

OBED MOUNTAIN MINE
TABLE 7 ATHABASCA RIVER 1.5 KM DOWNSTREAM (ATR-CON)

Method Type	Chemical	Unit	EQL	Location	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON
				Date	01-Nov-13	01-Nov-13	02-Nov-13	03-Nov-13	04-Nov-13	05-Nov-13	06-Nov-13	07-Nov-13	08-Nov-13	09-Nov-13
Aggregate Organics	Hydrocarbons, Recoverable (I.R.)	mg/L	1	-	-	-	-	-	-	<1	<1	<1	<1	<1
	BOD	mg/L	2	-	-	<2	<2	<2	<2	<2	<2	<2	2.8	<2
Anions and Nutrients	Oil and Grease	mg/L	1	4.6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2 - 10.4
	Phenols (4AAP)	µg/L	1	2.3	5	1.4	<1	1.2	<1 - 1.4	1.3 - 1.9	<1	1.3	<1	<1
Anions and Nutrients	Alkalinity (T) as CaCO3	mg/L	2	130	133	123	130	124	130 - 131	140 - 141	144	142	136	137 - 139
	Ammonia	mg/L	0.05	0.162	0.243	0.089	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anions and Nutrients	Bicarbonate	mg/L	5	158	162	151	159	151	159	171 - 172	175	173	166	168 - 169
	Carbonate	mg/L	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Anions and Nutrients	Chloride	mg/L	0.5	2.62	2.63	2.66	2.8	2.79	2.93 - 3.01	3.62 - 3.64	3.75	4.1	3.57	3.47 - 3.63
	Electrical Conductivity (lab)	µS/cm	0.0002	0.417	0.426	0.394	0.384	0.383	0.391 - 0.402	0.416	0.427	0.425	0.394	0.41 - 0.413
Anions and Nutrients	Hydroxide	mg/L	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	Ionic Balance	%	101	101	96.9	101	102	101	102	95.8	101	93.7	91.1 - 92.8	
Anions and Nutrients	Kjeldahl Nitrogen Total	mg/L	0.05	7.38	7.56	2	<0.2	0.251	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
	Nitrate (as N)	mg/L	0.05	0.097	0.104	0.079	0.056	0.052	0.054 - 0.063	0.054	<0.05	0.071	0.065	0.068 - 0.071
Anions and Nutrients	Nitrate + Nitrite-N	mg/L	0.07	0.097	0.104	-	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071
	Nitrite (as N)	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Anions and Nutrients	pH (Lab)	pH	0.1	8.08	8.08	8.05	8.08	8.01	8.02 - 8.11	8.05 - 8.14	8.04	7.94	7.91	7.99 - 8.04
	Phosphorus	mg/L	0.001	1.02	1.06	0.307	0.026	0.031	0.0117	0.0108 - 0.0188	0.0114	0.0167	0.0115	0.0094 - 0.0099
Anions and Nutrients	Phosphorus (Filtered)	mg/L	0.001	-	-	-	-	-	0.002 - 0.0025	0.0025 - 0.0032	<0.001	0.0027	0.0015 - 0.0022	
	Sulphate	mg/L	0.5	81.9	85	75.5	69.6	71	73 - 74.4	73.1 - 75.3	72.4	80.7	72.9	76.7 - 77.1
Anions and Nutrients	Sulphide	mg/L	0.002	0.026	0.058	<0.004	0.002	<0.002	0.0025 - 0.0029	0.002 - 0.0038	0.0028	<0.002	<0.002	0.0028
	Hardness as CaCO3	mg/L	184	175	173	173	178	184	196 - 197	198 - 201	190	194	181	182 - 186
Anions and Nutrients	TDS	mg/L	249	249	255	225	223	222	232 - 235	242 - 246	241	249	232	236 - 240
	Cyanide Total	mg/L	0.002	-	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.002	<0.005	<0.005
Cyanides	Aluminum (Filtered)	mg/L	0.001	-	0.0288	-	0.018	0.0093 - 0.0122	0.0106 - 0.0121	0.0103	0.0086	0.0091	0.0075	0.0075 - 0.0082
	Antimony (Filtered)	mg/L	0.0001	-	<0.0005	-	<0.0004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dissolved Metals	Arsenic (Filtered)	mg/L	0.0001	-	<0.0005	-	<0.0004	<0.0001	0.00014 - 0.00016	0.00019	0.00016	0.00014	0.00014 - 0.00016	
	Barium (Filtered)	mg/L	0.00005	-	0.0747	-	0.0596	0.0573 - 0.059	0.0591 - 0.0596	0.068	0.0662	0.0611	0.0627 - 0.063	
Dissolved Metals	Bismuth (Filtered)	mg/L	0.00005	-	<0.0025	-	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
	Bismuth (Filtered)	mg/L	0.00005	-	<0.00025	-	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	
Dissolved Metals	Boron (hot water ext) (Filtered)	mg/L	0.01	-	<0.05	-	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Cadmium (Filtered)	mg/L	0.00001	-	<0.00005	-	<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	
Dissolved Metals	Calcium (Filtered)	mg/L	0.02	54.1	50.5	46.6	46.6	49.2	53.2 - 53.3	52.1 - 53	51.4	51.8	47.8	48.8 - 50.5
	Chromium (III+VI) (Filtered)	mg/L	0.0001	-	<0.0005	-	<0.005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dissolved Metals	Cobalt (Filtered)	mg/L	0.0001	-	<0.0005	-	<0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
	Copper (Filtered)	mg/L	0.0001	-	<0.0005	-	<0.001	0.00011 - 0.00013	0.00016	0.00014	0.00019	0.00017	0.00013 - 0.00014	
Dissolved Metals	Iron (Filtered)	mg/L	0.01	-	<0.05	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Lead (Filtered)	mg/L	0.00005	-	<0.00025	-	<0.0001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	
Dissolved Metals	Lithium (Filtered)	mg/L	0.003	-	<0.015	-	<0.003	0.0039	0.0037 - 0.0038	0.0034	<0.003	<0.003	<0.003 - 0.0031	
	Magnesium (Filtered)	mg/L	0.005	11.8	11.8	13.8	15	14.9	15.3 - 15.5	16.4 - 16.7	15	15.6	14.9	14.6 - 14.7
Dissolved Metals	Manganese (Filtered)	mg/L	0.00005	-	0.0298	-	0.011	0.0116 - 0.0119	0.0148 - 0.0153	0.0198	0.0159	0.0129	0.0125 - 0.013	
	Molybdenum (Filtered)	mg/L	0.00005	-	0.00114	-	<0.005	0.000914 - 0.000931	0.000978 - 0.00103	0.00106	0.00105	0.000981	0.000993 - 0.00102	
Dissolved Metals	Nickel (Filtered)	mg/L	0.0001	-	<0.0005	-	<0.002	0.00024 - 0.00025	0.00028 - 0.00029	0.00032	0.00029	0.0003	0.00027 - 0.00029	
	Phosphorus (Filtered)	mg/L	0.3	-	<1.5	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	
Dissolved Metals	Potassium (Filtered)	mg/L	0.05	1.09	1.11	0.73	0.71	0.69	0.672 - 0.676	0.605 - 0.608	0.75	0.78	0.798 - 0.711	
	Selenium (Filtered)	mg/L	0.0001	-	<0.0005	-	<0.004	0.00034 - 0.00035	0.00031 - 0.00033	0.0004	0.00038	0.00034	0.00032 - 0.00034	
Dissolved Metals	Silicon (Filtered)	µg/L	50	-	2010	-	-	2230 - 2240	1820 - 1940	1880	2050	1970	2000 - 2030	
	Silver (Filtered)	mg/L	0.00001	-	<0.00005	-	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	
Dissolved Metals	Sodium (Filtered)	mg/L	0.05	19.3	23.4	11.8	9.7	8.9	8.73 - 8.94	11.5 - 11.6	10.9	10.5	9.9	9.09 - 9.64
	Strontium (Filtered)	mg/L	0.0001	-	0.576	-	-	0.55 - 0.562	0.532 - 0.542	0.56	0.52	0.516	0.567 - 0.575	
Dissolved Metals	Thallium (Filtered)	mg/L	0.00005	-	<0.00025	-	<0.0001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	
	Tin (Filtered)	mg/L	0.0001	-	<0.0005	-	<0.005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Dissolved Metals	Titanium (Filtered)	mg/L	0.0003	-	<0.0015	-	<0.001	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	
	Uranium (Filtered)	µg/L	0.01	-	0.975	-	0.61	0.605 - 0.607	0.672 - 0.674	0.731	0.694	0.716	0.669 - 0.684	
Dissolved Metals	Vanadium (Filtered)	mg/L	0.0001	-	<0.0005	-	<0.001	0.00011 - 0.00012	0.00014 - 0.00015	0.00015	0.00012	0.00012	0.0001 - 0.00011	
	Zinc (Filtered)	mg/L	0.001	-	0.0144	-	<0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
Organic / Inorganic Carbon	Carbon	mg/L	1	-	2.6	-	-	3.2 - 3.8	3.2	3.2	3.2	3.2	1.9 - 2.1	
	Dissolved Organic Carbon (Filtered)	mg/L	1	-	-	-	-	2.5	2.8 - 3	3.2	3.1	1.6	1.9 - 2.1	
Organic Parameters	Acrylamide	µg/L	5	-	-	-	-	<5	<5	<5	<5	<5	<5	
	Naphthenic Acid	mg/L	1	-	-	-	-	<1	<1	<1	<1	<1	<1	
Physical Tests	Dissolved Oxygen (Filtered)	mg/L	0.5	-	8.94	-	-	10.7	-	-	-	-	-	
	TDS (Filtered)	mg/L	10	-	-	-	-	246 - 254	243 - 251	267	269	244	247 - 249	
Physical Tests	Total Suspended Solids	mg/L	3	3800	8150	1410	37	74	7 - 12	8 - 14	3	17	3	
	Turbidity	NTU	0.1	>4000	>4000	1100	19.3	23.8	6.75 - 7.25	8.1 - 12.1	10.4	11.2	9.14	5.86 - 6.08
Polycyclic Aromatic Hydrocarbons	Benzo(a)fluoranthene	mg/L	0.00001	-	-	-	-	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	
	C4 Benzantracenes/Chrysenes	µg/L	0.04	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	
Polycyclic Aromatic Hydrocarbons	C4 Dibenzothiophenes	µg/L	0.04	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	
	C4 Fluoranthenes/Pyrenes	µg/L	0.04	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	
Polycyclic Aromatic Hydrocarbons	C4 Naphthalenes	µg/L	0.04	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	
	C4 Phenanthrenes/Anthracenes	µg/L	0.04	-	-	-	-	<0.04	<0.04 - 0.061	<0.04	<0.04	<0.04	<0.04	
Polycyclic Aromatic Hydrocarbons	1,1-Biphenyl	µg/L	0.01	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	1-Methylanthracene	µg/L	0.01	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Polycyclic Aromatic Hydrocarbons	2-Methylanthracene	µg/L	0.01	-	-	-	-	<0.01 - 0.012	<0.01 - 0.012	<0.01	<0.01	0.012	<0.01	
	Acenaphthene	µg/L	0.01	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Polycyclic Aromatic Hydrocarbons	Acenaphthylene	µg/L	0.01	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Anthracene	µg/L	0.01	-	-	-								

