OBED MOUNTAIN MINE
TABLE 2 SOIL/SEDIMENT CHEMISTRY

	Unit	MDL	Location	SOIL001		SOIL002		SOIL003		SOIL004			SOIL005			SOIL006		
			Date	8-Nov-13		8-Nov-13		8-Nov-13		8-Nov-13			8-Nov-13			8-Nov-13		
			Soil/Sediment	Soil	Soil	Soil	Soil	Sedment	Soil	Sediment	Sediment	Soil	Sediment	Soil	Soil	Sediment	Soil	Soil
Hydrocarbons																		
F2 (C10-C16 Hydrocarbons)	mg/kg	20		<20	<20	<20	<20	<20	<20	<20	<20	<44	<49	<20	<20	<112	<20	<20
Total Hydrocarbons (C6-C50)	mg/kg	20		52	95	64	<20	52	27	142	<20	109	859	<20	<20	310	47	<20
Chrom. to baseline at nC50	-			1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
TEH: (C16-C34)	mg/kg	20		52	74	43	<20	52	27	114	<20	109	524	<20	<20	161	25	<20
TEH: (C34-C50)	mg/kg	20		<20	21	21	<20	<20	<20	28	<20	<44	335	<20	<20	152	22	<20
TVH	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<30	<30	<10	<10	<80	<20	<10
TVH: (C6-C10 / BTEX CORRECTED)	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<30	<30	<10	<10	<80	<20	<10
Leachable Metals																		
Barium	mg/kg	5		53.3	38.5	62.5	64.2	36.5	55	47.6	34.3	69.5	111	32.1	45.4	67	40.1	44.4
Boron (B), Hot Water Ext.	mg/kg	0.1		0.36	0.53	<0.1	<0.1	0.59	0.39	1.14	0.56	0.16	0.58	0.12	<0.2	0.61	0.65	0.38
Metals																		
Aluminium	mg/kg	50		9920	8640	11,800	12,400	5540	7150	5600	6840	12,300	3390	11,500	11,900	1200	10,800	8900
Antimony	mg/kg	0.1		0.57	0.4	0.61	0.74	0.24	0.3	0.33	0.26	0.25	0.15	0.31	0.36	0.19	0.26	0.29
Arsenic	mg/kg	0.1		7.94	7.48	7.88	8.29	5.91	5.28	5.89	5.79	3.24	2.27	6.16	7.12	1.26	7.71	6.72
Barium	mg/kg	0.5		233	222	232	327	276	221	346	193	257	287	130	152	140	164	123
Beryllium	mg/kg	0.2		0.65	0.59	0.68	0.77	0.34	0.35	0.49	0.36	0.42	<0.2	0.41	0.53	<0.2	0.45	0.39
Bismuth	mg/kg	0.2		<0.2	<0.2	0.21	0.24	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	mg/kg	0.1		0.29	0.21	0.29	0.33	0.27	0.35	0.17	0.19	0.41	0.28	0.23	0.16	1	0.48	0.37
Calcium	mg/kg	100		8150	6610	7770	7820	11,400	13,000	9010	7020	14,000	18,700	7790	5380	27,600	8460	5430
Chromium (III+VI)	mg/kg	0.5		17.8	15.2	24.6	26.1	9.57	12.3	8.62	11.4	17.1	4.94	15.4	16.1	1.71	16.4	13.5
Cobalt	mg/kg	0.1		9.71	7.43	13	13.2	5.82	6.26	5.56	7.52	5.53	2.47	6.66	7.01	1.05	5.31	5.76
Copper	mg/kg	0.5		20.8	17.7	28.1	31.5	9.88	12	8.59	8.14	11.9	10.2	11.1	13.1	6.91	12.3	12.9
Iron	mg/kg	50		19,200	16,200	23,200	29,300	12,400	14,200	9540	13,200	13,600	5530	16,900	17,400	2270	18,300	15,400
Lead	mg/kg	0.5		11.5	10.7	13.2	13.7	7.2	7.19	8.42	7.33	8.22	5.84	9.59	10.5	3.43	7.83	7.74
Lithium	mg/kg	0.5		10.3	9.21	12.5	12	7.14	7.22	4.95	6.94	10.7	2.82	6.97	8.14	0.69	8.22	6.06
