



Metals

			Cadmium	Calcium	Cerium	Cesium	Chromium (III-VI)	Cobalt	Copper	Dysprosium	Erbium	Europium	Gadolinium	Gallium	Hafnium	Holmium	Iron	Lanthanum	Lead	Lithium	Lucentium	Magnesium	Manganese	Mercury	Molybdenum	Neodymium	Nickel	Niobium	Phosphorus	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Thorium	
MDL			0.1	100			0.5	0.1	0.5								50			0.5		20	1	0.005			0.5		50	0.2		100	1		0.05		
Location	Date	Depth (m)	0.11	5670	-	-	8.27	5.67	6.17	-	-	-	-	-	-	-	13,600	-	5.53	6.99	-	2330	471	0.0242	0.59	-	13.7	-	301	397	<0.2	<0.2	<100	42	0.075	-	
APC	25-Mar-14		-0.1	15,900	-	-	6.72	5.29	2.82	-	-	-	-	-	-	-	8570	-	3.84	4.6	-	4010	257	0.0131	0.19	-	11	-	323	381	<0.2	<0.2	<100	31.9	0.054	-	
ATR-AD1	26-Mar-14		<0.5		47.1	1.4	6.73	4.6 - 5.1	5.2	2.71	1.58	0.71	3.11	7.4	9.9	0.5			23.3	-5	-	0.25			<1	19.5	10.6	8.6	-	-	-	-	-	262.4	<0.5	7	
ATR-D1	10-Mar-14		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	10-Mar-14		0.13	116,000	-	-	7.59	4.19	5.52	-	-	-	-	-	-	-	10,700	-	5.03	8.79	-	19,700	393	0.0181	0.53	-	10.5	-	445	691	<0.2	<0.2	<100	162	0.062	-	
ATR-FF-6	18-Mar-14		<0.1 - 0.11	10,800 - 11,400	-	-	7.89 - 7.98	5.76 - 5.85	4.41 - 4.53	-	-	-	-	-	-	-	11,000 - 11,300	-	4.85	4.69 - 5.24	-	3120 - 3140	250 - 252	0.0146 - 0.0195	0.37 - 0.42	-	11.2 - 11.4	-	385 - 402	520 - 534	<0.2	<0.2	<100	34.1 - 36.1	0.073 - 0.074	-	
ATR-FF-7	19-Mar-14		<0.1	2220	-	-	3.2	2.41	1.86	-	-	-	-	-	-	-	4310	-	1.7	1.29	-	1180	82.1	<0.005	<0.1	-	4.29	-	187	156	<0.2	<0.2	<100	8.3	<0.05	-	
ATR-WD1	25-Mar-14		0.12	59,000	-	-	9.16	5.28	5.61	-	-	-	-	-	-	-	11,700	-	5.15	8.11	-	10,800	336	0.0174	0.47	-	13.1	-	491	496	<0.2	<0.2	<100	89.1	0.069	-	
BL-031423-01	23-Mar-14		<0.5	-	-	-	10.6	6.7	10.7	-	-	-	-	-	-	-	-	-	8	-	-	-	-	0.0382	<1	-	16.2	-	-	-	-	<0.5	<1	-	-	<0.5	-
BL-031424-01	24-Mar-14		<0.5	-	-	-	10.4	5.9	9.6	-	-	-	-	-	-	-	-	-	8.1	-	-	-	-	0.0411	<1	-	14.6	-	-	-	-	<0.5	<1	-	-	<0.5	-
BL-140325-01	25-Mar-14		<0.5	-	-	-	9.88	9.1	8.8	-	-	-	-	-	-	-	-	-	7.5	-	-	-	-	0.0518	<1	-	16	-	-	-	-	<0.5	<1	-	-	<0.5	-
BL-140326-01	26-Mar-14		<0.5	-	-	-	10.5	6.6	9.5	-	-	-	-	-	-	-	-	-	7.8	-	-	-	-	0.0317	<1	-	15.9	-	-	-	-	<0.5	<1	-	-	<0.5	-
BL-140326-02	26-Mar-14		<0.5	-	-	-	9.05	5.6	10.5	-	-	-	-	-	-	-	-	-	9.1	-	-	-	-	0.0246	1.2	-	13.7	-	-	-	-	<0.5	<1	-	-	<0.5	-
