	2013-10-15

Project manager: R.Reaume

Sequence no.: 03 of 03

M. dept.	Project	Disc.	Dwg no.	Rev.
160	P-0003880-0-01-200	HG	003	00

G:\160\P0003880\Z5_CAD\P-0003880-0-01-200_DWG03.DWG

Ground Elevation: *98.27 m*

Borehole Number: **BH-01-13**

Job N°: *P-0003880-0-01-200*

Drill Date: *2013-08-06*

Project: *Limited Subsurface Soil and Groundwater Investigation*

Field Tech: *D.Souter*

Location: *93,97,99,103,107,109,111 and 119 Roger Street, Waterloo, Ontario*

Drill Method: *Hollow Stem Auger*

Depth (m)	Description	Symbol	Elevation (m) / Depth (m)	Type and Number	"Blows" /150 mm	SPT 'N' Value
	Ground Elevation		98.27			
	ASPHALT:		0.00 / 98.21			
	FILL: sand, some silt and gravel, loose, brown, moist		0.06 / 97.51	SS-1	4-5 3-2	8
1	***SILT:*** sandy silt, trace gravel, loose, brown, moist		0.76 / 96.75	SS-2	2-1 1-1	2
	wet		1.52 / 96.14	SS-3	0-1 3-6	4
2	***SAND:*** silty sand, fine grained, loose, brown, wet		2.13 / 95.22	SS-4	2-1 2-3	3
3	compact, moist		3.05 / 93.09	SS-5	4-4 3-3	7
				SS-6A		
4				SS-6B	5-6 7-10	13
5				SS-7	6-8 9-9	17
	Botehole terminated at 5.18 m		5.18			
6						
7						
8						

Dynamic Cone: 20 40 60 80
Std Penetration: 20 40 60 80
Shear Strength (PP) kPa: 50 100 150 200
Initial
Remold
Shear Strength (FV) kPa: 50 100 150 200
WP WL
Water Content (%): 10 20 30

Headspace (ppm)
5
15
0
0
0
0
0
0
0

Environmental Testing

Groundwater Observations and Standpipe Details

- protective cover and concrete
- bentonite seal
- sand pack
- 50 mm pipe
- 3.05 m slotted screen
- native cave

Reviewed by: *A.Dunbrack*

Drafted by: *E.Ciochon*

Sheet: *1 of 1*

Notes: *Headspace readings expressed as parts per million (ppm).*
Monitoring well dry on August 12, 16, and September 12 and 18, 2013.

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Vertical Scale = 1 : 50.0

EQ-09-Ge-72 R.1 18.02.2011

Ground Elevation: *98.55 m*

Borehole Number: **BH-02-13**

Job N°: *P-0003880-0-01-200*

Drill Date: *2013-08-06*

Project: *Limited Subsurface Soil and Groundwater Investigation*

Field Tech: *D.Souter*

Location: *93,97,99,103,107,109,111 and 119 Roger Street, Waterloo, Ontario*

Drill Method: *Hollow Stem Auger*

Depth (m)	Description	Symbol	Elevation (m) / Depth (m)	Type and Number	"Blows" /150 mm	SPT 'N' Value	Dynamic Cone / Std Penetration	Shear Strength (PP) kPa / Shear Strength (FV) kPa	Water Content (%)	Headspace (ppm)	Environmental Testing	Groundwater Observations and Standpipe Details
	Ground Elevation		98.55									
	ASPHALT:		0.00 98.50 0.05	SS-1	7-6 7-7	13				15	PHC F1-F4, BTEX, Metals	protective cover and concrete
1	***FILL:*** sand, some silt and gravel, loose, brown, moist			SS-2	5-4 4-4	8				5		
			97.33 1.22	SS-3	1-1 1-1	2				0		
2	***SILT:*** sandy silt, trace gravel, loose, brown to dark brown, moist		96.42 2.13	SS-4	5-7 9-10	16				0		bentonite seal
	SAND: silty sand, fine grained, compact, brown, moist			SS-5	5-7 7-7	14				0		
3				SS-6	4-3 2-2	5				0		
4				SS-7	1-2 2-2	4				0		
	wet		93.98 4.57									
	trace gravel		93.67 4.88	SS-8	0-2 2-2	4				10		
5				SS-9	9-8 8-9	16				5		
6				SS-10	11-10 12-12	22				0		sand pack
												50 mm pipe 3.05 m slotted screen
7				SS-11	9-10 12-12	22				0		
8				SS-12	7-11 10-12	21				10		native cave
	Borehole terminated at 8.23 m		90.32 8.23									

Reviewed by: *A.Dunbrack*

Drafted by: *E.Ciochon*

Sheet: *1 of 1*

Notes: *Headspace readings expressed as parts per million (ppm).*
Monitoring well dry on August 12 and 16, 2013.

