Rubicon Environmental (2008) Inc.

Carl Madigan
3N Group Holdings Inc.
1769 St Laurent Boulevard,
Ottawa, ON K1G 3V4

October 27, 2022

Attention: 3N Group Holdings Inc.

R63048.12 – Conditions and Report Letter
Commercial/Residential Property:
245 – 247, & 261 – 263 Rochester Street, 27 & 29 Balsam Street Ottawa, ON

Dear Carl,

This letter is written with respect to the Conditions and Removal status report on the subject properties located at 245 – 247, & 261 – 263 Rochester Street, 27 & 29 Balsam Street Ottawa Ontario. Rubicon Environmental (2008) Inc. (Rubicon) was contracted in April 2021 to undergo a remedial environmental site assessment prior to redevelopment of a mixed commercial and residential building of nine (9) storeys with an underground parking garage, commercial floor level and 8 residential storeys. The subject property contains an area of approximately 2,600 m2 . At the time of this investigation the sites contained four (4) open basements exposed to bedrock, following the complete building demolitions and removal of all the construction and demolition waste, off-site. The subject properties contain minimal groundwater and minimal soil, more specifically along the west side which mainly exposed limestone bedrock and rock basement walls, with limited amounts of soil. The eastern portion formerly used for driveways and parking was once completed with an asphalt surface. During the demolition of the on-site buildings, the asphalt was excavated and recycled off-site. All asphalt was removed throughout the eastern portion of the subject properties.

The contaminants of concern of the eastern portion of the subject properties were related to the former asphalt once located above the granular A and gravel. These contaminants are BTEX, PHC, PAHs.

The contaminants of concern in the southwestern portion subject properties were related to the dry-cleaning chemicals used when the southern building was used as a dry cleaning facility. The contaminants of concern are Dichloroethylene 1,1(cis and Trans), -Tetrachloroethylene, Trichloroethylene.

On February 7, 2022, a borehole plan was conducted for bulk analysis for the soil within the subject property. Rubicon Environmental (2008) Inc. retained the services of Canadian Environmental Drilling and Contractors Inc. (CEDC), to complete the borehole drilling program at the On February 7, 2022. A truck mounted rig equipped with a combination of solid stem augers and split spoon samplers was utilized by Sonic Soil Sampling to complete the boreholes. All equipment that came into contact with

subsurface conditions (augers and split spoon samplers) during the drilling program was thoroughly cleansed with 'Alconox' powder mixed with water by the licensed drillers between each sampling interval to prevent possible cross contamination. Soil samples were collected at 0.75 m intervals using a 76 cm long, 5 cm diameter split spoon sampler.

All four (4) representative soil samples, one (1) duplicate and one (1) trip blank selected for laboratory analysis were placed in dedicated sterile sample jars using a dedicated sterile T-Core soil sampler, all provided in advance by the laboratory, and placed in ice packed coolers at a temperature of approximately 3-10 degrees Celsius. The following analytical soil results are below. Refer to Table 1-3 Soil Chemical Analysis. Refer to Figure 2- Site Investigation.

On October 10, 2022, excess soil was excavated to limestone bedrock stockpiled for transport to be used as recycled asphalt/granular A, as per MTO guidelines for parking and driveways. This granular A and gravel is suitable as shallow subsurface roadbed material for driveways and parking lots. The minimal soil collected from west of the subject property and the minor amounts of soil on the east of the subject property excavated with a maximum depth of 0.60 mbgl. excess soil was excavated to limestone bedrock stockpiled by 3N Group Holdings Inc. and for removal on October 24, 2022, by Robert Gourlay, transporting 66 MT to 64 Banks Street, in Ottawa. The soil weigh ticket is attached below – Solid Transport Ticket.

From August 2021 to September 2022 approximately 4,000 L was purged from the eight (8) wells into four (4) – 1,000 L totes. The eight (8) monitoring wells were purged using designated bailers, low flow pump and jet pump. Following the approximate 4,000 L of groundwater purged from the eight (8) monitoring wells, Rubicon took a confirmatory sample following preliminary and intermediate water samples through the purging of the contaminant plume from August 2021 and September 2022. Attached are the confirmatory samples representing the conditions of the groundwater following the purging of the plume. The four (4) – 1,000 L water totes is subject to further testing to determine if the purged groundwater is subject to removal.

On October 3, 2022, with the use of a Solinst 101 Water Level Meter - P7 Probe with PVDF flat tape, for all eight (8) groundwater monitoring wells (EX-MW1, EX-MW2, EX-MW4, EX-MW5, EX-MW6, EX-MW7, MW3 & MW5) were measured, sampled and submitted for the following: VOCs and PHCs (F_1-F_4). Each groundwater monitoring well had <5 ppm headspace readings. The location of groundwater sampling points is presented in Figure 2 – Site Investigation.

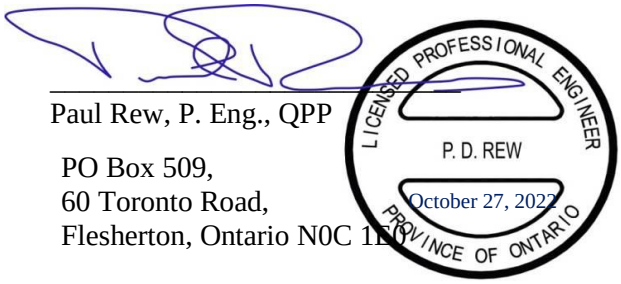
The subject property was assessed using the Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, for residential land use, coarse textured soil from the Ministry of Environment (MECP) document "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (April 15, 2011), referred to as MECP Table 7 SCS.

The laboratory analytical results for all the soil samples analyzed showed that each of the locations and depths of samples submitted were below the applicable site conditions standards. None of the potential contaminants of concerns which included: VOCs and Petroleum Hydrocarbons (PHC F_1-F_4) were present at concentrations greater than the applicable site condition standard.

Based on the soil removal and the current groundwater conditions the subject property does not exhibit VOC groundwater impairment as a result of the remedial activities from August 2021 to October 2022. The four (4) – 1,000 L totes are subject to environmental testing to determine the removal. Rubicon recommends one (1) final water sampling program once fractured bedrock has exposed sufficient water for due diligence. The subject property is suitable for redevelopment.

Respectively submitted,

RUBICON ENVIRONMENTAL (2008) INC.



Paul Rew, P. Eng., QPP

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TABLES

TABLE 1: SOIL CHEMICAL ANALYSES – VOCs (including BTEX) / PHC / Sieve

Parameter	2011 MECP Table 7 Residential Coarse	BH1 – SS1	BH3 – SS2	BH4 – SS1	BH5 – SS2	BH5 – SS2 Dup	TRIP BLANK
Date of Collection		07 – Feb - 22	07 – Feb - 22	07 – Feb - 22	07 – Feb - 22	07 – Feb - 22	07 – Feb - 22
Date Reported		22 – Feb – 22	22 – Feb – 22	22 – Feb – 22	22 – Feb – 22	22 – Feb – 22	22 – Feb – 22
Sampling Depth (mbgl)		0.00 – 0.75	0.75 – 1.50	0.00 – 0.75	0.75 – 1.50	0.75 – 1.50	
Analytical report reference number		L2685287	L2685287	L2685287	L2685287	L2685287	L2685287
Acetone	16 (U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Benzene	0.21 (U)	<0.0068	<0.0068	<0.0068	0.0162	0.0252	<0.0068
Bromodichloromethane	13 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Bromoform	0.27 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Bromomethane	0.05 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Carbon tetrachloride	0.05 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chlorobenzene	2.4 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dibromochloromethane	9.4 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chloroform	0.05 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dibromoethane	0.05 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dichlorobenzene	3.4 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,3-Dichlorobenzene	4.8 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,4-Dichlorobenzene	0.083 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dichlorodifluoromethane	16 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1-Dichloroethane	3.5 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dichloroethane	0.05 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1-Dichloroethylene	0.05 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
cis-1,2-Dichloroethylene	3.4 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
trans-1,2-Dichloroethylene	0.084 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Methylene Chloride	0.1 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dichloropropane	0.05 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
cis-1,3-Dichloropropene	0.05(U)	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
trans-1,3-Dichloropropene		<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
1,3-Dichloropropene (cis & trans)	0.05 (U)	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042
Ethylbenzene	2 (U)	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
n-Hexane	2.8 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Methyl Ethyl Ketone	16 (U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl Isobutyl Ketone	1.7 (U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MTBE	0.75 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Styrene	0.7 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1,1,2-Tetrachloroethane	0.058 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1,2,2-Tetrachloroethane	0.05 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Tetrachloroethylene	0.28 (U)	<0.050	0.387	0.081	<0.050	<0.050	<0.050
Toluene	2.3 (U)	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080
1,1,1-Trichloroethane	0.38 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1,2-Trichloroethane	0.05 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Trichloroethylene	0.061 (U)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane	4 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Vinyl chloride	0.02 (U)	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Xylenes (Total)	3.1 (U)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
F1 (C6-C10)	55(U)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
F2 (C10-C16)	98(U)	<50	<10	<10	<10	<10	<50
F3 (C16-C34)	300(U)	<50	<50	<50	<50	<50	<50
F4 (C34-C50)	2800(U)	<50	<50	<50	<50	<50	<50

All values in ug/g – ppm – parts per million MDL – method detection limit. D- Duplicate Sample *MOE O. Reg. – Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, Residential Property Use and Coarse textured soil criteria applied.
Orange – MDL exceeds applicable SCS
Red – Measured Conc. exceeds applicable SCS

TABLE 2: SOIL CHEMICAL ANALYSES – PAH

Parameter	2011 MECP Table 7 Residential Coarse	BH1 – SS1	BH3 – SS2	BH4 – SS1	BH5 – SS2	BH5 – SS2 Dup	TRIP BLANK
Date of Collection		07 – Feb - 22	07 – Feb - 22	07 – Feb - 22	07 – Feb - 22	07 – Feb - 22	07 – Feb - 22
Date Reported		22 – Feb – 22	22 – Feb – 22	22 – Feb – 22	22 – Feb – 22	22 – Feb – 22	22 – Feb – 22
Sampling Depth (mbgl)		0.00 – 0.75	0.75 – 1.50	0.00 – 0.75	0.75 – 1.50	0.75 – 1.50	
Analytical report reference number		L2685287	L2685287	L2685287	L2685287	L2685287	L2685287
Acenaphthene	7.9(U)	0.211	0.158	<0.050	<0.050	<0.050	
Acenaphthylene	0.15(U)	0.128	<0.050	<0.050	<0.050	<0.050	
Anthracene	0.67(U)	0.646	0.345	<0.050	0.107	0.096	
Benzo(a)anthracene	0.5(U)	2.83	0.724	0.067	0.333	0.323	
Benzo(a)pyrene	0.3(U)	2.84	0.637	0.082	0.327	0.308	
Benzo(b)fluoranthene	0.78(U)	3.24	0.847	0.140	0.442	0.431	
Benzo(g,h,i)perylene	6.6(U)	1.40	0.299	0.080	0.179	0.176	
Benzo(k)fluoranthene	0.78(U)	1.29	0.228	<0.050	0.114	0.116	
Chrysene	7(U)	2.63	0.640	0.074	0.324	0.318	
Dibenzo(ah)anthracene	0.1(U)	0.419	0.090	<0.050	0.054	0.051	
Fluoranthene	0.69(U)	5.39	1.69	0.088	0.664	0.634	
Fluorene	62(U)	0.199	0.166	<0.050	<0.050	<0.050	
Indeno(1,2,3-cd)pyrene	0.38(U)	1.40	0.302	0.069	0.170	0.163	
1+2-Methylnaphthalenes	0.99(U)	0.101	0.103	<0.042	<0.042	<0.042	
1-Methylnaphthalene	0.99(U)	0.049	0.043	<0.030	<0.030	<0.030	
2-Methylnaphthalene	0.99(U)	0.052	0.060	<0.030	<0.030	<0.030	
Naphthalene	0.6(U)	0.084	0.167	<0.013	0.031	0.036	
Phenanthrene	6.2(U)	2.89	1.56	0.046	0.446	0.401	
Pyrene	78(U)	4.43	1.28	0.096	0.526	0.526	

All values in ug/g – ppm – parts per million MDL – method detection limit. D- Duplicate Sample *MOE O. Reg. – Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, Residential Property Use and Coarse textured soil criteria applied.
Orange – MDL exceeds applicable SCS. Red – Measured Conc. exceeds applicable SCS

TABLE 3: SOIL CHEMICAL ANALYSES – Metals

Parameter	2011 MECP Table 7 Residential Coarse	BH1 – SS1	BH3 – SS2	BH4 – SS1	BH5 – SS2	BH5 – SS2 Dup	TRIP BLANK
Date of Collection		07 – Feb - 22	07 – Feb - 22	07 – Feb - 22	07 – Feb - 22	07 – Feb - 22	07 – Feb - 22
Date Reported		22 – Feb – 22	22 – Feb – 22	22 – Feb – 22	22 – Feb – 22	22 – Feb – 22	22 – Feb – 22
Sampling Depth (mbgl)		0.00 – 0.75	0.75 – 1.50	0.00 – 0.75	0.75 – 1.50	0.75 – 1.50	
Analytical report reference number		L2685287	L2685287	L2685287	L2685287	L2685287	L2685287
Antimony (Sb)	7.5 (U)	<1.0	<1.0	<1.0	<1.0	<1.0	
Arsenic (As)	18 (U)	2.9	5.8	8.1	5.8	5.7	
Barium (Ba)	390 (U)	55.6	161	177	121	118	
Beryllium (Be)	4 (U)	<0.50	0.84	0.80	<0.50	<0.50	
Boron (B)	120 (U)	14.2	13.9	12.3	9.6	9.8	
Cadmium (Cd)	1.2 (U)	<0.50	<0.50	<0.50	<0.50	<0.50	
Chromium (Cr)	160 (U)	20.2	41.9	34.8	23.5	26.4	
Cobalt (Co)	22 (U)	5.7	10.4	9.4	5.9	6.8	
Copper (Cu)	140 (U)	13.0	46.6	39.7	21.4	21.7	
Lead (Pb)	120 (U)	6.5	74.2	66.8	91.1	81.6	
Molybdenum (Mo)	6.9 (U)	<1.0	1.6	1.2	<1.0	<1.0	
Nickel (Ni)	100 (U)	15.5	25.4	22.0	13.0	13.3	
Selenium (Se)	2.4 (U)	<1.0	<1.0	<1.0	<1.0	<1.0	
Silver (Ag)	20 (U)	<0.20	<0.20	<0.20	<0.20	<0.20	
Thallium (Tl)	1 (U)	<0.50	<0.50	<0.50	<0.50	<0.50	
Uranium (U)	23 (U)	<1.0	<1.0	<1.0	<1.0	<1.0	
Vanadium (V)	86 (U)	24.4	59.2	51.1	25.6	28.9	
Zinc (Zn)	340 (U)	23.7	115	96.7	114	114	

All values in ug/g – ppm – parts per million MDL – method detection limit. D- Duplicate Sample *MOE O. Reg. – Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition Residential Property Use and Coarse textured soil criteria applied.
Orange – MDL exceeds applicable SCS. Red – Measured Conc. exceeds applicable SCS

TABLE 4: GROUNDWATER CHEMICAL ANALYSES – VOC's (including BTEX), PHC

Parameter	2011 MECP Table 7 Residential Coarse	EXMW1	EXMW1-DUPE	EXMW2	EXMW4	EXMW5	EXMW6	EXMW7	MW3	MW5	TRIP BLANK
Date of Collection		03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022
Date Reported		14-Oct-2022	14-Oct-2022	14-Oct-2022	14-Oct-2022	14-Oct-2022	14-Oct-2022	14-Oct-2022	14-Oct-2022	14-Oct-2022	14-Oct-2022
Sampling Depth (mbgl)											
Analytical report reference number		WT2217618	WT2217618	WT2217618	WT2217618	WT2217618	WT2217618	WT2217618	WT2217618	WT2217618	WT2217618
Acetone	100000(U)	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Benzene	0.5(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromodichloromethane	67000(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromoform	5(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromomethane	0.89(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon tetrachloride	0.2(U)	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chlorobenzene	140(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dibromochloromethane	2(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	65000(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dibromoethane	0.2(U)	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,2-Dichlorobenzene	150(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,3-Dichlorobenzene	7600(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	0.5(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Dichlorodifluoromethane	3500(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethane	11(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	0.5(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	0.5(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,2-Dichloroethylene	1.6(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,2-Dichloroethylene	1.6(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene Chloride	26(U)	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-Dichloropropane	0.58(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,3-Dichloropropene	0.5(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,3-Dichloropropene		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,3-Dichloropropene (cis & trans)		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Ethylbenzene	54(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
n-Hexane	5(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl Ethyl Ketone	21000(U)	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Methyl Isobutyl Ketone	5200(U)	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
MTBE	15(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Styrene	43(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	1.1(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	0.5(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethylene	0.5(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	320(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	23(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	0.5(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethylene	0.5(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichlorofluoromethane	2000(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Vinyl chloride	0.5(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
o-Xylene		<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
m+p-Xylenes		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Xylenes (Total)	72(U)	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
F1 (C6-C10)	25	<25	<25	<25	<25	<25	<25	<25	<25	<25	
F2 (C10-C16)	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	
F3 (C16-C34)	250	<250	<250	<250	<250	<250	<250	<250	<250	<250	
F4 (C34-C50)	250	<250	<250	<250	<250	<250	<250	<250	<250	<250	

