

Appendix V5-4D

Summary of Observed, Predicted Baseline,
and Predicted Base Case Water Quality Results
for Madrid-Boston Project



Appendix V5-4D1. Summary of Screening for Effects to Water Quality in Stickleback Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Antimony	0.006	C	Open	0.000007	0.000050	9	0.000015	0.000016	0.000016	0.000017	-
			Ice	0.000015	0.000047	3	0.000029	0.000041	0.000030	0.000044	-
		O	Open	0.000007	0.000050	9	0.000016	0.000018	0.000018	0.000020	-
			Ice	0.000015	0.000047	3	0.000032	0.000046	0.000034	0.000051	-
		CL	Open	0.000007	0.000050	9	0.000018	0.000018	0.000020	0.000021	-
			Ice	0.000015	0.000047	3	0.000034	0.000048	0.000038	0.000053	-
		PC	Open	0.000007	0.000050	9	0.000022	0.000024	0.000035	0.000039	-
			Ice	0.000015	0.000047	3	0.000041	0.000061	0.000063	0.000101	-
Arsenic	0.028	C	Open	0.00042	0.00049	9	0.00022	0.00023	0.00026	0.00026	-
			Ice	0.00089	0.00118	3	0.00042	0.00060	0.00049	0.00069	-
		O	Open	0.00042	0.00049	9	0.00023	0.00024	0.00026	0.00028	-
			Ice	0.00089	0.00118	3	0.00044	0.00063	0.00051	0.00072	-
		CL	Open	0.00042	0.00049	9	0.00024	0.00024	0.00027	0.00028	-
			Ice	0.00089	0.00118	3	0.00046	0.00063	0.00053	0.00073	-
		PC	Open	0.00042	0.00049	9	0.00026	0.00028	0.00035	0.00039	-
			Ice	0.00089	0.00118	3	0.00050	0.00074	0.00067	0.00101	-
Barium	1	C	Open	0.006	0.006	9	0.003	0.003	0.004	0.004	-
			Ice	0.024	0.035	3	0.006	0.008	0.008	0.010	-
		O	Open	0.006	0.006	9	0.003	0.003	0.004	0.004	-
			Ice	0.024	0.035	3	0.006	0.008	0.007	0.010	-
		CL	Open	0.006	0.006	9	0.003	0.003	0.004	0.004	-
			Ice	0.024	0.035	3	0.006	0.008	0.007	0.010	-
		PC	Open	0.006	0.006	9	0.003	0.004	0.004	0.004	-
			Ice	0.024	0.035	3	0.007	0.010	0.008	0.012	-

Appendix V5-4D1. Summary of Screening for Effects to Water Quality in Stickleback Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Beryllium	0.1	C	Open	0.0000015	0.0001000	9	0.0000068	0.0000070	0.0000075	0.0000081	-
			Ice	0.0000025	0.0000903	3	0.0000130	0.0000184	0.0000144	0.0000207	-
		O	Open	0.0000015	0.0001000	9	0.0000070	0.0000073	0.0000086	0.0000094	-
			Ice	0.0000025	0.0000903	3	0.0000136	0.0000192	0.0000164	0.0000243	-
		CL	Open	0.0000015	0.0001000	9	0.0000073	0.0000074	0.0000096	0.0000098	-
			Ice	0.0000025	0.0000903	3	0.0000141	0.0000195	0.0000184	0.0000253	-
		PC	Open	0.0000015	0.0001000	9	0.0000081	0.0000087	0.0000224	0.0000258	-
			Ice	0.0000025	0.0000903	3	0.0000154	0.0000227	0.0000401	0.0000672	-
Boron	1.5	C	Open	0.018	0.022	9	0.007	0.007	0.009	0.009	-
			Ice	0.038	0.044	3	0.013	0.019	0.017	0.024	-
		O	Open	0.018	0.022	9	0.007	0.007	0.009	0.009	-
			Ice	0.038	0.044	3	0.014	0.019	0.017	0.024	-
		CL	Open	0.018	0.022	9	0.007	0.007	0.009	0.009	-
			Ice	0.038	0.044	3	0.014	0.020	0.018	0.025	-
		PC	Open	0.018	0.022	9	0.008	0.009	0.013	0.014	-
			Ice	0.038	0.044	3	0.015	0.023	0.024	0.037	-
Calcium	1000	C	Open	17.3	18.6	9	3.5	3.7	6.3	6.5	-
			Ice	49.0	53.1	3	6.8	9.6	12.3	17.4	-
		O	Open	17.3	18.6	9	3.7	3.8	6.2	6.4	-
			Ice	49.0	53.1	3	7.1	10.0	11.9	16.9	-
		CL	Open	17.3	18.6	9	3.8	3.8	6.0	6.1	-
			Ice	49.0	53.1	3	7.3	10.1	11.6	16.2	-
		PC	Open	17.3	18.6	9	4.2	4.5	7.8	8.5	-
			Ice	49.0	53.1	3	7.9	11.6	14.7	22.2	-

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Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Cobalt	0.05	C	Open	0.00004	0.00005	9	0.00008	0.00008	0.00010	0.00010	-
			Ice	0.00063	0.00074	3	0.00015	0.00021	0.00019	0.00027	-
		O	Open	0.00004	0.00005	9	0.00008	0.00008	0.00010	0.00010	-
			Ice	0.00063	0.00074	3	0.00015	0.00021	0.00019	0.00027	-
		CL	Open	0.00004	0.00005	9	0.00008	0.00008	0.00010	0.00010	-
			Ice	0.00063	0.00074	3	0.00015	0.00021	0.00019	0.00026	-
		PC	Open	0.00004	0.00005	9	0.00008	0.00009	0.00011	0.00012	-
			Ice	0.00063	0.00074	3	0.00016	0.00023	0.00020	0.00030	-
Copper	0.009	C	Open	0.00041	0.00064	9	0.00127	0.00132	0.00134	0.00140	-
			Ice	0.00057	0.00125	3	0.00245	0.00345	0.00256	0.00364	-
		O	Open	0.00041	0.00064	9	0.00132	0.00137	0.00145	0.00154	-
			Ice	0.00057	0.00125	3	0.00254	0.00360	0.00278	0.00403	-
		CL	Open	0.00041	0.00064	9	0.00136	0.00139	0.00156	0.00158	-
			Ice	0.00057	0.00125	3	0.00262	0.00364	0.00299	0.00413	-
		PC	Open	0.00041	0.00064	9	0.00150	0.00162	0.00262	0.00296	-
			Ice	0.00057	0.00125	3	0.00286	0.00420	0.00477	0.00771	-
Lead	Hardness Dependent	C	Open	0.000025	0.001428	9	0.000045	0.000047	0.000051	0.000053	-
			Ice	0.000025	0.000028	3	0.000087	0.000124	0.000099	0.000138	-
		O	Open	0.000025	0.001428	9	0.000047	0.000050	0.000053	0.000054	-
			Ice	0.000025	0.000028	3	0.000092	0.000130	0.000101	0.000143	-
		CL	Open	0.000025	0.001428	9	0.000049	0.000050	0.000054	0.000055	-
			Ice	0.000025	0.000028	3	0.000095	0.000132	0.000103	0.000144	-
		PC	Open	0.000025	0.001428	9	0.000055	0.000060	0.000058	0.000063	-
			Ice	0.000025	0.000028	3	0.000105	0.000155	0.000111	0.000164	-

Appendix V5-4D1. Summary of Screening for Effects to Water Quality in Stickleback Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Manganese	0.2	C	Open	0.01	0.02	9	0.021	0.021	0.043	0.045	-
			Ice	0.75	0.94	3	0.040	0.056	0.083	0.121	-
		O	Open	0.01	0.02	9	0.021	0.022	0.039	0.042	-
			Ice	0.75	0.94	3	0.041	0.057	0.076	0.113	-
		CL	Open	0.01	0.02	9	0.022	0.022	0.036	0.037	-
			Ice	0.75	0.94	3	0.042	0.058	0.070	0.098	-
		PC	Open	0.01	0.02	9	0.023	0.024	0.027	0.036	-
			Ice	0.75	0.94	3	0.043	0.062	0.054	0.097	-
Mercury	0.000026	C	Open	0.000003	0.000005	9	0.000002	0.000002	0.000002	0.000002	-
			Ice	0.000002	0.000005	3	0.000003	0.000005	0.000004	0.000006	-
		O	Open	0.000003	0.000005	9	0.000002	0.000002	0.000002	0.000002	-
			Ice	0.000002	0.000005	3	0.000004	0.000006	0.000004	0.000006	-
		CL	Open	0.000003	0.000005	9	0.000002	0.000002	0.000002	0.000003	-
			Ice	0.000002	0.000005	3	0.000004	0.000006	0.000005	0.000007	-
		PC	Open	0.000003	0.000005	9	0.000003	0.000004	0.000004	0.000005	-
			Ice	0.000002	0.000005	3	0.000006	0.000010	0.000008	0.000014	-
Molybdenum	0.073	C	Open	0.000038	0.000164	9	0.000064	0.000066	0.000068	0.000071	-
			Ice	0.000080	0.000152	3	0.000124	0.000174	0.000130	0.000185	-
		O	Open	0.000038	0.000164	9	0.000067	0.000069	0.000074	0.000079	-
			Ice	0.000080	0.000152	3	0.000129	0.000182	0.000142	0.000206	-
		CL	Open	0.000038	0.000164	9	0.000069	0.000070	0.000080	0.000081	-
			Ice	0.000080	0.000152	3	0.000133	0.000184	0.000153	0.000212	-
		PC	Open	0.000038	0.000164	9	0.000076	0.000082	0.000141	0.000160	-
			Ice	0.000080	0.000152	3	0.000145	0.000214	0.000256	0.000417	-

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Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Nickel	Hardness Dependent	C	Open	0.00016	0.00047	9	0.00057	0.00059	0.00057	0.00060	-
			Ice	0.00064	0.00078	3	0.00109	0.00154	0.00111	0.00156	-
		O	Open	0.00016	0.00047	9	0.00059	0.00061	0.00060	0.00063	-
			Ice	0.00064	0.00078	3	0.00113	0.00160	0.00116	0.00165	-
		CL	Open	0.00016	0.00047	9	0.00061	0.00061	0.00063	0.00064	-
			Ice	0.00064	0.00078	3	0.00116	0.00162	0.00121	0.00168	-
		PC	Open	0.00016	0.00047	9	0.00066	0.00072	0.00077	0.00084	-
			Ice	0.00064	0.00078	3	0.00127	0.00186	0.00147	0.00219	-
Selenium	0.001	C	Open	0.000592	0.000702	9	0.000266	0.000276	0.000335	0.000341	-
			Ice	0.00025	0.001825	3	0.000513	0.000725	0.000647	0.000904	-
		O	Open	0.000592	0.000702	9	0.000277	0.000289	0.000334	0.00034	-
			Ice	0.00025	0.001825	3	0.000534	0.000758	0.000644	0.000899	-
		CL	Open	0.000592	0.000702	9	0.000287	0.000292	0.000333	0.000338	-
			Ice	0.00025	0.001825	3	0.000553	0.000767	0.000642	0.000894	-
		PC	Open	0.000592	0.000702	9	0.000318	0.000345	0.000325	0.000339	-
			Ice	0.00025	0.001825	3	0.000609	0.000899	0.000629	0.000894	-
Sodium	200	C	Open	15.15	16.75	9	6.46	6.69	7.10	7.27	-
			Ice	40.9	47.65	3	12.44	17.54	13.66	19.11	-
		O	Open	15.15	16.75	9	6.70	6.96	7.25	7.46	-
			Ice	40.9	47.65	3	12.92	18.29	13.95	19.64	-
		CL	Open	15.15	16.75	9	6.93	7.04	7.40	7.52	-
			Ice	40.9	47.65	3	13.33	18.50	14.26	19.80	-
		PC	Open	15.15	16.75	9	7.62	8.22	7.70	8.23	-
			Ice	40.9	47.65	3	14.54	21.39	14.82	21.42	-

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Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Silver	0.00025	C	Open	0.000002	0.000005	9	0.0000033	0.0000034	0.0000034	0.0000035	-
			Ice	0.000003	0.000005	3	0.0000063	0.0000089	0.0000065	0.0000091	-
		O	Open	0.000002	0.000005	9	0.0000034	0.0000034	0.0000035	0.0000036	-
			Ice	0.000003	0.000005	3	0.0000064	0.0000090	0.0000067	0.0000095	-
		CL	Open	0.000002	0.000005	9	0.0000034	0.0000034	0.0000036	0.0000037	-
			Ice	0.000003	0.000005	3	0.0000065	0.0000090	0.0000070	0.0000097	-
		PC	Open	0.000002	0.000005	9	0.0000035	0.0000037	0.0000047	0.0000051	-
			Ice	0.000003	0.000005	3	0.0000067	0.0000095	0.0000089	0.0000132	-
Thallium	0.0008	C	Open	0.000004	0.000050	9	0.0000059	0.0000062	0.0000060	0.0000062	-
			Ice	0.000003	0.000045	3	0.000011	0.000016	0.000012	0.000016	-
		O	Open	0.000004	0.000050	9	0.0000062	0.0000065	0.0000063	0.0000067	-
			Ice	0.000003	0.000045	3	0.000012	0.000017	0.000012	0.000018	-
		CL	Open	0.000004	0.000050	9	0.0000064	0.0000066	0.0000067	0.0000068	-
			Ice	0.000003	0.000045	3	0.000012	0.000017	0.000013	0.000018	-
		PC	Open	0.000004	0.000050	9	0.0000072	0.0000079	0.0000081	0.0000089	-
			Ice	0.000003	0.000045	3	0.000014	0.000021	0.000015	0.000023	-
Uranium	0.015	C	Open	0.00001	0.00001	9	0.000028	0.000029	0.000030	0.000031	-
			Ice	0.00003	0.00004	3	0.000054	0.000077	0.000057	0.000081	-
		O	Open	0.00001	0.00001	9	0.000029	0.000031	0.000032	0.000034	-
			Ice	0.00003	0.00004	3	0.000057	0.000080	0.000061	0.000089	-
		CL	Open	0.00001	0.00001	9	0.000030	0.000031	0.000034	0.000035	-
			Ice	0.00003	0.00004	3	0.000059	0.000081	0.000066	0.000091	-
		PC	Open	0.00001	0.00001	9	0.000034	0.000036	0.000056	0.000063	-
			Ice	0.00003	0.00004	3	0.000064	0.000095	0.000102	0.000165	-

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Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Vanadium	0.1	C	Open	NA	NA	NA	0.00025	0.00025	0.00025	0.00026	-
			Ice	NA	NA	NA	0.00047	0.00066	0.00049	0.00069	-
		O	Open	NA	NA	NA	0.00025	0.00026	0.00027	0.00028	-
			Ice	NA	NA	NA	0.00049	0.00068	0.00051	0.00074	-
		CL	Open	NA	NA	NA	0.00026	0.00026	0.00028	0.00029	-
			Ice	NA	NA	NA	0.00050	0.00069	0.00054	0.00075	-
		PC	Open	NA	NA	NA	0.00028	0.00030	0.00040	0.00045	-
			Ice	NA	NA	NA	0.00053	0.00077	0.00075	0.00116	-
Zinc	0.03	C	Open	0.0014	0.0024	9	0.0030	0.0031	0.0033	0.0034	-
			Ice	0.0020	0.0189	3	0.0057	0.0080	0.0064	0.0089	-
		O	Open	0.0014	0.0024	9	0.0031	0.0031	0.0034	0.0034	-
			Ice	0.0020	0.0189	3	0.0059	0.0082	0.0064	0.0090	-
		CL	Open	0.0014	0.0024	9	0.0031	0.0032	0.0034	0.0034	-
			Ice	0.0020	0.0189	3	0.0060	0.0083	0.0065	0.0090	-
		PC	Open	0.0014	0.0024	9	0.0033	0.0034	0.0034	0.0035	-
			Ice	0.0020	0.0189	3	0.0062	0.0089	0.0065	0.0092	-
Fluoride	0.12	C	Open	0.04	0.245	9	0.039	0.041	0.046	0.047	-
			Ice	0.09	0.095	3	0.076	0.107	0.089	0.124	-
		O	Open	0.04	0.245	9	0.041	0.042	0.046	0.047	-
			Ice	0.09	0.095	3	0.078	0.111	0.089	0.125	-
		CL	Open	0.04	0.245	9	0.042	0.043	0.047	0.048	-
			Ice	0.09	0.095	3	0.081	0.112	0.090	0.125	-
		PC	Open	0.04	0.245	9	0.046	0.049	0.048	0.051	-
			Ice	0.09	0.095	3	0.087	0.127	0.093	0.133	-

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Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Chloride	120	C	Open	46.3	50.9	9	11.3	11.7	28.6	30.1	-
			Ice	127.5	130.7	2	21.7	30.6	55.6	81.5	-
		O	Open	46.3	50.9	9	11.7	12.2	25.7	27.9	-
			Ice	127.5	130.7	2	22.6	32.0	49.9	75.3	-
		CL	Open	46.3	50.9	9	12.1	12.3	23.2	23.5	-
			Ice	127.5	130.7	2	23.3	32.4	45.0	63.2	-
		PC	Open	46.3	50.9	9	13.4	14.4	15.1	23.0	-
			Ice	127.5	130.7	2	25.5	37.5	30.5	62.0	-
Ammonia	1.83	C	Open	0.01	0.02	9	0.017	0.017	0.021	0.021	-
			Ice	0.17	0.19	3	0.032	0.044	0.040	0.056	-
		O	Open	0.01	0.02	9	0.017	0.017	0.020	0.021	-
			Ice	0.17	0.19	3	0.032	0.045	0.039	0.055	-
		CL	Open	0.01	0.02	9	0.017	0.017	0.020	0.020	-
			Ice	0.17	0.19	3	0.033	0.045	0.038	0.053	-
		PC	Open	0.01	0.02	9	0.018	0.019	0.019	0.020	-
			Ice	0.17	0.19	3	0.034	0.048	0.036	0.053	-
Sulphate	Hardness Dependent	C	Open	1.50	1.50	9	4.05	4.20	4.15	4.33	-
			Ice	2.13	2.68	3	7.79	11.01	7.99	11.29	-
		O	Open	1.50	1.50	9	4.21	4.39	4.42	4.65	-
			Ice	2.13	2.68	3	8.13	11.53	8.48	12.17	-
		CL	Open	1.50	1.50	9	4.37	4.44	4.66	4.74	-
			Ice	2.13	2.68	3	8.41	11.67	8.97	12.42	-
		PC	Open	1.50	1.50	9	4.84	5.23	6.35	7.03	-
			Ice	2.13	2.68	3	9.24	13.61	11.91	18.30	-

C = Construction; O = Operations; CL = Closure; PC = Post-Closure.

