APPENDIX B

Historical Data

Table B-1: Surface Water General Chemistry in 1988 and 1998 Select Study Lakes
Thor Lake, NT
Project #: 1235-10050

Parameter	Units	September 1988[a,c]								
		Thor Lake Surface	Thor Lake Bottom	Elbow Lake Surface	Elbow Lake Bottom	Fred Stream	Cressy Lake Surface	Cressy Lake Bottom	Ring Lake	Lake A
Micronutrients										
Ammonia-N	mg/L	0.07	0.09	0.09	0.07	0.09	0.09	0.11	0.17	0.08
Nitrate+Nitrite-N	mg/L	0.04	0.04	0.05	0.04	0.04	0.05	0.04	0.08	0.04
Total Kjeldahl Nitrogen	mg/L	1.1	0.73	0.64	0.66	0.69	0.79	0.93	1.8	0.66
Total Phosphorus (P)	mg/L	0.03	0.06	0.13	0.25	0.04	0.04	0.09	0.19	0.23
Orthophosphate (PO_4-P)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total Inorganic Carbon	mg/L	36	35	36	39	36	24	24	29	33
Total Organic Carbon	mg/L	16	16	12	12	16	19	19	33	18
Major Ions & Inorganics										
pH	-	7.90	7.80	7.60	7.70	-	7.50	-	7.50	8.00
Chloride (Cl)	mg/L	5.4	5.4	1.7	1.7	5.4	0.9	0.9	1	4.8
Calcium (Ca)	mg/L	30	30	33	33	30	24	24	30	29
Potassium (K)	mg/L	2.1	2.1	2.3	2.3	2	2	2	2.6	1.6
Magnesium (Mg)	mg/L	18	18	19	19	18	11	11	14	17
Sodium (Na)	mg/L	6.5	6.6	4.1	4.1	6.3	2.5	2.5	2.1	5.7
Sulphate (SO_4)	mg/L	0.4	0.4	0.8	0.7	0.6	3.8	3.8	0.9	1
Total Suspended Solids (TSS)	mg/L	2	2	2	3	-	4	3	8	1
Total Dissolved Solids (TDS)	mg/L	190	199	188	194	-	152	157	204	188
Hardness (as CaCO3)	mg/L	149	149	161	161	-	105	105	133	142
Bicarbonate (HCO_3)	mg/L	181	180	183	197	182	122	122	148	167
Carbonate (CO_3)	mg/L	2	2	7	NIL	NIL	NIL	NIL	NIL	NIL
Hydroxide (OH)	mg/L	-	-	-	-	-	-	-	-	-
Total Alkalinity (as $CaCO_3$)	mg/L	73	78	84	83	-	51	51	63	71

Notes:
[a] September 1988 data from SENES Consultants Ltd. Thor Lake Area Environmental Baseline Survey 1989 (prepared by the Saskatchewan Research Council)
[b] June 1998 data from Highwood Resources Ltd. Environmental Survey of the Thor Lake Area 1998 (prepared by Golder Associates Ltd.)
[c] Detection limits not reported; implied by less than ("<") values

Table B-1: Surface Water General Chemistry in 1988 and 1998 Select Study Lakes
Thor Lake, NT
Project #: 1235-10050

