



October 30, 2012

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

Water Resources Officer, AANDC
Nunavut District, Nunavut Region
P.O. Box 100
Iqaluit, NU X0A 0H0

RE: Water License 2BB-MRY1114 Monthly SNP Report – September 2012

The following is the monthly report for September 2012 as required under Part I, Item 19 of Water License 2BB-MRY1114.

SNP Sampling

During the month of September 2012, samples were collected at MRY-4, MRY-10, MRY-11, MRY-13A, and MRY-13B as part of the SNP sampling program. Table 1 presents a list of samples/monitoring required under the Water License and the details concerning which water quality samples have been collected along with sample date/lab identification number as appropriate. Analytical water quality testing results received as part of the SNP program, are presented in Table 2. Volumes consumed for domestic water purposes and the volumes of treated sewage effluent discharged at Mary River Camp are attached in Table 3.

SNP Results

A) Water Sampling and Analysis Results

Table 2 provides the analytical results related to SNP sampling requirements for September 2012.

B) Flow and Volume Measurements

Table 3 provides a breakdown of volume measurements as requested in Part I, Item 9 of the water license for September 2012.

We hope that the information provided in this monthly report is acceptable and should you have any questions regarding this report please contact Jim Millard at 902-403-1337(cell) / 647-693-9447(site) or by e-mail at jim.millard@baffinland.com.

Regards,

A handwritten signature in black ink, appearing to read 'J. Millard'.

James Millard, M.Sc., P.Geo.
Senior Environmental Superintendent

Attach: Tables 1, 2 and 3 (four pages)
cc: Melissa Joy (AANDC), Stephen Bathory and Joel Fortier (QIA)

Table 1: SNP Water Sampling Summary for September 2012

SNP Station	Sampling Date	Lab ID#	Comment
MRY-1	N/A	N/A	Volume reported daily
MRY-2	N/A	N/A	N/A – Water take location not active
MRY-3	N/A	N/A	Volume reported daily
MRY-4	September 20	987920, 987964	Volume reported daily
MRY-5	N/A	N/A	N/A - RBC not operating
MRY-6	N/A	N/A	Not Active
MRY-7	N/A	N/A	Not Active
MRY-9	N/A	N/A	N/A – No surface flow observed
MRY-10	August 31*	982235, 982152	
MRY-102	August 31*	982236, 982153	
MRY-11-TP1	August 31*	982231, 982148	No surface flow observed, sampled from test pit / sump.
MRY-12	N/A	N/A	N/A – No surface flow observed
MRY-13A	August 31*	982229, 982146	
MRY-13B	August 31*	982230, 982147	

Notes:

MRY-8/9 is downstream of bulk sample pit/bench.

MRY-10 is downstream of bulk sample weathered ore/waste rock pile.

MRY-102 is a duplicate of MRY-10.

MRY-11 is downstream of bulk sample crusher area.

MRY-11-TP1 corresponds to a crusher pit constructed sump.

MRY-12 is downstream of bulk ore stockpile area at Milne Inlet.

MRY-13A and -13B are downstream of non-hazardous landfill facility.

- Samples collected on August 31 but not reported in August monthly report. Frozen conditions prevented samples being collected during the month of September.