Dynamic Cone: 20 40 60 80
Std Penetration: 20 40 60 80
Shear Strength (PP) kPa: 50 100 150 200
Initial
Remold
Shear Strength (FV) kPa: 50 100 150 200
WP WL
Water Content (%): 10 20 30

Vertical Scale = 1 : 50.0

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EQ-09-Ge-72 R.1 18.02.2011

Ground Elevation: *100.81 m*

Borehole Number: **BH-03-13**

Job N°: *P-0003880-0-01-200*

Drill Date: *2013-08-06*

Project: *Limited Subsurface Soil and Groundwater Investigation*

Field Tech: *D.Souter*

Location: *93,97,99,103,107,109,111 and 119 Roger Street, Waterloo, Ontario*

Drill Method: *Hollow Stem Auger*

Depth (m)	Description	Symbol	Elevation (m) / Depth (m)	Type and Number	"Blows" /150 mm	SPT 'N' Value	Headspace (ppm)	Environmental Testing
	Ground Elevation		100.81					
	ASPHALT:		0.00 / 100.75					
	FILL: silty sand and gravel, loose, brown, moist		0.06 / 100.61	SS-1	7-4 5-5	9	20	PHC F1-F4, BTEX, PAHs, Metals
	some coal and gravel		0.20 / 100.18					
1	***SAND:*** silty sand, fine grained, compact, brown, moist		0.64	SS-2	3-5 7-11	12	20	
				SS-3	5-7 8-8	15	0	
2			98.52					
	wet		2.29	SS-4	12-11 13-15	24	15	
3			97.76					
	SILT: sandy silt, compact, brown, moist		3.05	SS-5	8-10 11-11	21	20	
			97.00					
	wet		3.81	SS-6A	10-15	25	15	
4			96.70					
	SAND: silty sand, fine grained, dense, brown, moist		4.12	SS-6B	18-19	37	15	
				SS-7	8-12 13-15	25	5	
5								
6				SS-8	7-9 13-18	22	10	
			94.10					
	Borehole terminated at 6.71 m		6.71					
7								
8								

Dynamic Cone: 20 40 60 80
Std Penetration: 20 40 60 80
Shear Strength (PP) kPa: 50 100 150 200
Initial / Remold
Shear Strength (FV) kPa: 50 100 150 200
WP WL
Water Content (%): 10 20 30

Groundwater Observations and Standpipe Details

- protective cover and concrete
- bentonite seal
- sand pack
- 50 mm pipe
- 3.05 m slotted screen
- bentonite seal

Reviewed by: *A.Dunbrack*

Drafted by: *E.Ciochon*

Sheet: *1 of 1*

Notes: *Headspace readings expressed as parts per million (ppm).*
Monitoring well dry on August 12, 16, and September 12 and 18, 2013.

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Vertical Scale = 1 : 50.0

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Ground Elevation: *98.30 m*

Borehole Number: **BH-101-13**

Job N°: *P-0003880-0-01-200*

Drill Date: *2013-08-29*

Project: *Limited Subsurface Soil and Groundwater Investigation*

Field Tech: *D.Souter*

Location: *93,97,99,103,107,109,111 and 119 Roger Street, Waterloo, Ontario*

Drill Method: *Hollow Stem Auger*

Depth (m)	Description	Elevation (m) / Depth (m)	Type and Number	"Blows" /150 mm	SPT 'N' Value	Headspace (ppm)
	Ground Elevation	98.30				
	ASPHALT:	0.00 / 98.24	SS-1	4-5 / 3-2	8	5
1	***FILL:*** sand, some silt and gravel, loose, brown, moist	0.06 / 97.54	SS-2	2-1 / 1-1	2	15
		0.76 / 96.78	SS-3	0-1 / 3-6	4	0
2	***SILT:*** sandy silt, trace gravel, loose, brown, moist	1.52 / 96.01	SS-4	2-1 / 2-3	3	0
3	wet	2.29	SS-5	4-4 / 3-3	7	0
	SAND:	94.34	SS-6A			0
4	silty sand, fine grained, loose, brown, wet	3.96	SS-6B	5-6 / 7-10	13	0
5	compact, moist		SS-7	6-8 / 9-9	17	0
6			SS-9	8-9 / 12-12	21	0
7			SS-10	11-16 / 17-20	33	0
8			SS-11	10-15 / 18-22	33	0
9			SS-12	9-12 / 15-17	27	0
10						
11			SS-13	8-14 / 14-18	28	0
12		86.11				
	dense, fine sand	12.19	SS-14	7-16 / 18-21	34	0
13						
		84.58				
14	silty sand	13.72	SS-15	11-16 / 17-19	33	0
15						
16			SS-16	10-15 / 17-18	32	0
		81.54				
17	wet	16.76	SS-17	10-11 / 13-17	24	0
18						
19			SS-18	9-13 / 16-20	29	0
20			SS-19	6-9 / 12-17	21	0
		77.88				
	Borehole terminated at 20.42 m	20.42				
21						
22						

Dynamic Cone / Std Penetration: 20 40 60 80

Shear Strength (PP) kPa / Shear Strength (FV) kPa: 50 100 150 200 (Initial / Remold)

Water Content (%): WP WL; 10 20 30

Environmental Testing: PHC F1-F4, VOCs, Metals

Groundwater Observations and Standpipe Details: protective cover and concrete; bentonite seal; grout seal; bentonite seal; el. 80.79 m 2013-09-18; sand pack; 50 mm pipe 3.05 m slotted screen; native cave

