

Table 1: Current Condition Targets, Athabasca River - Water

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Conventional Variables											
Alkalinity, Phenolphthalein (total hydroxide+1/2 carbonate) as CaCO3	mg/L	all sites	-	-	-	1.00	6.40	7.06	-	-	-
Alkalinity, total as CaCO3	mg/L	all sites	61.05	89.00	99.09	81.54	101.00	122.00	+	+	+
	mg/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	mg/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	mg/L	AL07DD0007	+	+	+	+	+	+	133.00	147.00	165.00
	mg/L	AL07DD0008	+	+	+	+	+	+	89.00	163.00	199.00
	mg/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Fixed suspended solids, Non-Filterable (Particle)	mg/L	all sites	30.50	166.00	661.80	3.95	20.40	125.70	<	<	<
Organic carbon, Filtered	mg/L	all sites	3.53	12.20	16.36	4.24	7.90	17.50	5.49	7.43	10.40
Organic carbon, Non-Filterable (Particle)	mg/L	all sites	1.23	4.01	13.17	0.39	0.98	5.07	0.09	0.23	0.47
Specific conductivity	uS/cm	all sites	160.90	216.00	263.10	213.20	266.00	322.20	318.85	409.50	484.75
Total suspended solids, Non-Filterable (Particle)	mg/L	all sites	37.04	183.00	719.90	9.64	24.00	141.50	<	<	<
True colour, Filtered	TCU	all sites	-	-	-	-	-	-	-	-	-
True colour, Supernate	rel units	all sites	5.00	60.00	98.25	6.00	25.00	88.00	5.00	15.00	35.00
Turbidity	NTU	all sites	18.49	69.00	219.00	5.28	12.20	95.20	1.84	3.65	6.63
pH, lab	pH units	all sites	7.79	8.09	8.32	7.94	8.22	8.38	7.65	7.84	8.12
Dissolved Metals											
Aluminum, Filtered	ug/L	all sites	7.68	32.35	117.90	5.06	16.00	56.68	3.83	13.20	28.20
Antimony, Filtered	ug/L	all sites	0.04	0.07	0.12	0.03	0.05	0.11	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-

Table 1: Current Condition Targets, Athabasca River - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
	ug/L	AL07DD0007	+	+	+	+	+	+	0.04	0.06	0.11
	ug/L	AL07DD0008	+	+	+	+	+	+	0.02	0.05	0.13
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Arsenic, Filtered	ug/L	all sites	0.37	0.55	0.81	0.36	0.49	0.73	0.32	0.46	0.66
Barium, Filtered	ug/L	all sites	24.52	43.75	55.41	27.22	49.10	63.38	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0007	+	+	+	+	+	+	62.30	71.90	79.90
	ug/L	AL07DD0008	+	+	+	+	+	+	24.90	86.65	109.00
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Beryllium, Filtered	ug/L	all sites	0.00	0.01	0.02	0.00	0.00	0.01	0.00	0.00	0.01
Bismuth, Filtered	ug/L	all sites	0.00	0.00	0.00	0.00	0.00	0.00	<	<	<
Boron, Filtered	ug/L	all sites	12.84	21.60	30.28	15.18	23.30	31.22	30.39	36.35	41.60
Cadmium, Filtered	ug/L	all sites	0.00	0.01	0.03	0.00	0.01	0.02	0.00	0.01	0.03
Cerium, Filtered	ug/L	all sites	0.04	0.18	0.60	0.02	0.07	0.27	0.02	0.06	0.08
Cesium, Filtered	ug/L	all sites	0.00	0.01	0.02	0.00	0.00	0.01	0.00	0.00	0.01
Chromium, Filtered	ug/L	all sites	0.05	0.10	0.25	0.03	0.06	0.14	0.06	0.08	0.13
Cobalt, Filtered	ug/L	all sites	0.04	0.07	0.17	0.04	0.08	0.12	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0007	+	+	+	+	+	+	0.04	0.06	0.09
	ug/L	AL07DD0008	+	+	+	+	+	+	0.04	0.05	0.09
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Copper, Filtered	ug/L	all sites	0.62	1.28	2.41	0.42	0.66	1.56	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0007	+	+	+	+	+	+	0.28	0.58	0.96

Table 1: Current Condition Targets, Athabasca River - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
	ug/L	AL07DD0008	+	+	+	+	+	+	0.31	0.56	1.26
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Gallium, Filtered	ug/L	all sites	0.01	0.02	0.04	0.00	0.01	0.06	0.00	0.01	0.06
Germanium, Filtered	ug/L	all sites	0.01	0.01	0.02	0.01	0.01	0.01	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0007	+	+	+	+	+	+	0.01	0.01	0.02
	ug/L	AL07DD0008	+	+	+	+	+	+	0.01	0.01	0.01
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Indium, Filtered	ug/L	all sites	<	<	<	<	<	<	<	<	<
Iron, Filtered	ug/L	all sites	22.64	190.50	572.75	37.76	157.00	445.60	72.11	255.00	563.50
Lanthanum, Filtered	ug/L	all sites	0.02	0.10	0.28	0.01	0.04	0.15	0.01	0.03	0.05
Lead, Filtered	ug/L	all sites	0.02	0.09	0.30	0.01	0.04	0.13	0.02	0.03	0.07
Lithium, Filtered	ug/L	all sites	3.98	5.39	7.37	4.80	6.03	8.58	7.96	9.98	11.37
Manganese, Filtered	ug/L	all sites	0.58	2.71	5.57	0.71	2.06	5.84	2.20	7.91	12.01
Molybdenum, Filtered	ug/L	all sites	+	+	+	0.33	0.69	0.91	+	+	+
	ug/L	AL07DD0004	0.40	0.59	2.88	+	+	+	-	-	-
	ug/L	AL07DD0005	0.50	0.63	0.73	+	+	+	-	-	-
	ug/L	AL07DD0007	0.63	0.74	0.96	+	+	+	0.64	0.79	0.88
	ug/L	AL07DD0008	0.26	0.53	0.81	+	+	+	0.23	0.89	1.14
	ug/L	AL07DD0009	-	-	-	+	+	+	-	-	-
Nickel, Filtered	ug/L	all sites	0.74	1.38	2.52	0.68	0.91	1.74	0.49	0.94	1.47
Niobium, Filtered	ug/L	all sites	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00
Palladium, Filtered	ug/L	all sites	<	<	<	<	<	<	<	<	<
Platinum, Filtered	ug/L	all sites	<	<	<	<	<	<	<	<	<
Rubidium, Filtered	ug/L	all sites	0.56	0.89	1.16	0.68	0.84	0.98	1.07	1.44	1.95
Scandium, Filtered	ug/L	all sites	0.00	0.01	0.14	0.00	0.01	0.06	0.00	0.01	0.04
Selenium, Filtered	ug/L	all sites	0.07	0.15	0.22	0.08	0.12	0.17	+	+	+

Table 1: Current Condition Targets, Athabasca River - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0007	+	+	+	+	+	+	0.11	0.16	0.21
	ug/L	AL07DD0008	+	+	+	+	+	+	0.05	0.20	0.34
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Silver, Filtered	ug/L	all sites	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Strontium, Filtered	ug/L	all sites	81.89	170.00	241.05	123.20	226.00	303.60	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0007	+	+	+	+	+	+	278.00	322.00	388.00
	ug/L	AL07DD0008	+	+	+	+	+	+	134.00	364.00	489.00
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Tellurium, Filtered	ug/L	all sites	0.01	0.01	0.01	<	<	<	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0007	+	+	+	+	+	+	0.01	0.01	0.02
	ug/L	AL07DD0008	+	+	+	+	+	+	0.00	0.00	0.01
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Thallium, Filtered	ug/L	all sites	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.01
Tin, Filtered	ug/L	all sites	0.00	0.00	0.03	0.00	0.00	0.05	0.00	0.01	0.02
Titanium, Filtered	ug/L	all sites	0.10	1.00	4.54	0.10	0.50	1.50	0.10	0.50	1.20
Tungsten, Filtered	ug/L	all sites	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01
Uranium, Filtered	ug/L	all sites	0.13	0.34	0.48	0.14	0.36	0.48	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0007	+	+	+	+	+	+	0.40	0.45	0.53
	ug/L	AL07DD0008	+	+	+	+	+	+	0.10	0.57	0.81
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-

Table 1: Current Condition Targets, Athabasca River - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Vanadium, Filtered	ug/L	all sites	0.21	0.39	0.74	0.15	0.31	0.64	0.13	0.20	0.48
Yttrium, Filtered	ug/L	all sites	0.05	0.18	0.42	0.04	0.08	0.26	0.05	0.07	0.10
Zinc, Filtered	ug/L	all sites	0.27	0.60	2.15	0.16	0.40	1.20	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0007	+	+	+	+	+	+	0.60	1.30	3.60
	ug/L	AL07DD0008	+	+	+	+	+	+	0.60	1.30	3.20
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Zirconium, Filtered	ug/L	all sites	0.08	0.20	0.50	0.05	0.10	0.30	0.07	0.10	0.20
<b>Field</b>											
Dissolved oxygen (DO)	mg/L	all sites	8.15	8.72	10.75	8.07	9.86	13.01	11.54	12.39	13.05
Specific conductivity	uS/cm	all sites	153.70	222.00	269.35	225.20	268.00	319.40	+	+	+
	uS/cm	AL07DD0004	+	+	+	+	+	+	-	-	-
	uS/cm	AL07DD0005	+	+	+	+	+	+	-	-	-
	uS/cm	AL07DD0007	+	+	+	+	+	+	373.00	417.00	484.00
	uS/cm	AL07DD0008	+	+	+	+	+	+	266.00	432.00	521.00
	uS/cm	AL07DD0009	+	+	+	+	+	+	-	-	-
Temperature, water	degC	all sites	10.46	18.79	22.14	2.44	12.68	22.62	+	+	+
	degC	AL07DD0004	+	+	+	+	+	+	-	-	-
	degC	AL07DD0005	+	+	+	+	+	+	-	-	-
	degC	AL07DD0007	+	+	+	+	+	+	-0.32	-0.13	-0.07
	degC	AL07DD0008	+	+	+	+	+	+	-0.80	-0.25	-0.08
	degC	AL07DD0009	+	+	+	+	+	+	-	-	-
Turbidity	NTU	all sites	20.25	64.65	321.95	2.43	12.15	71.75	0.00	1.50	101.50
pH	pH units	all sites	7.74	7.97	8.29	7.83	8.20	8.41	7.06	7.51	8.15
<b>General Organics</b>											
Benzene	ug/L	all sites	<	<	<	-	-	-	<	<	<
C10-C16 Hydrocarbons	ug/L	all sites	23.15	52.59	133.06	<	<	<	<	<	<

Table 1: Current Condition Targets, Athabasca River - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
C16-C34 Hydrocarbons	ug/L	all sites	<	<	<	<	<	<	<	<	<
C34-C50 Hydrocarbons	ug/L	all sites	<	<	<	<	<	<	<	<	<
C6-C10 Hydrocarbons	ug/L	all sites	<	<	<	<	<	<	<	<	<
Cyanide	mg/L	all sites	<	<	<	<	<	<	<	<	<
Ethylbenzene	ug/L	all sites	<	<	<	-	-	-	<	<	<
Hydrocarbons, petroleum	mg/L	all sites	0.02	0.08	0.40	<	<	<	<	<	<
Naphthenic acids	mg/L	all sites	<	<	<	<	<	<	<	<	<
Toluene	ug/L	all sites	+	+	+	0.01	0.03	0.14	<	<	<
	ug/L	AL07DD0004	-	-	-	+	+	+	+	+	+
	ug/L	AL07DD0005	-	-	-	+	+	+	+	+	+
	ug/L	AL07DD0007	-	-	-	+	+	+	+	+	+
	ug/L	AL07DD0008	<	<	<	+	+	+	+	+	+
	ug/L	AL07DD0009	-	-	-	+	+	+	+	+	+
m,p-Xylene	ug/L	all sites	<	<	<	-	-	-	<	<	<
o-Xylene	ug/L	all sites	<	<	<	<	<	<	<	<	<
<b>Major Ions</b>											
Calcium, Filtered	mg/L	all sites	+	+	+	23.47	32.15	38.89	24.26	43.20	57.34
	mg/L	AL07DD0004	-	-	-	+	+	+	+	+	+
	mg/L	AL07DD0005	-	-	-	+	+	+	+	+	+
	mg/L	AL07DD0007	-	-	-	+	+	+	+	+	+
	mg/L	AL07DD0008	15.80	23.15	33.20	+	+	+	+	+	+
	mg/L	AL07DD0009	-	-	-	+	+	+	+	+	+
Calcium, Unknown	mg/L	all sites	22.40	27.10	29.80	19.80	32.00	36.00	26.10	38.40	48.30
Chloride, Filtered	mg/L	all sites	1.15	4.52	12.93	1.52	8.13	18.04	+	+	+
	mg/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	mg/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	mg/L	AL07DD0007	+	+	+	+	+	+	14.70	17.90	24.70
	mg/L	AL07DD0008	+	+	+	+	+	+	5.38	13.16	36.70

Table 1: Current Condition Targets, Athabasca River - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Fluoride, Filtered	mg/L	AL07DD0009	+	+	+	+	+	+	-	-	-
	mg/L	all sites	+	+	+	0.06	0.09	0.11	+	+	+
	mg/L	AL07DD0004	0.07	0.09	0.09	+	+	+	-	-	-
	mg/L	AL07DD0005	0.06	0.09	0.09	+	+	+	-	-	-
	mg/L	AL07DD0007	0.08	0.09	0.10	+	+	+	0.10	0.11	0.15
	mg/L	AL07DD0008	0.07	0.08	0.09	+	+	+	0.09	0.11	0.13
	mg/L	AL07DD0009	-	-	-	+	+	+	-	-	-
Magnesium, Filtered	mg/L	all sites	+	+	+	6.73	8.55	11.40	+	+	+
	mg/L	AL07DD0004	4.76	7.13	8.55	+	+	+	-	-	-
	mg/L	AL07DD0005	5.59	6.97	7.84	+	+	+	-	-	-
	mg/L	AL07DD0007	6.73	8.32	9.40	+	+	+	10.10	12.30	14.00
	mg/L	AL07DD0008	4.29	6.48	9.35	+	+	+	7.08	13.35	17.10
	mg/L	AL07DD0009	-	-	-	+	+	+	-	-	-
Potassium, Filtered	mg/L	all sites	0.79	1.03	1.75	0.95	1.11	1.41	1.27	2.03	2.55
Silica, Filtered as SiO <sub>2</sub>	mg/L	all sites	3.06	5.89	9.02	1.92	4.51	7.91	5.63	8.85	12.16
Silica, Unknown as SiO <sub>2</sub>	mg/L	all sites	4.63	5.39	6.62	3.71	5.74	8.40	7.88	9.17	11.20
Sodium, Filtered	mg/L	all sites	6.12	8.63	13.06	6.99	12.20	18.22	21.49	27.80	32.89
Sulfate, Filtered as SO <sub>4</sub>	mg/L	all sites	+	+	+	9.67	24.00	37.26	+	+	+
	mg/L	AL07DD0004	9.91	16.60	24.10	+	+	+	-	-	-
	mg/L	AL07DD0005	10.60	17.00	20.70	+	+	+	-	-	-
	mg/L	AL07DD0007	15.60	21.75	29.00	+	+	+	31.50	38.70	52.40
	mg/L	AL07DD0008	6.61	13.20	30.40	+	+	+	11.60	44.05	65.50
	mg/L	AL07DD0009	-	-	-	+	+	+	-	-	-
<b>Nutrients and BOD</b>											
Ammonia and ammonium, Unfiltered as N	mg/L	all sites	0.00	0.01	0.03	0.00	0.01	0.02	0.02	0.05	0.08
Inorganic nitrogen (nitrate and nitrite), Filtered	mg/L	all sites	0.01	0.03	0.07	0.00	0.01	0.03	+	+	+