All values in ug/g – ppm – parts per million MDL – method detection limit. D- Duplicate Sample *MOE O. Reg. Table 7: Generic Site Condition Standards for Shallow Soils in a Non-Potable Ground Water Condition, Residential Property Use and coarse textured soil criteria applied.
Orange – MDL exceeds applicable SCS
Red – Measured Conc. exceeds applicable SCS

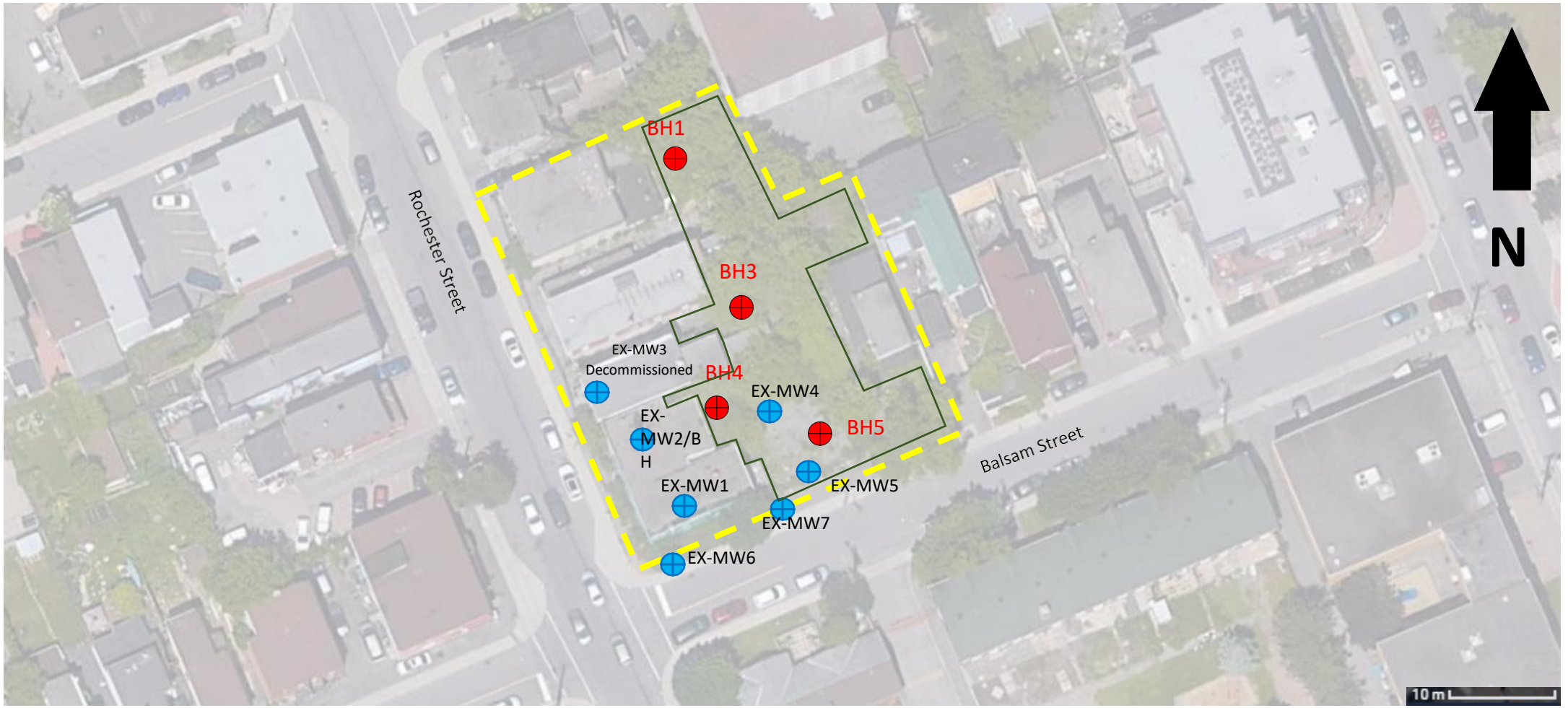
FIGURES

R63048	NAME	DATE
DRAWN BY:	NP	October 2022
CHECKED BY:	PDR	October 2022
27, 29 Balsam Street, & 245 - 267 Rochester Street, Ottawa / ON		

Rubicon Environmental (2008) Inc.

Figure 1:
Site Location

Legend
RSC Phase One, Phase Two Subject Property
Monitoring wells



R63048	NAME	DATE
DRAWN BY:	NP	October 2022
CHECKED BY:	PDR	October 2022
27, 29 Balsam Street, & 245 - 267 Rochester Street, Ottawa / ON		

Rubicon Environmental (2008) Inc.

Figure 2: Site Plan

Legend

- RSC Phase One, Phase Two Subject Property
- Monitoring wells
- Boreholes
- Excavation area

PHOTOGRAPHS

Image of scraped soil exposing lime stone bedrock

Image of surficial soil commencing excavation

Image of surficial soil stockpiled on site

Image of four 1,000 L totes present on site

Image of excavation commencing

LABORATORY
CERTIFICATE OF ANALYSIS

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: **WT2217618**	Page	: 1 of 8
Client	: **Rubicon Environmental Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Paul Rew	Account Manager	: Gayle Braun
Address	: 60 Toronto St Flesherton ON Canada N0C 1E0	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 519 924 0003	Telephone	: +1 519 886 6910
Project	: R63048	Date Samples Received	: 12-Oct-2022 15:28
PO	: ----	Date Analysis Commenced	: 12-Oct-2022
C-O-C number	: 20-1005665	Issue Date	: 14-Oct-2022 14:05
Sampler	: CLIENT		
Site	: ----		
Quote number	: SOA		
No. of samples received	: 10		
No. of samples analysed	: 10		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Jocelyn Kennedy	Department Manager - Semi-Volatile Organics	Organics, Waterloo, Ontario
Sarah Birch	Team Leader - Volatiles	Organics, Waterloo, Ontario

No Breaches Found

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.
Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

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. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key : LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	No Unit
µg/L	micrograms per litre

>: greater than.
<: less than.
Red shading is applied where the result is greater than the Guideline Upper Limit or the result is lower than the Guideline Lower Limit.
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit.

Analytical Results Evaluation

Matrix: **Water**

Analyte	CAS Number	Unit	Client sample ID	EXMW1	EXMW1-DUPE	EXMW2	EXMW4	EXMW5	EXMW6	EXMW7
			Sampling date/time	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022
			Sub-Matrix	Water	Water	Water	Water	Water	Water	Water
				WT2217618-001	WT2217618-002	WT2217618-003	WT2217618-004	WT2217618-005	WT2217618-006	WT2217618-007
Volatile Organic Compounds										
Acetone	67-64-1	µg/L		<20	<20	<20	<20	<20	<20	<20
benzene	71-43-2	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromodichloromethane	75-27-4	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromoform	75-25-2	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
bromomethane	74-83-9	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
carbon tetrachloride	56-23-5	µg/L		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
chlorobenzene	108-90-7	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
chloroform	67-66-3	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromochloromethane	124-48-1	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dibromoethane, 1,2-	106-93-4	µg/L		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
dichlorobenzene, 1,2-	95-50-1	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,3-	541-73-1	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorobenzene, 1,4-	106-46-7	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichlorodifluoromethane	75-71-8	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,1-	75-34-3	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethane, 1,2-	107-06-2	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, 1,1-	75-35-4	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, cis-1,2-	156-59-2	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloroethylene, trans-1,2-	156-60-5	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloromethane	75-09-2	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dichloropropane, 1,2-	78-87-5	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis+trans-1,3-	542-75-6	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
dichloropropylene, cis-1,3-	10061-01-5	µg/L		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
dichloropropylene, trans-1,3-	10061-02-6	µg/L		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
ethylbenzene	100-41-4	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
hexane, n-	110-54-3	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
methyl ethyl ketone [MEK]	78-93-3	µg/L		<20	<20	<20	<20	<20	<20	<20
methyl isobutyl ketone [MIBK]	108-10-1	µg/L		<20	<20	<20	<20	<20	<20	<20
methyl-tert-butyl ether [MTBE]	1634-04-4	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

Analytical Results Evaluation

Matrix: **Water**

Analyte	CAS Number	Unit	Client sample ID	EXMW1	EXMW1-DUPE	EXMW2	EXMW4	EXMW5	EXMW6	EXMW7
			Sampling date/time	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022	03-Oct-2022
			Sub-Matrix	Water	Water	Water	Water	Water	Water	Water
				WT2217618-001	WT2217618-002	WT2217618-003	WT2217618-004	WT2217618-005	WT2217618-006	WT2217618-007
Volatile Organic Compounds										
styrene	100-42-5	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,1,2-	630-20-6	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethane, 1,1,2,2-	79-34-5	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
tetrachloroethylene	127-18-4	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
toluene	108-88-3	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,1-	71-55-6	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethane, 1,1,2-	79-00-5	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichloroethylene	79-01-6	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trichlorofluoromethane	75-69-4	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
vinyl chloride	75-01-4	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
xylene, m+p-	179601-23-1	µg/L		<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
xylene, o-	95-47-6	µg/L		<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
xylenes, total	1330-20-7	µg/L		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
BTEX, total	----	µg/L		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Hydrocarbons										
F1 (C6-C10)	----	µg/L		<25	<25	<25	<25	<25	<25	<25
F2 (C10-C16)	----	µg/L		<100	<100	<100	<100	<100	<100	<100
F3 (C16-C34)	----	µg/L		<250	<250	<250	<250	<250	<250	<250
F4 (C34-C50)	----	µg/L		<250	<250	<250	<250	<250	<250	<250
F1-BTEX	----	µg/L		<25	<25	<25	<25	<25	<25	<25
hydrocarbons, total (C6-C50)	----	µg/L		<370	<370	<370	<370	<370	<370	<370
chromatogram to baseline at nC50	n/a	-		YES	YES	YES	YES	YES	YES	YES
Hydrocarbons Surrogates										
bromobenzotrifluoride, 2- (F2-F4 surr)	392-83-6	%		98.7	96.9	101	90.9	96.8	96.5	94.6
dichlorotoluene, 3,4-	97-75-0	%		88.2	99.0	100	96.3	93.0	94.0	94.3
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	460-00-4	%		94.9	95.8	95.6	95.7	95.3	94.7	95.0
difluorobenzene, 1,4-	540-36-3	%		100	99.9	99.8	99.8	99.7	99.7	99.8

Analytical Results Evaluation

Matrix: **Water**

Analyte	CAS Number	Unit	Client sample ID	MW3	MW5	TRIP BLANK	----	----	----	----
			Sampling date/time	03-Oct-2022	03-Oct-2022	03-Oct-2022	----	----	----	----
			Sub-Matrix	Water	Water	Water	----	----	----	----
				WT2217618-008	WT2217618-009	WT2217618-010	--------	--------	--------	--------
Volatile Organic Compounds										
Acetone	67-64-1	µg/L		<20	<20	<20	----	----	----	----
benzene	71-43-2	µg/L		<0.50	<0.50	<0.50	----	----	----	----
bromodichloromethane	75-27-4	µg/L		<0.50	<0.50	<0.50	----	----	----	----
bromoform	75-25-2	µg/L		<0.50	<0.50	<0.50	----	----	----	----
bromomethane	74-83-9	µg/L		<0.50	<0.50	<0.50	----	----	----	----
carbon tetrachloride	56-23-5	µg/L		<0.20	<0.20	<0.20	----	----	----	----
chlorobenzene	108-90-7	µg/L		<0.50	<0.50	<0.50	----	----	----	----
chloroform	67-66-3	µg/L		<0.50	<0.50	<0.50	----	----	----	----
dibromochloromethane	124-48-1	µg/L		<0.50	<0.50	<0.50	----	----	----	----
dibromoethane, 1,2-	106-93-4	µg/L		<0.20	<0.20	<0.20	----	----	----	----
dichlorobenzene, 1,2-	95-50-1	µg/L		<0.50	<0.50	<0.50	----	----	----	----
dichlorobenzene, 1,3-	541-73-1	µg/L		<0.50	<0.50	<0.50	----	----	----	----
dichlorobenzene, 1,4-	106-46-7	µg/L		<0.50	<0.50	<0.50	----	----	----	----
dichlorodifluoromethane	75-71-8	µg/L		<0.50	<0.50	<0.50	----	----	----	----
dichloroethane, 1,1-	75-34-3	µg/L		<0.50	<0.50	<0.50	----	----	----	----
dichloroethane, 1,2-	107-06-2	µg/L		<0.50	<0.50	<0.50	----	----	----	----
dichloroethylene, 1,1-	75-35-4	µg/L		<0.50	<0.50	<0.50	----	----	----	----
dichloroethylene, cis-1,2-	156-59-2	µg/L		<0.50	<0.50	<0.50	----	----	----	----
dichloroethylene, trans-1,2-	156-60-5	µg/L		<0.50	<0.50	<0.50	----	----	----	----
dichloromethane	75-09-2	µg/L		<1.0	<1.0	<1.0	----	----	----	----
dichloropropane, 1,2-	78-87-5	µg/L		<0.50	<0.50	<0.50	----	----	----	----
dichloropropylene, cis+trans-1,3-	542-75-6	µg/L		<0.50	<0.50	<0.50	----	----	----	----
dichloropropylene, cis-1,3-	10061-01-5	µg/L		<0.30	<0.30	<0.30	----	----	----	----
dichloropropylene, trans-1,3-	10061-02-6	µg/L		<0.30	<0.30	<0.30	----	----	----	----
ethylbenzene	100-41-4	µg/L		<0.50	<0.50	<0.50	----	----	----	----
hexane, n-	110-54-3	µg/L		<0.50	<0.50	<0.50	----	----	----	----
methyl ethyl ketone [MEK]	78-93-3	µg/L		<20	<20	<20	----	----	----	----
methyl isobutyl ketone [MIBK]	108-10-1	µg/L		<20	<20	<20	----	----	----	----
methyl-tert-butyl ether [MTBE]	1634-04-4	µg/L		<0.50	<0.50	<0.50	----	----	----	----
styrene	100-42-5	µg/L		<0.50	<0.50	<0.50	----	----	----	----

Analytical Results Evaluation

Matrix: **Water**

Analyte	CAS Number	Unit	Client sample ID: MW3	MW5	TRIP BLANK	----	----	----	----
			Sampling date/time: 03-Oct-2022	03-Oct-2022	03-Oct-2022	----	----	----	----
			Sub-Matrix: Water	Water	Water	----	----	----	----
			WT2217618-008	WT2217618-009	WT2217618-010	--------	--------	--------	--------
Volatile Organic Compounds									
tetrachloroethane, 1,1,1,2-	630-20-6	µg/L	<0.50	<0.50	<0.50	----	----	----	----
tetrachloroethane, 1,1,2,2-	79-34-5	µg/L	<0.50	<0.50	<0.50	----	----	----	----
tetrachloroethylene	127-18-4	µg/L	<0.50	<0.50	<0.50	----	----	----	----
toluene	108-88-3	µg/L	<0.50	<0.50	<0.50	----	----	----	----
trichloroethane, 1,1,1-	71-55-6	µg/L	<0.50	<0.50	<0.50	----	----	----	----
trichloroethane, 1,1,2-	79-00-5	µg/L	<0.50	<0.50	<0.50	----	----	----	----
trichloroethylene	79-01-6	µg/L	<0.50	<0.50	<0.50	----	----	----	----
trichlorofluoromethane	75-69-4	µg/L	<0.50	<0.50	<0.50	----	----	----	----
vinyl chloride	75-01-4	µg/L	<0.50	<0.50	<0.50	----	----	----	----
xylene, m+p-	179601-23-1	µg/L	<0.40	<0.40	<0.40	----	----	----	----
xylene, o-	95-47-6	µg/L	<0.30	<0.30	<0.30	----	----	----	----
xylenes, total	1330-20-7	µg/L	<0.50	<0.50	<0.50	----	----	----	----
BTEX, total	----	µg/L	<1.0	<1.0	<1.0	----	----	----	----
Hydrocarbons									
F1 (C6-C10)	----	µg/L	<25	<25	----	----	----	----	----
F2 (C10-C16)	----	µg/L	<100	<100	----	----	----	----	----
F3 (C16-C34)	----	µg/L	<250	<250	----	----	----	----	----
F4 (C34-C50)	----	µg/L	<250	<250	----	----	----	----	----
F1-BTEX	----	µg/L	<25	<25	----	----	----	----	----
hydrocarbons, total (C6-C50)	----	µg/L	<370	<370	----	----	----	----	----
chromatogram to baseline at nC50	n/a	-	YES	YES	----	----	----	----	----
Hydrocarbons Surrogates									
bromobenzotrifluoride, 2- (F2-F4 surr)	392-83-6	%	87.6	93.0	----	----	----	----	----
dichlorotoluene, 3,4-	97-75-0	%	73.1	84.1	----	----	----	----	----
Volatile Organic Compounds Surrogates									
bromofluorobenzene, 4-	460-00-4	%	98.3	94.6	95.3	----	----	----	----
difluorobenzene, 1,4-	540-36-3	%	99.7	99.5	99.7	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