Reviewed by: *A.Dunbrack*

Drafted by: *E.Ciochon*

Sheet: *1 of 1*

Notes: **Headspace readings expressed as parts per million (ppm)*

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Vertical Scale = 1 : 130.0

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LVM

Ground Elevation: *98.56 m*

Borehole Number: **BH-102-13**

Job N°: *P-0003880-0-01-200*

Drill Date: *2013-08-29*

Project: *Limited Subsurface Soil and Groundwater Investigation*

Field Tech: *D.Souter*

Location: *93,97,99,103,107,109,111 and 119 Roger Street, Waterloo, Ontario*

Drill Method: *Hollow Stem Auger*

Depth (m)	Description	Symbol	Elevation (m) / Depth (m)	Type and Number	"Blows" /150 mm	SPT 'N' Value	Headspace (ppm)	Environmental Testing
	Ground Elevation		98.56					
	ASPHALT:		0.00 / 98.51	SS-1	7-6 / 7-7	13	15	
1	***FILL:*** sand, some silt and gravel, loose, brown, moist		0.05 / 97.34	SS-2	5-4 / 4-4	8	5	
			1.22 / 96.43	SS-3	1-1 / 1-1	2	0	
2	***SILT:*** sandy silt, trace gravel, loose, brown to dark brown, moist		2.13	SS-4	5-7 / 9-10	16	0	
				SS-5	5-7 / 7-7	14	0	
3	***SAND:*** silty sand, fine grained, compact, brown, moist			SS-6	4-3 / 2-2	5	0	
4				SS-7	1-2 / 2-2	4	0	
	wet		4.57 / 93.99	SS-8	0-2 / 2-2	4	10	
5				SS-9	9-8 / 8-9	16	5	
6				SS-10	11-10 / 12-12	22	0	
7				SS-11	9-10 / 12-12	22	0	
8				SS-12	7-11 / 10-12	21	10	
	trace gravel		8.23 / 90.33	SS-13	9-12 / 13	25	0	
9				SS-14	7-12 / 14-15	26	0	
10								
11				SS-15	9-10 / 12-12	22	0	
12			12.19 / 86.37					
	fine to coarse sand			SS-16	10-12 / 13-13	25	0	
13								
14				SS-17	6-10 / 12-11	22	0	
15								
16				SS-18	10-13 / 14-20	27	0	
17				SS-19	7-11 / 12-16	23	0	PHC F1-F4, VOCs, Metals
18			18.29 / 80.27					
	coarse sand, wet			SS-20	5-8 / 10-13	18	0	
19								
20			78.44	SS-21	6-7 / 7-6	14	0	
	GRAVEL: gravel, some sand, compact, grey, wet		20.12 / 78.14					
21	Borehole terminated at 20.42 m		20.42					
22								

Dynamic Cone: 20 40 60 80 — Std Penetration: 20 40 60 80

Shear Strength (PP) kPa: 50 100 150 200 — Initial / Remold — Shear Strength (FV) kPa: 50 100 150 200

WP WL — Water Content (%): 10 20 30

Groundwater Observations and Standpipe Details

- protective cover and concrete
- bentonite seal
- el. 80.80 m 2013-09-18
- sand pack
- 50 mm pipe
- 3.05 m slotted screen
- native cave

Reviewed by: *A.Dunbrack*

Drafted by: *E.Ciochon*

Sheet: *1 of 1*

Notes: *Headspace reading expressed as parts per million (ppm)*

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Vertical Scale = 1 : 130.0

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Ground Elevation: *100.82 m*

Borehole Number: **BH-103-13**

Job N°: *P-0003880-0-01-200*

Drill Date: *2013-09-03*

Project: *Limited Subsurface Soil and Groundwater Investigation*

Field Tech: *D.Souter*

Location: *93,97,99,103,107,109,111 and 119 Roger Street, Waterloo, Ontario*

Drill Method: *Hollow Stem Auger*

Depth (m)	Description	Symbol	Elevation (m) / Depth (m)	Type and Number	"Blows" /150 mm	SPT 'N' Value
	Ground Elevation		100.82			
	ASPHALT:		0.00 / 100.76	SS-1	7-4 5-5	9
1	***FILL:*** silty sand and gravel, loose, brown, moist		0.06 / 100.62	SS-2	3-5 7-11	12
			0.20 / 100.18	SS-3	5-7 8-8	15
2	some coal and gravel		0.64 / 98.53	SS-4	12-11 13-15	24
	SAND: silty sand, fine grained, compact, brown, moist		2.29 / 97.77	SS-5	8-10 11-11	21
3	wet		3.05 / 97.01	SS-6A	10-15	25
	SILT: sandy silt, compact, brown, moist		3.81 / 96.70	SS-6B	18-19	37
4	wet		4.12	SS-7	8-12 13-15	25
	SAND: silty sand, fine grained, dense, brown, moist			SS-8	7-9 13-18	22
5				SS-10	12-20 26-31	46
6				SS-11	11-17 27-34	44
7				SS-12	12-21 46	67
8			88.63 / 12.19	SS-13	16-20 31	51
9	fine sand			SS-14	18-27 37	64
10				SS-15	10-16 28	44
11				SS-16	10-21 26	47
12			82.53 / 18.29	SS-17	10-16 18	34
13	medium sand			SS-18	11-13 20	33
14			81.01 / 19.81	SS-19	8-14 18	32
15	wet		79.03 / 21.79			
16	Borehole terminated at 21.79 m					