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Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
	mg/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	mg/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	mg/L	AL07DD0007	+	+	+	+	+	+	0.21	0.26	0.31
	mg/L	AL07DD0008	+	+	+	+	+	+	0.18	0.22	0.31
	mg/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Organic Nitrogen, Non-Filterable (Particle) as N	mg/L	all sites	0.11	0.31	1.00	0.03	0.11	0.31	+	+	+
	mg/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	mg/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	mg/L	AL07DD0007	+	+	+	+	+	+	0.01	0.02	0.03
	mg/L	AL07DD0008	+	+	+	+	+	+	0.01	0.02	0.05
	mg/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Total Nitrogen, mixed forms, Filtered as N	mg/L	all sites	0.12	0.30	0.61	0.11	0.22	0.62	0.39	0.53	0.81
Total Nitrogen, mixed forms, Non-Filterable (Particle) as N	mg/L	all sites	-	-	-	0.07	0.10	0.47	-	-	-
Total Nitrogen, mixed forms, Unknown as N	mg/L	all sites	0.29	0.45	0.59	0.22	0.34	0.52	+	+	+
	mg/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	mg/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	mg/L	AL07DD0007	+	+	+	+	+	+	-	-	-
	mg/L	AL07DD0008	+	+	+	+	+	+	-	-	-
	mg/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Total Phosphorus, mixed forms, Filtered as P	mg/L	all sites	0.01	0.02	0.03	0.00	0.01	0.03	0.01	0.02	0.04
Total Phosphorus, mixed forms, Unfiltered as P	mg/L	all sites	0.05	0.19	0.58	0.02	0.05	0.19	0.02	0.04	0.05
Organohalides											
2-Chloronaphthalene	ng/L	AL07DD0004	<	<	<	-	-	-	-	-	-
	ng/L	AL07DD0005	-	-	-	-	-	-	-	-	-



Table 1: Current Condition Targets, Athabasca River - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
	ng/L	AL07DD0007	-	-	-	-	-	-	-	-	-
	ng/L	AL07DD0008	-	-	-	-	-	-	-	-	-
	ng/L	AL07DD0009	-	-	-	-	-	-	-	-	-
<b>PAHs</b>											
1,2,3,4-Tetrahydronaphthalene	ng/L	all sites	<	<	<	<	<	<	<	<	<
1,6,7-Trimethylnaphthalene	ng/L	all sites	0.46	1.64	4.15	0.35	1.00	3.11	0.11	0.43	2.11
1-Methylnaphthalene	ng/L	all sites	1.17	4.70	18.66	<	<	<	<	<	<
2-Isopropylnaphthalene	ng/L	all sites	<	<	<	<	<	<	-	-	-
2-Methylnaphthalene	ng/L	all sites	2.48	9.19	35.30	<	<	<	<	<	<
3-Methylcholanthrene	ng/L	all sites	1.24	4.26	13.78	0.13	0.52	2.49	<	<	<
7,10-Dimethylbenzo[a]pyrene	ng/L	all sites	<	<	<	<	<	<	-	-	-
7-Methylbenzo[a]pyrene	ng/L	all sites	<	<	<	<	<	<	-	-	-
9-Ethylfluorene	ng/L	all sites	<	<	<	<	<	<	-	-	-
9-Methylfluorene	ng/L	all sites	0.10	0.56	3.92	<	<	<	<	<	<
Acenaphthene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Acenaphthylene	ng/L	AL07DD0004	<	<	<	<	<	<	-	-	-
	ng/L	AL07DD0005	<	<	<	<	<	<	-	-	-
	ng/L	AL07DD0007	<	<	<	<	<	<	<	<	<
	ng/L	AL07DD0008	<	<	<	<	<	<	<	<	<
	ng/L	AL07DD0009	-	-	-	-	-	-	-	-	-
Anthracene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Benz[a]anthracene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Benzo(b)fluoranthene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Benzo[a]pyrene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Benzo[e]pyrene	ng/L	all sites	<	<	<	<	<	<	<	<	<

Table 1: Current Condition Targets, Athabasca River - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Benzo[ghi]perylene	ng/L	AL07DD0004	<	<	<	<	<	<	-	-	-
	ng/L	AL07DD0005	<	<	<	<	<	<	-	-	-
	ng/L	AL07DD0007	<	<	<	<	<	<	<	<	<
	ng/L	AL07DD0008	<	<	<	<	<	<	<	<	<
	ng/L	AL07DD0009	-	-	-	-	-	-	-	-	-
Benzo[k]fluoranthene	ng/L	AL07DD0004	<	<	<	<	<	<	-	-	-
	ng/L	AL07DD0005	<	<	<	<	<	<	-	-	-
	ng/L	AL07DD0007	<	<	<	<	<	<	<	<	<
	ng/L	AL07DD0008	<	<	<	<	<	<	<	<	<
	ng/L	AL07DD0009	-	-	-	-	-	-	-	-	-
Biphenyl	ng/L	all sites	-	-	-	-	-	-	-	-	-
C1-Dibenzothiophenes	ng/L	all sites	-	-	-	-	-	-	-	-	-
C1-Fluoranthenes/pyrenes	ng/L	all sites	23.36	30.50	45.02	-	-	-	-	-	-
C2-1,6-Dimethylnaphthalene	ng/L	all sites	4.48	6.21	27.16	0.50	1.89	8.97	1.05	2.23	5.36
C2-1,9-Dimethylfluorene	ng/L	all sites	0.07	0.42	3.40	<	<	<	-	-	-
C2-3-Ethylfluoranthene	ng/L	all sites	<	<	<	<	<	<	-	-	-
C2-Benzopyrenes	ng/L	all sites	<	<	<	<	<	<	<	<	<
C2-Chrysenes	ng/L	all sites	4.13	7.42	14.61	<	<	<	<	<	<
C2-Dibenzothiophenes	ng/L	all sites	6.26	21.00	50.82	-	-	-	-	-	-
C2-Dimethyldibenzothiophenes	ng/L	all sites	3.95	16.56	60.42	0.32	1.70	26.69	0.39	0.75	2.90
C2-Fluoranthenes/pyrenes	ng/L	all sites	5.39	6.87	9.07	<	<	<	<	<	<
C2-Fluorenes	ng/L	all sites	14.00	21.90	50.10	-	-	-	-	-	-
C2-Naphthalenes	ng/L	all sites	-	-	-	-	-	-	-	-	-
C2-Phenanthrenes	ng/L	all sites	7.91	26.20	85.24	0.09	1.44	29.99	-	-	-
C3-2,4,7-Trimethyldibenzothiophene	ng/L	all sites	<	<	<	<	<	<	<	<	<
C3-4-Propyldibenzothiophene	ng/L	all sites	0.07	0.45	3.73	<	<	<	<	<	<
C3-Chrysenes	ng/L	all sites	9.57	10.60	11.90	-	-	-	-	-	-
C3-Dibenzothiophenes	ng/L	all sites	16.40	18.50	27.50	-	-	-	-	-	-

Table 1: Current Condition Targets, Athabasca River - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
C3-Fluoranthenes/pyrenes	ng/L	all sites	<	<	<	<	<	<	<	<	<
C3-Fluorenes	ng/L	all sites	<	<	<	<	<	<	<	<	<
C3-N-Propylfluorene	ng/L	all sites	<	<	<	<	<	<	<	<	<
C3-Naphthalenes	ng/L	all sites	5.53	15.23	50.65	<	<	<	<	<	<
C3-Phenanthrenes	ng/L	all sites	5.99	15.65	49.18	-	-	-	-	-	-
C4-Chrysenes	ng/L	all sites	11.58	12.65	13.84	-	-	-	-	-	-
C4-Dibenzothiophenes	ng/L	all sites	<	<	<	<	<	<	<	<	<
C4-Fluoranthenes/pyrenes	ng/L	all sites	<	<	<	<	<	<	<	<	<
C4-Fluorenes	ng/L	all sites	<	<	<	<	<	<	<	<	<
C4-Naphthalenes	ng/L	all sites	11.51	22.00	39.20	-	-	-	-	-	-
C4-Phenanthrenes	ng/L	all sites	+	+	+	<	<	<	<	<	<
	ng/L	AL07DD0004	-	-	-	+	+	+	+	+	+
	ng/L	AL07DD0005	4.66	8.95	14.55	+	+	+	+	+	+
	ng/L	AL07DD0007	-	-	-	+	+	+	+	+	+
	ng/L	AL07DD0008	-	-	-	+	+	+	+	+	+
	ng/L	AL07DD0009	-	-	-	+	+	+	+	+	+
Chrysene	ng/L	all sites	0.36	2.51	23.46	-	-	-	-	-	-
Dibenz[a,h]anthracene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Dibenzothiophene	ng/L	all sites	-	-	-	-	-	-	-	-	-
Fluoranthene	ng/L	all sites	0.67	2.14	7.11	<	<	<	<	<	<
Fluorene	ng/L	all sites	-	-	-	-	-	-	-	-	-
Indene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Indeno[1,2,3-cd]fluoranthene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Indeno[1,2,3-cd]pyrene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Methylbenzopyrene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Methylchrysene	ng/L	all sites	37.07	59.20	91.20	<	<	<	-	-	-
Methyldibenzothiophene	ng/L	all sites	1.52	3.55	17.76	0.24	0.93	4.47	0.30	0.82	2.60
Methylfluoranthene	ng/L	all sites	4.24	7.70	30.77	0.18	1.17	7.91	<	<	<

Table 1: Current Condition Targets, Athabasca River - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Methylfluorene	ng/L	all sites	14.61	30.30	57.48	-	-	-	-	-	-
Methylnaphthalene	ng/L	all sites	19.11	48.03	148.13	-	-	-	-	-	-
Methylphenanthrene	ng/L	all sites	6.21	30.20	110.19	<	<	<	-	-	-
Naphthalene	ng/L	all sites	3.16	23.78	251.85	11.84	43.05	123.20	4.51	26.65	200.50
Perylene	ng/L	all sites	1.59	9.09	71.88	<	<	<	<	<	<
Phenanthrene	ng/L	all sites	2.95	10.64	34.80	<	<	<	-	-	-
Pyrene	ng/L	all sites	0.67	3.34	24.60	<	<	<	<	<	<
Retene	ng/L	all sites	1.86	10.25	67.50	<	<	<	<	<	<
<b>Phenolics</b>											
Phenol	ug/L	all sites	<	<	<	<	<	<	<	<	<
<b>Target PANHs</b>											
Acridine	ug/L	all sites	<	<	<	<	<	<	<	<	<
Carbazole	ng/L	all sites	<	<	<	<	<	<	<	<	<
<b>Total Metals</b>											
Aluminum, Unfiltered	ug/L	all sites	142.40	2530.00	8576.00	110.82	316.00	3154.00	15.18	54.00	127.85
Antimony, Unfiltered	ug/L	all sites	0.05	0.11	0.20	0.02	0.06	0.15	0.01	0.06	0.09
Arsenic, Unfiltered	ug/L	all sites	0.64	1.98	5.43	0.50	0.71	2.63	0.38	0.56	0.77
Barium, Unfiltered	ug/L	all sites	48.02	73.80	174.00	34.70	53.70	104.24	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0007	+	+	+	+	+	+	63.30	69.50	79.30
	ug/L	AL07DD0008	+	+	+	+	+	+	26.00	85.20	107.00
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Beryllium, Unfiltered	ug/L	all sites	0.03	0.14	0.46	0.01	0.02	0.17	0.00	0.01	0.02
Bismuth, Unfiltered	ug/L	all sites	0.01	0.03	0.14	0.00	0.00	0.04	0.00	0.00	0.00
Boron, Unfiltered	ug/L	all sites	13.96	25.30	34.60	16.26	23.60	31.56	31.14	36.40	43.05
Cadmium, Unfiltered	ug/L	all sites	0.02	0.05	0.17	0.01	0.02	0.07	0.01	0.02	0.04
Cerium, Unfiltered	ug/L	all sites	0.99	5.59	17.62	0.29	0.64	6.50	0.07	0.18	0.52

Table 1: Current Condition Targets, Athabasca River - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Cesium, Unfiltered	ug/L	all sites	0.07	0.49	1.67	0.02	0.06	0.58	0.01	0.01	0.03
Chromium, Unfiltered	ug/L	all sites	0.26	3.56	11.80	0.20	0.45	4.41	0.04	0.18	0.34
Cobalt, Unfiltered	ug/L	all sites	0.39	1.65	5.23	0.17	0.27	1.94	0.08	0.09	0.14
Copper, Unfiltered	ug/L	all sites	1.14	4.40	12.36	0.53	0.91	5.69	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0007	+	+	+	+	+	+	0.29	0.66	0.97
	ug/L	AL07DD0008	+	+	+	+	+	+	0.17	0.59	2.00
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Gallium, Unfiltered	ug/L	all sites	0.07	0.78	2.72	0.05	0.10	0.91	0.01	0.03	0.07
Germanium, Unfiltered	ug/L	all sites	0.02	0.07	0.22	0.01	0.02	0.06	0.01	0.01	0.02
Indium, Unfiltered	ug/L	all sites	0.00	0.01	0.02	0.00	0.00	0.01	<	<	<
Iron, Unfiltered	ug/L	all sites	631.40	4290.00	12800.00	308.00	709.00	5302.00	132.90	430.50	863.55
Lanthanum, Unfiltered	ug/L	all sites	0.45	2.58	8.40	0.13	0.31	3.05	0.04	0.09	0.25
Lead, Unfiltered	ug/L	all sites	0.45	2.15	6.85	0.11	0.27	2.48	0.03	0.09	0.33
Lithium, Unfiltered	ug/L	all sites	5.47	7.88	13.52	5.75	6.91	9.95	8.32	9.97	11.11
Manganese, Unfiltered	ug/L	all sites	48.26	114.00	289.00	16.30	38.50	135.00	5.38	15.85	26.75
Mercury, Unfiltered	ng/L	all sites	2.85	10.00	28.90	0.98	1.90	12.63	0.47	0.68	0.98
Methylmercury(1+), Unfiltered	ng/L	all sites	0.07	0.18	0.33	0.02	0.06	0.22	0.03	0.04	0.04
Molybdenum, Unfiltered	ug/L	all sites	0.39	0.75	1.24	0.36	0.73	1.01	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0007	+	+	+	+	+	+	0.69	0.77	3.74
	ug/L	AL07DD0008	+	+	+	+	+	+	0.23	0.90	1.14
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Nickel, Unfiltered	ug/L	all sites	1.45	5.23	16.32	0.90	1.32	6.39	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-