Summary of Guideline Limits

Analyte	CAS Number	Unit	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All					
Volatile Organic Compounds									
Acetone	67-64-1	µg/L	**100000 µg/L**	**100000 µg/L**					
benzene	71-43-2	µg/L	**0.5 µg/L**	**0.5 µg/L**					
bromodichloromethane	75-27-4	µg/L	**67000 µg/L**	**67000 µg/L**					
bromoform	75-25-2	µg/L	**5 µg/L**	**5 µg/L**					
bromomethane	74-83-9	µg/L	**0.89 µg/L**	**0.89 µg/L**					
BTEX, total	----	µg/L							
carbon tetrachloride	56-23-5	µg/L	**0.2 µg/L**	**0.2 µg/L**					
chlorobenzene	108-90-7	µg/L	**140 µg/L**	**140 µg/L**					
chloroform	67-66-3	µg/L	**2 µg/L**	**2 µg/L**					
dibromochloromethane	124-48-1	µg/L	**65000 µg/L**	**65000 µg/L**					
dibromoethane, 1,2-	106-93-4	µg/L	**0.2 µg/L**	**0.2 µg/L**					
dichlorobenzene, 1,2-	95-50-1	µg/L	**150 µg/L**	**150 µg/L**					
dichlorobenzene, 1,3-	541-73-1	µg/L	**7600 µg/L**	**7600 µg/L**					
dichlorobenzene, 1,4-	106-46-7	µg/L	**0.5 µg/L**	**0.5 µg/L**					
dichlorodifluoromethane	75-71-8	µg/L	**3500 µg/L**	**3500 µg/L**					
dichloroethane, 1,1-	75-34-3	µg/L	**11 µg/L**	**11 µg/L**					
dichloroethane, 1,2-	107-06-2	µg/L	**0.5 µg/L**	**0.5 µg/L**					
dichloroethylene, 1,1-	75-35-4	µg/L	**0.5 µg/L**	**0.5 µg/L**					
dichloroethylene, cis-1,2-	156-59-2	µg/L	**1.6 µg/L**	**1.6 µg/L**					
dichloroethylene, trans-1,2-	156-60-5	µg/L	**1.6 µg/L**	**1.6 µg/L**					
dichloromethane	75-09-2	µg/L	**26 µg/L**	**26 µg/L**					
dichloropropane, 1,2-	78-87-5	µg/L	**0.58 µg/L**	**0.58 µg/L**					
dichloropropylene, cis+trans-1,3-	542-75-6	µg/L	**0.5 µg/L**	**0.5 µg/L**					
dichloropropylene, cis-1,3-	10061-01-5	µg/L							
dichloropropylene, trans-1,3-	10061-02-6	µg/L							
ethylbenzene	100-41-4	µg/L	**54 µg/L**	**54 µg/L**					
hexane, n-	110-54-3	µg/L	**5 µg/L**	**5 µg/L**					
methyl ethyl ketone [MEK]	78-93-3	µg/L	**21000 µg/L**	**21000 µg/L**					
methyl isobutyl ketone [MIBK]	108-10-1	µg/L	**5200 µg/L**	**5200 µg/L**					
methyl-tert-butyl ether [MTBE]	1634-04-4	µg/L	**15 µg/L**	**15 µg/L**					
styrene	100-42-5	µg/L	**43 µg/L**	**43 µg/L**					
tetrachloroethane, 1,1,1,2-	630-20-6	µg/L	**1.1 µg/L**	**1.1 µg/L**					
tetrachloroethane, 1,1,2,2-	79-34-5	µg/L	**0.5 µg/L**	**0.5 µg/L**					
tetrachloroethylene	127-18-4	µg/L	**0.5 µg/L**	**0.5 µg/L**					
toluene	108-88-3	µg/L	**320 µg/L**	**320 µg/L**					
trichloroethane, 1,1,1-	71-55-6	µg/L	**23 µg/L**	**23 µg/L**					

Analyte	CAS Number	Unit	ON153/04 T7-NPGW-C-All	ON153/04 T7-NPGW-F-All					
Volatile Organic Compounds - Continued									
trichloroethane, 1,1,2-	79-00-5	µg/L	**0.5 µg/L**	**0.5 µg/L**					
trichloroethylene	79-01-6	µg/L	**0.5 µg/L**	**0.5 µg/L**					
trichlorofluoromethane	75-69-4	µg/L	**2000 µg/L**	**2000 µg/L**					
vinyl chloride	75-01-4	µg/L	**0.5 µg/L**	**0.5 µg/L**					
xylene, m+p-	179601-23-1	µg/L							
xylene, o-	95-47-6	µg/L							
xylenes, total	1330-20-7	µg/L	**72 µg/L**	**72 µg/L**					
Hydrocarbons									
chromatogram to baseline at nC50	n/a	-							
F1 (C6-C10)	----	µg/L	**420 µg/L**	**420 µg/L**					
F1-BTEX	----	µg/L	**420 µg/L**	**420 µg/L**					
F2 (C10-C16)	----	µg/L	**150 µg/L**	**150 µg/L**					
F3 (C16-C34)	----	µg/L	**500 µg/L**	**500 µg/L**					
F4 (C34-C50)	----	µg/L	**500 µg/L**	**500 µg/L**					
hydrocarbons, total (C6-C50)	----	µg/L							

Please refer to the General Comments section for an explanation of any qualifiers detected.

Key:

ON153/04 Ontario Regulation 153/04 - April 15, 2011 Standards (JUL, 2011)

T7-NPGW-C-All 153 T7-Non-Potable Ground Water-All Types of Property Use - Coarse

T7-NPGW-F-All 153 T7-Non-Potable Ground Water-All Types of Property Uses (Fine)

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2217618**	Page	: 1 of 9
Client	: **Rubicon Environmental Inc.**	Laboratory	: Waterloo - Environmental
Contact	: Paul Rew	Account Manager	: Gayle Braun
Address	: 60 Toronto St Flesherton ON Canada N0C 1E0	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 519 924 0003	Telephone	: +1 519 886 6910
Project	: R63048	Date Samples Received	: 12-Oct-2022 15:28
PO	: ----	Issue Date	: 14-Oct-2022 14:05
C-O-C number	: 20-1005665		
Sampler	: CLIENT		
Site	: ----		
Quote number	: SOA		
No. of samples received	: 10		
No. of samples analysed	: 10		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- Laboratory Control Sample (LCS) outliers occur - please see following pages for full details.
- Matrix Spike outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Water**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Laboratory Control Sample (LCS) Recoveries								
Volatile Organic Compounds	QC-693114-002	----	Acetone	67-64-1	E611D	150 % LCS-H	70.0-130%	Recovery greater than upper control limit
Volatile Organic Compounds	QC-693114-002	----	methyl ethyl ketone [MEK]	78-93-3	E611D	148 % LCS-H	70.0-130%	Recovery greater than upper control limit
Volatile Organic Compounds	QC-693114-002	----	methyl isobutyl ketone [MIBK]	108-10-1	E611D	140 % MES	70.0-130%	Recovery greater than upper control limit

Result Qualifiers

Qualifier	Description
LCS-H	*Lab Control Sample recovery was above ALS DQO. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.*
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

Matrix Spike (MS) Recoveries								
Volatile Organic Compounds	Anonymous	Anonymous	methyl ethyl ketone [MEK]	78-93-3	E611D	145 % MES	60.0-140%	Recovery greater than upper data quality objective

Result Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) EXMW1	E581.F1-L	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) EXMW1-DUPE	E581.F1-L	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) EXMW2	E581.F1-L	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) EXMW4	E581.F1-L	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) EXMW5	E581.F1-L	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) EXMW6	E581.F1-L	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) EXMW7	E581.F1-L	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) MW3	E581.F1-L	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Hydrocarbons : CCME PHC - F1 by Headspace GC-FID (Low Level)										
Glass vial (sodium bisulfate) MW5	E581.F1-L	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) EXMW1	E601.SG	03-Oct-2022	13-Oct-2022	14 days	10 days	✓	13-Oct-2022	40 days	0 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) EXMW1-DUPE	E601.SG	03-Oct-2022	13-Oct-2022	14 days	10 days	✓	13-Oct-2022	40 days	0 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) EXMW2	E601.SG	03-Oct-2022	13-Oct-2022	14 days	10 days	✓	13-Oct-2022	40 days	0 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) EXMW4	E601.SG	03-Oct-2022	13-Oct-2022	14 days	10 days	✓	13-Oct-2022	40 days	0 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) EXMW5	E601.SG	03-Oct-2022	13-Oct-2022	14 days	10 days	✓	13-Oct-2022	40 days	0 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) EXMW6	E601.SG	03-Oct-2022	13-Oct-2022	14 days	10 days	✓	13-Oct-2022	40 days	0 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate) EXMW7	E601.SG	03-Oct-2022	13-Oct-2022	14 days	10 days	✓	13-Oct-2022	40 days	0 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
MW3	E601.SG	03-Oct-2022	13-Oct-2022	14 days	10 days	✓	13-Oct-2022	40 days	0 days	✓
Hydrocarbons : Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID										
Amber glass/Teflon lined cap (sodium bisulfate)										
MW5	E601.SG	03-Oct-2022	13-Oct-2022	14 days	10 days	✓	13-Oct-2022	40 days	0 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
EXMW1	E611D	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
EXMW1-DUPE	E611D	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
EXMW2	E611D	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
EXMW4	E611D	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
EXMW5	E611D	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
EXMW6	E611D	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
EXMW7	E611D	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
MW3	E611D	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
MW5	E611D	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓
Volatile Organic Compounds : VOCs (Eastern Canada List) by Headspace GC-MS										
Glass vial (sodium bisulfate)										
TRIP BLANK	E611D	03-Oct-2022	12-Oct-2022	----	----		12-Oct-2022	14 days	10 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	693117	1	18	5.5	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	693114	2	20	10.0	5.0	✓
Laboratory Control Samples (LCS)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	693117	1	18	5.5	5.0	✓
Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID	E601.SG	693420	1	16	6.2	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	693114	1	20	5.0	5.0	✓
Method Blanks (MB)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	693117	1	18	5.5	5.0	✓
Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID	E601.SG	693420	1	16	6.2	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	693114	1	20	5.0	5.0	✓
Matrix Spikes (MS)							
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L	693117	1	18	5.5	5.0	✓
VOCs (Eastern Canada List) by Headspace GC-MS	E611D	693114	1	20	5.0	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
CCME PHC - F1 by Headspace GC-FID (Low Level)	E581.F1-L Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	CCME Fraction 1 (F1) is analyzed by static headspace GC-FID. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
Silica Gel Treated CCME PHCs - F2-F4sg by GC-FID	E601.SG Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	Sample extracts are subjected to in-situ silica gel treatment prior to analysis by GC-FID for CCME hydrocarbon fractions (F2-F4).
VOCs (Eastern Canada List) by Headspace GC-MS	E611D Waterloo - Environmental	Water	EPA 8260D (mod)	Volatile Organic Compounds (VOCs) are analyzed by static headspace GC-MS. Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler, causing VOCs to partition between the aqueous phase and the headspace in accordance with Henry's law.
F1-BTEX	EC580 Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	F1-BTEX is calculated as follows: F1-BTEX = F1 (C6-C10) minus benzene, toluene, ethylbenzene and xylenes (BTEX).
SUM F1 to F4 where F2-F4 is SG treated	EC581SG Waterloo - Environmental	Water	CCME PHC in Soil - Tier 1	Hydrocarbons, total (C6-C50) is the sum of CCME Fraction F1(C6-C10), F2(C10-C16), F3(C16-C34), and F4(C34-C50), where F2-F4 have been treated with silica gel. F4G-sg is not used within this calculation due to overlap with other fractions.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
VOCs Preparation for Headspace Analysis	EP581 Waterloo - Environmental	Water	EPA 5021A (mod)	Samples are prepared in headspace vials and are heated and agitated on the headspace autosampler. An aliquot of the headspace is then injected into the GC/MS-FID system.
PHCs and PAHs Hexane Extraction	EP601 Waterloo - Environmental	Water	EPA 3511 (mod)	Petroleum Hydrocarbons (PHCs) and Polycyclic Aromatic Hydrocarbons (PAHs) are extracted using a hexane liquid-liquid extraction.