Dynamic Cone: Std Penetration — 20 40 60 80

Shear Strength (PP) kPa: 50 100 150 200 — Initial / Remold — Shear Strength (FV) kPa: 50 100 150 200

WP WL — Water Content (%): 10 20 30

Headspace (ppm)
20
20
0
15
20
15
15
5
10
0
0
0
0
0
0
0
0
0
0

Environmental Testing: PHC F1-F4, VOCs, Metals

Groundwater Observations and Standpipe Details:
- protective cover and concrete
- bentonite seal
- grout seal
- bentonite seal
- sand pack
- 50 mm pipe
- 3.05 m slotted screen
- native cave
- el. 80.83 m 2013-09-18

Reviewed by: *A.Dunbrack*

Drafted by: *E.Ciochon*

Sheet: *1 of 1*

Notes: *Headspace readings expressed as parts per million (ppm)*

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Vertical Scale = 1 : 130.0

EQ-09-Ge-72 R.1 18.02.2011

TABLE 101

PETROLEUM HYDROCARBON AND BTEX ANALYSIS - SOIL

Limited Subsurface Soil and Groundwater Investigation
93, 97, 99, 103, 107, 109, 111, and 119 Roger Street, Waterloo, Ontario

		Sample ID	BH-02-13 SS1	BH-102-13 SS1	BH-03-13 SS1	BH-101-13 SA1	BH-101-13 SA11	BH-102-13 SA7	BH-103-13 SA10	BH-203-13 SA10
		Date Sampled	06-Aug-13	06-Aug-13	06-Aug-13	29-Aug-13	29-Aug-13	29-Aug-13	03-Sep-13	03-Sep-13
		Lab Report	B3D0365	B3D0365	B3D0365	B3E7064	B3E7064	B3E7064	B3E7064	B3E7064
PARAMETERS	TABLE 2 STANDARDS RESIDENTIAL / PARKLAND / INSTITUTIONAL PROPERTY USE COARSE SOILS	TABLE 2 STANDARDS INDUSTRIAL / COMMERCIAL / COMMUNITY PROPERTY USE COARSE SOILS	BH-02-13	BH-02-13 (Field Duplicate)	BH-03-13	BH-101-13	BH-101-13	BH-102-13	BH-103-13	BH-103-13 (Field Duplicate)
			(0.05-0.61 mbg)	(0.05-0.61 mbg)	(0.06-0.61 mbg)	(0.06-0.61 mbg)	(18.29-18.90 mbg)	(16.76-17.37 mbg)	(19.81-20.27 mbg)	(19.81-20.27 mbg)
Benzene	0.21	0.32	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Ethyl Benzene	1.1	1.1	<0.020	<0.020	0.031	<0.020	<0.020	<0.020	<0.020	<0.020
Toluene	2.3	6.4	<0.020	<0.020	0.078	<0.020	<0.020	<0.020	<0.020	<0.020
Xylenes (Total)	3.1	26	<0.040	<0.040	0.26	<0.020	<0.020	<0.020	<0.020	<0.020
F1-BTEX	55	55	<10	<10	<10	<10	<10	<10	<10	<10
F2 (C10-C16)	98	230	<10	<10	<10	<10	<10	<10	<10	<10
F3 (C16-C34)	300	1,700	<50	<50	140	<50	<50	<50	<50	<50
F4 (C34-C50)	2,800	3,300	<50	<50	230	<50	<50	<50	<50	<50
Chrom. to baseline at nC50	NA	NA	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
F4 (Grav. Heavy Hydrocarbons)	2,800	3,300	NA	NA	1,100	NA	NA	NA	NA	NA

Notes:

- Standards from Table 2 of the MOE's Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 document for Full Depth Generic Site Condition Standards for Residential/Parkland/Institutional Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- Standards from Table 2 of the MOE's Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- All Standards and results shown in µg/g.
- mbg - metres below grade
- Tests carried out by: Maxxam Analytics of Mississauga, Ontario

TABLE 102

METALS ANALYSIS - SOIL

Limited Subsurface Soil and Groundwater Investigation
93, 97, 99, 103, 107, 109, 111, and 119 Roger Street, Waterloo, Ontario