Magnesium	mg/kg	20		4190	3730	5200	5490	3200	3560	2700	3310	4240	2440	3490	3490	2890	3600	2930
Manganese	mg/kg	1		499	328	626	901	467	524	364	462	573	474	353	350	171	614	266
Mercury	mg/kg	0.005		0.0495	0.0528	0.0621	0.0817	0.0401	0.0312	0.0388	0.0284	0.0583	0.0992	0.0289	0.0314	0.0534	0.0476	0.0369
Molybdenum	mg/kg	0.1		1.06	1.01	1.2	1.69	0.69	0.73	1.13	0.69	0.67	0.48	0.61	0.59	1.45	0.57	0.55
Nickel	mg/kg	0.5		27.6	23.3	37.4	40.4	15.4	17.8	13.4	16.6	17.6	7.51	16.2	19.9	4.84	19.7	19.5
Phosphorus	mg/kg	50		573	517	736	795	498	604	335	385	728	823	468	415	646	589	492
Potassium	mg/kg	50		816	879	980	1070	505	711	417	493	822	734	806	676	403	727	616
Selenium	mg/kg	0.2		0.4	0.29	0.4	0.52	0.26	0.32	0.39	0.24	0.58	0.25	<0.2	<0.2	<0.2	0.21	<0.2
Silver	mg/kg	0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Sodium	mg/kg	100		<100	<100	<100	<100	240	200	480	250	180	380	<100	<100	110	<100	<100
Strontium	mg/kg	1		53.9	53.2	33.4	39.3	78.6	75.7	110	60.1	104	94.4	21.5	17.3	215	84.2	64
Thallium	mg/kg	0.05		0.179	0.213	0.193	0.222	0.109	0.106	0.143	0.105	0.128	0.067	0.138	0.148	<0.05	0.148	0.131
Tin	mg/kg	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Titanium	mg/kg	1		76.8	83.2	59.3	65	53.9	55.9	213	109	43.6	36.4	49.8	41.8	11	41.6	46.8
Uranium	mg/kg	0.05		1.53	1.57	1.39	1.52	1.03	1.02	1.66	0.963	2.44	0.641	0.911	0.76	2.13	1.01	0.888
Vanadium	mg/kg	0.2		26.4	21.3	33.3	38.1	15	18.6	17.2	18.9	22.5	7.71	25.3	25.2	3.77	22.4	21.5
Zinc	mg/kg	5		68.1	59.8	84.8	94.3	59.7	66.2	37.4	38.1	62.7	81.9	49.2	44.1	18.8	50	42.3
Organic / Inorganic Carbon																		
Carbon	mg/kg	0.1		7.51	7.05	1.47	1.06	4.35	3.94	12.2	5.38	6.38	29.7	4.11	2.18	34.7	5.18	2.01
CaCO3 Equivalent	%	0.8		0.98	<0.8	1.43	1.2	1.42	1.66	1.57	1.29	<0.8	0.89	<0.8	<0.8	0.92	<0.8	<0.8
Inorganic Carbon	mg/kg	0.1		0.12	<0.1	0.17	0.14	0.17	0.2	0.19	0.15	<0.1	0.11	<0.1	<0.1	0.11	<0.1	<0.1
Total Carbon by Combustion	%	0.1		7.6	7.1	1.6	1.2	4.5	4.1	12.4	5.5	6.4	29.8	4.1	2.2	34.8	5.2	2
Particle Size																		
% clay by hydrometer	% by weight	0.1		20.9	19.1	22.6	24.2	10.1	12	9.2	8.2	19.1	23.1	20.9	23	10.6	20.9	15.7
Sand % Texture	% by weight	0.1		53.2	54	44	37.6	72	71	73.4	78	46	8.9	46	50	5.35	45	64
Silt % Texture	% by weight	0.1		25.9	26.9	33.4	38.2	17.9	17	17.4	13.8	34.9	68	33.1	27	84	34.1	20.3
Physical Tests																		
CaCO3 Equivalent	%	0.7		1.3	0.77	1.06	1.26	2.29	2.93	1.99	1.59	2.11	2.56	1.06	<0.7	3.18	1.16	0.89
Moisture	%	0.1		19.1	18.4	19.5	17.6	26	32.6	38.6	25.6	66.4	69.1	28.8	18.6	86.3	44.8	30.2

MDL Method Detection Limit
'<' Non Detect. Concentration below MDL.

