



Suite 220, 17010 – 103 Ave
Edmonton, AB T5S 1K7
Canada
Office: 780-435-0045

RECEIVED

By clerk at 1:24 pm, Jun 30, 2011

June 30, 2011

Phyllis Beaulieu, Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, Nunavut
X0B 1J0

Delivered by email.

RE: Water Licenses NWB1JER0410 Monthly Report- May 2011

Following is the monthly report for May 2011 as required under the Water License 2AM-JER0410. Results of water monitoring as proposed in section 5.0 of Appendix C (General Monitoring Plan) of the Care and Maintenance Plan submitted to the Water Board in January 2011 are included below.

JER-SWQ-01 (previously JER-SW1)/

The results from JER-SWQ-01, Waste Water Treatment effluent are below. Please note that the sample was taken prior to the replacement of the ultraviolet light bulbs. The cubic meters of water discharge in May from the Waste Water Treatment at station JER-SWF-04 to the Process Kimberlite Containment Area was 85m³. This is a manual calculation. The totalizer for recording flow out from the WWTP is now functional and is recorded daily.

ALS	SWQ-01
6/30/2011	L1009421-4
L1009421	5/25/2011 5:55:00 AM
Analyte	Water
Hardness (as CaCO3)	-
Total Suspended Solids	9
Total Kjeldahl Nitrogen	4.91
pH	7.2
Orthophosphate-Dissolved (as P)	3.38
TDS (Calculated)	382
Sulfate (SO4)	43.1
Fecal Coliforms	6800
Biochemical Oxygen Demand	5.3
Oil and Grease	1

Sewage sludge was removed from the WWTP in May. Approximately 10m³ was pumped out and deposited in the waste rock pile at 12W 0478298 7319368.

JER-SWF-01 (previously JER -WQ1)

The main station pump at Carat Lake Causeway is not operational at this time. The water taken for domestic purposes at this time is taken from Carat Lake by pump and transported by water truck to tanks within the accommodation unit. Volume drawn is calculated manually. Water drawn from Carat Lake in May was 105m³. The results from sampling at this location are below.

ALS		Sample ID	Carat Lake Intake
6/30/2011		ALS ID	L1010621-10
L1010621		Date Sampled	5/30/2011
Analyte	Units	LOR	Water
Hardness (as CaCO3)	mg/L	0.5	5.11
Total Suspended Solids	mg/L	3	<3.0
Total Dissolved Solids	mg/L	5	10
Temperature	Degree C	1	25
Turbidity	NTU	0.1	3.16
Acidity (as CaCO3)	mg/L	5	<5.0
Alkalinity, Total (as CaCO3)	mg/L	5	<5.0
Ammonia (as N)	mg/L	0.005	0.0158
Bicarbonate (HCO3)	mg/L	5	5.7
Carbonate (CO3)	mg/L	5	<5.0
Chloride (Cl)	mg/L	0.5	<0.50
Conductivity (EC)	uS/cm	0.2	11.6
Fluoride (F)	mg/L	0.05	<0.050
Hardness (as CaCO3)	mg/L	n/a	5.2
Hydroxide (OH)	mg/L	5	<5.0
Ion Balance	%	n/a	Low EC
Nitrate and Nitrite (as N)	mg/L	0.006	0.0508
Nitrate (as N)	mg/L	0.006	0.0508
Nitrite (as N)	mg/L	0.002	<0.0020
pH	pH	0.1	6.97
Orthophosphate-Dissolved (as P)	mg/L	0.001	<0.0010
Phosphorus (P)-Total Dissolved	mg/L	0.001	<0.0010
Phosphorus (P)-Total	mg/L	0.001	0.0071
TDS (Calculated)	mg/L	n/a	3
Sulfate (SO4)	mg/L	0.05	0.638
Fecal Coliforms	CFU/100mL	1	<1
Calcium (Ca)-Total	mg/L	0.05	1.18
Iron (Fe)-Total	mg/L	0.01	0.114
Magnesium (Mg)-Total	mg/L	0.05	0.589
Mercury (Hg)-Total	mg/L	0.00005	<0.000050
Phosphorus (P)-Total	mg/L	0.05	<0.050
Potassium (K)-Total	mg/L	0.2	0.37
Silicon (Si)-Total	mg/L	0.05	0.581
Sodium (Na)-Total	mg/L	0.2	0.52
Aluminum (Al)-Total	mg/L	0.0002	0.09
Antimony (Sb)-Total	mg/L	0.000005	0.0000258
Arsenic (As)-Total	mg/L	0.00002	0.000174
Barium (Ba)-Total	mg/L	0.00002	0.0024
Beryllium (Be)-Total	mg/L	0.000002	0.0000055
Bismuth (Bi)-Total	mg/L	0.000001	0.0000023
Boron (B)-Total	mg/L	0.005	<0.0050
Cadmium (Cd)-Total	mg/L	0.000005	0.0000065
Cesium (Cs)-Total	mg/L	0.000005	0.0000165
Chromium (Cr)-Total	mg/L	0.00005	0.000336
Cobalt (Co)-Total	mg/L	0.000005	0.0000943
Copper (Cu)-Total	mg/L	0.00005	0.00249

