



February 28th, 2007

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

RE: Water License NWB1JER0410 Monthly SNP Report – January 2007

Following is the monthly report for January 2007 as required under Water Licence NWB1JER0410.

SNP Sampling

During the month of January 2007, 3 samples were collected as part of the SNP sampling program. A summary of the January 2007 sampling is provided in Table 1.

Table 1: SNP Water Sampling Summary

SNP Station	Sampling Date	Lab#	Comment
JER-SW1	22-Jan-07	L473043-1	
JER-SW3	22-Jan-07	L473043-2	
JER-SW4	22-Jan-07	L473043-3	

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 January 2007.

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 January 2006 please contact the undersigned at 780 644-9129 or environment@tahera.com.

Regards,

Cheryl Wray
Environmental Supervisor

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

DATE	Carat Lake Freshwater Use (m3) (Camp and Emulsion Plant) - Daily	Treated Sewage Effluent to PKC (Long Lake) (m3) - Daily Calculated	Sewage Sludge Removed (m3)	Pit Pond Water to East Sump (m3) - Daily	East Sump pond to PKC (Long Lake) (m3) - Daily	Other waters to PKC (Long Lake) (m3)	Water Discharged from PKC (m3)	PKC Water Recycled (m3)	Process Plant Fresh Water (m3)	Process Plant Water Discharged to PKC (m3)	Coarse Rejects (tonnes)	Fine Rejects to PKC (tonnes)	Ore Processed (tonnes)	Quantity of Waste Rock (tonnes)	Quantity of Esker (tonnes)	Quantity of till (tonnes)
1-Jan	17.7	12.4	Monthly			Monthly		Monthly	854.0	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
2-Jan	13.4	9.4							885.5							
3-Jan	17.5	12.3							915.4							
4-Jan	14.2	9.9							969.2							
5-Jan	15.1	10.6							856.4							
6-Jan	15.1	10.6							881.1							
7-Jan	13.8	9.7							1,043.8							
8-Jan	15.3	10.7							1,051.0							
9-Jan	18.5	13.0							509.6							
10-Jan	15.6	10.9							1,216.8							
11-Jan	15.6	10.9							1,119.4							
12-Jan	14.6	10.2							1,178.7							
13-Jan	15.0	10.5							1,150.8							
14-Jan	14.3	10.0							1,050.4							
15-Jan	22.5	15.8							1,005.8							
16-Jan	19.4	13.6							1,079.4							
17-Jan	17.6	12.3							867.0							
18-Jan	29.2	20.4							778.2							
19-Jan	15.5	10.9							776.6							
20-Jan	17.5	12.3							791.1							
21-Jan	16.4	11.5							875.8							
22-Jan	26.6	18.6							986.4							
23-Jan	17.3	12.1							1,081.9							
24-Jan	22.5	15.8							995.1							
25-Jan	16.5	11.6							889.3							
26-Jan	25.5	17.9							974.7							
27-Jan	20.3	14.2							1,004.8							
28-Jan	16.7	11.7							979.7							
29-Jan	15.0	10.5							1,061.2							
30-Jan	18.4	12.9							946.4							
31-Jan	18.6	13.0							1,312.8							
Total	551.2	385.8	40.5	0.0	0.0	0.0	0.0	86.6	30,088.3	30,088.3	38,382	15,228	56,550	506,410.0	0.0	12,317.0

