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Date Received: 12-MAR-19
Report Date: 19-MAR-19 13:17 (MT)
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Client Phone: 604-521-1025

Certificate of Analysis

Lab Work Order #: L2243040
Project P.O. #: VANCO-0000048466
Job Reference:
C of C Numbers:
Legal Site Desc:

Brent Mack, B.Sc.
Account Manager

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID Description Sampled Date Sampled Time Client ID	L2243040-1 Soil 06-MAR-19 09:00 BA1910-A-1	L2243040-2 Soil 06-MAR-19 09:00 BA1910-A-2	L2243040-3 Soil 06-MAR-19 09:00 BA1910-A-3	L2243040-4 Soil 06-MAR-19 09:00 BA1910-A-4	L2243040-5 Soil 06-MAR-19 09:00 BA1910-A-5	
Grouping	Analyte					
SOIL						
Physical Tests	Moisture (%)	21.0	20.6	21.6	20.9	21.0
	pH (1:2 soil:water) (pH)	11.25	11.17	11.19	11.19	11.23
Metals	Aluminum (Al) (mg/kg)	44600	34100	36700	30900	39400
	Antimony (Sb) (mg/kg)	197	122	129	130	210
	Arsenic (As) (mg/kg)	28.1	22.0	22.0	24.5	29.8
	Barium (Ba) (mg/kg)	564	616	637	493	714
	Beryllium (Be) (mg/kg)	0.39	0.46	0.43	0.48	7.25
	Bismuth (Bi) (mg/kg)	7.91	5.52	5.84	8.50	8.59
	Boron (B) (mg/kg)	193	215	264	239	249
	Cadmium (Cd) (mg/kg)	111	10.0	11.3	102	12.4
	Calcium (Ca) (mg/kg)	143000	130000	124000	124000	145000
	Chromium (Cr) (mg/kg)	131	171	159	134	143
	Cobalt (Co) (mg/kg)	27.0	31.5	21.4	18.7	19.6
	Copper (Cu) (mg/kg)	11700	1280	1860	1450	6380
	Iron (Fe) (mg/kg)	62000	62200	52500	51600	56100
	Lead (Pb) (mg/kg)	1420	943	342	374	1030
	Lithium (Li) (mg/kg)	15.8	16.5	14.6	16.2	19.6
	Magnesium (Mg) (mg/kg)	11300	11200	9530	10100	11500
	Manganese (Mn) (mg/kg)	1100	844	750	716	761
	Mercury (Hg) (mg/kg)	0.113	0.091	0.093	0.097	0.206
	Molybdenum (Mo) (mg/kg)	141	67.7	181	91.7	135
	Nickel (Ni) (mg/kg)	245	101	105	129	110
	Phosphorus (P) (mg/kg)	11800	10300	11200	10600	11000
	Potassium (K) (mg/kg)	4790	5400	4840	5150	5030
	Selenium (Se) (mg/kg)	0.49	0.34	0.37	0.37	0.41
	Silver (Ag) (mg/kg)	4.88	3.24	4.35	3.42	4.88
	Sodium (Na) (mg/kg)	15400	16600	16400	17400	17000
	Strontium (Sr) (mg/kg)	352	271	281	328	331
	Sulfur (S) (mg/kg)	13900	11000	11100	11600	12900
	Thallium (Tl) (mg/kg)	0.070	0.069	0.061	0.065	0.079
	Tin (Sn) (mg/kg)	696	104	106	112	139
	Titanium (Ti) (mg/kg)	739	785	1130	393	920
	Tungsten (W) (mg/kg)	4.30	4.02	4.89	5.26	5.94
	Uranium (U) (mg/kg)	5.80	5.34	5.26	6.04	6.51
	Vanadium (V) (mg/kg)	54.1	49.3	53.3	51.7	55.4
	Zinc (Zn) (mg/kg)	4690	5230	3300	4590	3810
	Zirconium (Zr) (mg/kg)	2.1	1.3	1.6	1.5	1.3