Gallium (Ga)-Total	mg/L	0.00005	<0.000050
Lead (Pb)-Total	mg/L	0.000005	0.000288
Lithium (Li)-Total	mg/L	0.0002	0.00042
Manganese (Mn)-Total	mg/L	0.000005	0.00711
Molybdenum (Mo)-Total	mg/L	0.00001	0.000052
Nickel (Ni)-Total	mg/L	0.00005	0.00123
Rhenium (Re)-Total	mg/L	0.000005	<0.0000050
Rubidium (Rb)-Total	mg/L	0.000005	0.000778
Selenium (Se)-Total	mg/L	0.00004	<0.000040
Silver (Ag)-Total	mg/L	0.000005	<0.0000050
Strontium (Sr)-Total	mg/L	0.00001	0.00419
Tellurium (Te)-Total	mg/L	0.00001	<0.000010
Thallium (Tl)-Total	mg/L	0.000001	0.0000023
Thorium (Th)-Total	mg/L	0.000005	0.0000382
Tin (Sn)-Total	mg/L	0.00001	0.000014
Titanium (Ti)-Total	mg/L	0.00005	0.0026
Tungsten (W)-Total	mg/L	0.00001	<0.000010
Uranium (U)-Total	mg/L	0.000001	0.000632
Vanadium (V)-Total	mg/L	0.00001	0.000224
Yttrium (Y)-Total	mg/L	0.000005	0.000156
Zinc (Zn)-Total	mg/L	0.0001	0.00241
Zirconium (Zr)-Total	mg/L	0.00001	0.000175
Aluminum (Al)-Dissolved	mg/L	0.0002	0.0197
Antimony (Sb)-Dissolved	mg/L	0.000005	0.00002
Arsenic (As)-Dissolved	mg/L	0.00002	0.00014
Barium (Ba)-Dissolved	mg/L	0.00002	0.00163
Beryllium (Be)-Dissolved	mg/L	0.000002	<0.0000020
Bismuth (Bi)-Dissolved	mg/L	0.000001	<0.0000010
Boron (B)-Dissolved	mg/L	0.005	<0.0050
Cadmium (Cd)-Dissolved	mg/L	0.000005	0.0000077
Calcium (Ca)-Dissolved	mg/L	0.05	1.17 *
Cesium (Cs)-Dissolved	mg/L	0.000005	<0.0000050
Chromium (Cr)-Dissolved	mg/L	0.00005	0.000104
Cobalt (Co)-Dissolved	mg/L	0.000005	0.0000323
Copper (Cu)-Dissolved	mg/L	0.00005	0.00203
Gallium (Ga)-Dissolved	mg/L	0.00005	<0.000050
Iron (Fe)-Dissolved	mg/L	0.01	0.015
Lead (Pb)-Dissolved	mg/L	0.000005	0.000072
Lithium (Li)-Dissolved	mg/L	0.0002	0.00033
Magnesium (Mg)-Dissolved	mg/L	0.05	0.530 *
Manganese (Mn)-Dissolved	mg/L	0.000005	0.00545
Mercury (Hg)-Dissolved	mg/L	0.00005	<0.000050
Molybdenum (Mo)-Dissolved	mg/L	0.00001	0.000048
Nickel (Ni)-Dissolved	mg/L	0.00005	0.000511
Phosphorus (P)-Dissolved	mg/L	0.05	<0.050
Potassium (K)-Dissolved	mg/L	0.1	0.44 *
Rhenium (Re)-Dissolved	mg/L	0.000005	<0.0000050
Rubidium (Rb)-Dissolved	mg/L	0.000005	0.000637
Selenium (Se)-Dissolved	mg/L	0.00004	<0.000040
Silicon (Si)-Dissolved	mg/L	0.05	0.276
Silver (Ag)-Dissolved	mg/L	0.000005	<0.0000050
Sodium (Na)-Dissolved	mg/L	0.2	0.54 *

