

13 March 2008

Chief Administrative Officer
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

RE: Water License NWB1JER0410 Monthly SNP Report – February 2008

Following is the monthly report for February 2008 as required under Water Licence 2AM-JER0410.

SNP Sampling

During the month of February 2008 samples were collected as required for the SNP sampling program. A summary of the sampling is provided in Table 1.

Table 1: SNP Water Sampling Summary

SNP Station	Sampling Date	Lab#	Comment
JER-SW1	21 Feb 2008	L604210 280073	
JER-SW3	20 Feb 2008	L604210	
JER-SW4	24 Feb 2008	L606104	

All samples were collected as per requirements under Water License NWB1JER0410. Sample locations not listed in Table 1 were not required to be sampled during the month of February.

Although some sample criteria do not meet CCME guidelines or Permit Limits it should be noted that these locations are not final discharge points nor are they receiving environment results. The sample information included in this report, as required by Permit NWB1JER0410, are from operational streams only and do not include receiving environment samples or final discharge points.

Results**A) Water Sampling and Analysis Results**

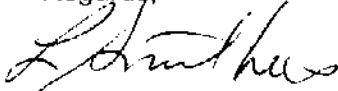
1. Table 2 provides the results for samples related to the SNP sampling requirements for the month of February 2008.

B) Flow and Volume Measurements

1. Table 3 provides a breakdown of flow and volume measurements and solid material moved as required under Part K, Item 12 and 13 of the water license.

Should you have any questions regarding the monthly report for February 2008 please contact the undersigned at 780 644-9129 or environment@tahera.com.

Regards,



Laura Smithies
Manager, Environment



Mike Johnson
Director of Operations

TABLE 2 - February 2008

Project	JERICHO	JERICHO	JERICHO
Report To			
ALS File No.	L604210	L604210	L606104
Date Received	22-Feb-08	22-Feb-08	29-Feb-08
Date	10-Mar-08	10-Mar-08	07-Mar-08

RESULTS OF ANALYSIS

Sample ID		Permit Limits (JER- WQ2) *maximum grab	CCME Guidelines for Protection of Aquatic Life	JER-SW1	JER-SW3	JER-SW4
Date Sampled				21-FEB-08	20-FEB-08	21-FEB-08
Time Sampled				07:10	09:10	15:30
ALS Sample ID				L604210.1	L604210.2	L606104.1
Matrix	Units			Water	Water	Water
Physical Tests						
Hardness (as CaCO ₃)	mg/L			38.2	81.8	147
Conductivity	uS/cm			567	244	599
pH		6.0 - 8.8	6.5 - 9.5	7.19	9.6	7.69
Total Dissolved Solids	mg/L	4000		314	117	386
Total Suspended Solids	mg/L	25		14.1	11.8	18.7
Turbidity	NTU			9.65	7.32	9.06
Anions and Nutrients						
Ammonia as N	mg N/L	12		10.7	3.99	1.2
Acidity (as CaCO ₃)	mg/L			14.4	<1.0	3.7
Alkalinity, Bicarbonate (as CaCO ₃)	mg/L			90.3	25.6	69.8
Alkalinity, Carbonate (as CaCO ₃)	mg/L			<1.0	51.9	<1.0
Alkalinity, Hydroxide (as CaCO ₃)	mg/L			<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO ₃)	mg/L			90.3	77.5	69.8
Chloride (Cl)	mg/L			60.4	12.1	27.6
Sulfate (SO ₄)	mg/L			44.6	9.28	45.7
Nitrate (as N)	mg N/L	58		1.25	8.73	32.4
Nitrite (as N)	mg N/L	5.0	0.06	10.8	0.145	0.179
Total Kjeldahl Nitrogen	mg N/L			-	4.79	2.1
Ortho Phosphate as P	mg P/L			5.31	<0.0010	<0.0010
Total Dissolved Phosphate As P	mg P/L			5.75	0.0034	0.0036
Total Phosphate as P	mg P/L	0.4		6.01	0.0135	0.0239
Total Metals						
Aluminum (Al)-Total	mg/L	3.0	0.005 - 0.100	0.057	0.188	0.0019
Antimony (Sb)-Total	mg/L			0.00513	0.00054	0.00059
Arsenic (As)-Total	mg/L	0.10	0.005	0.00059	0.00018	0.00053
Barium (Ba)-Total	mg/L			0.00708	0.151	0.124
Beryllium (Be)-Total	mg/L			<0.00050	<0.00050	<0.00050
Bismuth (Bi)-Total	mg/L			0.00161	<0.00050	<0.00050
Boron (B)-Total	mg/L			0.024	0.042	0.055
Cadmium (Cd)-Total	mg/L	0.0024	0.000017	0.000093	0.000056	0.000057
Calcium (Ca)-Total	mg/L			12.8	6.89	34.6
Chromium (Cr)-Total	mg/L	0.170		0.00204	0.0129	<0.00050
Cobalt (Co)-Total	mg/L		0.05	0.00031	0.0018	0.00024
Copper (Cu)-Total	mg/L	0.04	0.200 - 1.0	0.0983	0.0031	0.00153
Iron (Fe)-Total	mg/L		0.300	0.511	1.18	<0.030
Lead (Pb)-Total	mg/L	0.02	0.001 - 0.007	0.000689	0.00026	<0.000050
Lithium (Li)-Total	mg/L			0.0266	<0.0050	<0.0050
Magnesium (Mg)-Total	mg/L			3.19	22	13
Manganese (Mn)-Total	mg/L			0.0323	0.0189	0.0213
Mercury (Hg)-Total	mg/L		0.0001	<0.000050	<0.000050	<0.000050
Molybdenum (Mo)-Total	mg/L	1.50	0.073	0.00143	0.00448	0.00787
Nickel (Ni)-Total	mg/L	0.10	0.025 - 0.150	0.00974	0.0378	0.00726
Potassium (K)-Total	mg/L			18.1	8.74	17.8
Selenium (Se)-Total	mg/L		0.001	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	mg/L			4.94	4.23	4.45
Silver (Ag)-Total	mg/L		0.0001	0.000033	<0.000010	<0.000010
Sodium (Na)-Total	mg/L			77.4	5.98	27
Strontium (Sr)-Total	mg/L			0.0226	0.145	0.741
Thallium (Tl)-Total	mg/L		0.0008	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	mg/L			0.00174	<0.00010	0.00267
Titanium (Ti)-Total	mg/L			<0.010	0.029	<0.010
Uranium (U)-Total	mg/L	1.0		0.000098	0.000455	0.00157
Vanadium (V)-Total	mg/L			<0.0010	0.0015	<0.0010
Zinc (Zn)-Total	mg/L	0.50	0.030	0.108	<0.0040	<0.0010