Parameter	Units	June 1998[b,c]											
		Thor Lake Replicate 1	Thor Lake Replicate 2	Thor Lake Replicate 3	Elbow Lake Replicate 1	Elbow Lake Replicate 2	Elbow Lake Replicate 3	Blachford Replicate 1	Blachford Replicate 2	Blachford Replicate 3	Great Slave Replicate 1	Great Slave Replicate 2	Great Slave Replicate 3
Micronutrients													
Ammonia-N	mg/L	0.025	0.017	0.027	0.031	0.016	0.021	0.008	<0.005	0.015	<0.005	<0.005	<0.005
Nitrate+Nitrite-N	mg/L	<0.006	<0.006	<0.006	0.006	<0.006	<0.006	<0.006	<0.006	<0.006	0.085	0.085	0.127
Total Kjeldahl Nitrogen	mg/L	0.87	0.89	0.94	0.74	0.73	0.73	0.31	0.34	0.39	0.24	0.37	0.22
Total Phosphorus (P)	mg/L	-	-	-	-	-	-	0.007	0.007	0.007	0.004	0.003	0.003
Orthophosphate (PO_4-P)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Inorganic Carbon	mg/L	37	37	37	42	42	42	30	30	30	18	18	18
Total Organic Carbon	mg/L	15	15	15	12	12	12	7	7	7	5	5	5
Major Ions & Inorganics													
pH	-	8.70	-	-	8.67	-	-	-	-	-	8.70	-	-
Chloride (Cl)	mg/L	4.6	4.6	4.6	2.3	2.3	2.3	3.4	3.4	3.4	5.7	5.7	5.9
Calcium (Ca)	mg/L	29.1	29.2	29.1	31.4	31.5	31.5	24.7	24.5	24.7	22.8	22.7	22.5
Potassium (K)	mg/L	1.9	1.9	1.9	2.4	2.4	2.4	2.5	2.5	2.5	1.0	1.0	1.0
Magnesium (Mg)	mg/L	16.2	16.2	16.2	19	19.3	19	12.6	12.5	12.6	5.4	5.3	5.1
Sodium (Na)	mg/L	6	6	6	5	4	5	5	5	5	6	6	6
Sulphate (SO_4)	mg/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	5.5	5.4	6.0	15.2	16.0	16.0
Total Suspended Solids (TSS)	mg/L	5	2	<2	<2	5	5	<2	<2	7	6	5	<2
Total Dissolved Solids (TDS)	mg/L	143	143	144	158	156	156	122	122	123	96	98	97
Hardness (as CaCO3)	mg/L	139	140	139	157	158	157	14	113	114	79	79	77
Bicarbonate (HCO_3)	mg/L	173	173	174	197	193	193	140	140	140	82	83	80
Carbonate (CO_3)	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Hydroxide (OH)	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Total Alkalinity (as $CaCO_3$)	mg/L	142	142	143	163	160	159	114	115	115	67	68	66

Table B-2: Surface Water Total Metals in 1988 and 1998 Select Study Lakes
Thor Lake, NT
Project #: 1235- 10050

Parameter	Units	September 1988[a,c]								
		Thor Lake Surface	Thor Lake Bottom	Elbow Lake Surface	Elbow Lake Bottom	Fred Stream	Cressy Lake Surface	Cressy Lake Bottom	Ring Lake	Lake A
Aluminum (Al)	µg/L	14	<5	<5	<5	<5	<5	<5	<5	<5
Arsenic (As)	µg/L	<0.5	<0.5	<0.5	0.6	<0.05	1.9	2.0	<0.5	<0.05
Barium (Ba)	µg/L	72	80	85	84	59	15	20	59	41
Beryllium (Be)	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Boron (B)	µg/L	50	<50	90	<50	<50	<50	<50	<50	<50
Cadmium (Cd)	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cerium (Ce)	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium (Cr)	µg/L	7	9	15	8	4	5	2	5	4
Cobalt (Co)	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Copper (Cu)	µg/L	<1	2	<1	3	<1	<1	2	<1	<1
Iron (Fe)	µg/L	78	84	27	47	56	300	310	58	42
Lead (Pb)	µg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Manganese (Mn)	µg/L	35	39	50	76	25	54	56	17	3
Mercury (Hg)	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Molybdenum (Mo)	µg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel (Ni)	µg/L	<1	<1	<1	2	<1	1	<1	<1	<1
Niobium (Nb)	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Silver (Ag)	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tantalum (Ta)	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium (Tl)	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tungsten (W)	µg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Uranium (U)	µg/L	<0.5	<0.05	<0.05	<0.5	<0.05	1.0 (±0.8)	1.1 (±0.8)	<0.5	<0.05
Vanadium (V)	µg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Yttrium (Y)	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Zinc (Zn)	µg/L	3	2	<1	<1	1	2	2	3	2

Notes:

[a] September 1988 data from SENES Consultants Ltd. Thor Lake Area Environmental Baseline Survey 1989 (prepared by the Saskatchewan Research Council)

[b] June 1998 data from Highwood Resources Ltd. Environmental Survey of the Thor Lake Area 1998 (prepared by Golder Associates Ltd.)