Table 2. January 2007 SNP Sampling Results

Stn.Code	JER-SW1		
Station Name	STP Effluent		
Sample Class	M		
Sample No.	L473043-1		
Sample Comments			
Collect Date/Time	1/22/2007 13:43	PKCA Discharge Criteria	
Water Temperature	Deg C	19.5	
Field pH	pH	7.63	
Field Conductivity	us/cm	992	
Field Dissolved Oxygen	mg/L	1.92	
Oxidation Reduction Potential	mV	308.00	
pH @ 25°C	pH	7.86	6.0-8.8
Conductivity @ 25°C	us/cm	982	
T-Dissolved Solids180°C	mg/L	375	4000
Total Suspended Solids @105°C	mg/L	20.5	25
Turbidity	NTU	18.1	
T-Hardness as CaCO3	mg/L	30.6	
T-Alkalinity as CaCO3	mg/L	354	
Acidity as CaCO3	mg/L	18.9	
Hydroxide (as CaCO3)	mg/L	<1.0	
Balance (+ions/-ions)	Ratio		
Carbonate	mg/L	<1.0	
Bicarbonate	mg/L	354	
Chloride	mg/L	39.8	1000
Fluoride	mg/L		
Sulphate	mg/L	61.6	
Carbon (Total Inorganic)	mg/L	71.3	
Carbon (Total Organic)	mg/L	44.1	
Ammonia - Nitrogen	mg/L	62.8	12
Nitrate - Nitrogen	mg/L	<0.050	56
Nitrite - Nitrogen	mg/L	0.021	5
Total Kjeldahl Nitrogen	mg/L		
Phosphate - Ortho - Phosphoru	mg/L	0.64	
Dissolved Ortho Phosphate	mg/L	6.98	
Total Phosphate As P	mg/L	8.79	0.4
Biochemical Oxygen Demand	mg/L	40	25
MF - Fecal Coliforms	CFU/100mL	30000	20
Oil & Grease (Infrared)	mg/L		5
Dissolved Aluminum	mg/L	0.033	2
Dissolved Antimony	mg/L	0.00102	
Dissolved Arsenic	mg/L	0.00055	
Dissolved Barium	mg/L	0.00854	
Dissolved Beryllium	mg/L	<0.0010	
Dissolved Boron	mg/L	0.705	
Dissolved Cadmium	mg/L	<0.00010	
Dissolved Calcium	mg/L	7.48	
Dissolved Chromium	mg/L	0.0017	
Dissolved Cobalt	mg/L	0.00025	
Dissolved Copper	mg/L	0.161	
Dissolved Iron	mg/L	0.407	

Stn.Code		JER-SW1	
Station Name		STP Effluent	
Sample Class		M	
Sample No.		L473043-1	
Sample Comments			PKCA Discharge
Collect Date/Time		1/22/2007 13:43	Criteria
Dissolved Lead	mg/L	0.00613	
Dissolved Lithium	mg/L	0.03	
Dissolved Magnesium	mg/L	2.9	
Dissolved Manganese	mg/L	0.0256	
Dissolved Mercury	mg/L	<0.000050	
Dissolved Molybdenum	mg/L	0.00095	
Dissolved Nickel	mg/L	0.0084	
Dissolved Phosphorus	mg/L		
Dissolved Potassium	mg/L	19.9	
Dissolved Selenium	mg/L	<0.0020	
Dissolved Silicon	mg/L	2.75	
Dissolved Silver	mg/L	<0.000020	
Dissolved Sodium	mg/L	93.1	
Dissolved Strontium	mg/L	0.0218	
Dissolved Thallium	mg/L	<0.00020	
Dissolved Tin	mg/L	0.002	
Dissolved Titanium	mg/L	<0.010	
Dissolved Uranium	mg/L	0.000167	
Dissolved Vanadium	mg/L	<0.0020	
Dissolved Zinc	mg/L	0.322	
Total Aluminum	mg/L	0.19	3
Total Antimony	mg/L	0.00161	
Total Arsenic	mg/L	0.00066	0.1
Total Barium	mg/L	0.0169	
Total Beryllium	mg/L	<0.0010	
Total Boron	mg/L	0.684	
Total Cadmium	mg/L	0.00014	0.0024
Total Calcium	mg/L	8.61	
Total Chromium	mg/L	0.0104	0.17
Total Cobalt	mg/L	0.00063	
Total Copper	mg/L	0.217	0.04
Total Iron	mg/L	1.34	
Total Lead	mg/L	0.00766	0.02
Total Lithium	mg/L	0.03	
Total Magnesium	mg/L	3.52	
Total Manganese	mg/L	0.0432	
Total Mercury	mg/L	<0.000050	
Total Molybdenum	mg/L	0.00397	1.5
Total Nickel	mg/L	0.0144	0.1
Total Potassium	mg/L	21.6	
Total Selenium	mg/L	<0.0020	
Total Silicon	mg/L	3.26	
Total Silver	mg/L	0.000109	
Total Sodium	mg/L	94.4	
Total Strontium	mg/L	0.0249	
Total Thallium	mg/L	<0.00020	