Strontium (Sr)-Dissolved	mg/L	0.00001	0.00412
Tellurium (Te)-Dissolved	mg/L	0.00001	<0.000010
Thallium (Tl)-Dissolved	mg/L	0.000001	0.0000017
Thorium (Th)-Dissolved	mg/L	0.000005	0.0000203
Tin (Sn)-Dissolved	mg/L	0.00001	0.000017
Titanium (Ti)-Dissolved	mg/L	0.00005	0.000222
Tungsten (W)-Dissolved	mg/L	0.00001	<0.000010
Uranium (U)-Dissolved	mg/L	0.000001	0.000521
Vanadium (V)-Dissolved	mg/L	0.00001	0.000103
Yttrium (Y)-Dissolved	mg/L	0.000005	0.0000977
Zinc (Zn)-Dissolved	mg/L	0.0001	0.00515
Zirconium (Zr)-Dissolved	mg/L	0.00001	0.000076
Biochemical Oxygen Demand	mg/L	2	<2.0
Oil and Grease	mg/L	1	1.5

The Hazardous Waste Transfer Area (HWTa) had accumulated water in it that needed to be removed due to tears in the liner. Efforts were made prior to melt to remove snow from the area in order to minimize water accumulation. 148m³ of water pumped out of the HWTa was deposited in the open pit. Analysis of the water from the HWTa is shown below.

ALS		Sample ID	HWTa-EAST-1	HWTa-WEST-1	FIELD BLANK
6/30/2011		ALS ID	L1009421-1	L1009421-2	L1009421-3
L1009421		Date Sampled	5/25/2011	5/25/2011	5/25/2011
Analyte	Units	LOR	Water	Water	Water
Hardness (as CaCO ₃)	mg/L	0.5	58.9	17.9	<0.50
Total Suspended Solids	mg/L	3	27	23	<3.0
Total Dissolved Solids	mg/L	5	98	28	<5.0
Temperature	Degree C	1	25	25	25
Turbidity	NTU	0.1	17	28.1	<0.10
Acidity (as CaCO ₃)	mg/L	5	6.5	10.2	<5.0
Alkalinity, Total (as CaCO ₃)	mg/L	5	60.8	20.9	<5.0
Ammonia (as N)	mg/L	0.005	0.0314	0.082	<0.0050
Bicarbonate (HCO ₃)	mg/L	5	74.2	25.5	<5.0
Carbonate (CO ₃)	mg/L	5	<5.0	<5.0	<5.0
Chloride (Cl)	mg/L	0.5	4.98	<0.50	<0.50
Conductivity (EC)	uS/cm	0.2	155	39.1	0.48
Fluoride (F)	mg/L	0.05	<0.050	<0.050	<0.050
Hardness (as CaCO ₃)	mg/L	n/a	59	16.8	<1.0
Hydroxide (OH)	mg/L	5	<5.0	<5.0	<5.0
Ion Balance	%	n/a	104	Low EC	Low TDS
Nitrate and Nitrite (as N)	mg/L	0.006	0.667	0.0901	<0.0060
Nitrate (as N)	mg/L	0.006	0.647	0.0901	<0.0060
Nitrite (as N)	mg/L	0.002	0.0201	<0.0020	<0.0020
Total Kjeldahl Nitrogen	mg/L	0.2	-	-	-
pH	pH	0.1	8.1	7.56	5.79
Orthophosphate-Dissolved (as P)	mg/L	0.001	<0.0010	<0.0010	<0.0010
Phosphorus (P)-Total Dissolved	mg/L	0.001	0.0047	0.0063	<0.0010
Phosphorus (P)-Total	mg/L	0.001	0.0487	0.0394	<0.0010
TDS (Calculated)	mg/L	n/a	78.7	20	<1.0