Open = Open-Water (June to September); Ice = Under-Ice (October to May).

NA = Not Available.

*See Table 4.5-2 in Volume 5, Chapter 4 of the Final Environmental Impact Statement.

Appendix V5-4D2. Summary of Screening for Effects to Water Quality in the Eastern Arm of Aimaokatalok Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Aluminium	0.1	C	Open	0.051	0.076	33	0.0536	0.0581	0.0541	0.0577	-
			Ice	0.027	0.062	18	0.0924	0.1295	0.0911	0.1277	-
		O	Open	0.051	0.076	33	0.0538	0.0587	0.0545	0.0583	-
			Ice	0.027	0.062	18	0.0921	0.1283	0.0907	0.1264	-
		CL	Open	0.051	0.076	33	0.0538	0.0586	0.0545	0.0582	-
			Ice	0.027	0.062	18	0.0923	0.1286	0.0909	0.1268	-
		PC	Open	0.051	0.076	33	0.0533	0.0649	0.0532	0.0638	-
			Ice	0.027	0.062	18	0.0877	0.1287	0.0860	0.1263	-
Antimony	0.006	C	Open	0.000009	0.000088	33	0.000039	0.000050	0.000039	0.000050	-
			Ice	0.000029	0.000347	18	0.000045	0.000063	0.000047	0.000065	-
		O	Open	0.000009	0.000088	33	0.000039	0.000050	0.000039	0.000050	-
			Ice	0.000029	0.000347	18	0.000044	0.000062	0.000047	0.000065	-
		CL	Open	0.000009	0.000088	33	0.000039	0.000050	0.000039	0.000049	-
			Ice	0.000029	0.000347	18	0.000044	0.000061	0.000047	0.000065	-
		PC	Open	0.000009	0.000088	33	0.000040	0.000050	0.000079	0.000085	-
			Ice	0.000029	0.000347	18	0.000034	0.000061	0.000104	0.000167	-
Arsenic	0.028	C	Open	0.00017	0.00021	33	0.00022	0.00024	0.00023	0.00025	-
			Ice	0.00017	0.00025	18	0.00032	0.00045	0.00033	0.00047	-
		O	Open	0.00017	0.00021	33	0.00022	0.00024	0.00023	0.00025	-
			Ice	0.00017	0.00025	18	0.00032	0.00044	0.00034	0.00047	-
		CL	Open	0.00017	0.00021	33	0.00022	0.00024	0.00023	0.00025	-
			Ice	0.00017	0.00025	18	0.00032	0.00044	0.00034	0.00047	-
		PC	Open	0.00017	0.00021	33	0.00022	0.00025	0.00054	0.00059	-
			Ice	0.00017	0.00025	18	0.00029	0.00044	0.00085	0.00136	-

Appendix V5-4D2. Summary of Screening for Effects to Water Quality in the Eastern Arm of Aimaokatalok Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Barium	1	C	Open	0.0021	0.0025	33	0.0026	0.0027	0.0027	0.0027	-
			Ice	0.0023	0.0032	18	0.0040	0.0056	0.0041	0.0058	-
		O	Open	0.0021	0.0025	33	0.0026	0.0027	0.0027	0.0028	-
			Ice	0.0023	0.0032	18	0.0040	0.0056	0.0042	0.0058	-
		CL	Open	0.0021	0.0025	33	0.0026	0.0027	0.0027	0.0028	-
			Ice	0.0023	0.0032	18	0.0040	0.0056	0.0042	0.0058	-
		PC	Open	0.0021	0.0025	33	0.0026	0.0030	0.0028	0.0031	-
			Ice	0.0023	0.0032	18	0.0037	0.0056	0.0039	0.0059	-
Beryllium	0.1	C	Open	0.0000025	0.00010	33	0.000031	0.00005	0.000031	0.00005	-
			Ice	0.0000025	0.00010	18	0.000020	0.00003	0.000022	0.00003	-
		O	Open	0.0000025	0.00010	33	0.000031	0.00005	0.000032	0.00004	-
			Ice	0.0000025	0.00010	18	0.000019	0.00003	0.000022	0.00003	-
		CL	Open	0.0000025	0.00010	33	0.000031	0.00004	0.000032	0.00004	-
			Ice	0.0000025	0.00010	18	0.000019	0.00003	0.000021	0.00003	-
		PC	Open	0.0000025	0.00010	33	0.000031	0.00004	0.000040	0.00005	-
			Ice	0.0000025	0.00010	18	0.000013	0.00003	0.000027	0.00005	-
Boron	1.5	C	Open	0.0045	0.0110	33	0.0059	0.0062	0.0065	0.0069	-
			Ice	0.0068	0.0084	18	0.0093	0.0131	0.0100	0.0143	-
		O	Open	0.0045	0.0110	33	0.0060	0.0063	0.0067	0.0070	-
			Ice	0.0068	0.0084	18	0.0093	0.0130	0.0103	0.0144	-
		CL	Open	0.0045	0.0110	33	0.0060	0.0063	0.0067	0.0070	-
			Ice	0.0068	0.0084	18	0.0093	0.0130	0.0104	0.0145	-
		PC	Open	0.0045	0.0110	33	0.0059	0.0070	0.0117	0.0127	-
			Ice	0.0068	0.0084	18	0.0087	0.0130	0.0179	0.0287	-

Appendix V5-4D2. Summary of Screening for Effects to Water Quality in the Eastern Arm of Aimaokatalok Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Calcium	1000	C	Open	2.5	2.8	33	3.1	3.2	3.5	3.7	-
			Ice	3.5	4.4	18	4.7	6.6	5.2	7.6	-
		O	Open	2.5	2.8	33	3.1	3.3	3.6	3.8	-
			Ice	3.5	4.4	18	4.7	6.6	5.5	7.7	-
		CL	Open	2.5	2.8	33	3.1	3.3	3.6	3.8	-
			Ice	3.5	4.4	18	4.7	6.6	5.5	7.7	-
		PC	Open	2.5	2.8	33	3.1	3.6	3.9	4.5	-
			Ice	3.5	4.4	18	4.3	6.5	5.5	8.2	-
Cadmium	Hardness Dependent	C	Open	0.000021	0.000005	33	0.000033	0.000048	0.000032	0.000047	Jul
			Ice	0.000025	0.000013	18	0.000019	0.000028	0.000019	0.000027	-
		O	Open	0.000021	0.000005	33	0.000033	0.000048	0.000032	0.000045	Jul
			Ice	0.000025	0.000013	18	0.000019	0.000026	0.000019	0.000026	-
		CL	Open	0.000021	0.000005	33	0.000033	0.000047	0.000032	0.000045	Jul
			Ice	0.000025	0.000013	18	0.000018	0.000026	0.000018	0.000025	-
		PC	Open	0.000021	0.000005	33	0.000033	0.000047	0.000035	0.000049	Jul, Jun
			Ice	0.000025	0.000013	18	0.000012	0.000025	0.000015	0.000030	-
Cobalt	0.05	C	Open	0.000040	0.000072	33	0.000093	0.000110	0.000094	0.000111	-
			Ice	0.000026	0.000080	18	0.000097	0.000137	0.000101	0.000142	-
		O	Open	0.000040	0.000072	33	0.000093	0.000110	0.000094	0.000112	-
			Ice	0.000026	0.000080	18	0.000096	0.000133	0.000102	0.000142	-
		CL	Open	0.000040	0.000072	33	0.000093	0.000110	0.000095	0.000111	-
			Ice	0.000026	0.000080	18	0.000095	0.000133	0.000102	0.000142	-
		PC	Open	0.000040	0.000072	33	0.000093	0.000113	0.000112	0.000131	-
			Ice	0.000026	0.000080	18	0.000080	0.000132	0.000112	0.000177	-

Appendix V5-4D2. Summary of Screening for Effects to Water Quality in the Eastern Arm of Aimaokatalok Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Copper	0.009	C	Open	0.0010	0.0012	33	0.0011	0.0012	0.0013	0.0013	-
			Ice	0.0012	0.0018	18	0.0017	0.0024	0.0019	0.0028	-
		O	Open	0.0010	0.0012	33	0.0012	0.0012	0.0013	0.0014	-
			Ice	0.0012	0.0018	18	0.0017	0.0024	0.0020	0.0028	-
		CL	Open	0.0010	0.0012	33	0.0012	0.0012	0.0013	0.0014	-
			Ice	0.0012	0.0018	18	0.0017	0.0024	0.0020	0.0028	-
		PC	Open	0.0010	0.0012	33	0.0011	0.0013	0.0014	0.0016	-
			Ice	0.0012	0.0018	18	0.0016	0.0024	0.0020	0.0030	-
Iron	0.3	C	Open	0.105	0.146	33	0.129	0.135	0.128	0.135	-
			Ice	0.034	0.076	18	0.174	0.244	0.174	0.242	-
		O	Open	0.105	0.146	33	0.129	0.136	0.129	0.136	-
			Ice	0.034	0.076	18	0.172	0.240	0.174	0.242	-
		CL	Open	0.105	0.146	33	0.130	0.135	0.130	0.135	-
			Ice	0.034	0.076	18	0.173	0.241	0.174	0.243	-
		PC	Open	0.105	0.146	33	0.128	0.151	0.127	0.147	-
			Ice	0.034	0.076	18	0.153	0.240	0.152	0.242	-
Lead	Hardness Dependent	C	Open	0.000036	0.000431	33	0.000065	0.000079	0.000064	0.000079	-
			Ice	0.000025	0.000248	18	0.000077	0.000108	0.000077	0.000107	-
		O	Open	0.000036	0.000431	33	0.000066	0.000079	0.000065	0.000077	-
			Ice	0.000025	0.000248	18	0.000076	0.000106	0.000076	0.000106	-
		CL	Open	0.000036	0.000431	33	0.000066	0.000079	0.000064	0.000077	-
			Ice	0.000025	0.000248	18	0.000076	0.000106	0.000076	0.000106	-
		PC	Open	0.000036	0.000431	33	0.000066	0.000080	0.000067	0.000082	-
			Ice	0.000025	0.000248	18	0.000065	0.000106	0.000067	0.000108	-

Appendix V5-4D2. Summary of Screening for Effects to Water Quality in the Eastern Arm of Aimaokatalok Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Manganese	0.2	C	Open	0.0064	0.014	33	0.0183	0.019	0.0187	0.020	-
			Ice	0.0024	0.012	18	0.0225	0.032	0.0233	0.033	-
		O	Open	0.0064	0.014	33	0.0184	0.020	0.0189	0.020	-
			Ice	0.0024	0.012	18	0.0223	0.031	0.0236	0.033	-
		CL	Open	0.0064	0.014	33	0.0185	0.020	0.0190	0.020	-
			Ice	0.0024	0.012	18	0.0223	0.031	0.0236	0.033	-
		PC	Open	0.0064	0.014	33	0.0185	0.021	0.0192	0.022	-
			Ice	0.0024	0.012	18	0.0191	0.031	0.0205	0.033	-
Mercury	0.000026	C	Open	0.00000080	0.0000050	33	0.000027	0.000040	0.000026	0.000040	-
			Ice	0.00000082	0.0000050	18	0.000015	0.000022	0.000015	0.000021	-
		O	Open	0.00000080	0.0000050	33	0.000027	0.000040	0.000025	0.000038	-
			Ice	0.00000082	0.0000050	18	0.000015	0.000021	0.000014	0.000020	-
		CL	Open	0.00000080	0.0000050	33	0.000027	0.000040	0.000025	0.000038	-
			Ice	0.00000082	0.0000050	18	0.000014	0.000020	0.000014	0.000019	-
		PC	Open	0.00000080	0.0000050	33	0.000027	0.000041	0.000028	0.000042	-
			Ice	0.00000082	0.0000050	18	0.000011	0.000020	0.000011	0.000021	-
Molybdenum	0.073	C	Open	0.000035	0.000056	33	0.000081	0.000096	0.000088	0.000104	-
			Ice	0.000049	0.000075	18	0.000098	0.000137	0.000106	0.000153	-
		O	Open	0.000035	0.000056	33	0.000081	0.000097	0.000089	0.000105	-
			Ice	0.000049	0.000075	18	0.000096	0.000134	0.000110	0.000153	-
		CL	Open	0.000035	0.000056	33	0.000082	0.000096	0.000090	0.000104	-
			Ice	0.000049	0.000075	18	0.000096	0.000134	0.000110	0.000153	-
		PC	Open	0.000035	0.000056	33	0.000081	0.000098	0.000098	0.000117	-
			Ice	0.000049	0.000075	18	0.000085	0.000133	0.000112	0.000170	-

Appendix V5-4D2. Summary of Screening for Effects to Water Quality in the Eastern Arm of Aimaokatalok Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Nickel	Hardness Dependent	C	Open	0.00041	0.000705	33	0.00052	0.00055	0.00053	0.00056	-
			Ice	0.000495	0.001014	18	0.00077	0.00108	0.00078	0.00110	-
		O	Open	0.00041	0.000705	33	0.00052	0.00055	0.00054	0.00057	-
			Ice	0.000495	0.001014	18	0.00076	0.00106	0.00079	0.00110	-
		CL	Open	0.00041	0.000705	33	0.00053	0.00055	0.00054	0.00057	-
			Ice	0.000495	0.001014	18	0.00076	0.00107	0.00079	0.00110	-
		PC	Open	0.00041	0.000705	33	0.00052	0.00061	0.00057	0.00064	-
			Ice	0.000495	0.001014	18	0.00070	0.00106	0.00078	0.00117	-
Selenium	0.001	C	Open	0.000182	0.0005	33	0.000259	0.000276	0.000257	0.000276	-
			Ice	0.00025	0.0005	18	0.000385	0.000539	0.000381	0.000533	-
		O	Open	0.000182	0.0005	33	0.000260	0.000277	0.000258	0.000277	-
			Ice	0.00025	0.0005	18	0.000382	0.000532	0.000380	0.000530	-
		CL	Open	0.000182	0.0005	33	0.000261	0.000276	0.000260	0.000276	-
			Ice	0.00025	0.0005	18	0.000383	0.000533	0.000381	0.000531	-
		PC	Open	0.000182	0.0005	33	0.000256	0.000303	0.000258	0.000299	-
			Ice	0.00025	0.0005	18	0.000353	0.000531	0.000352	0.000530	-
Sodium	200	C	Open	4.23	5.4	33	5.645	5.871	5.6865	5.845	-
			Ice	6.27	8.0365	18	8.7845	12.32	8.763	12.2	-
		O	Open	4.23	5.4	33	5.667	5.942	5.7295	5.921	-
			Ice	6.27	8.0365	18	8.7345	12.17	8.771	12.22	-
		CL	Open	4.23	5.4	33	5.6705	5.932	5.734	5.916	-
			Ice	6.27	8.0365	18	8.7495	12.2	8.7865	12.25	-
		PC	Open	4.23	5.4	33	5.635	6.574	5.656	6.502	-
			Ice	6.27	8.0365	18	8.0965	12.16	8.095	12.2	-