Stn.Code		JER-SW1	
Station Name		STP Effluent	
Sample Class		M	
Sample No.		L473043-1	
Sample Comments			PKCA Discharge
Collect Date/Time		1/22/2007 13:43	Criteria
Total Tin	mg/L	0.0015	
Total Titanium	mg/L	<0.010	
Total Uranium	mg/L	0.000217	1
Total Vanadium	mg/L	<0.0020	
Total Zinc	mg/L	0.185	0.5

Stn.Code		JER-SW3	
Station Name		Process Plant	
Sample Class		Supernatant	
Sample No.		M	
Sample Comments		L473043-2	
Collect Date/Time		1/22/2007 11:35	PKCA Discharge Criteria
Water Temperature	Deg C	15.53	
Field pH	pH	8.83	
Field Conductivity	us/cm	253	
Field Dissolved Oxygen	mg/L	7.40	
Oxidation Reduction Potential	mV	311.50	
pH @ 25°C	pH	8.53	6.0-8.8
Conductivity @ 25°C	us/cm	258	
T-Dissolved Solids180°C	mg/L	140	4000
Total Suspended Solids @105°C	mg/L	<3.0	25
Turbidity	NTU	1.16	
T-Hardness as CaCO3	mg/L	31.8	
T-Alkalinity as CaCO3	mg/L	35.6	
Acidity as CaCO3	mg/L	<1.0	
Hydroxide (as CaCO3)	mg/L	<1.0	
Balance (+ions/-ions)	Ratio		
Carbonate	mg/L	8.5	
Bicarbonate	mg/L	27.1	
Chloride	mg/L	5.12	1000
Fluoride	mg/L		
Sulphate	mg/L	10.3	
Carbon (Total Inorganic)	mg/L	5.83	
Carbon (Total Organic)	mg/L	1.39	
Ammonia - Nitrogen	mg/L	5.89	12
Nitrate - Nitrogen	mg/L	16.9	56
Nitrite - Nitrogen	mg/L	0.753	5
Total Kjeldahl Nitrogen	mg/L		
Phosphate - Ortho - Phosphoru	mg/L	<0.0010	
Dissolved Ortho Phosphate	mg/L	0.0035	
Total Phosphate As P	mg/L	0.0066	0.4
Biochemical Oxygen Demand	mg/L		25
MF - Fecal Coliforms	CFU/100mL		20
Oil & Grease (Infrared)	mg/L		5
Dissolved Aluminum	mg/L	<0.0020	2
Dissolved Antimony	mg/L	0.00157	
Dissolved Arsenic	mg/L	0.00034	
Dissolved Barium	mg/L	0.182	
Dissolved Beryllium	mg/L	<0.00050	
Dissolved Boron	mg/L	0.041	
Dissolved Cadmium	mg/L	<0.000050	
Dissolved Calcium	mg/L	10.7	
Dissolved Chromium	mg/L	<0.00050	
Dissolved Cobalt	mg/L	<0.00010	
Dissolved Copper	mg/L	0.00038	
Dissolved Iron	mg/L	<0.030	

