August 12, 2019

Lions Group Inc.
10795 Highway 9
Caledon, Ontario
L7E 0G5

Attention: Mr. Jay Heming

Re: Hydrogeological Impact Assessment Report for 10795 Highway 9, Caledon, Ontario, L7E 0G5

Safetech Environmental Ltd. (Safetech) is pleased to submit to Lions Group Inc. (Client) the following Hydrogeological Impact Assessment report prepared for 10795 Highway 9, Caledon, Ontario, L7E 0G5 (Site).

This report has been prepared in accordance with the document *Hydrogeological Assessment Submissions, Conservation Authority Guidelines for Development Applications* (Guideline), and specifically with section 3.2 – Impact Assessment.

1 EXISTING CONDITIONS

The Site is zoned as follows on **Zone Map 43** provided under the *Town of Caledon By-Law 2006-50*.

Civic Address	Zoning Designation	Description
10795 Highway 9	A2-ORM	Rural – Oak Ridges Moraine
	EPA2-ORM	Environmental Policy Area 2 Zone – Oak Ridges Moraine

Figure 1: Site Plan – Zoning illustrates the current zoning of the Site.

The Site is currently occupied as follows:

Civic Address	Zoning Designation	Existing Land Use
10795 Highway 9	A2-ORM	Contractor's Facility, Business Office and Open Storage Area
	EPA2-ORM	Undeveloped

The existing contractor's facility, business office and open storage areas have been in place since circa 1960. The contractors yard includes an unpaved area where construction equipment is

stored in the rear of the property, a slab on grade building is used for the maintenance of construction equipment, and an outdoor above ground storage tank is used for the re-fueling of construction equipment.

1.1 PHYSIOGRAPHIC CONDITIONS

As noted on the Ontario Geological Survey (OGS) map *Physiography of Southern Ontario*, the Site is located in an area classified as a kame moraine, bordering on a spillway to the west of the Site.

Based on the OGS map *Bedrock Topography and Overburden Thickness Mapping, Southern Ontario*, bedrock at the Site is at an elevation of approximately 200 m above sea level (masl). With the surface level at the Site between approximately 290 and 295 masl, the overburden thickness is estimated to be approximately 90 – 100 m.

2 PROPOSED DEVELOPMENT

The Client has proposed to amend the current zoning of the Site in order to support the continued operation of the existing Contractor's Facility, Business Office and Open Storage Area, as illustrated in Figure 2: Site Plan – Existing Land Use.

3 ASSESSMENT OF IMPACTS

3.1 GROUNDWATER LEVELS

3.1.1 Groundwater Level Monitoring

A total of six ground water monitoring wells were installed at the Site, as illustrated in Figure 3: Site Plan – Groundwater Monitoring Wells.

The monitoring wells installed consisted of 25 mm Schedule 40 PVC screen and riser. The well screens were 3m in length, had a slot size of approximately 0.25 mm (slot 10) and was sealed at the base with a PVC end cap. The annular space around the well screens was backfilled with well gravel to an average height of 0.6 m above the top of the screens. The well gravel was extended above each of the screens to allow for compaction of the sand pack and expansion of the overlying well seal. A bentonite seal ('Hole Plug') was placed in the borehole annulus from the top of the gravel to approximately 0.3 mbgs. Lubricants and adhesives were not used when constructing the monitoring wells.

A field survey was conducted in order to establish reference elevations for each monitoring point, and groundwater levels were monitored upon completion of the wells, as well as on two dates following their installation in accordance with Section 3.1.7 of the Guideline, as follows:

Well ID	Well Depth (m)	Survey Elevation (mr)	Date	Depth to GW (m)	GW Elevation (mr)
BH/MW1	24	98.13	May 7, 2019	17.48	80.65
			May 16, 2019	16.82	81.31
			July 8, 2019	17.49	80.64
BH/MW2	9	100.51	May 2, 2019	Dry	N/A
			May 16, 2019	Dry	N/A
			July 8, 2019	Dry	N/A
BH/MW3	9	101.02	May 2, 2019	Dry	N/A
			May 16, 2019	Dry	N/A
			July 8, 2019	Dry	N/A
BH/MW4	9	99.1	May 6, 2019	Dry	N/A
			May 16, 2019	Dry	N/A
			July 8, 2019	Dry	N/A
BH/MW5	9	99.52	May 2, 2019	Dry	N/A
			May 16, 2019	Dry	N/A
			July 8, 2019	Dry	N/A
MW8	23.5	99.53	May 16, 2019	18.73	80.80
			May 16, 2019	17.25	82.28
			July 8, 2019	18.73	80.80

Surface and groundwater elevations were measured in meters relative (mr) to a known reference point assumed to be at an elevation of 100m. The reference point used was a cement pad located on the Site.

Borehole logs from the monitoring well installation are included in Appendix B.

3.1.2 Impacts to Groundwater Levels

The proposed rezoning of the Site is for administrative purposes, to support the existing uses of a Contractor's Facility, Business Office and Open Storage Areas.

Safetech understands that there are no plans to:

- Add additional surface cover (i.e. by paving the Site) which could impact the infiltration rate of groundwater; or,
- Perform any construction activities which would involve de-watering of excavations;

Therefore, based on the observed depth to groundwater (16.5+ meters), no significant impacts to the groundwater level are expected to result from the proposed zoning change.

3.2 PUMPING TESTS

Safetech understands that no de-watering or new well installations are proposed as part of the zoning change. Therefore a pumping test is not required.

3.3 GROUNDWATER DISCHARGE BASEFLOW

3.3.1 Investigation

Safetech performed tests involving the creation of an instantaneous change in the well water level by adding a known volume to the well (slug tests) in the two monitoring wells which were found to have groundwater present on July 8, 2019. The slug tests were performed in general accordance with the United States' Environmental Protection Agency (EPA) *SOP #2046 – Slug Tests*.

The slug tests were performed by inserting a water level monitor into the well, allowing the water level to stabilize, then inserting a slug into each well and recording the subsequent rise and return to baseline of the groundwater level. The following table summarizes the instrumentation used.

Well	BH/MW1	MW8
Water Level Monitor	Edge LT Levelogger M5	Edge LT Levelogger M5
Serial Number	2011307	2011323
Calibration Date	July 4, 2019	July 4, 2019
Slug Height	5 Feet	5 Feet
Slug Diameter	1 Inch	1 Inch

Levelogger M5's were used in order to achieve an accuracy of +/- 0.3 cm (0.01 feet). The loggers were suspended at depths of 2-3 meters below the measured top of the water column in each well, and each slug was suspended independently above the logger, with sufficient spacing to ensure that the slugs did not touch the loggers.

Graphs in Appendix C illustrate the logger readings for each slug test.

3.3.2 Calculations

Hydraulic conductivity was calculated as follows:

$$K = \frac{r^2 * ln\left(\frac{L}{R}\right)}{2 * L * T_0} \; for \; \frac{L}{R} > 8$$

$$T_0 = t \leftarrow \frac{H - h(t)}{H - H_0} = 0.37$$

Where:
K is the hydraulic conductivity (ft/s)
T_0 is the Basic Time Lag (s)
r is the well casing radius (ft)
R is the filter pack radius (ft)
L is the length of open screen (ft)

H is the steady state water elevation
H_0 is the water elevation at t = 0 (immediately after slug insertion)
t is the time since slug insertion
h(t) is the water elevation at t > 0

The following table provides a summary of the values used to calculate hydraulic conductivity:

Parameter	Units	BH/MW1	MW8
r	ft	0.08	0.08
R	ft	0.33	0.33
L	ft	10	10
H	m	80.64	80.80
H_0	m	80.71	80.96
t_1	s	20	0
$h(t_1)$	m	80.67	80.96
t_2	s	25	5
$h(t_2)$	m	80.66	80.84
T_0	s	21.7	4.4
K	ft/s	5.45e-5	2.70e-4
	cm/s	1.66e-3	8.23e-3

3.3.3 Findings

Hydraulic conductivity through the water bearing horizon into which the monitoring wells were installed is estimated to be on the order of 10^{-2} to 10^{-3} cm/s, which is consistent with the semi-permeable sand and silty-sand observed during monitoring well installation.

