

Obed Mountain Mne
Soil and Sediment Quality
August 2014

		Hydrocarbons									Metals																		
		F2 (C10-C16 Hydrocarbons)	F3-PAH	Total Hydrocarbons (C6-C50)	F2-Naphthalene	Chrom. to baseline at nC50	TEH: (C16-C34)	TEH: (C34-C50)	TVH	TVH: (C6-C10 / BTEX CORRECTED)	Aluminium	Antimony	Arsenic	Barium	Beryllium	Bismuth	Cadmium	Calcium	Chromium (III+VI)	Cobalt	Copper	Iron	Lead	Lithium	Magnesium	Manganese	Mercury	Molybdenum	Nickel
		mg/kg	mg/kg	mg/kg	mg/kg	-	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
MDL		20	20	20	20		20	20	10	10	50	0.1	0.1	0.5	0.2	0.2	0.1	100	0.5	0.1	0.5	50	0.5	0.5	20	1	0.005	0.1	0.5
Location	Date																												
ATR-AT1	14-Aug-14	<20	<20	<20	<20	1	<20	<20	<10	<10	559,000	1.83	348	56.8	0.85	1.76	5.26	12,500	368	536	86,400	18,400	9.42	5.14	3110	230	0.0222	65,600	34,700
ATR-FF-5	15-Aug-14	<20	99	160	<20	1	99	61	<10	<10	8540	0.31	6.89	169	0.48	<0.2	0.18	22,000	16.2	7.98	13.3	17,500	8.69	12.5	6700	396	0.0409	0.76	18.7
ATR-FF-6	15-Aug-14	<20	25	25	<20	1	25	<20	<10	<10	1360	0.11	3.55	32.5	<0.2	<0.2	<0.1	3490	2.29	3.46	4.99	6250	2.21	2.83	1180	149	0.0069	32	6.79
ATR-FF-7	15-Aug-14	<20	56	99	<20	1	56	43	<10	<10	2890	<0.1	2.59	69.6	0.2	<0.2	<0.1	9690	6.09	3.77	4.67	8400	3.36	5.54	3650	188	0.012	0.28	8.26

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													Organic / Inorganic Carbon			Particle Size				Physical Tests						
Phosphorus	Potassium	Selenium	Silver	Sodium	Strontium	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc	CaCO3 Equivalent	Inorganic Carbon	TOC	Total Carbon by Combustion	Clay % Texture	Sand % Texture	Silt % Texture	Texture	Moisture	Benzo[b+j]fluoranthene	C4 Benzantracenes/Chrysenes	C4 Dibenzothiophenes	C4 Fluoranthenes/Pyrenes		
mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	% dry weight	%	% by weight	% by weight	% by weight	-	%	mg/kg	mg/kg	mg/kg	mg/kg		
MDL	50	50	0.2	0.2	100	1	0.05	2	1	0.05	0.2	5	0.8	0.1	0.1	0.1	1	1	1	-	0.1	0.01	0.04	0.04	0.04	
Location	Date	5200	574	4.27	1.67	460	30.9	0.936	16	79.5	0.487	2120	30,900	7.23	0.87	0.63	1.5	10.4	71.4	18.2	-	32	<0.01	<0.04	<0.04	<0.04
ATR-AT1	14-Aug-14	637	1200	0.41	<0.2	130	62.3	0.146	<2	67.5	0.946	25.5	54.7	6.03	0.72	1.59	2.3	19.6	40.6	39.8	-	38.4	<0.01	<0.04	<0.04	<0.04
ATR-FF-5	15-Aug-14	304	190	<0.2	<0.2	<100	14.4	<0.05	<2	32.8	0.227	10.5	15.6	1.43	0.17	0.21	0.4	1	97	2	1	18.6	<0.01	<0.04	<0.04	<0.04
ATR-FF-6	15-Aug-14	433	408	<0.2	<0.2	<100	24.4	0.059	<2	71.7	0.465	13.2	23.7	2.95	0.35	0.34	0.7	7	75.4	17.6	-	35.4	<0.01	<0.04	0.055	<0.04
ATR-FF-7	15-Aug-14																									

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Polycyclic Aromatic Hydrocarbons

	C4 Naphthalenes	C4 Phenanthrenes/Anthracenes	Biphenyl	1-Methylnaphthalene	2-methylnaphthalene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene	Acridine	Benzo(e)pyrene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	C1 Acenaphthenes	C1 Benz(a)Anthracenes/Chrysenes	C1 Benzofluoranthenes/Benzopyrenes	C1 Biphenyls	C1 Dibenzothiophenes	Chrysene	C1 Fluoranthenes/Pyrenes	C1 Fluorenes	C1 Phenanthrenes/Anthracenes	Dibenz(a,h)anthracene	Dibenzothiophene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
MDL	0.04	0.04	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.01	0.05	
Location	Date																													
ATR-AT1	14-Aug-14	<0.04	<0.04	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.04	<0.04	<0.04	<0.04	<0.04	<0.01	<0.04	<0.04	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
ATR-FF-5	15-Aug-14	<0.04	<0.04	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.04	<0.04	<0.04	<0.04	<0.04	<0.01	<0.04	<0.04	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
ATR-FF-6	15-Aug-14	<0.04	<0.04	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.04	<0.04	<0.04	<0.04	<0.04	<0.01	<0.04	<0.04	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05
ATR-FF-7	15-Aug-14	<0.04	0.046	<0.01	<0.02	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.04	<0.04	<0.04	<0.04	<0.04	<0.01	<0.04	<0.04	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	

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		Polycyclic Aromatic Hydrocarbons																		Volatile Organic Compounds								
		Perylene	Phenanthrene	Pyrene	Quinoline	Retene	C2 Benzofluoranthenes/Benzopyrenes	C2 Biphenyls	C2 Dibenzothiophenes	C2 Fluoranthenes/Pyrenes	C2 Naphthalenes	C2 Phenanthrenes/Anthracenes	C2 Fluorenes	C2 subd B(a)Anthracenes/Chrysenes	C3 Benzanthracenes/Chrysenes	C3 Dibenzothiophenes	C3 Fluoranthenes/Pyrenes	C3 Fluorenes	C3 Naphthalenes	C3 Phenanthrenes/Anthracenes	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylenes Total	Styrene	
MDL		0.01	0.01	0.01	0.01	0.01	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.005	0.05	0.01	0.05	0.05	0.1	0.05	
Location	Date																											
ATR-AT1	14-Aug-14	0.017	<0.01	<0.01	<0.01	0.024	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.005	<0.05	<0.015	<0.05	<0.05	<0.1	<0.05	
ATR-FF-5	15-Aug-14	0.023	<0.01	<0.01	<0.01	0.035	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.005	<0.05	<0.015	<0.05	<0.05	<0.1	<0.05	
ATR-FF-6	15-Aug-14	<0.01	<0.01	<0.01	<0.01	<0.01	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.005	<0.05	<0.015	<0.05	<0.05	<0.1	<0.05	
ATR-FF-7	15-Aug-14	0.041	<0.01	<0.01	<0.01	0.012	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.005	<0.05	<0.015	<0.05	<0.05	<0.1	<0.05	