[c] Detection limits not reported; implied by less than ("<") values

Table B-2: Surface Water Total Metals in 1988 and 1998 Select Study Lakes
Thor Lake, NT
Project #: 1235- 10050

Parameter	Units	June 1998[b,c]											
		Thor Lake Replicate 1	Thor Lake Replicate 2	Thor Lake Replicate 3	Elbow Lake Replicate 1	Elbow Lake Replicate 2	Elbow Lake Replicate 3	Blachford Replicate 1	Blachford Replicate 2	Blachford Replicate 3	Great Slave Replicate 1	Great Slave Replicate 2	Great Slave Replicate 3
Aluminum (Al)	µg/L	20	20	20	30	20	20	70	70	70	30	30	30
Arsenic (As)	µg/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Barium (Ba)	µg/L	19	18	18	20	19	15	<1	<1	<1	<1	<1	<1
Beryllium (Be)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Boron (B)	µg/L	<1	<1	<1	<1	<1	<1	22	17	17	9	6	5
Cadmium (Cd)	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<2	<0.2	<0.2	<0.2	<0.2
Cerium (Ce)	µg/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Chromium (Cr)	µg/L	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Cobalt (Co)	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Copper (Cu)	µg/L	1	<1	1	<1	<1	<1	<1	1	1	1	2	2
Iron (Fe)	µg/L	200	230	230	180	180	180	220	200	200	180	180	190
Lead (Pb)	µg/L	1.4	0.8	1.4	<0.1	<0.1	<0.1	0.1	0.2	0.2	<0.1	<0.1	0.1
Manganese (Mn)	µg/L	22.2	23.3	23.8	11.3	11.8	11.4	3.2	3.1	3.0	1.1	1.7	0.9
Mercury (Hg)	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Molybdenum (Mo)	µg/L	2.2	2.2	2.3	4.3	4.3	4.1	0.5	0.4	0.5	0.9	0.8	0.9
Nickel (Ni)	µg/L	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1	8.2	<0.2	<0.2	<0.2
Niobium (Nb)	µg/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Silver (Ag)	µg/L	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Tantalum (Ta)	µg/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Thallium (Tl)	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tungsten (W)	µg/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Uranium (U)	µg/L	-	-	-	-	-	-	-	-	-	-	-	-
Vanadium (V)	µg/L	0.4	0.4	0.4	0.4	0.4	0.3	0.5	0.5	0.5	0.4	0.4	0.4
Yttrium (Y)	µg/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc (Zn)	µg/L	<4	<4	<4	<4	<4	<4	<4	6	<4	12	<4	<8

Table B-3: Surface Radionuclides in 1988 and 1998 Select Study Lakes
Thor Lake, NT
Project #: 1235-10050

Parameter	Units	September 1988[a]								
		Thor Lake		Elbow Lake		Fred Stream	Cressy Lake		Ring Lake	Lake A
		Surface	Bottom	Surface	Bottom		Surface	Bottom		
Lead-210 (^{210}Pb)	Bq/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Radium-226 (^{226}Ra)	Bq/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Radium-228 (^{228}Ra)	Bq/L	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Thorium-230 (^{230}Th)	Bq/L	<0.01	0.04	<0.01	0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Thorium-232 (^{232}Th)	Bq/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Uranium-238 (^{238}U)	Bq/L	-	-	-	-	-	-	-	-	-

Notes:

[a] September 1988 data from SENES Consultants Ltd. Thor Lake Area Environmental Baseline Survey 1989 (prepared by the Saskatchewan Research Council)

[b] June 1998 data from Highwood Resources Ltd. Environmental Survey of the Thor Lake Area 1998 (prepared by Golder Associates Ltd.)

[c] June 1998 data reported as total radionuclide activity ± error

Table B-3: Surface Radionuclides in 1988 and 1998 Select Study Lakes
Thor Lake, NT
Project #: 1235-10050

Parameter	Units	June 1998[b,c]			
		Thor Lake	Elbow Lake	Blachford	Great Slave Lake
Lead-210 (^{210}Pb)	Bq/L	<0.07 (± 0.041)	<0.07 (± 0.041)	0.011 (± 0.041)	<0.07 (± 0.041)
Radium-226 (^{226}Ra)	Bq/L	0.022 (± 0.007)	0.015 (± 0.007)	0.011 (± 0.007)	0.022 (± 0.007)
Radium-228 (^{228}Ra)	Bq/L	0.019 (± 0.019)	0.004 (± 0.015)	0.004 (± 0.015)	0.019 (± 0.019)
Thorium-230 (^{230}Th)	Bq/L	0.004 (± 0.004)	0.019 (± 0.015)	0.011 (± 0.011)	0.011 (± 0.007)
Thorium-232 (^{232}Th)	Bq/L	<0.004 (± 0.004)	<0.007 (± 0.004)	<0.011 (± 0.004)	0.004 (± 0.004)
Uranium-238 (^{238}U)	Bq/L	0.004 (± 0.007)	0.011 (± 0.007)	<0.007 (± 0.007)	0.007 (± 0.007)