Table 1: Current Condition Targets, Athabasca River - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
	ug/L	AL07DD0007	+	+	+	+	+	+	0.75	1.03	1.48
	ug/L	AL07DD0008	+	+	+	+	+	+	0.45	0.96	2.43
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Niobium, Unfiltered	ug/L	all sites	0.00	0.10	0.23	0.00	0.01	0.11	0.00	0.00	0.01
Palladium, Unfiltered	ug/L	all sites	<	<	<	<	<	<	<	<	<
Platinum, Unfiltered	ug/L	all sites	0.00	0.00	0.00	<	<	<	<	<	<
Rubidium, Unfiltered	ug/L	all sites	1.49	5.93	18.42	1.06	1.40	6.71	1.18	1.57	1.97
Scandium, Unfiltered	ug/L	all sites	0.02	0.44	2.52	0.00	0.05	0.66	0.00	0.02	0.09
Selenium, Unfiltered	ug/L	all sites	0.14	0.22	0.59	0.10	0.14	0.29	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0007	+	+	+	+	+	+	0.13	0.18	0.21
	ug/L	AL07DD0008	+	+	+	+	+	+	0.04	0.20	0.24
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Silver, Unfiltered	ug/L	all sites	0.00	0.02	0.07	0.00	0.00	0.04	0.00	0.00	0.01
Strontium, Unfiltered	ug/L	all sites	+	+	+	123.00	223.00	293.00	+	+	+
	ug/L	AL07DD0004	111.00	177.00	222.00	+	+	+	-	-	-
	ug/L	AL07DD0005	136.00	182.00	205.00	+	+	+	-	-	-
	ug/L	AL07DD0007	162.00	214.00	246.00	+	+	+	275.00	316.00	384.00
	ug/L	AL07DD0008	81.60	137.00	248.00	+	+	+	134.00	352.00	481.00
	ug/L	AL07DD0009	-	-	-	+	+	+	-	-	-
Tellurium, Unfiltered	ug/L	all sites	0.00	0.01	0.06	0.00	0.00	0.03	0.00	0.00	0.02
Thallium, Unfiltered	ug/L	all sites	0.01	0.05	0.18	0.01	0.01	0.05	0.00	0.01	0.01
Tin, Unfiltered	ug/L	all sites	0.03	0.09	0.39	0.00	0.02	0.14	0.00	0.01	0.06
Titanium, Unfiltered	ug/L	all sites	3.02	36.00	98.38	1.80	5.30	50.18	0.40	1.10	2.66
Tungsten, Unfiltered	ug/L	all sites	0.00	0.01	0.02	0.00	0.01	0.02	0.00	0.00	0.02
Uranium, Unfiltered	ug/L	all sites	0.27	0.45	1.03	0.18	0.37	0.57	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-

Table 1: Current Condition Targets, Athabasca River - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0007	+	+	+	+	+	+	0.38	0.45	0.52
	ug/L	AL07DD0008	+	+	+	+	+	+	0.10	0.57	0.77
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Vanadium, Unfiltered	ug/L	all sites	0.88	6.92	23.36	0.57	1.07	8.98	0.22	0.36	0.59
Yttrium, Unfiltered	ug/L	all sites	0.48	2.07	6.49	0.15	0.31	2.49	0.09	0.11	0.35
Zinc, Unfiltered	ug/L	all sites	2.52	13.10	41.38	0.98	2.00	14.64	+	+	+
	ug/L	AL07DD0004	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0005	+	+	+	+	+	+	-	-	-
	ug/L	AL07DD0007	+	+	+	+	+	+	1.00	1.60	2.00
	ug/L	AL07DD0008	+	+	+	+	+	+	0.70	1.85	6.90
	ug/L	AL07DD0009	+	+	+	+	+	+	-	-	-
Zirconium, Unfiltered	ug/L	all sites	0.36	1.80	4.40	0.20	0.30	2.82	0.10	0.20	0.30

Table 2: Current Condition Targets, Athabasca River - Sediment

Parameter	Unit	Site	5th	50th	95th
<b>Conventional Variables</b>					
Acid Neutralization Potential as %CaCO <sub>3</sub>	%	all sites	-	-	-
Grain size, clay (<2 µm)	%	all sites	0.99	7.00	15.48
Grain size, sand (≥63 µm to 2000 µm)	%	all sites	30.50	72.00	98.80
Grain size, silt (≥2 to 63 µm)	%	all sites	1.48	19.40	48.44
Inorganic carbon	%	all sites	-	-	-
Loss on Ignition @ 375 C	%	all sites	0.64	1.50	3.23
Moisture content	%	AB07DA0062	-	-	-
	%	AB07DA0800	-	-	-
	%	AB07DA3008	-	-	-
	%	AB07DA3009	-	-	-
	%	AB07DA3015	-	-	-
	%	AB07DA3016	-	-	-
	%	AB07DA3017	-	-	-
	%	AB07DA3018	-	-	-
	%	AB07DA3020	-	-	-
	%	AB07DA3021	-	-	-
	%	AB07DA3022	-	-	-
	%	AB07DA3023	-	-	-
	%	AB07DA3024	-	-	-
	%	ATR-ER	-	-	-
Organic Matter	%	all sites	0.68	1.40	2.77
Organic carbon	%	all sites	-	-	-
Total carbon	%	all sites	-	-	-
<b>Extractable Metals</b>					
Methylmercury(1+), Extractable	ng/g	all sites	0.02	0.31	1.19
<b>General Organics</b>					
BTEX, Total	ug/g	all sites	-	-	-
Benzene	ug/g	all sites	-	-	-
C10-C16 Hydrocarbons	ug/g	all sites	-	-	-
C10H16O2	%	all sites	0.00	0.01	0.04
C10H18O2	%	all sites	0.01	0.04	0.14
C10H20O2	%	all sites	0.07	0.39	1.68
C11H14O2	%	all sites	0.01	0.03	0.07
C11H16O2	%	all sites	0.00	0.00	0.04



Table 2: Current Condition Targets, Athabasca River - Sediment  
(continued)

Parameter	Unit	Site	5th	50th	95th
C11H18O2	%	all sites	0.00	0.01	0.04
C11H20O2	%	all sites	0.01	0.06	0.19
C11H22O2	%	all sites	0.21	0.45	0.78
C12H16O2	%	all sites	0.00	0.01	0.06
C12H18O2	%	all sites	0.00	0.00	0.02
C12H20O2	%	all sites	0.01	0.06	0.28
C12H22O2	%	all sites	0.11	0.31	0.62
C12H24O2	%	all sites	0.43	1.00	1.60
C13H16O2	%	all sites	0.00	0.00	0.05
C13H18O2	%	all sites	0.00	0.01	0.04
C13H20O2	%	all sites	0.01	0.03	0.14
C13H22O2	%	all sites	0.00	0.03	0.20
C13H24O2	%	all sites	0.04	0.10	0.20
C13H26O2	%	all sites	0.38	0.77	0.94
C14H16O2	%	all sites	<	<	<
C14H18O2	%	all sites	0.00	0.01	0.08
C14H20O2	%	all sites	0.00	0.03	0.09
C14H22O2	%	all sites	0.05	0.10	1.61
C14H24O2	%	all sites	0.06	0.14	2.64
C14H26O2	%	all sites	0.42	0.79	1.31
C14H28O2	%	AB07DA0062	-	-	-
	%	AB07DA0800	-	-	-
	%	AB07DA3008	-	-	-
	%	AB07DA3009	-	-	-
	%	AB07DA3015	-	-	-
	%	AB07DA3016	-	-	-
	%	AB07DA3017	-	-	-
	%	AB07DA3018	-	-	-
	%	AB07DA3020	-	-	-
	%	AB07DA3021	-	-	-
	%	AB07DA3022	-	-	-
	%	AB07DA3023	-	-	-
	%	AB07DA3024	-	-	-
C15H14O2	%	all sites	0.00	0.01	0.02
C15H16O2	%	all sites	0.00	0.01	0.03

Table 2: Current Condition Targets, Athabasca River - Sediment  
(continued)

Parameter	Unit	Site	5th	50th	95th
C15H18O2	%	all sites	0.00	0.00	0.03
C15H20O2	%	all sites	0.00	0.04	0.17
C15H22O2	%	all sites	0.02	0.10	1.44
C15H24O2	%	all sites	0.03	0.15	2.12
C15H26O2	%	all sites	0.07	0.18	1.90
C15H28O2	%	all sites	0.83	2.01	3.51
C15H30O2	%	all sites	2.61	4.24	6.84
C16-C34 Hydrocarbons	ug/g	all sites	-	-	-
C16H14O2	%	all sites	0.00	0.01	0.04
C16H16O2	%	all sites	<	<	<
C16H18O2	%	all sites	0.00	0.01	0.05
C16H20O2	%	all sites	0.00	0.03	0.14
C16H22O2	%	all sites	0.01	0.06	0.22
C16H24O2	%	all sites	0.33	2.17	3.93
C16H26O2	%	all sites	0.47	2.79	4.55
C16H28O2	%	all sites	0.76	3.03	4.71
C16H30O2	%	all sites	6.65	13.70	20.71
C16H32O2	%	all sites	0.09	4.52	25.45
C17H18O2	%	all sites	0.00	0.01	0.08
C17H20O2	%	all sites	0.00	0.02	0.08
C17H22O2	%	all sites	0.00	0.04	0.22
C17H24O2	%	all sites	0.01	0.07	0.26
C17H26O2	%	all sites	0.04	0.12	0.46
C17H28O2	%	all sites	0.08	0.27	0.69
C17H30O2	%	all sites	0.13	0.30	0.68
C17H32O2	%	all sites	1.66	2.94	7.08
C17H34O2	%	all sites	1.42	2.92	8.32
C18H20O2	%	all sites	0.00	0.01	0.10
C18H22O2	%	all sites	0.01	0.04	0.14
C18H24O2	%	all sites	0.03	0.09	0.17
C18H26O2	%	all sites	0.08	0.14	0.64
C18H28O2	%	all sites	0.32	1.77	5.47
C18H30O2	%	all sites	0.62	1.93	3.47
C18H32O2	%	all sites	1.47	2.78	6.48
C18H34O2	%	all sites	4.56	7.01	25.26

Table 2: Current Condition Targets, Athabasca River - Sediment  
(continued)

Parameter	Unit	Site	5th	50th	95th
C18H36O2	%	all sites	0.12	0.61	24.95
C19H20O2	%	all sites	0.00	0.00	0.09
C19H22O2	%	all sites	0.03	0.14	0.48
C19H24O2	%	all sites	0.01	0.05	0.10
C19H26O2	%	all sites	0.02	0.08	0.33
C19H28O2	%	all sites	0.03	0.15	0.38
C19H30O2	%	all sites	0.05	0.16	0.35
C19H32O2	%	all sites	0.03	0.15	0.61
C19H34O2	%	all sites	0.07	0.32	1.09
C19H36O2	%	all sites	0.22	0.46	1.16
C19H38O2	%	all sites	0.20	0.32	0.56
C20H22O2	%	all sites	0.00	0.01	0.12
C20H24O2	%	all sites	0.01	0.03	0.11
C20H26O2	%	all sites	0.02	0.12	0.29
C20H28O2	%	all sites	0.45	1.06	4.85
C20H30O2	%	all sites	0.95	7.21	13.09
C20H32O2	%	all sites	0.39	1.19	2.14
C20H34O2	%	all sites	0.13	0.32	0.69
C20H36O2	%	all sites	0.22	0.41	1.42
C20H38O2	%	all sites	0.11	0.29	0.52
C20H40O2	%	all sites	0.30	0.85	1.25
C21H24O2	%	all sites	0.01	0.05	0.10
C21H26O2	%	all sites	0.00	0.01	0.05
C21H28O2	%	all sites	0.00	0.02	0.10
C21H30O2	%	all sites	0.01	0.06	0.12
C21H32O2	%	all sites	0.02	0.07	0.24
C21H34O2	%	all sites	0.03	0.11	0.40
C21H36O2	%	all sites	0.02	0.20	0.82
C21H38O2	%	all sites	0.04	0.29	1.37
C21H40O2	%	all sites	0.01	0.10	0.48
C21H42O2	%	all sites	0.21	0.39	0.96
C22H32O2	%	all sites	0.12	0.80	2.45
C22H34O2	%	all sites	0.08	0.24	0.81
C22H36O2	%	all sites	0.04	0.12	0.50
C22H38O2	%	all sites	0.03	0.10	0.30

Table 2: Current Condition Targets, Athabasca River - Sediment  
(continued)

Parameter	Unit	Site	5th	50th	95th
C22H40O2	%	all sites	0.06	0.28	1.39
C22H42O2	%	all sites	0.12	0.34	1.11
C22H44O2	%	all sites	0.01	0.60	1.86
C23H32O2	%	all sites	0.00	0.02	0.07
C23H34O2	%	all sites	0.00	0.03	0.10
C23H36O2	%	all sites	0.00	0.04	0.12
C23H38O2	%	all sites	0.01	0.06	0.30
C23H40O2	%	all sites	0.02	0.15	0.85
C23H42O2	%	all sites	0.04	0.27	1.38
C23H44O2	%	all sites	0.05	0.19	0.85
C23H46O2	%	all sites	0.12	0.41	0.92
C24H36O2	%	all sites	0.00	0.02	0.10
C24H38O2	%	all sites	0.01	0.03	0.08
C24H40O2	%	all sites	0.01	0.04	0.12
C24H42O2	%	all sites	0.04	0.20	1.23
C24H44O2	%	all sites	0.06	0.24	1.34
C24H46O2	%	all sites	0.03	0.23	0.38
C24H48O2	%	all sites	0.01	0.75	2.04
C25H38O2	%	all sites	0.00	0.00	0.05
C25H40O2	%	all sites	0.01	0.04	0.08
C25H42O2	%	all sites	0.01	0.03	0.12
C25H44O2	%	all sites	0.01	0.08	0.28
C25H46O2	%	all sites	0.04	0.15	0.49
C25H48O2	%	all sites	0.04	0.09	0.38
C25H50O2	%	all sites	0.01	0.39	0.80
C34-C50 Hydrocarbons	ug/g	all sites	-	-	-
C5H10O2	%	all sites	0.00	0.03	0.12
C6H12O2	%	all sites	0.00	0.02	0.14
C7H12O2	%	all sites	0.00	0.01	0.03
C7H14O2	%	all sites	0.01	0.04	0.19
C8H14O2	%	all sites	0.01	0.02	0.07
C8H16O2	%	all sites	0.04	0.18	0.69
C9H14O2	%	all sites	0.00	0.01	0.06
C9H16O2	%	all sites	0.00	0.03	0.07
C9H18O2	%	all sites	0.13	0.47	1.38