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID Description Sampled Date Sampled Time Client ID		L2243040-6 Soil 06-MAR-19 09:00 BA1910-A-6	L2243040-7 Soil 06-MAR-19 09:00 BA1910-A-7	L2243040-8 Soil 06-MAR-19 09:00 BA1910-A-8	L2243040-9 Soil 06-MAR-19 09:00 BA1910-A-9	L2243040-10 Soil 06-MAR-19 09:00 BA1910-A-10
Grouping	Analyte					
SOIL						
Physical Tests	Moisture (%)	21.4	22.8	22.2	19.1	20.9
	pH (1:2 soil:water) (pH)	11.30	11.26	11.14	11.18	11.15
Metals	Aluminum (Al) (mg/kg)	36000	40600	32000	42200	34800
	Antimony (Sb) (mg/kg)	147	134	132	382	128
	Arsenic (As) (mg/kg)	22.6	21.0	21.7	24.8	20.9
	Barium (Ba) (mg/kg)	716	604	697	655	590
	Beryllium (Be) (mg/kg)	0.50	0.48	0.47	0.50	0.41
	Bismuth (Bi) (mg/kg)	8.83	6.30	11.1	8.19	8.22
	Boron (B) (mg/kg)	255	293	287	279	235
	Cadmium (Cd) (mg/kg)	12.6	10.2	12.1	11.6	11.4
	Calcium (Ca) (mg/kg)	146000	130000	136000	146000	122000
	Chromium (Cr) (mg/kg)	228	124	136	169	128
	Cobalt (Co) (mg/kg)	26.3	49.9	28.6	32.7	22.2
	Copper (Cu) (mg/kg)	2980	1630	16400	4040	2230
	Iron (Fe) (mg/kg)	67500	60500	55800	74300	42600
	Lead (Pb) (mg/kg)	6270	369	668	1830	356
	Lithium (Li) (mg/kg)	19.1	27.2	17.6	19.6	15.2
	Magnesium (Mg) (mg/kg)	10800	10500	10300	10200	9050
	Manganese (Mn) (mg/kg)	1020	804	881	978	640
	Mercury (Hg) (mg/kg)	0.090	0.116	0.095	0.149	0.133
	Molybdenum (Mo) (mg/kg)	149	76.6	86.2	135	111
	Nickel (Ni) (mg/kg)	138	99.1	122	158	100
	Phosphorus (P) (mg/kg)	11100	9930	11800	10700	10700
	Potassium (K) (mg/kg)	5490	4930	5000	5000	4540
	Selenium (Se) (mg/kg)	0.45	0.38	0.40	0.43	0.34
	Silver (Ag) (mg/kg)	5.49	4.93	4.30	4.29	3.27
	Sodium (Na) (mg/kg)	16900	15600	16100	16500	14600
	Strontium (Sr) (mg/kg)	323	295	334	318	279
	Sulfur (S) (mg/kg)	12600	11500	11200	13100	10200
Thallium (Tl) (mg/kg)	0.139	0.073	0.079	0.092	0.062	
Tin (Sn) (mg/kg)	144	150	110	149	116	
Titanium (Ti) (mg/kg)	917	920	556	1030	773	
Tungsten (W) (mg/kg)	9.62	4.74	16.9	7.62	3.79	
Uranium (U) (mg/kg)	6.31	5.76	5.79	6.33	5.11	
Vanadium (V) (mg/kg)	57.4	52.3	50.5	55.5	47.8	
Zinc (Zn) (mg/kg)	7090	3730	3300	4300	2850	
Zirconium (Zr) (mg/kg)	1.2	1.2	1.1	1.4	1.1	

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ALS ENVIRONMENTAL ANALYTICAL REPORT