As the proposed zoning change will not result in activities which interfere with the water bearing horizon at the Site, no significant impacts to this groundwater permeability are expected.

3.4 WATER BALANCE ANALYSIS

As no change in the existing property use is proposed following the zoning amendment, no significant changes to the Site's water balance are expected.

3.5 GROUNDWATER QUALITY

3.5.1 Laboratory Analytical Results

Safetech collected groundwater samples from the two monitoring wells with groundwater on May 16, 2019. Groundwater samples were analyzed for the following parameters:

- Petroleum Hydrocarbon Compounds (PHCs) fractions F1 – F4; and,
- Volatile Organic Compounds (VOCs)

The following table provides a summary of the laboratory results obtained in comparison to the groundwater quality standards set out under O.Reg. 153/04 as amended for potable groundwater in coarse grained soils (Table 2 Standards). Full laboratory certificates of analysis are included in Appendix D.

Parameter	Standard µg/L	BH/MW1 µg/L	MW8 µg/L
PHC F1	750	< 20	< 20
PHC F2	150	< 20	< 20
PHC F3	500	710	4120
PHC F4	500	440	6930
Chloroform	2.4	5	< 0.5

3.5.2 Findings

Groundwater at the Site currently exceeds the applicable Site Condition Standards for PHCs F3 & F4, as well as chloroform.

No changes to the operations at the Site are proposed as part of the proposed zoning amendment, therefore additional impacts to the groundwater quality at the Site are not expected.

3.6 ON-SITE SEWAGE SYSTEMS

The Site is serviced by an existing septic field, no changes to the septic servicing on the Site are proposed as part of the zoning amendment.

4 CONCLUSIONS

Safetech understands that no development has been proposed which would involve construction near the observed water table, or significant alteration of the existing surface infiltration conditions at the Site.

Therefore, based on the findings of this Hydrogeological Impact Assessment, the proposed zoning amendments to support the existing use of the Site are not expected to result in significant impacts to the groundwater level, base flow, or infiltration at the Site.

5 LIMITATIONS

The information, conclusions and recommendations provided in this and other associated reports were prepared by trained professionals and technical staff in accordance with level of care and skill exercised by members of the environmental engineering and consulting profession. Recommendations made in this report have been made in the context of existing industry accepted guidelines, which were in place at the date of this report.

In preparing this report, Safetech Environmental Limited (Safetech) relied in good faith on information supplied by individuals or organizations noted in the report. We assumed that the information provided is factual and accurate, and we accept no responsibility for any deficiency, misstatements, or inaccuracies contained in this report as a result of omissions, misrepresentation, or fraudulent acts of any persons or organizations contacted. It should be recognized that the passage of time affects the information provided in this report. Environmental conditions of a site can change. Opinions relating to the site conditions are based upon information that existed at the time the conclusions were formulated. Safetech cannot warrant against undiscovered environmental liabilities.

If any information becomes available that differs from the findings in this report, we request that we be notified immediately to reassess the conclusions provided herein.

This report has been prepared for the sole use of the person or entity to who it is addressed. No other person or entity is entitled to use or rely upon this report without the express written consent of Safetech and the person or entity to who it is addressed. Any use that a third party makes of this report, or any reliance based on conclusions and recommendations made, are the responsibility of such third parties. Safetech accepts no responsibility for damages suffered by third parties as a result of actions based on this report.

Yours truly,

Safetech Environmental Limited,

Robert Fuller, B.A.Sc., P.Eng
Engineer – Environmental Services

Philip I. Warren, P.Eng (QP), PMP
Manager – Environmental Services

Derrick Trim, B.Eng
Environmental EIT

APPENDIX A: FIGURES

FIGURE 1: SITE PLAN – ZONING

FIGURE 2: SITE PLAN – EXISTING LAND USE

FIGURE 3: SITE PLAN – GROUNDWATER MONITORING WELLS

LEGEND:

- Site Boundary
- Building(s)

safetech ENVIRONMENTAL LTD.

DATE OF DRAWING:
July 16, 2019

SCALE:
On Drawing

SEL PROJECT NUMBER:
2190025

DRAWING ID:
Figure 1

DRAWING TITLE:
Site Plan - Zoning
Hydrogeological Impact Assessment
10795 & 10819 Highway 9, Caledon, Ontario
L7E 0G5

LEGEND:

- Site Boundary
- Building(s)
- Paved Area(s)

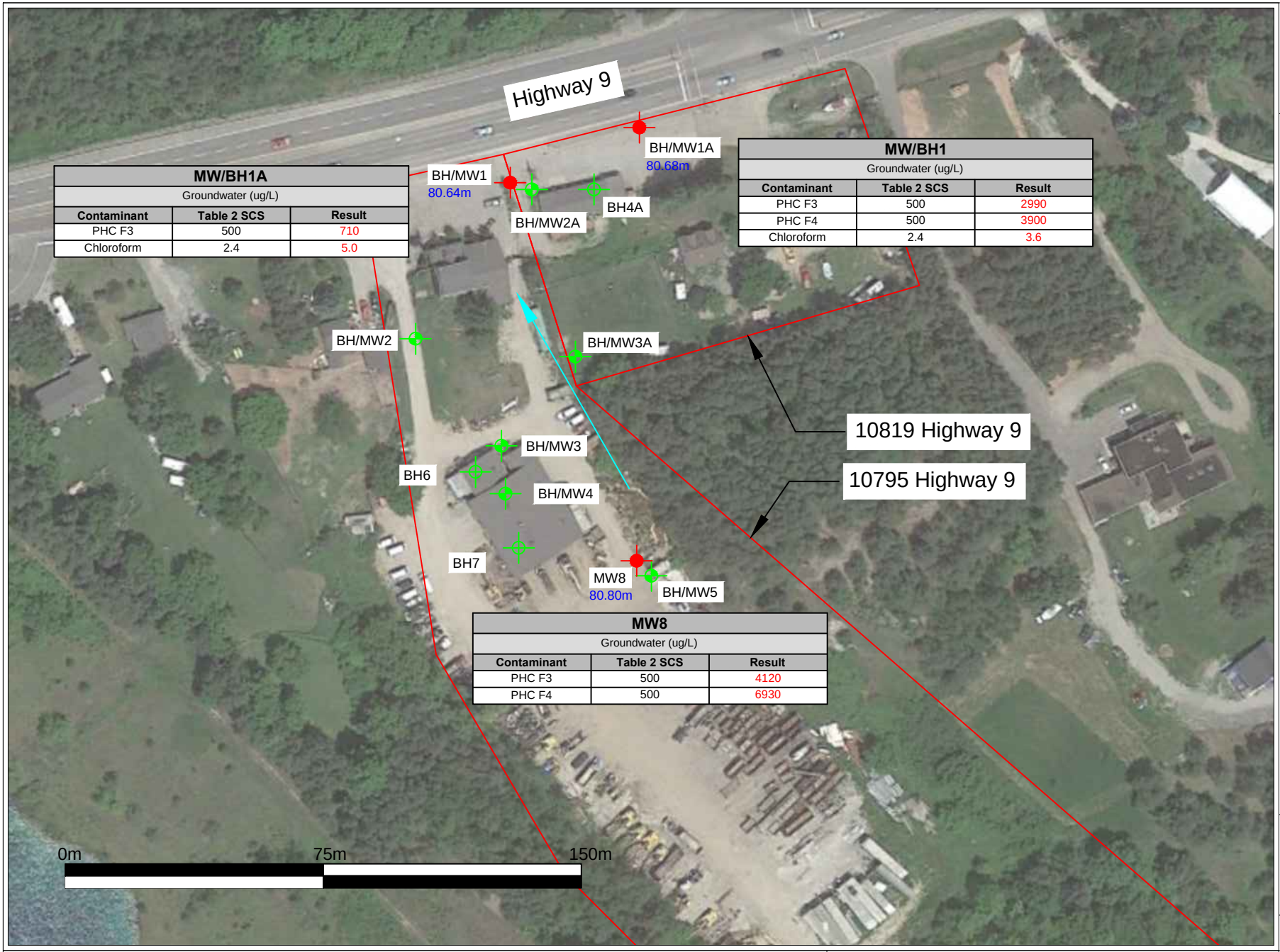
DRAWING TITLE:
Site Plan - Existing Land Use
Hydrogeological Impact Assessment
10795 & 10819 Highway 9, Caledon, Ontario
L7E 0G5