QUALITY CONTROL REPORT

Work Order	: **WT2217618**	Page	: 1 of 10
Client	: Rubicon Environmental Inc.	Laboratory	: Waterloo - Environmental
Contact	: Paul Rew	Account Manager	: Gayle Braun
Address	: 60 Toronto St Flesherton ON Canada N0C 1E0	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: 519 924 0003	Telephone	: +1 519 886 6910
Project	: R63048	Date Samples Received	: 12-Oct-2022 15:28
PO	: ----	Date Analysis Commenced	: 12-Oct-2022
C-O-C number	: 20-1005665	Issue Date	: 14-Oct-2022 14:05
Sampler	: CLIENT		
Site	: ----		
Quote number	: SOA		
No. of samples received	: 10		
No. of samples analysed	: 10		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Jocelyn Kennedy	Department Manager - Semi-Volatile Organics	Waterloo Organics, Waterloo, Ontario
Sarah Birch	Team Leader - Volatiles	Waterloo Organics, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include 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 predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 693114)											
TY2202625-001	Anonymous	Acetone	67-64-1	E611D	20	µg/L	24	25	0.7	Diff <2x LOR	----
TY2202625-001	Anonymous	benzene	71-43-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromodichloromethane	75-27-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromoform	75-25-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		bromomethane	74-83-9	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		carbon tetrachloride	56-23-5	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		chlorobenzene	108-90-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		chloroform	67-66-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromochloromethane	124-48-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dibromoethane, 1,2-	106-93-4	E611D	0.20	µg/L	<0.20	<0.20	0	Diff <2x LOR	----
		dichlorobenzene, 1,2-	95-50-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,3-	541-73-1	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorobenzene, 1,4-	106-46-7	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichlorodifluoromethane	75-71-8	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,1-	75-34-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethane, 1,2-	107-06-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, 1,1-	75-35-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloromethane	75-09-2	E611D	1.0	µg/L	<1.0	<1.0	0	Diff <2x LOR	----
		dichloropropane, 1,2-	78-87-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
		ethylbenzene	100-41-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		hexane, n-	110-54-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	<20	0	Diff <2x LOR	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		styrene	100-42-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		tetrachloroethylene	127-18-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Volatile Organic Compounds (QC Lot: 693114) - continued											
TY2202625-001	Anonymous	toluene	108-88-3	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,1-	71-55-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethane, 1,1,2-	79-00-5	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichloroethylene	79-01-6	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		trichlorofluoromethane	75-69-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		vinyl chloride	75-01-4	E611D	0.50	µg/L	<0.50	<0.50	0	Diff <2x LOR	----
		xylene, m+p-	179601-23-1	E611D	0.40	µg/L	<0.40	<0.40	0	Diff <2x LOR	----
		xylene, o-	95-47-6	E611D	0.30	µg/L	<0.30	<0.30	0	Diff <2x LOR	----
Hydrocarbons (QC Lot: 693117)											
TY2202625-001	Anonymous	F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	<25	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 693114)						
Acetone	67-64-1	E611D	20	µg/L	<20	----
benzene	71-43-2	E611D	0.5	µg/L	<0.50	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	<0.50	----
bromoform	75-25-2	E611D	0.5	µg/L	<0.50	----
bromomethane	74-83-9	E611D	0.5	µg/L	<0.50	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	<0.20	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	<0.50	----
chloroform	67-66-3	E611D	0.5	µg/L	<0.50	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	<0.50	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	<0.20	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	<0.50	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	<0.50	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	<0.50	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	<0.50	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	<0.50	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	<0.50	----
dichloromethane	75-09-2	E611D	1	µg/L	<1.0	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	<0.50	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	<0.30	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	<0.30	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	<0.50	----
hexane, n-	110-54-3	E611D	0.5	µg/L	<0.50	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	<20	----
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	<20	----
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	<0.50	----
styrene	100-42-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	<0.50	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	<0.50	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	<0.50	----
toluene	108-88-3	E611D	0.5	µg/L	<0.50	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Volatile Organic Compounds (QCLot: 693114) - continued						
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	<0.50	----
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	<0.50	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	<0.50	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	<0.50	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	<0.50	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	<0.40	----
xylene, o-	95-47-6	E611D	0.3	µg/L	<0.30	----
Hydrocarbons (QCLot: 693117)						
F1 (C6-C10)	----	E581.F1-L	25	µg/L	<25	----
Hydrocarbons (QCLot: 693420)						
F2 (C10-C16)	----	E601.SG	100	µg/L	<100	----
F3 (C16-C34)	----	E601.SG	250	µg/L	<250	----
F4 (C34-C50)	----	E601.SG	250	µg/L	<250	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 693114)									
Acetone	67-64-1	E611D	20	µg/L	100 µg/L	# 150	70.0	130	LCS-H
benzene	71-43-2	E611D	0.5	µg/L	100 µg/L	104	70.0	130	----
bromodichloromethane	75-27-4	E611D	0.5	µg/L	100 µg/L	117	70.0	130	----
bromoform	75-25-2	E611D	0.5	µg/L	100 µg/L	114	70.0	130	----
bromomethane	74-83-9	E611D	0.5	µg/L	100 µg/L	113	60.0	140	----
carbon tetrachloride	56-23-5	E611D	0.2	µg/L	100 µg/L	98.1	70.0	130	----
chlorobenzene	108-90-7	E611D	0.5	µg/L	100 µg/L	98.5	70.0	130	----
chloroform	67-66-3	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
dibromochloromethane	124-48-1	E611D	0.5	µg/L	100 µg/L	114	70.0	130	----
dibromoethane, 1,2-	106-93-4	E611D	0.2	µg/L	100 µg/L	118	70.0	130	----
dichlorobenzene, 1,2-	95-50-1	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
dichlorobenzene, 1,3-	541-73-1	E611D	0.5	µg/L	100 µg/L	94.0	70.0	130	----
dichlorobenzene, 1,4-	106-46-7	E611D	0.5	µg/L	100 µg/L	95.8	70.0	130	----
dichlorodifluoromethane	75-71-8	E611D	0.5	µg/L	100 µg/L	124	60.0	140	----
dichloroethane, 1,1-	75-34-3	E611D	0.5	µg/L	100 µg/L	109	70.0	130	----
dichloroethane, 1,2-	107-06-2	E611D	0.5	µg/L	100 µg/L	119	70.0	130	----
dichloroethylene, 1,1-	75-35-4	E611D	0.5	µg/L	100 µg/L	95.4	70.0	130	----
dichloroethylene, cis-1,2-	156-59-2	E611D	0.5	µg/L	100 µg/L	105	70.0	130	----
dichloroethylene, trans-1,2-	156-60-5	E611D	0.5	µg/L	100 µg/L	99.0	70.0	130	----
dichloromethane	75-09-2	E611D	1	µg/L	100 µg/L	111	70.0	130	----
dichloropropane, 1,2-	78-87-5	E611D	0.5	µg/L	100 µg/L	109	70.0	130	----
dichloropropylene, cis-1,3-	10061-01-5	E611D	0.3	µg/L	100 µg/L	116	70.0	130	----
dichloropropylene, trans-1,3-	10061-02-6	E611D	0.3	µg/L	100 µg/L	119	70.0	130	----
ethylbenzene	100-41-4	E611D	0.5	µg/L	100 µg/L	93.8	70.0	130	----
hexane, n-	110-54-3	E611D	0.5	µg/L	100 µg/L	93.2	70.0	130	----
methyl ethyl ketone [MEK]	78-93-3	E611D	20	µg/L	100 µg/L	# 148	70.0	130	LCS-H
methyl isobutyl ketone [MIBK]	108-10-1	E611D	20	µg/L	100 µg/L	# 140	70.0	130	MES
methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	0.5	µg/L	100 µg/L	102	70.0	130	----
styrene	100-42-5	E611D	0.5	µg/L	100 µg/L	103	70.0	130	----
tetrachloroethane, 1,1,1,2-	630-20-6	E611D	0.5	µg/L	100 µg/L	101	70.0	130	----
tetrachloroethane, 1,1,2,2-	79-34-5	E611D	0.5	µg/L	100 µg/L	122	70.0	130	----
tetrachloroethylene	127-18-4	E611D	0.5	µg/L	100 µg/L	92.5	70.0	130	----
toluene	108-88-3	E611D	0.5	µg/L	100 µg/L	96.7	70.0	130	----
trichloroethane, 1,1,1-	71-55-6	E611D	0.5	µg/L	100 µg/L	97.1	70.0	130	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report: Spike Concentration	Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High	Qualifier
Volatile Organic Compounds (QCLot: 693114) - continued									
trichloroethane, 1,1,2-	79-00-5	E611D	0.5	µg/L	100 µg/L	116	70.0	130	----
trichloroethylene	79-01-6	E611D	0.5	µg/L	100 µg/L	97.2	70.0	130	----
trichlorofluoromethane	75-69-4	E611D	0.5	µg/L	100 µg/L	96.6	60.0	140	----
vinyl chloride	75-01-4	E611D	0.5	µg/L	100 µg/L	94.9	60.0	140	----
xylene, m+p-	179601-23-1	E611D	0.4	µg/L	200 µg/L	93.8	70.0	130	----
xylene, o-	95-47-6	E611D	0.3	µg/L	100 µg/L	96.4	70.0	130	----
Hydrocarbons (QCLot: 693117)									
F1 (C6-C10)	----	E581.F1-L	25	µg/L	2000 µg/L	97.7	80.0	120	----
Hydrocarbons (QCLot: 693420)									
F2 (C10-C16)	----	E601.SG	100	µg/L	4382.38 µg/L	111	70.0	130	----
F3 (C16-C34)	----	E601.SG	250	µg/L	5331.82 µg/L	116	70.0	130	----
F4 (C34-C50)	----	E601.SG	250	µg/L	4620.98 µg/L	113	70.0	130	----

Qualifiers

Qualifier	Description
LCS-H	Lab Control Sample recovery was above ALS DQO. Non-detected sample results are considered reliable. Other results, if reported, have been qualified.

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 693114)										
TY2202625-001	Anonymous	benzene	71-43-2	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		bromodichloromethane	75-27-4	E611D	114 µg/L	100 µg/L	114	60.0	140	----
		bromoform	75-25-2	E611D	110 µg/L	100 µg/L	110	60.0	140	----
		bromomethane	74-83-9	E611D	104 µg/L	100 µg/L	104	60.0	140	----
		carbon tetrachloride	56-23-5	E611D	95.3 µg/L	100 µg/L	95.3	60.0	140	----
		chlorobenzene	108-90-7	E611D	96.3 µg/L	100 µg/L	96.3	60.0	140	----
		chloroform	67-66-3	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		dibromochloromethane	124-48-1	E611D	111 µg/L	100 µg/L	111	60.0	140	----
		dibromoethane, 1,2-	106-93-4	E611D	114 µg/L	100 µg/L	114	60.0	140	----
		dichlorobenzene, 1,2-	95-50-1	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		dichlorobenzene, 1,3-	541-73-1	E611D	93.4 µg/L	100 µg/L	93.4	60.0	140	----
		dichlorobenzene, 1,4-	106-46-7	E611D	95.1 µg/L	100 µg/L	95.1	60.0	140	----
		dichlorodifluoromethane	75-71-8	E611D	98.2 µg/L	100 µg/L	98.2	60.0	140	----
		dichloroethane, 1,1-	75-34-3	E611D	106 µg/L	100 µg/L	106	60.0	140	----
		dichloroethane, 1,2-	107-06-2	E611D	116 µg/L	100 µg/L	116	60.0	140	----
		dichloroethylene, 1,1-	75-35-4	E611D	91.0 µg/L	100 µg/L	91.0	60.0	140	----
		dichloroethylene, cis-1,2-	156-59-2	E611D	102 µg/L	100 µg/L	102	60.0	140	----
		dichloroethylene, trans-1,2-	156-60-5	E611D	96.6 µg/L	100 µg/L	96.6	60.0	140	----
		dichloromethane	75-09-2	E611D	108 µg/L	100 µg/L	108	60.0	140	----
		dichloropropane, 1,2-	78-87-5	E611D	107 µg/L	100 µg/L	107	60.0	140	----
		dichloropropylene, cis-1,3-	10061-01-5	E611D	110 µg/L	100 µg/L	110	60.0	140	----
		dichloropropylene, trans-1,3-	10061-02-6	E611D	110 µg/L	100 µg/L	110	60.0	140	----
		ethylbenzene	100-41-4	E611D	91.7 µg/L	100 µg/L	91.7	60.0	140	----
		hexane, n-	110-54-3	E611D	88.7 µg/L	100 µg/L	88.7	60.0	140	----
		methyl ethyl ketone [MEK]	78-93-3	E611D	145 µg/L	100 µg/L	145	60.0	140	MES
		methyl isobutyl ketone [MIBK]	108-10-1	E611D	136 µg/L	100 µg/L	136	60.0	140	----
		methyl-tert-butyl ether [MTBE]	1634-04-4	E611D	99.9 µg/L	100 µg/L	99.9	60.0	140	----
		styrene	100-42-5	E611D	100 µg/L	100 µg/L	100	60.0	140	----
		tetrachloroethane, 1,1,1,2-	630-20-6	E611D	98.3 µg/L	100 µg/L	98.3	60.0	140	----
		tetrachloroethane, 1,1,2,2-	79-34-5	E611D	117 µg/L	100 µg/L	117	60.0	140	----
		tetrachloroethylene	127-18-4	E611D	90.2 µg/L	100 µg/L	90.2	60.0	140	----
		toluene	108-88-3	E611D	94.2 µg/L	100 µg/L	94.2	60.0	140	----
		trichloroethane, 1,1,1-	71-55-6	E611D	94.0 µg/L	100 µg/L	94.0	60.0	140	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Volatile Organic Compounds (QCLot: 693114) - continued										
TY2202625-001	Anonymous	trichloroethane, 1,1,2-	79-00-5	E611D	112 µg/L	100 µg/L	112	60.0	140	----
		trichloroethylene	79-01-6	E611D	95.4 µg/L	100 µg/L	95.4	60.0	140	----
		trichlorofluoromethane	75-69-4	E611D	91.2 µg/L	100 µg/L	91.2	60.0	140	----
		vinyl chloride	75-01-4	E611D	87.3 µg/L	100 µg/L	87.3	60.0	140	----
		xylene, m+p-	179601-23-1	E611D	184 µg/L	200 µg/L	91.8	60.0	140	----
		xylene, o-	95-47-6	E611D	94.2 µg/L	100 µg/L	94.2	60.0	140	----
Hydrocarbons (QCLot: 693117)										
TY2202625-001	Anonymous	F1 (C6-C10)	----	E581.F1-L	2110 µg/L	2000 µg/L	106	60.0	140	----

Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 1005665

Canada Toll Free: 1 800 668 9878

Page of

www.alsglobal.com

Environmental Division Waterloo
Work Order Reference
WT2217618

Telephone : +1 519 886 6910

Report To	Contact and company name below will appear on the final report
Company:	Rubicon Environmental (2008) Inc.
Contact:	Paul Rew
Phone:	519-942-7358
	Company address below will appear on the final report
Street:	723361 Side Road 250
City/Province:	Melancthon ON
Postal Code:	L9V 2N9
Invoice To	Same as Report To ☑ YES ☐ NO
	Copy of Invoice with Report ☑ YES ☐ NO
Company:	
Contact:	

Reports / Recipients

Select Report Format: ☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)
Merge QC/QCI Reports with COA ☐ YES ☐ NO ☐ N/A
☑ Compare Results to Criteria on Report - provide details below if box checked
Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax: Jromero@rubiconenviro.com
Email 2:
Email 3:

Invoice Recipients

Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax: Admin@rubiconenvir.com
Email 2:

Turnaround Time (TAT) Requested

☐ Routine [R] if received by 3pm M-F - no surcharges apply
☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minin
☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge mini
☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge mini
☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge mini
☑ Same day [E2] if received by 10am M-S - 200% rush surcharge. A may apply to rush requests on weekends, statutory holidays and no

Date and Time Required for all E&P TATs:

For all tests with rush TATs requested, plea

Project Information

ALS Account # / Quote #:
Job #: R63048
PO / AFE:
LSD:

Oil and Gas Required Fields (client use)

AFE/Cost Center: PO#:
Major/Minor Code: Routing Code:
Requisitioner:
Location:

ALS Lab Work Order # (ALS use only):

ALS Contact: Gayle

Sampler:

Analysis

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P)

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS	VOC	PHC (F1-F4)										SAMPLES ON HOLD	EXTENDED STORAGE	SUSPECTED HAZARD (see Notes)
	EXMW1	03-OCT-22		Water		X	X	X											
	EXMW1-Dupe					X	X	X											
	EXMW2					X	X	X											
	EXMW4					X	X	X											
	EXMW5					X	X	X											
	EXMW6					X	X	X											
	EXMW7					X	X	X											
	MW3					X	X	X											
	MW5					X	X	X											
	Trip Blank					X													

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ YES ☑ NO
Are samples for human consumption/ use? ☐ YES ☑ NO

Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)

Table 7 residential

SAMPLE RECEIPT DETAILS (ALS use only)

Cooling Method: ☑ NONE ☐ ICE ☐ ICE PACKS ☐ FROZEN ☐ COOLING INITIATED
Submission Comments identified on Sample Receipt Notification: ☐ YES ☐ NO
Cooler Custody Seals Intact: ☐ YES ☐ N/A Sample Custody Seals Intact: ☐ YES ☐ N/A

INITIAL COOLER TEMPERATURES °C				FINAL COOLER TEMPERATURES °C			
19.8				9.6			

SHIPMENT RELEASE (client use)

Released by:	Date:	Time:

INITIAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:
Kamelyn	12/10/2022	15:28

FINAL SHIPMENT RECEPTION (ALS use only)

Received by:	Date:	Time:
FH	2022-10-12	5:30PM

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

AUG 2020 FRONT

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**.

MA VW-163 / MM-285 / OR-328

RUBICON ENVIRONMENTAL INC.
ATTN: Paul Rew
60 Toronto St
Flesherton ON N0C 1E0

Date Received: 11-FEB-22
Report Date: 22-FEB-22 12:59 (MT)
Version: FINAL

Client Phone: 519-857-7435

Certificate of Analysis

Lab Work Order #: L2685287

Project P.O. #: NOT SUBMITTED
Job Reference: R63048
C of C Numbers:
Legal Site Desc:

Gayle Braun
Senior Account Manager

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

Summary of Guideline Exceedances

Guideline ALS ID	Client ID	Grouping	Analyte	Result	Guideline Limit	Unit
Ontario Regulation 153/04 - April 15, 2011 Standards - T7-Soil-Res/Park/Inst. Property Use (Coarse)						
L2685287-1	BH1-SS1	Polycyclic Aromatic Hydrocarbons	Benzo(a)anthracene	2.83	0.5	ug/g
			Benzo(a)pyrene	2.84	0.3	ug/g
			Benzo(b&j)fluoranthene	3.24	0.78	ug/g
			Benzo(k)fluoranthene	1.29	0.78	ug/g
			Dibenz(a,h)anthracene	0.419	0.1	ug/g
			Fluoranthene	5.39	0.69	ug/g
			Indeno(1,2,3-cd)pyrene	1.40	0.38	ug/g
L2685287-2	BH3-SS2	Volatile Organic Compounds	Tetrachloroethylene	0.387	0.28	ug/g
		Polycyclic Aromatic Hydrocarbons	Benzo(a)anthracene	0.724	0.5	ug/g
			Benzo(a)pyrene	0.637	0.3	ug/g
			Benzo(b&j)fluoranthene	0.847	0.78	ug/g
			Fluoranthene	1.69	0.69	ug/g
L2685287-4	BH5-SS2	Polycyclic Aromatic Hydrocarbons	Benzo(a)pyrene	0.327	0.3	ug/g
L2685287-5	BH5-SS2 DUP	Polycyclic Aromatic Hydrocarbons	Benzo(a)pyrene	0.308	0.3	ug/g
Ontario Regulation 153/04 - April 15, 2011 Standards - T7-Soil-Res/Park/Inst. Property Use (Fine)						
L2685287-1	BH1-SS1	Polycyclic Aromatic Hydrocarbons	Benzo(a)anthracene	2.83	0.63	ug/g
			Benzo(a)pyrene	2.84	0.3	ug/g
			Benzo(b&j)fluoranthene	3.24	0.78	ug/g
			Benzo(k)fluoranthene	1.29	0.78	ug/g
			Dibenz(a,h)anthracene	0.419	0.1	ug/g
			Fluoranthene	5.39	0.69	ug/g
			Indeno(1,2,3-cd)pyrene	1.40	0.48	ug/g
L2685287-2	BH3-SS2	Polycyclic Aromatic Hydrocarbons	Benzo(a)anthracene	0.724	0.63	ug/g
			Benzo(a)pyrene	0.637	0.3	ug/g
			Benzo(b&j)fluoranthene	0.847	0.78	ug/g
			Fluoranthene	1.69	0.69	ug/g
L2685287-4	BH5-SS2	Polycyclic Aromatic Hydrocarbons	Benzo(a)pyrene	0.327	0.3	ug/g
L2685287-5	BH5-SS2 DUP	Polycyclic Aromatic Hydrocarbons	Benzo(a)pyrene	0.308	0.3	ug/g

* Please refer to the Reference Information section for an explanation of any qualifiers noted.

ANALYTICAL REPORT

Physical Tests - SOIL

		Guide Limits							
Analyte	**Unit**	**#1**	**#2**						
Lab ID				L2685287-1	L2685287-2	L2685287-3	L2685287-4	L2685287-5	L2685287-6
Sample Date				07-FEB-22	07-FEB-22	08-FEB-22	08-FEB-22	08-FEB-22	08-FEB-22
Sample ID				BH1-SS1	BH3-SS2	BH4-SS1	BH5-SS2	BH5-SS2 DUP	TRIP BLANK
% Moisture	%	-	-	21.3	20.7	18.1	10.2	11.8	<0.25
pH	pH units	-	-	7.61					

Guide Limit #1: T7-Soil-Res/Park/Inst. Property Use (Coarse)
Guide Limit #2: T7-Soil-Res/Park/Inst. Property Use (Fine)

Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.