Table 2: Current Condition Targets, Athabasca River - Sediment  
(continued)

Parameter	Unit	Site	5th	50th	95th
Ethylbenzene	ug/g	all sites	-	-	-
Hydrocarbons	ug/g	all sites	-	-	-
Naphthenic acids	ug/g	all sites	52.91	136.50	458.90
Toluene	ug/g	all sites	-	-	-
Total xylenes	ug/g	all sites	-	-	-
m,p-Xylene	ug/g	all sites	-	-	-
o-Xylene	ug/g	all sites	-	-	-
<b>Nutrients and BOD</b>					
Ammonium, Available as N	ng/g	all sites	819.46	6550.00	25800.00
Kjeldahl nitrogen, Total	%	all sites	0.01	0.04	0.10
<b>PAHs</b>					
1,2,6-Trimethylphenanthrene	ng/g	all sites	1.05	3.15	8.62
1,2-Dimethylnaphthalene	ng/g	all sites	0.22	1.53	2.98
1,4,6,7-Tetramethylnaphthalene	ng/g	all sites	1.65	4.55	8.09
1,6,7-Trimethylnaphthalene	ng/g	all sites	1.41	6.21	10.20
1,7-Dimethylfluorene	ng/g	all sites	0.53	1.62	4.68
1,7-Dimethylphenanthrene	ng/g	all sites	2.05	6.92	22.40
1,8-Dimethylphenanthrene	ng/g	all sites	0.51	1.75	4.98
1-Methylchrysene	ng/g	all sites	1.55	4.68	29.00
1-Methylnaphthalene	ng/g	all sites	1.40	6.79	16.60
1-Methylphenanthrene	ng/g	all sites	1.70	6.16	21.40
2,3,6-Trimethylnaphthalene	ng/g	all sites	1.71	7.29	14.20
2,4-Dimethyldibenzothiophene	ng/g	all sites	1.59	4.05	26.10
2,6-Dimethylnaphthalene	ng/g	all sites	1.56	6.96	18.30
2,6-Dimethylphenanthrene	ng/g	all sites	1.08	3.13	17.50
2-Methylanthracene	ng/g	all sites	0.47	1.19	19.60
2-Methyldibenzothiophenes/3-Methyldibenzothiophenes	ng/g	all sites	1.12	3.58	45.00
2-Methylfluorene	ng/g	all sites	0.46	1.09	3.07
2-Methylnaphthalene	ng/g	all sites	2.15	10.98	32.00
2-Methylphenanthrene	ng/g	all sites	2.50	9.30	48.60
3,6-Dimethylphenanthrene	ng/g	all sites	1.34	3.92	12.30
3-Methylfluoranthene/Benzo[a]fluorene	ng/g	all sites	3.29	8.38	31.80
3-Methylphenanthrene	ng/g	all sites	2.07	6.86	29.40
4,6-Dimethyldibenzothiophene	ng/g	all sites	-	-	-
5,9-Dimethylchrysene	ng/g	all sites	4.84	11.90	56.30

Table 2: Current Condition Targets, Athabasca River - Sediment  
(continued)

Parameter	Unit	Site	5th	50th	95th
5-Methylchrysene/6-Methylchrysene	ng/g	all sites	1.00	2.84	11.90
7-Methylbenzo[a]pyrene	ng/g	all sites	1.03	2.54	12.00
9-Methylphenanthrene/4-Methylphenanthrene	ng/g	all sites	2.57	7.95	22.90
Acenaphthene	ng/g	all sites	<	<	<
Acenaphthylene	ng/g	all sites	-	-	-
Anthracene	ng/g	all sites	<	<	<
Benz[a]anthracene	ng/g	all sites	<	<	<
Benzo(b)fluoranthene	ng/g	all sites	2.38	7.83	22.30
Benzo(j+k)fluoranthene	ng/g	all sites	1.10	2.73	13.80
Benzo[a]pyrene	ng/g	all sites	<	<	<
Benzo[b,j,k]fluoranthene	ng/g	all sites	-	-	-
Benzo[e]pyrene	ng/g	all sites	2.87	8.22	46.90
Benzo[ghi]perylene	ng/g	all sites	<	<	<
Biphenyl	ng/g	all sites	<	<	<
C1-Acenaphthenes	ng/g	all sites	<	<	<
C1-Benzo[a]anthracenes/chrysenes	ng/g	all sites	9.62	35.15	105.86
C1-Benzofluoranthenes/benzopyrenes	ng/g	all sites	<	<	<
C1-Biphenyls	ng/g	all sites	<	<	<
C1-Dibenzothiophenes	ng/g	all sites	0.23	3.02	36.90
C1-Fluoranthenes/pyrenes	ng/g	all sites	5.23	27.90	121.02
C1-Fluorenes	ng/g	all sites	<	<	<
C1-Naphthalenes	ng/g	all sites	7.90	16.24	29.40
C1-Phenanthrenes/anthracenes	ng/g	all sites	4.49	20.10	61.10
C2-Benzo[a]anthracenes/chrysenes	ng/g	all sites	<	<	<
C2-Benzofluoranthenes/benzopyrenes	ng/g	all sites	<	<	<
C2-Biphenyls	ng/g	all sites	<	<	<
C2-Dibenzothiophenes	ng/g	all sites	8.08	54.40	125.00
C2-Fluoranthenes/pyrenes	ng/g	all sites	10.37	48.20	159.05
C2-Fluorenes	ng/g	all sites	8.44	17.47	33.60
C2-Naphthalenes	ng/g	all sites	8.48	27.50	49.90
C2-Phenanthrenes/anthracenes	ng/g	all sites	5.19	38.40	70.30
C3-Benzo[a]anthracenes/chrysenes	ng/g	all sites	5.91	16.30	49.00
C3-Dibenzothiophenes	ng/g	all sites	11.46	103.00	255.00
C3-Fluoranthenes/pyrenes	ng/g	all sites	9.05	38.20	96.17

Table 2: Current Condition Targets, Athabasca River - Sediment  
(continued)

Parameter	Unit	Site	5th	50th	95th
C3-Fluorenes	ng/g	all sites	10.69	27.78	80.00
C3-Naphthalenes	ng/g	all sites	9.55	26.20	42.30
C3-Phenanthrenes/anthracenes	ng/g	all sites	7.51	50.00	110.00
C4-Benzo[a]anthracenes/chrysenes	ng/g	all sites	2.43	8.35	17.00
C4-Dibenzothiophenes	ng/g	all sites	28.88	82.00	265.00
C4-Fluoranthenes/pyrenes	ng/g	all sites	7.32	22.05	47.40
C4-Naphthalenes	ng/g	all sites	15.91	28.80	43.00
C4-Phenanthrenes/anthracenes	ng/g	all sites	16.61	215.00	895.60
Chrysene	ng/g	all sites	1.03	12.60	73.84
Dibenz[a,h]anthracene	ng/g	all sites	<	<	<
Dibenzothiophene	ng/g	all sites	<	<	<
Fluoranthene	ng/g	all sites	<	<	<
Fluorene	ng/g	all sites	<	<	<
Indeno[1,2,3-cd]pyrene	ng/g	all sites	<	<	<
Naphthalene	ng/g	all sites	<	<	<
Perylene	ng/g	all sites	22.10	68.75	129.00
Phenanthrene	ng/g	all sites	<	<	<
Pyrene	ng/g	all sites	0.58	3.25	15.40
Retene	ng/g	all sites	6.98	42.20	84.40
<b>Phenolics</b>					
Phenols, Extractable	ng/g	all sites	<	<	<
<b>Total Metals</b>					
Aluminum	ug/g	all sites	848.00	5340.00	9890.00
Antimony	ug/g	all sites	0.09	0.20	0.30
Arsenic	ug/g	all sites	1.96	4.21	6.67
Barium	ug/g	AB07DA0062	-	-	-
	ug/g	AB07DA0800	-	-	-
	ug/g	AB07DA3008	-	-	-
	ug/g	AB07DA3009	-	-	-
	ug/g	AB07DA3015	-	-	-
	ug/g	AB07DA3016	-	-	-
	ug/g	AB07DA3017	-	-	-
	ug/g	AB07DA3018	-	-	-
	ug/g	AB07DA3020	-	-	-
	ug/g	AB07DA3021	-	-	-

Table 2: Current Condition Targets, Athabasca River - Sediment  
(continued)

Parameter	Unit	Site	5th	50th	95th
	ug/g	AB07DA3022	-	-	-
	ug/g	AB07DA3023	-	-	-
	ug/g	AB07DA3024	-	-	-
	ug/g	ATR-ER	-	-	-
Beryllium	ug/g	all sites	<	<	<
Bismuth	ug/g	all sites	-	-	-
Boron	ug/g	all sites	3.59	5.25	7.83
Cadmium	ug/g	all sites	<	<	<
Calcium	ug/g	AB07DA0062	-	-	-
	ug/g	AB07DA0800	-	-	-
	ug/g	AB07DA3008	-	-	-
	ug/g	AB07DA3009	-	-	-
	ug/g	AB07DA3015	-	-	-
	ug/g	AB07DA3016	-	-	-
	ug/g	AB07DA3017	-	-	-
	ug/g	AB07DA3018	-	-	-
	ug/g	AB07DA3020	-	-	-
	ug/g	AB07DA3021	-	-	-
	ug/g	AB07DA3022	-	-	-
	ug/g	AB07DA3023	-	-	-
	ug/g	AB07DA3024	-	-	-
Chromium	ug/g	all sites	2.29	10.90	17.35
Cobalt	ug/g	all sites	2.00	6.03	8.80
Copper	ug/g	all sites	1.42	6.75	14.42
Iron	ug/g	all sites	4000.00	13000.00	20300.00
Lead	ug/g	all sites	3.19	5.34	8.89
Lithium	ug/g	all sites	4.25	8.12	12.36
Magnesium	ug/g	AB07DA0062	-	-	-
	ug/g	AB07DA0800	-	-	-
	ug/g	AB07DA3008	-	-	-
	ug/g	AB07DA3009	-	-	-
	ug/g	AB07DA3015	-	-	-
	ug/g	AB07DA3016	-	-	-
	ug/g	AB07DA3017	-	-	-
	ug/g	AB07DA3018	-	-	-



Table 2: Current Condition Targets, Athabasca River - Sediment  
(continued)

Parameter	Unit	Site	5th	50th	95th
	ug/g	AB07DA3020	-	-	-
	ug/g	AB07DA3021	-	-	-
	ug/g	AB07DA3022	-	-	-
	ug/g	AB07DA3023	-	-	-
	ug/g	AB07DA3024	-	-	-
	ug/g	ATR-ER	-	-	-
Manganese	ug/g	all sites	78.35	289.00	555.50
Mercury	ug/g	all sites	<	<	<
Molybdenum	ug/g	all sites	<	<	<
Nickel	ug/g	all sites	3.37	13.30	21.15
Phosphorus	ug/g	AB07DA0062	-	-	-
	ug/g	AB07DA0800	-	-	-
	ug/g	AB07DA3008	-	-	-
	ug/g	AB07DA3009	-	-	-
	ug/g	AB07DA3015	-	-	-
	ug/g	AB07DA3016	-	-	-
	ug/g	AB07DA3017	-	-	-
	ug/g	AB07DA3018	-	-	-
	ug/g	AB07DA3020	-	-	-
	ug/g	AB07DA3021	-	-	-
	ug/g	AB07DA3022	-	-	-
	ug/g	AB07DA3023	-	-	-
	ug/g	AB07DA3024	-	-	-
Potassium	ug/g	all sites	222.10	767.50	1261.50
Silver	ug/g	all sites	<	<	<
Sodium	ug/g	all sites	<	<	<
Strontium	ug/g	all sites	7.95	46.70	75.55
Thallium	ug/g	all sites	<	<	<
Thorium	ug/g	all sites	0.89	3.33	5.25
Tin	ug/g	all sites	<	<	<
Titanium	ug/g	all sites	34.41	63.90	96.81
Tungsten	ug/g	all sites	<	<	<
Uranium	ug/g	all sites	<	<	<
Vanadium	ug/g	all sites	4.21	17.10	27.40
Zinc	ug/g	all sites	12.23	39.90	61.72

Table 2: Current Condition Targets, Athabasca River - Sediment  
(*continued*)