DATE OF DRAWING:
July 16, 2019

SCALE:
On Drawing

SEL PROJECT NUMBER:
2190025

DRAWING ID:
Figure 2



MW/BH1A

Groundwater (ug/L)

Contaminant	Table 2 SCS	Result
PHC F3	500	710
Chloroform	2.4	5.0

MW/BH1

Groundwater (ug/L)

Contaminant	Table 2 SCS	Result
PHC F3	500	2990
PHC F4	500	3900
Chloroform	2.4	3.6

MW8

Groundwater (ug/L)

Contaminant	Table 2 SCS	Result
PHC F3	500	4120
PHC F4	500	6930

LEGEND:

- Approximate Site Boundaries
- 80' - 90' Monitoring Well Location
- 20' - 30' Monitoring Well Locations
- 20' Borehole Locations
- Inferred Groundwater Direction
- 99.99 Relative Water Level Elevations (m)

DRAWING TITLE:
Site Plan - Groundwater Monitoring
Hydrogeological Impact Assessment
10795 & 10819 Highway 9, Caledon, Ontario
L7E 0G5

DATE OF DRAWING:
July 16, 2019

SCALE:
On Drawing

SEL PROJECT NUMBER:
2190025

DRAWING ID:
Figure 3

APPENDIX B: BOREHOLE LOGS

BORING NUMBER BH/MW1

Safetech Environmental Ltd.

CLIENT Rendezvous Holdings Inc. **PROJECT NAME**

PROJECT NUMBER 607018 **PROJECT LOCATION** 10795 Highway 9, Caledon, Ontario

DATE STARTED 5/7/19 **COMPLETED** 5/8/19 **GROUND ELEVATION** **HOLE SIZE** 2"

DRILLING CONTRACTOR Profile Drilling Inc. **GROUND WATER LEVELS:**

DRILLING METHOD Direct Push/Trackmounted Mobile B-60 **AT TIME OF DRILLING** ---

LOGGED BY DT **CHECKED BY** PW **AT END OF DRILLING** ---

NOTES **AFTER DRILLING** 17.48 m

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	LAYER DEPTH (m)	SAMPLE NUMBER	RECOVERY (%)	VAPOUR READING (ppm)	WELL DIAGRAM
			SILT and SAND (Soil) Moist; Loose; Black; Organics Odor	0.61	SS1	67		
					SS2	41	0	
			SAND Moist; Loose; Brown and Orangish; No Odor		SS3	65	0.03	
			Light Brown		SS4	80	0.02	
					SS5	80	0.03	
	5		trace SILT		SS6	66	0.03	
				6.10				
			AUGER					
25								
	10							
50	15			15.24				
			GRAVELY SAND Friable; Multi Colored Gravel, Brown Sand; No Odor	15.85	SS7	59	0.05	
			SAND Friable; Brown; No Odor		SS8*	41	0.11	
	20							
				21.95	SS9	49	0.12	
75								
			SILTY SAND Firm; Brown; No Odor	24.99	SS10	59	0.03	

Borehole Termination Depth: 24.99 m

SAFETECH ENVIRONMENTAL BH LOG 10795 HWY 9 BH LOGS.GPJ GINT STD CANADA.GDT 6/6/19

BORING NUMBER BH/MW2

Safetech Environmental Ltd.

CLIENT Rendezvous Holdings Inc. **PROJECT NAME**

PROJECT NUMBER 607018 **PROJECT LOCATION** 10795 Highway 9, Caledon, Ontario

DATE STARTED 5/2/19 **COMPLETED** 5/2/19 **GROUND ELEVATION** **HOLE SIZE** 2"

DRILLING CONTRACTOR Profile Drilling Inc. **GROUND WATER LEVELS:**

DRILLING METHOD Direct Push/Trackmounted Mobile B-45 **AT TIME OF DRILLING** ---

LOGGED BY DT **CHECKED BY** PW **AT END OF DRILLING** ---

NOTES **AFTER DRILLING** ---

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	LAYER DEPTH (m)	SAMPLE NUMBER	RECOVERY (%)	VAPOUR READING (ppm)	WELL DIAGRAM
			GRAVEL/SAND Moist; Friable; White Gravel, Black/Brown Sand; No Odor	0.15	SS1	100		
				0.46	SS2	100	0.12	
			SAND Moist; Friable; Light Brown; No Odor	0.61	SS3	100	0.13	
			TOPSOIL Moist; Friable; Black; No Odor		SS4	70	0.12	
			SAND Moist; Friable; Light Brown, some Orange; No Odor					
			Light Brown		SS5	79	0.22	
	2							
					SS6*	79	0.16	
10								
	4				SS7	75	0.27	
				4.42				
			SILTY SAND Moist; Friable; Light Brown, No Odor		SS8	67	0.14	
				5.94				
20	6		**SILT** Moist; Friable; Light Brown; No Odor		SS9	84	0.15	
				7.47				
	8		**SILTY SAND** Moist; Friable; Light Brown; No Odor		SS10	83	0.16	
				8.99				

Borehole Termination Depth: 8.99 m

BORING NUMBER BH/MW3

Safetech Environmental Ltd.

CLIENT Rendezvous Holdings Inc. **PROJECT NAME**

PROJECT NUMBER 607018 **PROJECT LOCATION** 10795 Highway 9, Caledon, Ontario

DATE STARTED 5/2/19 **COMPLETED** 5/2/19 **GROUND ELEVATION** **HOLE SIZE** 2"

DRILLING CONTRACTOR Profile Drilling Inc. **GROUND WATER LEVELS:**

DRILLING METHOD Direct Push/Trackmounted Mobile B-45 **AT TIME OF DRILLING** ---

LOGGED BY DT **CHECKED BY** PW **AT END OF DRILLING** ---

NOTES **AFTER DRILLING** ---

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	LAYER DEPTH (m)	SAMPLE NUMBER	RECOVERY (%)	VAPOUR READING (ppm)	WELL DIAGRAM
			GRAVELY SAND Moist; Loose; Dark Brown, Black, Dark Orange; No Odor	0.30	SS1	100	0.18	
			SAND Moist; Loose; Light Brown, some Orange; No Odor		SS2	83	0.14	
			Friable; Brown		SS3	67	0	
					SS4	89	0.17	
	2			1.98	SS5	100	0.18	
			SILTY SAND Moist; Friable; Light Brown, No Odor					
			Brown		SS6*	84	0.31	
10								
	4				SS7	100	0.23	
				4.27				
			SANDY SILT Moist; Friable; Brown, No Odor	4.42	SS8	100	0.2	
			SAND Moist; Loose; Light Brown, No Odor	5.94	SS9	92	0.27	
20	6							
			SAND trace Silt Moist; Moist; Brown, No Odor		SS10	54	0.3	
	8							
					SS11	84	0.18	
				8.99				

Borehole Termination Depth: 8.99 m

BORING NUMBER BH/MW4

Safetech Environmental Ltd.