* Please refer to the Reference Information section for an explanation of any qualifiers noted.

ANALYTICAL REPORT

Metals - SOIL

				Lab ID	L2685287-1	L2685287-2	L2685287-3	L2685287-4	L2685287-5
				Sample Date	07-FEB-22	07-FEB-22	08-FEB-22	08-FEB-22	08-FEB-22
				Sample ID	BH1-SS1	BH3-SS2	BH4-SS1	BH5-SS2	BH5-SS2 DUP
		Guide Limits							
Analyte	Unit	#1	#2						
Antimony (Sb)	ug/g	7.5	7.5	<1.0	<1.0	<1.0	<1.0	<1.0
Arsenic (As)	ug/g	18	18	2.9	5.8	8.1	5.8	5.7
Barium (Ba)	ug/g	390	390	55.6	161	177	121	118
Beryllium (Be)	ug/g	4	5	<0.50	0.84	0.80	<0.50	<0.50
Boron (B)	ug/g	120	120	14.2	13.9	12.3	9.6	9.8
Cadmium (Cd)	ug/g	1.2	1.2	<0.50	<0.50	<0.50	<0.50	<0.50
Chromium (Cr)	ug/g	160	160	20.2	41.9	34.8	23.5	26.4
Cobalt (Co)	ug/g	22	22	5.7	10.4	9.4	5.9	6.8
Copper (Cu)	ug/g	140	180	13.0	46.6	39.7	21.4	21.7
Lead (Pb)	ug/g	120	120	6.5	74.2	66.8	91.1	81.6
Molybdenum (Mo)	ug/g	6.9	6.9	<1.0	1.6	1.2	<1.0	<1.0
Nickel (Ni)	ug/g	100	130	15.5	25.4	22.0	13.0	13.3
Selenium (Se)	ug/g	2.4	2.4	<1.0	<1.0	<1.0	<1.0	<1.0
Silver (Ag)	ug/g	20	25	<0.20	<0.20	<0.20	<0.20	<0.20
Thallium (Tl)	ug/g	1	1	<0.50	<0.50	<0.50	<0.50	<0.50
Uranium (U)	ug/g	23	23	<1.0	<1.0	<1.0	<1.0	<1.0
Vanadium (V)	ug/g	86	86	24.4	59.2	51.1	25.6	28.9
Zinc (Zn)	ug/g	340	340	23.7	115	96.7	114	114

Guide Limit #1: T7-Soil-Res/Park/Inst. Property Use (Coarse)
Guide Limit #2: T7-Soil-Res/Park/Inst. Property Use (Fine)

Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.

* Please refer to the Reference Information section for an explanation of any qualifiers noted.

Volatile Organic Compounds - SOIL

				Lab ID	L2685287-1	L2685287-2	L2685287-3	L2685287-4	L2685287-5	L2685287-6
				Sample Date	07-FEB-22	07-FEB-22	08-FEB-22	08-FEB-22	08-FEB-22	08-FEB-22
				Sample ID	BH1-SS1	BH3-SS2	BH4-SS1	BH5-SS2	BH5-SS2 DUP	TRIP BLANK
		Guide Limits								
Analyte	Unit	#1	#2							
Acetone	ug/g	16	28	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Benzene	ug/g	0.21	0.17	<0.0068	<0.0068	<0.0068	0.0162	0.0252	<0.0068
Bromodichloromethane	ug/g	13	13	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Bromoform	ug/g	0.27	0.26	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Bromomethane	ug/g	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Carbon tetrachloride	ug/g	0.05	0.12	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chlorobenzene	ug/g	2.4	2.7	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dibromochloromethane	ug/g	9.4	9.4	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Chloroform	ug/g	0.05	0.17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dibromoethane	ug/g	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dichlorobenzene	ug/g	3.4	4.3	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,3-Dichlorobenzene	ug/g	4.8	6	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,4-Dichlorobenzene	ug/g	0.083	0.097	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Dichlorodifluoromethane	ug/g	16	25	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1-Dichloroethane	ug/g	3.5	11	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dichloroethane	ug/g	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1-Dichloroethylene	ug/g	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
cis-1,2-Dichloroethylene	ug/g	3.4	30	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
trans-1,2-Dichloroethylene	ug/g	0.084	0.75	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Methylene Chloride	ug/g	0.1	0.96	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,2-Dichloropropane	ug/g	0.05	0.085	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
cis-1,3-Dichloropropene	ug/g	-	-	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
trans-1,3-Dichloropropene	ug/g	-	-	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
1,3-Dichloropropene (cis & trans)	ug/g	0.05	0.083	<0.042	<0.042	<0.042	<0.042	<0.042	<0.042
Ethylbenzene	ug/g	2	15	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
n-Hexane	ug/g	2.8	34	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Methyl Ethyl Ketone	ug/g	16	44	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methyl Isobutyl Ketone	ug/g	1.7	4.3	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
MTBE	ug/g	0.75	1.4	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Styrene	ug/g	0.7	2.2	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050

Guide Limit #1: T7-Soil-Res/Park/Inst. Property Use (Coarse)
Guide Limit #2: T7-Soil-Res/Park/Inst. Property Use (Fine)

* Please refer to the Reference Information section for an explanation of any qualifiers noted.

Volatile Organic Compounds - SOIL

				Lab ID	L2685287-1	L2685287-2	L2685287-3	L2685287-4	L2685287-5	L2685287-6
				Sample Date	07-FEB-22	07-FEB-22	08-FEB-22	08-FEB-22	08-FEB-22	08-FEB-22
				Sample ID	BH1-SS1	BH3-SS2	BH4-SS1	BH5-SS2	BH5-SS2 DUP	TRIP BLANK
		Guide Limits								
Analyte	Unit	#1	#2							
1,1,1,2-Tetrachloroethane	ug/g	0.058	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Tetrachloroethylene	ug/g	0.28	2.3	<0.050	0.387	0.081	<0.050	<0.050	<0.050
Toluene	ug/g	2.3	6	<0.080	<0.080	<0.080	<0.080	<0.080	<0.080
1,1,1-Trichloroethane	ug/g	0.38	3.4	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
1,1,2-Trichloroethane	ug/g	0.05	0.05	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Trichloroethylene	ug/g	0.061	0.52	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Trichlorofluoromethane	ug/g	4	5.8	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Vinyl chloride	ug/g	0.02	0.022	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
o-Xylene	ug/g	-	-	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
m+p-Xylenes	ug/g	-	-	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030
Xylenes (Total)	ug/g	3.1	25	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Surrogate: 4-Bromofluorobenzene	%	-	-	93.9	99.1	95.4	97.2	97.5	80.2
Surrogate: 1,4-Difluorobenzene	%	-	-	98.6	101.3	99.2	102.2	101.4	103.5

Guide Limit #1: T7-Soil-Res/Park/Inst. Property Use (Coarse)
Guide Limit #2: T7-Soil-Res/Park/Inst. Property Use (Fine)

Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.

* Please refer to the Reference Information section for an explanation of any qualifiers noted.

Hydrocarbons - SOIL

Analyte	Unit	Guide Limits #1	Guide Limits #2	Lab ID	L2685287-1	L2685287-2	L2685287-3	L2685287-4	L2685287-5	L2685287-6
				Sample Date	07-FEB-22	07-FEB-22	08-FEB-22	08-FEB-22	08-FEB-22	08-FEB-22
				Sample ID	BH1-SS1	BH3-SS2	BH4-SS1	BH5-SS2	BH5-SS2 DUP	TRIP BLANK
F1 (C6-C10)	ug/g	55	65		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
F1-BTEX	ug/g	55	65		<5.0	<5.0	<5.0	<5.0	<5.0	
F2 (C10-C16)	ug/g	98	150		<50 DLM	<10	<10	<10	<10	
F2-Naphth	ug/g	-	-		<50	<10	<10	<10	<10	
F3 (C16-C34)	ug/g	300	1300		280	81	<50	61	131	
F3-PAH	ug/g	-	-		250	74	<50	58	128	
F4 (C34-C50)	ug/g	2800	5600		460	<50	<50	181	410	
F4G-SG (GHH-Silica)	ug/g	2800	5600		2020			1040	2250	
Total Hydrocarbons (C6-C50)	ug/g	-	-		730	81	<72	242	541	
Chrom. to baseline at nC50		-	-		NO	YES	YES		NO	
Chrom. to baseline at nC50	ppm	-	-					NO		
Surrogate: 2-Bromobenzotrifluoride	%	-	-		90.2	88.1	90.2	87.8	87.1	
Surrogate: 3,4-Dichlorotoluene	%	-	-		102.6	101.0	95.1	92.6	91.0	106.0

Guide Limit #1: T7-Soil-Res/Park/Inst. Property Use (Coarse)
Guide Limit #2: T7-Soil-Res/Park/Inst. Property Use (Fine)

Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.

* Please refer to the Reference Information section for an explanation of any qualifiers noted.

ANALYTICAL REPORT

Polycyclic Aromatic Hydrocarbons - SOIL

			Lab ID	L2685287-1	L2685287-2	L2685287-3	L2685287-4	L2685287-5
			Sample Date	07-FEB-22	07-FEB-22	08-FEB-22	08-FEB-22	08-FEB-22
			Sample ID	BH1-SS1	BH3-SS2	BH4-SS1	BH5-SS2	BH5-SS2 DUP
Analyte	Unit	Guide Limits #1	#2					
Acenaphthene	ug/g	7.9	58	0.211	0.158	<0.050	<0.050	<0.050
Acenaphthylene	ug/g	0.15	0.17	0.128	<0.050	<0.050	<0.050	<0.050
Anthracene	ug/g	0.67	0.74	0.646	0.345	<0.050	0.107	0.096
Benzo(a)anthracene	ug/g	0.5	0.63	2.83	0.724	0.067 R	0.333	0.323
Benzo(a)pyrene	ug/g	0.3	0.3	2.84	0.637	0.082	0.327	0.308
Benzo(b&j)fluoranthene	ug/g	0.78	0.78	3.24	0.847	0.140	0.442	0.431
Benzo(g,h,i)perylene	ug/g	6.6	7.8	1.40	0.299	0.080	0.179	0.176
Benzo(k)fluoranthene	ug/g	0.78	0.78	1.29	0.228	<0.050	0.114	0.116
Chrysene	ug/g	7	7.8	2.63	0.640	0.074	0.324	0.318
Dibenz(a,h)anthracene	ug/g	0.1	0.1	0.419	0.090	<0.050	0.054	0.051
Fluoranthene	ug/g	0.69	0.69	5.39	1.69	0.088	0.664	0.634
Fluorene	ug/g	62	69	0.199	0.166	<0.050	<0.050	<0.050
Indeno(1,2,3-cd)pyrene	ug/g	0.38	0.48	1.40	0.302	0.069	0.170	0.163
1+2-Methylnaphthalenes	ug/g	0.99	3.4	0.101	0.103	<0.042	<0.042	<0.042
1-Methylnaphthalene	ug/g	0.99	3.4	0.049	0.043	<0.030	<0.030	<0.030
2-Methylnaphthalene	ug/g	0.99	3.4	0.052	0.060	<0.030	<0.030	<0.030
Naphthalene	ug/g	0.6	0.75	0.084 DLM	0.167	<0.013	0.031	0.036 DLM
Phenanthrene	ug/g	6.2	7.8	2.89	1.56	0.046	0.446	0.401
Pyrene	ug/g	78	78	4.43	1.28	0.096	0.526	0.526
Surrogate: 2-Fluorobiphenyl	%	-	-	72.7	94.9	94.8	94.9	74.0
Surrogate: d14-Terphenyl	%	-	-	71.3	94.5	93.9	95.5	73.8

Guide Limit #1: T7-Soil-Res/Park/Inst. Property Use (Coarse)
Guide Limit #2: T7-Soil-Res/Park/Inst. Property Use (Fine)

Detection Limit for result exceeds Guideline Limit. Assessment against Guideline Limit cannot be made.
Analytical result for this parameter exceeds Guide Limits listed. See Summary of Guideline Exceedances.

* Please refer to the Reference Information section for an explanation of any qualifiers noted.

Reference Information

Qualifiers for Individual Parameters Listed:

Qualifier	Description
R	The ion abundance ratio(s) did not meet the acceptance criteria. Value is an estimated maximum.
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference**
F1-F4-511-CALC-WT	Soil	F1-F4 Hydrocarbon Calculated Parameters	CCME CWS-PHC, Pub #1310, Dec 2001-S

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

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 and as of November 30, 2020), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

F2-F4-511-WT	Soil	F2-F4-O.Reg 153/04 (July 2011)	CCME Tier 1

Petroleum Hydrocarbons (F2-F4 fractions) are extracted from soil with 1:1 hexane:acetone using a rotary extractor. Extracts are treated with silica gel to remove polar organic interferences. F2, F3, & F4 are analyzed by GC-FID. F4G-sg is analyzed gravimetrically.

Notes:
1. F2 (C10-C16): Sum of all hydrocarbons that elute between nC10 and nC16.
2. F3 (C16-C34): Sum of all hydrocarbons that elute between nC16 and nC34.
3. F4 (C34-C50): Sum of all hydrocarbons that elute between nC34 and nC50.
4. F4G: Gravimetric Heavy Hydrocarbons
5. F4G-sg: Gravimetric Heavy Hydrocarbons (F4G) after silica gel treatment.
6. Where both F4 (C34-C50) and F4G-sg are reported for a sample, the larger of the two values is used for comparison against the relevant CCME guideline for F4.
7. F4G-sg cannot be added to the C6 to C50 hydrocarbon results to obtain an estimate of total extractable hydrocarbons.
8. This method is validated for use.
9. Data from analysis of validation and quality control samples is available upon request.

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference**

10. Reported results are expressed as milligrams per dry kilogram, unless otherwise indicated.

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 and as of November 30, 2020), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

F4G-ADD-511-WT Soil F4G SG-O.Reg 153/04 (July 2011) MOE DECPH-E3398/CCME TIER 1

F4G, gravimetric analysis, is determined if the chromatogram does not return to baseline at or before C50. A soil sample is extracted with a solvent mix, the solvent is evaporated and the weight of the residue is determined.

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 and as of November 30, 2020), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

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

Soil/sediment is dried, disaggregated, and sieved (2 mm). For tests intended to support Ontario regulations, the <2mm fraction is ground to pass through a 0.355 mm sieve. Strong Acid Leachable Metals in the <2mm fraction are solubilized by heated digestion with nitric and hydrochloric acids. Instrumental analysis is by Collision / Reaction Cell ICPMS.

Limitations: This method is intended to liberate environmentally available metals. Silicate minerals are not solubilized. Some metals may be only partially recovered (matrix dependent), including Al, Ba, Be, Cr, S, Sr, Ti, Tl, V, W, and Zr. Elemental Sulfur may be poorly recovered by this method. Volatile forms of sulfur (e.g. sulfide, H2S) may be excluded if lost during sampling, storage, or digestion.

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 CCME PHC in Soil - Tier 1 (mod)

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 techniqueis used to extract the sample with a mixture of methanol and toluene. The extracts are concentrated and analyzed by GC/MS. Results for benzo(b) fluoranthene may include contributions from benzo(j)fluoranthene, if also present in the sample.

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 and as of November 30, 2020), unless a subset of the Analytical Test Group (ATG) has been requested (the Protocol states that all analytes in an ATG must be reported).

PH-WT Soil pH 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).