Appendix V5-4D2. Summary of Screening for Effects to Water Quality in the Eastern Arm of Aimaokatalok Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Silver	0.00025	C	Open	0.0000021	0.0000129	33	0.0000280	0.0000422	0.0000270	0.0000416	-
			Ice	0.0000033	0.0000085	18	0.0000135	0.0000194	0.0000133	0.0000191	-
		O	Open	0.0000021	0.0000129	33	0.0000282	0.0000420	0.0000266	0.0000396	-
			Ice	0.0000033	0.0000085	18	0.0000130	0.0000184	0.0000128	0.0000182	-
		CL	Open	0.0000021	0.0000129	33	0.0000282	0.0000418	0.0000265	0.0000394	-
			Ice	0.0000033	0.0000085	18	0.0000126	0.0000177	0.0000124	0.0000173	-
		PC	Open	0.0000021	0.0000129	33	0.0000282	0.0000425	0.0000292	0.0000430	-
			Ice	0.0000033	0.0000085	18	0.0000078	0.0000174	0.0000087	0.0000189	-
Thallium	0.0008	C	Open	0.0000025	0.00005	33	0.00003035	0.0000444	0.00002925	0.0000437	-
			Ice	0.0000016	0.00005	18	0.000019	0.000027	0.00001865	0.0000266	-
		O	Open	0.0000025	0.00005	33	0.00003065	0.0000442	0.00002885	0.0000417	-
			Ice	0.0000016	0.00005	18	0.00001845	0.000026	0.000018	0.0000255	-
		CL	Open	0.0000025	0.00005	33	0.00003065	0.0000439	0.00002885	0.0000415	-
			Ice	0.0000016	0.00005	18	0.0000181	0.0000253	0.0000176	0.0000246	-
		PC	Open	0.0000025	0.00005	33	0.00003055	0.000044	0.0000315	0.0000449	-
			Ice	0.0000016	0.00005	18	0.0000126	0.0000251	0.0000134	0.0000263	-
Uranium	0.015	C	Open	0.000023	0.000027	33	0.000050	0.000064	0.000051	0.000065	-
			Ice	0.000027	0.000040	18	0.000050	0.000070	0.000053	0.000075	-
		O	Open	0.000023	0.000027	33	0.000050	0.000064	0.000052	0.000065	-
			Ice	0.000027	0.000040	18	0.000049	0.000069	0.000054	0.000075	-
		CL	Open	0.000023	0.000027	33	0.000050	0.000064	0.000052	0.000065	-
			Ice	0.000027	0.000040	18	0.000049	0.000068	0.000053	0.000074	-
		PC	Open	0.000023	0.000027	33	0.000050	0.000064	0.000056	0.000070	-
			Ice	0.000027	0.000040	18	0.000041	0.000068	0.000049	0.000079	-

Appendix V5-4D2. Summary of Screening for Effects to Water Quality in the Eastern Arm of Aimaokatalok Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Vanadium	0.1	C	Open	NA	NA	NA	0.00024	0.00026	0.00025	0.00028	-
			Ice	NA	NA	NA	0.00030	0.00043	0.00032	0.00046	-
		O	Open	NA	NA	NA	0.00024	0.00026	0.00026	0.00028	-
			Ice	NA	NA	NA	0.00030	0.00042	0.00033	0.00046	-
		CL	Open	NA	NA	NA	0.00024	0.00026	0.00026	0.00028	-
			Ice	NA	NA	NA	0.00030	0.00042	0.00033	0.00046	-
		PC	Open	NA	NA	NA	0.00023	0.00029	0.00026	0.00032	-
			Ice	NA	NA	NA	0.00027	0.00042	0.00032	0.00049	-
Zinc	0.03	C	Open	0.0015	0.0031	33	0.0027	0.0028	0.0027	0.0028	-
			Ice	0.0015	0.0160	18	0.0034	0.0047	0.0034	0.0048	-
		O	Open	0.0015	0.0031	33	0.0027	0.0028	0.0027	0.0028	-
			Ice	0.0015	0.0160	18	0.0033	0.0047	0.0035	0.0048	-
		CL	Open	0.0015	0.0031	33	0.0027	0.0028	0.0027	0.0028	-
			Ice	0.0015	0.0160	18	0.0033	0.0047	0.0035	0.0049	-
		PC	Open	0.0015	0.0031	33	0.0027	0.0030	0.0027	0.0030	-
			Ice	0.0015	0.0160	18	0.0028	0.0046	0.0030	0.0049	-
Fluoride	0.12	C	Open	0.026	0.108	32	0.035	0.036	0.035	0.036	-
			Ice	0.032	0.084	18	0.051	0.072	0.052	0.072	-
		O	Open	0.026	0.108	32	0.035	0.036	0.035	0.037	-
			Ice	0.032	0.084	18	0.051	0.071	0.052	0.072	-
		CL	Open	0.026	0.108	32	0.035	0.036	0.036	0.036	-
			Ice	0.032	0.084	18	0.051	0.071	0.052	0.073	-
		PC	Open	0.026	0.108	32	0.035	0.040	0.036	0.040	-
			Ice	0.032	0.084	18	0.046	0.071	0.047	0.072	-

Appendix V5-4D2. Summary of Screening for Effects to Water Quality in the Eastern Arm of Aimaokatalok Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Ammonia	1.83	C	Open	0.0090	0.0168	33	0.0143	0.0152	0.0144	0.0154	-
			Ice	0.0067	0.0235	18	0.0176	0.0248	0.0177	0.0248	-
		O	Open	0.0090	0.0168	33	0.0144	0.0154	0.0145	0.0156	-
			Ice	0.0067	0.0235	18	0.0174	0.0242	0.0178	0.0248	-
		CL	Open	0.0090	0.0168	33	0.0145	0.0153	0.0146	0.0155	-
			Ice	0.0067	0.0235	18	0.0174	0.0243	0.0178	0.0249	-
		PC	Open	0.0090	0.0168	33	0.0143	0.0170	0.0144	0.0168	-
			Ice	0.0067	0.0235	18	0.0149	0.0241	0.0151	0.0247	-
Nitrate	3	C	Open	0.0025	0.0065	33	0.0152	0.0164	0.0154	0.0167	-
			Ice	0.0516	0.1379	18	0.0172	0.0243	0.0174	0.0244	-
		O	Open	0.0025	0.0065	33	0.0153	0.0166	0.0154	0.0169	-
			Ice	0.0516	0.1379	18	0.0170	0.0237	0.0175	0.0244	-
		CL	Open	0.0025	0.0065	33	0.0154	0.0165	0.0156	0.0168	-
			Ice	0.0516	0.1379	18	0.0170	0.0237	0.0175	0.0244	-
		PC	Open	0.0025	0.0065	33	0.0149	0.0186	0.0151	0.0184	-
			Ice	0.0516	0.1379	18	0.0144	0.0236	0.0146	0.0243	-
Sulphate	Hardness Dependent	C	Open	1.50	4.40	33	3.57	3.66	3.74	3.87	-
			Ice	1.68	5.20	18	5.72	8.02	5.93	8.39	-
		O	Open	1.50	4.40	33	3.59	3.70	3.83	3.93	-
			Ice	1.68	5.20	18	5.69	7.93	6.04	8.43	-
		CL	Open	1.50	4.40	33	3.59	3.69	3.83	3.93	-
			Ice	1.68	5.20	18	5.70	7.95	6.06	8.45	-
		PC	Open	1.50	4.40	33	3.60	4.07	4.17	4.54	-
			Ice	1.68	5.20	18	5.26	7.93	6.21	9.21	-

C = Construction; O = Operations; CL = Closure; PC = Post-Closure.

Open = Open-Water (June to September); Ice = Under-Ice (October to May).

*See Table 4.5-2 in Volume 5, Chapter 4 of the Final Environmental Impact Statement.

Appendix V5-4D3. Summary of Screening for Effects to Water Quality in Aimaokatalok Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Antimony	0.006	C	Open	0.000009	0.000088	33	0.000014	0.000017	0.000018	0.000030	-
			Ice	0.000029	0.000347	18	0.000020	0.000023	0.000022	0.000037	-
		O	Open	0.000009	0.000088	33	0.000014	0.000017	0.000032	0.000038	-
			Ice	0.000029	0.000347	18	0.000020	0.000023	0.000043	0.000053	-
		CL	Open	0.000009	0.000088	33	0.000014	0.000017	0.000028	0.000032	-
			Ice	0.000029	0.000347	18	0.000020	0.000023	0.000038	0.000045	-
		PC	Open	0.000009	0.000088	33	0.000014	0.000017	0.000015	0.000024	-
			Ice	0.000029	0.000347	18	0.000019	0.000023	0.000020	0.000043	-
Beryllium	0.1	C	Open	0.000003	0.0001	33	0.0000052	0.0000052	0.0000054	0.0000073	-
			Ice	0.000003	0.0001	18	0.0000064	0.0000074	0.0000070	0.0000094	-
		O	Open	0.000003	0.0001	33	0.0000052	0.0000052	0.0000092	0.0000100	-
			Ice	0.000003	0.0001	18	0.0000064	0.0000074	0.0000114	0.0000148	-
		CL	Open	0.000003	0.0001	33	0.0000052	0.0000052	0.0000075	0.0000075	-
			Ice	0.000003	0.0001	18	0.0000064	0.0000074	0.0000095	0.0000114	-
		PC	Open	0.000003	0.0001	33	0.0000051	0.0000052	0.0000053	0.0000065	-
			Ice	0.000003	0.0001	18	0.0000063	0.0000074	0.0000066	0.0000106	-
Boron	1.5	C	Open	0.005	0.011	33	0.0051	0.0051	0.0053	0.0066	-
			Ice	0.007	0.008	18	0.0063	0.0073	0.0069	0.0088	-
		O	Open	0.005	0.011	33	0.0051	0.0051	0.0069	0.0069	-
			Ice	0.007	0.008	18	0.0063	0.0073	0.0084	0.0100	-
		CL	Open	0.005	0.011	33	0.0051	0.0051	0.0069	0.0069	-
			Ice	0.007	0.008	18	0.0063	0.0073	0.0085	0.0099	-
		PC	Open	0.005	0.011	33	0.0051	0.0051	0.0051	0.0062	-
			Ice	0.007	0.008	18	0.0063	0.0073	0.0065	0.0099	-

Appendix V5-4D3. Summary of Screening for Effects to Water Quality in Aimaokatalok Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Calcium	1000	C	Open	2.46	2.794	33	2.624	2.641	2.7355	2.846	-
			Ice	3.48	4.44525	18	3.215	3.73	3.356	3.983	-
		O	Open	2.46	2.794	33	2.6255	2.642	2.8815	2.923	-
			Ice	3.48	4.44525	18	3.215	3.73	3.527	4.145	-
		CL	Open	2.46	2.794	33	2.6255	2.641	2.844	2.868	-
			Ice	3.48	4.44525	18	3.215	3.73	3.494	4.062	-
		PC	Open	2.46	2.794	33	2.613	2.641	2.631	2.764	-
			Ice	3.48	4.44525	18	3.18	3.73	3.2235	4.042	-
Cobalt	0.05	C	Open	0.00004	0.0001	33	0.00005	0.00006	0.00006	0.00006	-
			Ice	0.00003	0.0001	18	0.00006	0.00007	0.00007	0.00008	-
		O	Open	0.00004	0.0001	33	0.00005	0.00006	0.00006	0.00007	-
			Ice	0.00003	0.0001	18	0.00006	0.00007	0.00007	0.00009	-
		CL	Open	0.00004	0.0001	33	0.00005	0.00006	0.00006	0.00006	-
			Ice	0.00003	0.0001	18	0.00006	0.00007	0.00007	0.00008	-
		PC	Open	0.00004	0.0001	33	0.00005	0.00006	0.00005	0.00006	-
			Ice	0.00003	0.0001	18	0.00006	0.00007	0.00006	0.00008	-
Mercury	0.000026	C	Open	0.00000080	0.000005	33	0.00000169	0.0000019	0.00000174	0.0000019	-
			Ice	0.00000082	0.000005	18	0.00000299	0.0000035	0.00000304	0.0000036	-
		O	Open	0.00000080	0.000005	33	0.00000170	0.0000019	0.00000180	0.0000020	-
			Ice	0.00000082	0.000005	18	0.00000301	0.0000035	0.00000314	0.0000037	-
		CL	Open	0.00000080	0.000005	33	0.00000170	0.0000019	0.00000178	0.0000019	-
			Ice	0.00000082	0.000005	18	0.00000302	0.0000035	0.00000312	0.0000036	-
		PC	Open	0.00000080	0.000005	33	0.00000184	0.0000022	0.00000185	0.0000022	-
			Ice	0.00000082	0.000005	18	0.00000337	0.0000046	0.00000338	0.0000046	-

Appendix V5-4D3. Summary of Screening for Effects to Water Quality in Aimaokatalok Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Molybdenum	0.073	C	Open	0.000035	0.000056	33	0.000047	0.000048	0.000050	0.000052	-
			Ice	0.000049	0.000075	18	0.000059	0.000069	0.000062	0.000073	-
		O	Open	0.000035	0.000056	33	0.000047	0.000048	0.000052	0.000053	-
			Ice	0.000049	0.000075	18	0.000059	0.000069	0.000065	0.000077	-
		CL	Open	0.000035	0.000056	33	0.000047	0.000048	0.000052	0.000052	-
			Ice	0.000049	0.000075	18	0.000059	0.000069	0.000065	0.000075	-
		PC	Open	0.000035	0.000056	33	0.000047	0.000048	0.000048	0.000050	-
			Ice	0.000049	0.000075	18	0.000059	0.000069	0.000060	0.000075	-
Silver	0.00025	C	Open	0.0000021	0.0000129	33	0.0000022	0.0000023	0.0000022	0.0000024	-
			Ice	0.0000033	0.0000085	18	0.0000025	0.0000029	0.0000025	0.0000030	-
		O	Open	0.0000021	0.0000129	33	0.0000022	0.0000023	0.0000024	0.0000025	-
			Ice	0.0000033	0.0000085	18	0.0000025	0.0000029	0.0000027	0.0000032	-
		CL	Open	0.0000021	0.0000129	33	0.0000022	0.0000023	0.0000023	0.0000024	-
			Ice	0.0000033	0.0000085	18	0.0000025	0.0000029	0.0000026	0.0000031	-
		PC	Open	0.0000021	0.0000129	33	0.0000022	0.0000023	0.0000022	0.0000023	-
			Ice	0.0000033	0.0000085	18	0.0000024	0.0000029	0.0000024	0.0000030	-
Ammonia	1.83	C	Open	0.009	0.017	33	0.011	0.012	0.014	0.017	-
			Ice	0.007	0.024	18	0.013	0.015	0.016	0.021	-
		O	Open	0.009	0.017	33	0.011	0.012	0.016	0.019	-
			Ice	0.007	0.024	18	0.013	0.015	0.020	0.026	-
		CL	Open	0.009	0.017	33	0.011	0.012	0.014	0.014	-
			Ice	0.007	0.024	18	0.013	0.015	0.017	0.020	-
		PC	Open	0.009	0.017	33	0.011	0.012	0.011	0.013	-
			Ice	0.007	0.024	18	0.012	0.015	0.012	0.019	-

Appendix V5-4D3. Summary of Screening for Effects to Water Quality in Aimaokatalok Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Nitrate	3	C	Open	0.003	0.006	33	0.012	0.012	0.013	0.020	-
			Ice	0.052	0.138	18	0.013	0.015	0.014	0.024	-
		O	Open	0.003	0.006	33	0.012	0.012	0.016	0.023	-
			Ice	0.052	0.138	18	0.013	0.015	0.019	0.029	-
		CL	Open	0.003	0.006	33	0.012	0.012	0.012	0.013	-
			Ice	0.052	0.138	18	0.013	0.015	0.014	0.016	-
		PC	Open	0.003	0.006	33	0.012	0.012	0.011	0.012	-
			Ice	0.052	0.138	18	0.012	0.015	0.012	0.016	-
Nitrite	0.06	C	Open	0.0005	0.0025	33	0.0010	0.0010	0.0068	0.0087	-
			Ice	0.0010	0.0027	18	0.0013	0.0015	0.0096	0.0141	-
		O	Open	0.0005	0.0025	33	0.0010	0.0010	0.0113	0.0124	-
			Ice	0.0010	0.0027	18	0.0013	0.0015	0.0163	0.0214	-
		CL	Open	0.0005	0.0025	33	0.0010	0.0010	0.0083	0.0094	-
			Ice	0.0010	0.0027	18	0.0013	0.0015	0.0144	0.0162	-
		PC	Open	0.0005	0.0025	33	0.0010	0.0010	0.0010	0.0067	-
			Ice	0.0010	0.0027	18	0.0013	0.0015	0.0013	0.0138	-

C = Construction; O = Operations; CL = Closure; PC = Post-Closure.

Open = Open-Water (June to September); Ice = Under-Ice (October to May).

*See Table 4.5-2 in Volume 5, Chapter 4 of the Final Environmental Impact Statement.