		Sample ID	BH-02-13 SS1	BH-03-13 SS1	BH-103-13 SS1	BH-101-13 SA1	BH-101-13 SA11	BH-102-13 SA7	BH-103-13 SA10	BH-203-13 SA10
		Date Sampled	06-Aug-13	06-Aug-13	06-Aug-13	29-Aug-13	29-Aug-13	29-Aug-13	03-Sep-13	03-Sep-13
		Lab Report	B3D0365	B3D0365	B3D0365	B3E7064	B3E7064	B3E7064	B3E7064	B3E7064
PARAMETERS	TABLE 2 STANDARDS RESIDENTIAL / PARKLAND / INSTITUTIONAL PROPERTY USE COARSE SOILS	TABLE 2 STANDARDS INDUSTRIAL / COMMERCIAL / COMMUNITY PROPERTY USE COARSE SOILS	BH-02-13	BH-03-13	BH-03-13 (Field Duplicate)	BH-101-13	BH-101-13	BH-102-13	BH-103-13	BH-103-13 (Field Duplicate)
			(0.05-0.61 mbg)	(0.06-0.61 mbg)	(0.06-0.61 mbg)	(0.06-0.61 mbg)	(18.29-18.90 mbg)	(16.76-17.37 mbg)	(19.81-20.27 mbg)	(19.81-20.27 mbg)
Antimony (Sb)	7.5	40	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Arsenic (As)	18	18	2.1	4.5	3.7	2.3	<1.0	1.2	<1.0	<1.0
Barium (Ba)	390	670	14	72	41	22	4.4	5.5	4.4	5.8
Beryllium (Be)	4	8	<0.20	0.64	0.41	0.28	<0.20	<0.20	<0.20	<0.20
Boron (B)	120	120	<5.0	5.4	5.6	<5.0	<5.0	<5.0	<5.0	<5.0
Cadmium (Cd)	1.2	1.9	0.12	0.30	0.19	<0.10	0.11	<0.10	0.13	<0.10
Chromium (Cr)	160	160	5.2	16	10	8.7	3.5	3.6	3.9	3.2
Cobalt (Co)	22	80	1.9	6.8	4.1	4.1	0.87	1.3	1.1	1.0
Copper (Cu)	140	230	5.9	19	16	10	3.1	4.9	3.2	3.5
Lead (Pb)	120	120	6.4	16	13	7.9	5.0	5.6	6.2	4.8
Molybdenum (Mo)	6.9	40	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Nickel (Ni)	100	270	3.9	18	12	8.6	2.2	2.8	1.9	2.3
Selenium (Se)	2.4	5.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Silver (Ag)	20	40	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Thallium (Tl)	1	3.3	<0.050	0.098	0.065	<0.050	<0.050	<0.050	<0.050	<0.050
Uranium (U)	23	33	0.28	0.42	0.39	0.36	0.30	0.29	0.30	0.28
Vanadium (V)	86	86	13	23	16	15	7.7	7.2	11	7.1
Zinc (Zn)	340	340	34	65	48	42	38	38	33	35

Notes:

- Standards from Table 2 of the MOE's Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 document for Full Depth Generic Site Condition Standards for Residential/Parkland/Institutional Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- Standards from Table 2 of the MOE's Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- All Standards and results shown in µg/g.
- mbg - metres below grade
- Tests carried out by: Maxxam Analytics of Mississauga, Ontario

TABLE 103

VOLATILE ORGANIC COMPOUNDS (VOCs) ANALYSIS - SOIL

Limited Subsurface Soil and Groundwater Investigation
93, 97, 99, 103, 107, 109, 111, and 119 Roger Street, Waterloo, Ontario

		Sample ID	BH-101-13 SA1	BH-101-13 SA11	BH-102-13 SA7	BH-103-13 SA10	BH-203-13 SA10	Trip Blank	Trip Blank
		Date Sampled	29-Aug-13	29-Aug-13	29-Aug-13	03-Sep-13	03-Sep-13	06-Aug-13	03-Sep-13
		Lab Report	B3E7064	B3E7064	B3E7064	B3E7064	B3E7064	B3D0365	B3E7064
PARAMETERS	TABLE 2 STANDARDS RESIDENTIAL / PARKLAND / INSTITUTIONAL PROPERTY USE COARSE SOILS	TABLE 2 STANDARDS INDUSTRIAL / COMMERCIAL / COMMUNITY PROPERTY USE COARSE SOILS	BH-101-13	BH-101-13	BH-102-13	BH-103-13	BH-103-13 (Field Duplicate)	Trip Blank	Trip Blank
			(0.06-0.61 mbg)	(18.29-18.90 mbg)	(16.76-17.37 mbg)	(19.81-20.27 mbg)	(19.81-20.27 mbg)	NA	NA
Acetone	16	16	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Benzene	0.21	0.32	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Bromodichloromethane	1.50	1.50	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Bromoform	0.27	0.61	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Bromomethane	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Carbon tetrachloride	0.05	0.21	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chlorobenzene	2.4	2.4	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chloroform	0.05	0.47	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dibromochloromethane	2.3	2.3	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dichlorobenzene	1.2	1.2	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,3-Dichlorobenzene	4.8	9.6	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,4-Dichlorobenzene	0.083	0.2	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dichlorodifluoromethane	16	16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1-Dichloroethane	0.47	0.47	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dichloroethane	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1-Dichloroethylene	0.05	0.064	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
cis-1,2-Dichloroethylene	1.9	1.9	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
trans-1,2-Dichloroethylene	0.084	1.3	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dichloropropane	0.05	0.16	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
cis-1,3-Dichloropropene	0.05	0.059	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
trans-1,3-Dichloropropene	0.05	0.059	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Dichloropropene, 1,3-	0.05	0.059	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
Ethyl Benzene	1.1	1.1	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
1,2-Dibromoethane	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
n-Hexane	2.8	46	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Methyl Ethyl Ketone	16	70	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl Isobutyl Ketone	1.7	31	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MTBE	0.75	1.6	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Methylene Chloride	0.1	1.6	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Styrene	0.7	34	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1,1,2-Tetrachloroethane	0.058	0.087	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1,2,2-Tetrachloroethane	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Tetrachloroethylene	0.28	1.9	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Toluene	2.3	6.4	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
1,1,1-Trichloroethane	0.38	6.1	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1,2-Trichloroethane	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Trichloroethylene	0.061	0.55	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Trichlorofluoromethane	4	4	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Vinyl chloride	0.02	0.032	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Xylenes (Total)	3.1	26	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020