Parameter	Unit	Site	5th	50th	95th
Zirconium	ug/g	all sites	1.32	3.95	5.95

Table 3: Current Condition Targets, Athabasca River Delta - Water

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Bacteria											
Escherichia coli	No/100 mL	all sites	1.37	5.48	30.00	<	<	<	<	<	<
Fecal Coliform	No/100 mL	all sites	1.24	6.50	39.80	0.09	1.53	29.00	<	<	<
Total Coliform	No/100 mL	all sites	-	-	-	-	-	-	-	-	-
Conventional Variables											
Alkalinity, Phenolphthalein (total hydroxide+1/2 carbonate) as CaCO3	mg/L	all sites	<	<	<	<	<	<	<	<	<
Alkalinity, total as CaCO3	mg/L	all sites	68.80	89.00	100.00	90.40	110.00	128.00	100.00	140.00	160.00
Deuterium/Hydrogen ratio	o/oo VSMOW	all sites	-152.40	-144.25	-135.60	-142.20	-139.30	-133.80	-144.57	-139.95	-136.68
Dissolved oxygen (DO)	mg/L	all sites	-	-	-	-	-	-	-	-	-
Organic carbon, Filtered	mg/L	all sites	4.60	12.00	19.60	5.42	7.90	16.80	4.48	7.50	13.00
Organic carbon, Unfiltered	mg/L	all sites	-	-	-	-	-	-	-	-	-
Organic carbon, Unknown	mg/L	all sites	4.30	12.50	19.00	4.47	9.10	20.50	5.03	8.20	14.00
Oxidation reduction potential (ORP)	mV	all sites	162.30	288.50	547.90	107.00	208.50	421.25	+	+	+
	mV	AB07DD0010	+	+	+	+	+	+	105.20	193.00	426.86
	mV	AB07DD0105	+	+	+	+	+	+	104.30	227.50	553.20
Oxygen-18	o/oo VSMOW	all sites	-19.02	-18.18	-16.98	-17.76	-17.30	-16.70	-18.21	-17.32	-16.90
Specific conductivity	uS/cm	all sites	172.00	220.00	286.00	232.00	290.00	362.00	289.00	420.00	493.00
Temperature, air	degC	all sites	6.00	17.00	34.00	-4.00	8.00	22.00	-26.50	-7.00	6.25
Total dissolved solids, Filtered	mg/L	all sites	101.00	140.00	180.00	141.00	180.00	267.00	178.00	250.00	302.00
Total suspended solids, Non-Filterable (Particle)	mg/L	all sites	34.00	160.00	612.00	10.40	32.00	206.00	1.30	4.00	17.00
True colour, Filtered	rel units	all sites	15.60	66.00	126.00	16.20	32.00	97.80	17.80	28.00	57.90
Turbidity	NTU	all sites	4.12	65.00	246.00	4.20	13.00	77.80	2.88	3.70	14.90
pH, lab	pH units	all sites	7.63	8.02	8.17	7.60	8.04	8.20	+	+	+
	pH units	AB07DD0010	+	+	+	+	+	+	7.78	7.96	8.06
	pH units	AB07DD0105	+	+	+	+	+	+	7.64	7.88	8.02

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Dissolved Metals											
Aluminum, Filtered	ug/L	all sites	3.55	16.20	104.85	1.84	7.96	39.06	1.92	4.23	18.39
Antimony, Filtered	ug/L	all sites	0.06	0.09	0.13	<	<	<	+	+	+
	ug/L	AB07DD0010	+	+	+	+	+	+	<	<	<
	ug/L	AB07DD0105	+	+	+	+	+	+	<	<	<
Arsenic, Filtered	ug/L	all sites	0.35	0.55	0.79	0.33	0.50	0.80	0.30	0.42	0.60
Barium, Filtered	ug/L	all sites	34.70	42.95	49.55	40.78	45.60	53.30	44.51	59.75	70.34
Beryllium, Filtered	ug/L	all sites	0.00	0.01	0.02	0.00	0.00	0.04	0.00	0.00	0.05
Bismuth, Filtered	ug/L	all sites	0.00	0.00	0.01	0.00	0.00	0.02	<	<	<
Boron, Filtered	ug/L	all sites	15.62	22.20	30.93	17.86	22.60	29.20	24.36	31.75	37.77
Cadmium, Filtered	ug/L	all sites	0.01	0.01	0.02	0.00	0.01	0.11	0.01	0.01	0.03
Calcium, Filtered	mg/L	all sites	17.65	25.75	31.07	25.12	31.40	36.80	29.55	40.20	48.64
Chlorine, Filtered	mg/L	all sites	1.56	4.09	7.83	4.03	8.22	16.48	10.29	20.80	37.09
Chromium, Filtered	ug/L	all sites	0.08	0.23	0.76	0.05	0.15	0.54	0.10	0.24	0.48
Cobalt, Filtered	ug/L	all sites	0.04	0.07	0.13	0.04	0.07	0.22	+	+	+
	ug/L	AB07DD0010	+	+	+	+	+	+	0.04	0.08	0.17
	ug/L	AB07DD0105	+	+	+	+	+	+	0.02	0.06	0.14
Copper, Filtered	ug/L	all sites	0.83	1.55	2.46	0.65	0.97	2.18	0.50	0.75	1.35
Iron, Filtered	ug/L	all sites	29.55	121.50	426.50	23.60	95.00	293.60	116.65	178.00	367.40
Lead, Filtered	ug/L	all sites	0.02	0.08	0.26	0.01	0.04	0.23	0.01	0.05	0.76
Lithium, Filtered	ug/L	all sites	3.75	5.21	7.40	4.73	6.09	7.20	6.78	8.59	10.79
Manganese, Filtered	ug/L	all sites	0.55	1.73	6.01	0.31	1.40	8.23	4.68	18.80	35.09
Mercury, Filtered	ng/L	all sites	-	-	-	-	-	-	0.33	0.50	1.29
Methylmercury(1+), Filtered	ng/L	all sites	0.02	0.06	0.11	0.02	0.04	0.12	0.02	0.03	0.06
Molybdenum, Filtered	ug/L	all sites	0.15	0.49	0.70	0.38	0.63	0.98	0.52	0.64	0.75
Nickel, Filtered	ug/L	all sites	0.36	1.43	3.48	0.29	0.75	1.33	0.07	0.76	1.47
Selenium, Filtered	ug/L	all sites	0.05	0.11	0.26	0.18	0.24	0.30	0.14	0.25	0.45

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Silver, Filtered	ug/L	all sites	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01
Strontium, Filtered	ug/L	all sites	99.12	162.50	213.00	128.20	206.00	253.00	195.80	266.00	339.40
Thallium, Filtered	ug/L	all sites	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.02
Thorium, Filtered	ug/L	all sites	0.00	0.03	0.13	0.00	0.01	0.06	0.00	0.01	0.05
Tin, Filtered	ug/L	all sites	<	<	<	<	<	<	<	<	<
Titanium, Filtered	ug/L	all sites	0.64	1.91	9.21	0.44	1.03	4.72	0.81	1.18	2.33
Uranium, Filtered	ug/L	all sites	0.25	0.34	0.39	0.26	0.35	0.43	+	+	+
	ug/L	AB07DD0010	+	+	+	+	+	+	0.27	0.42	0.49
	ug/L	AB07DD0105	+	+	+	+	+	+	0.31	0.39	0.48
Vanadium, Filtered	ug/L	all sites	0.26	0.43	0.67	0.19	0.31	0.65	0.07	0.17	0.33
Zinc, Filtered	ug/L	all sites	0.23	0.61	1.73	0.22	0.53	1.11	+	+	+
	ug/L	AB07DD0010	+	+	+	+	+	+	0.75	1.02	3.51
	ug/L	AB07DD0105	+	+	+	+	+	+	0.59	1.58	7.75
<b>Extractable Metals</b>											
Aluminum, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Antimony, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Arsenic, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Barium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Beryllium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Bismuth, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Boron, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Cadmium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Calcium, Unfiltered	mg/L	all sites	-	-	-	-	-	-	-	-	-
Chromium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Cobalt, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Copper, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Iron, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Lead, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Lithium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Manganese, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Molybdenum, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Nickel, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Selenium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Silver, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Strontium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Thallium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Thorium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Tin, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Titanium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Uranium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Vanadium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Zinc, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
<b>Field</b>											
Colour (visual)	1	all sites	0.20	1.00	2.00	0.20	1.00	1.80	0.00	1.00	1.00
Depth, snow cover	m	all sites	-	-	-	-	-	-	0.03	0.16	0.45
Dissolved oxygen (DO)	mg/L	all sites	7.64	9.05	11.28	7.88	10.40	13.16	+	+	+
	mg/L	AB07DD0010	+	+	+	+	+	+	9.87	11.32	13.47
	mg/L	AB07DD0105	+	+	+	+	+	+	8.79	10.78	12.93
Floating solids or foam	1	all sites	0.00	1.00	3.00	0.00	1.00	2.00	0.00	0.00	0.00
Ice cover	%	all sites	-	-	-	-	-	-	88.25	100.00	100.00
Ice thickness	m	AB07DD0010	+	+	+	+	+	+	0.10	0.50	0.79
	m	AB07DD0105	+	+	+	+	+	+	0.26	0.70	1.35
Odor	1	all sites	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Snow cover	%	all sites	-	-	-	-	-	-	80.00	100.00	100.00

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Specific conductivity	uS/cm	all sites	150.06	228.60	287.38	217.25	286.20	362.00	+	+	+
	uS/cm	AB07DD0010	+	+	+	+	+	+	137.18	425.40	510.44
	uS/cm	AB07DD0105	+	+	+	+	+	+	271.09	401.20	486.53
Temperature, water	degC	all sites	7.40	17.27	21.82	1.59	10.95	21.91	-0.21	0.01	0.19
Turbidity, visual	1	all sites	1.00	2.00	3.00	0.00	1.00	2.00	0.00	1.00	1.15
pH	pH units	all sites	7.51	7.88	8.20	7.47	8.00	9.05	+	+	+
	pH units	AB07DD0010	+	+	+	+	+	+	6.97	7.43	8.23
	pH units	AB07DD0105	+	+	+	+	+	+	6.33	7.25	7.64
<b>General Organics</b>											
12-Chlorodehydroabiatic acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
14-Chlorodehydroabiatic acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
2,4-Dinitrotoluene	ug/L	all sites	-	-	-	-	-	-	-	-	-
2,6-Dinitrotoluene	ug/L	all sites	-	-	-	-	-	-	-	-	-
2-Chloroethyl vinyl ether	ug/L	all sites	-	-	-	-	-	-	-	-	-
3,4,5-Trichlorocatechol	ug/L	all sites	-	-	-	-	-	-	-	-	-
3,4,5-Trichloroguaiacol	ug/L	all sites	-	-	-	-	-	-	-	-	-
3,4,6-Trichlorocatechol	ug/L	all sites	-	-	-	-	-	-	-	-	-
3,4,6-Trichloroguaiacol	ug/L	all sites	-	-	-	-	-	-	-	-	-
3,4-Dichlorocatechol	ug/L	all sites	-	-	-	-	-	-	-	-	-
3,4-Dichloroguaiacol	mg/L	all sites	-	-	-	-	-	-	-	-	-
3,5-Dichlorocatechol	ug/L	all sites	-	-	-	-	-	-	-	-	-
3,6-Dichlorocatechol	mg/L	all sites	-	-	-	-	-	-	-	-	-
4,5,6-Trichloroguaiacol	ug/L	all sites	-	-	-	-	-	-	-	-	-
4,5,6-Trichlorosyringol	ug/L	all sites	-	-	-	-	-	-	-	-	-
4,5-Dichlorocatechol	ug/L	all sites	-	-	-	-	-	-	-	-	-
4,5-Dichloroguaiacol	ug/L	all sites	-	-	-	-	-	-	-	-	-
4,5-Dichloroveratrole	ug/L	all sites	-	-	-	-	-	-	-	-	-

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
4,6-Dichloroguaiacol	ug/L	all sites	-	-	-	-	-	-	-	-	-
4-Chlorocatechol	ug/L	all sites	-	-	-	-	-	-	-	-	-
4-Chloroguaiacol	ug/L	all sites	-	-	-	-	-	-	-	-	-
Abietic acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
Arachidic acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
BTEX, Total	mg/L	all sites	-	-	-	-	-	-	<	<	<
Benzene	ug/L	all sites	-	-	-	-	-	-	-	-	-
Benzidine	ug/L	all sites	-	-	-	-	-	-	-	-	-
C10-C16 Hydrocarbons	ug/L	all sites	-	-	-	-	-	-	<	<	<
C16-C34 Hydrocarbons	ug/L	all sites	<	<	<	<	<	<	<	<	<
C34-C50 Hydrocarbons	ug/L	all sites	-	-	-	-	-	-	<	<	<
C6-C10 Hydrocarbons	ug/L	all sites	-	-	-	-	-	-	<	<	<
Cumene	ug/L	all sites	-	-	-	-	-	-	-	-	-
Cyanide, Unknown	mg/L	all sites	<	<	<	-	-	-	-	-	-
Dehydroabietic acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
Ethylbenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-
Isophorone	ug/L	all sites	-	-	-	-	-	-	-	-	-
Isopimaric acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
Levopimaric acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
Linoleic acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
Methyl tert-butyl ether	ug/L	all sites	-	-	-	-	-	-	-	-	-
Myristic acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
N-Nitrosodi-n-propylamine	ug/L	all sites	-	-	-	-	-	-	-	-	-
N-Nitrosodiphenylamine	ug/L	all sites	-	-	-	-	-	-	-	-	-
Naphthenic acids	mg/L	all sites	0.07	0.23	0.41	0.07	0.14	0.27	0.05	0.19	0.52
Neoabietic acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
Nitrobenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-



Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Oilsands extractable organics	mg/L	all sites	0.28	0.66	6.95	0.15	0.40	2.93	0.14	0.50	1.66
Oleic acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
Palmitic acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
Palustric acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
Pimaric acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
S-Ethyl dipropylthiocarbamate	ug/L	all sites	-	-	-	-	-	-	-	-	-
Sandaracopimaric acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
Stearic acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
Styrene	ug/L	all sites	-	-	-	-	-	-	<	<	<
Tetrachlorocatechol	ug/L	all sites	-	-	-	-	-	-	-	-	-
Tetrachloroguaiacol	ug/L	all sites	-	-	-	-	-	-	-	-	-
Tetrachloroveratrole	ug/L	all sites	-	-	-	-	-	-	-	-	-
Toluene	ug/L	all sites	-	-	-	-	-	-	-	-	-
Vinyl chloride	ug/L	all sites	-	-	-	-	-	-	-	-	-
Xylene	ug/L	all sites	-	-	-	-	-	-	<	<	<
m,p-Xylene	ug/L	all sites	-	-	-	-	-	-	-	-	-
n-Butylbenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-
n-Propylbenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-
o-Xylene	ug/L	all sites	-	-	-	-	-	-	-	-	-
p-Cymene	ug/L	all sites	-	-	-	-	-	-	-	-	-
sec-Butylbenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-
<b>Major Ions</b>											
Calcium, Filtered	mg/L	all sites	20.40	27.00	33.80	26.00	33.00	37.80	32.00	42.00	49.20
Chlorate, Unfiltered	mg/L	all sites	-	-	-	-	-	-	-	-	-
Chloride, Unfiltered	mg/L	all sites	3.70	6.00	12.40	6.04	12.00	21.40	13.90	25.00	40.00
Fluoride, Unfiltered	mg/L	all sites	0.08	0.10	0.12	0.09	0.10	0.13	0.10	0.12	0.14