Table 2. Water Chemistry Results - September 2012

Sample Number	Sample ID	Date Sampled	Parameter Name	Result	Unit	Lab
987964	MRY-4	20-Sep-12	Biochemical Oxygen Demand	<1	mg/L	Exova Accutest
987964	MRY-4	20-Sep-12	Chemical Oxygen Demand	27	mg/L	Exova Accutest
987920	MRY-4	20-Sep-12	Faecal Coliforms	40	CFU/100mL	Exova Accutest
987964	MRY-4	20-Sep-12	Oil & Grease - Total	<1	mg/L	Exova Accutest
987964	MRY-4	20-Sep-12	Total Suspended Solids	7	mg/L	Exova Accutest
987964	MRY-4	20-Sep-12	pH	8.14	pH units	Exova Accutest
982152	MRY-10	31-Aug-12	Oil & Grease	<1	mg/L	Exova Accutest
982152	MRY-10	31-Aug-12	pH	7.08	pH units	Exova Accutest
982152	MRY-10	31-Aug-12	Total Suspended Solids	<2	mg/L	Exova Accutest
982235	MRY-10	31-Aug-12	Arsenic (Total)	<0.10	ug/L	Exova Accutest
982235	MRY-10	31-Aug-12	Copper (Total)	0.53	ug/L	Exova Accutest
982235	MRY-10	31-Aug-12	Lead (Total)	0.10	ug/L	Exova Accutest
982235	MRY-10	31-Aug-12	Nickel (Total)	<0.50	ug/L	Exova Accutest
982235	MRY-10	31-Aug-12	Zinc (Total)	<3.0	ug/L	Exova Accutest
982153	MRY-102	31-Aug-12	Oil & Grease	<1	mg/L	Exova Accutest
982153	MRY-102	31-Aug-12	pH	5.62	pH units	Exova Accutest
982153	MRY-102	31-Aug-12	Total Suspended Solids	<2	mg/L	Exova Accutest
982236	MRY-102	31-Aug-12	Arsenic (Total)	<0.10	ug/L	Exova Accutest
982236	MRY-102	31-Aug-12	Copper (Total)	<0.50	ug/L	Exova Accutest
982236	MRY-102	31-Aug-12	Lead (Total)	<0.05	ug/L	Exova Accutest
982236	MRY-102	31-Aug-12	Nickel (Total)	<0.50	ug/L	Exova Accutest
982236	MRY-102	31-Aug-12	Zinc (Total)	<3.0	ug/L	Exova Accutest
982148	MRY-11-TP1	31-Aug-12	Oil & Grease	<1	mg/L	Exova Accutest
982148	MRY-11-TP1	31-Aug-12	pH	8.20	pH units	Exova Accutest
982148	MRY-11-TP1	31-Aug-12	Total Suspended Solids	14	mg/L	Exova Accutest
982231	MRY-11-TP1	31-Aug-12	Arsenic (Total)	0.25	ug/L	Exova Accutest
982231	MRY-11-TP1	31-Aug-12	Copper (Total)	2.81	ug/L	Exova Accutest
982231	MRY-11-TP1	31-Aug-12	Lead (Total)	0.72	ug/L	Exova Accutest
982231	MRY-11-TP1	31-Aug-12	Nickel (Total)	3.74	ug/L	Exova Accutest
982231	MRY-11-TP1	31-Aug-12	Zinc (Total)	3.2	ug/L	Exova Accutest
982146	MRY-13A	31-Aug-12	pH, Laboratory	8	pH units	Exova Accutest
982146	MRY-13A	31-Aug-12	Alkalinity, Total as mg CaCO3 equiv.	144	mg/L	Exova Accutest
982146	MRY-13A	31-Aug-12	Conductivity in Laboratory	367	uS/cm	Exova Accutest
982146	MRY-13A	31-Aug-12	Total Dissolved Solids	239	mg/L	Exova Accutest
982146	MRY-13A	31-Aug-12	Total Suspended Solids	<2	mg/L	Exova Accutest
982146	MRY-13A	31-Aug-12	Oil & Grease - Total	<1	mg/L	Exova Accutest
982146	MRY-13A	31-Aug-12	Phenol	<0.001	mg/L	Exova Accutest
982146	MRY-13A	31-Aug-12	Total Organic Carbon (TOC)	3.4	mg/L	Exova Accutest
982146	MRY-13A	31-Aug-12	Dissolved Organic Carbon (DOC)	3.5	mg/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Aluminum (Al) Total	3.4	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Antimony (Sb) Total	<0.10	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Barium (Ba) Total	18	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Cadmium (Cd) Total	<0.010	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Chromium (Cr) Total	0.54	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Cobalt (Co) Total	<0.10	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Copper (Cu) Total	1.19	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Iron (Fe) Total	<10	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Lead (Pb) Total	<0.05	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Lithium (Li) Total	1.27	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Manganese (Mn) Total	0.236	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Molybdenum (Mo) Total	0.186	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Nickel (Ni) Total	7.41	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Selenium (Se) Total	<0.10	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Tin (Sn) Total	<0.10	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Strontium (Sr) Total	15.1	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Thallium (Tl) Total	<0.010	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Titanium (Ti) Total	<10	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Uranium (U) Total	0.875	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Vanadium (V) Total	<1.0	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Zinc (Zn) Total	3.7	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Arsenic (As) Total	0.11	ug/L	Exova Accutest
982229	MRY-13A	31-Aug-12	Mercury (Hg) Total	<0.010	ug/L	Exova Accutest
982147	MRY-13B	31-Aug-12	pH, Laboratory	8.09	pH units	Exova Accutest
982147	MRY-13B	31-Aug-12	Alkalinity, Total as mg CaCO3 equiv.	127	mg/L	Exova Accutest
982147	MRY-13B	31-Aug-12	Conductivity in Laboratory	286	uS/cm	Exova Accutest
982147	MRY-13B	31-Aug-12	Total Dissolved Solids	186	mg/L	Exova Accutest
982147	MRY-13B	31-Aug-12	Total Suspended Solids	<2	mg/L	Exova Accutest
982147	MRY-13B	31-Aug-12	Oil & Grease - Total	<1	mg/L	Exova Accutest
982147	MRY-13B	31-Aug-12	Phenol	<0.001	mg/L	Exova Accutest
982147	MRY-13B	31-Aug-12	Total Organic Carbon (TOC)	3.4	mg/L	Exova Accutest
982147	MRY-13B	31-Aug-12	Dissolved Organic Carbon (DOC)	3.5	mg/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Aluminum (Al) Total	4.4	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Antimony (Sb) Total	<0.10	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Barium (Ba) Total	14.7	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Cadmium (Cd) Total	<0.010	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Chromium (Cr) Total	0.54	ug/L	Exova Accutest