		Sample ID	L2243040-11	L2243040-12		
		Description	Soil	Soil		
		Sampled Date	06-MAR-19	06-MAR-19		
		Sampled Time	09:00	09:00		
		Client ID	BA1910-A-11	BA1910-A-12		
Grouping	Analyte					
SOIL						
Physical Tests	Moisture (%)	21.3	20.4			
	pH (1:2 soil:water) (pH)	11.15	11.13			
Metals	Aluminum (Al) (mg/kg)	30900	38000			
	Antimony (Sb) (mg/kg)	157	136			
	Arsenic (As) (mg/kg)	36.1	20.2			
	Barium (Ba) (mg/kg)	576	560			
	Beryllium (Be) (mg/kg)	0.51	0.50			
	Bismuth (Bi) (mg/kg)	23.4	13.3			
	Boron (B) (mg/kg)	258	196			
	Cadmium (Cd) (mg/kg)	24.1	11.5			
	Calcium (Ca) (mg/kg)	156000	139000			
	Chromium (Cr) (mg/kg)	172	171			
	Cobalt (Co) (mg/kg)	43.3	44.3			
	Copper (Cu) (mg/kg)	1410	2160			
	Iron (Fe) (mg/kg)	66200	59400			
	Lead (Pb) (mg/kg)	598	459			
	Lithium (Li) (mg/kg)	29.4	16.6			
	Magnesium (Mg) (mg/kg)	11200	9770			
	Manganese (Mn) (mg/kg)	1590	817			
	Mercury (Hg) (mg/kg)	0.155	0.148			
	Molybdenum (Mo) (mg/kg)	4010	89.5			
	Nickel (Ni) (mg/kg)	164	105			
	Phosphorus (P) (mg/kg)	11300	9790			
	Potassium (K) (mg/kg)	5100	4580			
	Selenium (Se) (mg/kg)	0.49	0.39			
	Silver (Ag) (mg/kg)	4.22	3.60			
	Sodium (Na) (mg/kg)	16300	15000			
	Strontium (Sr) (mg/kg)	318	309			
	Sulfur (S) (mg/kg)	14200	10800			
	Thallium (Tl) (mg/kg)	0.095	0.061			
	Tin (Sn) (mg/kg)	156	102			
	Titanium (Ti) (mg/kg)	821	462			
	Tungsten (W) (mg/kg)	5.53	4.91			
	Uranium (U) (mg/kg)	7.05	5.63			
Vanadium (V) (mg/kg)	58.5	47.8				
Zinc (Zn) (mg/kg)	6890	3540				
Zirconium (Zr) (mg/kg)	1.3	1.7				

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

		Sample ID	L2243040-1	L2243040-2	L2243040-3	L2243040-4	L2243040-5
		Description	Soil	Soil	Soil	Soil	Soil
		Sampled Date	06-MAR-19	06-MAR-19	06-MAR-19	06-MAR-19	06-MAR-19
		Sampled Time	09:00	09:00	09:00	09:00	09:00
		Client ID	BA1910-A-1	BA1910-A-2	BA1910-A-3	BA1910-A-4	BA1910-A-5
Grouping	Analyte						
SOIL							
TCLP Metals	1st Preliminary pH (pH)		11.49	11.29	11.27	11.37	11.34
	2nd Preliminary pH (pH)		8.68	8.57	8.10	8.20	8.30
	Final pH (pH)		6.06	6.15	5.98	6.20	6.01
	Extraction Solution Initial pH (pH)		2.92	2.92	2.92	2.92	2.92
	Antimony (Sb)-Leachable (mg/L)		<1.0	<1.0	<1.0	<1.0	<1.0
	Arsenic (As)-Leachable (mg/L)		<1.0	<1.0	<1.0	<1.0	<1.0
	Barium (Ba)-Leachable (mg/L)		<2.5	<2.5	<2.5	<2.5	<2.5
	Beryllium (Be)-Leachable (mg/L)		<0.025	<0.025	<0.025	<0.025	<0.025
	Boron (B)-Leachable (mg/L)		2.02	2.14	2.05	2.10	2.16
	Cadmium (Cd)-Leachable (mg/L)		0.177	0.210	0.202	0.481	0.191
	Calcium (Ca)-Leachable (mg/L)		1790	1950	1930	1830	1940
	Chromium (Cr)-Leachable (mg/L)		<0.25	<0.25	<0.25	<0.25	<0.25
	Cobalt (Co)-Leachable (mg/L)		0.359	0.288	0.268	0.644	0.381
	Copper (Cu)-Leachable (mg/L)		1.03	0.516	0.463	0.567	0.821
	Iron (Fe)-Leachable (mg/L)		<5.0	<5.0	<5.0	<5.0	<5.0
	Lead (Pb)-Leachable (mg/L)		<0.25	<0.25	<0.25	<0.25	<0.25
	Magnesium (Mg)-Leachable (mg/L)		118	123	137	116	113
	Mercury (Hg)-Leachable (mg/L)		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Nickel (Ni)-Leachable (mg/L)		0.92	0.44	0.65	0.43	0.60
	Selenium (Se)-Leachable (mg/L)		<1.0	<1.0	<1.0	<1.0	<1.0
	Silver (Ag)-Leachable (mg/L)		<0.050	<0.050	<0.050	<0.050	<0.050
	Thallium (Tl)-Leachable (mg/L)		<1.0	<1.0	<1.0	<1.0	<1.0
	Vanadium (V)-Leachable (mg/L)		<0.15	<0.15	<0.15	<0.15	<0.15
	Zinc (Zn)-Leachable (mg/L)		33.6	35.1	35.9	33.5	47.7