CLIENT Rendezvous Holdings Inc. **PROJECT NAME**

PROJECT NUMBER 607018 **PROJECT LOCATION** 10795 Highway 9, Caledon, Ontario

DATE STARTED 5/6/19 **COMPLETED** 5/6/19 **GROUND ELEVATION** **HOLE SIZE** 2"

DRILLING CONTRACTOR Profile Drilling Inc. **GROUND WATER LEVELS:**

DRILLING METHOD Direct Push/Trackmounted Mobile B-45 **AT TIME OF DRILLING** ---

LOGGED BY DT **CHECKED BY** PW **AT END OF DRILLING** ---

NOTES **AFTER DRILLING** ---

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	LAYER DEPTH (m)	SAMPLE NUMBER	RECOVERY (%)	VAPOUR READING (ppm)	WELL DIAGRAM
			SILTY SAND Wet; Friable; Brown; No Odor		SS1*	40	0.67	
				0.91				
			SAND Moist; Loose; Brown; No Odor		SS2	93	0.49	
				1.37				
	2		**SANDY SILT** Moist; Friable; Brown; No Odor		SS3	76	0.38	
				2.59				
10			**SAND** trace Silt Wet; Friable; Brown; No Odor		SS4	74	0.33	
				3.66				
	4		**SANDY SILT** Moist/Wet; Friable; Brown; No Odor		SS5	70	0.26	
			trace Clay		SS6	70	0.32	
20	6		trace Clay		SS7	81	0.39	
			trace Clay		SS8	85	0.25	
	8			8.53				
					SS9	149	0.33	
				9.14				

Borehole Termination Depth: 9.14 m

BORING NUMBER BH/MW5

Safetech Environmental Ltd.

CLIENT Rendezvous Holdings Inc. **PROJECT NAME**

PROJECT NUMBER 607018 **PROJECT LOCATION** 10795 Highway 9, Caledon, Ontario

DATE STARTED 5/1/19 **COMPLETED** 5/2/19 **GROUND ELEVATION** **HOLE SIZE** 2"

DRILLING CONTRACTOR Profile Drilling Inc. **GROUND WATER LEVELS:**

DRILLING METHOD Direct Push/Trackmounted Mobile B-45 **AT TIME OF DRILLING** ---

LOGGED BY DT **CHECKED BY** PW **AT END OF DRILLING** ---

NOTES **AFTER DRILLING** ---

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	LAYER DEPTH (m)	SAMPLE NUMBER	RECOVERY (%)	VAPOUR READING (ppm)	WELL DIAGRAM
			GRAVEL/SAND FILL Moist; Loose; Brown; No Odor	0.30				
			GRAVELLY SAND Moist; Friable; Brown; No Odor	0.61	SS1	77	0.07	
			SAND trace Silt Moist; Friable; Light Brown; No Odor		SS2	59	0.02	
	2				SS3	79	0.03	
				2.13				
			SAND		SS4	67	0.06	
10								
	4				SS5	62	0.03	
					SS6	75	0.07	
20	6							
					SS7*	70	0.21	
	8							
					SS8	70	0.14	
				8.99				

Borehole Termination Depth: 8.99 m

BORING NUMBER BH6

Safetech Environmental Ltd.

CLIENT Rendezvous Holdings Inc. **PROJECT NAME**

PROJECT NUMBER 607018 **PROJECT LOCATION** 10795 Highway 9, Caledon, Ontario

DATE STARTED 5/6/19 **COMPLETED** 5/6/19 **GROUND ELEVATION** **HOLE SIZE** 2"

DRILLING CONTRACTOR Profile Drilling Inc. **GROUND WATER LEVELS:**

DRILLING METHOD Direct Push/Trackmounted Mobile B-45 **AT TIME OF DRILLING** ---

LOGGED BY DT **CHECKED BY** PW **AT END OF DRILLING** ---

NOTES **AFTER DRILLING** ---

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	LAYER DEPTH (m)	SAMPLE NUMBER	RECOVERY (%)	VAPOUR READING (ppm)	WELL DIAGRAM
			CONCRETE	0.08				
			SAND Moist; Loose; Brown; No Odor		SS1*	26	0.45	
				1.22				
			SILT trace SAND Moist; Loose; Brown; No Odor		SS2	43	0.28	
	2							
10					SS3	65	0.2	
				3.66				
			SANDY SILT Moist; Loose; Brown, No Odor		SS4	75	0.19	
	4							
					SS5	73	0.19	
20	6			6.10				

Borehole Termination Depth: 6.10 m

BORING NUMBER BH7

Safetech Environmental Ltd.

CLIENT Rendezvous Holdings Inc. **PROJECT NAME**

PROJECT NUMBER 607018 **PROJECT LOCATION** 10795 Highway 9, Caledon, Ontario

DATE STARTED 5/1/19 **COMPLETED** 5/1/19 **GROUND ELEVATION** **HOLE SIZE** 2"

DRILLING CONTRACTOR Profile Drilling Inc. **GROUND WATER LEVELS:**

DRILLING METHOD Direct Push/Trackmounted Mobile B-45 **AT TIME OF DRILLING** ---

LOGGED BY DT **CHECKED BY** PW **AT END OF DRILLING** ---

NOTES **AFTER DRILLING** ---

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	LAYER DEPTH (m)	SAMPLE NUMBER	RECOVERY (%)	VAPOUR READING (ppm)	WELL DIAGRAM
			CONCRETE	0.13				
			GRAVEL FILL	0.20				
			SAND Dry; Friable; Light Brown; No Odor		SS1	67	0.03	
					SS2	70	0.04	
	2				SS3	62	0.11	
					SS4	79	0.05	
10								
	4				SS5*	79	0.18	
					SS6	84	0.12	
				5.94				

Borehole Termination Depth: 5.94 m

BORING NUMBER MW8

Safetech Environmental Ltd.

CLIENT Rendezvous Holdings Inc.
PROJECT NAME
PROJECT NUMBER 607018
PROJECT LOCATION 10795 Highway 9, Caledon, Ontario
DATE STARTED 5/15/19 **COMPLETED** 5/16/19
GROUND ELEVATION **HOLE SIZE** 2"
DRILLING CONTRACTOR Profile Drilling Inc.
GROUND WATER LEVELS:
DRILLING METHOD Direct Push/Trackmounted Mobile B-60
AT TIME OF DRILLING ---
LOGGED BY DT **CHECKED BY** PW
AT END OF DRILLING ---
NOTES
AFTER DRILLING 18.73 m

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	LAYER DEPTH (m)	SAMPLE NUMBER	RECOVERY (%)	VAPOUR READING (ppm)	WELL DIAGRAM
			AUGER					
	5							
25								
	10							
	15							
50								
	20							
75								
				24.20				

Borehole Termination Depth: 24.20 m

SAFETECH ENVIRONMENTAL BH LOG 10795 HWY 9 BH LOGS.GPJ GINT STD CANADA.GDT 6/6/19

BORING NUMBER BH/MW1A

Safetech Environmental Ltd.