Table B-4: Sediment General Chemistry in 1998 Select Study Lakes
Thor Lakes, NT
Project #: 1235-10050

Parameter	Units	June 1998[a,b]								
		Thor			Elbow			Blachford		
		Replicate 1	Replicate 2	Replicate 3	Replicate 1	Replicate 2	Replicate 3	Replicate 1	Replicate 2	Replicate 3
Major Ions and Inorganics										
% Saturation	%	284	379	400	616	590	635	105	97	59
Total Alkalinity	mg/kg	56	52	48	110	42	91	33	59	59
Bicarbonate (HCO_3)	mg/kg	69	64	58	134	51	111	40	72	72
Carbonate (CO_3)	mg/kg	<5	<5	<5	<5	<5	<5	<5	<5	<5
Conductivity	µS/cm	0.19	0.20	0.18	0.26	0.24	0.22	0.18	0.17	0.20
SAR	mg/kg	0.4	0.5	0.3	0.3	0.2	0.2	0.4	0.4	0.5
pH	-	6.70	6.80	6.90	7.70	7.60	7.60	6.10	6.30	6.50
Sulphate (SO_4)	mg/kg	30.8	35.1	28.6	30.9	25.8	24.2	37.7	41.3	30.0
Silver (Ag)	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<1
Aluminum (Al)	mg/kg	4900	5720	5630	1300	1400	1260	11300	8130	9750
Arsenic (As)	mg/kg	3.5	4.1	3.8	2.8	3.0	2.6	4.5	3.7	3.9
Boron (B)	mg/kg	12	13	13	29	35	31	10	6	5
Beryllium (Be)	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<1
Calcium (Ca)	mg/kg	15.3	16.4	14.2	30.2	30	29.6	16.5	18.3	20.0
Cerium (Ce)	mg/kg	-	-	-	-	-	-	44	43	44.0
Cadmium (Cd)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloride (Cl)	mg/kg	9.3	9.8	8.7	6.8	6.1	11.3	7.8	8.8	9.1
Cobalt (Co)	mg/kg	5	6	6	2	2	2	5	5	6
Chromium (Cr)	mg/kg	11.2	13.1	13.0	3.5	3.7	3.2	19.0	14.5	18.5
Copper (Cu)	mg/kg	19	20	23	20	23	17	12	11	13
Iron (Fe)	mg/kg	12100	14100	14200	9700	11300	9800	11000	9230	11600
Mercury (Hg)	mg/kg	0.04	0.04	0.05	0.11	0.12	0.11	0.05	0.02	0.02
Potassium (K)	mg/kg	2.8	3.0	2.6	3.2	2.1	3.2	5.8	6.4	4.0
Magnesium (Mg)	mg/kg	5.8	5.9	5.0	10.6	10.0	8.9	6.7	6.9	8.2
Manganese (Mn)	mg/kg	249	271	284	863	1010	828	122	105	143
Molybdenum (Mo)	mg/kg	3	4	5	2	2	3	<1	<1	<1
Sodium (Na)	mg/kg	7	9	6	7	6	6	7	7	10
Niobium (Nb)	mg/kg	0.47	0.58	0.61	0.26	0.29	0.26	0.18	0.17	0.17

Table B-4: Sediment General Chemistry in 1998 Select Study Lakes
Thor Lakes, NT
Project #: 1235-10050

Parameter	Units	June 1998[a,b]								
		Thor			Elbow			Blachford		
		Replicate 1	Replicate 2	Replicate 3	Replicate 1	Replicate 2	Replicate 3	Replicate 1	Replicate 2	Replicate 3
Nickel (Ni)	mg/kg	11	13	14	4	4	3	13	11	14
Lead (Pb)	mg/kg	<5	<5	<5	<5	<5	<5	6	5	7
Tantalum (Ta)	mg/kg	<0.05	<0.05	<0.05	0.05	0.08	<0.05	<0.05	<1.05	<0.05
Thallium (Tl)	mg/kg	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tungsten (W)	mg/kg	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vanadium (V)	mg/kg	21	24	23	5	6	6	26	21	24
Ytterbium (Yb)	mg/kg	4.72	5.36	5.54	3.01	3.49	3.04	7.00	6.00	6.75
Zinc (Zn)	mg/kg	41.3	45.9	44.3	25.0	25.1	22.4	57.9	36.3	43.0

Notes:

[a] June 1998 data from Highwood Resources Ltd. Environmental Survey of the Thor Lake Area 1998 (prepared by Golder Associates Ltd.)