Notes:

- Standards from Table 2 of the MOE's Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 document for Full Depth Generic Site Condition Standards for Residential/Parkland/Institutional Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- Standards from Table 2 of the MOE's Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- All Standards and results shown in µg/g.
- mbg - metres below grade
- Tests carried out by: Maxxam Analytics of Mississauga, Ontario

TABLE 104

POLYCYCLIC AROMATIC HYDROCARBONS (PAHs) ANALYSIS - SOIL

Limited Subsurface Soil and Groundwater Investigation
93, 97, 99, 103, 107, 109, 111, and 119 Roger Street, Waterloo, Ontario

		Sample ID	BH-03-13 SS1	BH-103-13 SS1
		Date Sampled	06-Aug-13	06-Aug-13
		Lab Report	B3D0365	B3D0365
PARAMETERS	TABLE 2 STANDARDS RESIDENTIAL / PARKLAND / INSTITUTIONAL PROPERTY USE COARSE SOILS	TABLE 2 STANDARDS INDUSTRIAL / COMMERCIAL / COMMUNITY PROPERTY USE COARSE SOILS	BH-03-13	BH-03-13 (Field Duplicate)
			(0.06-0.61 mbg)	(0.06-0.61 mbg)
Acenaphthene	7.9	21	<0.0050	<0.0050
Acenaphthylene	0.15	0.15	<0.0050	<0.0050
Anthracene	0.67	0.67	<0.0050	<0.0050
Benzo(a)anthracene	0.5	0.96	<0.0050	<0.0050
Benzo(a)pyrene	0.3	0.3	<0.0050	<0.0050
Benzo(b)fluoranthene	0.78	0.96	<0.0050	<0.0050
Benzo(g,h,i)perylene	6.6	9.6	<0.0050	<0.0050
Benzo(k)fluoranthene	0.78	0.96	<0.0050	<0.0050
Chrysene	7	9.6	<0.0050	<0.0050
Dibenzo(ah)anthracene	0.1	0.1	<0.0050	<0.0050
Fluoranthene	0.69	9.6	<0.0050	<0.0050
Fluorene	62	62	<0.0050	<0.0050
Indeno(1,2,3-cd)pyrene	0.38	0.76	<0.0050	<0.0050
1+2-Methylnaphthalenes	0.99	30	<0.0050	<0.0050
1-Methylnaphthalene	0.99	30	<0.0050	<0.0050
2-Methylnaphthalene	0.99	30	<0.0050	<0.0050
Naphthalene	0.6	9.6	<0.0050	<0.0050
Phenanthrene	6.2	12	<0.0050	<0.0050
Pyrene	78	96	<0.0050	<0.0050

Notes:

- Standards from Table 2 of the MOE's Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 document for Full Depth Generic Site Condition Standards for Residential/Parkland/Institutional Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- Standards from Table 2 of the MOE's Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 document for Full Depth Generic Site Condition Standards for Industrial/Commercial/Community Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- All Standards and results shown in µg/g.
- mbg - metres below grade
- Tests carried out by: Maxxam Analytics of Mississauga, Ontario

TABLE 201

MONITORING WELLS FIELD DATA AND ELEVATIONS - GROUNDWATER

Limited Subsurface Soil and Groundwater Investigation
93, 97, 99, 103, 107, 109, 111, and 119 Roger Street, Waterloo, Ontario

MONITORING WELL I.D.	MONITORING WELL DIAMETER (mm)	DATE MONITORED	ELEVATION (mad)		DEPTH TO WATER (mbgs)	DEPTH TO PRODUCT (mbgs)	DEPTH TO BOTTOM (mbgs)	SI (mbgs)	SI (mad)	GROUNDWATER ELEVATION (mad)	COMMENTS
			GROUND	TOP							
BH-01-13	51	16-Aug-13	98.27	98.19	Dry	n/a	4.57	1.52 - 4.57	90.65 - 93.70	n/a	Monitoring well dry on August 12, 16, and September 12 and 18, 2013.
BH-02-13	51	12-Sep-13	98.55	98.46	Dry	n/a	7.62	4.57 - 7.62	87.88 - 90.93	n/a	Monitoring well dry on August 12 and 16, 2013.
BH-03-13	51	12-Sep-13	100.81	100.73	Dry	n/a	4.57	1.52 - 4.57	93.19 - 96.24	n/a	Monitoring well dry on August 12, 16, and September 12 and 18, 2013.
BH-101-13	51	12-Sep-13	98.30	98.21	17.51	n/a	19.81	16.81 - 19.81	75.35 - 78.40	80.79	No odour or free product were observed during groundwater monitoring activities on September 12 and 18, 2013.
BH-102-13	51	12-Sep-13	98.56	98.42	17.76	n/a	19.81	16.81 - 19.81	75.70 - 78.75	80.80	
BH-103-13	51	12-Sep-13	100.82	100.70	19.99	n/a	21.34	18.29 - 21.34	76.43 - 79.48	80.83	