Appendix V5-4D4. Summary of Screening for Effects to Water Quality in Windy Lake

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Antimony	0.006	C	Open	0.000063	0.000092	18	0.000025	0.000025	0.000025	0.000025	-
			Ice	0.000064	0.000116	10	0.000027	0.000028	0.000027	0.000029	-
		O	Open	0.000063	0.000092	18	0.000026	0.000027	0.000026	0.000027	-
			Ice	0.000064	0.000116	10	0.000028	0.000030	0.000028	0.000031	-
		CL	Open	0.000063	0.000092	18	0.000027	0.000027	0.000027	0.000027	-
			Ice	0.000064	0.000116	10	0.000029	0.000031	0.000029	0.000031	-
		PC	Open	0.000063	0.000092	18	0.000031	0.000033	0.000046	0.000057	-
			Ice	0.000064	0.000116	10	0.000033	0.000038	0.000050	0.000065	-
Arsenic	0.028	C	Open	0.00049	0.00077	18	0.00030	0.00030	0.00030	0.00030	-
			Ice	0.00038	0.00075	10	0.00032	0.00034	0.00032	0.00034	-
		O	Open	0.00049	0.00077	18	0.00031	0.00032	0.00031	0.00032	-
			Ice	0.00038	0.00075	10	0.00033	0.00036	0.00034	0.00037	-
		CL	Open	0.00049	0.00077	18	0.00032	0.00032	0.00032	0.00033	-
			Ice	0.00038	0.00075	10	0.00035	0.00037	0.00035	0.00037	-
		PC	Open	0.00049	0.00077	18	0.00036	0.00039	0.00153	0.00216	-
			Ice	0.00038	0.00075	10	0.00039	0.00044	0.00165	0.00245	-
Beryllium	0.1	C	Open	0.0000045	0.0001	18	0.0000054	0.0000054	0.0000055	0.0000055	-
			Ice	0.0000025	0.0001	10	0.0000058	0.0000061	0.0000059	0.0000062	-
		O	Open	0.0000045	0.0001	18	0.0000056	0.0000058	0.0000058	0.0000061	-
			Ice	0.0000025	0.0001	10	0.0000060	0.0000065	0.0000062	0.0000069	-
		CL	Open	0.0000045	0.0001	18	0.0000058	0.0000058	0.0000061	0.0000062	-
			Ice	0.0000025	0.0001	10	0.0000062	0.0000066	0.0000066	0.0000070	-
		PC	Open	0.0000045	0.0001	18	0.0000064	0.0000069	0.0000085	0.0000099	-
			Ice	0.0000025	0.0001	10	0.0000069	0.0000078	0.0000091	0.0000112	-

Appendix V5-4D4. Summary of Screening for Effects to Water Quality in Windy Lake

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Cadmium	Hardness Dependent	C	Open	0.0000032	0.0000111	18	0.0000054	0.0000054	0.0000054	0.0000054	-
			Ice	0.0000025	0.0000110	10	0.0000058	0.0000061	0.0000058	0.0000061	-
		O	Open	0.0000032	0.0000111	18	0.0000056	0.0000058	0.0000056	0.0000058	-
			Ice	0.0000025	0.0000110	10	0.0000060	0.0000065	0.0000060	0.0000065	-
		CL	Open	0.0000032	0.0000111	18	0.0000058	0.0000058	0.0000058	0.0000058	-
			Ice	0.0000025	0.0000110	10	0.0000062	0.0000066	0.0000062	0.0000066	-
		PC	Open	0.0000032	0.0000111	18	0.0000064	0.0000069	0.0000087	0.0000103	-
			Ice	0.0000025	0.0000110	10	0.0000069	0.0000078	0.0000093	0.0000116	-
Cobalt	0.05	C	Open	0.000031	0.000053	18	0.000054	0.000054	0.000054	0.000054	-
			Ice	0.000025	0.000050	10	0.000058	0.000061	0.000058	0.000062	-
		O	Open	0.000031	0.000053	18	0.000056	0.000058	0.000056	0.000058	-
			Ice	0.000025	0.000050	10	0.000060	0.000065	0.000061	0.000066	-
		CL	Open	0.000031	0.000053	18	0.000058	0.000058	0.000058	0.000059	-
			Ice	0.000025	0.000050	10	0.000062	0.000066	0.000063	0.000067	-
		PC	Open	0.000031	0.000053	18	0.000064	0.000069	0.000223	0.000310	-
			Ice	0.000025	0.000050	10	0.000069	0.000078	0.000240	0.000351	-
Copper	0.009	C	Open	0.00096	0.00158	18	0.00149	0.00149	0.00149	0.00150	-
			Ice	0.00091	0.00111	10	0.00160	0.00169	0.00160	0.00169	-
		O	Open	0.00096	0.00158	18	0.00154	0.00159	0.00155	0.00161	-
			Ice	0.00091	0.00111	10	0.00166	0.00180	0.00167	0.00183	-
		CL	Open	0.00096	0.00158	18	0.00159	0.00160	0.00162	0.00163	-
			Ice	0.00091	0.00111	10	0.00171	0.00181	0.00174	0.00184	-
		PC	Open	0.00096	0.00158	18	0.00178	0.00193	0.00199	0.00223	-
			Ice	0.00091	0.00111	10	0.00192	0.00219	0.00213	0.00252	-

Appendix V5-4D4. Summary of Screening for Effects to Water Quality in Windy Lake

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Lead	Hardness Dependent	C	Open	0.000039	0.000288	18	0.000054	0.000054	0.000054	0.000054	-
			Ice	0.000025	0.000039	10	0.000058	0.000061	0.000058	0.000061	-
		O	Open	0.000039	0.000288	18	0.000056	0.000058	0.000056	0.000058	-
			Ice	0.000025	0.000039	10	0.000060	0.000065	0.000060	0.000065	-
		CL	Open	0.000039	0.000288	18	0.000058	0.000058	0.000058	0.000058	-
			Ice	0.000025	0.000039	10	0.000062	0.000066	0.000062	0.000066	-
		PC	Open	0.000039	0.000288	18	0.000064	0.000069	0.000077	0.000088	-
			Ice	0.000025	0.000039	10	0.000069	0.000078	0.000082	0.000099	-
Manganese	0.2	C	Open	0.0024	0.0037	18	0.0217	0.0218	0.0217	0.0218	-
			Ice	0.0009	0.0013	10	0.0233	0.0246	0.0233	0.0246	-
		O	Open	0.0024	0.0037	18	0.0225	0.0232	0.0225	0.0233	-
			Ice	0.0009	0.0013	10	0.0243	0.0263	0.0243	0.0264	-
		CL	Open	0.0024	0.0037	18	0.0233	0.0235	0.0233	0.0235	-
			Ice	0.0009	0.0013	10	0.0251	0.0266	0.0251	0.0266	-
		PC	Open	0.0024	0.0037	18	0.0263	0.0284	0.0294	0.0332	-
			Ice	0.0009	0.0013	10	0.0282	0.0322	0.0317	0.0376	-
Mercury	0.000026	C	Open	0.00000030	0.000005	18	0.00000075	0.00000076	0.00000079	0.00000080	-
			Ice	0.00000085	0.000005	10	0.00000081	0.00000086	0.00000085	0.00000089	-
		O	Open	0.00000030	0.000005	18	0.00000078	0.00000080	0.00000090	0.00000100	-
			Ice	0.00000085	0.000005	10	0.00000084	0.00000090	0.00000097	0.00000112	-
		CL	Open	0.00000030	0.000005	18	0.00000080	0.00000080	0.00000101	0.00000103	-
			Ice	0.00000085	0.000005	10	0.00000086	0.00000091	0.00000109	0.00000115	-
		PC	Open	0.00000030	0.000005	18	0.00000088	0.00000094	0.00000198	0.00000257	-
			Ice	0.00000085	0.000005	10	0.00000094	0.00000106	0.00000212	0.00000290	-

Appendix V5-4D4. Summary of Screening for Effects to Water Quality in Windy Lake

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Nickel	Hardness Dependent	C	Open	0.00020	0.00033	18	0.00057	0.00058	0.00057	0.00058	-
			Ice	0.00023	0.00034	10	0.00062	0.00065	0.00062	0.00065	-
		O	Open	0.00020	0.00033	18	0.00059	0.00061	0.00059	0.00061	-
			Ice	0.00023	0.00034	10	0.00064	0.00069	0.00064	0.00069	-
		CL	Open	0.00020	0.00033	18	0.00061	0.00062	0.00061	0.00062	-
			Ice	0.00023	0.00034	10	0.00066	0.00070	0.00066	0.00070	-
		PC	Open	0.00020	0.00033	18	0.00068	0.00073	0.0013	0.0016	-
			Ice	0.00023	0.00034	10	0.00073	0.00083	0.0014	0.0018	-
Thallium	0.0008	C	Open	0.0000039	0.000050	18	0.0000022	0.0000022	0.0000022	0.0000022	-
			Ice	0.0000025	0.000050	10	0.0000023	0.0000025	0.0000023	0.0000025	-
		O	Open	0.0000039	0.000050	18	0.0000022	0.0000023	0.0000023	0.0000023	-
			Ice	0.0000025	0.000050	10	0.0000024	0.0000026	0.0000024	0.0000026	-
		CL	Open	0.0000039	0.000050	18	0.0000023	0.0000023	0.0000023	0.0000024	-
			Ice	0.0000025	0.000050	10	0.0000025	0.0000026	0.0000025	0.0000027	-
		PC	Open	0.0000039	0.000050	18	0.0000026	0.0000028	0.0000032	0.0000037	-
			Ice	0.0000025	0.000050	10	0.0000028	0.0000031	0.0000034	0.0000041	-
Vanadium	0.1	C	Open	NA	NA	NA	0.000194	0.000195	0.000195	0.000196	-
			Ice	NA	NA	NA	0.000209	0.000221	0.000210	0.000221	-
		O	Open	NA	NA	NA	0.000200	0.000206	0.000202	0.000210	-
			Ice	NA	NA	NA	0.000217	0.000234	0.000218	0.000237	-
		CL	Open	NA	NA	NA	0.000207	0.000208	0.000210	0.000212	-
			Ice	NA	NA	NA	0.000223	0.000236	0.000226	0.000240	-
		PC	Open	NA	NA	NA	0.000230	0.000247	0.000262	0.000295	-
			Ice	NA	NA	NA	0.000247	0.000279	0.000281	0.000334	-

Appendix V5-4D4. Summary of Screening for Effects to Water Quality in Windy Lake

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Sulphate	Hardness Dependent	C	Open	7.77	9.15	18	2.88	2.89	2.88	2.89	-
			Ice	9.20	10.00	10	3.10	3.27	3.10	3.27	-
		O	Open	7.77	9.15	18	2.97	3.06	2.99	3.10	-
			Ice	9.20	10.00	10	3.21	3.47	3.23	3.51	-
		CL	Open	7.77	9.15	18	3.07	3.09	3.11	3.13	-
			Ice	9.20	10.00	10	3.30	3.50	3.35	3.54	-
		PC	Open	7.77	9.15	18	3.42	3.68	5.55	6.91	-
			Ice	9.20	10.00	10	3.67	4.17	5.98	7.83	-

C = Construction; O = Operations; CL = Closure; PC = Post-Closure.

Open = Open-Water (June to September); Ice = Under-Ice (October to May).

NA= Not Available.

**See Table 4.5-2 in Volume 5, Chapter 4 of the Final Environmental Impact Statement.*

Appendix V5-4D5. Summary of Screening for Effects to Water Quality in Wolverine Lake

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Antimony	0.006	C	Open	0.000012	0.000038	8	0.000030	0.000030	0.000030	0.000030	-
			Ice	0.000058	0.000097	4	0.000049	0.000065	0.000049	0.000065	-
		O	Open	0.000012	0.000038	8	0.000032	0.000034	0.000032	0.000034	-
			Ice	0.000058	0.000097	4	0.000053	0.000074	0.000053	0.000074	-
		CL	Open	0.000012	0.000038	8	0.000034	0.000035	0.000034	0.000035	-
			Ice	0.000058	0.000097	4	0.000057	0.000076	0.000057	0.000075	-
		PC	Open	0.000012	0.000038	8	0.000039	0.000041	0.000044	0.000047	-
			Ice	0.000058	0.000097	4	0.000065	0.000091	0.000072	0.000103	-
Arsenic	0.028	C	Open	0.00051	0.00068	8	0.00035	0.00036	0.00035	0.00036	-
			Ice	0.00124	0.00181	4	0.00059	0.00078	0.00059	0.00078	-
		O	Open	0.00051	0.00068	8	0.00038	0.00041	0.00038	0.00040	-
			Ice	0.00124	0.00181	4	0.00063	0.00089	0.00064	0.00088	-
		CL	Open	0.00051	0.00068	8	0.00041	0.00041	0.00040	0.00041	-
			Ice	0.00124	0.00181	4	0.00068	0.00090	0.00068	0.00090	-
		PC	Open	0.00051	0.00068	8	0.00046	0.00049	0.00052	0.00055	-
			Ice	0.00124	0.00181	4	0.00077	0.00107	0.00084	0.00120	-
Beryllium	0.1	C	Open	0.0000015	0.000067	8	0.000006	0.000006	0.000006	0.000006	-
			Ice	0.0000046	0.000171	4	0.000011	0.000014	0.000011	0.000014	-
		O	Open	0.0000015	0.000067	8	0.000007	0.000007	0.000007	0.000008	-
			Ice	0.0000046	0.000171	4	0.000011	0.000016	0.000012	0.000017	-
		CL	Open	0.0000015	0.000067	8	0.000007	0.000007	0.000008	0.000008	-
			Ice	0.0000046	0.000171	4	0.000012	0.000016	0.000013	0.000017	-
		PC	Open	0.0000015	0.000067	8	0.000008	0.000009	0.000014	0.000016	-
			Ice	0.0000046	0.000171	4	0.000014	0.000019	0.000022	0.000034	-

Appendix V5-4D5. Summary of Screening for Effects to Water Quality in Wolverine Lake

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Cobalt	0.05	C	Open	0.00004	0.00006	8	0.00006	0.00006	0.00006	0.00006	-
			Ice	0.00018	0.00040	4	0.00011	0.00014	0.00011	0.00014	-
		O	Open	0.00004	0.00006	8	0.00007	0.00007	0.00007	0.00007	-
			Ice	0.00018	0.00040	4	0.00011	0.00016	0.00011	0.00016	-
		CL	Open	0.00004	0.00006	8	0.00007	0.00007	0.00007	0.00007	-
			Ice	0.00018	0.00040	4	0.00012	0.00016	0.00012	0.00016	-
		PC	Open	0.00004	0.00006	8	0.00008	0.00009	0.00009	0.00010	-
			Ice	0.00018	0.00040	4	0.00014	0.00019	0.00015	0.00022	-
Copper	0.009	C	Open	0.0007	0.0012	8	0.0017	0.0018	0.0017	0.0018	-
			Ice	0.0008	0.0011	4	0.0029	0.0039	0.0029	0.0039	-
		O	Open	0.0007	0.0012	8	0.0019	0.0020	0.0019	0.0020	-
			Ice	0.0008	0.0011	4	0.0031	0.0044	0.0032	0.0044	-
		CL	Open	0.0007	0.0012	8	0.0020	0.0020	0.0020	0.0020	-
			Ice	0.0008	0.0011	4	0.0034	0.0044	0.0034	0.0045	-
		PC	Open	0.0007	0.0012	8	0.0023	0.0024	0.0027	0.0029	-
			Ice	0.0008	0.0011	4	0.0038	0.0053	0.0044	0.0064	-
Mercury	0.000026	C	Open	0.0000011	0.0000096	8	0.0000009	0.0000009	0.0000009	0.0000009	-
			Ice	0.0000012	0.0000045	4	0.0000015	0.0000019	0.0000015	0.0000019	-
		O	Open	0.0000011	0.0000096	8	0.0000009	0.0000010	0.0000010	0.0000013	-
			Ice	0.0000012	0.0000045	4	0.0000016	0.0000022	0.0000018	0.0000027	-
		CL	Open	0.0000011	0.0000096	8	0.0000010	0.0000010	0.0000013	0.0000013	-
			Ice	0.0000012	0.0000045	4	0.0000017	0.0000022	0.0000022	0.0000029	-
		PC	Open	0.0000011	0.0000096	8	0.0000011	0.0000012	0.0000047	0.0000053	-
			Ice	0.0000012	0.0000045	4	0.0000018	0.0000026	0.0000070	0.0000115	-

Appendix V5-4D5. Summary of Screening for Effects to Water Quality in Wolverine Lake

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Thallium	0.0008	C	Open	0.0000025	0.000034	8	0.0000025	0.000003	0.0000025	0.000003	-
			Ice	0.0000029	0.000085	4	0.0000042	0.000006	0.0000042	0.000006	-
		O	Open	0.0000025	0.000034	8	0.0000027	0.000003	0.0000027	0.000003	-
			Ice	0.0000029	0.000085	4	0.0000045	0.000006	0.0000045	0.000006	-
		CL	Open	0.0000025	0.000034	8	0.0000029	0.000003	0.0000029	0.000003	-
			Ice	0.0000029	0.000085	4	0.0000048	0.000006	0.0000048	0.000006	-
		PC	Open	0.0000025	0.000034	8	0.0000032	0.000003	0.0000038	0.000004	-
			Ice	0.0000029	0.000085	4	0.0000054	0.000008	0.0000062	0.000009	-
Uranium	0.015	C	Open	0.000028	0.000033	8	0.000043	0.000043	0.000043	0.000043	-
			Ice	0.000039	0.000047	4	0.000072	0.000095	0.000072	0.000095	-
		O	Open	0.000028	0.000033	8	0.000046	0.000049	0.000046	0.000049	-
			Ice	0.000039	0.000047	4	0.000077	0.000107	0.000077	0.000107	-
		CL	Open	0.000028	0.000033	8	0.000049	0.000050	0.000049	0.000050	-
			Ice	0.000039	0.000047	4	0.000082	0.000109	0.000082	0.000109	-
		PC	Open	0.000028	0.000033	8	0.000055	0.000059	0.000064	0.000069	-
			Ice	0.000039	0.000047	4	0.000092	0.000129	0.000105	0.000150	-
Vanadium	0.1	C	Open	NA	NA	NA	0.00023	0.00023	0.00023	0.00023	-
			Ice	NA	NA	NA	0.00038	0.00050	0.00038	0.00050	-
		O	Open	NA	NA	NA	0.00024	0.00026	0.00024	0.00026	-
			Ice	NA	NA	NA	0.00041	0.00056	0.00041	0.00057	-
		CL	Open	NA	NA	NA	0.00026	0.00026	0.00026	0.00026	-
			Ice	NA	NA	NA	0.00043	0.00057	0.00043	0.00057	-
		PC	Open	NA	NA	NA	0.00029	0.00031	0.00035	0.00037	-
			Ice	NA	NA	NA	0.00048	0.00067	0.00057	0.00081	-

Appendix V5-4D5. Summary of Screening for Effects to Water Quality in Wolverine Lake

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Sulphate	Hardness Dependent	C	Open	1.50	1.50	8	3.37	3.42	3.37	3.42	-
			Ice	1.33	3.63	4	5.64	7.44	5.64	7.44	-
		O	Open	1.50	1.50	8	3.61	3.85	3.63	3.83	-
			Ice	1.33	3.63	4	6.03	8.40	6.05	8.39	-
		CL	Open	1.50	1.50	8	3.85	3.90	3.85	3.90	-
			Ice	1.33	3.63	4	6.44	8.53	6.44	8.51	-
		PC	Open	1.50	1.50	8	4.31	4.59	4.98	5.33	-
			Ice	1.33	3.63	4	7.21	10.03	8.13	11.62	-

C = Construction; O = Operations; CL = Closure; PC = Post-Closure.