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TABLE 7 ATHABASCA RIVER 1.5 KM DOWNSTREAM (ATR-CON)

Method Type	Chemical	Unit	EQL	Location	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON			
				Date	01-Nov-13	01-Nov-13	02-Nov-13	03-Nov-13	04-Nov-13	05-Nov-13	06-Nov-13	07-Nov-13	08-Nov-13	09-Nov-13	10-Nov-13			
Method Type	C1 Benz(a)Anthracenes/Chrysenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C1 Benzofluoranthenes/Benzopyrenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	Chrysene	ug/L	0.01	-	-	-	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
	C1 Biphenyls	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C1 Dibenzothiophenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C1 Fluoranthenes/Pyrenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	-	-	-	-		
	C1 Fluorenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C1 Phenanthrenes/Anthracenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	-	-	-	-		
	Dibenz(a,h)anthracene	ug/L	0.01	-	-	-	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
	Dibenzofluorene	ug/L	0.01	-	-	-	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
	Fluoranthene	ug/L	0.01	-	-	-	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
	Fluorene	ug/L	0.01	-	-	-	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
	Indeno(1,2,3-c,d)pyrene	ug/L	0.01	-	-	-	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
	Naphthalene	ug/L	0.05	-	-	-	-	-	-	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
	Perylene	ug/L	0.01	-	-	-	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
	Phenanthrene	ug/L	0.01	-	-	-	-	-	-	-	<0.01	<0.01	<0.01	<0.01	0.015	<0.01		
	Pyrene	ug/L	0.01	-	-	-	-	-	-	-	<0.01	<0.01	<0.04	<0.04	<0.04	<0.01		
	Quindoline	ug/L	0.01	-	-	-	-	-	-	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
	Ritene	ug/L	0.01	-	-	-	-	-	-	-	0.022 - 0.026	<0.01 - 0.061	<0.01 - 0.034	0.012	0.012	0.012		
	C2 Benz(a)Anthracenes/Chrysenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C2 Benzofluoranthenes/Benzopyrenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C2 Biphenyls	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C2 Dibenzothiophenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C2 Fluoranthenes/Pyrenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C2 Naphthalenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C2 Phenanthrenes/Anthracenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C2 Fluorenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C3 Benzanthracenes/Chrysenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C3 Dibenzothiophenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C3 Fluoranthenes/Pyrenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C3 Fluorenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C3 Naphthalenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	C3 Phenanthrenes/Anthracenes	ug/L	0.04	-	-	-	-	-	-	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04		
	Speciated Metals	Chromium (hexavalent)	mg/L	0.001	<0.001	<0.001	-	-	-	-	-	-	-	-	-	-	-	
	Total Metals	Aluminum	mg/L	0.003	25.4	47.3	11.1	0.691	0.66	0.256 - 0.31	0.203 - 0.326	0.283	0.157	0.29	0.161 - 0.175			
		Antimony	mg/L	0.0001	<0.0004	<0.0004	<0.0005	<0.0004	<0.0004	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001		
		Arsenic	mg/L	0.001	0.0195	0.0334	0.00742	0.0044	0.0047	0.0002 - 0.00021	0.00021 - 0.00028	0.00024	0.00022	0.00019	0.00021	0.00019 - 0.00021		
		Barium	mg/L	0.00005	2.92	5.03	0.0948	0.108	0.0647	0.0687	0.0657 - 0.0855	0.0728	0.0737	0.0658	0.0737	0.0653 - 0.0666		
		Beryllium	mg/L	0.0005	0.0022	0.0031	<0.0025	<0.001	<0.001	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
		Bismuth	mg/L	0.00005	-	-	-	-	-	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Boron (hot water ext)		mg/L	0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Cadmium		mg/L	0.00001	0.00102	0.00165	0.000383	<0.00005	<0.00005	<0.00001	<0.00001 - 0.00001	<0.00001	<0.00001	0.000011	<0.00001	<0.00001	<0.00001	<0.00001	
Calcium		mg/L	0.02	111	142	57.6	49.2	49.8	50.2 - 50.5	48.6 - 50.6	54.1	53.4	51.3	51.7	51.3 - 51.7			
Chromium (III+VI)		mg/L	0.0001	0.0227	0.0465	0.0083	<0.005	<0.005	0.00029 - 0.00033	0.00039 - 0.00047	0.00037	0.00047	0.00032	0.00047	0.00032	0.0002	0.0002	
Cobalt		mg/L	0.001	0.0153	0.0262	0.0045	<0.002	<0.002	0.00011 - 0.00012	0.00012 - 0.00016	0.00016	0.00016	0.00014	0.00016	<0.0001			
Copper		mg/L	0.0001	0.0481	0.0864	0.0193	0.002	0.0012	0.00033 - 0.00038	0.00057 - 0.00036	0.00059	0.00034	0.00034	0.00034	0.0003 - 0.00061			
Iron		mg/L	0.01	30.4	58.9	10.5	0.551	0.705	0.236 - 0.243	0.217 - 0.309	0.289	0.249	0.234	0.151				
Lead		mg/L	0.00005	0.0553	0.0881	0.0191	0.00078	0.00091	0.00022	0.00023 - 0.000351	0.000265	0.000364	0.000219	0.000139 - 0.000331				
Lithium		mg/L	0.005	0.032	0.046	<0.025	<0.01	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Magnesium		mg/L	0.005	28.7	38	19.3	14.7	14.9	14.8 - 15	15.1 - 15.7	15.4	15.6	14.9	14.8 - 15.2				
Manganese		mg/L	0.00005	0.862	1.44	0.215	0.0204	0.0273	0.0158 - 0.0162	0.0183 - 0.0203	0.0268	0.0254	0.0181	0.0152 - 0.0158				
Mercury		ug/L	0.0005	<0.1*	<0.1*	<0.1*	<0.1*	<0.1*	<0.02 - 0.0008	<0.0015 - 0.0026	<0.0015	0.00152	0.0009	0.00065 - 0.00068				
Molybdenum		mg/L	0.00005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000981 - 0.001	0.000988 - 0.000993	0.00112	0.00109	0.00106	0.00103 - 0.00107				
Nickel		mg/L	0.0001	0.04	0.0769	0.0145	<0.002	<0.002	0.00045 - 0.00046	0.00061 - 0.00067	0.00063	0.00077	0.00049	0.00037 - 0.0004				
Phosphorus		mg/L	0.3	-	-	-	-	-	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	
Potassium		mg/L	0.05	4.94	7.51	2.13	0.79	0.79	0.728 - 0.75	0.8 - 0.835	0.847	0.78	0.838	0.741 - 0.786				
Selenium		mg/L	0.0001	0.00159	0.00252	0.00083	<0.0004	<0.0004	0.00032 - 0.00033	0.00029 - 0.0003	0.00038	0.00033	0.00033	0.00031	0.00031	0.00031	0.00031	
Silicon		ug/L	50	-	-	-	-	-	2400 - 2960	2110 - 2340	2630	2190	2380	2290 - 2360				
Silver		mg/L	0.00001	0.00048	0.00083	0.00018	<0.0001	<0.0001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	
Sodium		mg/L	0.05	22.6	25.9	11.8	9.9	8.7	9.08 - 9.1	10.6 - 10.7	12	10.5	9.99	9.2 - 9.8				
Strontium		mg/L	0.0001	0.00049	0.00084	<0.00025	<0.0001	<0.0001	0.572 - 0.579	0.523 - 0.534	0.537	0.555	0.528	0.549 - 0.574				
Thallium		mg/L	0.00005	0.00049	0.00084	<0.00025	<0.0001	<0.0001	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	
Tin		mg/L	0.0001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.0001	<0.0001 - 0.00018	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Titanium		mg/L	0.0003	0.168	0.166	0.13	0.0163	0.0173	0.00647 - 0.00706	0.00409 - 0.00754	0.00661	0.00356	0.00729	0.0037 - 0.00371				
Uranium		ug/L	0.01	13.2	20	5.01	0.81	0.72	0.665 - 0.685	0.691 - 0.737	0.788	0.717	0.745	0.705 - 0.718				
Vanadium		mg/L	0.0001	0.0407	0.0792	0.0152	0.001	0.0012	0.00054 - 0.0006	0.00048 - 0.00072	0.00065	0.00048	0.00059	0.00043 - 0.00046				
Zinc		mg/L	0.003	0.211	0.36	0.105	0.0107	0.0056	<0.003	0.0044 - 0.0058	0.0034	0.019	<0.003	<0.003	<0.003	<0.003	<0.003	
Volatile Organic Compounds		1,1,1-trichloroethane	ug/L															