Sulfate (SO4)	mg/L	0.05	5.04	0.442	<0.050
Calcium (Ca)-Total	mg/L	0.05	11.4	4.74	<0.050
Iron (Fe)-Total	mg/L	0.01	0.415	0.411	<0.010
Magnesium (Mg)-Total	mg/L	0.05	8.33	1.67	<0.050
Mercury (Hg)-Total	mg/L	0.00005	<0.000050	<0.000050	<0.000050
Phosphorus (P)-Total	mg/L	0.05	<0.050	<0.050	<0.050
Potassium (K)-Total	mg/L	0.2	4.13	0.97	<0.20
Silicon (Si)-Total	mg/L	0.05	2.18	1.08	<0.050
Sodium (Na)-Total	mg/L	0.2	7.3	0.53	<0.20
Aluminum (Al)-Total	mg/L	0.0002	0.406	0.359	0.00036
Antimony (Sb)-Total	mg/L	0.000005	0.000155	0.00031	<0.0000050
Arsenic (As)-Total	mg/L	0.00002	0.00102	0.000771	<0.000020
Barium (Ba)-Total	mg/L	0.00002	0.0244	0.00839	<0.000020
Beryllium (Be)-Total	mg/L	0.000002	0.0000192	0.0000239	<0.0000020
Bismuth (Bi)-Total	mg/L	0.000001	0.0000097	0.0000134	<0.0000010
Boron (B)-Total	mg/L	0.005	0.0729	0.0073	<0.0050
Cadmium (Cd)-Total	mg/L	0.000005	<0.0000050	0.0000094	<0.0000050
Cesium (Cs)-Total	mg/L	0.000005	0.0000394	0.0000484	<0.0000050
Chromium (Cr)-Total	mg/L	0.00005	0.00107	0.000697	<0.000050
Cobalt (Co)-Total	mg/L	0.000005	0.000497	0.00055	<0.0000050
Copper (Cu)-Total	mg/L	0.00005	0.00577	0.0026	0.000114
Gallium (Ga)-Total	mg/L	0.00005	0.000154	0.000142	<0.000050
Lead (Pb)-Total	mg/L	0.000005	0.000715	0.000795	0.000415
Lithium (Li)-Total	mg/L	0.0002	0.00187	0.00094	<0.00020
Manganese (Mn)-Total	mg/L	0.000005	0.0238	0.0987	0.0000219
Molybdenum (Mo)-Total	mg/L	0.00001	0.00452	0.000358	<0.000010
Nickel (Ni)-Total	mg/L	0.00005	0.0098	0.00264	<0.000050
Rhenium (Re)-Total	mg/L	0.000005	<0.0000050	<0.0000050	<0.0000050
Rubidium (Rb)-Total	mg/L	0.000005	0.00318	0.00106	<0.0000050
Selenium (Se)-Total	mg/L	0.00004	0.00013	0.000051	<0.000040
Silver (Ag)-Total	mg/L	0.000005	<0.0000050	<0.0000050	<0.0000050
Strontium (Sr)-Total	mg/L	0.00001	0.146	0.0251	<0.000050
Tellurium (Te)-Total	mg/L	0.00001	<0.000010	<0.000010	<0.000010
Thallium (Tl)-Total	mg/L	0.000001	0.0000108	0.0000088	<0.0000010
Thorium (Th)-Total	mg/L	0.000005	0.000126	0.0000736	<0.0000050
Tin (Sn)-Total	mg/L	0.00001	0.00003	0.000013	<0.000010
Titanium (Ti)-Total	mg/L	0.00005	0.0093	0.0104	<0.000050
Tungsten (W)-Total	mg/L	0.00001	0.000062	0.000018	<0.000010
Uranium (U)-Total	mg/L	0.000001	0.024	0.004	<0.0000010
Vanadium (V)-Total	mg/L	0.00001	0.00057	0.000722	<0.000010
Yttrium (Y)-Total	mg/L	0.000005	0.000621	0.000384	<0.0000050
Zinc (Zn)-Total	mg/L	0.0001	0.00302	0.00488	0.00126
Zirconium (Zr)-Total	mg/L	0.00001	0.000388	0.000645	<0.000010
Aluminum (Al)-Dissolved	mg/L	0.0002	0.0497	0.0341	0.0004
Antimony (Sb)-Dissolved	mg/L	0.000005	0.000137	0.000335	<0.0000050
Arsenic (As)-Dissolved	mg/L	0.00002	0.000676	0.0004	<0.000020
Barium (Ba)-Dissolved	mg/L	0.00002	0.0174	0.00528	0.000065
Beryllium (Be)-Dissolved	mg/L	0.000002	0.0000027	0.0000036	<0.0000020
Bismuth (Bi)-Dissolved	mg/L	0.000001	0.0000016	0.0000016	<0.0000010
Boron (B)-Dissolved	mg/L	0.005	0.0645	0.0057	<0.0050
Cadmium (Cd)-Dissolved	mg/L	0.000005	<0.0000050	<0.0000050	<0.0000050
Calcium (Ca)-Dissolved	mg/L	0.05	11.1 *	4.63 *	<0.050 *