TABLE 2 - February 2008

Project	JERICHO	JFRICHO	JFRICHO
Report To			
ALS File No.	L604210	L604210	L606104
Date Received	22-Feb-08	22-Feb-08	29-Feb-08
Date	10-Mar-08	10-Mar-08	07-Mar-08

RESULTS OF ANALYSIS

Sample ID		Permit Limits (JER-WQ2)	CCME Guidelines for Protection of Aquatic Life	JER-SW1	JER-SW3	JER-SW4
Date Sampled				21-FEB-08	20-FEB-08	27-FEB-08
Time Sampled				07:10	09:10	15:30
ALS Sample ID				L604210-1	L604210-2	L606104-1
Matrix	Units			Water	Water	Water
Dissolved Metals						
Aluminum (Al)-Dissolved	mg/L	2.0		0.0166	0.0012	<0.0010
Antimony (Sb)-Dissolved	mg/L			0.00479	0.00063	0.00058
Arsenic (As)-Dissolved	mg/L			0.00001	0.00017	0.00052
Barium (Ba)-Dissolved	mg/L			0.00546	0.135	0.126
Beryllium (Be)-Dissolved	mg/L			<0.00050	<0.00050	<0.00050
Bismuth (Bi)-Dissolved	mg/L			0.00089	<0.00050	<0.00050
Boron (B)-Dissolved	mg/L			0.021	0.043	0.057
Cadmium (Cd)-Dissolved	mg/L			<0.000050	<0.000050	0.000052
Calcium (Ca)-Dissolved	mg/L			11	5.19	34.8
Chromium (Cr)-Dissolved	mg/L			0.00112	<0.00050	<0.00050
Cobalt (Co)-Dissolved	mg/L			0.00017	<0.00010	0.00023
Copper (Cu)-Dissolved	mg/L			0.0625	0.00097	0.0016
Iron (Fe)-Dissolved	mg/L			0.271	<0.030	<0.030
Lead (Pb)-Dissolved	mg/L			0.000457	<0.000050	<0.000050
Lithium (Li)-Dissolved	mg/L			0.0248	<0.0050	<0.0050
Magnesium (Mg)-Dissolved	mg/L			2.81	16.7	13.5
Manganese (Mn)-Dissolved	mg/L			0.0263	0.000136	0.0168
Mercury (Hg)-Dissolved	mg/L			<0.000050	<0.000050	<0.000050
Molybdenum (Mo)-Dissolved	mg/L			0.000668	0.0044	0.00814
Nickel (Ni)-Dissolved	mg/L			0.00751	0.0038	0.00757
Potassium (K)-Dissolved	mg/L			16.1	8.04	18.4
Selenium (Se)-Dissolved	mg/L			<0.0010	<0.0010	<0.0010
Silicon (Si)-Dissolved	mg/L			4.94	1.46	4.48
Silver (Ag)-Dissolved	mg/L			0.00003	<0.000010	<0.000010
Sodium (Na)-Dissolved	mg/L			80.7	5.74	27.9
Strontium (Sr)-Dissolved	mg/L			0.0204	0.138	0.762
Titanium (Ti)-Dissolved	mg/L			<0.00010	<0.00010	<0.00010
Tin (Sn)-Dissolved	mg/L			0.00139	<0.00010	0.00266
Titanium (Ti)-Dissolved	mg/L			<0.010	<0.010	<0.010
Uranium (U)-Dissolved	mg/L			0.000056	<0.000010	0.00171
Vanadium (V)-Dissolved	mg/L			<0.0010	<0.0010	<0.0010
Zinc (Zn)-Dissolved	mg/L			0.0945	0.0015	0.0011
Aggregate Organics						
Oil and Grease	mg/L	5.0		<1.0		-
Organic Parameters						
Total Inorganic Carbon	mg/L			14.6	12.9	11.3
Total Organic Carbon	mg/L			29.4	2.81	2.92
Teiga Labs						
Teiga File No.				280073		
Date Received				21-Feb-08		
Date				21-Feb-08		
Matrix				Water		
Biochemical Oxygen Demand	mg/L	25		??		
Fecal Coliform	CFU/100 ml	20	100	4000		
Field Measurements						
Field Water Temperature	deg C			21.7	17.08	14.4
Field Conductivity	uS/cm			N/A	958	572
Field DO	%			N/A	15.8	51
Field DO	mg/L			0.22	1.39	7.14
Field pH				7.65	7.49	6.47
Field ORP	mV			N/A	112.6	50.9