CLIENT Rendezvous Holdings Inc. **PROJECT NAME**

PROJECT NUMBER 606918 **PROJECT LOCATION** 10819 Highway 9, Caledon, Ontario

DATE STARTED 5/8/19 **COMPLETED** 5/10/19 **GROUND ELEVATION** **HOLE SIZE** 2"

DRILLING CONTRACTOR Profile Drilling Inc. **GROUND WATER LEVELS:**

DRILLING METHOD Direct Push/Trackmounted Mobile B-60 **AT TIME OF DRILLING** ---

LOGGED BY DT **CHECKED BY** PW **AT END OF DRILLING** ---

NOTES **AFTER DRILLING** 16.78 m

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	LAYER DEPTH (m)	SAMPLE NUMBER	RECOVERY (%)	VAPOUR READING (ppm)	WELL DIAGRAM
			ASPHALT	0.08				
			GRAVELLY SAND	0.30	SS1	51	0.06	
			Dry; Friable; Light Brown; No Odor	1.22	SS2	38	0.24	
			SAND					
			Moist; Friable; Brown; No Odor	3.66	SS3	43	0.3	
			trace Silt					
	5		trace Silt	4.88	SS4	43	0.25	
			trace SILT		SS5	50	0.24	
				6.25				
			trace SILT	6.71	SS6	54	0.09	
25			**SANDY GRAVEL**	8.23				
			Friable; Light Brown Sand, Multi Colored Gravel; No Odor					
	10		**GRAVELY SAND**	9.75	SS7	75	0.15	
			Loose; Multi Colored Gravel, Brown Sand; No Odor					
				12.80				
			SAND		SS8	49	0.09	
			Firm; Brown; No Odor					
50	15		**GRAVELY SAND**		SS9	54	0.06	
			Loose; Multi Colored Gravel, Brown Sand; No Odor					
				18.90	SS10*	49	0	
	20							
			SAND	21.95	SS11	67	0	
75			Firm; Brown; No Odor					
	25		**SILTY SAND**		SS12	70	0	
			Friable; Brown; No Odor					
				28.04	SS13	70	0	
	30							
100			**GRAVELY SAND**	31.09	SS14	49	0	
			Loose; Multi Colored Gravel, Brown Sand; No Odor					
			SANDY GRAVEL	34.14	SS15	49	0.12	
			Friable; Light Brown Sand, Multi Colored Gravel; No Odor					

Borehole Termination Depth: 34.14 m

SAFETECH ENVIRONMENTAL BH LOG 10819 HWY 9 BH LOGS.GPJ GINT STD CANADA.GDT 5/29/19

BORING NUMBER BH/MW2A

Safetech Environmental Ltd.

CLIENT Rendezvous Holdings Inc. **PROJECT NAME**

PROJECT NUMBER 606918 **PROJECT LOCATION** 10819 Highway 9, Caledon, Ontario

DATE STARTED 5/3/19 **COMPLETED** 5/3/19 **GROUND ELEVATION** **HOLE SIZE** 2"

DRILLING CONTRACTOR Profile Drilling Inc. **GROUND WATER LEVELS:**

DRILLING METHOD Direct Push/Trackmounted Mobile B-45 **AT TIME OF DRILLING** ---

LOGGED BY DT **CHECKED BY** PW **AT END OF DRILLING** ---

NOTES **AFTER DRILLING** ---

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	LAYER DEPTH (m)	SAMPLE NUMBER	RECOVERY (%)	VAPOUR READING (ppm)	WELL DIAGRAM
			ASPHALT	0.05				
			SAND Black	0.10				
			SAND Moist; Loose; Brown; No Odor		SS1	12	0.02	
	2				SS2	77	0	
10					SS3	81	0.01	
	4				SS4	69	0.01	
					SS5	70	0.05	
				5.79				
20	6		**SANDY SILT** Moist; Friable; Brown; No Odor		SS6	83	0.11	
				6.40	SS7*	60	0.18	
			SAND Moist; Loose; Brown; No Odor		SS8	87	0.16	
	8				SS9	98	0.09	
			trace Gravel		SS10	92	0.1	
				9.14				

Borehole Termination Depth: 9.14 m

BORING NUMBER BH/MW3A

Safetech Environmental Ltd.

CLIENT Rendezvous Holdings Inc. **PROJECT NAME**

PROJECT NUMBER 606918 **PROJECT LOCATION** 10819 Highway 9, Caledon, Ontario

DATE STARTED 5/3/19 **COMPLETED** 5/3/19 **GROUND ELEVATION** **HOLE SIZE** 2"

DRILLING CONTRACTOR Profile Drilling Inc. **GROUND WATER LEVELS:**

DRILLING METHOD Direct Push/Trackmounted Mobile B-45 **AT TIME OF DRILLING** ---

LOGGED BY DT **CHECKED BY** PW **AT END OF DRILLING** ---

NOTES **AFTER DRILLING** ---

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	LAYER DEPTH (m)	SAMPLE NUMBER	RECOVERY (%)	VAPOUR READING (ppm)	WELL DIAGRAM
			TOPSOIL Moist; Loose; Dark Brown, Black; Organics Odor	0.61				
			SAND Moist; Loose; Brown; No Odor					
	2				SS2	81	0	
10					SS3	96	0.02	
	4				SS4	93	0.1	
					SS5	92	0.04	
20	6				SS6*	100	0.14	
			SANDY SILT Wet; Friable; Brown; No Odor	6.58	SS7	93	0.07	
					SS8	100	0.03	
	8		**SAND** Moist; Friable; Light Brown; No Odor	8.10	SS9	58	0.14	
					SS10	100	0.08	
				9.14				

Borehole Termination Depth: 9.14 m

BORING NUMBER BH4A

Safetech Environmental Ltd.

CLIENT Rendezvous Holdings Inc. **PROJECT NAME**

PROJECT NUMBER 606918 **PROJECT LOCATION** 10819 Highway 9, Caledon, Ontario

DATE STARTED 5/3/19 **COMPLETED** 5/3/19 **GROUND ELEVATION** **HOLE SIZE** 2"

DRILLING CONTRACTOR Profile Drilling Inc. **GROUND WATER LEVELS:**

DRILLING METHOD Direct Push/Trackmounted Mobile B-45 **AT TIME OF DRILLING** ---

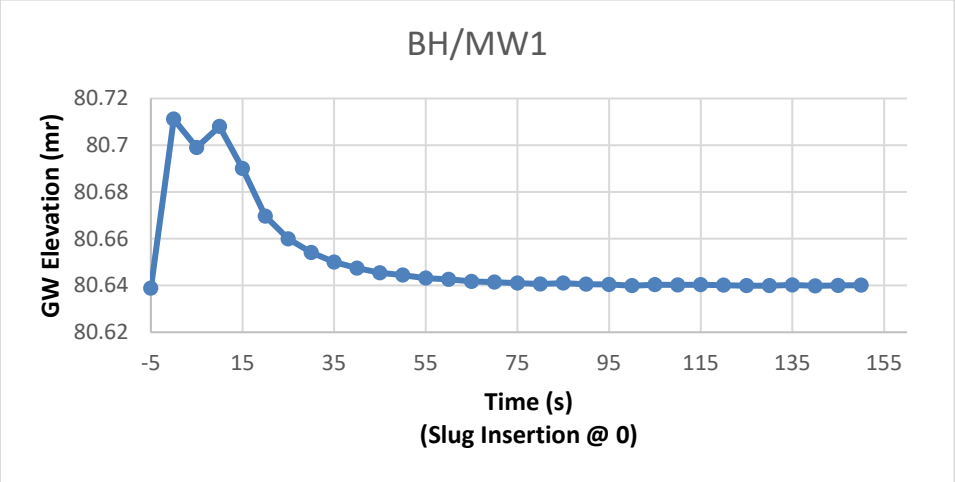
LOGGED BY DT **CHECKED BY** PW **AT END OF DRILLING** ---