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 and as of November 30, 2020), 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

Reference Information

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Method Reference**

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

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

Chain of Custody Numbers:

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
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. Guideline limits are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Quality Control Report

Workorder: L2685287 Report Date: 22-FEB-22

Client: RUBICON ENVIRONMENTAL INC.
60 Toronto St
Flesherton ON N0C 1E0
Contact: Paul Rew

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F1-HS-511-WT	**Soil**							
Batch R5726037								
WG3696519-4 DUP		**WG3696519-3**						
F1 (C6-C10)		<5.0	<5.0	RPD-NA	ug/g	N/A	30	16-FEB-22
WG3696519-2 LCS								
F1 (C6-C10)			110.0		%		80-120	16-FEB-22
WG3696519-1 MB								
F1 (C6-C10)			<5.0		ug/g		5	16-FEB-22
Surrogate: 3,4-Dichlorotoluene			118.8		%		60-140	16-FEB-22
WG3696519-5 MS		**WG3696519-3**						
F1 (C6-C10)			119.2		%		60-140	16-FEB-22
F2-F4-511-WT	**Soil**							
Batch R5726996								
WG3696673-3 DUP		**WG3696673-5**						
F2 (C10-C16)		<10	<10	RPD-NA	ug/g	N/A	40	17-FEB-22
F3 (C16-C34)		61	85		ug/g	34	40	17-FEB-22
F4 (C34-C50)		181	243		ug/g	29	40	17-FEB-22
WG3696673-2 LCS								
F2 (C10-C16)			100.0		%		70-130	17-FEB-22
F3 (C16-C34)			97.8		%		70-130	17-FEB-22
F4 (C34-C50)			102.0		%		70-130	17-FEB-22
WG3696673-1 MB								
F2 (C10-C16)			<10		ug/g		10	17-FEB-22
F3 (C16-C34)			<50		ug/g		50	17-FEB-22
F4 (C34-C50)			<50		ug/g		50	17-FEB-22
Surrogate: 2-Bromobenzotrifluoride			102.1		%		60-140	17-FEB-22
WG3696673-4 MS		**WG3696673-5**						
F2 (C10-C16)			98.5		%		60-140	17-FEB-22
F3 (C16-C34)			95.9		%		60-140	17-FEB-22
F4 (C34-C50)			105.1		%		60-140	17-FEB-22
F4G-ADD-511-WT	**Soil**							
Batch R5727992								
WG3698321-3 DUP		**L2685287-4**						
F4G-SG (GHH-Silica)		1040	1370		ug/g	28	40	16-FEB-22
WG3698321-2 LCS								
F4G-SG (GHH-Silica)			89.8		%		60-140	16-FEB-22
WG3698321-1 MB								
F4G-SG (GHH-Silica)			<250		ug/g		250	16-FEB-22

Quality Control Report

Client: RUBICON ENVIRONMENTAL INC.
60 Toronto St
Flesherton ON N0C 1E0
Contact: Paul Rew

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-WT	**Soil**							
Batch R5727455								
WG3697416-2 CRM		**WT-SS-2**						
Arsenic (As)			114.3		%		70-130	17-FEB-22
Barium (Ba)			121.8		%		70-130	17-FEB-22
Beryllium (Be)			116.3		%		70-130	17-FEB-22
Boron (B)			9.0		mg/kg		3.5-13.5	17-FEB-22
Cadmium (Cd)			108.2		%		70-130	17-FEB-22
Chromium (Cr)			104.7		%		70-130	17-FEB-22
Cobalt (Co)			103.0		%		70-130	17-FEB-22
Copper (Cu)			108.9		%		70-130	17-FEB-22
Lead (Pb)			124.2		%		70-130	17-FEB-22
Molybdenum (Mo)			108.0		%		70-130	17-FEB-22
Nickel (Ni)			106.1		%		70-130	17-FEB-22
Selenium (Se)			0.15		mg/kg		0-0.34	17-FEB-22
Silver (Ag)			83.5		%		70-130	17-FEB-22
Thallium (Tl)			0.085		mg/kg		0.029-0.129	17-FEB-22
Uranium (U)			105.2		%		70-130	17-FEB-22
Vanadium (V)			107.3		%		70-130	17-FEB-22
Zinc (Zn)			103.6		%		70-130	17-FEB-22
WG3697416-6 DUP		**WG3697416-5**						
Antimony (Sb)		0.13	0.12		ug/g	6.4	30	17-FEB-22
Arsenic (As)		3.01	2.99		ug/g	0.8	30	17-FEB-22
Barium (Ba)		54.9	58.1		ug/g	5.7	40	17-FEB-22
Beryllium (Be)		0.42	0.43		ug/g	2.3	30	17-FEB-22
Boron (B)		15.2	13.9		ug/g	9.0	30	17-FEB-22
Cadmium (Cd)		0.066	0.067		ug/g	1.0	30	17-FEB-22
Chromium (Cr)		22.0	21.8		ug/g	1.0	30	17-FEB-22
Cobalt (Co)		5.93	6.48		ug/g	8.8	30	17-FEB-22
Copper (Cu)		13.9	13.5		ug/g	3.1	30	17-FEB-22
Lead (Pb)		6.02	5.98		ug/g	0.7	40	17-FEB-22
Molybdenum (Mo)		0.25	0.24		ug/g	3.2	40	17-FEB-22
Nickel (Ni)		16.9	16.7		ug/g	1.0	30	17-FEB-22
Selenium (Se)		<0.20	<0.20	RPD-NA	ug/g	N/A	30	17-FEB-22
Silver (Ag)		<0.10	<0.10	RPD-NA	ug/g	N/A	40	17-FEB-22
Thallium (Tl)		0.080	0.081		ug/g	0.2	30	17-FEB-22

Quality Control Report

Client: RUBICON ENVIRONMENTAL INC.
60 Toronto St
Flesherton ON N0C 1E0
Contact: Paul Rew

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-WT	**Soil**							
Batch R5727455								
WG3697416-6 DUP		**WG3697416-5**						
Uranium (U)		0.613	0.611		ug/g	0.2	30	17-FEB-22
Vanadium (V)		26.8	25.8		ug/g	4.2	30	17-FEB-22
Zinc (Zn)		26.1	27.1		ug/g	3.8	30	17-FEB-22
WG3697416-4 LCS								
Antimony (Sb)			102.6		%		80-120	17-FEB-22
Arsenic (As)			104.6		%		80-120	17-FEB-22
Barium (Ba)			111.9		%		80-120	17-FEB-22
Beryllium (Be)			101.9		%		80-120	17-FEB-22
Boron (B)			92.4		%		80-120	17-FEB-22
Cadmium (Cd)			104.7		%		80-120	17-FEB-22
Chromium (Cr)			98.4		%		80-120	17-FEB-22
Cobalt (Co)			94.0		%		80-120	17-FEB-22
Copper (Cu)			98.0		%		80-120	17-FEB-22
Lead (Pb)			103.2		%		80-120	17-FEB-22
Molybdenum (Mo)			105.2		%		80-120	17-FEB-22
Nickel (Ni)			98.0		%		80-120	17-FEB-22
Selenium (Se)			98.3		%		80-120	17-FEB-22
Silver (Ag)			95.8		%		80-120	17-FEB-22
Thallium (Tl)			101.6		%		80-120	17-FEB-22
Uranium (U)			104.4		%		80-120	17-FEB-22
Vanadium (V)			101.8		%		80-120	17-FEB-22
Zinc (Zn)			97.2		%		80-120	17-FEB-22
WG3697416-1 MB								
Antimony (Sb)			<0.10		mg/kg		0.1	17-FEB-22
Arsenic (As)			<0.10		mg/kg		0.1	17-FEB-22
Barium (Ba)			<0.50		mg/kg		0.5	17-FEB-22
Beryllium (Be)			<0.10		mg/kg		0.1	17-FEB-22
Boron (B)			<5.0		mg/kg		5	17-FEB-22
Cadmium (Cd)			<0.020		mg/kg		0.02	17-FEB-22
Chromium (Cr)			<0.50		mg/kg		0.5	17-FEB-22
Cobalt (Co)			<0.10		mg/kg		0.1	17-FEB-22
Copper (Cu)			<0.50		mg/kg		0.5	17-FEB-22
Lead (Pb)			<0.50		mg/kg		0.5	17-FEB-22
Molybdenum (Mo)			<0.10		mg/kg		0.1	17-FEB-22

Quality Control Report

Client: RUBICON ENVIRONMENTAL INC.
60 Toronto St
Flesherton ON N0C 1E0
Contact: Paul Rew

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-200.2-CCMS-WT	**Soil**							
Batch R5727455								
WG3697416-1 MB								
Nickel (Ni)			<0.50		mg/kg		0.5	17-FEB-22
Selenium (Se)			<0.20		mg/kg		0.2	17-FEB-22
Silver (Ag)			<0.10		mg/kg		0.1	17-FEB-22
Thallium (Tl)			<0.050		mg/kg		0.05	17-FEB-22
Uranium (U)			<0.050		mg/kg		0.05	17-FEB-22
Vanadium (V)			<0.20		mg/kg		0.2	17-FEB-22
Zinc (Zn)			<2.0		mg/kg		2	17-FEB-22
MOISTURE-WT	**Soil**							
Batch R5726167								
WG3696668-3 DUP		**L2685287-4**						
% Moisture		10.2	11.1		%	7.8	20	17-FEB-22
WG3696668-2 LCS								
% Moisture			97.2		%		90-110	17-FEB-22
WG3696668-1 MB								
% Moisture			<0.25		%		0.25	17-FEB-22
PAH-511-WT	**Soil**							
Batch R5726427								
WG3696866-3 DUP		**WG3696866-5**						
1-Methylnaphthalene		<0.030	<0.030	RPD-NA	ug/g	N/A	40	17-FEB-22
2-Methylnaphthalene		<0.030	<0.030	RPD-NA	ug/g	N/A	40	17-FEB-22
Acenaphthene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	17-FEB-22
Acenaphthylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	17-FEB-22
Anthracene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	17-FEB-22
Benzo(a)anthracene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	17-FEB-22
Benzo(a)pyrene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	17-FEB-22
Benzo(b&j)fluoranthene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	17-FEB-22
Benzo(g,h,i)perylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	17-FEB-22
Benzo(k)fluoranthene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	17-FEB-22
Chrysene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	17-FEB-22
Dibenz(a,h)anthracene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	17-FEB-22
Fluoranthene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	17-FEB-22
Fluorene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	17-FEB-22
Indeno(1,2,3-cd)pyrene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	17-FEB-22
Naphthalene		<0.013	<0.013	RPD-NA	ug/g	N/A	40	17-FEB-22

Quality Control Report

Client: RUBICON ENVIRONMENTAL INC.
60 Toronto St
Flesherton ON N0C 1E0
Contact: Paul Rew

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-511-WT	**Soil**							
Batch R5726427								
WG3696866-3 DUP		**WG3696866-5**						
Phenanthrene		<0.046	<0.046	RPD-NA	ug/g	N/A	40	17-FEB-22
Pyrene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	17-FEB-22
WG3696866-2 LCS								
1-Methylnaphthalene			89.0		%		50-140	17-FEB-22
2-Methylnaphthalene			89.4		%		50-140	17-FEB-22
Acenaphthene			83.6		%		50-140	17-FEB-22
Acenaphthylene			85.8		%		50-140	17-FEB-22
Anthracene			79.9		%		50-140	17-FEB-22
Benzo(a)anthracene			88.8		%		50-140	17-FEB-22
Benzo(a)pyrene			84.3		%		50-140	17-FEB-22
Benzo(b&j)fluoranthene			90.0		%		50-140	17-FEB-22
Benzo(g,h,i)perylene			79.9		%		50-140	17-FEB-22
Benzo(k)fluoranthene			79.6		%		50-140	17-FEB-22
Chrysene			88.9		%		50-140	17-FEB-22
Dibenz(a,h)anthracene			74.8		%		50-140	17-FEB-22
Fluoranthene			89.7		%		50-140	17-FEB-22
Fluorene			81.7		%		50-140	17-FEB-22
Indeno(1,2,3-cd)pyrene			78.6		%		50-140	17-FEB-22
Naphthalene			87.1		%		50-140	17-FEB-22
Phenanthrene			87.6		%		50-140	17-FEB-22
Pyrene			89.1		%		50-140	17-FEB-22
WG3696866-1 MB								
1-Methylnaphthalene			<0.030		ug/g		0.03	17-FEB-22
2-Methylnaphthalene			<0.030		ug/g		0.03	17-FEB-22
Acenaphthene			<0.050		ug/g		0.05	17-FEB-22
Acenaphthylene			<0.050		ug/g		0.05	17-FEB-22
Anthracene			<0.050		ug/g		0.05	17-FEB-22
Benzo(a)anthracene			<0.050		ug/g		0.05	17-FEB-22
Benzo(a)pyrene			<0.050		ug/g		0.05	17-FEB-22
Benzo(b&j)fluoranthene			<0.050		ug/g		0.05	17-FEB-22
Benzo(g,h,i)perylene			<0.050		ug/g		0.05	17-FEB-22
Benzo(k)fluoranthene			<0.050		ug/g		0.05	17-FEB-22
Chrysene			<0.050		ug/g		0.05	17-FEB-22
Dibenz(a,h)anthracene			<0.050		ug/g		0.05	17-FEB-22

Quality Control Report

Client: RUBICON ENVIRONMENTAL INC.
60 Toronto St
Flesherton ON N0C 1E0
Contact: Paul Rew

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-511-WT	**Soil**							
Batch R5726427								
WG3696866-1 MB								
Fluoranthene			<0.050		ug/g		0.05	17-FEB-22
Fluorene			<0.050		ug/g		0.05	17-FEB-22
Indeno(1,2,3-cd)pyrene			<0.050		ug/g		0.05	17-FEB-22
Naphthalene			<0.013		ug/g		0.013	17-FEB-22
Phenanthrene			<0.046		ug/g		0.046	17-FEB-22
Pyrene			<0.050		ug/g		0.05	17-FEB-22
Surrogate: 2-Fluorobiphenyl			89.0		%		50-140	17-FEB-22
Surrogate: d14-Terphenyl			80.5		%		50-140	17-FEB-22
WG3696866-4 MS		**WG3696866-5**						
1-Methylnaphthalene			91.6		%		50-140	17-FEB-22
2-Methylnaphthalene			92.1		%		50-140	17-FEB-22
Acenaphthene			88.9		%		50-140	17-FEB-22
Acenaphthylene			88.5		%		50-140	17-FEB-22
Anthracene			83.1		%		50-140	17-FEB-22
Benzo(a)anthracene			94.4		%		50-140	17-FEB-22
Benzo(a)pyrene			89.8		%		50-140	17-FEB-22
Benzo(b&j)fluoranthene			88.2		%		50-140	17-FEB-22
Benzo(g,h,i)perylene			84.8		%		50-140	17-FEB-22
Benzo(k)fluoranthene			89.5		%		50-140	17-FEB-22
Chrysene			92.9		%		50-140	17-FEB-22
Dibenz(a,h)anthracene			80.0		%		50-140	17-FEB-22
Fluoranthene			91.4		%		50-140	17-FEB-22
Fluorene			87.0		%		50-140	17-FEB-22
Indeno(1,2,3-cd)pyrene			81.8		%		50-140	17-FEB-22
Naphthalene			89.4		%		50-140	17-FEB-22
Phenanthrene			90.1		%		50-140	17-FEB-22
Pyrene			90.2		%		50-140	17-FEB-22
PH-WT	**Soil**							
Batch R5725401								
WG3696432-1 DUP		**L2685271-4**						
pH		7.99	8.01	J	pH units	0.02	0.3	16-FEB-22
WG3696794-1 LCS								
pH			7.07		pH units		6.9-7.1	16-FEB-22
VOC-511-HS-WT	**Soil**							

Quality Control Report

Client: RUBICON ENVIRONMENTAL INC.
60 Toronto St
Flesherton ON N0C 1E0
Contact: Paul Rew

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT	**Soil**							
Batch R5726037								
WG3696519-4 DUP		**WG3696519-3**						
1,1,1,2-Tetrachloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
1,1,2,2-Tetrachloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
1,1,1-Trichloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
1,1,2-Trichloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
1,1-Dichloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
1,1-Dichloroethylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
1,2-Dibromoethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
1,2-Dichlorobenzene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
1,2-Dichloroethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
1,2-Dichloropropane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
1,3-Dichlorobenzene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
1,4-Dichlorobenzene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
Acetone		<0.50	<0.50	RPD-NA	ug/g	N/A	40	16-FEB-22
Benzene		<0.0068	<0.0068	RPD-NA	ug/g	N/A	40	16-FEB-22
Bromodichloromethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
Bromoform		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
Bromomethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
Carbon tetrachloride		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
Chlorobenzene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
Chloroform		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
cis-1,2-Dichloroethylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
cis-1,3-Dichloropropene		<0.030	<0.030	RPD-NA	ug/g	N/A	40	16-FEB-22
Dibromochloromethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
Dichlorodifluoromethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
Ethylbenzene		<0.018	<0.018	RPD-NA	ug/g	N/A	40	16-FEB-22
n-Hexane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
Methylene Chloride		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
MTBE		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
m+p-Xylenes		<0.030	<0.030	RPD-NA	ug/g	N/A	40	16-FEB-22
Methyl Ethyl Ketone		<0.50	<0.50	RPD-NA	ug/g	N/A	40	16-FEB-22
Methyl Isobutyl Ketone		<0.50	<0.50	RPD-NA	ug/g	N/A	40	16-FEB-22
o-Xylene		<0.020	<0.020	RPD-NA	ug/g	N/A	40	16-FEB-22
Styrene		<0.050	<0.050		ug/g			16-FEB-22

Quality Control Report

Client: RUBICON ENVIRONMENTAL INC.
60 Toronto St
Flesherton ON N0C 1E0
Contact: Paul Rew