Table 3: Flow and Volume Measurements-Part K Item 12 and 13

DATE	Civil Line Production (with Cows and Barnyard Plant) Daily	Civil Line Production (with (with Cows and Barnyard Plant) Daily	Treated Sewage Effluent to PIC (with Cows and Barnyard Plant) Daily (Gallons)	Sewage Sludge to Land (m³)	PG Pond Water to Land (m³) Daily	East Bay Pond to PIC (Gallons) Daily	Other water to PIC (Gallons) Daily	Water Discharged from PIC (m³)	PIC Water Received (m³)	Process Plant Fresh Water (m³)	Process Plant Water Recycled to PIC (m³)	Cause Rejects (tonnes)	Flow Rejects to PIC (tonnes)	One Processed (tonnes)	Quantity of Waste (tonnes)	Quantity of Sludge (tonnes)	Quantity of Sludge (tonnes)
1-1-00	17.2	0.0	11.0							100.0							
2-1-00	20.0	0.0	11.0							100.0							
3-1-00	20.0	0.0	11.0							100.0							
4-1-00	20.0	0.0	11.0							100.0							
5-1-00	20.0	0.0	11.0							100.0							
6-1-00	20.0	0.0	11.0							100.0							
7-1-00	20.0	0.0	11.0							100.0							
8-1-00	20.0	0.0	11.0							100.0							
9-1-00	20.0	0.0	11.0							100.0							
10-1-00	20.0	0.0	11.0							100.0							
11-1-00	20.0	0.0	11.0							100.0							
12-1-00	20.0	0.0	11.0							100.0							
1-1-01	20.0	0.0	11.0							100.0							
2-1-01	20.0	0.0	11.0							100.0							
3-1-01	20.0	0.0	11.0							100.0							
4-1-01	20.0	0.0	11.0							100.0							
5-1-01	20.0	0.0	11.0							100.0							
6-1-01	20.0	0.0	11.0							100.0							
7-1-01	20.0	0.0	11.0							100.0							
8-1-01	20.0	0.0	11.0							100.0							
9-1-01	20.0	0.0	11.0							100.0							
10-1-01	20.0	0.0	11.0							100.0							
11-1-01	20.0	0.0	11.0							100.0							
12-1-01	20.0	0.0	11.0							100.0							
1-1-02	20.0	0.0	11.0							100.0							
2-1-02	20.0	0.0	11.0							100.0							
3-1-02	20.0	0.0	11.0							100.0							
4-1-02	20.0	0.0	11.0							100.0							
5-1-02	20.0	0.0	11.0							100.0							
6-1-02	20.0	0.0	11.0							100.0							
7-1-02	20.0	0.0	11.0							100.0							
8-1-02	20.0	0.0	11.0							100.0							
9-1-02	20.0	0.0	11.0							100.0							
10-1-02	20.0	0.0	11.0							100.0							
11-1-02	20.0	0.0	11.0							100.0							
12-1-02	20.0	0.0	11.0							100.0							
1-1-03	20.0	0.0	11.0							100.0							
2-1-03	20.0	0.0	11.0							100.0							
3-1-03	20.0	0.0	11.0							100.0							
4-1-03	20.0	0.0	11.0							100.0							
5-1-03	20.0	0.0	11.0							100.0							
6-1-03	20.0	0.0	11.0							100.0							
7-1-03	20.0	0.0	11.0							100.0							
8-1-03	20.0	0.0	11.0							100.0							
9-1-03	20.0	0.0	11.0							100.0							
10-1-03	20.0	0.0	11.0							100.0							
11-1-03	20.0	0.0	11.0							100.0							
12-1-03	20.0	0.0	11.0							100.0							