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Magnesium, Filtered	mg/L	all sites	4.84	7.90	9.74	8.32	9.40	11.80	+	+	+
	mg/L	AB07DD0010	+	+	+	+	+	+	9.42	13.00	15.00
	mg/L	AB07DD0105	+	+	+	+	+	+	9.65	12.00	14.00
Potassium, Filtered	mg/L	all sites	0.74	1.30	2.60	0.96	1.20	1.48	1.29	1.80	2.31
Sodium, Filtered	mg/L	all sites	8.20	9.40	15.80	10.20	16.00	20.00	20.70	29.00	40.20
Sulfate, Unfiltered as SO4	mg/L	all sites	14.00	23.00	28.80	19.40	28.00	39.00	27.80	36.00	47.10
Sulfide, Unfiltered	mg/L	all sites	-	-	-	-	-	-	-	-	-
<b>Nutrients and BOD</b>											
Ammonia and ammonium, Unfiltered as N	mg/L	all sites	<	<	<	0.01	0.02	0.08	0.02	0.05	0.10
Biochemical oxygen demand, standard conditions, Filtered	mg/L	all sites	-	-	-	-	-	-	-	-	-
Carbonaceous biochemical oxygen demand, non-standard conditions	mg/L	all sites	-	-	-	-	-	-	-	-	-
Chlorophyll a	ug/L	all sites	1.32	6.21	11.22	4.02	6.40	13.02	0.26	0.40	4.22
Inorganic nitrogen (nitrate and nitrite), Unfiltered as N	mg/L	all sites	0.02	0.05	0.11	-	-	-	0.03	0.17	0.27
Kjeldahl nitrogen, Unfiltered as N	mg/L	all sites	0.33	0.70	1.70	0.18	0.45	0.86	0.26	0.41	0.67
Nitrate, Unfiltered as N	mg/L	all sites	0.02	0.05	0.11	-	-	-	0.03	0.17	0.27
Nitrite, Unfiltered as N	mg/L	all sites	-	-	-	-	-	-	<	<	<
Orthophosphate, Filtered as P	mg/L	all sites	0.00	0.00	0.01	<	<	<	0.00	0.00	0.00
Silica, reactive, Unknown	mg/L	all sites	3.20	5.80	6.40	-	-	-	-	-	-
Total Phosphorus, mixed forms, Filtered as P	mg/L	all sites	0.01	0.01	0.03	0.01	0.01	0.02	0.01	0.01	0.02
Total Phosphorus, mixed forms, Unfiltered as P	mg/L	all sites	0.04	0.11	0.23	0.01	0.04	0.19	0.02	0.02	0.05
<b>Organohalides</b>											
1,1,1,2-Tetrachloroethane	ug/L	all sites	-	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane	ug/L	all sites	-	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	ug/L	all sites	-	-	-	-	-	-	-	-	-

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
1,1,2-Trichloroethane	ug/L	all sites	-	-	-	-	-	-	-	-	-
1,1-Dichloroethane	ug/L	all sites	-	-	-	-	-	-	-	-	-
1,1-Dichloroethylene	ug/L	all sites	-	-	-	-	-	-	-	-	-
1,2,3-Trichlorobenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-
1,2,3-Trichloropropane	ug/L	all sites	-	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane	ug/L	all sites	-	-	-	-	-	-	-	-	-
1,2-Dichloroethane	ug/L	all sites	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	ug/L	all sites	-	-	-	-	-	-	-	-	-
1,2-Diphenylhydrazine	ug/L	all sites	-	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-
1,3-DICHLOROPROPANE	ug/L	all sites	-	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-
1-Propene, 1,1-dichloro-	ug/L	all sites	-	-	-	-	-	-	-	-	-
12,14-Dichlorodehydroabietic acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
2,2-Dichloropropane	ug/L	all sites	-	-	-	-	-	-	-	-	-
2,4,6-Trichloroanisole	mg/L	all sites	-	-	-	-	-	-	-	-	-
2,6-Dichlorosyringaldehyde	mg/L	all sites	-	-	-	-	-	-	-	-	-
2-Chloronaphthalene	ng/L	all sites	-	-	-	-	-	-	-	-	-
2-Chlorosyringaldehyde	mg/L	all sites	-	-	-	-	-	-	-	-	-
4-Bromophenyl phenyl ether	ug/L	all sites	-	-	-	-	-	-	-	-	-
5,6-Dichlorovanillin	mg/L	all sites	-	-	-	-	-	-	-	-	-
5-Chlorovanillin	mg/L	all sites	-	-	-	-	-	-	-	-	-
6-Chlorovanillin	mg/L	all sites	-	-	-	-	-	-	-	-	-
9,10-Dichlorostearic Acid	ug/L	all sites	-	-	-	-	-	-	-	-	-
Adsorbable Organic Halide	ug/L	all sites	-	-	-	-	-	-	-	-	-

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Bis(2-chloroethoxy)methane	ug/L	all sites	-	-	-	-	-	-	-	-	-
Bis(2-chloroethyl) ether	ug/L	all sites	-	-	-	-	-	-	-	-	-
Bis(2-chloroisopropyl) ether	ug/L	all sites	-	-	-	-	-	-	-	-	-
Bromobenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-
CFC-11	ug/L	all sites	-	-	-	-	-	-	-	-	-
Carbon tetrachloride	ug/L	all sites	-	-	-	-	-	-	-	-	-
Chlorobenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-
Chlorodibromomethane	ug/L	all sites	-	-	-	-	-	-	-	-	-
Chloroethane	ug/L	all sites	-	-	-	-	-	-	-	-	-
Chloroform	ug/L	all sites	-	-	-	-	-	-	-	-	-
Chloromethane	ug/L	all sites	-	-	-	-	-	-	-	-	-
Dibromomethane	ug/L	all sites	-	-	-	-	-	-	-	-	-
Dichlorobromomethane	ug/L	all sites	-	-	-	-	-	-	-	-	-
Ethylene dibromide	ug/L	all sites	-	-	-	-	-	-	-	-	-
Hexachlorobenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	ug/L	all sites	-	-	-	-	-	-	-	-	-
Hexachlorocyclopentadiene	ug/L	all sites	-	-	-	-	-	-	-	-	-
Hexachloroethane	ug/L	all sites	-	-	-	-	-	-	-	-	-
Methyl bromide	ug/L	all sites	-	-	-	-	-	-	-	-	-
Methylene chloride	ug/L	all sites	-	-	-	-	-	-	-	-	-
Tetrachloroethylene	ug/L	all sites	-	-	-	-	-	-	-	-	-
Tribromomethane	ug/L	all sites	-	-	-	-	-	-	-	-	-
Trichloroethylene	ug/L	all sites	-	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethylene	ug/L	all sites	-	-	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	ug/L	all sites	-	-	-	-	-	-	-	-	-
o-Chlorotoluene	ug/L	all sites	-	-	-	-	-	-	-	-	-
o-Dichlorobenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
p-Chlorophenyl phenyl ether	ug/L	all sites	-	-	-	-	-	-	-	-	-
p-Chlorotoluene	ug/L	all sites	-	-	-	-	-	-	-	-	-
p-Dichlorobenzene	ug/L	all sites	-	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	ug/L	all sites	-	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	ug/L	all sites	-	-	-	-	-	-	-	-	-
<b>PAHs</b>											
1-Methylnaphthalene	ng/L	all sites	-	-	-	-	-	-	<	<	<
2-Methylnaphthalene	ng/L	all sites	-	-	-	-	-	-	<	<	<
3-Methylcholanthrene	ng/L	all sites	-	-	-	-	-	-	-	-	-
7,12-Dimethylbenz[a]anthracene	ug/L	all sites	-	-	-	-	-	-	-	-	-
Acenaphthene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Acenaphthylene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Anthracene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Benz[a]anthracene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Benzo(b)fluoranthene	ng/L	all sites	-	-	-	-	-	-	-	-	-
Benzo[a]pyrene	ng/L	all sites	-	-	-	-	-	-	-	-	-
Benzo[b,j,k]fluoranthene	ug/L	all sites	-	-	-	-	-	-	<	<	<
Benzo[c]phenanthrene	ug/L	all sites	-	-	-	-	-	-	-	-	-
Benzo[e]pyrene	ng/L	all sites	-	-	-	-	-	-	<	<	<
Benzo[ghi]perylene	ng/L	all sites	-	-	-	-	-	-	-	-	-
Benzo[k]fluoranthene	ng/L	all sites	-	-	-	-	-	-	-	-	-
C1-Dibenzothiophenes	ng/L	all sites	<	<	<	-	-	-	<	<	<
C1-Fluoranthenes/pyrenes	ng/L	all sites	<	<	<	-	-	-	<	<	<
C2-Chrysenes	ng/L	all sites	<	<	<	-	-	-	<	<	<
C2-Dibenzothiophenes	ng/L	all sites	<	<	<	-	-	-	<	<	<
C2-Fluoranthenes/pyrenes	ng/L	all sites	<	<	<	-	-	-	<	<	<
C2-Fluorenes	ng/L	all sites	<	<	<	-	-	-	<	<	<

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
C2-Naphthalenes	ng/L	all sites	<	<	<	-	-	-	<	<	<
C2-Phenanthrenes/anthracenes	ug/L	all sites	<	<	<	-	-	-	<	<	<
C3-Chrysenes	ng/L	all sites	<	<	<	-	-	-	<	<	<
C3-Dibenzothiophenes	ng/L	all sites	<	<	<	-	-	-	<	<	<
C3-Fluoranthenes/pyrenes	ng/L	all sites	<	<	<	-	-	-	<	<	<
C3-Fluorenes	ng/L	all sites	<	<	<	-	-	-	<	<	<
C3-Naphthalenes	ng/L	all sites	<	<	<	-	-	-	<	<	<
C3-Phenanthrenes/anthracenes	ug/L	all sites	<	<	<	-	-	-	<	<	<
C4-Chrysenes	ng/L	all sites	<	<	<	-	-	-	<	<	<
C4-Dibenzothiophenes	ng/L	all sites	<	<	<	-	-	-	<	<	<
C4-Fluoranthenes/pyrenes	ng/L	all sites	<	<	<	-	-	-	<	<	<
C4-Fluorenes	ng/L	all sites	<	<	<	-	-	-	<	<	<
C4-Naphthalenes	ng/L	all sites	<	<	<	<	<	<	<	<	<
C4-Phenanthrenes/anthracenes	ug/L	all sites	<	<	<	-	-	-	<	<	<
Chrysene	ng/L	all sites	-	-	-	-	-	-	-	-	-
Dibenz[a,h]anthracene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Dibenzo[a,h]pyrene	ug/L	all sites	-	-	-	-	-	-	-	-	-
Dibenzo[a,i]pyrene	ug/L	all sites	-	-	-	-	-	-	-	-	-
Dibenzo[a,l]pyrene	ug/L	all sites	-	-	-	-	-	-	-	-	-
Fluoranthene	ng/L	all sites	-	-	-	-	-	-	-	-	-
Fluorene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Indeno[1,2,3-cd]pyrene	ng/L	all sites	<	<	<	<	<	<	<	<	<
Methylchrysene	ng/L	all sites	<	<	<	-	-	-	<	<	<
Methylfluorene	ng/L	all sites	<	<	<	-	-	-	<	<	<
Methylphenanthrene	ng/L	all sites	<	<	<	-	-	-	<	<	<
Naphthalene	ng/L	all sites	-	-	-	-	-	-	-	-	-
Perylene	ng/L	all sites	-	-	-	-	-	-	<	<	<

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Phenanthrene	ng/L	all sites	-	-	-	-	-	-	-	-	-
Pyrene	ng/L	all sites	-	-	-	-	-	-	-	-	-
Retene	ng/L	all sites	-	-	-	-	-	-	<	<	<
<b>Pesticide</b>											
.alpha.-Endosulfan	ug/L	all sites	<	<	<	<	<	<	-	-	-
.lambda.-Cyhalothrin	ug/L	all sites	-	-	-	-	-	-	-	-	-
2,4-D	ug/L	all sites	<	<	<	<	<	<	-	-	-
2,4-DB	ug/L	all sites	<	<	<	<	<	<	-	-	-
2-Chloro-4-isopropylamino-6-amino-s-triazine	ug/L	all sites	<	<	<	<	<	<	-	-	-
2-Chloro-6-ethylamino-4-amino-s-triazine	ug/L	all sites	<	<	<	<	<	<	-	-	-
Aldicarb	ug/L	all sites	<	<	<	<	<	<	-	-	-
Aldicarb sulfone	ug/L	all sites	-	-	-	-	-	-	-	-	-
Aldicarb sulfoxide	ug/L	all sites	-	-	-	-	-	-	-	-	-
Aldrin	ug/L	all sites	<	<	<	<	<	<	-	-	-
Aminocarb	ug/L	all sites	-	-	-	-	-	-	-	-	-
Aminopyralid	ug/L	all sites	<	<	<	<	<	<	-	-	-
Atrazine	ug/L	all sites	<	<	<	<	<	<	-	-	-
Atrazine de-ethylated	ug/L	all sites	-	-	-	-	-	-	-	-	-
Azinphos-methyl	ug/L	all sites	<	<	<	<	<	<	-	-	-
Azoxystrobin	ug/L	all sites	-	-	-	-	-	-	-	-	-
Benomyl	ug/L	all sites	-	-	-	-	-	-	-	-	-
Bentazon	ug/L	all sites	<	<	<	<	<	<	-	-	-
Benzene Hexachloride, Alpha (BHC)	ug/L	all sites	<	<	<	<	<	<	-	-	-
Bromacil	ug/L	all sites	<	<	<	<	<	<	-	-	-
Bromoxynil	ug/L	all sites	<	<	<	<	<	<	-	-	-
Carbaryl	ug/L	all sites	-	-	-	-	-	-	-	-	-

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Carbofuran	ug/L	all sites	-	-	-	-	-	-	-	-	-
Carboxin	ug/L	all sites	<	<	<	<	<	<	-	-	-
Chlorothalonil	ug/L	all sites	<	<	<	<	<	<	-	-	-
Chlorpyrifos	ug/L	all sites	<	<	<	<	<	<	-	-	-
Clodinafop acid metabolite	ug/L	all sites	<	<	<	<	<	<	-	-	-
Clodinafop-propargyl	ug/L	all sites	<	<	<	<	<	<	-	-	-
Clopyralid	ug/L	all sites	<	<	<	<	<	<	-	-	-
Clothianidin	ug/L	all sites	-	-	-	-	-	-	-	-	-
Cyanazine	ug/L	all sites	<	<	<	<	<	<	-	-	-
Deltamethrin	ug/L	all sites	-	-	-	-	-	-	-	-	-
Diazinon	ug/L	all sites	<	<	<	<	<	<	-	-	-
Dicamba	ug/L	all sites	<	<	<	<	<	<	-	-	-
Dichlorprop	ug/L	all sites	<	<	<	<	<	<	-	-	-
Diclofop methyl	ug/L	all sites	<	<	<	<	<	<	-	-	-
Dieldrin	ug/L	all sites	-	-	-	-	-	-	-	-	-
Difenoconazole	ug/L	all sites	-	-	-	-	-	-	-	-	-
Dimethoate	ug/L	all sites	<	<	<	<	<	<	-	-	-
Disulfoton	ug/L	all sites	<	<	<	<	<	<	-	-	-
Diuron	ug/L	all sites	<	<	<	<	<	<	-	-	-
Ethalfuralin	ug/L	all sites	<	<	<	<	<	<	-	-	-
Ethion	ug/L	all sites	<	<	<	<	<	<	-	-	-
Ethofumesate	ug/L	all sites	<	<	<	<	<	<	-	-	-
Fenoxaprop-p-ethyl	ug/L	all sites	<	<	<	<	<	<	-	-	-
Fenoxaprop-p-methyl	ug/L	all sites	-	-	-	-	-	-	-	-	-
Fluazifop-P-butyl	ug/L	all sites	<	<	<	<	<	<	-	-	-
Fluroxypyr	ug/L	all sites	<	<	<	<	<	<	-	-	-
Hexaconazole	ug/L	all sites	-	-	-	-	-	-	-	-	-



Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Imazamethabenz-methyl	ug/L	all sites	<	<	<	<	<	<	-	-	-
Imazamox	ug/L	all sites	-	-	-	-	-	-	-	-	-
Imazethapyr	ug/L	all sites	<	<	<	<	<	<	-	-	-
Imidacloprid	ug/L	all sites	-	-	-	-	-	-	-	-	-
Iprodione	ug/L	all sites	<	<	<	<	<	<	-	-	-
Lindane	ug/L	all sites	<	<	<	<	<	<	-	-	-
Linuron	ug/L	all sites	<	<	<	<	<	<	-	-	-
MCPA	ug/L	all sites	<	<	<	<	<	<	-	-	-
MCPB	ug/L	all sites	<	<	<	<	<	<	-	-	-
Malathion	ug/L	all sites	<	<	<	<	<	<	-	-	-
Mecoprop	ug/L	all sites	<	<	<	<	<	<	-	-	-
Metalaxyl-M	ug/L	all sites	<	<	<	<	<	<	-	-	-
Metconazole	ug/L	all sites	-	-	-	-	-	-	-	-	-
Methomyl	ug/L	all sites	<	<	<	-	-	-	-	-	-
Methoxychlor	ug/L	all sites	<	<	<	<	<	<	-	-	-
Metolachlor	ug/L	all sites	<	<	<	<	<	<	-	-	-
Metribuzin	ug/L	all sites	<	<	<	<	<	<	-	-	-
Monuron	ug/L	all sites	-	-	-	-	-	-	-	-	-
Napropamide	ug/L	all sites	<	<	<	<	<	<	-	-	-
OH-Carbofuran	ug/L	all sites	-	-	-	-	-	-	-	-	-
Oxycarboxin	ug/L	all sites	<	<	<	<	<	<	-	-	-
Parathion	ug/L	all sites	<	<	<	<	<	<	-	-	-
Permethrin	ug/L	all sites	-	-	-	-	-	-	-	-	-
Phorate	ug/L	all sites	<	<	<	<	<	<	-	-	-
Picloram	ug/L	all sites	<	<	<	<	<	<	-	-	-
Picoxystrobin	ug/L	all sites	-	-	-	-	-	-	-	-	-
Propiconazole	ug/L	all sites	<	<	<	<	<	<	-	-	-

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Prothioconazole	ug/L	all sites	-	-	-	-	-	-	-	-	-
Pyraclostrobin	ug/L	all sites	-	-	-	-	-	-	-	-	-
Pyridaben	ug/L	all sites	<	<	<	<	<	<	-	-	-
Quinclorac	ug/L	all sites	<	<	<	<	<	<	-	-	-
Quizalofop	ug/L	all sites	<	<	<	<	<	<	-	-	-
Simazine	ug/L	all sites	<	<	<	<	<	<	-	-	-
Tebuconazole	ug/L	all sites	-	-	-	-	-	-	-	-	-
Terbufos	ug/L	all sites	<	<	<	<	<	<	-	-	-
Thiamethoxam	ug/L	all sites	<	<	<	<	<	<	-	-	-
Triallate	ug/L	all sites	<	<	<	<	<	<	-	-	-
Triclopyr	ug/L	all sites	<	<	<	<	<	<	-	-	-
Trifloxystrobin	ug/L	all sites	-	-	-	-	-	-	-	-	-
Trifluralin	ug/L	all sites	<	<	<	<	<	<	-	-	-
Triticonazole	ug/L	all sites	-	-	-	-	-	-	-	-	-
Vinclozolin	ug/L	all sites	<	<	<	<	<	<	-	-	-
<b>Phenolics</b>											
2,3,4,6-Tetrachlorophenol	ug/L	all sites	-	-	-	-	-	-	-	-	-
2,4,5-Trichlorophenol	ug/L	all sites	-	-	-	-	-	-	-	-	-
2,4,6-Trichlorophenol	ug/L	all sites	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol	ug/L	all sites	-	-	-	-	-	-	-	-	-
2,4-Dichlorophenol/2,5-Dichlorophenol	mg/L	all sites	-	-	-	-	-	-	-	-	-
2,4-Dimethylphenol	ug/L	all sites	-	-	-	-	-	-	-	-	-
2,4-Dinitrophenol	ug/L	all sites	-	-	-	-	-	-	-	-	-
2,6-Dichlorophenol	mg/L	all sites	-	-	-	-	-	-	-	-	-
4,6-Dinitro-o-cresol	ug/L	all sites	-	-	-	-	-	-	-	-	-
4-Chloro-2-methylphenol	ug/L	all sites	<	<	<	<	<	<	-	-	-
4-Chlorophenol	ug/L	all sites	-	-	-	-	-	-	-	-	-

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Pentachlorophenol	ug/L	all sites	-	-	-	-	-	-	-	-	-
Phenol	ug/L	all sites	-	-	-	-	-	-	-	-	-
Phenolics	mg/L	all sites	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.01
o-Chlorophenol	ug/L	all sites	-	-	-	-	-	-	-	-	-
o-Nitrophenol	ug/L	all sites	-	-	-	-	-	-	-	-	-
p-Chloro-m-cresol	ug/L	all sites	-	-	-	-	-	-	-	-	-
p-Nitrophenol	ug/L	all sites	-	-	-	-	-	-	-	-	-
<b>Phthalates</b>											
Butyl benzyl phthalate	ug/L	all sites	-	-	-	-	-	-	-	-	-
Di(2-ethoxyhexyl) phthalate	ug/L	all sites	-	-	-	-	-	-	-	-	-
Di-n-octyl phthalate	ug/L	all sites	-	-	-	-	-	-	-	-	-
Dibutyl phthalate	ug/L	all sites	-	-	-	-	-	-	-	-	-
Diethyl phthalate	ug/L	all sites	-	-	-	-	-	-	-	-	-
Dimethyl phthalate	ug/L	all sites	-	-	-	-	-	-	-	-	-
<b>Target PANHs</b>											
Acridine	ug/L	all sites	-	-	-	-	-	-	-	-	-
<b>Total Metals</b>											
Chromium(VI), Unknown	mg/L	all sites	<	<	<	-	-	-	-	-	-
Mercury, Unfiltered	ng/L	all sites	3.42	8.90	23.80	0.80	2.99	13.70	0.46	0.82	4.25
Methylmercury(1+), Unfiltered	ng/L	all sites	0.03	0.16	0.25	0.04	0.07	0.19	0.03	0.04	0.10
<b>Total Recoverable Metals</b>											
Aluminum, Unfiltered	ug/L	all sites	396.75	2770.00	13475.00	142.40	792.00	5480.00	26.60	97.50	1202.25
Antimony, Unfiltered	ug/L	all sites	0.07	0.10	0.15	0.03	0.07	0.28	0.04	0.05	0.12
Arsenic, Unfiltered	ug/L	all sites	0.72	1.75	2.91	0.50	0.86	1.95	0.42	0.57	0.83
Barium, Unfiltered	ug/L	all sites	55.85	86.15	239.25	46.06	56.90	141.06	49.84	64.05	77.97
Beryllium, Unfiltered	ug/L	all sites	0.03	0.14	0.47	0.01	0.04	0.23	0.00	0.01	0.11
Bismuth, Unfiltered	ug/L	all sites	0.01	0.02	0.06	0.00	0.01	0.02	0.00	0.00	0.02
Boron, Unfiltered	ug/L	all sites	17.00	24.80	41.77	20.70	24.70	40.54	24.30	32.85	39.78

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Cadmium, Unfiltered	ug/L	all sites	0.02	0.06	0.27	0.01	0.02	0.13	0.01	0.02	0.09
Calcium, Unfiltered	mg/L	all sites	19.57	27.85	35.48	25.82	32.40	38.18	29.82	40.50	50.23
Chlorine, Unfiltered	mg/L	all sites	1.58	4.12	7.88	4.06	8.40	16.74	10.89	20.80	38.17
Chromium, Unfiltered	ug/L	all sites	0.69	3.21	11.71	0.15	0.92	6.31	0.05	0.22	0.68
Cobalt, Unfiltered	ug/L	all sites	0.39	1.35	4.94	0.17	0.41	1.87	0.06	0.12	0.43
Copper, Unfiltered	ug/L	all sites	1.63	3.65	10.13	0.94	1.42	4.81	0.54	0.91	1.90
Iron, Unfiltered	ug/L	all sites	1292.50	4240.00	13625.00	454.20	1050.00	4414.00	412.75	565.50	1294.50
Lead, Unfiltered	ug/L	all sites	0.54	2.12	10.55	0.17	0.47	2.81	0.07	0.16	2.56
Lithium, Unfiltered	ug/L	all sites	5.16	7.46	16.95	5.83	6.83	8.13	7.04	8.92	11.09
Manganese, Unfiltered	ug/L	all sites	44.25	104.40	320.50	19.80	54.70	113.80	16.82	30.75	51.66
Molybdenum, Unfiltered	ug/L	all sites	0.15	0.52	0.73	0.38	0.60	0.98	0.54	0.65	0.77
Nickel, Unfiltered	ug/L	all sites	1.50	4.33	13.17	0.60	1.55	4.97	0.10	1.01	2.25
Selenium, Unfiltered	ug/L	all sites	0.15	0.26	0.47	0.15	0.22	0.30	0.19	0.30	0.50
Silver, Unfiltered	ug/L	all sites	0.01	0.02	0.33	0.00	0.01	0.03	+	+	+
	ug/L	AB07DD0010	+	+	+	+	+	+	0.00	0.00	0.01
	ug/L	AB07DD0105	+	+	+	+	+	+	0.00	0.00	0.02
Strontium, Unfiltered	ug/L	all sites	111.00	174.50	227.50	129.40	206.00	256.60	197.10	275.00	343.40
Thallium, Unfiltered	ug/L	all sites	0.02	0.05	0.21	0.01	0.02	0.11	0.00	0.01	0.05
Thorium, Unfiltered	ug/L	all sites	0.09	0.42	2.51	0.03	0.14	0.88	0.01	0.02	0.20
Tin, Unfiltered	ug/L	all sites	0.02	0.05	0.11	<	<	<	0.01	0.04	0.10
Titanium, Unfiltered	ug/L	all sites	6.74	33.90	127.00	2.78	11.60	69.98	1.73	2.53	22.63
Uranium, Unfiltered	ug/L	all sites	0.36	0.49	1.27	0.32	0.41	0.65	+	+	+
	ug/L	AB07DD0010	+	+	+	+	+	+	0.28	0.44	0.52
	ug/L	AB07DD0105	+	+	+	+	+	+	0.31	0.40	0.52
Vanadium, Unfiltered	ug/L	all sites	1.58	6.73	21.23	0.64	2.04	12.25	0.25	0.43	2.04
Zinc, Unfiltered	ug/L	all sites	3.27	10.36	32.95	1.40	3.10	15.63	+	+	+
	ug/L	AB07DD0010	+	+	+	+	+	+	1.02	1.65	6.98

Table 3: Current Condition Targets, Athabasca River Delta - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
	ug/L	AB07DD0105	+	+	+	+	+	+	1.05	2.58	13.22

Table 4: Current Condition Targets, Athabasca River Delta - Sediment

Parameter	Unit	Site	5th	50th	95th
<b>Conventional Variables</b>					
Acid Neutralization Potential as %CaCO <sub>3</sub>	%	all sites	1.61	5.51	8.35
Grain size, clay (<2 µm)	%	all sites	3.07	16.10	33.23
Grain size, sand (≥63 µm to 2000 µm)	%	all sites	3.39	34.50	92.03
Grain size, silt (≥2 to 63 µm)	%	all sites	4.57	48.20	72.33
Inorganic carbon	%	all sites	0.24	0.74	1.02
Moisture content	%	all sites	22.25	34.20	56.30
Organic carbon	%	all sites	0.53	1.44	2.50
Total carbon	%	all sites	0.77	2.10	3.33
<b>General Organics</b>					
AEP Total recoverable hydrocarbons	ug/g	all sites	600.00	700.00	1400.00
BTEX, Total	ug/g	all sites	-	-	-
Benzene	ug/g	all sites	<	<	<
C10-C16 Hydrocarbons	ug/g	all sites	15.48	26.65	48.60
C11-C30 AEP Total extractable hydrocarbons	ug/g	all sites	54.00	200.00	500.00
C16-C34 Hydrocarbons	ug/g	all sites	33.42	216.00	394.50
C34-C50 Hydrocarbons	ug/g	all sites	33.45	172.00	424.50
C5-C10 AEP Total volatile hydrocarbons	ug/g	all sites	0.79	2.35	8.50
Ethylbenzene	ug/g	all sites	<	<	<
Hydrocarbons	ug/g	all sites	85.25	405.50	715.15
Styrene	ug/g	all sites	-	-	-
Toluene	ug/g	all sites	<	<	<
Total xylenes	ug/g	all sites	-	-	-
m,p-Xylene	ug/g	all sites	<	<	<
o-Xylene	ug/g	all sites	<	<	<
<b>PAHs</b>					
1,2,6-Trimethylphenanthrene	ng/g	all sites	-	-	-
1,2-Dimethylnaphthalene	ng/g	all sites	-	-	-
1,4,6,7-Tetramethylnaphthalene	ng/g	all sites	-	-	-
1,6,7-Trimethylnaphthalene	ng/g	all sites	-	-	-
1,7-Dimethylfluorene	ng/g	all sites	-	-	-
1,7-Dimethylphenanthrene	ng/g	all sites	-	-	-
1,8-Dimethylphenanthrene	ng/g	all sites	-	-	-

Table 4: Current Condition Targets, Athabasca River Delta - Sediment (*continued*)