Open = Open-Water (June to September); Ice = Under-Ice (October to May).

NA= Not Available.

**See Table 4.5-2 in Volume 5, Chapter 4 of the Final Environmental Impact Statement.*

Appendix V5-4D6. Summary of Screening for Effects to Water Quality in Patch Lake

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Antimony	0.006	C	Open	0.000021	0.000050	18	0.000026	0.000026	0.000026	0.000026	-
			Ice	0.000050	0.000079	9	0.000033	0.000038	0.000033	0.000038	-
		O	Open	0.000021	0.000050	18	0.000027	0.000028	0.000027	0.000028	-
			Ice	0.000050	0.000079	9	0.000034	0.000041	0.000034	0.000041	-
		CL	Open	0.000021	0.000050	18	0.000028	0.000028	0.000028	0.000028	-
			Ice	0.000050	0.000079	9	0.000035	0.000041	0.000035	0.000041	-
		PC	Open	0.000021	0.000050	18	0.000030	0.000031	0.000033	0.000034	-
			Ice	0.000050	0.000079	9	0.000037	0.000045	0.000041	0.000050	-
Arsenic	0.028	C	Open	0.00042	0.00065	18	0.00031	0.00031	0.00031	0.00031	-
			Ice	0.00045	0.00080	9	0.00039	0.00046	0.00039	0.00046	-
		O	Open	0.00042	0.00065	18	0.00032	0.00033	0.00032	0.00033	-
			Ice	0.00045	0.00080	9	0.00040	0.00048	0.00040	0.00048	-
		CL	Open	0.00042	0.00065	18	0.00033	0.00033	0.00033	0.00033	-
			Ice	0.00045	0.00080	9	0.00042	0.00049	0.00042	0.00049	-
		PC	Open	0.00042	0.00065	18	0.00035	0.00036	0.00076	0.00078	-
			Ice	0.00045	0.00080	9	0.00044	0.00053	0.00091	0.00116	-
Beryllium	0.1	C	Open	0.0000040	0.0001	18	0.0000056	0.0000056	0.0000057	0.0000057	-
			Ice	0.0000025	0.0001	9	0.0000070	0.0000082	0.0000072	0.0000083	-
		O	Open	0.0000040	0.0001	18	0.0000057	0.0000059	0.0000060	0.0000063	-
			Ice	0.0000025	0.0001	9	0.0000072	0.0000086	0.0000076	0.0000092	-
		CL	Open	0.0000040	0.0001	18	0.0000058	0.0000059	0.0000063	0.0000064	-
			Ice	0.0000025	0.0001	9	0.0000074	0.0000086	0.0000080	0.0000093	-
		PC	Open	0.0000040	0.0001	18	0.0000061	0.0000063	0.0000073	0.0000077	-
			Ice	0.0000025	0.0001	9	0.0000077	0.0000092	0.0000091	0.0000112	-

Appendix V5-4D6. Summary of Screening for Effects to Water Quality in Patch Lake

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Cobalt	0.05	C	Open	0.000050	0.000097	18	0.000056	0.000056	0.000056	0.000056	-
			Ice	0.000025	0.000050	9	0.000070	0.000082	0.000071	0.000082	-
		O	Open	0.000050	0.000097	18	0.000057	0.000059	0.000057	0.000059	-
			Ice	0.000025	0.000050	9	0.000072	0.000086	0.000072	0.000086	-
		CL	Open	0.000050	0.000097	18	0.000058	0.000059	0.000059	0.000059	-
			Ice	0.000025	0.000050	9	0.000074	0.000086	0.000074	0.000086	-
		PC	Open	0.000050	0.000097	18	0.000061	0.000063	0.000070	0.000072	-
			Ice	0.000025	0.000050	9	0.000077	0.000092	0.000086	0.000105	-
Mercury	0.000026	C	Open	0.0000003	0.0000050	18	0.00000077	0.00000078	0.00000084	0.00000085	-
			Ice	0.0000009	0.0000050	9	0.00000097	0.00000113	0.00000105	0.00000121	-
		O	Open	0.0000003	0.0000050	18	0.00000079	0.00000080	0.00000099	0.00000110	-
			Ice	0.0000009	0.0000050	9	0.00000099	0.00000117	0.00000123	0.00000159	-
		CL	Open	0.0000003	0.0000050	18	0.00000080	0.00000081	0.00000113	0.00000113	-
			Ice	0.0000009	0.0000050	9	0.00000101	0.00000118	0.00000142	0.00000164	-
		PC	Open	0.0000003	0.0000050	18	0.00000083	0.00000085	0.00000150	0.00000167	-
			Ice	0.0000009	0.0000050	9	0.00000104	0.00000124	0.00000184	0.00000242	-

C = Construction; O = Operations; CL = Closure; PC = Post-Closure.

Open = Open-Water (June to September); Ice = Under-Ice (October to May).

*See Table 4.5-2 in Volume 5, Chapter 4 of the Final Environmental Impact Statement.

Appendix V5-4D7. Summary of Screening for Effects to Water Quality in P.O. Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Antimony	0.006	C	Open	0.000023	0.000042	7	0.000026	0.000027	0.000026	0.000027	-
			Ice	-	-	-	0.000051	0.000071	0.000051	0.000071	-
		O	Open	0.000023	0.000042	7	0.000027	0.000028	0.000027	0.000028	-
			Ice	-	-	-	0.000052	0.000074	0.000052	0.000074	-
		CL	Open	0.000023	0.000042	7	0.000028	0.000028	0.000028	0.000028	-
			Ice	-	-	-	0.000054	0.000075	0.000054	0.000075	-
		PC	Open	0.000023	0.000042	7	0.000029	0.000031	0.000032	0.000034	-
			Ice	-	-	-	0.000056	0.000081	0.000061	0.000089	-
Arsenic	0.028	C	Open	0.00059	0.00061	7	0.00031	0.00032	0.00032	0.00032	-
			Ice	-	-	-	0.00060	0.00084	0.00061	0.00084	-
		O	Open	0.00059	0.00061	7	0.00032	0.00033	0.00032	0.00033	-
			Ice	-	-	-	0.00062	0.00088	0.00062	0.00088	-
		CL	Open	0.00059	0.00061	7	0.00033	0.00034	0.00033	0.00034	-
			Ice	-	-	-	0.00064	0.00089	0.00064	0.00088	-
		PC	Open	0.00059	0.00061	7	0.00035	0.00037	0.00069	0.00075	-
			Ice	-	-	-	0.00066	0.00095	0.0012	0.0019	-
Beryllium	0.1	C	Open	0.000010	0.0001	7	0.000006	0.000006	0.000006	0.000006	-
			Ice	-	-	-	0.000011	0.000015	0.000011	0.000015	-
		O	Open	0.000010	0.0001	7	0.000006	0.000006	0.000006	0.000006	-
			Ice	-	-	-	0.000011	0.000016	0.000011	0.000016	-
		CL	Open	0.000010	0.0001	7	0.000006	0.000006	0.000006	0.000006	-
			Ice	-	-	-	0.000011	0.000016	0.000012	0.000017	-
		PC	Open	0.000010	0.0001	7	0.000006	0.000006	0.000007	0.000008	-
			Ice	-	-	-	0.000012	0.000017	0.000013	0.000020	-

Appendix V5-4D7. Summary of Screening for Effects to Water Quality in P.O. Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Cobalt	0.05	C	Open	0.000081	0.00022	7	0.00005635	0.0000569	0.00005645	0.0000571	-
			Ice	-	-	-	0.0001075	0.0001492	0.000108	0.0001495	-
		O	Open	0.000081	0.00022	7	0.00005745	0.0000591	0.0000576	0.0000592	-
			Ice	-	-	-	0.00011	0.0001551	0.00011	0.0001553	-
		CL	Open	0.000081	0.00022	7	0.0000588	0.0000594	0.000059	0.0000596	-
			Ice	-	-	-	0.000112	0.0001558	0.0001125	0.0001563	-
		PC	Open	0.000081	0.00022	7	0.000061	0.0000641	0.0000679	0.0000723	-
			Ice	-	-	-	0.000115	0.0001648	0.000127	0.000185	-
Mercury	0.000026	C	Open	0.0000015	0.0000045	7	0.0000008	0.0000008	0.0000008	0.0000008	-
			Ice	-	-	-	0.0000015	0.0000021	0.0000016	0.0000022	-
		O	Open	0.0000015	0.0000045	7	0.0000008	0.0000008	0.0000009	0.0000011	-
			Ice	-	-	-	0.0000015	0.0000021	0.0000018	0.0000027	-
		CL	Open	0.0000015	0.0000045	7	0.0000008	0.0000008	0.0000011	0.0000011	-
			Ice	-	-	-	0.0000015	0.0000021	0.0000020	0.0000028	-
		PC	Open	0.0000015	0.0000045	7	0.0000008	0.0000009	0.0000014	0.0000016	-
			Ice	-	-	-	0.0000016	0.0000022	0.0000026	0.0000040	-

C = Construction; O = Operations; CL = Closure; PC = Post-Closure.

Open = Open-Water (June to September); Ice = Under-Ice (October to May).

*See Table 4.5-2 in Volume 5, Chapter 4 of the Final Environmental Impact Statement.

No under-ice observations are available for P.O. Lake.

Appendix V5-4D8. Summary of Screening for Effects to Water Quality in Ogama Lake

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Arsenic	0.028	C	Open	0.00049	0.00058	13	0.00031	0.00031	0.00031	0.00031	-
			Ice	0.00116	0.00134	3	0.00057	0.00078	0.00057	0.00078	-
		O	Open	0.00049	0.00058	13	0.00031	0.00032	0.00031	0.00032	-
			Ice	0.00116	0.00134	3	0.00058	0.00080	0.00058	0.00080	-
		CL	Open	0.00049	0.00058	13	0.00031	0.00032	0.00031	0.00032	-
			Ice	0.00116	0.00134	3	0.00059	0.00080	0.00059	0.00080	-
		PC	Open	0.00049	0.00058	13	0.00032	0.00033	0.00045	0.00048	-
			Ice	0.00116	0.00134	3	0.00059	0.00082	0.00080	0.0012	-
Mercury	0.000026	C	Open	0.0000010	0.0000050	13	0.00000075	0.00000076	0.00000076	0.00000077	-
			Ice	0.0000003	0.0000045	3	0.00000136	0.00000186	0.00000138	0.00000188	-
		O	Open	0.0000010	0.0000050	13	0.00000075	0.00000077	0.00000080	0.00000085	-
			Ice	0.0000003	0.0000045	3	0.00000136	0.00000188	0.00000146	0.00000207	-
		CL	Open	0.0000010	0.0000050	13	0.00000076	0.00000077	0.00000087	0.00000088	-
			Ice	0.0000003	0.0000045	3	0.00000138	0.00000189	0.00000156	0.00000213	-
		PC	Open	0.0000010	0.0000050	13	0.00000076	0.00000078	0.00000099	0.00000105	-
			Ice	0.0000003	0.0000045	3	0.00000135	0.00000190	0.00000171	0.00000246	-

C = Construction; O = Operations; CL = Closure; PC = Post-Closure.

Open = Open-Water (June to September); Ice = Under-Ice (October to May).

Appendix V5-4D9. Summary of Screening for Effects to Water Quality in Doris Creek

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Aluminium	0.1	C	Open	0.07	0.37	44	0.0621	0.0779	0.0616	0.0837	-
			Ice	-	-	-	0.0012	0.0618	0.0035	0.0608	-
		O	Open	0.07	0.37	44	0.0623	0.0795	0.0614	0.1042	Jun
			Ice	-	-	-	0.0014	0.0623	0.0035	0.0610	-
		CL	Open	0.07	0.37	44	0.0627	0.0782	0.0615	0.0796	-
			Ice	-	-	-	0.0022	0.0624	0.0036	0.0610	-
		PC	Open	0.07	0.37	44	0.0630	0.0789	0.0629	0.0792	-
			Ice	-	-	-	0.0019	0.0653	0.0022	0.0652	-
Antimony	0.006	C	open	0.000015	0.000046	44	0.000025	0.000032	0.000026	0.000035	-
			ice	-	-	-	0.0000005	0.000025	0.000001	0.000025	-
		O	open	0.000015	0.000046	44	0.000026	0.000033	0.000026	0.000045	-
			ice	-	-	-	0.0000006	0.000026	0.000001	0.000026	-
		CL	open	0.000015	0.000046	44	0.000026	0.000033	0.000026	0.000034	-
			ice	-	-	-	0.0000009	0.000026	0.000002	0.00003	-
		PC	open	0.000015	0.000046	44	0.000027	0.000033	0.000082	0.000176	-
			ice	-	-	-	0.0000008	0.000028	0.000001	0.00015	-
Arsenic	0.028	C	open	0.00029	0.00052	44	0.00030	0.00038	0.00031	0.00042	-
			ice	-	-	-	0.00001	0.00030	0.00002	0.00030	-
		O	open	0.00029	0.00052	44	0.00031	0.00039	0.00031	0.00053	-
			ice	-	-	-	0.00001	0.00031	0.00002	0.00031	-
		CL	open	0.00029	0.00052	44	0.00031	0.00039	0.00031	0.00041	-
			ice	-	-	-	0.00001	0.00031	0.00002	0.00031	-
		PC	open	0.00029	0.00052	44	0.00032	0.00039	0.00358	0.00999	-
			ice	-	-	-	0.00001	0.00033	0.00002	0.00867	-

Appendix V5-4D9. Summary of Screening for Effects to Water Quality in Doris Creek

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Barium	1	C	open	0.0033	0.0067	44	0.0038	0.0048	0.0038	0.0051	-
			ice	-	-	-	0.0001	0.0038	0.0002	0.0037	-
		O	open	0.0033	0.0067	44	0.0038	0.0049	0.0038	0.0064	-
			ice	-	-	-	0.0001	0.0038	0.0002	0.0038	-
		CL	open	0.0033	0.0067	44	0.0038	0.0048	0.0038	0.0049	-
			ice	-	-	-	0.0001	0.0038	0.0002	0.0038	-
		PC	open	0.0033	0.0067	44	0.0039	0.0048	0.0063	0.0113	-
			ice	-	-	-	0.0001	0.0040	0.0001	0.0094	-
Beryllium	0.1	C	open	0.0000025	0.0000897	44	0.00000539	0.00000675	0.00000596	0.00000810	-
			ice	-	-	-	0.00000010	0.00000537	0.00000034	0.00000589	-
		O	open	0.0000025	0.0000897	44	0.00000543	0.00000693	0.00000609	0.00001040	-
			ice	-	-	-	0.00000012	0.00000545	0.00000035	0.00000609	-
		CL	open	0.0000025	0.0000897	44	0.00000548	0.00000684	0.00000618	0.00000803	-
			ice	-	-	-	0.00000019	0.00000546	0.00000036	0.00000614	-
		PC	open	0.0000025	0.0000897	44	0.00000555	0.00000690	0.00000956	0.00001340	-
			ice	-	-	-	0.00000017	0.00000576	0.00000028	0.00001180	-
Boron	1.5	C	open	0.024	0.034	44	0.034	0.042	0.033	0.045	-
			ice	-	-	-	0.001	0.033	0.002	0.033	-
		O	open	0.024	0.034	44	0.034	0.043	0.033	0.057	-
			ice	-	-	-	0.001	0.034	0.002	0.033	-
		CL	open	0.024	0.034	44	0.034	0.043	0.034	0.044	-
			ice	-	-	-	0.001	0.034	0.002	0.033	-
		PC	open	0.024	0.034	44	0.035	0.043	0.037	0.044	-
			ice	-	-	-	0.001	0.036	0.001	0.041	-