Cesium (Cs)-Dissolved	mg/L	0.000005	0.0000064	0.0000058	<0.0000050
Chromium (Cr)-Dissolved	mg/L	0.00005	0.000127	0.000086	<0.000050
Cobalt (Co)-Dissolved	mg/L	0.000005	0.000177	0.00024	<0.0000050
Copper (Cu)-Dissolved	mg/L	0.00005	0.00361	0.0014	0.000076
Gallium (Ga)-Dissolved	mg/L	0.00005	<0.000050	<0.000050	<0.000050
Iron (Fe)-Dissolved	mg/L	0.01	0.019	0.026	<0.010
Lead (Pb)-Dissolved	mg/L	0.000005	0.000067	0.0000527	<0.0000050
Lithium (Li)-Dissolved	mg/L	0.0002	0.00132	0.00059	<0.00020
Magnesium (Mg)-Dissolved	mg/L	0.05	7.59 *	1.53 *	<0.050 *
Manganese (Mn)-Dissolved	mg/L	0.000005	0.0199	0.077	0.000018
Mercury (Hg)-Dissolved	mg/L	0.00005	<0.000050	<0.000050	<0.000050
Molybdenum (Mo)-Dissolved	mg/L	0.00001	0.00443	0.000381	0.000013
Nickel (Ni)-Dissolved	mg/L	0.00005	0.00376	0.000982	<0.000050
Phosphorus (P)-Dissolved	mg/L	0.05	<0.050	<0.050	<0.050
Potassium (K)-Dissolved	mg/L	0.1	3.38 *	0.87 *	<0.10 *
Rhenium (Re)-Dissolved	mg/L	0.000005	<0.0000050	<0.0000050	<0.0000050
Rubidium (Rb)-Dissolved	mg/L	0.000005	0.00222	0.000648	<0.0000050
Selenium (Se)-Dissolved	mg/L	0.00004	0.000054	0.000045	<0.000040
Silicon (Si)-Dissolved	mg/L	0.05	0.695	0.395	<0.050
Silver (Ag)-Dissolved	mg/L	0.000005	<0.0000050	<0.0000050	<0.0000050
Sodium (Na)-Dissolved	mg/L	0.2	6.84 *	0.50 *	<0.20 *
Strontium (Sr)-Dissolved	mg/L	0.00001	0.135	0.0238	<0.000050
Tellurium (Te)-Dissolved	mg/L	0.00001	<0.000010	<0.000010	<0.000010
Thallium (Tl)-Dissolved	mg/L	0.000001	0.0000108	0.0000039	<0.0000010
Thorium (Th)-Dissolved	mg/L	0.000005	0.0000187	0.0000165	<0.0000050
Tin (Sn)-Dissolved	mg/L	0.00001	<0.000010	<0.000010	<0.000010
Titanium (Ti)-Dissolved	mg/L	0.00005	0.000233	0.000429	<0.000050
Tungsten (W)-Dissolved	mg/L	0.00001	0.000081	0.000021	<0.000010
Uranium (U)-Dissolved	mg/L	0.000001	0.0245	0.00247	<0.0000010
Vanadium (V)-Dissolved	mg/L	0.00001	0.000142	0.000187	<0.000010
Yttrium (Y)-Dissolved	mg/L	0.000005	0.000109	0.0000415	<0.0000050
Zinc (Zn)-Dissolved	mg/L	0.0001	0.00465	0.00332	0.00156
Zirconium (Zr)-Dissolved	mg/L	0.00001	0.000066	0.00004	<0.000010
Biochemical Oxygen Demand	mg/L	2	-	-	-
Oil and Grease	mg/L	1	-	-	-
Benzene	mg/L	0.0005	<0.00050	<0.00050	<0.00050
Ethylbenzene	mg/L	0.0005	<0.00050	<0.00050	<0.00050
Toluene	mg/L	0.0005	<0.00050	<0.00050	<0.00050
o-Xylene	mg/L	0.0005	<0.00050	<0.00050	<0.00050
m+p-Xylene	mg/L	0.0005	<0.00050	<0.00050	<0.00050
Xylenes	mg/L	0.00071	<0.00071	<0.00071	<0.00071
F1(C6-C10)	mg/L	0.1	<0.10	<0.10	<0.10
F1-BTEX	mg/L	0.1	<0.10	<0.10	<0.10
F2 (>C10-C16)	mg/L	0.25	0.3	0.31	<0.25
F3 (C16-C34)	mg/L	0.25	1.65	0.95	<0.25
F4 (C34-C50)	mg/L	0.25	<0.25	<0.25	<0.25
Acenaphthene	mg/L	0.00002	<0.000020	0.000112	<0.000020
Acridine	mg/L	0.00002	<0.000020	<0.000020	<0.000020
Anthracene	mg/L	0.00001	<0.000010	<0.000010	<0.000010
Benzo(a)anthracene	mg/L	0.00001	<0.000010	<0.000010	<0.000010
Benzo(a)pyrene	mg/L	0.000005	<0.0000050	<0.0000050	<0.0000050
Benzo(b&j)fluoranthene	mg/L	0.00001	<0.000010	<0.000010	<0.000010