OBED MOUNTAIN MINE
TABLE 7 ATHABASCA RIVER 1.5 KM DOWNSTREAM (ATR-CON)

		Location	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON
		Date	01-Nov-13	01-Nov-13	02-Nov-13	03-Nov-13	04-Nov-13	05-Nov-13	06-Nov-13	07-Nov-13	08-Nov-13	09-Nov-13	09-Nov-13	10-Nov-13
Method Type	Chemical	Unit	EQL											
	Acrylonitrile	µg/L	100	-	-	-	-	-	<100	<100	<100	<100	<100	<100
	Benzene	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Toluene	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Bromodichloromethane	µg/L	1	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	Bromoform	µg/L	3	-	-	-	-	-	<3	<3	<3	<3	<3	<3
	Bromomethane	µg/L	10	-	-	-	-	-	<10	<10	<10	<10	<10	<10
	Carbon disulfide	µg/L	1	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	Carbon tetrachloride	µg/L	1	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	Chlorobenzene	µg/L	1	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	Chlorodibromomethane	µg/L	3	-	-	-	-	-	<3	<3	<3	<3	<3	<3
	Chloroethane	µg/L	10	-	-	-	-	-	<10	<10	<10	<10	<10	<10
	Chloroform	µg/L	1	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	Chloromethane	µg/L	10	-	-	-	-	-	<10	<10	<10	<10	<10	<10
	cis-1,2-dichloroethene	µg/L	1	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	cis-1,3-dichloropropene	µg/L	1	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	cis-1,4-Dichloro-2-butene	µg/L	10	-	-	-	-	-	<10	<10	<10	<10	<10	<10
	Dibromomethane	µg/L	3	-	-	-	-	-	<3	<3	<3	<3	<3	<3
	Dichlorodifluoromethane	µg/L	3	-	-	-	-	-	<3	<3	<3	<3	<3	<3
	Dichloromethane	µg/L	1	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	Ethanol	µg/L	300	-	-	-	-	-	<300	<300	<300	<300	<300	<300
	Ethyl methacrylate	µg/L	10	-	-	-	-	-	<10	<10	<10	<10	<10	<10
	Ethylbenzene	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Xylene (m & p)	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Xylene (o)	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Xylenes Total	µg/L	0.71	<0.71	<0.71	<0.71	<0.71	<0.71	-	-	-	-	-	-
	Iodomethane	µg/L	1	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	Styrene	µg/L	1	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	Trichloroethene	µg/L	1	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	Tetrachloroethene	µg/L	1	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	trans-1,2-dichloroethene	µg/L	1	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	trans-1,3-dichloropropene	µg/L	1	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	trans-1,4-Dichloro-2-butene	µg/L	10	-	-	-	-	-	<10	<10	<10	<10	<10	<10
	Trichlorofluoromethane	µg/L	1	-	-	-	-	-	<1	<1	<1	<1	<1	<1
	Vinyl acetate	µg/L	100	-	-	-	-	-	<100	<100	<100	<100	<100	<100
	Vinyl chloride	µg/L	2	-	-	-	-	-	<2	<2	<2	<2	<2	<2

Notes
MDL - Method Detection Limit
- "Sample not analyzed for this parameter"
< - "result is less than the MDL. No detectable concentration was measured"
* EPA 245.7/245.1

OBED MOUNTAIN MINE
TABLE 7 ATHABASCA RIVER 1.5 KM DOWNSTREAM (ATR-CON)