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

		Sample ID	L2243040-6	L2243040-7	L2243040-8	L2243040-9	L2243040-10
		Description	Soil	Soil	Soil	Soil	Soil
		Sampled Date	06-MAR-19	06-MAR-19	06-MAR-19	06-MAR-19	06-MAR-19
		Sampled Time	09:00	09:00	09:00	09:00	09:00
		Client ID	BA1910-A-6	BA1910-A-7	BA1910-A-8	BA1910-A-9	BA1910-A-10
Grouping	Analyte						
SOIL							
TCLP Metals	1st Preliminary pH (pH)		11.39	11.47	11.43	11.43	11.45
	2nd Preliminary pH (pH)		8.56	8.47	7.98	8.56	8.19
	Final pH (pH)		6.05	6.18	6.06	6.18	6.08
	Extraction Solution Initial pH (pH)		2.92	2.92	2.92	2.92	2.92
	Antimony (Sb)-Leachable (mg/L)		<1.0	<1.0	<1.0	<1.0	<1.0
	Arsenic (As)-Leachable (mg/L)		<1.0	<1.0	<1.0	<1.0	<1.0
	Barium (Ba)-Leachable (mg/L)		<2.5	<2.5	<2.5	<2.5	<2.5
	Beryllium (Be)-Leachable (mg/L)		<0.025	<0.025	<0.025	<0.025	<0.025
	Boron (B)-Leachable (mg/L)		2.14	2.16	2.33	2.17	2.23
	Cadmium (Cd)-Leachable (mg/L)		0.158	0.231	0.170	0.156	0.195
	Calcium (Ca)-Leachable (mg/L)		1930	1970	1850	1940	1940
	Chromium (Cr)-Leachable (mg/L)		<0.25	<0.25	<0.25	<0.25	<0.25
	Cobalt (Co)-Leachable (mg/L)		0.887	0.611	0.670	0.552	0.493
	Copper (Cu)-Leachable (mg/L)		0.505	0.645	1.17	0.733	0.750
	Iron (Fe)-Leachable (mg/L)		<5.0	<5.0	<5.0	<5.0	<5.0
	Lead (Pb)-Leachable (mg/L)		<0.25	<0.25	<0.25	<0.25	<0.25
	Magnesium (Mg)-Leachable (mg/L)		121	126	115	120	129
	Mercury (Hg)-Leachable (mg/L)		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Nickel (Ni)-Leachable (mg/L)		0.53	0.51	0.57	0.52	0.51
	Selenium (Se)-Leachable (mg/L)		<1.0	<1.0	<1.0	<1.0	<1.0
	Silver (Ag)-Leachable (mg/L)		<0.050	<0.050	<0.050	<0.050	<0.050
	Thallium (Tl)-Leachable (mg/L)		<1.0	<1.0	<1.0	<1.0	<1.0
	Vanadium (V)-Leachable (mg/L)		<0.15	<0.15	<0.15	<0.15	<0.15
	Zinc (Zn)-Leachable (mg/L)		38.2	36.3	39.9	29.4	35.4