BL-140327-01	27-Mar-14		<0.5	-	-	-	11.2 - 12.3	5.9 - 6.4	8.5 - 9.6	-	-	-	-	-	-	-	-	-	6.5 - 7.6	-	-	-	-	0.0313 - 0.0358	<1	-	14.4 - 15.7	-	-	-	-	<0.5	<1	-	-	<0.5	-
BL-140328-01	28-Mar-14		<0.5	-	-	-	10.9	7.6	9.2	-	-	-	-	-	-	-	-	-	7.2	-	-	-	-	0.0339	<1	-	17.2	-	-	-	-	<0.5	<1	-	-	<0.5	-
BL-140330-01	30-Mar-14		0.3	9550	-	-	12.2	6.93	11.8	-	-	-	-	-	-	-	13,700	-	7.66	8.37	-	3230	495	0.0431	0.9	-	18.1	-	508	563	0.37	<0.2	230	69.5	0.116	-	
BL-140330-02	30-Mar-14		0.31	10,100	-	-	13.4	7.47	12.7	-	-	-	-	-	-	-	15,000	-	8.31	9.24	-	3500	530	0.0525	0.93	-	18.2	-	528	676	0.38	<0.2	250	78.6	0.117	-	
BL-140331-01	31-Mar-14		0.39	11,400	-	-	12.8	6.51	11.7	-	-	-	-	-	-	-	14,700	-	7.93	8.91	-	3370	642	0.0518	0.99	-	16.4	-	618	739	0.43	<0.2	260	76.9	0.11	-	
BL-140331-02	31-Mar-14		0.37	11,000	-	-	11.1	6.89	11.9	-	-	-	-	-	-	-	14,100	-	7.66	7.74	-	2950	569	0.0585	1.11	-	16.6	-	506	516	0.44	<0.2	260	87	0.117	-	
DX SPILL	06-Mar-14		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENV701	28-Mar-14	0-0.2	0.15	3210	-	-	26.6	9.36	21.8	-	-	-	-	-	-	-	23,600	-	11	10.8	-	4120	368	0.0405	0.87	-	28.8	-	483	1080	<0.2	<0.2	<100	18.1	0.172	-	
ENV702	28-Mar-14	0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENV703	30-Mar-14	0.2-0.45	0.95	23,500	-	-	9.37	3.32	14.5	-	-	-	-	-	-	-	8770	-	6.67	7.54	-	1900	232	0.0898	0.55	-	11.7	-	3020	489	0.74	0.49	<100	54.6	0.103	-	
		0.45-0.6	<0.1	3910	-	-	15.5	7.15	6.18	-	-	-	-	-	-	-	15,600	-	10.4	16.4	-	2670	217	0.0329	0.23	-	14.1	-	868	481	<0.2	0.21	<100	15.1	0.121	-	
		0-0.2	2.08	27,700	-	-	3.53	3.46	8.75	-	-	-	-	-	-	-	10,300	-	5.04	2.58	-	1550	357	0.093	0.68	-	7.42	-	1670	504	0.39	0.21	<100	66.1	0.05	-	
ENV704	30-Mar-14	0.2-0.4	0.53	3630	-	-	20.4	12.9	12.8	-	-	-	-	-	-	-	33,700	-	15	17.1	-	2670	1010	0.0605	0.89	-	16.4	-	1820	695	0.5	0.53	<100	15.4	0.192	-	
		0-0.2	1.03	9560	-	-	13.8	3.8	10.6	-	-	-	-	-	-	-	13,400	-	7.72	11.1	-	2600	139	0.0771	0.49	-	12.3	-	1520	883	0.41	0.29	<100	25	0.158	-	
ENV725	28-Mar-14	0.2-0.47	0.65	13,900	-	-	12.7	8.89	19.5	-	-	-	-	-	-	-	31,500	-	5.58	5.63	-	2130	375	0.0811	0.74	-	20.9	-	1560	490	0.66	<0.2	<100	54	0.097	-	
		0.47-0.67	0.43	6680	-	-	24.3	5.61	19	-	-	-	-	-	-	-	18,600	-	9.05	12.7	-	3580	173	0.0854	0.26	-	20.5	-	721	912	0.43	<0.2	<100	28.2	0.181	-	
		0-0.2	0.87	16,400	-	-	3.84	14	8.44	-	-	-	-	-	-	-	33,500	-	3.64	2.01	-	1650	1360	0.085	0.98	-	11.2	-	1760	1060	0.21	<0.2	100	62	0.053	-	