Method Type	Chemical	Unit	EQL	Location	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON
				Date	11-Nov-13	12-Nov-13	13-Nov-13	14-Nov-13	15-Nov-13	16-Nov-13	17-Nov-13	18-Nov-13	19-Nov-13	20-Nov-13	21-Nov-13
Aggregate Organics	Hydrocarbons, Recoverable (I.R.)	mg/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	BOD	mg/L	2	<2	<2-2.9	<2	<2	<2-5.2	<2-4.3	1	<2	2.1	<2	<2	<2
Anions and Nutrients	Oil and Grease	mg/L	1	-	-	-	-	-	-	-	-	-	-	-	-
	Phenols (4AAP)	µg/L	1	<1-1	1.7-2.2	2.2-2.4	<1	<1	1.6-2.1	<1-2.1	2.8	2.1-3.5	2.7-3.8	3.1	3.1
Alkalinity (T) as CaCO3	Alkalinity (T) as CaCO3	mg/L	2	133-135	139-140	135-137	126-135	128-129	127-128	137-139	145	150-152	155-157	159	159
	Ammonia	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05-0.062	0.055-0.066	0.063	0.063
Bicarbonate	Bicarbonate	mg/L	5	162-165	169-171	164-167	154-165	156-157	154-156	168-169	177	183-186	190-191	191	191
	Carbonate	mg/L	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Chloride	Chloride	mg/L	0.5	3.84-3.98	4.38-4.43	4.41-4.67	3.01-3.16	2.98-3.24	2.89-3.12	2.9-3.05	4.86	4.23-4.41	5.23-5.29	4.58	4.58
	Electrical Conductivity (lab)	µS/cm	0.0002	0.417-0.418	0.426	0.408-0.409	0.396-0.406	0.405-0.407	0.395-0.4	0.419-0.42	0.454	0.462-0.463	0.478-0.481	0.475	0.475
Hydroxide	Hydroxide	mg/L	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	Ionic Balance	%	5	92.1-95.9	95.2-97.5	97.2-100	96.6-98.4	92.6-95.6	94.8-96.4	94.5-97.2	95.3	94.3-94.4	93.1-96.5	97.9	97.9
Kjeldahl Nitrogen Total	Kjeldahl Nitrogen Total	mg/L	0.05	<0.2	<0.2	<0.2	<0.2	<0.2-0.24	<0.2	<0.2	<0.2	<0.2	<0.2	0.24	0.24
	Nitrate (as N)	mg/L	0.05	0.073-0.082	0.067-0.071	0.07-0.146	0.063-0.07	0.06-0.066	<0.05-0.057	<0.05-0.05	0.055	0.061-0.063	0.082-0.083	0.083	0.083
Nitrate + Nitrite-N	Nitrate + Nitrite-N	mg/L	0.07	0.073-0.082	<0.071-0.071	<0.071-0.146	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	0.082-0.083	0.083	0.083
	Nitrite (as N)	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
pH (Lab)	pH (Lab)	pH	0.1	7.98-8.01	8.11-8.12	7.97-8.1	7.86-7.98	7.91-7.94	7.91-7.94	7.95	7.91-7.92	7.93-7.96	7.99	7.99	7.99
	Phosphorus	mg/L	0.001	0.0108	0.014-0.016	0.0148-0.015	0.0136-0.0162	0.0165-0.0166	0.0166-0.0207	0.0157-0.0267	0.0216	0.0182-0.0185	0.0199-0.0231	0.0224	0.0224
Phosphorus (Filtered)	Phosphorus (Filtered)	mg/L	0.001	0.0021-0.003	0.0026-0.0046	0.0034-0.0036	0.0033-0.0034	0.0032-0.0033	0.0022-0.0026	0.002-0.0025	0.0039	0.0015-0.0023	0.0018-0.0023	0.0021	0.0021
	Sulphate	mg/L	0.5	73.6-81.4	78.6-78.7	74.6-75.2	75.1-75.2	73.4-77.5	71.4-73.3	72.9-73.5	80.9	80.4-82.6	87.2-87.6	86.6	86.6
Sulphide	Sulphide	mg/L	0.002	<0.002-0.0029	0.0039-0.0041	<0.002-0.0059	<0.002	<0.002-0.0039	<0.002-0.0058	<0.002	0.0028	<0.002-0.003	0.0023-0.0036	<0.002	<0.002
	Hardness as CaCO3	mg/L	187-192	193-198	192-195	185-190	175-184	177	183-188	192	196	201-210	218	218	218
TDS	TDS	mg/L	240-242	247-248	240	228-236	224-232	223-225	223-236	256	259-261	273-277	278	278	278
	Cyanide Total	mg/L	0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cyanides	Aluminum (Filtered)	mg/L	0.001	0.0096-0.0099	0.0096-0.01	0.0086	0.0089	0.0078-0.0082	<0.0091-0.0112	0.0083-0.0094	0.0177	0.0108-0.013	0.0118-0.0119	0.0096	0.0096
	Antimony (Filtered)	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Arsenic (Filtered)	Arsenic (Filtered)	mg/L	0.0001	0.00014-0.00016	0.00014-0.00017	0.00013-0.00014	0.00013	0.00013-0.00016	<0.0001	0.00117-0.00023	0.00021	0.00021-0.00023	0.00019-0.0003	0.00019	0.00019
	Barium (Filtered)	mg/L	0.00005	0.0576-0.0578	0.0569-0.0657	0.0582-0.0697	0.0559-0.0686	0.0589-0.0682	0.0585-0.0602	0.0584-0.0692	0.0639	0.0668-0.0674	0.0698-0.07	0.0705	0.0705
Bismuth (Filtered)	Bismuth (Filtered)	mg/L	0.00005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
	Bismuth (Filtered)	mg/L	0.00005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Boron (hot water ext) (Filtered)	Boron (hot water ext) (Filtered)	mg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	0.01	0.01
	Cadmium (Filtered)	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001-0.000028	<0.00001	<0.00001	<0.00001
Calcium (Filtered)	Calcium (Filtered)	mg/L	0.02	49.5-51.5	52.4-52.6	51.4-51.5	49.6-50.8	47.9-50.4	48.6-48.7	46.8-48.4	51.1	51.3-52	52.8-57	58.8	58.8
	Chromium (III+VI) (Filtered)	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001-0.00011	<0.0001	<0.0001	<0.0001
Cobalt (Filtered)	Cobalt (Filtered)	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.00014	0.00014
	Copper (Filtered)	mg/L	0.0001	0.00011-0.00013	0.00013-0.00022	0.00014-0.00016	0.00015-0.00016	0.00014	<0.00014	0.00014-0.00015	<0.0001	<0.0001-0.000248	<0.0001	0.00028	0.00028
Iron (Filtered)	Iron (Filtered)	mg/L	0.01	<0.01	<0.01-0.012	<0.01	<0.01	<0.01	<0.01	<0.01	0.015	<0.01	0.013-0.014	0.016	0.016
	Lead (Filtered)	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Lithium (Filtered)	Lithium (Filtered)	mg/L	0.003	0.0033-0.0037	<0.003-0.0036	<0.003-0.0031	0.0034-0.0035	0.0033	0.0033	0.0033-0.0034	<0.003	<0.003-0.0031	0.0031-0.0036	0.0043	0.0043
	Magnesium (Filtered)	mg/L	0.005	15.3-15.4	15	15.4-16.3	14.9-15.4	13.4-14.1	13.4-13.5	16-16.4	15.6	16.1-16.6	16.5-16.8	17.3	17.3
Manganese (Filtered)	Manganese (Filtered)	mg/L	0.00005	0.0111-0.0115	0.013-0.0145	0.0083-0.00905	0.00675-0.00826	0.00652-0.00752	0.00801-0.00846	0.0104-0.0105	0.0147	0.0159-0.0165	0.0158-0.0159	0.0123	0.0123
	Molybdenum (Filtered)	mg/L	0.00005	0.000946-0.000973	0.000959-0.00103	0.000959-0.00101	0.000975-0.000983	0.000872-0.000933	0.000919-0.000931	0.00089-0.000929	0.00103	0.00104-0.00127	0.00106-0.00116	0.0012	0.0012
Nickel (Filtered)	Nickel (Filtered)	mg/L	0.0001	0.00027-0.00028	0.0003-0.00036	0.0003	0.00028-0.0003	0.00027-0.00028	0.00029-0.0003	0.00029-0.0003	0.00033	0.00036-0.00037	0.00036-0.00038	0.00034	0.00034
	Phosphorus (Filtered)	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Potassium (Filtered)	Potassium (Filtered)	mg/L	0.05	0.677-0.696	0.719-0.828	0.692-0.698	0.674-0.707	0.65-0.68	0.7-0.71	0.799-0.808	0.927	0.95-0.98	1.03	0.978	0.978
	Selenium (Filtered)	mg/L	0.0001	0.00032-0.00033	0.00031-0.00036	0.00034	0.0003-0.00034	0.00029-0.0003	0.00028	0.00031-0.00032	0.00034	0.00034-0.00034	0.00033-0.00041	0.00038	0.00038
Silicon (Filtered)	Silicon (Filtered)	µg/L	50	1870-1970	1990-2020	1850	1940-1960	1900-1930	1960-2030	2160-2200	2250	2360-2370	2390-2460	2150	2150
	Silver (Filtered)	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Sodium (Filtered)	Sodium (Filtered)	mg/L	0.05	9.11-9.28	11.1-11.3	10.4-10.5	8.99-9.07	8.5-8.9	9.1-9.3	10.5-10.7	14.9	14.3-14.4	15.8-15.9	13.9	13.9
	Strontium (Filtered)	mg/L	0.0001	0.524-0.547	0.549-0.581	0.519-0.521	0.516-0.519	0.524-0.561	0.529-0.532	0.504-0.508	0.519	0.528-0.543	0.546-0.578	0.63	0.63
Thallium (Filtered)	Thallium (Filtered)	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
	Tin (Filtered)	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Titanium (Filtered)	Titanium (Filtered)	mg/L	0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
	Uranium (Filtered)	µg/L	0.01	0.68-0.684	0.672-0.717	0.585-0.614	0.672-0.678	0.65-0.653	0.644-0.664	0.695-0.713	0.771	0.796-0.8	0.765-0.788	0.801	0.801
Vanadium (Filtered)	Vanadium (Filtered)	mg/L	0.0001	<0.0001-0.0001	0.00012-0.00013	0.00012-0.00015	0.00011-0.00012	0.00011	0.00011-0.00012	0.00011	0.00016	0.00018-0.00019	0.0004	0.0004	0.0004
	Zinc (Filtered)	mg/L	0.001	<0.001	<0.001-0.0029	<0.001	<0.001	<0.001	<0.001	<0.001-0.0013	<0.001	<0.001	0.0014-0.0034	0.0012	0.0012
Organic / Inorganic Carbon	Carbon	mg/L	1	2.1-2.3	2.4-2.6	2.5-2.7	2.1-2.2	2.4	2.5-2.9	3.8	3.4-3.5	3.7-3.8	3.5	3.5	
	Dissolved Organic Carbon (Filtered)	mg/L	1	2.2-2.3	2.7-2.9	2.7-									