OBED MOUNTAIN MINE
TABLE 2 SOIL/SEDIMENT CHEMISTRY

	Unit	MDL	Location	SOIL001		SOIL002		SOIL003		SOIL004			SOIL005			SOIL006		
			Date	8-Nov-13		8-Nov-13		8-Nov-13		8-Nov-13			8-Nov-13			8-Nov-13		
			Soil/Sediment	Soil	Soil	Soil	Soil	Sedment	Soil	Sediment	Sediment	Soil	Sediment	Soil	Soil	Sediment	Soil	Soil
Polycyclic Aromatic Hydrocarbons																		
Benzo[b+j]fluoranthene	mg/kg	0.005		0.0158	0.0162	0.0218	0.0189	<0.005	0.0259	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.01	<0.005	<0.005
C4 Benzanthracenes/Chrysenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<4	<0.04	<0.04	<0.08	<0.04	<0.04
C4 Dibenzothiophenes	mg/kg	0.04		0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.107	<0.04	<0.04	<4	<0.04	<0.04	<0.08	<0.04	<0.04
C4 Fluoranthenes/Pyrenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.123	<0.04	<0.04	<4	<0.04	<0.04	<0.08	<0.04	<0.04
C4 Naphthalenes	mg/kg	0.04		0.382	0.398	0.091	0.062	0.158	0.319	2.53	0.148	0.105	1.95	<0.04	<0.04	<0.08	<0.04	<0.04
C4 Phenanthrenes/Anthracenes	mg/kg	0.04		<0.4	<0.4	<0.4	0.343	1.33	3.09	21.3	<0.4	0.416	<4	<0.04	<0.04	0.442	<0.04	0.06
1,1-Biphenyl	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.023	<0.01	<0.01	<0.1	<0.01	<0.01	<0.02	<0.01	<0.01
1-Methylnaphthalene	mg/kg	0.01		0.058	0.067	0.022	0.019	0.026	0.062	0.457	0.024	0.02	0.57	<0.01	<0.01	<0.02	<0.01	<0.01
2-methylnaphthalene	mg/kg	0.005		0.0358	0.045	0.0103	0.0088	0.0168	0.0358	0.292	0.0156	0.0144	0.433	<0.005	<0.005	0.013	<0.005	<0.005
Acenaphthene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0412	<0.005	<0.005	<0.05	<0.005	<0.005	<0.01	<0.005	<0.005
Acenaphthylene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.01	<0.005	<0.005
Anthracene	mg/kg	0.004		<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.04	<0.004	<0.004	<0.01	<0.004	<0.004
Benz(a)anthracene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.01	<0.005	<0.005
Benzo(a) pyrene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.01	<0.005	<0.005
Acridine	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0137	<0.005	<0.005	<0.05	<0.005	<0.005	<0.01	<0.005	<0.005
Benzo(e)pyrene	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.02	<0.01	<0.01
Benzo(g,h,i)perylene	mg/kg	0.005		0.0088	0.0082	0.0072	0.0082	<0.005	0.009	0.0102	<0.005	<0.005	<0.5	<0.005	<0.005	<0.01	<0.005	<0.005
Benzo(k)fluoranthene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.01	<0.005	<0.005
C1 Acenaphthenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.123	<0.04	<0.04	<0.4	<0.04	<0.04	<0.08	<0.04	<0.04
C1 Benz(a)Anthracenes/Chrysenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.058	<0.04	<0.04	<4	<0.04	<0.04	<0.08	<0.04	<0.04