Stn.Code		JER-SW3	
Station Name		Process Plant	
Sample Class		Supernatant	
Sample No.		M	
Sample Comments		L473043-2	
Collect Date/Time		1/22/2007 11:35	PKCA Discharge Criteria
Dissolved Lead	mg/L	<0.000050	
Dissolved Lithium	mg/L	<0.0050	
Dissolved Magnesium	mg/L	1.2	
Dissolved Manganese	mg/L	<0.00010	
Dissolved Mercury	mg/L	<0.000050	
Dissolved Molybdenum	mg/L	0.0124	
Dissolved Nickel	mg/L	0.00147	
Dissolved Phosphorus	mg/L		
Dissolved Potassium	mg/L	15.5	
Dissolved Selenium	mg/L	<0.0010	
Dissolved Silicon	mg/L	3.32	
Dissolved Silver	mg/L	<0.000010	
Dissolved Sodium	mg/L	19	
Dissolved Strontium	mg/L	0.613	
Dissolved Thallium	mg/L	0.0001	
Dissolved Tin	mg/L	<0.00010	
Dissolved Titanium	mg/L	<0.010	
Dissolved Uranium	mg/L	0.000014	
Dissolved Vanadium	mg/L	<0.0010	
Dissolved Zinc	mg/L	<0.0010	
Total Aluminum	mg/L	0.0448	3
Total Antimony	mg/L	0.00154	
Total Arsenic	mg/L	0.00036	0.1
Total Barium	mg/L	0.184	
Total Beryllium	mg/L	<0.00050	
Total Boron	mg/L	0.043	
Total Cadmium	mg/L	<0.000050	0.0024
Total Calcium	mg/L	11.5	
Total Chromium	mg/L	0.00112	0.17
Total Cobalt	mg/L	0.0003	
Total Copper	mg/L	0.00057	0.04
Total Iron	mg/L	0.121	
Total Lead	mg/L	<0.000050	0.02
Total Lithium	mg/L	<0.0050	
Total Magnesium	mg/L	1.73	
Total Manganese	mg/L	0.00244	
Total Mercury	mg/L	<0.000050	
Total Molybdenum	mg/L	0.0126	1.5
Total Nickel	mg/L	0.00741	0.1
Total Potassium	mg/L	16.3	
Total Selenium	mg/L	<0.0010	
Total Silicon	mg/L	3.55	
Total Silver	mg/L	<0.000010	
Total Sodium	mg/L	19.2	
Total Strontium	mg/L	0.616	

Stn.Code		JER-SW3	
Station Name		Process Plant	
Sample Class		Supernatant	
Sample No.		M	
Sample Comments		L473043-2	
Collect Date/Time		1/22/2007 11:35	PKCA Discharge Criteria
Total Thallium	mg/L	0.00011	
Total Tin	mg/L	<0.00010	
Total Titanium	mg/L	<0.010	
Total Uranium	mg/L	0.000035	1
Total Vanadium	mg/L	<0.0010	
Total Zinc	mg/L	<0.0010	0.5

Stn.Code		JER-SW4	
Station Name		PKCA Pond	
Sample Class		Water	
Sample No.		M	
Sample Comments		L473043-3	
Collect Date/Time		1/22/2007 13:31	PKCA Discharge Criteria
Water Temperature	Deg C	0.33	
Field pH	pH	7.05	
Field Conductivity	us/cm	314	
Field Dissolved Oxygen	mg/L	13.07	
Oxidation Reduction Potential	mV	375.60	
pH @ 25°C	pH	7.73	6.0-8.8
Conductivity @ 25°C	us/cm	311	
T-Dissolved Solids180°C	mg/L	184	4000
Total Suspended Solids @105°C	mg/L	<3.0	25
Turbidity	NTU	0.43	
T-Hardness as CaCO3	mg/L	102	
T-Alkalinity as CaCO3	mg/L	65.3	
Acidity as CaCO3	mg/L	2.4	
Hydroxide (as CaCO3)	mg/L	<1.0	
Balance (+ions/-ions)	Ratio		
Carbonate	mg/L	<1.0	
Bicarbonate	mg/L	65.3	
Chloride	mg/L	14	1000
Fluoride	mg/L		
Sulphate	mg/L	18.6	
Carbon (Total Inorganic)	mg/L	7.63	
Carbon (Total Organic)	mg/L	3.64	
Ammonia - Nitrogen	mg/L	0.157	12
Nitrate - Nitrogen	mg/L	12.7	56
Nitrite - Nitrogen	mg/L	0.122	5
Total Kjeldahl Nitrogen	mg/L		
Phosphate - Ortho - Phosphoru	mg/L	<0.0010	
Dissolved Ortho Phosphate	mg/L	0.0041	
Total Phosphate As P	mg/L	0.0106	0.4
Biochemical Oxygen Demand	mg/L		25
MF - Fecal Coliforms	CFU/100mL		20
Oil & Grease (Infrared)	mg/L		5
Dissolved Aluminum	mg/L	<0.0030	2
Dissolved Antimony	mg/L	0.0005	
Dissolved Arsenic	mg/L	0.00059	
Dissolved Barium	mg/L	0.0723	
Dissolved Beryllium	mg/L	<0.00050	
Dissolved Boron	mg/L	0.041	
Dissolved Cadmium	mg/L	<0.000050	
Dissolved Calcium	mg/L	20.9	
Dissolved Chromium	mg/L	<0.00050	
Dissolved Cobalt	mg/L	<0.00010	
Dissolved Copper	mg/L	0.00316	
Dissolved Iron	mg/L	<0.030	