OBED MOUNTAIN MINE
TABLE 7 ATHABASCA RIVER 1.5 KM DOWNSTREAM (ATR-CON)

Method Type	Chemical	Unit	EQL	Location	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON		
				Date	11-Nov-13	12-Nov-13	13-Nov-13	14-Nov-13	15-Nov-13	16-Nov-13	17-Nov-13	18-Nov-13	19-Nov-13	20-Nov-13	21-Nov-13		
Organic Compounds	C1 Benz(a)Anthracenes/Chrysenes	ug/L	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	
	C1 Benzofluoranthenes/Benzopyrenes	ug/L	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	
	Chrysene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	C1 Biphenyls	ug/L	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	
	C1 Dibenzothiophenes	ug/L	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	
	C1 Fluoranthenes/Pyrenes	ug/L	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	
	C1 Fluorenes	ug/L	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	
	C1 Phenanthrenes/Anthracenes	ug/L	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	
	Dibenz(a,h)anthracene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Dibenzothiophene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 - 0.071	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Fluoranthene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Fluorene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Indeno(1,2,3-c,d)pyrene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Naphthalene	ug/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
	Perylene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Phenanthrene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 - 0.012	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Pyrene	ug/L	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	
	Quinoline	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Ritene	ug/L	0.01	<0.01	<0.01	0.012 - 0.015	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	C2 Benz(a)Anthracenes/Chrysenes	ug/L	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	
	C2 Benzofluoranthenes/Benzopyrenes	ug/L	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	
	C2 Biphenyls	ug/L	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	
	C2 Dibenzothiophenes	ug/L	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	
	C2 Fluoranthenes/Pyrenes	ug/L	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	
	C2 Naphthalenes	ug/L	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	
	C2 Phenanthrenes/Anthracenes	ug/L	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	
	C2 Fluorenes	ug/L	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	
	C3 Benzanthracenes/Chrysenes	ug/L	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	
	C3 Dibenzothiophenes	ug/L	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	
	C3 Fluoranthenes/Pyrenes	ug/L	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	
	C3 Fluorenes	ug/L	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	
	C3 Naphthalenes	ug/L	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	
	C3 Phenanthrenes/Anthracenes	ug/L	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	
	Speciated Metals	Chromium (hexavalent)	mg/L	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Metals	Aluminum	mg/L	0.003	0.15 - 0.153	0.107 - 0.143	0.109 - 0.132	0.145 - 0.146	0.162 - 0.213	0.173 - 0.206	0.184 - 0.19	0.131	0.13 - 0.135	0.116 - 0.136	0.137	-	-
		Antimony	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
		Arsenic	mg/L	0.005	<0.0001	0.00021 - 0.00358	0.00051 - 0.00077	0.00084 - 0.00093	0.00025 - 0.00028	0.00022 - 0.00026	0.00026 - 0.00028	0.00026 - 0.00028	0.00025 - 0.00028	0.00022 - 0.00024	0.00026	0.00022 - 0.00024	0.00026
		Barium	mg/L	0.00005	0.0644 - 0.0651	0.0556 - 0.0579	0.0612 - 0.0616	0.0646 - 0.0656	0.0602 - 0.0672	0.0584 - 0.0626	0.0614 - 0.0619	0.0648	0.0697 - 0.0723	0.072 - 0.073	0.0684	-	-
		Beryllium	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
		Bismuth	mg/L	0.00005	<0.00005	<0.00005	<0.00005 - 0.000128	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
		Boron (hot water ext)	mg/L	0.01	0.011 - 0.013	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
		Cadmium	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001 - 0.000011	0.000016 - 0.000017	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
		Calcium	mg/L	0.02	52.8 - 53.5	53.8 - 56.1	49.9 - 50.9	51.8 - 52.5	51.4 - 52.7	44.6 - 48.2	49.7 - 50.7	53	54.8 - 55	60.1 - 62.5	55.1	-	-
		Chromium (III+VI)	mg/L	0.0001	0.00021 - 0.00022	0.00019 - 0.0002	0.0002 - 0.00033	0.00023	0.00032 - 0.00039	0.00046 - 0.00058	0.00023 - 0.00024	0.0002	0.0002	0.0002	0.00017 - 0.0002	0.0002	0.0002
		Cobalt	mg/L	0.0001	<0.0001	<0.0001	0.00011 - 0.00013	0.00013 - 0.00015	0.00015 - 0.00017	0.00016 - 0.00019	0.00012 - 0.00013	0.00011	0.00011 - 0.00012	0.00011 - 0.00012	0.00011	0.00011 - 0.00012	0.00011
Copper		mg/L	0.0001	0.00028 - 0.00029	0.00036 - 0.00044	0.00041 - 0.0005	0.00038 - 0.00045	0.0005 - 0.00079	0.00079	0.00054 - 0.00056	0.00056	0.00056	0.00056	0.00056	0.00056	0.00056	
Iron		mg/L	0.01	0.139 - 0.147	0.13 - 0.132	0.179 - 0.216	0.232 - 0.235	0.319 - 0.333	0.288 - 0.378	0.182 - 0.208	0.143	0.141 - 0.147	0.132 - 0.133	0.161	-	-	
Lead		mg/L	0.00005	0.000126 - 0.00018	0.000119 - 0.000151	0.000178 - 0.000325	0.000197 - 0.000205	0.000268 - 0.000333	0.000337 - 0.000363	0.000151 - 0.00018	0.00015	0.00014 - 0.00015	0.000136 - 0.00014	0.000148	-	-	
Lithium		mg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Magnesium		mg/L	0.005	16 - 16.1	14.1 - 15.6	14 - 15	14.2 - 14.3	14 - 14.4	14.5 - 15	16.5 - 17.2	16.8	16.8 - 16.9	17.7 - 18	17.6	-	-	
Manganese		mg/L	0.00005	0.0152	0.0149 - 0.0159	0.0142 - 0.015	0.0174 - 0.0181	0.0159 - 0.0188	0.0161 - 0.0187	0.0161 - 0.0166	0.0194	0.0188 - 0.0208	0.0198 - 0.02	0.0185	-	-	
Mercury		ug/L	0.0005	0.00052 - 0.00066	0.0005 - 0.00058	<0.0005 - 0.00078	0.00061 - 0.00077	0.0008 - 0.002	0.00086 - 0.00128	0.00075 - 0.0009	0.00078	0.00067 - 0.00074	<0.0005 - 0.00069	0.00085	-	-	
Molybdenum		mg/L	0.00005	0.00109 - 0.00116	0.00106 - 0.00109	0.00095 - 0.000972	0.000997 - 0.001	0.00105	0.000897 - 0.000945	0.000941 - 0.000968	0.00111	0.00121	0.00125 - 0.00131	0.00116	-	-	
Nickel		mg/L	0.0001	0.00038 - 0.0004	0.0004 - 0.00044	0.00044 - 0.00063	0.00053 - 0.00055	0.00056 - 0.00072	0.00085 - 0.00096	0.00046 - 0.00048	0.00045	0.0005 - 0.00052	0.00046 - 0.00047	0.00047	-	-	
Phosphorus		mg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	-	-	
Potassium		mg/L	0.05	0.758 - 0.791	0.635 - 0.749	0.712 - 0.741	0.703 - 0.704	0.699 - 0.764	0.741 - 0.783	0.856 - 0.865	1.01	0.971 - 0.998	1.15 - 1.16	1.03	-	-	
Selenium		mg/L	0.0001	0.00033 - 0.00034	0.00029 - 0.00034	0.00032 - 0.00033	0.00031	0.00029	0.00028 - 0.0003	0.00033	0.00033	0.00036 - 0.					