C1 Benzofluoranthenes/Benzopyrenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<4	<0.04	<0.04	<0.08	<0.04	<0.04
C1 Biphenyls	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.4	<0.04	<0.04	<0.08	<0.04	<0.04
C1 Dibenzothiophenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.177	<0.04	<0.04	<4	<0.04	<0.04	<0.08	<0.04	<0.04
Chrysene	mg/kg	0.005		0.008	0.0067	0.0063	0.0064	<0.005	0.0083	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.01	<0.005	<0.005
C1 Fluoranthenes/Pyrenes	mg/kg	0.04		0.065	0.06	<0.04	<0.04	<0.04	0.08	0.397	<0.04	<0.04	<4	<0.04	<0.04	<0.08	<0.04	<0.04
C1 Fluorenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.155	<0.04	<0.04	<0.4	<0.04	<0.04	<0.08	<0.04	<0.04
C1 Phenanthrenes/Anthracenes	mg/kg	0.04		0.091	0.071	<0.04	<0.04	<0.04	0.08	0.492	<0.04	<0.04	<4	<0.04	<0.04	<0.08	<0.04	<0.04
Dibenz(a,h)anthracene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	<0.005	<0.005	<0.01	<0.005	<0.005
Fluoranthene	mg/kg	0.005		0.0323	0.0277	0.0157	0.0135	0.0102	0.0347	0.133	0.0103	0.0074	<0.5	<0.005	<0.005	<0.01	<0.005	<0.005
Fluorene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	0.0068	<0.005	0.12	0.0064	0.0051	0.118	<0.005	<0.005	<0.01	<0.005	<0.005
Indeno(1,2,3-c,d)pyrene	mg/kg	0.005		0.0089	0.0083	0.0072	0.0072	<0.005	0.011	0.0155	<0.005	<0.005	<0.5	<0.005	<0.005	<0.01	<0.005	<0.005
Naphthalene	mg/kg	0.005		0.0176	0.0278	0.0068	<0.005	0.0101	0.0186	0.142	0.0082	0.0088	<0.01	<0.005	<0.005	<0.01	<0.005	<0.005
Perylene	mg/kg	0.01		0.059	0.063	0.075	0.07	0.015	0.107	0.104	0.016	0.02	<1	<0.01	<0.01	<0.02	<0.01	<0.01
Phenanthrene	mg/kg	0.005		0.0321	0.0286	0.0143	0.0121	0.0122	0.0313	0.175	0.0116	0.0124	0.163	<0.005	<0.005	0.012	<0.005	<0.005
Pyrene	mg/kg	0.005		0.0402	0.0356	0.0275	0.0262	0.0108	0.0495	0.124	0.0106	0.0085	<0.5	<0.005	<0.005	<0.01	<0.005	<0.005
Quinoline	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.05	<0.005	<0.005	<0.01	<0.005	<0.005
C2 Benzofluoranthenes/Benzopyrenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<4	<0.04	<0.04	<0.08	<0.04	<0.04
C2 Biphenyls	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.071	<0.04	<0.04	<0.4	<0.04	<0.04	<0.08	<0.04	<0.04
C2 Dibenzothiophenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.114	<0.04	<0.04	<4	<0.04	<0.04	<0.08	<0.04	<0.04
C2 Fluoranthenes/Pyrenes	mg/kg	0.04		<0.04	0.047	<0.04	<0.04	<0.04	0.056	0.181	<0.04	<0.04	<4	<0.04	<0.04	<0.08	<0.04	<0.04
C2 Naphthalenes	mg/kg	0.04		0.263	0.276	0.09	0.076	0.117	0.246	1.93	0.112	0.092	2.6	<0.04	<0.04	<0.08	<0.04	<0.04
C2 Phenanthrenes/Anthracenes	mg/kg	0.04		0.12	0.1	<0.04	<0.04	0.057	0.115	0.737	0.047	0.047	<4	<0.04	<0.04	<0.08	<0.04	<0.04