Stn.Code		JER-SW4	
Station Name		PKCA Pond	
Sample Class		Water	
Sample No.		M	
Sample Comments		L473043-3	
Collect Date/Time		1/22/2007 13:31	PKCA Discharge Criteria
Dissolved Lead	mg/L	<0.000050	
Dissolved Lithium	mg/L	<0.0050	
Dissolved Magnesium	mg/L	12.2	
Dissolved Manganese	mg/L	0.000608	
Dissolved Mercury	mg/L	<0.000050	
Dissolved Molybdenum	mg/L	0.00373	
Dissolved Nickel	mg/L	0.00236	
Dissolved Phosphorus	mg/L		
Dissolved Potassium	mg/L	10.1	
Dissolved Selenium	mg/L	<0.0010	
Dissolved Silicon	mg/L	1.66	
Dissolved Silver	mg/L	<0.000010	
Dissolved Sodium	mg/L	13.4	
Dissolved Strontium	mg/L	0.277	
Dissolved Thallium	mg/L	<0.00010	
Dissolved Tin	mg/L	<0.00010	
Dissolved Titanium	mg/L	<0.010	
Dissolved Uranium	mg/L	0.00136	
Dissolved Vanadium	mg/L	<0.0010	
Dissolved Zinc	mg/L	0.0056	
Total Aluminum	mg/L	0.0128	3
Total Antimony	mg/L	0.00052	
Total Arsenic	mg/L	0.0006	0.1
Total Barium	mg/L	0.0726	
Total Beryllium	mg/L	<0.00050	
Total Boron	mg/L	0.042	
Total Cadmium	mg/L	<0.000050	0.0024
Total Calcium	mg/L	21.3	
Total Chromium	mg/L	<0.00050	0.17
Total Cobalt	mg/L	0.00012	
Total Copper	mg/L	0.00398	0.04
Total Iron	mg/L	0.038	
Total Lead	mg/L	0.000183	0.02
Total Lithium	mg/L	<0.0050	
Total Magnesium	mg/L	12.4	
Total Manganese	mg/L	0.00563	
Total Mercury	mg/L	<0.000050	
Total Molybdenum	mg/L	0.00383	1.5
Total Nickel	mg/L	0.00272	0.1
Total Potassium	mg/L	10.4	
Total Selenium	mg/L	<0.0010	
Total Silicon	mg/L	1.72	
Total Silver	mg/L	<0.000010	
Total Sodium	mg/L	13.8	
Total Strontium	mg/L	0.27	

Stn.Code		JER-SW4	
Station Name		PKCA Pond	
Sample Class		Water	
Sample No.		M	
Sample Comments		L473043-3	
Collect Date/Time		1/22/2007 13:31	PKCA Discharge Criteria
Total Thallium	mg/L	<0.00010	
Total Tin	mg/L	<0.00010	
Total Titanium	mg/L	<0.010	
Total Uranium	mg/L	0.0014	1
Total Vanadium	mg/L	<0.0010	
Total Zinc	mg/L	0.0083	0.5