Appendix V5-4D9. Summary of Screening for Effects to Water Quality in Doris Creek

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Calcium	1000	C	open	8.45	10.36	44	9.37	11.75	9.41	12.77	-
			ice	-	-	-	0.18	9.34	0.54	9.29	-
		O	open	8.45	10.36	44	9.45	12.06	9.46	16.09	-
			ice	-	-	-	0.21	9.49	0.54	9.42	-
		CL	open	8.45	10.36	44	9.54	11.90	9.51	12.31	-
			ice	-	-	-	0.33	9.50	0.56	9.44	-
		PC	open	8.45	10.36	44	9.66	12.02	11.81	13.49	-
			ice	-	-	-	0.29	10.04	0.41	12.72	-
Cadmium	Hardness Dependent	C	open	0.000003	0.000011	44	0.0000054	0.0000068	0.0000054	0.0000073	-
			ice	-	-	-	0.0000001	0.0000054	0.0000003	0.0000053	-
		O	open	0.000003	0.000011	44	0.0000054	0.0000069	0.0000054	0.0000092	-
			ice	-	-	-	0.0000001	0.0000055	0.0000003	0.0000054	-
		CL	open	0.000003	0.000011	44	0.0000055	0.0000068	0.0000054	0.0000070	-
			ice	-	-	-	0.0000002	0.0000055	0.0000003	0.0000054	-
		PC	open	0.000003	0.000011	44	0.0000056	0.0000069	0.0000067	0.0000079	-
			ice	-	-	-	0.0000002	0.0000058	0.0000002	0.0000074	-
Chromium	0.001	C	open	0.00025	0.00084	44	0.00054	0.00068	0.00054	0.00073	-
			ice	-	-	-	0.00001	0.00054	0.00003	0.00053	-
		O	open	0.00025	0.00084	44	0.00054	0.00069	0.00054	0.00091	-
			ice	-	-	-	0.00001	0.00054	0.00003	0.00054	-
		CL	open	0.00025	0.00084	44	0.00055	0.00068	0.00054	0.00070	-
			ice	-	-	-	0.00002	0.00055	0.00003	0.00054	-
		PC	open	0.00025	0.00084	44	0.00055	0.00069	0.00057	0.00070	-
			ice	-	-	-	0.00002	0.00058	0.00002	0.00059	-

Appendix V5-4D9. Summary of Screening for Effects to Water Quality in Doris Creek

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Cobalt	0.05	C	open	0.00005	0.00025	44	0.000054	0.000068	0.000055	0.000074	-
			ice	-	-	-	0.000001	0.000054	0.000003	0.000054	-
		O	open	0.00005	0.00025	44	0.000054	0.000069	0.000055	0.000094	-
			ice	-	-	-	0.000001	0.000055	0.000003	0.000055	-
		CL	open	0.00005	0.00025	44	0.000055	0.000068	0.000056	0.000072	-
			ice	-	-	-	0.000002	0.000055	0.000003	0.000055	-
		PC	open	0.00005	0.00025	44	0.000056	0.000069	0.000397	0.000436	-
			ice	-	-	-	0.000002	0.000058	0.000015	0.000421	-
Copper	0.009	C	open	0.0015	0.0026	44	0.00149	0.00187	0.00153	0.00208	-
			ice	-	-	-	0.00003	0.00149	0.00009	0.00151	-
		O	open	0.0015	0.0026	44	0.00151	0.00193	0.00155	0.00264	-
			ice	-	-	-	0.00003	0.00152	0.00009	0.00155	-
		CL	open	0.0015	0.0026	44	0.00153	0.00191	0.00156	0.00202	-
			ice	-	-	-	0.00005	0.00152	0.00009	0.00155	-
		PC	open	0.0015	0.0026	44	0.00155	0.00193	0.00181	0.00212	-
			ice	-	-	-	0.00005	0.00162	0.00006	0.00202	-
Iron	0.3	C	open	0.14	0.47	44	0.171	0.215	0.171	0.232	-
			ice	-	-	-	0.0033	0.170	0.010	0.168	-
		O	open	0.14	0.47	44	0.170	0.217	0.168	0.285	-
			ice	-	-	-	0.004	0.170	0.010	0.168	-
		CL	open	0.14	0.47	44	0.170	0.212	0.168	0.217	-
			ice	-	-	-	0.0059	0.169	0.010	0.166	-
		PC	open	0.14	0.47	44	0.168	0.213	0.166	0.216	-
			ice	-	-	-	0.0051	0.173	0.0061	0.168	-

Appendix V5-4D9. Summary of Screening for Effects to Water Quality in Doris Creek

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Lead	Hardness Dependent	C	open	0.000025	0.00017	44	0.0000539	0.0000675	0.0000535	0.0000726	-
			ice	-	-	-	0.0000010	0.0000537	0.0000031	0.0000528	-
		O	open	0.000025	0.00017	44	0.0000543	0.0000693	0.0000537	0.0000912	-
			ice	-	-	-	0.0000012	0.0000545	0.0000031	0.0000534	-
		CL	open	0.000025	0.00017	44	0.0000548	0.0000684	0.0000539	0.0000698	-
			ice	-	-	-	0.0000019	0.0000546	0.0000032	0.0000535	-
		PC	open	0.000025	0.00017	44	0.0000555	0.0000690	0.0000564	0.0000695	-
			ice	-	-	-	0.0000017	0.0000576	0.0000020	0.0000591	-
Lithium	2.5	C	open	0.0037	0.0043	31	0.00401	0.00502	0.00396	0.00538	-
			ice	-	-	-	0.00008	0.00399	0.00023	0.00391	-
		O	open	0.0037	0.0043	31	0.00404	0.00516	0.00398	0.00675	-
			ice	-	-	-	0.00009	0.00406	0.00023	0.00396	-
		CL	open	0.0037	0.0043	31	0.00408	0.00509	0.00399	0.00516	-
			ice	-	-	-	0.00014	0.00407	0.00023	0.00396	-
		PC	open	0.0037	0.0043	31	0.00414	0.00515	0.00430	0.00518	-
			ice	-	-	-	0.00012	0.00431	0.00016	0.00442	-
Manganese	0.2	C	open	0.022	0.046	44	0.0220	0.0276	0.0220	0.0298	-
			ice	-	-	-	0.0004	0.0220	0.0013	0.0217	-
		O	open	0.022	0.046	44	0.0224	0.0285	0.0222	0.0378	-
			ice	-	-	-	0.00049	0.0225	0.0013	0.0221	-
		CL	open	0.022	0.046	44	0.0226	0.0282	0.0224	0.0290	-
			ice	-	-	-	0.00079	0.0226	0.0013	0.0222	-
		PC	open	0.022	0.046	44	0.0230	0.0285	0.0297	0.0315	-
			ice	-	-	-	0.0007	0.0239	0.0011	0.0306	-

Appendix V5-4D9. Summary of Screening for Effects to Water Quality in Doris Creek

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Mercury	0.000026	C	open	0.000001	0.000005	44	0.00000074	0.00000093	0.00000109	0.00000148	-
			ice	-	-	-	0.00000001	0.00000074	0.00000006	0.00000108	-
		O	open	0.000001	0.000005	44	0.00000075	0.00000095	0.00000116	0.00000202	-
			ice	-	-	-	0.00000002	0.00000075	0.00000007	0.00000117	-
		CL	open	0.000001	0.000005	44	0.00000075	0.00000094	0.00000120	0.00000157	-
			ice	-	-	-	0.00000003	0.00000075	0.00000007	0.00000120	-
		PC	open	0.000001	0.000005	44	0.00000075	0.00000094	0.00000221	0.00000302	-
			ice	-	-	-	0.00000002	0.00000078	0.00000006	0.00000275	-
Molybdenum	0.073	C	open	0.0002	0.0002	44	0.000190	0.000238	0.000191	0.000259	-
			ice	-	-	-	0.0000037	0.000190	0.000011	0.000189	-
		O	open	0.0002	0.0002	44	0.000193	0.000247	0.000193	0.000330	-
			ice	-	-	-	0.0000043	0.000195	0.000011	0.000193	-
		CL	open	0.0002	0.0002	44	0.000196	0.000245	0.000195	0.000253	-
			ice	-	-	-	0.0000068	0.000195	0.000011	0.000194	-
		PC	open	0.0002	0.0002	44	0.000200	0.000247	0.000277	0.000409	-
			ice	-	-	-	0.0000060	0.000210	0.000008	0.000354	-
Nickel	Hardness Dependent	C	open	0.001	0.001	44	0.00057	0.00072	0.00057	0.00078	-
			ice	-	-	-	0.000011	0.00057	0.00003	0.00057	-
		O	open	0.001	0.001	44	0.00058	0.00074	0.00058	0.00098	-
			ice	-	-	-	0.000013	0.00058	0.00003	0.00057	-
		CL	open	0.001	0.001	44	0.00058	0.00073	0.00058	0.00075	-
			ice	-	-	-	0.000020	0.00058	0.00003	0.00058	-
		PC	open	0.001	0.001	44	0.00059	0.00073	0.00183	0.00199	-
			ice	-	-	-	0.000018	0.00061	0.00007	0.00192	-

Appendix V5-4D9. Summary of Screening for Effects to Water Quality in Doris Creek

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Selenium	0.001	C	open	0.0001	0.0012	44	0.00022	0.00027	0.00021	0.00029	-
			ice	-	-	-	0.0000042	0.00021	0.00001	0.00021	-
		O	open	0.0001	0.0012	44	0.00022	0.00028	0.00021	0.00036	-
			ice	-	-	-	0.0000048	0.00022	0.00001	0.00021	-
		CL	open	0.0001	0.0012	44	0.00022	0.00027	0.00021	0.00028	-
			ice	-	-	-	0.000008	0.00022	0.00001	0.00021	-
		PC	open	0.0001	0.0012	44	0.00022	0.00028	0.00036	0.00039	-
			ice	-	-	-	0.000007	0.00023	0.00001	0.00037	-
Sodium	200	C	open	31.4	35.0	44	35.3	44.3	35.0	47.5	-
			ice	-	-	-	0.7	35.2	2.0	34.6	-
		O	open	31.4	35.0	44	35.5	45.3	35.1	59.6	-
			ice	-	-	-	0.8	35.6	2.0	34.9	-
		CL	open	31.4	35.0	44	35.8	44.7	35.2	45.5	-
			ice	-	-	-	1.2	35.7	2.1	34.9	-
		PC	open	31.4	35.0	44	36.2	45.1	35.0	45.3	-
			ice	-	-	-	1.1	37.6	1.3	35.3	-
Silver	0.00025	C	open	0.0000025	0.0000050	44	0.0000054	0.0000068	0.0000054	0.0000073	-
			ice	-	-	-	0.00000010	0.0000054	0.0000003	0.0000053	-
		O	open	0.0000025	0.0000050	44	0.0000054	0.0000069	0.0000054	0.0000092	-
			ice	-	-	-	0.00000012	0.0000055	0.0000003	0.0000054	-
		CL	open	0.0000025	0.0000050	44	0.0000055	0.0000068	0.0000054	0.0000070	-
			ice	-	-	-	0.00000019	0.0000055	0.0000003	0.0000054	-
		PC	open	0.0000025	0.0000050	44	0.0000056	0.0000069	0.0000059	0.0000070	-
			ice	-	-	-	0.00000017	0.0000058	0.0000002	0.0000064	-

Appendix V5-4D9. Summary of Screening for Effects to Water Quality in Doris Creek

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Thallium	0.0008	C	open	0.0000025	0.0000435	44	0.0000022	0.0000027	0.0000022	0.0000030	-
			ice	-	-	-	0.00000004	0.00000215	0.00000013	0.00000217	-
		O	open	0.0000025	0.0000435	44	0.0000022	0.0000028	0.0000022	0.0000038	-
			ice	-	-	-	0.00000005	0.00000218	0.00000013	0.00000220	-
		CL	open	0.0000025	0.0000435	44	0.0000022	0.0000027	0.0000022	0.0000029	-
			ice	-	-	-	0.00000008	0.00000218	0.00000013	0.00000221	-
		PC	open	0.0000025	0.0000435	44	0.0000022	0.0000028	0.0000036	0.0000045	-
			ice	-	-	-	0.00000007	0.00000231	0.00000012	0.00000405	-
Uranium	0.015	C	open	0.00003	0.00005	44	0.000037	0.000046	0.000037	0.000051	-
			ice	-	-	-	0.00000071	0.00003650	0.00000212	0.00003680	-
		O	open	0.00003	0.00005	44	0.000037	0.000047	0.000038	0.000064	-
			ice	-	-	-	0.00000082	0.00003720	0.00000215	0.00003750	-
		CL	open	0.00003	0.00005	44	0.000037	0.000047	0.000038	0.000049	-
			ice	-	-	-	0.00000130	0.00003730	0.00000223	0.00003760	-
		PC	open	0.00003	0.00005	44	0.000038	0.000047	0.000044	0.000050	-
			ice	-	-	-	0.00000114	0.00003960	0.00000148	0.00004780	-
Vanadium	0.1	C	open	0.0002	0.0007	44	0.000193	0.000242	0.000197	0.000268	-
			ice	-	-	-	0.000004	0.000192	0.000011	0.000195	-
		O	open	0.0002	0.0007	44	0.000194	0.000248	0.000199	0.000339	-
			ice	-	-	-	0.000004	0.000195	0.000011	0.000198	-
		CL	open	0.0002	0.0007	44	0.000196	0.000244	0.0002	0.000259	-
			ice	-	-	-	0.000007	0.000195	0.000012	0.000199	-
		PC	open	0.0002	0.0007	44	0.000198	0.000247	0.000231	0.00027	-
			ice	-	-	-	0.000006	0.000206	0.000008	0.000255	-

Appendix V5-4D9. Summary of Screening for Effects to Water Quality in Doris Creek

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Zinc	0.03	C	open	0.002	0.004	44	0.0032	0.0041	0.0032	0.0044	-
			ice	-	-	-	0.0001	0.0032	0.0002	0.0032	-
		O	open	0.002	0.004	44	0.0033	0.0042	0.0032	0.0055	-
			ice	-	-	-	0.0001	0.0033	0.0002	0.0032	-
		CL	open	0.002	0.004	44	0.0033	0.0041	0.0032	0.0042	-
			ice	-	-	-	0.0001	0.0033	0.0002	0.0032	-
		PC	open	0.002	0.004	44	0.0033	0.0041	0.0034	0.0042	-
			ice	-	-	-	0.0001	0.0035	0.0001	0.0035	-
TSS	Narrative	C	open	3.7	10.4	44	4.8	6.1	4.8	6.5	-
			ice	-	-	-	0.1	4.8	0.3	4.8	-
		O	open	3.7	10.4	44	4.9	6.3	4.8	8.3	-
			ice	-	-	-	0.1	5.0	0.3	4.8	-
		CL	open	3.7	10.4	44	5.0	6.2	4.9	6.3	-
			ice	-	-	-	0.2	5.0	0.3	4.9	-
		PC	open	3.7	10.4	44	5.1	6.3	4.9	6.3	-
			ice	-	-	-	0.2	5.3	0.2	5.1	-
Fluoride	0.12	C	open	0.05	0.07	44	0.057	0.072	0.057	0.077	-
			ice	-	-	-	0.001	0.057	0.003	0.056	-
		O	open	0.05	0.07	44	0.058	0.074	0.057	0.097	-
			ice	-	-	-	0.001	0.058	0.003	0.057	-
		CL	open	0.05	0.07	44	0.058	0.073	0.057	0.074	-
			ice	-	-	-	0.002	0.058	0.003	0.057	-
		PC	open	0.05	0.07	44	0.059	0.074	0.058	0.074	-
			ice	-	-	-	0.002	0.061	0.002	0.059	-

Appendix V5-4D9. Summary of Screening for Effects to Water Quality in Doris Creek