C2 Fluorenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.233	<0.04	<0.04	<0.4	<0.04	<0.04	<0.08	<0.04	<0.04
C2 subd B(a)A/chrysene	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.057	<0.04	<0.04	<4	<0.04	<0.04	<0.08	<0.04	<0.04
C3 Benzanthracenes/Chrysenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.111	<0.04	<0.04	<4	<0.04	<0.04	<0.08	<0.04	<0.04
C3 Dibenzothiophenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.123	<0.04	<0.04	<4	<0.04	<0.04	<0.08	<0.04	<0.04
C3 Fluoranthenes/Pyrenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.095	<0.04	<0.04	<4	<0.04	<0.04	<0.08	<0.04	<0.04
C3 Fluorenes	mg/kg	0.04		0.045	<0.04	<0.04	<0.04	<0.04	<0.04	0.226	<0.04	0.045	<0.4	<0.04	<0.04	<0.08	<0.04	<0.04
C3 Naphthalenes	mg/kg	0.04		0.399	0.411	0.096	0.078	0.158	0.33	2.73	0.152	0.111	3.4	<0.04	<0.04	0.096	<0.04	<0.04
C3 Phenanthrenes/Anthracenes	mg/kg	0.04		0.093	0.061	0.558	<0.04	0.227	0.516	2.85	0.23	0.137	<4	<0.04	<0.04	<0.08	<0.04	<0.04
Saturated Paste Extractables																		
Calcium	mg/kg	5		90.5	63.6	93.2	62.9	94.5	94.3	86.6	71.7	61.7	70	52.1	43.3	60.8	39.8	38.8
Saturation Percentage	%	1		51.1	55.3	52.2	44.6	63.3	75.6	50.8	38.7	177	430	59.8	49.8	605	77.3	40.4
Electrical Conductivity (lab)	dS/m	0.01		0.54	0.435	0.589	0.399	0.889	0.727	1.14	0.936	0.51	0.555	0.366	0.241	0.444	0.257	0.325
Magnesium	mg/kg	3		15.5	12.3	15.5	13.4	19.2	18.4	18.1	14.7	14.4	13.1	11	8.2	16.6	10.6	10.8
pH (Lab)	pH	0.1		7.02	6.98	7.21	7.42	7.45	7.56	7.42	7.39	7.33	6.7	6.82	6.77	7.64	6.99	7.17
Potassium	mg/kg	2		7.7	11.9	8.7	4.8	15.2	15.1	7.1	5.9	8.1	33.9	3.4	3.7	27.6	3	2.8
Sodium	mg/kg	2		10.4	10.1	20.6	9.6	101	67.9	180	162	32.3	41.3	13.1	7.6	13.8	10.8	10.8
Sodium Adsorption Ratio	---	0.1		0.27	0.3	0.52	0.29	2.48	1.67	4.6	4.57	0.96	1.19	0.43	0.28	0.41	0.39	0.4
Speciated Metals																		
Chromium (hexavalent)	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.15	<1.5	<0.1	<0.1	<0.3	<0.1	0.11
Volatile Organic Compounds																		
Benzene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0058	<0.005	<0.015	<0.015	<0.005	<0.005	<0.04	<0.01	<0.005
Toluene	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.15	<0.15	<0.05	<0.05	<0.4	<0.1	<0.05
Ethylbenzene	mg/kg	0.01		<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.045	<0.045	<0.015	<0.015	<0.12	<0.03	<0.015
Xylene (m & p)	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.15	<0.15	<0.05	<0.05	<0.4	<0.1	<0.05
Xylene (o)	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.15	<0.15	<0.05	<0.05	<0.4	<0.1	<0.05
Xylenes Total	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.3	<0.3	<0.1	<0.1	<0.8	<0.2	<0.1

MDL Method Detection Limit
'<' Non Detect. Concentration below MDL.