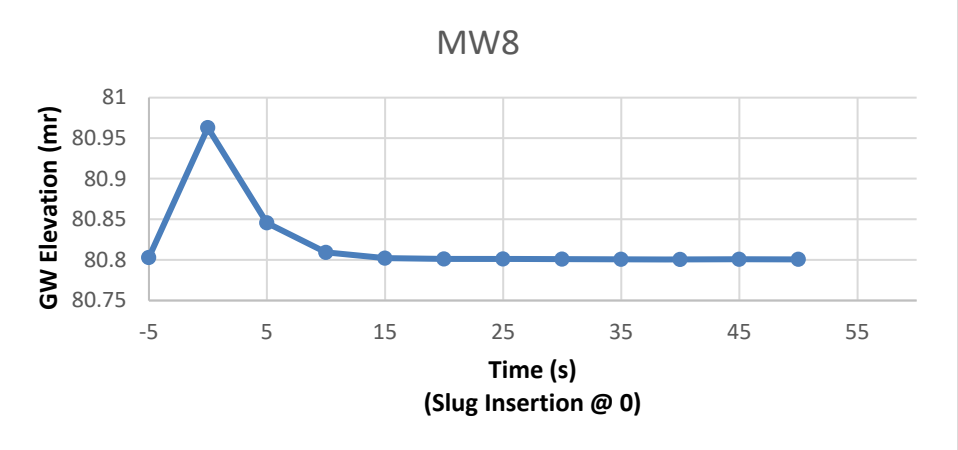
NOTES **AFTER DRILLING** ---

DEPTH (ft)	DEPTH (m)	GRAPHIC LOG	MATERIAL DESCRIPTION	LAYER DEPTH (m)	SAMPLE NUMBER	RECOVERY (%)	VAPOUR READING (ppm)	WELL DIAGRAM
			CONCRETE	0.08				
			SAND Moist; Loose; Brown; No Odor		SS1	32	0.02	
	2				SS2	65	0.03	
10					SS3	88	0.03	
	4				SS4	96	0.06	
					SS5*	89	0.07	
20	6			6.10				

Borehole Termination Depth: 6.10 m

APPENDIX C: SLUG TEST DATA





APPENDIX D: GROUNDWATER QUALITY ANALYSIS RESULTS

Certificate of Analysis

Environment Testing

Client: Safetech Environmental Limited
14 - 3045 Southcreek Rd.
Mississauga, ON
L4X 2X7
Attention: Mr. Derrick Trim
Invoice to: Safetech Environmental Limited
PO#:

Report Number:	1907789
Date Submitted:	2019-05-17
Date Reported:	2019-05-29
Project:	606918/607018
COC #:	203176
Temperature (C):	15
Custody Seal:	

Dear Derrick Trim:

Please find attached the analytical results for your samples. If you have any questions regarding this report, please do not hesitate to call (613-727-5692).

Report Comments:

Rebecca Koshy, Project Manager

All analysis is completed at Eurofins Environment Testing Canada Inc. (Ottawa, Ontario) unless otherwise stated
.
Eurofins Environment Testing Canada Inc. is accredited by CALA, Canadian Association for Laboratory Accreditation to ISO/IEC 17025 for tests which appear on the scope of accrteditation. The scope is available at http://www.cala.ca/scopes/2602.pdf

Please note: Field data, where presented on the report, has been provided by the client and is presented for informational purposes only. Guideline or regulatory limits listed on this report are provided for ease of use (informational purposes) only. Eurofins recommends consulting the official guideline or regulation as required. Unless otherwise stated, measurement uncertainty is not taken into account when determining guideline or regulatory exceedances.

Client: Safetech Environmental Limited
14 - 3045 Southcreek Rd.
Mississauga, ON
L4X 2X7
Attention: Mr. Derrick Trim
PO#:
Invoice to: Safetech Environmental Limited

Report Number: 1907789
Date Submitted: 2019-05-17
Date Reported: 2019-05-29
Project: 606918/607018
COC #: 203176

O.Reg 153-T2-Groundwater-Coarse

Exceedence Summary

Sample I.D.	Analyte	Result	Units	Criteria
Hydrocarbons				
BH/MW1	Petroleum Hydrocarbons F3	710	ug/L	STD 500
BH/MW1A	Petroleum Hydrocarbons F3	2990	ug/L	STD 500
BH/MW1A	Petroleum Hydrocarbons F4	3900	ug/L	STD 500
MW8	Petroleum Hydrocarbons F3	4120	ug/L	STD 500
MW8	Petroleum Hydrocarbons F4	6930	ug/L	STD 500
Volatiles				
BH/MW1	Chloroform	5.0	ug/L	STD 2.4
BH/MW1A	Chloroform	3.6	ug/L	STD 2.4

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Client: Safetech Environmental Limited
14 - 3045 Southcreek Rd.
Mississauga, ON
L4X 2X7
Attention: Mr. Derrick Trim
PO#:
Invoice to: Safetech Environmental Limited

Report Number: 1907789
Date Submitted: 2019-05-17
Date Reported: 2019-05-29
Project: 606918/607018
COC #: 203176

Guideline = O.Reg 153-T2-Groundwater-Coarse

Hydrocarbons

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1427166	1427167	1427168
Sample Matrix					GW153	GW153	GW153
Sample Type							
Sample Date					2019-05-16	2019-05-16	2019-05-16
Sampling Time							
Sample I.D.					BH/MW1	BH/MW1A	MW8
PHC's F1	366251	20	ug/L	STD 750	<20	<20	<20
PHC's F1-BTEX	366253	20	ug/L		<20	<20	<20
PHC's F2	366160	20	ug/L	STD 150	<20	<20	<20
PHC's F3	366160	50	ug/L	STD 500	710*	2990*	4120*
PHC's F4	366160	50	ug/L	STD 500	440	3900*	6930*

Volatiles

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1427166	1427167	1427168
Sample Matrix					GW153	GW153	GW153
Sample Type							
Sample Date					2019-05-16	2019-05-16	2019-05-16
Sampling Time							
Sample I.D.					BH/MW1	BH/MW1A	MW8
Acetone	366442	30	ug/L	STD 2700	<30	<30	<30
Benzene	366251	0.5	ug/L	STD 5	<0.5	<0.5	<0.5
Bromodichloromethane	366251	0.3	ug/L	STD 16	3.7	2.1	<0.3
Bromoform	366251	0.4	ug/L	STD 25	<0.4	<0.4	<0.4
Bromomethane	366251	0.5	ug/L	STD 0.89	<0.5	<0.5	<0.5
Carbon Tetrachloride	366251	0.2	ug/L	STD 0.79	<0.2	<0.2	<0.2
Chlorobenzene	366251	0.5	ug/L	STD 30	<0.5	<0.5	<0.5
Chloroform	366251	0.5	ug/L	STD 2.4	5.0*	3.6*	<0.5
Dibromochloromethane	366251	0.3	ug/L	STD 25	2.3	1.1	<0.3
Dichlorobenzene, 1,2-	366251	0.4	ug/L	STD 3	<0.4	<0.4	<0.4
Dichlorobenzene, 1,3-	366251	0.4	ug/L	STD 59	<0.4	<0.4	<0.4
Dichlorobenzene, 1,4-	366251	0.4	ug/L	STD 1	<0.4	<0.4	<0.4
Dichlorodifluoromethane	366251	0.5	ug/L	STD 590	<0.5	<0.5	<0.5