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Chloride	120	C	open	61.3	71.7	44	66.9	83.9	66.4	90.1	-
			ice	-	-	-	1.3	66.6	3.8	65.6	-
		O	open	61.3	71.7	44	67.4	86.0	66.5	113.0	-
			ice	-	-	-	1.5	67.6	3.8	66.2	-
		CL	open	61.3	71.7	44	68.0	84.8	66.7	86.4	-
			ice	-	-	-	2.4	67.7	3.9	66.3	-
		PC	open	61.3	71.7	44	68.8	85.7	66.4	85.9	-
			ice	-	-	-	2.1	71.4	2.4	67.1	-
Free Cyanide	0.005	C	open	0.0005	0.0022	24	0.0011	0.0014	0.0011	0.0015	-
			ice	-	-	-	0.0000	0.0011	0.0001	0.0011	-
		O	open	0.0005	0.0022	24	0.0011	0.0014	0.0011	0.0018	-
			ice	-	-	-	0.0000	0.0011	0.0001	0.0011	-
		CL	open	0.0005	0.0022	24	0.0011	0.0014	0.0011	0.0014	-
			ice	-	-	-	0.0000	0.0011	0.0001	0.0011	-
		PC	open	0.0005	0.0022	24	0.0011	0.0014	0.0011	0.0014	-
			ice	-	-	-	0.0000	0.0012	0.0000	0.0011	-
Cyanide	0.2	C	open	0.0005	0.0048	41	0.0010	0.0013	0.0011	0.0015	-
			ice	-	-	-	0.0000	0.0010	0.0001	0.0011	-
		O	open	0.0005	0.0048	41	0.0011	0.0013	0.0011	0.0018	-
			ice	-	-	-	0.0000	0.0011	0.0001	0.0011	-
		CL	open	0.0005	0.0048	41	0.0011	0.0013	0.0011	0.0014	-
			ice	-	-	-	0.0000	0.0011	0.0001	0.0011	-
		PC	open	0.0005	0.0048	41	0.0011	0.0013	0.0011	0.0014	-
			ice	-	-	-	0.0000	0.0011	0.0000	0.0011	-

Appendix V5-4D9. Summary of Screening for Effects to Water Quality in Doris Creek

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Ammonia	1.83	C	open	0.0077	0.0199	44	0.0052	0.0065	0.0053	0.0073	-
			ice	-	-	-	0.0001	0.0052	0.0003	0.0053	-
		O	open	0.0077	0.0199	44	0.0052	0.0066	0.0054	0.0091	-
			ice	-	-	-	0.0001	0.0052	0.0003	0.0053	-
		CL	open	0.0077	0.0199	44	0.0053	0.0066	0.0054	0.0070	-
			ice	-	-	-	0.0002	0.0052	0.0003	0.0053	-
		PC	open	0.0077	0.0199	44	0.0053	0.0066	0.0054	0.0069	-
			ice	-	-	-	0.0002	0.0055	0.0002	0.0054	-
Nitrate	3	C	open	0.0025	0.0036	44	0.00539	0.00675	0.00535	0.00725	-
			ice	-	-	-	0.00010	0.00537	0.00031	0.00528	-
		O	open	0.0025	0.0036	44	0.00543	0.00693	0.00536	0.00911	-
			ice	-	-	-	0.00012	0.00545	0.00031	0.00533	-
		CL	open	0.0025	0.0036	44	0.00548	0.00684	0.00538	0.00696	-
			ice	-	-	-	0.00019	0.00546	0.00032	0.00534	-
		PC	open	0.0025	0.0036	44	0.00555	0.00690	0.00536	0.00693	-
			ice	-	-	-	0.00017	0.00576	0.00020	0.00542	-
Nitrite	0.06	C	open	NA	NA	NA	0.00108	0.00135	0.00107	0.00145	-
			ice	NA	NA	NA	0.00002	0.00107	0.00006	0.00106	-
		O	open	NA	NA	NA	0.00109	0.00139	0.00107	0.00182	-
			ice	NA	NA	NA	0.00002	0.00109	0.00006	0.00107	-
		CL	open	NA	NA	NA	0.00110	0.00137	0.00108	0.00139	-
			ice	NA	NA	NA	0.00004	0.00109	0.00006	0.00107	-
		PC	open	NA	NA	NA	0.00111	0.00138	0.00107	0.00139	-
			ice	NA	NA	NA	0.00003	0.00115	0.00004	0.00108	-

Appendix V5-4D9. Summary of Screening for Effects to Water Quality in Doris Creek

Variable	Threshold*	Phase	Season	Observed			Predicted Baseline		Predicted Base Case		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Sulphate	Hardness Dependent	C	open	2.64	5.62	44	2.87	3.60	2.92	3.96	-
			ice	-	-	-	0.06	2.86	0.17	2.88	-
		O	open	2.64	5.62	44	2.90	3.70	2.94	5.00	-
			ice	-	-	-	0.06	2.91	0.17	2.93	-
		CL	open	2.64	5.62	44	2.92	3.65	2.96	3.83	-
			ice	-	-	-	0.10	2.91	0.17	2.94	-
		PC	open	2.64	5.62	44	2.96	3.68	7.61	8.43	-
			ice	-	-	-	0.09	3.08	0.28	7.96	-
Total Phosphorus	Guidance Framework	C	open	0.025	0.037	44	0.024	0.031	0.024	0.033	-
			ice	-	-	-	0.0005	0.02	0.0014	0.02	-
		O	open	0.025	0.037	44	0.025	0.032	0.025	0.042	-
			ice	-	-	-	0.0005	0.03	0.0014	0.02	-
		CL	open	0.025	0.037	44	0.025	0.031	0.025	0.032	-
			ice	-	-	-	0.0009	0.03	0.0015	0.02	-
		PC	open	0.025	0.037	44	0.026	0.032	0.025	0.032	-
			ice	-	-	-	0.0008	0.03	0.0009	0.03	-

C = Construction; O = Operations; CL = Closure; PC = Post-Closure.

Open = Open-Water (June to September); Ice = Under-Ice (October to May).

*See Table 4.5-2 in Volume 5, Chapter 4 of the Final Environmental Impact Statement.

Under-ice observations are not available for Doris Creek.

Appendix V5-4D10 . Summary of Screening for Effects to Water Quality in Little Roberts Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Aluminium	0.1	C	Open	0.0898	0.1603	28	0.0386	0.0410	0.0391	0.0420	-
			Ice	0.0162	0.1089	9	0.0477	0.0668	0.0505	0.0704	-
		O	Open	0.0898	0.1603	28	0.0388	0.0413	0.0397	0.0421	-
			Ice	0.0162	0.1089	9	0.0462	0.0669	0.0497	0.0730	-
		CL	Open	0.0898	0.1603	28	0.0390	0.0413	0.0390	0.0416	-
			Ice	0.0162	0.1089	9	0.0446	0.0627	0.0454	0.0637	-
		PC	Open	0.0898	0.1603	28	0.0394	0.0418	0.0393	0.0420	-
			Ice	0.0162	0.1089	9	0.0451	0.0626	0.0458	0.0639	-
Antimony	0.006	C	Open	0.000018	0.000036	28	0.000016	0.000017	0.000016	0.000018	-
			Ice	0.000050	0.000087	9	0.000020	0.000028	0.000021	0.000030	-
		O	Open	0.000018	0.000036	28	0.000016	0.000017	0.000017	0.000018	-
			Ice	0.000050	0.000087	9	0.000019	0.000028	0.000021	0.000032	-
		CL	Open	0.000018	0.000036	28	0.000016	0.000017	0.000016	0.000018	-
			Ice	0.000050	0.000087	9	0.000019	0.000026	0.000020	0.000027	-
		PC	Open	0.000018	0.000036	28	0.000017	0.000018	0.000033	0.000042	-
			Ice	0.000050	0.000087	9	0.000019	0.000026	0.000034	0.000051	-
Arsenic	0.028	C	Open	0.00029	0.0005	28	0.00019	0.00020	0.00019	0.00021	-
			Ice	0.00054	0.0019	9	0.00023	0.00033	0.00025	0.00035	-
		O	Open	0.00029	0.0005	28	0.00019	0.00021	0.00020	0.00021	-
			Ice	0.00054	0.0019	9	0.00023	0.00033	0.00025	0.00037	-
		CL	Open	0.00029	0.0005	28	0.00019	0.00021	0.00020	0.00021	-
			Ice	0.00054	0.0019	9	0.00022	0.00031	0.00023	0.00032	-
		PC	Open	0.00029	0.0005	28	0.00020	0.00021	0.00118	0.00171	-
			Ice	0.00054	0.0019	9	0.00023	0.00031	0.00076	0.00215	-

Appendix V5-4D10 . Summary of Screening for Effects to Water Quality in Little Roberts Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Barium	1	C	Open	0.0035	0.0044	28	0.0024	0.0025	0.0024	0.0026	-
			Ice	0.0078	0.0162	9	0.0029	0.0041	0.0031	0.0043	-
		O	Open	0.0035	0.0044	28	0.0024	0.0025	0.0024	0.0026	-
			Ice	0.0078	0.0162	9	0.0028	0.0041	0.0031	0.0045	-
		CL	Open	0.0035	0.0044	28	0.0024	0.0025	0.0024	0.0026	-
			Ice	0.0078	0.0162	9	0.0027	0.0038	0.0028	0.0039	-
		PC	Open	0.0035	0.0044	28	0.0024	0.0026	0.0031	0.0037	-
			Ice	0.0078	0.0162	9	0.0028	0.0038	0.0034	0.0046	-
Beryllium	0.1	C	Open	0.0000025	0.00006	28	0.0000034	0.0000036	0.0000036	0.0000039	-
			Ice	0.0000025	0.00006	9	0.0000042	0.0000058	0.0000048	0.0000067	-
		O	Open	0.0000025	0.00006	28	0.0000034	0.0000036	0.0000037	0.0000039	-
			Ice	0.0000025	0.00006	9	0.0000040	0.0000058	0.0000049	0.0000071	-
		CL	Open	0.0000025	0.00006	28	0.0000034	0.0000036	0.0000037	0.0000039	-
			Ice	0.0000025	0.00006	9	0.0000039	0.0000055	0.0000045	0.0000064	-
		PC	Open	0.0000025	0.00006	28	0.0000034	0.0000037	0.0000048	0.0000052	-
			Ice	0.0000025	0.00006	9	0.0000040	0.0000055	0.0000058	0.0000081	-
Boron	1.5	C	Open	0.027	0.037	28	0.021	0.022	0.021	0.023	-
			Ice	0.058	0.090	9	0.026	0.036	0.027	0.038	-
		O	Open	0.027	0.037	28	0.021	0.023	0.022	0.023	-
			Ice	0.058	0.090	9	0.025	0.036	0.027	0.040	-
		CL	Open	0.027	0.037	28	0.021	0.023	0.021	0.023	-
			Ice	0.058	0.090	9	0.024	0.034	0.025	0.035	-
		PC	Open	0.027	0.037	28	0.021	0.023	0.022	0.024	-
			Ice	0.058	0.090	9	0.025	0.034	0.026	0.036	-

Appendix V5-4D10 . Summary of Screening for Effects to Water Quality in Little Roberts Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Calcium	1000	C	Open	7.5	9.1	28	5.8	6.3	6.0	6.4	-
			Ice	15.3	29.8	9	7.2	10.1	7.7	10.8	-
		O	Open	7.5	9.1	28	5.9	6.3	6.1	6.5	-
			Ice	15.3	29.8	9	7.0	10.1	7.7	11.3	-
		CL	Open	7.5	9.1	28	5.9	6.3	6.0	6.4	-
			Ice	15.3	29.8	9	6.8	9.6	7.0	9.9	-
		PC	Open	7.5	9.1	28	6.0	6.4	6.7	7.2	-
			Ice	15.3	29.8	9	6.9	9.6	8.0	11.5	-
Cadmium	Hardness Dependent	C	Open	0.0000025	0.000013	28	0.0000034	0.0000036	0.0000034	0.0000037	-
			Ice	0.0000025	0.000011	9	0.0000042	0.0000058	0.0000044	0.0000062	-
		O	Open	0.0000025	0.000013	28	0.0000034	0.0000036	0.0000035	0.0000037	-
			Ice	0.0000025	0.000011	9	0.0000040	0.0000058	0.0000044	0.0000065	-
		CL	Open	0.0000025	0.000013	28	0.0000034	0.0000036	0.0000034	0.0000037	-
			Ice	0.0000025	0.000011	9	0.0000039	0.0000055	0.0000040	0.0000056	-
		PC	Open	0.0000025	0.000013	28	0.0000034	0.0000037	0.0000038	0.0000042	-
			Ice	0.0000025	0.000011	9	0.0000040	0.0000055	0.0000046	0.0000065	-
Chromium	0.001	C	Open	0.00025	0.00052	28	0.00033	0.00036	0.00034	0.00037	
			Ice	0.00025	0.00078	9	0.00041	0.00058	0.00044	0.00061	
		O	Open	0.00025	0.00052	28	0.00034	0.00036	0.00035	0.00037	
			Ice	0.00025	0.00078	9	0.00040	0.00058	0.00044	0.00064	
		CL	Open	0.00025	0.00052	28	0.00034	0.00036	0.00034	0.00037	
			Ice	0.00025	0.00078	9	0.00039	0.00055	0.00040	0.00056	
		PC	Open	0.00025	0.00052	28	0.00034	0.00037	0.00035	0.00038	
			Ice	0.00025	0.00078	9	0.00040	0.00055	0.00041	0.00057	

Appendix V5-4D10 . Summary of Screening for Effects to Water Quality in Little Roberts Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Cobalt	0.05	C	Open	0.000055	0.00009	28	0.000034	0.000036	0.000034	0.000037	-
			Ice	0.000081	0.00043	9	0.000042	0.000058	0.000045	0.000063	-
		O	Open	0.000055	0.00009	28	0.000034	0.000036	0.000035	0.000038	-
			Ice	0.000081	0.00043	9	0.000040	0.000058	0.000045	0.000066	-
		CL	Open	0.000055	0.00009	28	0.000034	0.000036	0.000035	0.000037	-
			Ice	0.000081	0.00043	9	0.000039	0.000055	0.000041	0.000058	-
		PC	Open	0.000055	0.00009	28	0.000034	0.000037	0.000158	0.000178	-
			Ice	0.000081	0.00043	9	0.000040	0.000055	0.000266	0.000409	-
Copper	0.009	C	Open	0.0015	0.0030	28	0.00093	0.0010	0.0010	0.0010	-
			Ice	0.0024	0.0029	9	0.0012	0.0016	0.0013	0.0018	-
		O	Open	0.0015	0.0030	28	0.0009	0.0010	0.0010	0.0011	-
			Ice	0.0024	0.0029	9	0.0011	0.0016	0.0013	0.0019	-
		CL	Open	0.0015	0.0030	28	0.00095	0.0010	0.0010	0.0010	-
			Ice	0.0024	0.0029	9	0.0011	0.0015	0.0012	0.0016	-
		PC	Open	0.0015	0.0030	28	0.0010	0.0010	0.0010	0.0011	-
			Ice	0.0024	0.0029	9	0.0011	0.0015	0.0012	0.0017	-
Iron	0.3	C	Open	0.16575	0.27825	28	0.10625	0.1109	0.1081	0.1137	-
			Ice	0.515	1.362	9	0.13095	0.1836	0.1382	0.1931	-
		O	Open	0.16575	0.27825	28	0.1061	0.1107	0.10845	0.1134	-
			Ice	0.515	1.362	9	0.12565	0.1831	0.1339	0.1962	-
		CL	Open	0.16575	0.27825	28	0.10635	0.1108	0.1067	0.1118	-
			Ice	0.515	1.362	9	0.1204	0.1693	0.12295	0.1727	-
		PC	Open	0.16575	0.27825	28	0.106	0.1115	0.106	0.1111	-
			Ice	0.515	1.362	9	0.1175	0.1683	0.1177	0.1721	-

Appendix V5-4D10 . Summary of Screening for Effects to Water Quality in Little Roberts Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Lead	Hardness Dependent	C	Open	0.0000628	0.0011635	28	0.0000335	0.0000359	0.0000340	0.0000368	-
			Ice	0.0000510	0.0005490	9	0.0000415	0.0000580	0.0000441	0.0000614	-
		O	Open	0.0000628	0.0011635	28	0.0000338	0.0000363	0.0000347	0.0000371	-
			Ice	0.0000510	0.0005490	9	0.0000404	0.0000583	0.0000438	0.0000643	-
		CL	Open	0.0000628	0.0011635	28	0.0000341	0.0000364	0.0000342	0.0000366	-
			Ice	0.0000510	0.0005490	9	0.0000391	0.0000549	0.0000399	0.0000560	-
		PC	Open	0.0000628	0.0011635	28	0.0000344	0.0000370	0.0000346	0.0000376	-
			Ice	0.0000510	0.0005490	9	0.0000397	0.0000549	0.0000408	0.0000567	-
Lithium	2.5	C	Open	NA	NA	NA	0.0025	0.0027	0.0025	0.0027	-
			Ice	NA	NA	NA	0.0031	0.0043	0.0033	0.0046	-
		O	Open	NA	NA	NA	0.0025	0.0027	0.0026	0.0028	-
			Ice	NA	NA	NA	0.0030	0.0043	0.0033	0.0048	-
		CL	Open	NA	NA	NA	0.0025	0.0027	0.0025	0.0027	-
			Ice	NA	NA	NA	0.0029	0.0041	0.0030	0.0041	-
		PC	Open	NA	NA	NA	0.0026	0.0028	0.0026	0.0028	-
			Ice	NA	NA	NA	0.0030	0.0041	0.0031	0.0044	-
Manganese	0.2	C	Open	0.011	0.02	28	0.014	0.015	0.014	0.015	-
			Ice	0.081	0.45	9	0.017	0.024	0.018	0.025	-
		O	Open	0.011	0.02	28	0.014	0.015	0.014	0.016	-
			Ice	0.081	0.45	9	0.017	0.024	0.018	0.027	-
		CL	Open	0.011	0.02	28	0.014	0.015	0.014	0.015	-
			Ice	0.081	0.45	9	0.016	0.023	0.017	0.023	-
		PC	Open	0.011	0.02	28	0.014	0.015	0.017	0.018	-
			Ice	0.081	0.45	9	0.017	0.023	0.020	0.030	-