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT	**Soil**							
Batch R5726037								
WG3696519-4 DUP		**WG3696519-3**						
Styrene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
Tetrachloroethylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
Toluene		<0.080	<0.080	RPD-NA	ug/g	N/A	40	16-FEB-22
trans-1,2-Dichloroethylene		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
trans-1,3-Dichloropropene		<0.030	<0.030	RPD-NA	ug/g	N/A	40	16-FEB-22
Trichloroethylene		<0.010	<0.010	RPD-NA	ug/g	N/A	40	16-FEB-22
Trichlorofluoromethane		<0.050	<0.050	RPD-NA	ug/g	N/A	40	16-FEB-22
Vinyl chloride		<0.020	<0.020	RPD-NA	ug/g	N/A	40	16-FEB-22
WG3696519-2 LCS								
1,1,1,2-Tetrachloroethane			101.4		%		60-130	16-FEB-22
1,1,2,2-Tetrachloroethane			94.2		%		60-130	16-FEB-22
1,1,1-Trichloroethane			96.6		%		60-130	16-FEB-22
1,1,2-Trichloroethane			91.8		%		60-130	16-FEB-22
1,1-Dichloroethane			112.9		%		60-130	16-FEB-22
1,1-Dichloroethylene			109.1		%		60-130	16-FEB-22
1,2-Dibromoethane			89.7		%		70-130	16-FEB-22
1,2-Dichlorobenzene			95.1		%		70-130	16-FEB-22
1,2-Dichloroethane			99.7		%		60-130	16-FEB-22
1,2-Dichloropropane			105.9		%		70-130	16-FEB-22
1,3-Dichlorobenzene			99.3		%		70-130	16-FEB-22
1,4-Dichlorobenzene			97.6		%		70-130	16-FEB-22
Acetone			105.2		%		60-140	16-FEB-22
Benzene			91.4		%		70-130	16-FEB-22
Bromodichloromethane			105.0		%		50-140	16-FEB-22
Bromoform			102.5		%		70-130	16-FEB-22
Bromomethane			84.0		%		50-140	16-FEB-22
Carbon tetrachloride			108.4		%		70-130	16-FEB-22
Chlorobenzene			94.8		%		70-130	16-FEB-22
Chloroform			102.6		%		70-130	16-FEB-22
cis-1,2-Dichloroethylene			87.2		%		70-130	16-FEB-22
cis-1,3-Dichloropropene			100.1		%		70-130	16-FEB-22
Dibromochloromethane			100.7		%		60-130	16-FEB-22
Dichlorodifluoromethane			67.6		%		50-140	16-FEB-22

Quality Control Report

Client: RUBICON ENVIRONMENTAL INC.
60 Toronto St
Flesherton ON N0C 1E0
Contact: Paul Rew

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT	**Soil**							
Batch R5726037								
WG3696519-2 LCS								
Ethylbenzene			96.7		%		70-130	16-FEB-22
n-Hexane			101.4		%		70-130	16-FEB-22
Methylene Chloride			116.9		%		70-130	16-FEB-22
MTBE			96.7		%		70-130	16-FEB-22
m+p-Xylenes			102.1		%		70-130	16-FEB-22
Methyl Ethyl Ketone			95.9		%		60-140	16-FEB-22
Methyl Isobutyl Ketone			84.6		%		60-140	16-FEB-22
o-Xylene			94.8		%		70-130	16-FEB-22
Styrene			86.6		%		70-130	16-FEB-22
Tetrachloroethylene			97.7		%		60-130	16-FEB-22
Toluene			94.0		%		70-130	16-FEB-22
trans-1,2-Dichloroethylene			116.3		%		60-130	16-FEB-22
trans-1,3-Dichloropropene			103.2		%		70-130	16-FEB-22
Trichloroethylene			98.6		%		60-130	16-FEB-22
Trichlorofluoromethane			91.8		%		50-140	16-FEB-22
Vinyl chloride			91.6		%		60-140	16-FEB-22
WG3696519-1 MB								
1,1,1,2-Tetrachloroethane			<0.050		ug/g		0.05	16-FEB-22
1,1,2,2-Tetrachloroethane			<0.050		ug/g		0.05	16-FEB-22
1,1,1-Trichloroethane			<0.050		ug/g		0.05	16-FEB-22
1,1,2-Trichloroethane			<0.050		ug/g		0.05	16-FEB-22
1,1-Dichloroethane			<0.050		ug/g		0.05	16-FEB-22
1,1-Dichloroethylene			<0.050		ug/g		0.05	16-FEB-22
1,2-Dibromoethane			<0.050		ug/g		0.05	16-FEB-22
1,2-Dichlorobenzene			<0.050		ug/g		0.05	16-FEB-22
1,2-Dichloroethane			<0.050		ug/g		0.05	16-FEB-22
1,2-Dichloropropane			<0.050		ug/g		0.05	16-FEB-22
1,3-Dichlorobenzene			<0.050		ug/g		0.05	16-FEB-22
1,4-Dichlorobenzene			<0.050		ug/g		0.05	16-FEB-22
Acetone			<0.50		ug/g		0.5	16-FEB-22
Benzene			<0.0068		ug/g		0.0068	16-FEB-22
Bromodichloromethane			<0.050		ug/g		0.05	16-FEB-22
Bromoform			<0.050		ug/g		0.05	16-FEB-22
Bromomethane			<0.050		ug/g		0.05	16-FEB-22

Quality Control Report

Client: RUBICON ENVIRONMENTAL INC.
60 Toronto St
Flesherton ON N0C 1E0
Contact: Paul Rew

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT	**Soil**							
Batch R5726037								
WG3696519-1 MB								
Carbon tetrachloride			<0.050		ug/g		0.05	16-FEB-22
Chlorobenzene			<0.050		ug/g		0.05	16-FEB-22
Chloroform			<0.050		ug/g		0.05	16-FEB-22
cis-1,2-Dichloroethylene			<0.050		ug/g		0.05	16-FEB-22
cis-1,3-Dichloropropene			<0.030		ug/g		0.03	16-FEB-22
Dibromochloromethane			<0.050		ug/g		0.05	16-FEB-22
Dichlorodifluoromethane			<0.050		ug/g		0.05	16-FEB-22
Ethylbenzene			<0.018		ug/g		0.018	16-FEB-22
n-Hexane			<0.050		ug/g		0.05	16-FEB-22
Methylene Chloride			<0.050		ug/g		0.05	16-FEB-22
MTBE			<0.050		ug/g		0.05	16-FEB-22
m+p-Xylenes			<0.030		ug/g		0.03	16-FEB-22
Methyl Ethyl Ketone			<0.50		ug/g		0.5	16-FEB-22
Methyl Isobutyl Ketone			<0.50		ug/g		0.5	16-FEB-22
o-Xylene			<0.020		ug/g		0.02	16-FEB-22
Styrene			<0.050		ug/g		0.05	16-FEB-22
Tetrachloroethylene			<0.050		ug/g		0.05	16-FEB-22
Toluene			<0.080		ug/g		0.08	16-FEB-22
trans-1,2-Dichloroethylene			<0.050		ug/g		0.05	16-FEB-22
trans-1,3-Dichloropropene			<0.030		ug/g		0.03	16-FEB-22
Trichloroethylene			<0.010		ug/g		0.01	16-FEB-22
Trichlorofluoromethane			<0.050		ug/g		0.05	16-FEB-22
Vinyl chloride			<0.020		ug/g		0.02	16-FEB-22
Surrogate: 1,4-Difluorobenzene			116.7		%		50-140	16-FEB-22
Surrogate: 4-Bromofluorobenzene			110.9		%		50-140	16-FEB-22
WG3696519-5 MS		**WG3696519-3**						
1,1,1,2-Tetrachloroethane			105.9		%		50-140	16-FEB-22
1,1,2,2-Tetrachloroethane			95.4		%		50-140	16-FEB-22
1,1,1-Trichloroethane			101.4		%		50-140	16-FEB-22
1,1,2-Trichloroethane			97.8		%		50-140	16-FEB-22
1,1-Dichloroethane			120.1		%		50-140	16-FEB-22
1,1-Dichloroethylene			120.8		%		50-140	16-FEB-22
1,2-Dibromoethane			95.6		%		50-140	16-FEB-22
1,2-Dichlorobenzene			97.8		%		50-140	16-FEB-22

Quality Control Report

Client: RUBICON ENVIRONMENTAL INC.
60 Toronto St
Flesherton ON N0C 1E0
Contact: Paul Rew

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-511-HS-WT	**Soil**							
Batch R5726037								
WG3696519-5 MS		**WG3696519-3**						
1,2-Dichloroethane			106.9		%		50-140	16-FEB-22
1,2-Dichloropropane			111.8		%		50-140	16-FEB-22
1,3-Dichlorobenzene			102.1		%		50-140	16-FEB-22
1,4-Dichlorobenzene			99.7		%		50-140	16-FEB-22
Acetone			105.0		%		50-140	16-FEB-22
Benzene			97.0		%		50-140	16-FEB-22
Bromodichloromethane			110.6		%		50-140	16-FEB-22
Bromoform			105.9		%		50-140	16-FEB-22
Bromomethane			100.3		%		50-140	16-FEB-22
Carbon tetrachloride			114.2		%		50-140	16-FEB-22
Chlorobenzene			98.6		%		50-140	16-FEB-22
Chloroform			108.7		%		50-140	16-FEB-22
cis-1,2-Dichloroethylene			91.8		%		50-140	16-FEB-22
cis-1,3-Dichloropropene			104.5		%		50-140	16-FEB-22
Dibromochloromethane			104.7		%		50-140	16-FEB-22
Dichlorodifluoromethane			124.7		%		50-140	16-FEB-22
Ethylbenzene			99.9		%		50-140	16-FEB-22
n-Hexane			116.0		%		50-140	16-FEB-22
Methylene Chloride			124.8		%		50-140	16-FEB-22
MTBE			101.5		%		50-140	16-FEB-22
m+p-Xylenes			105.4		%		50-140	16-FEB-22
Methyl Ethyl Ketone			95.0		%		50-140	16-FEB-22
Methyl Isobutyl Ketone			86.0		%		50-140	16-FEB-22
o-Xylene			97.7		%		50-140	16-FEB-22
Styrene			89.2		%		50-140	16-FEB-22
Tetrachloroethylene			101.1		%		50-140	16-FEB-22
Toluene			98.5		%		50-140	16-FEB-22
trans-1,2-Dichloroethylene			124.6		%		50-140	16-FEB-22
trans-1,3-Dichloropropene			107.8		%		50-140	16-FEB-22
Trichloroethylene			102.7		%		50-140	16-FEB-22
Trichlorofluoromethane			108.1		%		50-140	16-FEB-22
Vinyl chloride			115.9		%		50-140	16-FEB-22

Quality Control Report

Workorder: L2685287 Report Date: 22-FEB-22

Client: RUBICON ENVIRONMENTAL INC.
60 Toronto St
Flesherton ON N0C 1E0
Contact: Paul Rew

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.
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.

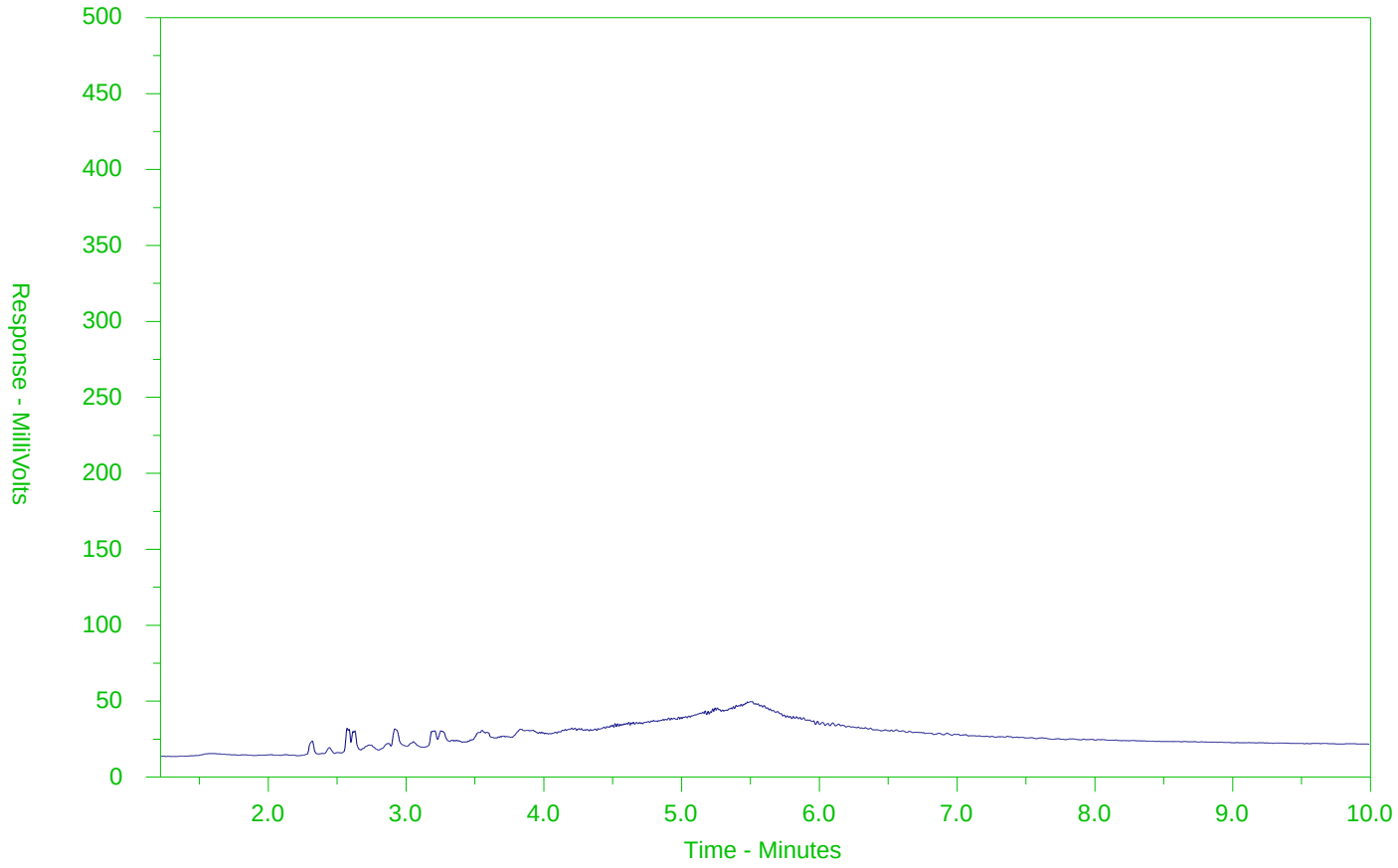
ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where 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: L2685287-1
Client Sample ID: BH1-SS1



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
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.

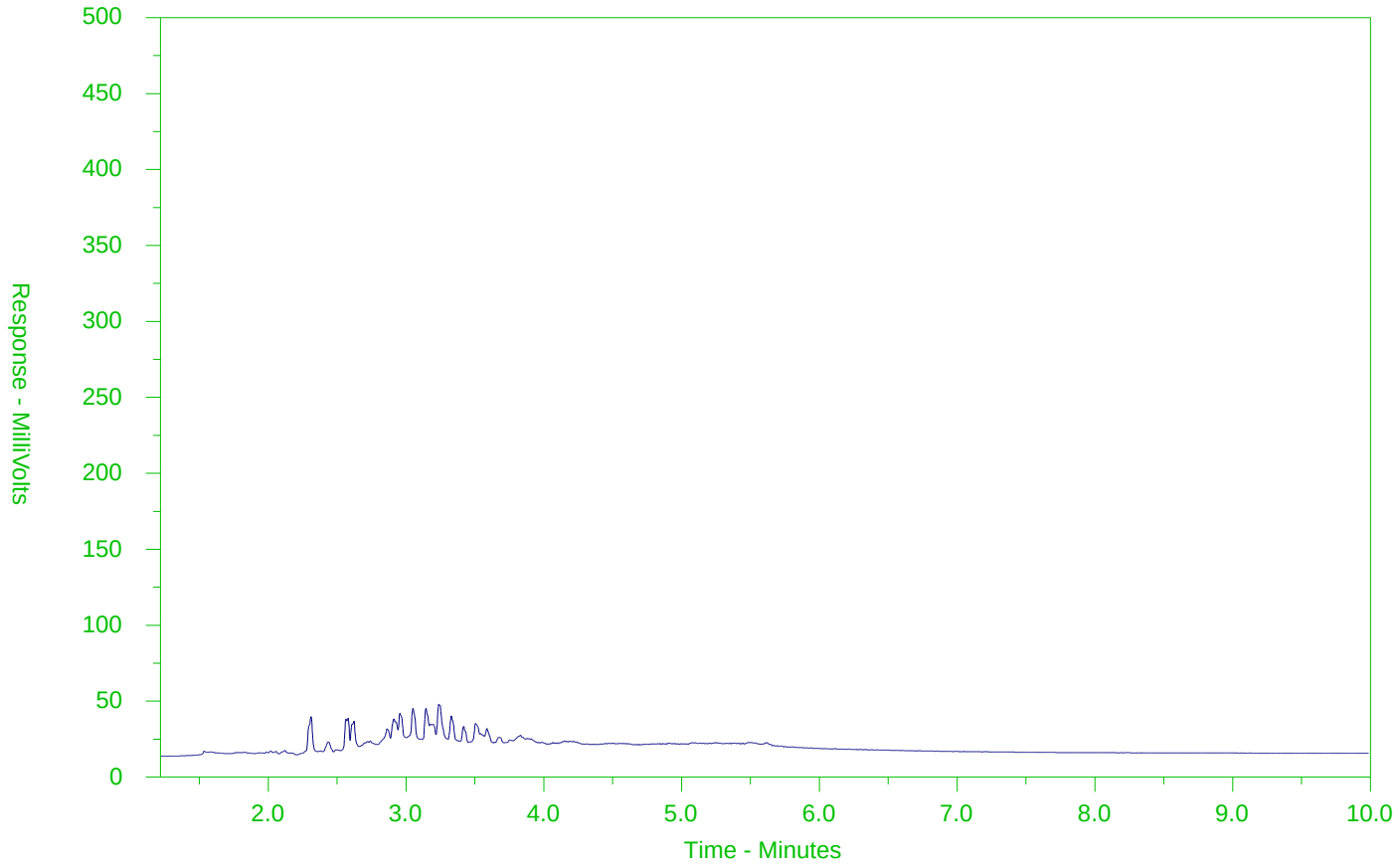
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2685287-2
Client Sample ID: BH3-SS2



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
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.