OBED MOUNTAIN MINE
TABLE 2 SOIL/SEDIMENT CHEMISTRY

	Unit	MDL	Location	SOIL007		SOIL008			SOIL009		SOIL010		
			Date	8-Nov-13		8-Nov-13			8-Nov-13		8-Nov-13		
			Soil/Sediment	Sediment	Soil	Sediment	Soil	Soil	Sediment	Soil	Soil	Soil	Soil
Hydrocarbons													
F2 (C10-C16 Hydrocarbons)	mg/kg	20		<42	<20	<20	<20	<20	<29	<20	<20	<20	<20
Total Hydrocarbons (C6-C50)	mg/kg	20		111	<20	108	64	<20	166	<20	43	<20	<20
Chrom. to baseline at nC50	-			1	1	1	1	1	1	1	1	1	1
TEH: (C16-C34)	mg/kg	20		59	<20	38	27	<20	88	<20	22	<20	<20
TEH: (C34-C50)	mg/kg	20		52	<20	70	37	<20	78	<20	21	<20	<20
TVH	mg/kg	10		<30	<10	<10	<10	<10	<20	<10	<10	<10	<10
TVH: (C6-C10 / BTEX CORRECTED)	mg/kg	10		<30	<10	<10	<10	<10	<20	<10	<10	<10	<10
Leachable Metals													
Barium	mg/kg	5		48.5	37.6	122	71	51.9	30.1	21.9	36.6	40.8	54.1
Boron (B), Hot Water Ext.	mg/kg	0.1		<0.1	0.11	0.53	0.65	0.17	0.24	<0.1	0.4	0.25	0.3
Metals													
Aluminium	mg/kg	50		11,000	14,200	7500	14,900	11,500	10,700	12,000	9460	9470	10,700
Antimony	mg/kg	0.1		0.34	0.3	0.17	0.19	0.18	0.23	0.25	0.2	0.22	0.23
Arsenic	mg/kg	0.1		4.4	7.14	2.15	4.81	5.53	3.28	6.61	4.91	4.97	5.03
Barium	mg/kg	0.5		255	156	261	225	177	144	79.7	158	185	170
Beryllium	mg/kg	0.2		0.54	0.55	<0.2	0.55	0.53	0.36	0.37	0.4	0.44	0.5
Bismuth	mg/kg	0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cadmium	mg/kg	0.1		0.42	0.13	0.96	0.49	<0.1	0.42	0.11	0.53	0.31	0.31
Calcium	mg/kg	100		25,000	3900	5280	5290	5470	9710	2960	7760	7130	6370
Chromium (III+VI)	mg/kg	0.5		11.9	19.9	9.5	20.6	17.5	12.3	15.6	14.5	15.2	16.2
Cobalt	mg/kg	0.1		4.5	8.18	3.19	9.04	7.77	4.4	5.22	6.54	6.61	7.59
Copper	mg/kg	0.5		12.8	12	8.09	9.91	10	7.58	7.13	9.57	10.4	11.7
Iron	mg/kg	50		13,800	19,900	8640	18,700	17,300	11,800	17,300	15,300	15,800	16,300
Lead	mg/kg	0.5		7.47	9.38	6.61	9.53	9.01	8.82	8.1	7.5	7.77	8.3
Lithium	mg/kg	0.5		9.44	12.3	5.37	13.3	13.3	9.02	15	10.2	10.5	10.7
Magnesium	mg/kg	20		2970	3540	1910	3570	3550	2600	3300	3280	3410	3360