[b] Detection limits not reported; implied by less than ("<") values

Table B-5: Sediment Radionuclides in 1998 Select Study Lakes
Thor Lake, NT
Project #: 1235-10050

Parameter	Units	June 1998[a,b,c]								
		Thor			Elbow			Blachford		
Lead-210 (^{210}Pb)	Bq/g	0.330 (± 0.048)	0.348 (± 0.048)	0.333 (± 0.048)	0.293 (± 0.048)	0.344 (± 0.048)	0.322 (± 0.048)	0.022 (± 0.063)	0.052 (± 0.063)	0.085 (± 0.063)
Radium-226 (^{226}Ra)	Bq/g	0.070 (± 0.022)	<0.085 (± 0.052)	0.093 (± 0.019)	0.070 (± 0.019)	0.100 (± 0.030)	0.070 (± 0.019)	0.070 (± 0.015)	0.085 (± 0.022)	0.070 (± 0.015)
Radium-228 (^{228}Ra)	Bq/g	<0.048 (± n/r)	n/r (± 0.019)	0.093 (± 0.022)	<0.033 (± n/r)	<0.056 (± n/r)	0.044 (± 0.022)	0.093 (± 0.015)	0.052 (± 0.019)	0.089 (± 0.015)
Thorium-230 (^{230}Th)	Bq/g	0.030 (± 0.011)	0.030 (± 0.011)	0.070 (± 0.022)	0.015 (± 0.007)	0.015 (± 0.007)	0.015 (± 0.007)	0.030 (± 0.022)	0.056 (± 0.041)	0.026 (± 0.019)
Thorium-232 (^{232}Th)	Bq/g	0.041 (± 0.015)	0.033 (± 0.011)	0.033 (± 0.015)	0.007 (± 0.004)	0.007 (± 0.004)	0.007 (± 0.004)	0.059 (± 0.026)	0.063 (± 0.041)	0.067 (± 0.030)
Uranium-238 (^{238}U)	Bq/g	0.052 (± 0.015)	0.059 (± 0.022)	0.093 (± 0.033)	0.115 (± 0.022)	0.089 (± 0.022)	0.078 (± 0.019)	0.059 (± 0.015)	0.037 (± 0.011)	0.037 (± 0.011)

Notes:

[a] June 1998 data from Highwood Resources Ltd. Environmental Survey of the Thor Lake Area 1998 (prepared by Golder Associates Ltd.)

[b] June 1998 data reported as total radionuclide activity ± error

[c] n/r = result not reported

Table B-6: Chlorophyll Concentrations in 1988 Study Lakes[a]
Thor Lake, NT
Project #: 1235-10050

Chlorophyll	Units	September 1988								
		Thor Lake Surface	Thor Lake Bottom	Elbow Lake Surface	Elbow Lake Bottom	Fred Stream	Cressy Lake Surface	Cressy Lake Bottom	Ring Lake	Lake A
Chlorophyll *a*	µg/L	3.45	3.98	0.68	0.78	-	5.08	6.48	0.60	0.95
Chlorophyll *b*	µg/L	3.20	2.18	4.10	2.00	-	2.78	4.63	1.56	2.45

Notes:
[a] September 1988 data from SENES Consultants Ltd. Thor Lake Area Environmental Baseline Survey 1989 (prepared by the Saskatchewan Research Council)

Table B-7: Zooplankton Densities (organisms per litre) in 1998 Study Lakes[a]
Thor Lake, NT
Project #: 1235-10050