982230	MRY-13B	31-Aug-12	Cobalt (Co) Total	<0.10	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Copper (Cu) Total	1.17	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Iron (Fe) Total	10	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Lead (Pb) Total	<0.05	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Lithium (Li) Total	1.29	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Manganese (Mn) Total	0.354	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Molybdenum (Mo) Total	0.149	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Nickel (Ni) Total	5.6	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Selenium (Se) Total	<0.10	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Tin (Sn) Total	<0.10	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Strontium (Sr) Total	12.3	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Thallium (Tl) Total	<0.010	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Titanium (Ti) Total	<10	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Uranium (U) Total	0.28	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Vanadium (V) Total	<1.0	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Zinc (Zn) Total	<3.0	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Arsenic (As) Total	<0.10	ug/L	Exova Accutest
982230	MRY-13B	31-Aug-12	Mercury (Hg) Total	<0.010	ug/L	Exova Accutest

Notes:

Samples MRY-11-TP1 through MRY-11-TP4 were collected from standing water in the constructed sump within crusher pad, the water level in the sump has never been observed to overflow; there is no discharge to the receiving environment.

Sample MRY-102 is a duplicate of MRY-101s collected downstream of bulk sample weathered ore/waste rock pile.

Table 3: Flow and Volume Measurements-Part I Item 7 - September 2012

DATE	Camp Lake Freshwater Use (Mary River Camp) - Daily Potable Water (m³) - MRY-1	Camp Lake Daily Freshwater Use for Other Purposes - (m³) - MRY-1	Three Km Lake Steensby Inlet Daily Potable Water (m³)	Km 32 Lake Milne Inlet Camp Daily Potable Water (m³) MRY-3	Treated Sewage Effluent (m³) from WWTF to PWSP at Mary River Camp - MRY-4	Sewage Sludge Removed (m³) from Mary River WWTP	Treated Sewage Effluent (m³) from PWSP to Sheardown Lake (MRY-4a,b,c)
1-Sep	0.0	0.0	4.5	0.0	0.0	0.0	0.0
2-Sep	22.3	0.0	0.0	0.0	22.3	0.0	0.0
3-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4-Sep	14.0	0.0	0.0	0.0	14.0	0.0	0.0
5-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6-Sep	0.0	0.0	0.0	30.3	0.0	0.0	0.0
7-Sep	32.2	0.0	0.0	0.0	32.2	0.0	0.0
8-Sep	0.0	0.0	0.0	30.3	0.0	0.0	0.0
9-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16-Sep	32.9	0.0	0.0	0.0	32.9	0.0	0.0
17-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-Sep	18.9	0.0	0.0	0.0	18.9	0.0	0.0
			0.0	0.0			
Total	120.4	0.0	4.5	60.6	120.4	0.0	0.0

Notes:

WWTP - Waste Water Treatment Plant
PWSP - Polishing Waste Stabilization Pond