Notes:
mm - millimetre
mbgs - metres below ground surface
mad - metres above datum
n/a - not applicable
SI - Screen Interval

TABLE 202

PETROLEUM HYDROCARBON AND BTEX ANALYSIS - GROUNDWATER

Limited Subsurface Soil and Groundwater Investigation
93, 97, 99, 103, 107, 109, 111, and 119 Roger Street, Waterloo, Ontario

	Sample ID	BH-101-13	BH-201-13	BH-102-13	BH-103-13
	Date Sampled	18-Sep-13	18-Sep-13	18-Sep-13	18-Sep-13
	Lab Report	B3F7737	B3F7737	B3F7737	B3F7737
PARAMETERS	**TABLE 2 STANDARDS ALL TYPES OF PROPERTY USE COARSE SOILS**	**BH-101-13**	**BH-101-13 (Field Duplicate)**	**BH-102-13**	**BH-103-13**
Benzene	5	<0.20	<0.20	<0.20	<0.20
Ethyl Benzene	2.4	<0.20	<0.20	<0.20	<0.20
Toluene	24	0.24	<0.20	<0.20	<0.20
Xylenes (Total)	300	<0.20	<0.20	<0.20	<0.20
F1 (C6-C10)	750	<25	<25	<25	<25
F1-BTEX	750	<25	<25	<25	<25
F2 (C10-C16)	150	<100	<100	<100	<100
F3 (C16-C34)	500	<200	<200	<200	<200
F4 (C34-C50)	500	<200	<200	<200	<200
Chrom. to baseline at nC50	NA	Yes	Yes	Yes	Yes

Notes:

- Standards from Table 2 of the MOE's Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended, document for Full Depth Generic Site Condition Standards for All Types of Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- All Standards and results shown in µg/l.
- Tests carried out by: Maxxam Analytics of Mississauga, Ontario.

TABLE 203

METALS ANALYSIS - GROUNDWATER

Limited Subsurface Soil and Groundwater Investigation
93, 97, 99, 103, 107, 109, 111, and 119 Roger Street, Waterloo, Ontario

	Sample ID	BH-101-13	BH-201-13	BH-102-13	BH-103-13
	Date Sampled	18-Sep-13	18-Sep-13	18-Sep-13	18-Sep-13
	Lab Report	B3F7737	B3F7737	B3F7737	B3F7737
PARAMETERS	TABLE 2 STANDARDS ALL TYPES OF PROPERTY USE COARSE SOILS	BH-101-13	BH-101-13 (Field Duplicate)	BH-102-13	BH-103-13
Antimony (Sb)	6	<0.50	0.52	<0.50	<0.50
Arsenic (As)	25	<1.0	<1.0	<1.0	<1.0
Barium (Ba)	1,000	180	180	110	70
Beryllium (Be)	4	<0.50	<0.50	<0.50	<0.50
Boron (B)	5,000	28	27	22	13
Cadmium (Cd)	2.7	<0.10	<0.10	<0.10	<0.10
Chromium (Cr)	50	<5.0	<5.0	<5.0	<5.0
Cobalt (Co)	3.8	0.81	0.90	<0.50	<0.50
Copper (Cu)	87	2.2	1.8	1.9	1.9
Lead (Pb)	10	3.0	<0.50	<0.50	<0.50
Molybdenum (Mo)	70	1.8	1.8	1.0	2.2
Nickel (Ni)	100	3.2	2.6	1.8	<1.0
Selenium (Se)	10	<2.0	2.2	<2.0	<2.0
Silver (Ag)	1.5	<0.10	<0.10	<0.10	<0.10
Sodium (Na)	490,000	350,000	350,000	110,000	45,000
Thallium (Tl)	2	0.068	0.067	<0.050	<0.050
Uranium (U)	20	1.7	1.7	0.91	1.7
Vanadium (V)	6.2	<1	<1	<0.50	0.54
Zinc (Zn)	1,100	14	13	9.6	7.7

Notes:

- Standards from Table 2 of the MOE's Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended, document for Full Depth Generic Site Condition Standards for All Types of Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- All Standards and results shown in µg/l.
- Tests carried out by: Maxxam Analytics of Mississauga, Ontario.