Species/Groups	Lake				
	Thor	Elbow	A	Cressy	Ring
Copepoda					
- Calanoida					
Limnocalanus macrurus	-	0.033	0.006		
Epischura lacustris	0.002	-	-		
Diaptomus sicilis					
- adults	0.055	0.027	-		
- juveniles	0.024	0.019	-		
Diaptomus pribilofensis					
- adults	0.002	-	0.033		
- juveniles	-	-	0.035		
Hetercope septrionalis	-	-	-	0.026	0.082
- Cyclopoida					
Cyclops scutifer	0.749	0.146	-		
Cyclops bicuspidatus thomasi[b]	3.6	0.243	-	-	3.83
- Total naupliar junveniles	0.6	1.94	-	9.57	1.28
Cladocera					
Daphnia galeata mendotae	-	-	-	0.036	0.041
Daphnia longiremis	-	0.024	-		
Daphnia longirostris	3.3	0.243	-		
Diptera					
Chaoborus americanus	-	-	-	0.036	0.005
Rotifera					
Kellicottia longispina	3	-	7.28	14.6	-
Other small rotifers	27	12.1	72.8	87.4	-

Notes:

[a] September 1988 data from SENES Consultants Ltd. Thor Lake Area Environmental Baseline Survey 1989 (prepared by the Saskatchewan Research Council)

[b] May include juvenile copepodids of *Cyclops scutifer* in Thor and Elbow

APPENDIX C

Photographs

Photo 1: Aerial view of Fred Out, showing outlet from Fred and culvert under road, May 2009

Photo 2: Aerial view of Fred Out, downstream from road, showing marsh sections with no fish passage, May 2009

Photo 3 Fred Out, downstream from road, showing gauging station, May 2009

Photo 4: Thor Out looking upstream at Thor Lake and 1.2 m bedrock cascade, May 2009

Photo 5: Thor Out looking downstream toward Fred Lake, May 2009

Photo 6: Cressy Out showing wetted areas in a bog. The water in the puddle was visibly flowing, May 2009

Photo 7: Cressy Out showing wetted area in bog and absence of defined channel, May 2009

Photo 8: Northern pike captured in a deep section of Murky Out, May 2009

Photo 9: Long Out looking upstream from Thor Lake, May 2009

Photo 10: South Tardiff Out looking upstream at an earth dam, May 2009

Photo 11: Megan Out showing lack of defined channel and discontinuous surface flow, May 2009

Photo 12: Spruce forest in mapped location of Thorn Out. No visible channel, May 2009

Photo 13: Looking upstream at Elbow Out flowing across the beach at Great Slave Lake, May 2009

Photo 14: Looking downstream at Elbow Out; showing discontinuous surface flow through a swamp, May 2009

Photo 15: A Lake showing inlet (Fred Out), September 2009

Photo 16: Buck Lake showing black spruce riparian area and grassy shoreline, September 2009

Photo 17: Carrot Lake showing bedrock islands and bedrock bluff in background, September 2009

Photo 18: Cressy Out showing bedrock bluff, September 2009

Photo 19: Dinosaur showing bedrock bluff, September 2009

Photo 20: Drizzle showing emergent aquatic plants and black spruce forest, September 2009

Photo 21: Aerial view looking southwest at Elbow Lake, October 2009

Photo 22: Elbow Lake showing black spruce forest and grassy margin. Boulders are visible on the lake bottom, September 2009

Photo 23: Aerial view looking southeast at Fred Lake, Thor Lake behind, September 2008

Photo 24: Great Slave Lake, looking north toward dock site beach, September 2009

Photo 25: Kinnikinnick Lake, showing bedrock bluff, September 2009

Photo 26: Long Lake, showing aquatic vegetation in littoral area and field staff dip netting, September 2009

Photo 27: Megan Lake showing black spruce forest and birch, September 2009

Photo 28: Murky Lake showing floating aquatic vegetation and black spruce forest, September 2009

Photo 29: North Tardiff Lake showing floating aquatic vegetation and floating vegetation mat around lake margin, September 2009

Photo 30: Pistol Lake. Two bays and a bedrock bluff are visible in the background, September 2009

Photo 31: Porkchop Lake showing black spruce forest and thunderheads, September 2009