ENV726	29-Mar-14	0.2-0.45	0.52	7520	-	-	5.62	2.74	14.4	-	-	-	-	-	-	-	6170	-	3.97	2.05	-	648	27.6	0.0715	0.71	-	8.06	-	1570	355	0.69	0.27	<100	19.2	0.089	-	
		0.45-0.65	<0.1	940	-	-	46	3.02	3.55	-	-	-	-	-	-	-	8120	-	8.33	11.7	-	1790	47.1	0.0135	0.74	-	21	-	339	532	<0.2	<0.2	<100	6.2	0.116	-	
		0-0.2	0.79	9200	-	-	1.65	1.77	5.77	-	-	-	-	-	-	-	3490	-	3.94	0.95	-	1040	206	0.0828	4.06	-	3.39	-	1180	808	0.23	<0.2	<100	24.7	0.06	-	
ENV727	29-Mar-14	0.2-0.45	0.56	5270	-	-	6.08	1.29	10.2	-	-	-	-	-	-	-	3740	-	4.11	3.49	-	648	10.7	0.0312	0.14	-	4.34	-	1110	359	0.5	<0.2	<100	14.1	0.085	-	
		0.45-0.65	0.14	1290	-	-	16.6	2.02	2.65	-	-	-	-	-	-	-	7990	-	7.6	13.7	-	1930	40.4	0.0125	0.2	-	7.68	-	727	670	<0.2	<0.2	<100	7.3	0.12	-	
		0-0.2	0.69	6880	-	-	1.5	0.96	7.42	-	-	-	-	-	-	-	2380	-	3.66	0.79	-	586	133	0.0615	2.67	-	3.07	-	1140	571	0.25	<0.2	<100	15.4	<0.05	-	
ENV728	30-Mar-14	0.2-0.2	1.17	34,900	-	-	10	7.4	18.7	-	-	-	-	-	-	-	13,900	-	6.53	10.1	-	2650	936	0.0619	1.06	-	15.4	-	1220	537	0.97	0.53	<100	71.9	0.119	-	
		0.41-0.61	<0.1	3570	-	-	21																														

Obed Mountain Mine  
Soil and Sediment Quality  
March 2014

Location	Date	Depth (m)	NORM													Organic / Inorganic Carbon				Particle Size					Physical Tests													
			Tin	Titanium	Praseodymium	Rubidium	Samarium	Tungsten	Uranium	Vanadium	Tantalum	Zinc	Terbium	Zirconium	Thulium	Ytterbium	Yttrium	Lead-210	Radium-226	Radium-228	CaCO3 Equivalent	Inorganic Carbon	TOC	Total Carbon by Combustion	Soil Particle Size (>75 um)	Clay % Texture	Sand % Texture	Silt % Texture	Texture	Moisture	B(p) Total Poency Equivalent	Benzol(p)-Jfluoranthene	C4 Benzanthracenes/Chrysenes	C4 Dibenzophenenes	C4 Fluoranthenes/Pyrenes	C4 Naphthalenes	C4 Phenanthrenes/Anthracenes	IACR-Coarse
MDL			2	1																				1	1	1	1	0.1	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	0.05		
APC	25-Mar-14	<2	48.5	-	-	-	-	0.511	14.4	-	32.7	-	-	-	-	-	-	-	1.76	0.21	2.52	2.7	-	-	11.1	81	7.9	1	29	-	0.028	-	<0.04	<0.04	0.301	<0.04	-	
ATR-AD1	26-Mar-14	<2	79.5	-	-	-	-	0.382	11	-	26.2	-	-	-	-	-	-	-	5.83	0.7	0.37	1.1	-	-	5.1	90	5	1	26.6	-	<0.01	-	<0.04	<0.04	<0.04	<0.04	-	
ATR-D1	10-Mar-14	<1	-	5.45	41.3	3.81	0.5	<2.1	9.4-47	0.6	28	0.48	393.7	0.24	1.7	16	<0.1	<0.1	<0.1	33.5	4.02	0.51	4.5	-	-	4.1	82	14	1	17.9	<0.02	<0.01	-	<0.04	<0.04	<0.04	<0.04	<0.05