Appendix V5-4D10 . Summary of Screening for Effects to Water Quality in Little Roberts Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Mercury	0.000026	C	Open	0.00000076	0.000005	28	0.00000046	0.00000049	0.00000059	0.00000061	-
			Ice	0.00000073	0.000005	9	0.00000057	0.00000080	0.00000084	0.00000117	-
		O	Open	0.00000076	0.000005	28	0.00000046	0.00000050	0.00000061	0.00000064	-
			Ice	0.00000073	0.000005	9	0.00000055	0.00000080	0.00000088	0.00000127	-
		CL	Open	0.00000076	0.000005	28	0.00000047	0.00000050	0.00000063	0.00000064	-
			Ice	0.00000073	0.000005	9	0.00000053	0.00000075	0.00000086	0.00000120	-
		PC	Open	0.00000076	0.000005	28	0.00000047	0.00000050	0.00000099	0.00000105	-
			Ice	0.00000073	0.000005	9	0.00000054	0.00000075	0.00000123	0.00000183	-
Molybdenum	0.073	C	Open	0.00019	0.00023	28	0.00012	0.00013	0.00012	0.00013	-
			Ice	0.00027	0.00035	9	0.00015	0.00021	0.00016	0.00022	-
		O	Open	0.00019	0.00023	28	0.00012	0.00013	0.00012	0.00013	-
			Ice	0.00027	0.00035	9	0.00014	0.00021	0.00016	0.00023	-
		CL	Open	0.00019	0.00023	28	0.00012	0.00013	0.00012	0.00013	-
			Ice	0.00027	0.00035	9	0.00014	0.00020	0.00015	0.00020	-
		PC	Open	0.00019	0.00023	28	0.00012	0.00013	0.00014	0.00017	-
			Ice	0.00027	0.00035	9	0.00014	0.00020	0.00017	0.00023	-
Nickel	*	C	Open	0.00058	0.00075	28	0.00036	0.00038	0.00036	0.00039	-
			Ice	0.00096	0.00131	9	0.00044	0.00062	0.00047	0.00066	-
		O	Open	0.00058	0.00075	28	0.00036	0.00039	0.00037	0.00040	-
			Ice	0.00096	0.00131	9	0.00043	0.00062	0.00047	0.00069	-
		CL	Open	0.00058	0.00075	28	0.00036	0.00039	0.00037	0.00039	-
			Ice	0.00096	0.00131	9	0.00042	0.00058	0.00043	0.00060	-
		PC	Open	0.00058	0.00075	28	0.00037	0.00039	0.00081	0.00088	-
			Ice	0.00096	0.00131	9	0.00042	0.00058	0.00124	0.00189	-

Appendix V5-4D10 . Summary of Screening for Effects to Water Quality in Little Roberts Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Selenium	0.001	C	Open	0.0001	0.0011	28	0.00013	0.00014	0.00014	0.00015	-
			Ice	0.0001	0.0043	9	0.00017	0.00023	0.00018	0.00025	-
		O	Open	0.0001	0.0011	28	0.00014	0.00015	0.00014	0.00015	-
			Ice	0.0001	0.0043	9	0.00016	0.00023	0.00017	0.00026	-
		CL	Open	0.0001	0.0011	28	0.00014	0.00015	0.00014	0.00015	-
			Ice	0.0001	0.0043	9	0.00016	0.00022	0.00016	0.00022	-
		PC	Open	0.0001	0.0011	28	0.00014	0.00015	0.00019	0.00020	-
			Ice	0.0001	0.0043	9	0.00016	0.00022	0.00024	0.00036	-
Sodium	200	C	Open	31.75	34.98	28	21.94	23.48	22.27	24.07	-
			Ice	78.00	152.00	9	27.17	38.01	28.82	40.16	-
		O	Open	31.75	34.98	28	22.12	23.71	22.68	24.21	-
			Ice	78.00	152.00	9	26.38	38.13	28.54	41.96	-
		CL	Open	31.75	34.98	28	22.27	23.75	22.31	23.91	-
			Ice	78.00	152.00	9	25.54	35.89	26.01	36.51	-
		PC	Open	31.75	34.98	28	22.52	24.11	22.22	23.77	-
			Ice	78.00	152.00	9	25.90	35.89	25.97	36.33	-
Silver	0.00025	C	Open	0.0000025	0.0000026	28	0.0000034	0.0000036	0.0000034	0.0000037	-
			Ice	0.0000025	0.0000105	9	0.0000042	0.0000058	0.0000044	0.0000062	-
		O	Open	0.0000025	0.0000026	28	0.0000034	0.0000036	0.0000035	0.0000037	-
			Ice	0.0000025	0.0000105	9	0.0000040	0.0000058	0.0000044	0.0000065	-
		CL	Open	0.0000025	0.0000026	28	0.0000034	0.0000036	0.0000034	0.0000037	-
			Ice	0.0000025	0.0000105	9	0.0000039	0.0000055	0.0000040	0.0000056	-
		PC	Open	0.0000025	0.0000026	28	0.0000034	0.0000037	0.0000035	0.0000039	-
			Ice	0.0000025	0.0000105	9	0.0000040	0.0000055	0.0000042	0.0000058	-

Appendix V5-4D10 . Summary of Screening for Effects to Water Quality in Little Roberts Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Thallium	0.0008	C	Open	0.000002	0.000005	28	0.0000013	0.0000014	0.0000014	0.0000015	-
			Ice	0.000002	0.000031	9	0.0000017	0.0000023	0.0000018	0.0000025	-
		O	Open	0.000002	0.000005	28	0.0000014	0.0000015	0.0000014	0.0000015	-
			Ice	0.000002	0.000031	9	0.0000016	0.0000023	0.0000018	0.0000026	-
		CL	Open	0.000002	0.000005	28	0.0000014	0.0000015	0.0000014	0.0000015	-
			Ice	0.000002	0.000031	9	0.0000016	0.0000022	0.0000016	0.0000023	-
		PC	Open	0.000002	0.000005	28	0.0000014	0.0000015	0.0000019	0.0000020	-
			Ice	0.000002	0.000031	9	0.0000016	0.0000022	0.0000022	0.0000034	-
Uranium	0.015	C	Open	0.000041	0.000051	28	0.000023	0.000025	0.000023	0.000025	-
			Ice	0.000061	0.000075	9	0.000028	0.000040	0.000031	0.000043	-
		O	Open	0.000041	0.000051	28	0.000023	0.000025	0.000024	0.000026	-
			Ice	0.000061	0.000075	9	0.000028	0.000040	0.000031	0.000045	-
		CL	Open	0.000041	0.000051	28	0.000023	0.000025	0.000024	0.000025	-
			Ice	0.000061	0.000075	9	0.000027	0.000038	0.000028	0.000039	-
		PC	Open	0.000041	0.000051	28	0.000024	0.000025	0.000025	0.000028	-
			Ice	0.000061	0.000075	9	0.000027	0.000038	0.000030	0.000042	-
Vanadium	0.1	C	Open	NA	NA	NA	0.00011985	0.0001283	0.0001237	0.0001332	-
			Ice	NA	NA	NA	0.0001485	0.000208	0.000162	0.0002251	-
		O	Open	NA	NA	NA	0.00012085	0.0001295	0.0001261	0.0001344	-
			Ice	NA	NA	NA	0.000144	0.000209	0.000161	0.0002361	-
		CL	Open	NA	NA	NA	0.00012165	0.0001297	0.0001244	0.0001329	-
			Ice	NA	NA	NA	0.0001395	0.000196	0.0001475	0.000207	-
		PC	Open	NA	NA	NA	0.00012305	0.0001318	0.0001319	0.000145	-
			Ice	NA	NA	NA	0.000142	0.000196	0.0001582	0.0002211	-

Appendix V5-4D10 . Summary of Screening for Effects to Water Quality in Little Roberts Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Zinc	0.03	C	Open	0.0015	0.0015	28	0.0020	0.0022	0.0020	0.0022	-
			Ice	0.0015	0.0025	9	0.0025	0.0035	0.0026	0.0037	-
		O	Open	0.0015	0.0015	28	0.0020	0.0022	0.0021	0.0022	-
			Ice	0.0015	0.0025	9	0.0024	0.0035	0.0026	0.0039	-
		CL	Open	0.0015	0.0015	28	0.0020	0.0022	0.0020	0.0022	-
			Ice	0.0015	0.0025	9	0.0023	0.0033	0.0024	0.0034	-
		PC	Open	0.0015	0.0015	28	0.0021	0.0022	0.0021	0.0023	-
			Ice	0.0015	0.0025	9	0.0024	0.0033	0.0025	0.0035	-
TSS	Narrative*	C	Open	3.13	5.08	28	3.01	3.26	3.06	3.34	-
			Ice	2.30	11.90	9	3.75	5.24	4.00	5.56	-
		O	Open	3.13	5.08	28	3.06	3.31	3.13	3.38	-
			Ice	2.30	11.90	9	3.66	5.28	4.01	5.90	-
		CL	Open	3.13	5.08	28	3.08	3.31	3.09	3.34	-
			Ice	2.30	11.90	9	3.56	5.00	3.63	5.10	-
		PC	Open	3.13	5.08	28	3.13	3.40	3.10	3.37	-
			Ice	2.30	11.90	9	3.68	5.02	3.71	5.10	-
Fluoride	0.12	C	Open	0.049	0.077	16	0.036	0.038	0.036	0.039	-
			Ice	0.093	0.123	6	0.044	0.062	0.047	0.065	-
		O	Open	0.049	0.077	16	0.036	0.039	0.037	0.040	-
			Ice	0.093	0.123	6	0.043	0.062	0.046	0.068	-
		CL	Open	0.049	0.077	16	0.036	0.039	0.036	0.039	-
			Ice	0.093	0.123	6	0.042	0.058	0.042	0.059	-
		PC	Open	0.049	0.077	16	0.037	0.039	0.037	0.039	-
			Ice	0.093	0.123	6	0.042	0.059	0.043	0.060	-

Appendix V5-4D10 . Summary of Screening for Effects to Water Quality in Little Roberts Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Chloride	120	C	Open	59.60	64.43	16	41.59	44.54	42.20	45.67	-
			Ice	151.75	274.50	6	51.53	72.08	54.68	76.18	-
		O	Open	59.60	64.43	16	41.95	44.99	43.01	45.94	-
			Ice	151.75	274.50	6	50.05	72.34	54.18	79.65	-
		CL	Open	59.60	64.43	16	42.24	45.07	42.31	45.38	-
			Ice	151.75	274.50	6	48.46	68.11	49.35	69.29	-
		PC	Open	59.60	64.43	16	42.72	45.78	42.14	45.13	-
			Ice	151.75	274.50	6	49.19	68.12	49.38	68.96	-
Free Cyanide	0.005	C	Open	0.0005	0.0011	18	0.00067	0.00072	0.00068	0.00074	-
			Ice	0.0005	0.0011	4	0.00083	0.00116	0.00088	0.00123	-
		O	Open	0.0005	0.0011	18	0.00068	0.00073	0.00069	0.00074	-
			Ice	0.0005	0.0011	4	0.00081	0.00117	0.00087	0.00129	-
		CL	Open	0.0005	0.0011	18	0.00068	0.00073	0.00068	0.00073	-
			Ice	0.0005	0.0011	4	0.00078	0.00110	0.00080	0.00112	-
		PC	Open	0.0005	0.0011	18	0.00069	0.00074	0.00068	0.00073	-
			Ice	0.0005	0.0011	4	0.00079	0.00110	0.00080	0.00111	-
Cyanide	0.2	C	Open	0.00050	0.00481	27	0.00066	0.00071	0.00068	0.00074	-
			Ice	0.00050	0.00766	8	0.00081	0.00113	0.00088	0.00123	-
		O	Open	0.00050	0.00481	27	0.00066	0.00071	0.00069	0.00074	-
			Ice	0.00050	0.00766	8	0.00078	0.00113	0.00087	0.00129	-
		CL	Open	0.00050	0.00481	27	0.00067	0.00072	0.00068	0.00073	-
			Ice	0.00050	0.00766	8	0.00076	0.00106	0.00080	0.00112	-
		PC	Open	0.00050	0.00481	27	0.00067	0.00073	0.00068	0.00073	-
			Ice	0.00050	0.00766	8	0.00078	0.00106	0.00080	0.00111	-

Appendix V5-4D10 . Summary of Screening for Effects to Water Quality in Little Roberts Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Ammonia	2.22	C	Open	0.0025	0.0114	28	0.0033	0.0035	0.0034	0.0037	-
			Ice	0.0370	0.2110	9	0.0040	0.0056	0.0044	0.0061	-
		O	Open	0.0025	0.0114	28	0.0033	0.0036	0.0035	0.0037	-
			Ice	0.0370	0.2110	9	0.0039	0.0056	0.0044	0.0064	-
		CL	Open	0.0025	0.0114	28	0.0033	0.0036	0.0034	0.0037	-
			Ice	0.0370	0.2110	9	0.0038	0.0053	0.0040	0.0056	-
		PC	Open	0.0025	0.0114	28	0.0034	0.0036	0.0034	0.0036	-
			Ice	0.0370	0.2110	9	0.0039	0.0053	0.0040	0.0056	-
Nitrate	3	C	Open	0.003	0.010	28	0.003	0.004	0.003	0.004	-
			Ice	0.038	0.145	9	0.004	0.006	0.004	0.006	-
		O	Open	0.003	0.010	28	0.003	0.004	0.003	0.004	-
			Ice	0.038	0.145	9	0.004	0.006	0.004	0.006	-
		CL	Open	0.003	0.010	28	0.003	0.004	0.003	0.004	-
			Ice	0.038	0.145	9	0.004	0.005	0.004	0.006	-
		PC	Open	0.003	0.010	28	0.003	0.004	0.003	0.004	-
			Ice	0.038	0.145	9	0.004	0.005	0.004	0.006	-
Nitrite	0.06	C	Open	0.00050	0.00050	28	0.00067	0.00072	0.00068	0.00074	-
			Ice	0.00090	0.00680	9	0.00083	0.00116	0.00088	0.00123	-
		O	Open	0.00050	0.00050	28	0.00068	0.00073	0.00069	0.00074	-
			Ice	0.00090	0.00680	9	0.00081	0.00117	0.00087	0.00129	-
		CL	Open	0.00050	0.00050	28	0.00068	0.00073	0.00068	0.00073	-
			Ice	0.00090	0.00680	9	0.00078	0.00110	0.00080	0.00112	-
		PC	Open	0.00050	0.00050	28	0.00069	0.00074	0.00068	0.00073	-
			Ice	0.00090	0.00680	9	0.00079	0.00110	0.00080	0.00111	-

Appendix V5-4D10 . Summary of Screening for Effects to Water Quality in Little Roberts Lake

Variable	Threshold*	Phase	Season	Observed			Baseline		Predicted		
				Median (mg/L)	95 th Quantile (mg/L)	N	Median (mg/L)	Maximum (mg/L)	Median (mg/L)	Maximum (mg/L)	Months Exceeding Threshold
Sulphate	Hardness Dependent	C	Open	3.73	5.00	28	1.79	1.92	1.83	1.98	-
			Ice	9.04	13.64	9	2.21	3.09	2.39	3.34	-
		O	Open	3.73	5.00	28	1.80	1.94	1.87	2.00	-
			Ice	9.04	13.64	9	2.15	3.11	2.39	3.50	-
		CL	Open	3.73	5.00	28	1.82	1.94	1.85	1.98	-
			Ice	9.04	13.64	9	2.08	2.93	2.18	3.06	-
		PC	Open	3.73	5.00	28	1.84	1.97	3.53	3.72	-
			Ice	9.04	13.64	9	2.12	2.93	5.05	7.69	-
Total Phosphorus	Guidance Framework*	Construc- tion	open	0.019	0.024	28	0.015	0.017	0.016	0.017	-
			ice	0.028	0.069	9	0.019	0.026	0.020	0.028	-
		Operatio- ns	open	0.019	0.024	28	0.016	0.017	0.016	0.017	-
			ice	0.028	0.069	9	0.019	0.027	0.020	0.030	-
		Closure	open	0.019	0.024	28	0.016	0.017	0.016	0.017	-
			ice	0.028	0.069	9	0.018	0.025	0.018	0.026	-
		Post- Closure	open	0.019	0.024	28	0.016	0.017	0.016	0.017	-
			ice	0.028	0.069	9	0.019	0.025	0.019	0.026	-

C = Construction; O = Operations; CL = Closure; PC = Post-Closure.

Open = Open-Water (June to September); Ice = Under-Ice (October to May).

*See Table 4.5-2 in Volume 5, Chapter 4 of the Final Environmental Impact Statement.