Manganese	mg/kg	1		366	245	82	541	443	293	129	514	429	537
Mercury	mg/kg	0.005		0.0587	0.0209	0.0643	0.0325	0.0324	0.0405	0.0107	0.041	0.0417	0.0386
Molybdenum	mg/kg	0.1		0.67	0.56	1.43	0.99	0.78	0.91	0.56	0.52	0.55	0.61
Nickel	mg/kg	0.5		15.5	21.1	8.28	17.4	17.2	11.6	17.6	16.1	17.3	19
Phosphorus	mg/kg	50		693	378	497	672	506	481	449	607	541	571
Potassium	mg/kg	50		581	700	536	520	526	727	523	498	511	518
Selenium	mg/kg	0.2		0.66	<0.2	0.32	0.38	0.4	<0.2	<0.2	0.52	0.53	0.5
Silver	mg/kg	0.2		0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Sodium	mg/kg	100		<100	<100	270	<100	<100	100	<100	110	<100	<100
Strontium	mg/kg	1		46.7	14	60.1	46.8	38.6	34.1	12.7	34	34.8	27.6
Thallium	mg/kg	0.05		0.12	0.114	0.078	0.136	0.096	0.13	0.111	0.099	0.107	0.116
Tin	mg/kg	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Titanium	mg/kg	1		27.7	55.8	23.8	40.7	47.3	28.1	41.6	39.5	46.6	43.4
Uranium	mg/kg	0.05		1.85	0.514	1.43	2.24	1.23	0.549	0.444	1.24	1.11	1.25
Vanadium	mg/kg	0.2		20.7	30.4	17.1	32.2	26.1	24	27.2	21.2	22.1	23.8
Zinc	mg/kg	5		35.6	42.1	39.6	53.3	44.9	39.4	44.8	45	45.3	46.5
Organic / Inorganic Carbon													
Carbon	mg/kg	0.1		22	0.92	25.3	4.84	1.72	7.64	0.98	5.98	3.87	3.49
CaCO3 Equivalent	%	0.8		<0.8	<0.8	0.92	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Inorganic Carbon	mg/kg	0.1		<0.1	<0.1	0.11	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Carbon by Combustion	%	0.1		22	0.9	25.4	4.8	1.7	7.6	1	6	3.9	3.5
Particle Size													
% clay by hydrometer	% by weight	0.1		12.2	21.8	18.9	19.1	20.4	20.4	20	14.4	14.4	18.4
Sand % Texture	% by weight	0.1		41	52	6.59	45	48.4	43.8	55.6	57.4	55.6	46.8
Silt % Texture	% by weight	0.1		46.8	26.3	74.5	35.9	31.2	35.8	24.4	28.2	30	34.8
Physical Tests													
CaCO3 Equivalent	%	0.7		2.29	<0.7	<0.7	0.7	<0.7	1.46	<0.7	1.16	1.06	0.84
Moisture	%	0.1		64.9	16.8	31.8	30.8	22.8	55.9	18.9	35.4	28.8	25.5

MDL Method Detection Limit
'<' Non Detect. Concentration below MDL.