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID Description Sampled Date Sampled Time Client ID	L2243040-11 Soil 06-MAR-19 09:00 BA1910-A-11	L2243040-12 Soil 06-MAR-19 09:00 BA1910-A-12		
Grouping	Analyte				
SOIL					
TCLP Metals	1st Preliminary pH (pH)	11.33	11.35		
	2nd Preliminary pH (pH)	8.14	7.98		
	Final pH (pH)	5.97	6.00		
	Extraction Solution Initial pH (pH)	2.92	2.92		
	Antimony (Sb)-Leachable (mg/L)	<1.0	<1.0		
	Arsenic (As)-Leachable (mg/L)	<1.0	<1.0		
	Barium (Ba)-Leachable (mg/L)	<2.5	<2.5		
	Beryllium (Be)-Leachable (mg/L)	<0.025	<0.025		
	Boron (B)-Leachable (mg/L)	2.11	2.23		
	Cadmium (Cd)-Leachable (mg/L)	0.170	0.318		
	Calcium (Ca)-Leachable (mg/L)	1800	1890		
	Chromium (Cr)-Leachable (mg/L)	<0.25	<0.25		
	Cobalt (Co)-Leachable (mg/L)	0.548	1.09		
	Copper (Cu)-Leachable (mg/L)	0.960	0.612		
	Iron (Fe)-Leachable (mg/L)	<5.0	<5.0		
	Lead (Pb)-Leachable (mg/L)	<0.25	<0.25		
	Magnesium (Mg)-Leachable (mg/L)	115	114		
	Mercury (Hg)-Leachable (mg/L)	<0.0010	<0.0010		
	Nickel (Ni)-Leachable (mg/L)	0.45	1.29		
	Selenium (Se)-Leachable (mg/L)	<1.0	<1.0		
	Silver (Ag)-Leachable (mg/L)	<0.050	<0.050		
	Thallium (Tl)-Leachable (mg/L)	<1.0	<1.0		
	Vanadium (V)-Leachable (mg/L)	<0.15	<0.15		
	Zinc (Zn)-Leachable (mg/L)	50.5	55.7		

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

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Duplicate	Arsenic (As)	DUP-H	L2243040-1
Duplicate	Copper (Cu)	DUP-H	L2243040-10, -11, -12, -2, -3, -4, -5, -6, -7, -8, -9
Duplicate	Lead (Pb)	DUP-H	L2243040-10, -11, -12, -2, -3, -4, -5, -6, -7, -8, -9
Duplicate	Nickel (Ni)	DUP-H	L2243040-10, -11, -12, -2, -3, -4, -5, -6, -7, -8, -9
Duplicate	Tungsten (W)	DUP-H	L2243040-10, -11, -12, -2, -3, -4, -5, -6, -7, -8, -9
Certified Reference Material	Silver (Ag)	MES	L2243040-1
Matrix Spike	Cadmium (Cd)-Leachable	MS-B	L2243040-1, -10, -11, -12, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Leachable	MS-B	L2243040-1, -10, -11, -12, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Cobalt (Co)-Leachable	MS-B	L2243040-1, -10, -11, -12, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Zinc (Zn)-Leachable	MS-B	L2243040-1, -10, -11, -12, -2, -3, -4, -5, -6, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
DUP-H	Duplicate results outside ALS DQO, due to sample heterogeneity.
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).
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-200.2-CVAF-VA	Soil	Mercury in Soil by CVAAS	EPA 200.2/1631E (mod)
Soil samples are digested with hot nitric and hydrochloric acids, followed by CVAAS analysis. This method is fully compliant with the BC SALM strong acid leachable metals digestion method.			
HG-TCLP-CVAFS-VA	Soil	Mercury by CVAAS (TCLP)	EPA 1311/245.7
This analysis is carried out in accordance with the extraction procedure outlined in "Test Methods for Evaluating Solid Waste - Physical/Chemical Methods Volume 1C" SW-846 EPA Method 1311, published by the United States Environmental Protection Agency (EPA). In summary, the sample is extracted at a 20:1 liquid to solids ratio for 16 to 20 hours using either extraction fluid #1 (glacial acetic acid, water and sodium hydroxide) or extraction fluid #2 (glacial acetic acid), depending on the pH of the original sample. The extract is then filtered through a 0.6 to 0.8 micron glass fibre filter and analysed using atomic absorption spectrophotometry (EPA 245.7).			
MET-200.2-CCMS-VA	Soil	Metals in Soil by CRC ICPMS	EPA 200.2/6020A (mod)
Soil/sediment is dried, disaggregated, and sieved (2 mm). 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, V, W, and Zr. Elemental Sulfur may be poorly recovered by this method. Volatile forms of sulfur (e.g. sulfide, H ₂ S) may be excluded if lost during sampling, storage, or digestion.			
MET-TCLP-CCMS-VA	Soil	Metals by ICPMS (TCLP)	EPA 1311/6020A
This analysis is carried out in accordance with the extraction procedure outlined in "Test Methods for Evaluating Solid Waste - Physical/Chemical Methods Volume 1C" SW-846 EPA Method 1311, published by the United States Environmental Protection Agency (EPA). In summary, the sample is extracted at a 20:1 liquid to solids ratio for 16 to 20 hours using either extraction fluid #1 (glacial acetic acid, water and sodium hydroxide) or extraction fluid #2 (glacial acetic acid), depending on the pH of the original sample. The extract is then filtered through a 0.6 to 0.8 micron glass fibre filter. Instrumental analysis of the digested extract is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).			
MOISTURE-VA	Soil	Moisture content	CCME PHC in Soil - Tier 1 (mod)
This analysis is carried out gravimetrically by drying the sample at 105 C for a minimum of two hours.			
PH-1:2-VA	Soil	pH in Soil (1:2 Soil:Water Extraction)	BC WLAP METHOD: PH, ELECTROMETRIC, SOIL
This analysis is carried out in accordance with procedures described in the pH, Electrometric in Soil and Sediment method - Section B Physical/Inorganic and Misc. Constituents, BC Environmental Laboratory Manual 2007. The procedure involves mixing the dried (at <60°C) and sieved (No. 10 / 2mm) sample with deionized/distilled water at a 1:2 ratio of sediment to water. The pH of the solution is then measured using a standard pH probe.			