1-1-04	20.0	0.0	11.0							100.0							
2-1-04	20.0	0.0	11.0							100.0							
3-1-04	20.0	0.0	11.0							100.0							
4-1-04	20.0	0.0	11.0							100.0							
5-1-04	20.0	0.0	11.0							100.0							
6-1-04	20.0	0.0	11.0							100.0							
7-1-04	20.0	0.0	11.0							100.0							
8-1-04	20.0	0.0	11.0							100.0							
9-1-04	20.0	0.0	11.0							100.0							
10-1-04	20.0	0.0	11.0							100.0							
11-1-04	20.0	0.0	11.0							100.0							
12-1-04	20.0	0.0	11.0							100.0							
1-1-05	20.0	0.0	11.0							100.0							
2-1-05	20.0	0.0	11.0							100.0							
3-1-05	20.0	0.0	11.0							100.0							
4-1-05	20.0	0.0	11.0							100.0							
5-1-05	20.0	0.0	11.0							100.0							
6-1-05	20.0	0.0	11.0							100.0							
7-1-05	20.0	0.0	11.0							100.0							
8-1-05	20.0	0.0	11.0							100.0							
9-1-05	20.0	0.0	11.0							100.0							
10-1-05	20.0	0.0	11.0							100.0							
11-1-05	20.0	0.0	11.0							100.0							
12-1-05	20.0	0.0	11.0							100.0							
1-1-06	20.0	0.0	11.0							100.0							
2-1-06	20.0	0.0	11.0							100.0							
3-1-06	20.0	0.0	11.0							100.0							
4-1-06	20.0	0.0	11.0							100.0							
5-1-06	20.0	0.0	11.0							100.0							
6-1-06	20.0	0.0	11.0							100.0							
7-1-06	20.0	0.0	11.0							100.0							
8-1-06	20.0	0.0	11.0							100.0							
9-1-06	20.0	0.0	11.0							100.0							
10-1-06	20.0	0.0	11.0							100.0							
11-1-06	20.0	0.0	11.0							100.0							
12-1-06	20.0	0.0	11.0							100.0							
1-1-07	20.0	0.0	11.0							100.0							
2-1-07	20.0	0.0	11.0							100.0							
3-1-07	20.0	0.0	11.0							100.0							
4-1-07	20.0	0.0	11.0							100.0							
5-1-07	20.0	0.0	11.0							100.0							
6-1-07	20.0	0.0	11.0							100.0							
7-1-07	20.0	0.0	11.0							100.0							
8-1-07	20.0	0.0	11.0							100.0							
9-1-07	20.0	0.0	11.0							100.0							
10-1-07	20.0	0.0	11.0							100.0							
11-1-07	20.0	0.0	11.0							100.0							
12-1-07	20.0	0.0	11.0							100.0							
1-1-08	20.0	0.0	11.0							100.0							
2-1-08	20.0	0.0	11.0							100.0							
3-1-08	20.0	0.0	11.0							100.0							
4-1-08	20.0	0.0	11.0							100.0							
5-1-08	20.0	0.0	11.0							100.0							
6-1-08	20.0	0.0	11.0							100.0							
7-1-08	20.0	0.0	11.0							100.0							
8-1-08	20.0	0.0	11.0							100.0							
9-1-08	20.0	0.0	11.0							100.0							
10-1-08	20.0	0.0	11.0							100.0							
11-1-08	20.0	0.0	11.0							100.0							
12-1-08	20.0	0.0	11.0							100.0							
1-1-09	20.0	0.0	11.0							100.0							
2-1-09	20.0	0.0	11.0							100.0							
3-1-09	20.0	0.0	11.0							100.0							
4-1-09	20.0	0.0	11.0							100.0							
5-1-09	20.0	0.0	11.0							100.0							
6-1-09	20.0	0.0	11.0							100.0							