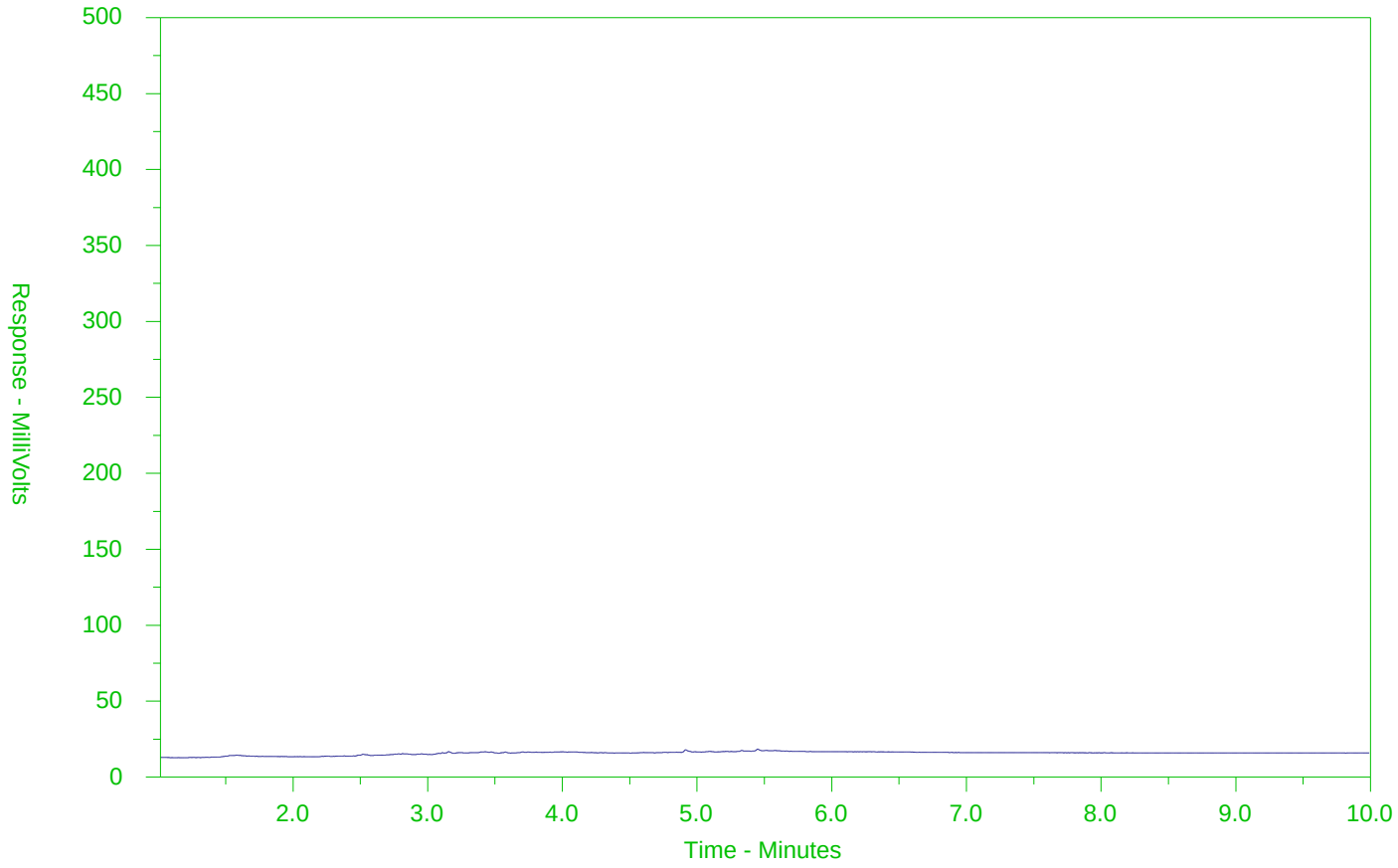
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2685287-3
Client Sample ID: BH4-SS1



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
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.

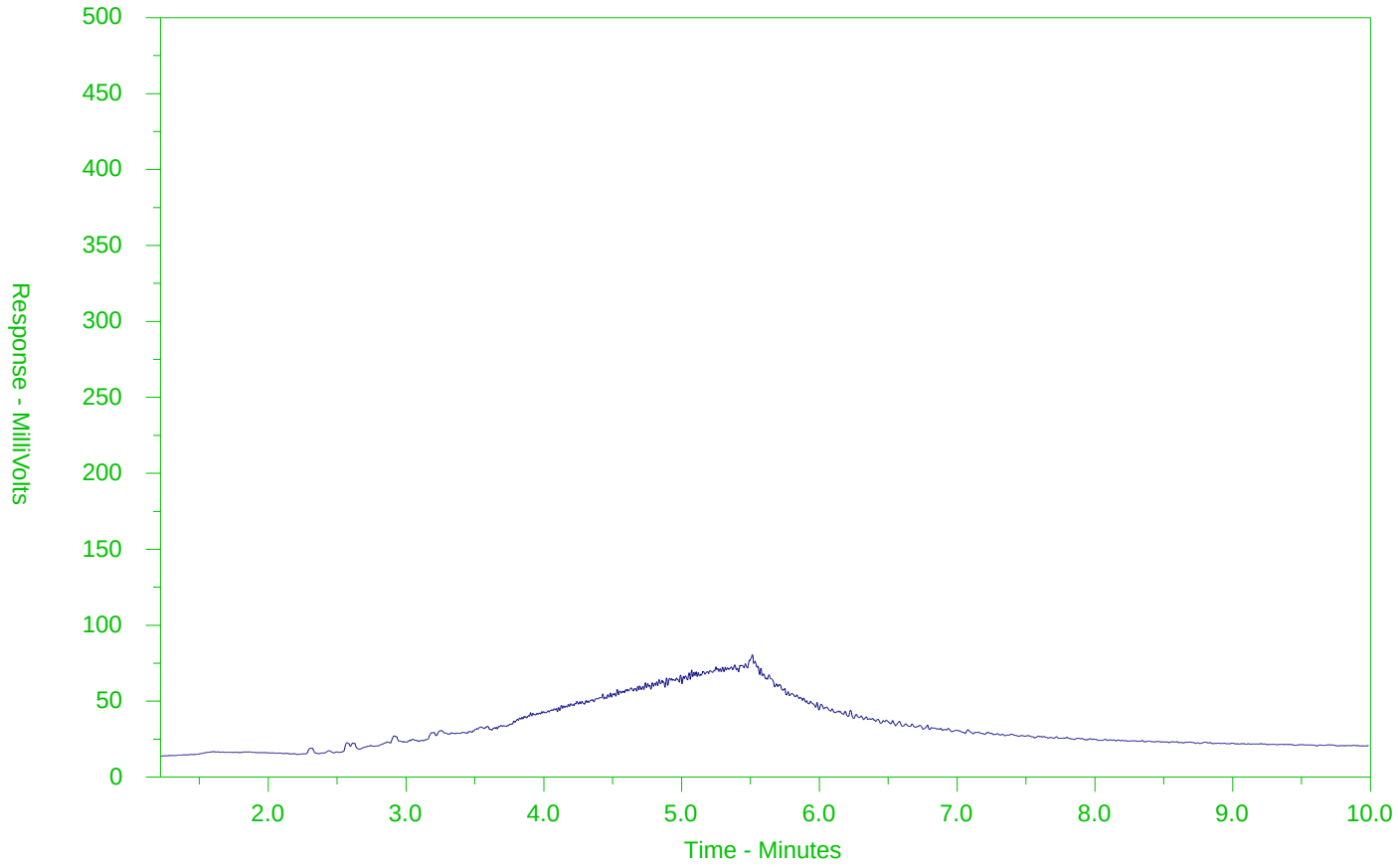
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2685287-4
Client Sample ID: BH5-SS2



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

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

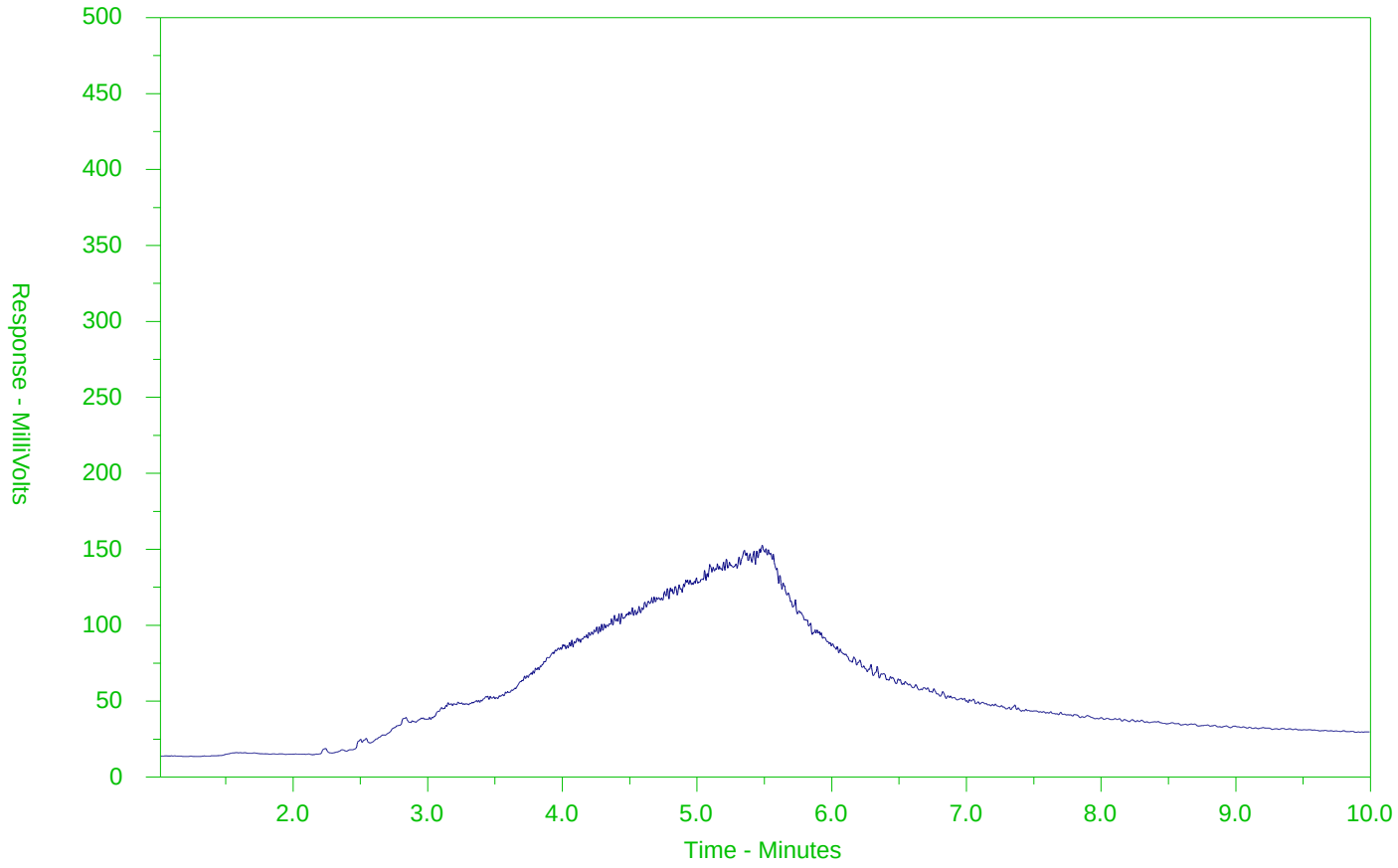
The scale at the bottom of the chromatogram indicates the approximate retention times of common petroleum products and four n-alkane hydrocarbon marker compounds. Retention times may vary between samples, but general patterns and distributions will remain similar.

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: L2685287-5
Client Sample ID: BH5-SS2 DUP



←F2→	←F3→	←F4→	
nC10	nC16	nC34	nC50
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.

Chain of Custody (COC) / Analytical Request Form

COC Number: 20 - 954278

Page of

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

Report To	Contact and company name below will appear on the final report
Company:	Rubicon Environmental (2015) Inc.
Contact:	Paul Rew
Phone:	519-942-7353
Company address below will appear on the final report	
Street:	660 Tycoon Rd
City/Province:	Flesherton ON
Postal Code:	N0C 1E0
Invoice To	Same as Report To ☑ YES ☐ NO
	Copy of Invoice with Report ☑ YES ☐ NO
Company:	
Contact:	

Project Information	
ALS Account # / Quote #	Q61367
Job #	R630498
PO / AFE:	
LSD:	
ALS Lab Work Order # (ALS use only):	

Reports / Recipients	
Select Report Format:	☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)
Merge QC/QCI Reports with COA	☑ YES ☐ NO ☐ N/A
☑ Compare Results to Criteria on Report - provide details below if box checked	
Select Distribution:	☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax	Paul.rew@rubiconenviro.com
Email 2	adamaltieve@rubiconenviro.com
Email 3	

Invoice Recipients	
Select Invoice Distribution:	☑ EMAIL ☐ MAIL ☐ FAX
Email 1 or Fax	admin@rubiconenviro.com
Email 2	Paul.rew@rubiconenviro.com

Oil and Gas Required Fields (client use)			
AFE/Cost Center:		PO#	
Major/Minor Code:		Routing Code:	
Requisitioner:			
Location:			
ALS Contact:	Gayle	Sampler:	

Turnaround Time (TAT) Requested
☑ Routine [R] if received by 3pm M-F - no surcharges apply
☐ 4 day [P4] if received by 3pm M-F - 20% rush surcharge minimum
☐ 3 day [P3] if received by 3pm M-F - 25% rush surcharge minimum
☐ 2 day [P2] if received by 3pm M-F - 50% rush surcharge minimum
☐ 1 day [E] if received by 3pm M-F - 100% rush surcharge minimum
☐ Same day [E2] if received by 10am M-S - 200% rush surcharge. Additional fees may apply to rush requests on weekends, statutory holidays and non-routine tests
Date and Time Required for all E&P TATs:
For all tests with rush TATs requested, please contact your AM to confirm availability

AFFIX ALS BARCODE LABEL HERE (ALS use only)

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (ALS use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	NUMBER OF CONTAINERS: GH, VOCs, PHCs, PAHs, Metals	SAMPLES ON HOLD	EXTENDED STORAGE REQUIRED	SUSPECTED HAZARD (see notes)
	BH1 - SS1	07/02/22	11:00	Soil				
	[redacted]	[redacted]						
	~~BH3 - SS1~~ BH3 - SS2	07/02/22	4:00					
	BH4 - SS1	08/02/22	12:00					
	BH5 - SS2	08/02/22	3:30					
	BH5 - SS2 DUPLICATE	08/02/22	3:30					

Drinking Water (DW) Samples[1] (client use)	Notes / Specify Limits for result evaluation by selecting from drop-down below (Excel COC only)
Are samples taken from a Regulated DW System? ☐ YES ☑ NO	Table 7 Residential
Are samples for human consumption/ use? ☐ YES ☑ NO	

SAMPLE RECEIPT DETAILS (ALS use only)				
Cooling Method:	☐ NONE	☐ ICE	☐ ICE PACKS	☐ FROZEN ☐ COOLING INITIATED
Submission Comments identified on Sample Receipt Notification:	☐ YES	☐ NO		
Cooler Custody Seals Intact:	☐ YES	☐ N/A	Sample Custody Seals Intact:	☐ YES ☐ N/A
INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C	

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (ALS use only)			FINAL SHIPMENT RECEPTION (ALS use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

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**

White Paper Co. 604 951-3800

SOLID TRANSPORT TICKET

ROBERT GOURLAY

Equipment Rentals
Demolition

6431 BANK ST.
METCALFE ON
K0A 2P0

Business: (613) 822-8722
Cellular: (613) 725-7639

ORDER NO:_____ DATE: OCT 24 2022.

NAME: 3N GROUP HOULDING INC

ADDRESS:_____ TEL:_____

DEL. TO:_____

EQUIP. TYPE:_____ NO:_____

DESCRIPTION	QUANTITY
THREE LOADS	3 LOADS
$800.00 + TAX 10%	
$904.00	

TIME STARTED	AM PM	TIME FINISHED	AM PM
TIME STARTED	AM PM	TIME FINISHED	AM PM

WE REGRET WE CANNOT ASSUME RESPONSIBILITY FOR PROPERTY DAMAGE WHEN ASKED TO DELIVER MATERIAL BEYOND THE CURB LINE.

TICKET № 14026

CUSTOMER

OPERATOR

WHITE - OFFICE YELLOW - CUSTOMER PINK - OPERATOR

Upon accepting this receipt, the customer accepts all materials and allows GOURLAY to collect any and all monies owing to GOURLAY at the customer's expense.