Parameter	Unit	Site	5th	50th	95th
1-Methylchrysene	ng/g	all sites	-	-	-
1-Methylnaphthalene	ng/g	all sites	-	-	-
1-Methylphenanthrene	ng/g	all sites	-	-	-
2,3,6-Trimethylnaphthalene	ng/g	all sites	-	-	-
2,4-Dimethyldibenzothiophene	ng/g	all sites	-	-	-
2,6-Dimethylnaphthalene	ng/g	all sites	-	-	-
2,6-Dimethylphenanthrene	ng/g	all sites	-	-	-
2-Methylanthracene	ng/g	all sites	-	-	-
2-Methyldibenzothiophenes/3-Methyldibenzothiophenes	ng/g	all sites	-	-	-
2-Methylfluorene	ng/g	all sites	-	-	-
2-Methylnaphthalene	ng/g	all sites	-	-	-
2-Methylphenanthrene	ng/g	all sites	-	-	-
3,6-Dimethylphenanthrene	ng/g	all sites	-	-	-
3-Methylfluoranthene/Benzo[a]fluorene	ng/g	all sites	-	-	-
3-Methylphenanthrene	ng/g	all sites	-	-	-
5,9-Dimethylchrysene	ng/g	all sites	-	-	-
5-Methylchrysene/6-Methylchrysene	ng/g	all sites	-	-	-
7-Methylbenzo[a]pyrene	ng/g	all sites	-	-	-
9-Methylphenanthrene/4-Methylphenanthrene	ng/g	all sites	-	-	-
Acenaphthene	ng/g	all sites	<	<	<
Acenaphthylene	ng/g	all sites	<	<	<
Anthracene	ng/g	all sites	<	<	<
Benz[a]anthracene	ng/g	all sites	<	<	<
Benzo(b)fluoranthene	ng/g	all sites	-	-	-
Benzo(j+k)fluoranthene	ng/g	all sites	-	-	-
Benzo[a]pyrene	ng/g	all sites	3.39	5.88	10.20
Benzo[b,j,k]fluoranthene	ng/g	all sites	3.30	15.65	27.77
Benzo[e]pyrene	ng/g	all sites	-	-	-
Benzo[ghi]perylene	ng/g	all sites	3.44	10.45	18.43
Biphenyl	ng/g	all sites	1.69	5.87	10.68
C1-Acenaphthenes	ng/g	all sites	<	<	<
C1-Benzo[a]anthracenes/chrysenes	ng/g	all sites	7.73	67.95	256.75
C1-Benzofluoranthenes/benzopyrenes	ng/g	all sites	17.39	47.45	87.61
C1-Biphenyls	ng/g	all sites	3.30	6.80	14.43

Table 4: Current Condition Targets, Athabasca River Delta - Sediment (*continued*)

Parameter	Unit	Site	5th	50th	95th
C1-Dibenzothiophenes	ng/g	all sites	3.46	11.35	22.95
C1-Fluoranthenes/pyrenes	ng/g	all sites	17.90	46.25	135.50
C1-Fluorenes	ng/g	all sites	3.26	8.54	25.59
C1-Naphthalenes	ng/g	all sites	5.87	26.25	48.42
C1-Phenanthrenes/anthracenes	ng/g	all sites	7.01	37.80	77.25
C2-Benzo[a]anthracenes/chrysenes	ng/g	all sites	<	<	<
C2-Benzofluoranthenes/benzopyrenes	ng/g	all sites	9.50	21.15	39.20
C2-Biphenyls	ng/g	all sites	2.97	8.62	25.80
C2-Dibenzothiophenes	ng/g	all sites	15.80	49.45	108.80
C2-Fluoranthenes/pyrenes	ng/g	all sites	31.49	80.80	243.70
C2-Fluorenes	ng/g	all sites	8.81	26.50	55.42
C2-Naphthalenes	ng/g	all sites	11.60	43.00	78.95
C2-Phenanthrenes/anthracenes	ng/g	all sites	5.43	52.25	96.10
C3-Benzo[a]anthracenes/chrysenes	ng/g	all sites	-	-	-
C3-Dibenzothiophenes	ng/g	all sites	27.12	92.50	253.50
C3-Fluoranthenes/pyrenes	ng/g	all sites	28.47	78.20	198.90
C3-Fluorenes	ng/g	all sites	12.00	37.75	104.23
C3-Naphthalenes	ng/g	all sites	10.54	37.35	61.75
C3-Phenanthrenes/anthracenes	ng/g	all sites	19.91	59.00	144.75
C4-Benzo[a]anthracenes/chrysenes	ng/g	all sites	-	-	-
C4-Dibenzothiophenes	ng/g	all sites	33.26	113.50	267.35
C4-Fluoranthenes/pyrenes	ng/g	all sites	-	-	-
C4-Naphthalenes	ng/g	all sites	10.15	27.80	55.88
C4-Phenanthrenes/anthracenes	ng/g	all sites	24.50	248.00	543.75
Chrysene	ng/g	all sites	3.43	17.75	30.38
Dibenz[a,h]anthracene	ng/g	all sites	<	<	<
Dibenzothiophene	ng/g	all sites	<	<	<
Fluoranthene	ng/g	all sites	1.14	3.87	7.12
Fluorene	ng/g	all sites	0.38	2.30	4.53
Indeno[1,2,3-cd]pyrene	ng/g	all sites	2.25	6.22	11.50
Naphthalene	ng/g	all sites	2.17	7.75	20.20
Perylene	ng/g	all sites	-	-	-
Phenanthrene	ng/g	all sites	3.72	15.95	27.25
Pyrene	ng/g	all sites	3.22	10.45	18.55
Retene	ng/g	all sites	12.88	52.10	132.70



Table 4: Current Condition Targets, Athabasca River Delta - Sediment (*continued*)

Parameter	Unit	Site	5th	50th	95th
<b>Total Metals</b>					
Aluminum	ug/g	all sites	3314.00	7800.00	14340.00
Antimony	ug/g	all sites	0.13	0.22	0.35
Arsenic	ug/g	all sites	2.97	4.95	8.19
Barium	ug/g	all sites	66.33	149.50	213.50
Beryllium	ug/g	all sites	<	<	<
Bismuth	ug/g	all sites	<	<	<
Boron	ug/g	all sites	4.00	10.00	23.40
Cadmium	ug/g	all sites	<	<	<
Calcium	ug/g	all sites	9030.00	21100.00	27880.00
Chromium	ug/g	all sites	7.65	14.95	32.88
Cobalt	ug/g	all sites	5.03	7.70	11.22
Copper	ug/g	all sites	4.54	13.10	22.23
Iron	ug/g	all sites	8956.00	17500.00	26380.00
Lead	ug/g	all sites	3.85	7.91	12.10
Lithium	ug/g	all sites	2.19	10.70	20.10
Magnesium	ug/g	all sites	3518.00	7340.00	9310.00
Manganese	ug/g	all sites	172.80	392.00	632.60
Mercury	ug/g	all sites	0.02	0.04	0.07
Molybdenum	ug/g	all sites	<	<	<
Nickel	ug/g	all sites	10.19	18.75	29.40
Phosphorus	ug/g	all sites	185.50	610.50	767.50
Potassium	ug/g	all sites	525.50	1200.00	2100.00
Selenium	ug/g	all sites	0.19	0.41	1.01
Silver	ug/g	all sites	-	-	-
Sodium	ug/g	all sites	72.89	140.00	277.50
Strontium	ug/g	all sites	26.70	60.50	80.50
Thallium	ug/g	all sites	0.09	0.16	0.25
Tin	ug/g	all sites	<	<	<
Titanium	ug/g	all sites	25.44	56.00	82.72
Uranium	ug/g	all sites	<	<	<
Vanadium	ug/g	all sites	12.82	21.70	36.10
Zinc	ug/g	all sites	29.82	59.35	83.53
Zirconium	ug/g	all sites	-	-	-

Table 5: Current Condition Targets, Lake Athabasca - Water

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Conventional Variables											
Alkalinity, total	mg/L	all sites	-	-	-	30.20	35.20	99.30	-	-	-
Hardness as CaCO3	mg/L	all sites	-	-	-	31.20	38.54	104.00	-	-	-
Organic carbon, Filtered	mg/L	all sites	-	-	-	3.30	4.35	13.50	-	-	-
Organic carbon, Unfiltered	mg/L	all sites	-	-	-	3.50	4.15	13.10	-	-	-
Specific conductivity	uS/cm	all sites	-	-	-	79.70	92.35	234.00	-	-	-
Total dissolved solids, Filtered	mg/L	all sites	-	-	-	22.00	57.00	268.00	-	-	-
Total suspended solids, Non-Filterable (Particle)	mg/L	all sites	-	-	-	1.11	20.00	212.85	-	-	-
Turbidity, Unfiltered	NTU	all sites	-	-	-	6.08	25.95	158.00	-	-	-
pH, lab	pH units	all sites	-	-	-	7.58	7.72	8.11	-	-	-
Field											
Conductivity	uS/cm	all sites	73.19	170.52	248.91	45.57	136.13	226.60	-	-	-
Depth, Secchi disk depth	cm	all sites	1.50	10.12	55.50	10.03	21.59	81.10	-	-	-
Dissolved oxygen (DO)	mg/L	all sites	6.24	9.04	12.67	7.96	9.80	13.92	-	-	-
Dissolved oxygen saturation	%	all sites	62.93	94.62	113.90	84.33	95.27	117.30	-	-	-
Oxidation reduction potential (ORP)	mV	all sites	-286.94	135.50	319.68	-447.32	108.72	286.20	-	-	-
Salinity	ppt	all sites	0.04	0.09	0.17	0.03	0.10	0.14	-	-	-
Temperature, water	degC	all sites	7.79	17.55	22.28	1.17	14.00	21.50	-	-	-
Turbidity	NTU	all sites	9.70	48.80	198.70	7.54	24.70	80.70	-	-	-
pH	pH units	all sites	7.75	8.22	9.39	7.67	8.13	8.55	-	-	-
General Organics											
Silica gel treated n-hexane extractable material	mg/L	all sites	-	-	-	<	<	<	-	-	-
Major Ions											
Calcium, Unfiltered	mg/L	all sites	-	-	-	-	-	-	-	-	-
Chloride, Unfiltered	mg/L	all sites	-	-	-	3.30	3.70	4.70	-	-	-
Fluoride, Unfiltered	mg/L	all sites	-	-	-	<	<	<	-	-	-
Magnesium, Unfiltered	mg/L	all sites	-	-	-	-	-	-	-	-	-

Table 5: Current Condition Targets, Lake Athabasca - Water *(continued)*

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Potassium, Unfiltered	mg/L	all sites	-	-	-	-	-	-	-	-	-
Sodium, Unfiltered	mg/L	all sites	-	-	-	-	-	-	-	-	-
Sulfate, Unfiltered as SO4	mg/L	all sites	-	-	-	3.00	6.00	20.00	-	-	-
<b>Nutrients and BOD</b>											
Ammonia and ammonium, Unfiltered as N	mg/L	all sites	-	-	-	<	<	<	-	-	-
Inorganic nitrogen (nitrate and nitrite), Unfiltered as N	mg/L	all sites	-	-	-	0.02	0.10	0.22	-	-	-
Nitrate, Unfiltered as N	mg/L	all sites	-	-	-	0.01	0.10	0.22	-	-	-
Nitrite, Unfiltered as N	mg/L	all sites	-	-	-	0.00	0.00	0.04	-	-	-
Orthophosphate, Unfiltered as P	mg/L	all sites	-	-	-	0.00	0.00	0.00	-	-	-
Total Nitrogen, mixed forms, Filtered as N	mg/L	all sites	-	-	-	0.17	0.20	0.47	-	-	-
Total Nitrogen, mixed forms, Unfiltered as N	mg/L	all sites	-	-	-	0.20	0.25	0.65	-	-	-
Total Phosphorus, mixed forms, Filtered as P	mg/L	all sites	-	-	-	0.00	0.00	0.01	-	-	-
Total Phosphorus, mixed forms, Unfiltered as P	mg/L	all sites	-	-	-	0.01	0.04	0.27	-	-	-
<b>Total Metals</b>											
Aluminum, Unfiltered	ug/L	all sites	-	-	-	137.00	591.00	3100.00	-	-	-
Antimony, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Arsenic, Unfiltered	ug/L	all sites	-	-	-	0.30	0.70	2.40	-	-	-
Barium, Unfiltered	ug/L	all sites	-	-	-	19.10	29.90	92.60	-	-	-
Beryllium, Unfiltered	ug/L	all sites	-	-	-	0.01	0.03	0.14	-	-	-
Bismuth, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Boron, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Cadmium, Unfiltered	ug/L	all sites	-	-	-	<	<	<	-	-	-
Cesium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Chromium, Filtered	ug/L	all sites	-	-	-	<	<	<	-	-	-

Table 5: Current Condition Targets, Lake Athabasca - Water (*continued*)

Parameter	Unit	Site	High Flow			Open Water			Under Ice		
			5th	50th	95th	5th	50th	95th	5th	50th	95th
Chromium, Unfiltered	ug/L	all sites	-	-	-	0.30	0.90	4.90	-	-	-
Chromium(VI), Unfiltered	mg/L	all sites	-	-	-	<	<	<	-	-	-
Cobalt, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Copper, Unfiltered	ug/L	all sites	-	-	-	0.90	1.45	7.20	-	-	-
Iron, Unfiltered	ug/L	all sites	-	-	-	236.00	953.00	6700.00	-	-	-
Lead, Unfiltered	ug/L	all sites	-	-	-	0.10	0.55	3.60	-	-	-
Lithium, Unfiltered	ug/L	all sites	-	-	-	3.00	3.85	8.00	-	-	-
Manganese, Unfiltered	ug/L	all sites	-	-	-	6.70	21.10	162.00	-	-	-
Mercury, Unfiltered	ng/L	all sites	-	-	-	-	-	-	-	-	-
Methylmercury(1+), Unfiltered	ng/L	all sites	-	-	-	-	-	-	-	-	-
Molybdenum, Unfiltered	ug/L	all sites	-	-	-	0.10	0.30	0.70	-	-	-
Nickel, Unfiltered	ug/L	all sites	-	-	-	0.60	1.50	8.70	-	-	-
Rubidium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Selenium, Unfiltered	ug/L	all sites	-	-	-	<	<	<	-	-	-
Silver, Unfiltered	ug/L	all sites	-	-	-	<	<	<	-	-	-
Strontium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Thallium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Tin, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Titanium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Uranium, Unfiltered	ug/L	all sites	-	-	-	-	-	-	-	-	-
Vanadium, Unfiltered	ug/L	all sites	-	-	-	0.50	1.90	9.20	-	-	-
Zinc, Unfiltered	ug/L	all sites	-	-	-	1.02	4.05	20.70	-	-	-