	24-Mar-14	<2	34.5	-	-	-	-	0.49	10.5	-	29.3	-	-	-	-	-	-	-	35.4	4.25	0.5	4.7	-	-	7.7	76	16.3	-	18.1	-	<0.01	-	<0.04	<0.04	<0.04	<0.04	-	
ATR-FF-6	18-Mar-14	<2	48.7-55.1	-	-	-	-	0.528-0.529	13.5-13.7	-	30.2-32.4	-	-	-	-	-	-	-	3.3-3.41	0.4-0.41	0.56-0.61	1	-	-	6	86-88	6-8	1	24.1-26.5	<0.02	<0.01	-	-	-	-	-	<0.05	
ATR-FF-7	19-Mar-14	<2	48.4	-	-	-	-	0.17	5.27	-	10.3	-	-	-	-	-	-	-	1.46	0.17	0.13	0.3	-	-	<1	99.8	<1	1	21.3	<0.02	<0.01	-	-	-	-	-	<0.05	
ATR-WD1	25-Mar-14	<2	45.1	-	-	-	-	0.496	13.6	-	35.3	-	-	-	-	-	-	-	18	2.16	0.84	3	-	-	6.8	86	7.2	1	26.5	-	<0.01	-	<0.04	<0.04	<0.04	<0.04	-	
BL-031423-01	23-Mar-14	<5	-	-	-	-	-	<2	17.7	-	42	-	-	-	-	-	-	-	1.73	0.21	8.04	8.3	-	-	56.5	12.5	68	19.5	-	<0.02	<0.02-0.011	-	<0.04	<0.04	0.271	<0.055	<0.05	
BL-031424-01	24-Mar-14	<5	-	-	-	-	-	<2	17.6	-	39	-	-	-	-	-	-	-	1.91	0.23	8.9	9.1	-	-	62.7	13.7	70	16.3	-	<0.02	<0.02-0.017	-	<0.04	<0.04	0.48	<0.08	<0.05	
BL-140325-01	25-Mar-14	<5	-	-	-	-	-	<2	16.3	-	37	-	-	-	-	-	-	-	1.48	0.18	6.63	6.8	-	-	67.8	8.4	80	11.6	1	39.3	<0.02	<0.01-0.01	-	<0.04	<0.04	0.214	<0.04	<0.05
BL-140326-01	26-Mar-14	<5	-	-	-	-	-	<2	17.9	-	36	-	-	-	-	-	-	-	1.19	0.14	5.9	6	-	-	69.1	9	78	13	-	50.9	<0.02	<0.02-0.011	-	<0.04	<0.04	0.255	<0.05	<0.05
BL-140326-02	26-Mar-14	<5	-	-	-	-	-	<2	17.5	-	36	-	-	-	-	-	-	-	1.74	0.21	13.7	13.9	-	-	57.5	9	74	17	-	28	<0.02	<0.01-0.017	-	<0.04	<0.04	0.525	<0.09	<0.05
BL-140327-01	27-Mar-14	<5	-	-	-	-	-	<2	18.8-18.9	-	35-38	-	-	-	-	-	-	-	<0.8-1.63	<0.1-0.2	3.14-5.07	3.1-5.3	-	-	58.6-61.4	10.4-10.8	70-73	16.6-19.2	-	38.1-48.6	<0.02	<0.01-0.021	-	<0.04	<0.04	<0.04-0.94	<0.04	<0.05
BL-140328-01	28-Mar-14	<5	-	-	-	-	-	<2	17.4	-	39	-	-	-	-	-	-	-	0.8	<0.1	3.64	3.6	-	-	64.3	10.3	72	17.7	-	33.1	<0.02	<0.01	-	<0.04	<0.04	0.042	<0.04	<0.05
BL-140330-01	30-Mar-14	<2	58.9	-	-	-	-	1.36	19.7	-	42.6	-	-	-	-	-	-	-	1.22	0.15	6.81	7	-	-	59.4	-	-	-	-	95.8	-	0.115	<0.2	<0.2	2.14	<0.3	-	
BL-140330-02	30-Mar-14	<2	76.9	-	-	-	-	1.36	21	-	47.6	-	-	-	-	-	-	-	1.17	0.14	7.91	8	-	-	56.4	-	-	-	-	63.2	-	0.014	<0.04	<0.04	<0.04	0.297	<0.04	-
BL-140331-01	31-Mar-14	<2	57.1	-	-	-	-	1.4	20.1	-	51.5	-	-	-	-	-	-	-	0.94	0.11	11.8	11.9	-	-	46.6	-	-	-	-	77.7	-	0.016	<0.04	<0.04	<0.04	0.314	<0.04	-
BL-140331-02	31-Mar-14	<2	59.8	-	-	-	-	1.49	19.2	-	44.6	-	-	-	-	-	-	-	1.24	0.15	9.78	9.9	-	-	57.2	-	-	-	-	39.9	-	<0.01	<0.04	<0.04	<0.04	0.151	<0.04	-