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Client: Safetech Environmental Limited
14 - 3045 Southcreek Rd.
Mississauga, ON
L4X 2X7
Attention: Mr. Derrick Trim
PO#:
Invoice to: Safetech Environmental Limited

Report Number: 1907789
Date Submitted: 2019-05-17
Date Reported: 2019-05-29
Project: 606918/607018
COC #: 203176

Guideline = O.Reg 153-T2-Groundwater-Coarse

Volatiles

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1427166	1427167	1427168
Sample Matrix					GW153	GW153	GW153
Sample Type							
Sample Date					2019-05-16	2019-05-16	2019-05-16
Sampling Time							
Sample I.D.					BH/MW1	BH/MW1A	MW8
Dichloroethane, 1,1-	366251	0.4	ug/L	STD 5	<0.4	<0.4	<0.4
Dichloroethane, 1,2-	366251	0.2	ug/L	STD 1.6	<0.2	<0.2	<0.2
Dichloroethylene, 1,1-	366251	0.5	ug/L	STD 1.6	<0.5	<0.5	<0.5
Dichloroethylene, 1,2-cis-	366251	0.4	ug/L	STD 1.6	<0.4	<0.4	<0.4
Dichloroethylene, 1,2-trans-	366251	0.4	ug/L	STD 1.6	<0.4	<0.4	<0.4
Dichloropropane, 1,2-	366251	0.5	ug/L	STD 5	<0.5	<0.5	<0.5
Dichloropropene,1,3-	366442	0.3	ug/L	STD 0.5	<0.3	<0.3	<0.3
Dichloropropene,1,3-cis-	366251	0.2	ug/L		<0.2	<0.2	<0.2
Dichloropropene,1,3-trans-	366251	0.2	ug/L		<0.2	<0.2	<0.2
Ethylbenzene	366251	0.5	ug/L	STD 2.4	<0.5	<0.5	<0.5
Ethylene dibromide	366251	0.2	ug/L	STD 0.2	<0.2	<0.2	<0.2
Hexane (n)	366251	5	ug/L	STD 51	<5	<5	<5
Methyl Ethyl Ketone	366442	10	ug/L	STD 1800	<10	<10	<10
Methyl Isobutyl Ketone	366442	10	ug/L	STD 640	<10	<10	<10
Methyl tert-Butyl Ether (MTBE)	366442	2	ug/L	STD 15	<2	<2	<2
Methylene Chloride	366251	4.0	ug/L	STD 50	<4.0	<4.0	<4.0
Styrene	366251	0.5	ug/L	STD 5.4	<0.5	<0.5	<0.5
Tetrachloroethane, 1,1,1,2-	366251	0.5	ug/L	STD 1.1	<0.5	<0.5	<0.5
Tetrachloroethane, 1,1,2,2-	366251	0.5	ug/L	STD 1	<0.5	<0.5	<0.5
Tetrachloroethylene	366251	0.3	ug/L	STD 1.6	<0.3	<0.3	<0.3
Toluene	366251	0.5	ug/L	STD 24	0.6	1.2	<0.5
Trichloroethane, 1,1,1-	366251	0.4	ug/L	STD 200	0.9	<0.4	<0.4
Trichloroethane, 1,1,2-	366251	0.4	ug/L	STD 4.7	<0.4	<0.4	<0.4
Trichloroethylene	366251	0.3	ug/L	STD 1.6	<0.3	<0.3	<0.3

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Client: Safetech Environmental Limited
14 - 3045 Southcreek Rd.
Mississauga, ON
L4X 2X7
Attention: Mr. Derrick Trim
PO#:
Invoice to: Safetech Environmental Limited

Report Number: 1907789
Date Submitted: 2019-05-17
Date Reported: 2019-05-29
Project: 606918/607018
COC #: 203176

Guideline = O.Reg 153-T2-Groundwater-Coarse

Volatiles

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1427166	1427167	1427168
					Sample Matrix GW153	GW153	GW153
					Sample Type		
					Sample Date 2019-05-16	2019-05-16	2019-05-16
					Sampling Time		
					Sample I.D. BH/MW1	BH/MW1A	MW8
Trichlorofluoromethane	366251	0.5	ug/L	STD 150	<0.5	<0.5	<0.5
Vinyl Chloride	366251	0.2	ug/L	STD 0.5	<0.2	<0.2	<0.2
Xylene Mixture	366252	0.5	ug/L	STD 300	<0.5	<0.5	<0.5
Xylene, m/p-	366251	0.4	ug/L		<0.4	<0.4	<0.4
Xylene, o-	366251	0.4	ug/L		<0.4	<0.4	<0.4

PHC Surrogate

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. 1427166	1427167	1427168
					Sample Matrix GW153	GW153	GW153
					Sample Type		
					Sample Date 2019-05-16	2019-05-16	2019-05-16
					Sampling Time		
					Sample I.D. BH/MW1	BH/MW1A	MW8
Alpha-androstrane	366160	0	%		117	109	113

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Client: Safetech Environmental Limited
14 - 3045 Southcreek Rd.
Mississauga, ON
L4X 2X7
Attention: Mr. Derrick Trim
PO#:
Invoice to: Safetech Environmental Limited

Report Number: 1907789
Date Submitted: 2019-05-17
Date Reported: 2019-05-29
Project: 606918/607018
COC #: 203176

Guideline = O.Reg 153-T2-Groundwater-Coarse

VOCs Surrogates

Analyte	Batch No	MRL	Units	Guideline	Lab I.D. / Sample Matrix / Sample Type / Sample Date / Sampling Time / Sample I.D.		
					1427166 GW153 2019-05-16 BH/MW1	1427167 GW153 2019-05-16 BH/MW1A	1427168 GW153 2019-05-16 MW8
1,2-dichloroethane-d4	366251	0	%		109	106	114
4-bromofluorobenzene	366251	0	%		123	118	113
Toluene-d8	366251	0	%		102	105	102

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Client: Safetech Environmental Limited
14 - 3045 Southcreek Rd.
Mississauga, ON
L4X 2X7
Attention: Mr. Derrick Trim
PO#:
Invoice to: Safetech Environmental Limited

Report Number: 1907789
Date Submitted: 2019-05-17
Date Reported: 2019-05-29
Project: 606918/607018
COC #: 203176