OBED MOUNTAIN MINE
TABLE 2 SOIL/SEDIMENT CHEMISTRY

	Unit	MDL	Location	SOIL007		SOIL008			SOIL009		SOIL010		
			Date	8-Nov-13		8-Nov-13			8-Nov-13		8-Nov-13		
			Soil/Sediment	Sediment	Soil	Sediment	Soil	Soil	Sediment	Soil	Soil	Soil	Soil
Polycyclic Aromatic Hydrocarbons													
Benzo[b+j]fluoranthene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
C4 Benzanthracenes/Chrysenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
C4 Dibenzothiophenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
C4 Fluoranthenes/Pyrenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
C4 Naphthalenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	0.057	<0.04	0.043	<0.04	0.542
C4 Phenanthrenes/Anthracenes	mg/kg	0.04		0.067	<0.04	0.127	0.108	<0.04	0.282	0.24	0.382	0.072	<0.04
1,1-Biphenyl	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.086
1-Methylnaphthalene	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.02
2-methylnaphthalene	mg/kg	0.005		0.013	<0.005	0.0069	<0.005	<0.005	0.0143	0.0056	0.0075	<0.005	1.89
Acenaphthene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	0.0202	<0.005	<0.005	<0.005	0.0879
Acenaphthylene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Anthracene	mg/kg	0.004		<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Benz(a)anthracene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Benzo(a) pyrene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Acridine	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Benzo(e)pyrene	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(g,h,i)perylene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Benzo(k)fluoranthene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
C1 Acenaphthenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.383
C1 Benz(a)Anthracenes/Chrysenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
C1 Benzofluoranthenes/Benzopyrenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
C1 Biphenyls	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.168
C1 Dibenzothiophenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.049
Chrysene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
C1 Fluoranthenes/Pyrenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
C1 Fluorenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.178
C1 Phenanthrenes/Anthracenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.153
Dibenz(a,h)anthracene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluoranthene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Fluorene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.137
Indeno(1,2,3-c,d)pyrene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Naphthalene	mg/kg	0.005		0.0082	<0.005	<0.005	<0.005	<0.005	0.0079	<0.005	<0.005	<0.005	0.0289
Perylene	mg/kg	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	0.014	<0.01
Phenanthrene	mg/kg	0.005		0.0146	<0.005	0.0068	<0.005	<0.005	0.0103	0.0054	0.0076	<0.005	0.168
Pyrene	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Quinoline	mg/kg	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
C2 Benzofluoranthenes/Benzopyrenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
C2 Biphenyls	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.088
C2 Dibenzothiophenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
C2 Fluoranthenes/Pyrenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
C2 Naphthalenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	0.044	<0.04	<0.04	<0.04	6.19
C2 Phenanthrenes/Anthracenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
C2 Fluorenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.106
C2 subd B(a)A/chrysene	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
C3 Benzanthracenes/Chrysenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
C3 Dibenzothiophenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
C3 Fluoranthenes/Pyrenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
C3 Fluorenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
C3 Naphthalenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	0.057	<0.04	0.041	<0.04	2.01
C3 Phenanthrenes/Anthracenes	mg/kg	0.04		<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Saturated Paste Extractables													
Calcium	mg/kg	5		103	47.1	27.3	55.1	36.3	53.2	22.4	60.5	91.6	41.3
Saturation Percentage	%	1		218	36.5	249	69.6	50.9	101	39.2	94.6	70.3	65.7
Electrical Conductivity (lab)	dS/m	0.01		0.563	0.296	0.338	0.301	0.21	0.367	0.165	0.447	0.552	0.225
Magnesium	mg/kg	3		16.4	8.5	8.2	9.2	5.6	11.1	4.7	13.6	19.5	7.3
pH (Lab)	pH	0.1		6.88	7.07	3.76	5.08	6.42	6.37	6.05	6.73	6.62	6.45
Potassium	mg/kg	2		4.2	2	10.1	2.2	<2	2.8	<2	<2	<2	<2
Sodium	mg/kg	2		9.2	11.4	31	8.9	4.7	17.4	8.1	23.4	22.8	5.3
Sodium Adsorption Ratio	---	0.1		0.22	0.4	1.34	0.29	0.19	0.57	0.4	0.71	0.56	0.2
Speciated Metals													
Chromium (hexavalent)	mg/kg	0.1		<1.5	0.3	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Volatile Organic Compounds													
Benzene	mg/kg	0.005		<0.015	<0.005	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005
Toluene	mg/kg	0.05		<0.15	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
Ethylbenzene	mg/kg	0.01		<0.045	<0.015	<0.015	<0.015	<0.015	<0.03	<0.015	<0.015	<0.015	<0.015
Xylene (m & p)	mg/kg	0.05		<0.15	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
Xylene (o)	mg/kg	0.05		<0.15	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05
Xylenes Total	mg/kg	0.1		<0.3	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1

MDL Method Detection Limit
'<' Non Detect. Concentration below MDL.