TABLE 204

VOLATILE ORGANIC COMPOUNDS (VOCs) ANALYSIS - GROUNDWATER

Limited Subsurface Soil and Groundwater Investigation
93, 97, 99, 103, 107, 109, 111, and 119 Roger Street, Waterloo, Ontario

	Sample ID	BH-101-13	BH-201-13	BH-102-13	BH-103-13	Trip Blank
	Date Sampled	18-Sep-13	18-Sep-13	18-Sep-13	18-Sep-13	-
	Lab Report	B3F7737	B3F7737	B3F7737	B3F7737	B3F7737
PARAMETERS	TABLE 2 STANDARDS ALL TYPES OF PROPERTY USE COARSE SOILS	BH-101-13	BH-101-13 (Field Duplicate)	BH-102-13	BH-103-13	Trip Blank
Acetone	2,700	<10	<10	<10	<10	<10
Benzene	5	<0.20	<0.20	<0.20	<0.20	<0.20
Bromodichloromethane	16	<0.50	<0.50	<0.50	<0.50	<0.50
Bromoform	25	<1.0	<1.0	<1.0	<1.0	<1.0
Bromomethane	0.89	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon tetrachloride	0.79	<0.20	<0.20	<0.20	<0.20	<0.20
Chlorobenzene	30	<0.20	<0.20	<0.20	<0.20	<0.20
Chloroform	2.4	<0.20	<0.20	0.49	0.74	<0.20
Dibromochloromethane	25	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	3	<0.50	<0.50	<0.50	<0.50	<0.50
1,3-Dichlorobenzene	59	<0.50	<0.50	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	1	<0.50	<0.50	<0.50	<0.50	<0.50
Dichlorodifluoromethane	590	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethane	5	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichloroethane	1.6	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	1.6	<0.20	<0.20	<0.20	<0.20	<0.20
cis-1,2-Dichloroethylene	1.6	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,2-Dichloroethylene	1.6	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloropropane	5	<0.20	<0.20	<0.20	<0.20	<0.20
cis-1,3-Dichloropropene	0.5	<0.30	<0.30	<0.30	<0.30	<0.30
trans-1,3-Dichloropropene	0.5	<0.40	<0.40	<0.40	<0.40	<0.40
Dichloropropene, 1,3-	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Ethyl Benzene	2.4	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dibromoethane	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
n-Hexane	51	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl Ethyl Ketone	1,800	<10	<10	<10	<10	<10
Methyl Isobutyl Ketone	640	<5.0	<5.0	<5.0	<5.0	<5.0
MTBE	15	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene Chloride	50	<2.0	<2.0	<2.0	<2.0	<2.0
Styrene	5.4	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	1.1	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	1	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	1.6	<0.20	<0.20	<0.20	<0.20	<0.20
Toluene	24	0.24	<0.20	<0.20	0.77	<0.20
1,1,1-Trichloroethane	200	<0.20	<0.20	<0.20	0.67	<0.20
1,1,2-Trichloroethane	4.7	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	1.6	<0.20	<0.20	<0.20	0.44	<0.20
Trichlorofluoromethane	150	<0.50	<0.50	<0.50	<0.50	<0.50
Vinyl chloride	0.5	<0.20	<0.20	<0.20	<0.20	<0.20
Xylenes (Total)	300	<0.20	<0.20	<0.20	<0.20	<0.20

Notes:

- Standards from Table 2 of the MOE's Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended, document for Full Depth Generic Site Condition Standards for All Types of Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- All Standards and results shown in µg/l.
- Tests carried out by: Maxxam Analytics of Mississauga, Ontario.

TABLE 205

POLYCYCLIC AROMATIC HYDROCARBONS (PAHs) ANALYSIS - GROUNDWATER

Limited Subsurface Soil and Groundwater Investigation
93, 97, 99, 103, 107, 109, 111, and 119 Roger Street, Waterloo, Ontario

	Sample ID	BH-101-13
	Date Sampled	18-Sep-13
	Lab Report	B3F7737
PARAMETERS	TABLE 2 STANDARDS ALL TYPES OF PROPERTY USE COARSE SOILS	BH-101-13
Acenaphthene	4.1	<0.050
Acenaphthylene	1	<0.050
Anthracene	2.4	<0.050
Benzo(a)anthracene	1	<0.050
Benzo(a)pyrene	0.01	<0.010
Benzo(b)fluoranthene	0.1	<0.050
Benzo(ghi)perylene	0.2	<0.050
Benzo(k)fluoranthene	0.1	<0.050
Chrysene	0.1	<0.050
Dibenzo(a,h)anthracene	0.2	<0.050
Fluoranthene	0.41	<0.050
Fluorene	120	<0.050
Indeno(1,2,3-cd)pyrene	0.2	<0.050
1+2-Methylnaphthalenes	3.2	<0.071
1-Methylnaphthalene	3.2	<0.050
2-Methylnaphthalene	3.2	<0.050
Naphthalene	11	<0.050
Phenanthrene	1	0.042
Pyrene	4.1	0.064

Notes:

- Standards from Table 2 of the MOE's Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act, April 15, 2011, O. Reg. 153/04 as amended, document for Full Depth Generic Site Condition Standards for All Types of Property Use - Potable Groundwater Condition/Coarse Textured Soil.
- All Standards and results shown in µg/l.
- Tests carried out by: Maxxam Analytics of Mississauga, Ontario.