Quality Assurance Summary

Batch No	Analyte	Blank	QC % Rec	QC Limits	Spike % Rec	Spike Limits	Dup % RPD	Duplicate Limits
366160	PHC's F2	<20 ug/L	100	60-140		60-140		0-30
366160	PHC's F3	<50 ug/L	100	60-140		60-140		0-30
366160	PHC's F4	<50 ug/L	100	60-140		60-140		0-30
366251	Tetrachloroethane, 1,1,1,2-	<0.5 ug/L	103	60-130	87	50-140	0	0-30
366251	Trichloroethane, 1,1,1-	<0.4 ug/L	94	60-130	83	50-140	0	0-30
366251	Tetrachloroethane, 1,1,2,2-	<0.5 ug/L	114	60-130	101	50-140	0	0-30
366251	Trichloroethane, 1,1,2-	<0.4 ug/L	104	60-130	86	50-140	0	0-30
366251	Dichloroethane, 1,1-	<0.4 ug/L	93	60-130	80	50-140	0	0-30
366251	Dichloroethylene, 1,1-	<0.5 ug/L	94	60-130	81	50-140	0	0-30
366251	Dichlorobenzene, 1,2-	<0.4 ug/L	111	60-130	106	50-140	0	0-30
366251	Dichloroethane, 1,2-	<0.2 ug/L	105	60-130	93	50-140	0	0-30
366251	Dichloropropane, 1,2-	<0.5 ug/L	103	60-130	88	50-140	0	0-30
366251	Dichlorobenzene, 1,3-	<0.4 ug/L	94	60-130	89	50-140	0	0-30
366251	Dichlorobenzene, 1,4-	<0.4 ug/L	95	60-130	90	50-140	0	0-30
366251	Benzene	<0.5 ug/L	98	60-130	84	50-140	0	0-30
366251	Bromodichloromethane	<0.3 ug/L	100	60-130	84	50-140	0	0-30
366251	Bromoform	<0.4 ug/L	101	60-130	84	50-140	0	0-30
366251	Bromomethane	<0.5 ug/L	71	60-130	69	50-140	0	0-30
366251	Dichloroethylene, 1,2-cis-	<0.4 ug/L	99	60-130	85	50-140	0	0-30
366251	Dichloropropene,1,3-cis-	<0.2 ug/L	90	60-130	77	50-140	0	0-30
366251	Carbon Tetrachloride	<0.2 ug/L	97	60-130	92	50-140	0	0-30
366251	Chloroform	<0.5 ug/L	96	60-130	82	50-140	0	0-30
366251	Dibromochloromethane	<0.3 ug/L	99	60-130	83	50-140	0	0-30
366251	Dichlorodifluoromethane	<0.5 ug/L	105	60-130	123	50-140	0	0-30
366251	Methylene Chloride	<4.0 ug/L	114	60-130	89	50-140	0	0-30
366251	Ethylbenzene	<0.5 ug/L	100	60-130	86	50-140	0	0-30
366251	Ethylene dibromide	<0.2 ug/L	104	60-130		50-140		0-30
366251	PHC's F1	<20 ug/L	99	60-140	120	60-140	0	0-30
366251	Hexane (n)	<5 ug/L	90	60-130	79	50-140	0	0-30
366251	Xylene, m/p-	<0.4 ug/L	103	60-130	90	50-140	0	0-30
366251	Chlorobenzene	<0.5 ug/L	95	60-130	84	50-140	0	0-30
366251	Xylene, o-	<0.4 ug/L	100	60-130	88	50-140	0	0-30
366251	Styrene	<0.5 ug/L	94	60-130	81	50-140	0	0-30

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Client: Safetech Environmental Limited
14 - 3045 Southcreek Rd.
Mississauga, ON
L4X 2X7
Attention: Mr. Derrick Trim
PO#:
Invoice to: Safetech Environmental Limited

Report Number: 1907789
Date Submitted: 2019-05-17
Date Reported: 2019-05-29
Project: 606918/607018
COC #: 203176

Quality Assurance Summary

Batch No	Analyte	Blank	QC % Rec	QC Limits	Spike % Rec	Spike Limits	Dup % RPD	Duplicate Limits
366251	Dichloroethylene, 1,2-trans-	<0.4 ug/L	95	60-130	81	50-140	0	0-30
366251	Dichloropropene,1,3-trans-	<0.2 ug/L	89	60-130	77	50-140	0	0-30
366251	Tetrachloroethylene	<0.3 ug/L	90	60-130	79	50-140	0	0-30
366251	Toluene	<0.5 ug/L	97	60-130	85	50-140	0	0-30
366251	Trichloroethylene	<0.3 ug/L	96	60-130	85	50-140	0	0-30
366251	Trichlorofluoromethane	<0.5 ug/L	95	60-130	83	50-140	0	0-30
366251	Vinyl Chloride	<0.2 ug/L	95	60-130	88	50-140	0	0-30
366252	Xylene Mixture							
366253	PHC's F1-BTEX							
366442	Dichloropropene,1,3-							
366442	Acetone	<30 ug/L		60-130	101	50-140	0	0-30
366442	Methyl Ethyl Ketone	<10 ug/L	100	60-130	115	50-140	0	0-30
366442	Methyl Isobutyl Ketone	<10 ug/L		60-130	92	50-140	0	0-30
366442	Methyl tert-Butyl Ether (MTBE)	<2 ug/L	80	60-130	80	50-140	0	0-30

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Client: Safetech Environmental Limited
14 - 3045 Southcreek Rd.
Mississauga, ON
L4X 2X7
Attention: Mr. Derrick Trim
PO#:
Invoice to: Safetech Environmental Limited

Report Number: 1907789
Date Submitted: 2019-05-17
Date Reported: 2019-05-29
Project: 606918/607018
COC #: 203176

Test Summary

Batch No	Analyte	Instrument	Prep aration Date	Analysis Date	Analyst	Method
366160	PHC's F2	GC/FID	2019-05-23	2019-05-24	C_M	CCME O.Reg 153/04
366160	PHC's F3	GC/FID	2019-05-23	2019-05-24	C_M	CCME O.Reg 153/04
366160	PHC's F4	GC/FID	2019-05-23	2019-05-24	C_M	CCME O.Reg 153/04
366251	Tetrachloroethane, 1,1,1,2-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Trichloroethane, 1,1,1-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Tetrachloroethane, 1,1,2,2-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Trichloroethane, 1,1,2-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Dichloroethane, 1,1-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Dichloroethylene, 1,1-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Dichlorobenzene, 1,2-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Dichloroethane, 1,2-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Dichloropropane, 1,2-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Dichlorobenzene, 1,3-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Dichlorobenzene, 1,4-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Benzene	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Bromodichloromethane	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Bromoform	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Bromomethane	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Dichloroethylene, 1,2-cis-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Dichloropropene,1,3-cis-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Carbon Tetrachloride	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Chloroform	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Dibromochloromethane	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Dichlorodifluoromethane	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Methylene Chloride	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Ethylbenzene	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Ethylene dibromide	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	PHC's F1	GC/FID	2019-05-27	2019-05-27	TJB	CCME O.Reg 153/04
366251	Hexane (n)	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Xylene, m/p-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Chlorobenzene	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Xylene, o-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Styrene	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range

Certificate of Analysis

Client: Safetech Environmental Limited
14 - 3045 Southcreek Rd.
Mississauga, ON
L4X 2X7
Attention: Mr. Derrick Trim
PO#:
Invoice to: Safetech Environmental Limited

Report Number: 1907789
Date Submitted: 2019-05-17
Date Reported: 2019-05-29
Project: 606918/607018
COC #: 203176

Test Summary

Batch No	Analyte	Instrument	Prep aration Date	Analysis Date	Analyst	Method
366251	Dichloroethylene, 1,2-trans-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Dichloropropene,1,3-trans-	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Tetrachloroethylene	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Toluene	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Trichloroethylene	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Trichlorofluoromethane	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366251	Vinyl Chloride	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366252	Xylene Mixture	GC-MS	2019-05-27	2019-05-27	TJB	EPA 8260
366253	PHC's F1-BTEX	GC/FID	2019-05-27	2019-05-27	TJB	CCME O.Reg 153/04
366442	Dichloropropene,1,3-	GC-MS	2019-05-29	2019-05-29	TJB	EPA 8260
366442	Acetone	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366442	Methyl Ethyl Ketone	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366442	Methyl Isobutyl Ketone	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260
366442	Methyl tert-Butyl Ether (MTBE)	GC-MS	2019-05-21	2019-05-23	TJB	EPA 8260

Results relate only to the parameters tested on the samples submitted.
Methods references and/or additional QA/QC information available on request.

MRL = Method Reporting Limit, AO = Aesthetic Objective, OG = Operational Guideline, MAC = Maximum Acceptable Concentration, IMAC = Interim Maximum Acceptable Concentration, STD = Standard, PWQO = Provincial Water Quality Guideline, IPWQO = Interim Provincial Water Quality Objective, TDR = Typical Desired Range