DX SPILL	06-Mar-14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENV701	28-Mar-14	0-0.2	59.2	-	-	-	-	0.754	34.1	-	58	-	-	-	-	-	-	-	0.94	0.11	1.79	1.9	-	-	35.7	-	-	-	-	30.5	-	-	-	-	-	-	-	-
ENV702	28-Mar-14	0-0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	55	-	<0.01	-	<0.04	<0.04	<0.04	<0.04	-
ENV703	30-Mar-14	0.2-0.45	36.3	-	-	-	-	1.7	14.9	-	32.4	-	-	-	-	-	-	-	1.34	0.16	29.4	29.5	-	-	-	-	-	-	-	76.5	-	<0.01	-	<0.04	<0.04	<0.04	<0.04	-
		0.45-0.6	40.9	-	-	-	-	1.63	21.9	-	66.6	-	-	-	-	-	-	-	<0.8	<0.1	2.95	3	-	-	20.7	-	-	-	-	20.9	-	-	-	-	-	-	-	-
		0-0.2	18.8	-	-	-	-	0.705	10.4	-	26.9	-	-	-	-	-	-	-	1.26	0.15	36.4	36.5	-	-	-	-	-	-	-	82.4	-	-	-	-	-	-	-	-
ENV704	30-Mar-14	0.2-0.4	34.5	-	-	-	-	2.28	37.8	-	51.2	-	-	-	-	-	-	-	<0.8	<0.1	4.17	4.2	-	-	17.6	-	-	-	-	28.5	-	-	-	-	-	-	-	-
		0-0.2	28.6	-	-	-	-	0.927	20.1	-	42.5	-	-	-	-	-	-	-	1.46	0.18	17.8	18	-	-	6.9	-	-	-	-	73.4	-	<0.01	-	<0.04	<0.04	<0.04	<0.04	-
ENV725	28-Mar-14	0.2-0.47	29.7	-	-	-	-	0.922	25.1	-	46.5	-	-	-	-	-	-	-	1.41	0.17	30.5	30.7	-	-	-	-	-	-	-	78.4	-	<0.01	-	<0.04	<0.04	<0.04	<0.04	-
		0.47-0.67	46.3	-	-	-	-	1.31	31.2	-	53.1	-	-	-	-	-	-	-	1.44	0.17	10.1	10.3	-	-	18.4	-	-	-	-	52	-	-	-	-	-	-	-	-
		0-0.2	18.8	-	-	-	-	0.219	9.14	-	55.9	-	-	-	-	-	-	-	1.82	0.22	30.7	30.9	-	-	-	-	-	-	-	81.3	-	<0.01	-	<0.04	<0.04	<0.04	<0.04	-
ENV726	29-Mar-14	0.2-0.45	18.5	-	-	-	-	0.302	9.49	-	11.8	-	-	-	-	-	-	-	1.74	0.21	36.2	36.4	-	-	-	-	-	-	-	79.4	-	<0.01	-	<0.04	<0.04	<0.04	<0.04	-
		0.45-0.65	48.2	-	-	-	-	0.377	16.4	-	30	-	-	-	-	-	-	-	<0.8	<0.1	2.3	2.3	-	-	27.3	-	-	-	-	19.2	-	-	-	-	-	-	-	-
		0-0.2	9	-	-	-	-	0.077	2.71	-	26.8	-	-	-	-	-	-	-	1.33	0.16	42.4	42.6	-	-	-	-	-	-	-	92.4	-	<0.05	-	<0.2	<0.2	<0.2	<0.2	-
ENV727	29-Mar-14	0.2-0.45	24.3	-	-	-	-	0.305	7.73	-	30.3	-	-	-	-	-	-	-	1.57	0.19	25	25.2	-	-	-	-	-	-	-	81.2	-	<0.01	-	<0.04	<0.04	<0.04	<0.04	-
		0.45-0.65	49.6	-	-	-	-	0.354	14.3	-	40	-	-	-	-	-	-	-	<0.8	<0.1	2.23	2.2	-	-	27.1	-	-	-	-	26	-	-	-	-	-	-	-	-
		0-0.2	4.5	-	-	-	-	0.076	2.43	-	63	-	-	-	-	-	-	-	1.73	0.21	44.4	44.6	-	-	-	-	-	-	-	94	-	<0.02	-	<0.08	<0.08	<0.08	<0.08	-
ENV728	30-Mar-14	0.2-0.2	56.9	-	-	-	-	3.64	17.2	-	39.3	-	-	-	-	-	-	-	1.28	0.15	20.9	21	-	-	-	-	-	-	-	63.5	-	<0.01	-	<0.04	<0.04	<0.04	<0.04	-
		0.41-0.61	69.8	-	-	-	-	0.917	27.1																													