OBED MOUNTAIN MINE
TABLE 7 ATHABASCA RIVER 1.5 KM DOWNSTREAM (ATR-CON)

Method Type	Chemical	Unit	EQL	Location	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON	ATR-CON
				Date	11-Nov-13	12-Nov-13	13-Nov-13	14-Nov-13	15-Nov-13	16-Nov-13	17-Nov-13	18-Nov-13	19-Nov-13	20-Nov-13
	Acrylonitrile	µg/L	100		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	Benzene	mg/L	0.0005		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Toluene	mg/L	0.0005		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Bromodichloromethane	µg/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Bromoform	µg/L	3		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
	Bromomethane	µg/L	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Carbon disulfide	µg/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Carbon tetrachloride	µg/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chlorobenzene	µg/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chlorodibromomethane	µg/L	3		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
	Chloroethane	µg/L	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Chloroform	µg/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Chloromethane	µg/L	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	cis-1,2-dichloroethene	µg/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	cis-1,3-dichloropropene	µg/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	cis-1,4-Dichloro-2-butene	µg/L	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Dibromomethane	µg/L	3		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
	Dichlorodifluoromethane	µg/L	3		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
	Dichloromethane	µg/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Ethanol	µg/L	300		<300	<300	<300	<300	<300	<300	<300	<300	<300	<300
	Ethyl methacrylate	µg/L	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Ethylbenzene	mg/L	0.0005		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Xylene (m & p)	mg/L	0.0005		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Xylene (o)	mg/L	0.0005		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Xylenes Total	µg/L	0.71		-	-	-	-	-	-	-	-	-	-
	Iodomethane	µg/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Styrene	µg/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Trichloroethene	µg/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Tetrachloroethene	µg/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	trans-1,2-dichloroethene	µg/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	trans-1,3-dichloropropene	µg/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	trans-1,4-Dichloro-2-butene	µg/L	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Trichlorofluoromethane	µg/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Vinyl acetate	µg/L	100		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
	Vinyl chloride	µg/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2

Notes
MDL - Method Detection Limit
- "Sample not analyzed for this parameter"
< - "result is less than the MDL. No detectable concentration was measured"
* EPA 245.7/245.1

OBED MOUNTAIN MINE
TABLE 7 ATHABASCA RIVER 1.5 KM DOWNSTREAM (ATR-CON)