Benzo(g,h,i)perylene	mg/L	0.00002	<0.000020	<0.000020	<0.000020
Benzo(k)fluoranthene	mg/L	0.00001	<0.000010	<0.000010	<0.000010
Chrysene	mg/L	0.00002	<0.000020	<0.000020	<0.000020
Dibenzo(a,h)anthracene	mg/L	0.000005	<0.0000050	<0.0000050	<0.0000050
Fluoranthene	mg/L	0.00002	<0.000020	<0.000020	<0.000020
Fluorene	mg/L	0.00002	<0.000020	0.000321	<0.000020
Indeno(1,2,3-cd)pyrene	mg/L	0.00001	<0.000010	<0.000010	<0.000010
Naphthalene	mg/L	0.00005	<0.000050	0.000201	<0.000050
Phenanthrene	mg/L	0.00005	0.000198	0.0014	<0.000050
Pyrene	mg/L	0.00001	<0.000010	<0.000010	<0.000010
Quinoline	mg/L	0.00002	<0.000020	<0.000020	<0.000020
2-Fluorobiphenyl	%	Surrogate	104	91	95
Nitrobenzene d5	%	Surrogate	74	61	78
p-Terphenyl d14	%	Surrogate	117	112	113
B(A)P Total Potency Equivalent	mg/L	0.00001	<0.000010	<0.000010	<0.000010