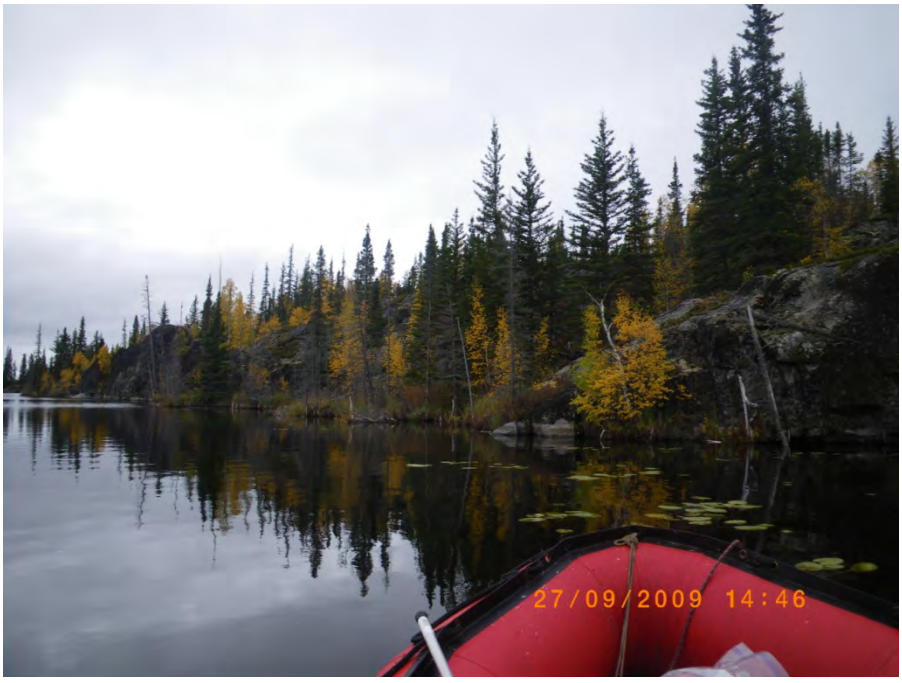

Photo 32: Redemption Lake showing bedrock bluff, black spruce forest and floating aquatic vegetation, September 2009

Photo 33: Ring Lake showing black spruce forest; boulders visible in the water, September 2009

Photo 34: South Tardiff Lake showing floating aquatic vegetation and floating mat of shoreline vegetation, September 2009

Photo 35: Thor Lake showing black spruce forest and Thor Lake Camp in the background, September 2009

Photo 36: Thorn Lake showing black spruce forest and a patch of emergent aquatic vegetation, September 2009

Photo 37: U Lake showing black spruce forest and soft bottom sediments, September 2008

Photo 38: External parasite on the caudal fin of a lake whitefish caught in Long Lake, September 2009

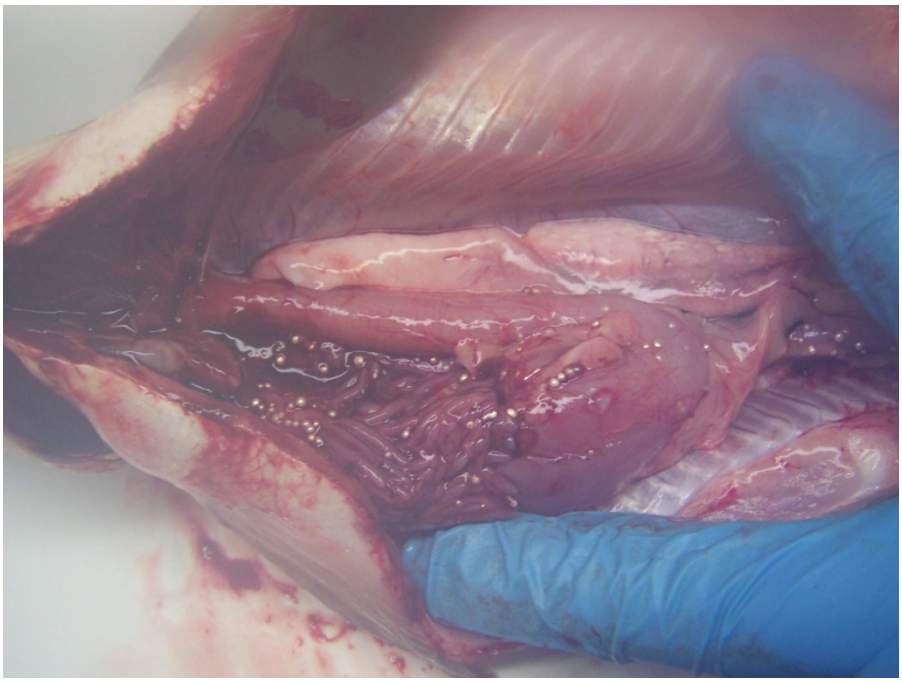

Photo 39: Cysts, assumed to be related to parasites, on the gastrointestinal tract of a male lake whitefish, September 2008