		Location	ATR-CON	ATR-CON	ATR-CON	ATR-CON
		Date	22-Nov-13	24-Nov-13	25-Nov-13	26-Nov-13
Method Type	Chemical	Unit	EQL			
Aggregate Organics	Hydrocarbons, Recoverable (I.R.)	mg/L	1	<1	<1	<1
	BOD	mg/L	2	<2	<2	<2
Oil and Grease	Oil and Grease	mg/L	1	-	-	-
	Phenols (4AAP)	µg/L	1	2 - 2.6	<1	<1 - 1.8
Anions and Nutrients	Alkalinity (T) as CaCO3	mg/L	2	160 - 162	154 - 158	161
	Ammonia	mg/L	0.05	0.081 - 0.082	<0.05	0.051
Bicarbonate	Bicarbonate	mg/L	5	196 - 198	187 - 193	197
	Carbonate	mg/L	5	<5	<5	<5
Chloride	Chloride	mg/L	0.5	4.78 - 4.94	3.62 - 3.8	2.7
	Electrical Conductivity (lab)	dS/m	0.0002	0.494 - 0.496	0.466 - 0.469	0.454
Hydroxide	Hydroxide	mg/L	5	<5	<5	<5
	Ionic Balance	%	5	95.9 - 96.7	96 - 96.6	99.7
Kjeldahl Nitrogen Total	Kjeldahl Nitrogen Total	mg/L	0.05	<0.2	<0.2	<0.2 - 0.22
	Nitrate (as N)	mg/L	0.05	0.066	0.082 - 0.083	0.059
Nitrate + Nitrite-N	Nitrate + Nitrite-N	mg/L	0.07	<0.071	0.082 - 0.083	<0.071
	Nitrite (as N)	mg/L	0.05	<0.05	<0.05	<0.05
pH (Lab)	pH (Lab)	pH	0.1	8.01 - 8.03	8.02 - 8.08	8.04
	Phosphorus	mg/L	0.001	0.0171 - 0.0182	0.0144 - 0.0157	0.0147
Phosphorus (Filtered)	Phosphorus (Filtered)	mg/L	0.001	0.0021 - 0.0026	<0.001 - 0.0015	0.0015
	Sulphate	mg/L	0.5	92.7 - 96.4	87 - 88	72
Sulphide	Sulphide	mg/L	0.002	0.0024 - 0.0065	0.0022	<0.002
	Hardness as CaCO3	mg/L		222 - 223	212 - 218	213
TDS	TDS	mg/L		289 - 292	271 - 275	258
						262 - 253
Cyanides	Cyanide Total	mg/L	0.002	<0.005	<0.005	<0.005
	Aluminium (Filtered)	mg/L	0.001	0.0119 - 0.0127	0.0093 - 0.0133	0.0074
Dissolved Metals	Antimony (Filtered)	mg/L	0.0001	<0.0001	<0.0001	<0.0001
	Arsenic (Filtered)	mg/L	0.0001	0.00016 - 0.00018	0.00015 - 0.00026	0.00017
Barium (Filtered)	Barium (Filtered)	mg/L	0.00005	0.0717 - 0.0719	0.0675 - 0.0678	0.0671
	Beryllium (Filtered)	mg/L	0.00005	<0.00005	<0.00005	<0.00005
Bismuth (Filtered)	Bismuth (Filtered)	mg/L	0.00005	<0.00005	<0.00005	<0.00005
	Boron (hot water ext) (Filtered)	mg/L	0.01	0.01	<0.01 - 0.016	<0.01
Cadmium (Filtered)	Cadmium (Filtered)	mg/L	0.00001	<0.00001	<0.00001	<0.00001
	Calcium (Filtered)	mg/L	0.02	60.1 - 60.3	55.3 - 59.3	57.3
Chromium (III+VI) (Filtered)	Chromium (III+VI) (Filtered)	mg/L	0.0001	<0.0001	<0.0001	<0.0001
	Cobalt (Filtered)	mg/L	0.0001	<0.0001	<0.0001	<0.0001
Copper (Filtered)	Copper (Filtered)	mg/L	0.0001	0.00016 - 0.00017	0.00023	<0.0001 - 0.00026
	Iron (Filtered)	mg/L	0.01	<0.01 - 0.01	<0.01 - 0.012	<0.01
Lead (Filtered)	Lead (Filtered)	mg/L	0.00005	<0.00005	<0.00005	<0.00005
	Lithium (Filtered)	mg/L	0.003	0.0042 - 0.0043	0.0039 - 0.0043	0.0049
Magnesium (Filtered)	Magnesium (Filtered)	mg/L	0.005	17.4 - 17.7	17 - 17.9	17.1
	Manganese (Filtered)	mg/L	0.00005	0.0123 - 0.0125	0.00955 - 0.0106	0.0189
Molybdenum (Filtered)	Molybdenum (Filtered)	mg/L	0.00005	0.00124	0.0011 - 0.00117	0.0011
	Nickel (Filtered)	mg/L	0.0001	0.00031 - 0.00035	0.00029 - 0.00032	0.00029
Phosphorus (Filtered)	Phosphorus (Filtered)	mg/L	0.3	<0.3	<0.3	<0.3
	Potassium (Filtered)	mg/L	0.05	1.03 - 1.05	0.89 - 0.92	0.73
Selenium (Filtered)	Selenium (Filtered)	mg/L	0.0001	0.00044	0.00038 - 0.00039	0.00032
	Silicon (Filtered)	µg/L	50	2170 - 2180	2310 - 2320	2700
Silver (Filtered)	Silver (Filtered)	mg/L	0.00001	<0.00001	<0.00001	<0.00001
	Sodium (Filtered)	mg/L	0.05	15 - 15.4	12.2 - 12.7	11.5
Strontium (Filtered)	Strontium (Filtered)	mg/L	0.0001	0.625 - 0.631	0.597 - 0.633	0.545
	Thallium (Filtered)	mg/L	0.00005	<0.00005	<0.00005	<0.00005
Tin (Filtered)	Tin (Filtered)	mg/L	0.0001	<0.0001	<0.0001	<0.0001
	Titanium (Filtered)	mg/L	0.0003	<0.0003	<0.0003	<0.0003 - 0.00113
Uranium (Filtered)	Uranium (Filtered)	µg/L	0.01	0.795 - 0.808	0.724 - 0.738	0.847
	Vanadium (Filtered)	mg/L	0.0001	0.00016 - 0.00018	0.00015	0.00013
Zinc (Filtered)	Zinc (Filtered)	mg/L	0.001	<0.001	<0.001	<0.001 - 0.0042
	Carbon	mg/L	1	3.3 - 3.7	2.3 - 2.6	3.1
Organic / Inorganic Carbon	Dissolved Organic Carbon (Filtered)	mg/L	1	3.6 - 3.8	1.9 - 2.3	2
						2.6 - 2.9
Organic Parameters	Acrylamide	µg/L	5	-	-	-
	Naphthenic Acid	mg/L	1	<1	<1	<1
Physical Tests	Dissolved Oxygen (Filtered)	mg/L	0.5	-	-	-
	TDS (Filtered)	mg/L	10	304 - 309	278 - 283	278
Total Suspended Solids	Total Suspended Solids	mg/L	3	<3 - 3	<3	14
	Turbidity	NTU	0.1	3.73 - 4.09	4.01 - 4.08	8.79
Polycyclic Aromatic Hydrocarbons		mg/L	0.00001	<0.00001	<0.00001	<0.00001
	Benzo(b)fluoranthene	µg/L	0.04	<0.04	<0.04	<0.04
C4 Benzanthracenes/Chrysenes	C4 Benzanthracenes/Chrysenes	µg/L	0.04	<0.04	<0.04	<0.04
	C4 Dibenzothiophenes	µg/L	0.04	<0.04	<0.04	<0.04
C4 Fluoranthenes/Pyrenes	C4 Fluoranthenes/Pyrenes	µg/L	0.04	<0.04	<0.04	<0.04
	C4 Naphthalenes	µg/L	0.04	<0.04	<0.04	<0.04
C4 Phenanthrenes/Anthracenes	C4 Phenanthrenes/Anthracenes	µg/L	0.04	<0.04	<0.04	0.094 - 0.174
	1,1-Biphenyl	µg/L	0.01	<0.01	<0.01	<0.01
1-Methylnaphthalene	1-Methylnaphthalene	µg/L	0.01	<0.01	<0.01	<0.01
	2-methylnaphthalene	µg/L	0.01	<0.01	<0.01	<0.01
Acenaphthene	Acenaphthene	µg/L	0.01	<0.01	<0.01	<0.01
	Acenaphthylene	µg/L	0.01	<0.01	<0.01	<0.01
Anthracene	Anthracene	µg/L	0.01	<0.04	<0.04	<0.04
	Benz(a)anthracene	µg/L	0.01	<0.01	<0.01	<0.01
Benzof(a)pyrene	Benzof(a)pyrene	µg/L	0.01	<0.01	<0.01	<0.01
	Acridine	mg/L	0.00001	<0.00001	<0.00001	<0.00001
Benzof(b)pyrene	Benzof(b)pyrene	µg/L	0.01	<0.01	<0.01	<0.01
	Benzof(k)pyrene	µg/L	0.01	<0.01	<0.01	<0.01
Benzof(l)fluoranthene	Benzof(l)fluoranthene	µg/L	0.01	<0.01	<0.01	<0.01
	C1 Acenaphthenes	µg/L	0.04	<0.04	<0.04	<0.04

Notes
MDL - Method Detection Limit
- "Sample not analyzed for this parameter"
< - "result is less than the MDL. No detectable concentration was measured"
* EPA 245.7/245.1

OBED MOUNTAIN MINE
TABLE 7 ATHABASCA RIVER 1.5 KM DOWNSTREAM (ATR-CON)