Sampling was conducted in the open pit in May. The analytical results are included below;

ALS		Sample ID	PIT(2M)	PIT-MAY (11M)	PIT (12M)	PIT(13M)	PIT(14M)	PIT (15M)	PIT (17M)
6/30/2011		ALS ID	L101062 1-1	L1010621-2	L101062 1-3	L101062 1-4	L101062 1-5	L101062 1-6	L101062 1-7
L1010621		Date Sampled	5/27/2011	5/27/2011	5/27/2011	5/27/2011	5/27/2011	5/27/2011	5/27/2011
Analyte	Units	LOR	Water	Water	Water	Water	Water	Water	Water
Hardness (as CaCO3)	mg/L	0.5	-	-	-	-	-	-	-
Total Suspended Solids	mg/L	3	33	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Total Dissolved Solids	mg/L	5	111	288	290	296	350	339	375
Temperature	Degree C	1	25	25	25	25	25	25	25
Turbidity	NTU	0.1	59.5	1.22	0.79	0.74	0.51	0.45	0.48
Acidity (as CaCO3)	mg/L	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity, Total (as CaCO3)	mg/L	5	32.3	44.9	45	45	40.8	41.1	41
Ammonia (as N)	mg/L	0.005	0.112	0.271	0.273	0.309	1.87	1.8	1.91
Bicarbonate (HCO3)	mg/L	5	39.4	54.7	54.9	54.8	49.8	50.2	50
Carbonate (CO3)	mg/L	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Chloride (Cl)	mg/L	0.5	7.66	19.7	19.7	19.9	30.4	30.1	30.7
Conductivity (EC)	uS/cm	0.2	170	433	435	437	540	540	545
Fluoride (F)	mg/L	0.05	<0.050	0.095	0.096	0.098	0.121	0.12	0.122
Hardness (as CaCO3)	mg/L	n/a	59.5	134	138	136	154	160	157
Hydroxide (OH)	mg/L	5	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ion Balance	%	n/a	101	99	101	99.9	95.5	101	98.1
Nitrate and Nitrite (as N)	mg/L	0.006	7.08	24.7	25	24.6	33.4	33.3	34
Nitrate (as N)	mg/L	0.006	7.08	24.6 *	24.9 *	24.5 *	33.0 *	32.9 *	33.6 *
Nitrite (as N)	mg/L	0.002	<0.050	0.096	0.097	0.106	0.437	0.427	0.443
pH	pH	0.1	7.82	7.94	7.95	7.95	8.24	8.24	8.15
Orthophosphate-Dissolved (as P)	mg/L	0.001	0.0028	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus (P)-Total Dissolved	mg/L	0.001	0.0063	<0.0010	<0.0010	0.0014	<0.0010	<0.0010	<0.0010

Phosphorus (P)-Total	mg/L	0.001	0.0315	<0.0010	<0.0010	0.0033	0.0041	0.0035	0.0026
TDS (Calculated)	mg/L	n/a	93.2	246	249	246	306	312	314
Sulfate (SO4)	mg/L	0.05	6.42	21.1	21.1	21.1	24.4	24.4	24.6
Magnesium (Mg)-Dissolved	mg/L	0.05	6.14	14.1	14.3	14.3	20.5	20	19.9
Potassium (K)-Dissolved	mg/L	0.1	3.07	7.12	7.28	7.15	8.32	9.66	9.4
Sodium (Na)-Dissolved	mg/L	0.2	5.5	17	17.3	17	21.7	24.2	23.5

Weekly inspections of the dams and dykes were undertaken during the month of May and temperature readings recorded were sent to a geotechnical engineer.

Should you have any questions regarding the monthly report for May 2011 please contact the undersigned at (778)372-2750 or michelle@shearminerals.com

Regards,

Michelle Tanguay
Environment Manager