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

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
VA	ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Reference Information

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

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 of sample.

mg/L - milligrams per litre.

< - Less than.

D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).

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.



L2243040-COFC

COC # _____

Page ____ of ____

Report To		Report		Service Requested (Rush for routine analysis subject to availability)		
Company:	Covanta Energy	<input type="checkbox"/> Standard	<input type="checkbox"/> Other	<input checked="" type="radio"/> Regular (Standard Turnaround Times - Business Days)		
Contact:	Steve McKinney / Dan Skrypnik	<input checked="" type="checkbox"/> PDF	<input type="checkbox"/> Excel	<input type="checkbox"/> Digital	<input type="checkbox"/> Fax	
Address:	5150 Riverbend Drive Burnaby BC	Email 1:	smckinney@covanta.com		<input type="checkbox"/> Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT	
Phone:	604-521-1025	Email 2:	rjohnson4@covanta.com		<input type="checkbox"/> Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT	
	<input type="checkbox"/> Yes <input type="checkbox"/> No	Email 3:	dskrypnik@covanta.com		<input type="checkbox"/> Same Day or Weekend Emergency - Contact ALS to Confirm TAT	
			brent.kirkpatrick@metrovancover.org		Analysis Request	
			Sarah.Wellman@metrovancover.org			

Invoice To Same as Report? <input type="checkbox"/> Yes <input type="checkbox"/> No		Client / Project Information		Please indicate below Filtered, Preserved or both (F, P, F/P)							
Hardcopy of Invoice with Report? <input type="checkbox"/> Yes <input type="checkbox"/> No		Job #:									
Company:		PO / AFE: PO# 46693 Weekly Bottom Ash - Suite									
Contact:		LSD: (includes 2:1 pH)									
Address:		Quote #:									
Phone:											

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	MET-TCLP-VA (all metals, Hg)	MOISTURE	Chrome 6	MET-CSR+FULL-VA (all metals)	Number of Containers
BA1910-A-1		06-Mar-19	9:00	Soil	X	X		X	1
BA1910-A-2		06-Mar-19	9:00	Soil	X	X		X	1
BA1910-A-3		06-Mar-19	9:00	Soil	X	X		X	1
BA1910-A-4		06-Mar-19	9:00	Soil	X	X		X	1
BA1910-A-5		06-Mar-19	9:00	Soil	X	X		X	1
BA1910-A-6		06-Mar-19	9:00	Soil	X	X		X	1
BA1910-A-7		06-Mar-19	9:00	Soil	X	X		X	1
BA1910-A-8		06-Mar-19	9:00	Soil	X	X		X	1
BA1910-A-9		06-Mar-19	9:00	Soil	X	X		X	1
BA1910-A-10		06-Mar-19	9:00	Soil	X	X		X	1
BA1910-A-11		06-Mar-19	9:00	Soil	X	X		X	1
BA1910-A-12		06-Mar-19	9:00	Soil	X	X		X	1

Special Instructions / Regulations with water or land use (GCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

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 provided on a separate Excel tab.
 Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations:
<i>[Signature]</i>	12-Mar-19	08:00	HA	3/12	11:45am	21 °C				Yes / No ? If Yes add SIF