Method Type	Chemical	Unit	EQL	Location	ATR-CON	ATR-CON	ATR-CON	ATR-CON
				Date	22-Nov-13	24-Nov-13	25-Nov-13	26-Nov-13
Method Type	C1 Benz(a)Anthracenes/Chrysenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	<0.04
	C1 Benzofluoranthenes/Benzopyrenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	Chrysene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	
	C1 Biphenyls	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C1 Dibenzothiophenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C1 Fluoranthenes/Pyrenes	ug/L	0.04	-	-	-	-	
	C1 Fluorenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C1 Phenanthrenes/Anthracenes	ug/L	0.04	-	-	-	-	
	Dibenz(a,h)anthracene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	
	Dibenzothiophene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	
	Fluoranthene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	
	Fluorene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	
	Indeno(1,2,3-c,d)pyrene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	
	Naphthalene	ug/L	0.05	<0.05	<0.05	<0.05	<0.05	
	Perylene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	
	Phenanthrene	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	
	Pyrene	ug/L	0.01	<0.04	<0.01	<0.01	<0.04	
	Quinoline	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	
	Ritene	ug/L	0.01	<0.01	<0.01	0.038	0.084 - 0.174	
	C2 Benz(a)Anthracenes/Chrysenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C2 Benzofluoranthenes/Benzopyrenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C2 Biphenyls	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C2 Dibenzothiophenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C2 Fluoranthenes/Pyrenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C2 Naphthalenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C2 Phenanthrenes/Anthracenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C2 Fluorenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C3 Benzanthracenes/Chrysenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C3 Dibenzothiophenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C3 Fluoranthenes/Pyrenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C3 Fluorenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C3 Naphthalenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	C3 Phenanthrenes/Anthracenes	ug/L	0.04	<0.04	<0.04	<0.04	<0.04	
	Speciated Metals	Chromium (hexavalent)	mg/L	0.001	-	-	-	-
	Total Metals	Aluminium	mg/L	0.003	0.106 - 0.126	0.135 - 0.142	0.0145	0.43 - 0.783
		Antimony	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001 - 0.00012
		Arsenic	mg/L	0.0001	0.00021 - 0.00022	0.00019 - 0.00022	<0.0001	0.0003 - 0.00047
		Barium	mg/L	0.00005	0.0773 - 0.0775	0.0747 - 0.0752	0.00263	0.0803 - 0.102
		Beryllium	mg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005
		Bismuth	mg/L	0.00005	<0.00005	<0.00005 - 0.000119	<0.00005	<0.00005
		Boron (hot water ext)	mg/L	0.01	0.01 - 0.011	0.01	<0.01	<0.01
		Cadmium	mg/L	0.00001	<0.00001	<0.00001	<0.00001	0.000016 - 0.000018
		Calcium	mg/L	0.02	64.3 - 64.8	60.8 - 61.7	38.7	50.5 - 53.4
	Chromium (III+VI)	mg/L	0.0001	0.00017 - 0.00022	0.0002 - 0.00025	<0.0001	0.00046 - 0.0007	
	Cobalt	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001 - 0.00028	
	Copper	mg/L	0.0001	0.00033 - 0.00036	0.00041 - 0.00045	0.00021	0.00104 - 0.00108	
	Iron	mg/L	0.01	0.11 - 0.112	0.136 - 0.145	0.013	0.517 - 0.566	
	Lead	mg/L	0.00005	0.000106 - 0.000107	0.000128 - 0.000135	0.000204	0.000449 - 0.000818	
	Lithium	mg/L	0.005	<0.005	<0.005	<0.005	<0.005	
	Magnesium	mg/L	0.005	17.4 - 17.9	17.2	0.664	14.7 - 15	
	Manganese	mg/L	0.00005	0.0151 - 0.0164	0.0135 - 0.0154	0.000917	0.0222 - 0.0267	
	Mercury	ug/L	0.0005	0.00055 - 0.00057	<0.0005	0.00173	0.00267 - 0.00287	
	Molybdenum	mg/L	0.00005	0.00136 - 0.0014	0.00127 - 0.00134	0.000746	0.00099 - 0.00102	
	Nickel	mg/L	0.0001	0.00042 - 0.00048	0.00046	<0.0001	0.0008 - 0.00108	
	Phosphorus	mg/L	0.3	<0.3	<0.3	<0.3	<0.3	
	Potassium	mg/L	0.05	1.06 - 1.13	0.922 - 0.951	<0.05	0.844 - 0.921	
	Selenium	mg/L	0.0001	0.0004 - 0.00043	0.00039	<0.0001	0.00028 - 0.0003	
	Silicon	ug/L	50	2350 - 2380	2570 - 2650	440	3810 - 4220	
	Silver	mg/L	0.00001	<0.00001	<0.00001	<0.00001	<0.00001 - 0.00002	
	Sodium	mg/L	0.05	15.4 - 16.1	12.1 - 12.3	0.196	10.2 - 10.5	
	Strontium	mg/L	0.0001	0.676 - 0.682	0.683 - 0.684	0.369	0.543 - 0.559	
	Thallium	mg/L	0.00005	<0.00005	<0.00005	<0.00005	<0.00005	
	Tin	mg/L	0.0001	<0.0001	<0.0001	<0.0001	0.0001 - 0.00011	
	Titanium	mg/L	0.0003	0.00404 - 0.00406	0.00349 - 0.00371	0.0005	0.012 - 0.0273	
	Uranium	ug/L	0.01	0.823 - 0.829	0.792 - 0.813	0.597	0.903 - 0.976	
	Vanadium	mg/L	0.0001	0.0004 - 0.00041	0.00041	0.00015	0.00082 - 0.0013	
	Zinc	mg/L	0.003	<0.003	<0.003	<0.003	0.0052 - 0.0197	
Volatile Organic Compounds	1,1,1-trichloroethane	ug/L	1	<1	<1	<1	<1	
	1,1,2,2-tetrachloroethane	ug/L	20	<20	<20	<20	<20	
	1,1,2-trichloroethane	ug/L	2	<2	<2	<2	<2	
	1,1-dichloroethane	ug/L	1	<1	<1	<1	<1	
	1,1-dichloroethene	ug/L	1	<1	<1	<1	<1	
	1,2,3-trichloropropane	ug/L	5	<5	<5	<5	<5	
	1,2-dibromoethane	ug/L	1	<1	<1	<1	<1	
	1,2-dichlorobenzene	ug/L	1	<1	<1	<1	<1	
	1,2-dichloroethane	ug/L	2	<2	<2	<2	<2	
	1,2-dichloropropane	ug/L	2	<2	<2	<2	<2	
	1,3-dichlorobenzene	ug/L	1	<1	<1	<1	<1	
	1,4-dichlorobenzene	ug/L	1	<1	<1	<1	<1	
	Methyl Ethyl Ketone	ug/L	100	<100	<100	<100	<100	
	2-hexanone (MBK)	ug/L	10	<10	<10	<10	<10	
	4-Methyl-2-pentanone	ug/L	10	<10	<10	<10	<10	
	Acetone	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	
	Acrolein	ug/L	100	<100	<100	<100	<100	

Notes
MDL - Method Detection Limit
- "Sample not analyzed for this parameter"
< - "result is less than the MDL. No detectable concentration was measured"
* EPA 245.7/245.1

OBED MOUNTAIN MINE
TABLE 7 ATHABASCA RIVER 1.5 KM DOWNSTREAM (ATR-CON)

			Location	ATR-CON	ATR-CON	ATR-CON	ATR-CON
			Date	22-Nov-13	24-Nov-13	25-Nov-13	26-Nov-13
Method Type	Chemical	Unit	EQL				
	Acrylonitrile	µg/L	100	<100	<100	<100	<100
	Benzene	mg/L	0.0005	<0.001	<0.001	<0.001	<0.001
	Toluene	mg/L	0.0005	<0.001	<0.001	<0.001	<0.001
	Bromodichloromethane	µg/L	1	<1	<1	<1	<1
	Bromoform	µg/L	3	<3	<3	<3	<3
	Bromomethane	µg/L	10	<10	<10	<10	<10
	Carbon disulfide	µg/L	1	<1	<1	<1	<1
	Carbon tetrachloride	µg/L	1	<1	<1	<1	<1
	Chlorobenzene	µg/L	1	<1	<1	<1	<1
	Chlorodibromomethane	µg/L	3	<3	<3	<3	<3
	Chloroethane	µg/L	10	<10	<10	<10	<10
	Chloroform	µg/L	1	<1	<1	<1	<1
	Chloromethane	µg/L	10	<10	<10	<10	<10
	cis-1,2-dichloroethene	µg/L	1	<1	<1	<1	<1
	cis-1,3-dichloropropene	µg/L	1	<1	<1	<1	<1
	cis-1,4-Dichloro-2-butene	µg/L	10	<10	<10	<10	<10
	Dibromomethane	µg/L	3	<3	<3	<3	<3
	Dichlorodifluoromethane	µg/L	3	<3	<3	<3	<3
	Dichloromethane	µg/L	1	<1	<1	<1	<1
	Ethanol	µg/L	300	<300	<300	<300	<300
	Ethyl methacrylate	µg/L	10	<10	<10	<10	<10
	Ethylbenzene	mg/L	0.0005	<0.001	<0.001	<0.001	<0.001
	Xylene (m & p)	mg/L	0.0005	<0.001	<0.001	<0.001	<0.001
	Xylene (o)	mg/L	0.0005	<0.001	<0.001	<0.001	<0.001
	Xylenes Total	µg/L	0.71	-	-	-	-
	Iodomethane	µg/L	1	<1	<1	<1	<1
	Styrene	µg/L	1	<1	<1	<1	<1
	Trichloroethene	µg/L	1	<1	<1	<1	<1
	Tetrachloroethene	µg/L	1	<1	<1	<1	<1
	trans-1,2-dichloroethene	µg/L	1	<1	<1	<1	<1
	trans-1,3-dichloropropene	µg/L	1	<1	<1	<1	<1
	trans-1,4-Dichloro-2-butene	µg/L	10	<10	<10	<10	<10
	Trichlorofluoromethane	µg/L	1	<1	<1	<1	<1
	Vinyl acetate	µg/L	100	<100	<100	<100	<100
	Vinyl chloride	µg/L	2	<2	<2	<2	<2

Notes
MDL - Method Detection Limit
- "Sample not analyzed for this parameter"
< - "result is less than the MDL. No detectable concentration was measured"
* EPA 245.7/245.1